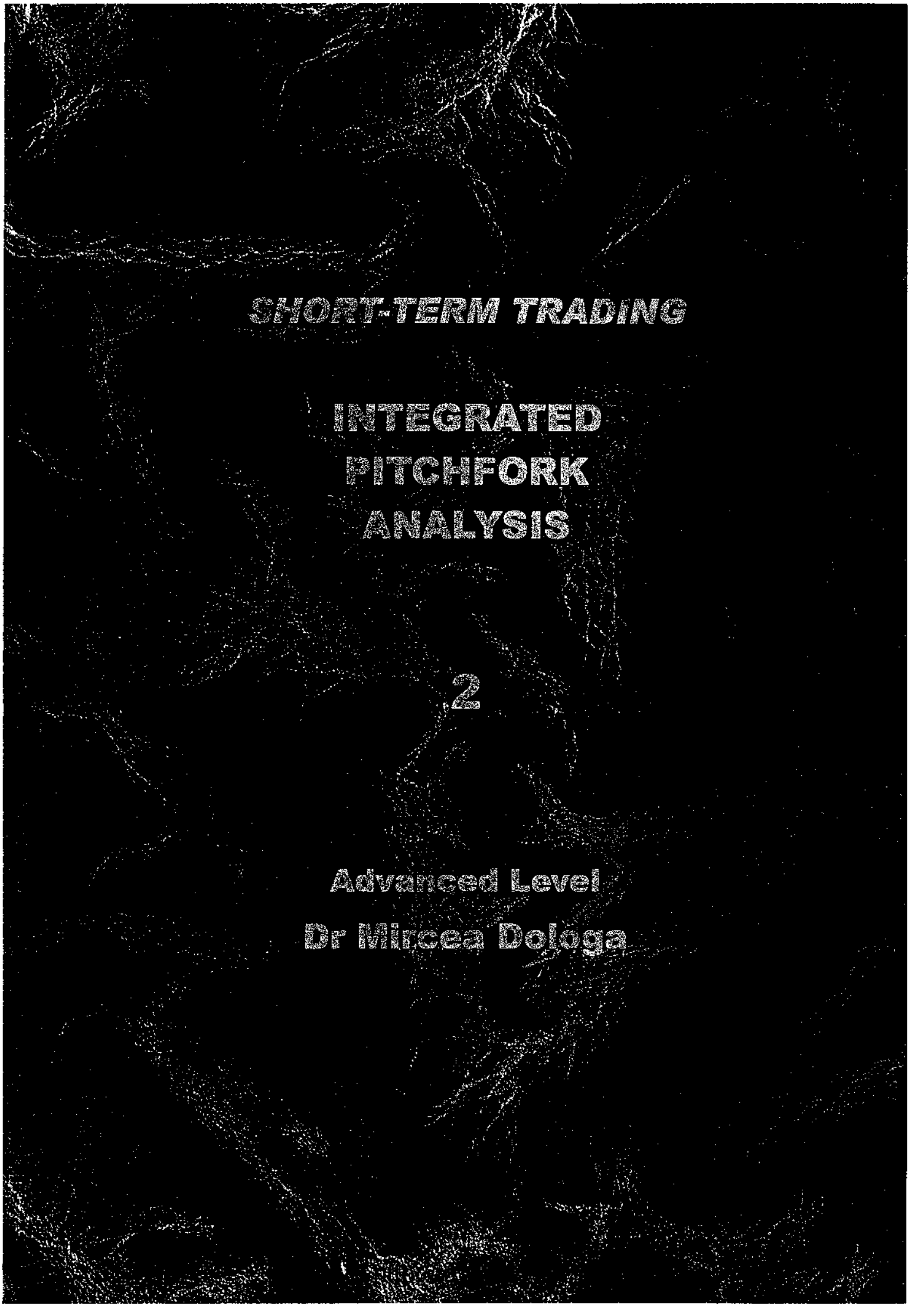

SHORT-TERM TRADING
INTEGRATED
PITCHFORK
ANALYSIS
2
Advanced Level
Dr Mircea Dologa

Short-Term Trading - INTEGRATED PITCHFORK ANALYSIS

Advanced level

300 pages – 450 charts

by Dr Mircea Dologa, MD, CTA

Contents - Volume 2

Introduction

"Human nature tends to see what it expects to see ..." unknown author

The successful trader is the person who can apply the theoretical concepts of the most optimal trading technique, for his markets, and bring his personal touch in real-time trading. The author has created and developed *Integrated Pitchfork Analysis*, in synergy with existing *state-of-the-art* professional trading tools. The *first volume* built the foundation of the technique, and the *second and third tomes* will describe the *integration* of the method with the already existing modern trading tools.

Writing this book has constituted for the author a real continuous teaching challenge, for the entire period of writing. His only obsession was to create, construct, test and finally propose to the colleague trader, *an easy to use professional edge technique*, never utilized before this publication. Among these incommensurable advantages there are the following principles:

- **The author writes from his experience and research - a 20-year trading & investing period. He provides a thorough creation, presentation & implementation of the *Integrated Pitchfork Analysis.* Thus, the writer's original concept rooted from more than 75 years of trading experience of our masters like Schabacker, Babson, Marchal, Dr Andrews and more recently Timothy Morge (www.medianline.com). This technique has become a head start in terms of professional trading, based on knowledge and practice during two decades of research. Thus, a *"trading edge too efficient to be ignored"* has been created!**
- **The *"Key Points to Remember"* section, located at the end of each chapter, has been designed to sharpen the comprehension of the just exposed theory and case studies and also to provide quick reference points for later quick revisions.**
- **The author's experience in medical field taught and warned him that there is no positive outcome of any well accomplished task without the *heavy load of clinical case practice*, once that the knowledge and confidence are at *"rendez-vous"*. Thus he provides for almost every chapter *case studies* that will not only emphasize the theoretical presentation, but will also comfort the trader's comprehension and trading confidence.**

As an entrepreneurial person that you are, *otherwise you wouldn't be reading this book right now*, you took up the decision to become a profitably consistent trader... Don't wait... This book is for you!

Be warned... the road to conquer the *Learning Curve* is long and thorny... you'll get there if you really want it, but you'll have to fight teeth and nails!

1. The WHYs of this Professional Book!

This *second volume* was specifically elaborated for the experienced trader, bringing even further and higher the standards of Dr Andrews' technique, founded more than three quarters of a century ago. The *Integrated Pitchfork Analysis* will enhance the ergonomics and the profitability of the trades through the use of three mechanisms:

- **The *improvement of the trading accuracy*,**
- **A *greater trade probability* leading to *a better profitability*,**
- **An independent *cross-verification*, which exceptionally increases the trade's management, his performing confidence and the outcome of the trade.**

Many of these tools did not exist or were not symbiotically and synergistically used together, more than a quarter of a century ago. They surely belong nowadays to the arsenal of the profitable and consistent professional trader: the inter-market analysis, the multiple time frame, the momentum & Fibonacci bar counts, the multiple time frame floor pivots, the Elliott waves principle, the Gann tools, the Jenkins circles, the Wolfe Waves or the ellipses.

2. Never Give-Up... Fight Teeth and Nails!

As most of us probably know, the trader is an eternal student of the markets. Until the efficient and consistent trading level is attained, the trader will have to fight *teeth and nails*, in his quest for knowledge. It means that you must have the stamina and the energy, as well as the skill for continuous tasks in the process of learning and practice. There is nothing out there to be taken for granted...! Or should I say ...? There is no free lunch on Wall Street!

3. Reaching the Advanced Level - Use of Progressive Learning Modules

The teaching procedures exposed in this trading book, fully obey the *epistemology* principles: the presentation of the advanced *Knowledge* in a modular manner and the practice of it, through the analysis of real-time cases with greater emphasis on *Risk and Money Management* concepts. Please find below brief explanations of several taught chapters topics:

- ***The description of the* Context of the Trade, *so often neglected, will really facilitate the comprehension of the market movements, otherwise there wouldn't be any chance of consistent profitable results.***
- ***The* Pre-open Preparation *is a well-kept secret of the professional trader. Between you and me... How many books or even articles have you read or have you seen about this very pragmatic topic?... Isn't this important for the market's opening and morning's trading results? Or should I rather say... Isn't this the key to understand the ensuing day's trading outcome?***
- ***The* News Trading – Overnight & Intra-Day Unfolding *correctly exploited by the trader will profitably fuel the trade(s) of the morning or/and of the day.***
- ***The* Inter-market Analysis & Fundamentals – Real-Time Use, *so often misunderstood topics, due to their labyrinth facets, have the advantage of building the road to the day's trading potential. Many of us can still remember, the disastrous impact of the Russian or the Asian crisis that shook-up the entire world markets, some years ago. We are now aware that the dragonfly's wing fluttering in Asia can be easily heard over the oceans...! Or should I better mention the most recent sub-prime crisis, in the summer of 2007...?***
- ***The use of* Elliott Waves – Real-Time & Intermediate-Term Use *technique intricate with the single or multiple pitchforks is one of the most precious tools available for the astute trader. It can, not only identify the trend and the counter-trend, but can also reveal the exact location of the market flow within the contextual or the local market. Thus, we can observe the maturity of the trend, the price targets and finally the specific levels where the market might fail.***
  Due to the common difficulty or even the inability of some traders to thoroughly understand Elliott Waves concept, the author emphasized the applied principle of epistemology, teaching this topic through the use of progressive modules, the process of mental assimilation based on repetitive real-time cases, and the "Key Points to Remember" section, at the end of each chapter. The latter takes its full applicability in the learning process, later on, when the trader can make a quick reference, whenever needed.
- ***The sixth chapter* – Original Tools for Impulsive Pattern End – *Diagnosis, Kinetics & Management speaks for itself. The Confidence of the trader is greatly enhanced by using these tools, in the quest for low-risk high-probability trades. Thus, one can easily prosper by performing only the most profitable trades like, trading the wave 3 or wave 5.***

- *The little known technique of* Channelling – Pathways in the Sand – Market Move Projections, *efficiently assist the trader in locating the most probable target, trails or stop loss levels. Their channelling, objectives determination and around-the-clock kinetics will create time-price dependent market relations. These advanced tools will reveal the optimal market description, so indispensable for finding the low-risk high-probability trades. Some very original subjects were treated here.*
- *The eighth and the ninth chapters –* Variable Time/Price Location of Pitchfork's Anchor *describe author's original research used on everyday trading, concerning the sophisticated use of traditional and Schiff pitchforks.*
- *The* Momentum and Fibonacci Bar Counts *are little known topics by most of the traders. The momentum mapping will easily divulge the strength or the weakness of the current market. The Fibonacci bar count is frequently used by the experienced traders to consider an eventual termination of a trend. The synergy of both bar counts is obvious when they are used together. What else will better reveal the trend's exhaustion?*
- *The author particularly studied in detail several indicators such as:* False Stochastics, RSI and OSC(5, 35), *in order to better pinpoint the entries or the exits, among other profitable tasks. Our preference goes to False Stochastics (an Advanced GET proprietary indicator of eSignal), which is a dual characteristic tool for determining the trending and at the same time, the trade-opportunities sideways moving markets.*

4. **Reinforce the Risk & Money Management Concept**

After all these tools have been described, the author developed the *Risk and Money Management* concept, first theoretically presented with the *Three Pawn Technique* and then applied through the *filter* of *multiple case studies*. It unveils numerous professional edges, far away from the crowd's reach. Among others, we will mention: *the pre-arranged entries, the parsimony of stop loss sizes, the logical objective targets, the reward/risk ratios, the hidden and non-randomly chosen trailing stops, the scale in/out concepts which may increase with at least 50% your results, the exits, the nibbling and the single/multiple trading units.*

5. **Knowledge & Confidence as Conclusion**

For a trader, two things are primordial: *Knowledge* and *Confidence*.

***Knowledge* explains how the market works, and *Confidence* is the trader's ability to use it, over and over again. The more you use it, the more you will see the market react to *your proposed strategy*. The more you will believe in it, the faster you will become a self-confident trader.**

We should never, ever forget that trading with *Confidence* is the most profitable way around! The *Knowledge* builds the *Confidence*, and together they will really ensure your *peace of mind*, without any *visceral fear nor paralysing pain*, throughout the entire trading process!

The *Integrated Pitchfork Analysis* advanced concept, described for the first time in this book, will not only build the trader's *Confidence*, but it will also offer a global and unique *real trading professional edge*, to be used by the trader, in his every day practice.

Dr Mircea Dologa, MD, CTA **June 21st, 2007**
Paris – France

mircdologa@yahoo.com **Founder *of* www.pitchforktrader.com**

Chapter 1

Context of the Trade

The darkness of the *unknown* has always intrigued me!
This sentence began the first chapter of volume one, talking about the mechanism of an *intuitive approach*, true as ever, in the practice of profitable trading. It will catapult the trader's efficiency, well ahead of the crowd's, due to the approach's global discernment or perception. The resulting *acumen* will give the trader the power to see what is not obvious to the average mind. It goes even further, enhancing the implementation of the local action, due to the general observation. It is like an expert guide unlocking the wisdom of the subconscious mind.

The hard task is to elaborate an adequate learning module that could effortlessly and efficiently implement this approach in trader's conscious mind. Useless to say, that this approach is hardly found in any other trading literature. We will propose solutions for this complex and ubiquitous task, carrying in our mind the three main *building blocks* of the *intuitive approach* applied to trading:

- **the *context of the trade*,**
- **the *pre-open preparation* and**
- **the *inter-market analysis*.**

Some of the readers might wonder why should the *intuitive approach* be applied to trading or investing. Well, for me, it is really beneficial, to have acquired this quality because it greatly improved not only the trading results but also the way I see the trading process. To be clear, it "*really ensures the peace of mind, without any visceral fear, nor paralysing pain, throughout the entire trading process*".

Grasping and understanding this *intuitive approach*, began when I read for the first time Lee Iacocca's autobiographical book, in 1985. Then, later on, I have read, his second book, in a few hours: *Where have all the leaders gone?*

Like one of his readers said "*If Business Executives had a Hall of Fame, Iacocca probably have a floor dedicated to him*". And I should add that the former president of Ford and Chrysler, is still well, creative and very much alive...! He came out, in both books, with guns blazing from page one, and never stopped until the last one. As the CEO of Chrysler Corporation, his great merit was to bring the firm back from the brink of bankruptcy, in the difficult times of 1970s oil crisis. With his "*straight shooter*" reputation he "*formatted*" a whole generation of business managers by unveiling the pressing need for real leadership not only in United States but also all over the world. When I said *business managers*, I also meant the trading and investing professionals. We should never forget that we are in a special, or should I say a peculiar type of business where loosing money is a way of our professional life.

What really intrigued me and also triggered my envy to know more about the *intuitive trading approach* was Iacocca's following sentence: "*Thing global, but act local*".
First, I thought of the *usual trading plan concept* but later I realized that is much more than that. And suddenly it all came out. The trader must integrate intuition in his everyday practice. One should kind of *cultivate the intuition*, day-after-day.

I wouldn't completely agree with Einstein's quote "*Imagination is more important than knowledge*" without bringing around the hard task of practising experience. How can a trader imagine anything with a "*raw*" *un-cultivated knowledge?* I remember, one of my

students saying that it took him a couple of years, and thousands of charts to "*feel at home*" with his trading.

Speaking about the *building blocks* of the *intuitive approach* applied to trading, let us study, the first of the three, the *Context of the Trade.*

1. Defining the Market's Spatial & Temporal Context - Its Limits

Among multiple understandings of the word *Context* found in a collegiate dictionary, we would retain the following meaning "*the act, the process, or manner of weaving parts into a whole, thus forming a genuine structure*". We should add that this "*weaving together of elements into a whole*" is done eyeballing the chart not only from the *price* point of view but also from the *time's* standing point.

The eyeballs tend to stare, especially on the vertical axis, and the market appears to be motionless in novice's mind. The first time around, the trader is rather lost, and he does not know where to start even if he already had some idea of trading.
Once the first sensation is gone, we will try to map the chart in such a way that we will be aware of the *left-to-right* market movements, on the time-wise horizontally oriented X-axis.

In order to trade, we should first become familiar with the *flow of the market.* Secondly, we will think about trading decisions. One of the best methods to understand the market context (*its layout, here*), is to mark out its *spatial and temporal cardinal orientations*:

***1.1 Price-wise Cardinal Orientations on Y-axis*:**

- **Where the price is coming from?**
- **Where the price seems to be going?**
- **How is the price in regard to main levels like highs, lows, floor pivots, opening range, etc...?**
- **How high/low is the morning, after-noon or day's apogee (*highest high)*?**
- **In what way did the price reach the current location?**
- **Was there a continuous move, or did the price jump directly towards the high/low of the chart?**

***1.2 Time-wise Cardinal Orientations on X-axis*:**

- **What is the time frame mostly used by the trader?**
- **What time-length corresponds to each bar? This *hint* will allow us to calculate the time frame!**
- **Did you select the time frame that mostly illustrates the dominant trend?**
- **What is the time-interval between two lows or two highs?**
- **Did you take into account the *time-of-the-day* schedule before taking any trading decisions?**
- **Do you have a *time-map* illustrating the most frequent trade opportunities on monthly, weekly, daily and hourly scale?**

1.3 Time- & Price-wise Orientations on the X & Y-axis Delineated Area

- **Is the market trending or not?**
- **What is the market's *exact location* within the whole context?**
- **What is the exact slope of the chart?**
- **How did the day finish: at an extreme point of the chart, or did it perform a last "*gasp*" in pre-close, closing with a huge counter price bar?**
- **How fast/slow the price reached its morning, after-noon or day's extreme positions?**

- How long did it take for the price to terminate its up-sloping/down-sloping tendency?
- What kind of rhythm did the price undertake: *cadenced, random, rapid or crawling*?

It goes without saying that the above list of orientations is not exhaustive.

As you probably noticed, we have described above, *not only the price-related market features, but also the time-related orientations and the price-time dual relationships.* We have not restrained ourselves, this time, in comparison with volume 1.
Why? Just to remind you and also to emphasize that in real trading, more than 90% of the traders don't use the time parameters. That could be disastrous for novice or intermediate traders' results. The time came-up to treat also this time-price relationship in detail in this second volume, especially designed for the advanced traders (*please refer to Contents*). Missing the *time-tool*, is like shooting with a revolver instead of firing with a high calibre machine gun from an US Navy aircraft.

The intricacy of the time-price relationship can efficiently explain the market movements and its random or sequential flow.
In order to progress we must understand what will happen when you will use a *real-time chart* where the price is rolling on the low time frame chart, like a small but very alive, tireless mercury bubble.

Ideally we should embed the market flow energy into a hypothetic meandering river.

The market's winding and unwinding movements will be optimal only if it takes up the *path of least resistance.*

2. Applied Dow Theory to Every-Day Trading

The *Dow Theory* plays a major role in understanding the market structure, part of the trading approach even if this is not obvious at the first glance. Charles H. Dow never wrote a book, but the theory's roots were strongly attached to his editorials published in *Wall Street Journal*, just after the turning of the 20th century, between 1900 and 1902.
Charles H. Dow's intentions were to use these editorials as a *Barometer* of the existing business conditions... or should we say as the *Context* of the financial market?
Dow Theory becomes a reality due to the sustained efforts of William Peter Hamilton and especially Robert Rhea. The latter wrote in 1932 the *Dow Theory* book, thus founding the whole concept.
We will briefly study the labyrinth aspects of this theory, indispensable for understanding the fundamental tenets of trading without really exhausting the topics, due to lack of space in this book.

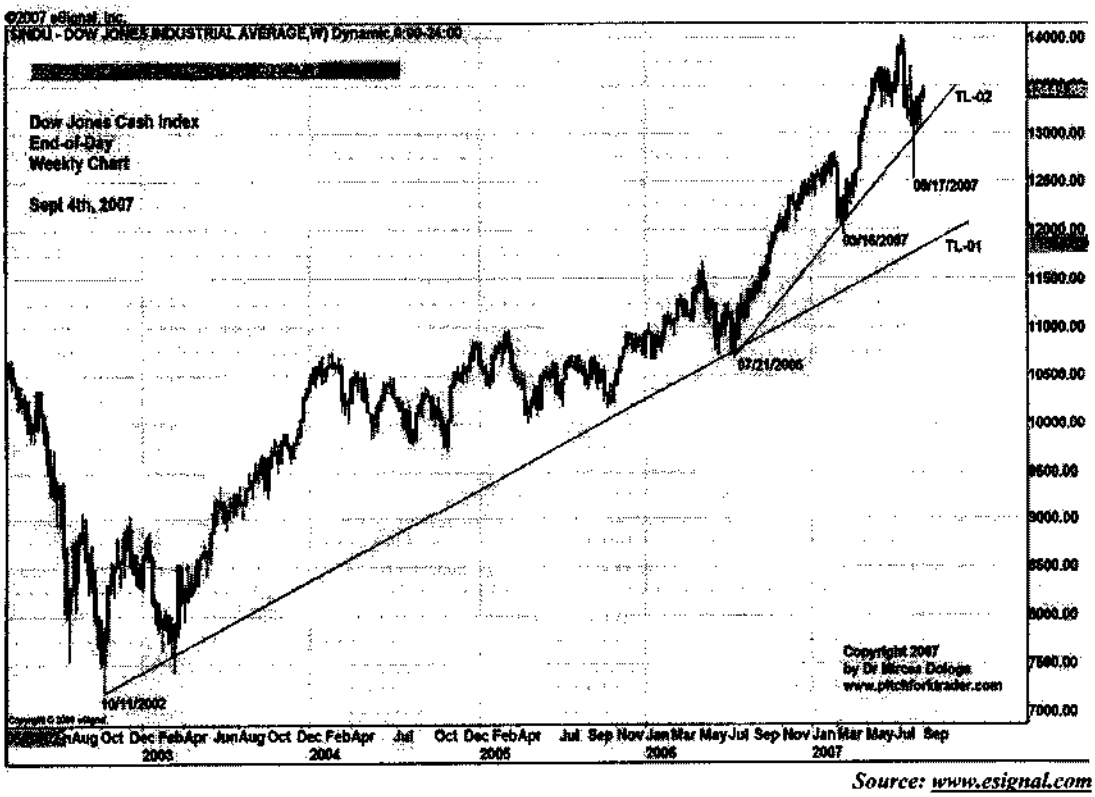
2.1 The Market Averages Discount Everything

The trader understands the above statement, as the price is the *absolute truth.* Anything that could possibly affect the demand or the supply phenomena of the market, is promptly discounted by the Averages, especially the Dow Jones Industrial Averages and the Dow Jones Transportation Average. This goes for any unexpected "*acts of God*", or on the contrary, any expectations, which are instantly assimilated and discounted by the Averages.
As an example, we can say that a magazine cover is not more news, once it came out.
However, as a *trading tip* for the stock trader, one can find out about the news, ahead of the crowd, by checking out the magazine's website, before the hard copy publication invaded the streets.

2.2 All-times Three Market Trends

In spite of the fact that there are numerous trends in the market, at any time, Charles H. Dow has only focused on three types:

- **The *Primary Trend,* or the Tides, which will probably last from less than a year to several years, represents the long-term movement, being the most important trending element (*refer to Figure 1*). We can evaluate that its duration is *usually over 9 months.* The up-trend of a *Tide* was named a Bull Market and down trending was called a Bear Market. Both of them were characterized by a three fold moves, whatever the direction was.**

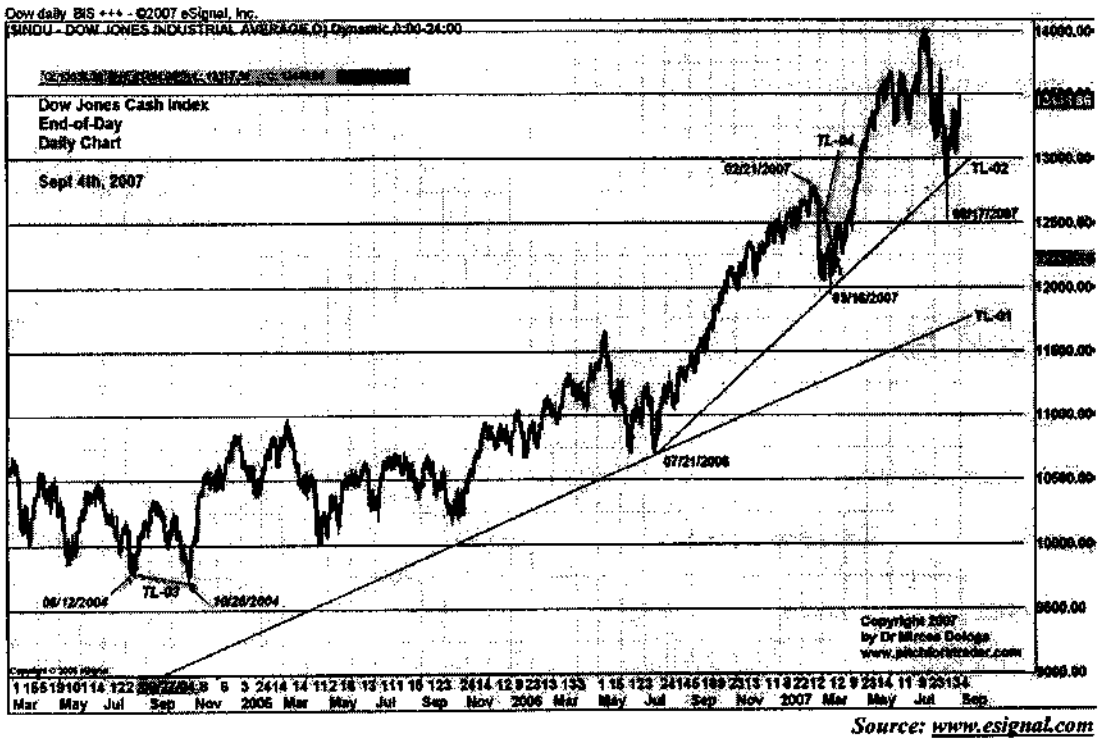


Source: www.esignal.com

Figure 1 - *Both illustrated* TL-01 & TL-02 *trend lines embed more than 9 months of market activity, thus they qualify to describe the long-term movement. This is an obvious example of a trend within a trend, or a fractal within another fractal.*

- **The *Secondary Trend,* or the Waves, will probably last from *three weeks to three months*, forming the intermediate-term movement. In its corrective process, called *secondary reactions*, this intermediate trend will retrace as little as one third to two thirds of the *Primary Trend.* These specific fractional correction ratios were thus created and named long before Edson Gould created the *speed lines* based on the same fractional ratios. W.D. Gann also mentioned, not only the third ratios but also the halves of the thirds during a retracement.**

- **The *Minor Trend* or the Ripples, usually last from two to four weeks, sometimes six weeks. Being the daily fluctuations and illustrating the short-term movement, they weren't really taken into consideration. They were considered as the least important trending element.**



Source: www.esignal.com

Figure 2 - *The* **TL-01** & **TL-02** *trend lines still represent the long-term movements already drawn in the preceding figure (n° 1). The trend line n° 3 (***TL-03***) being shorter than three months but lasting longer than six weeks qualifies to describe the Secondary Trend. On the contrary, the trend line n° 4 (***TL-04***) lasted less than four weeks, thus labelling the short-term movement called the Ripple.*

2.3 The Two Averages Must Confirm Each Other

Not only the two Averages must confirm each other, but also the active individual stocks must follow them. A top or a market bottom is not accepted, unless both Averages confirm it. It is common for one Average to signal a trend reversal, way ahead of the other. However, there is no time limit specified by the theory.

2.4 The Line – Announcing a High-Momentum Movement

The Line is the forerunner of the nowadays *energy-building rectangles*. It was described as a two to three week movement representing the accumulation or distribution phenomena. Its size is around 5% of both Averages. Most of the time, they efficiently signal an incoming high-momentum move. The narrower they are, the higher the built up volatility is. The longer they last, the stronger the momentum will be.

2.5 The Closing Prices

Only end-of-day, closing prices are to be considered. The intra-day price movements are to be neglected.

2.6 Price Action Determines the Trend

A trend has been defined, in those days, as *the general direction in which the price tend to move*. Ninety years later, Victor Sperandeo's two books gave more details: *an up-trend is characterized by higher highs and higher lows, and a downtrend by lower highs and lower lows.*

We find in William Peter Hamilton's writings (*September 23, 1929*) the sacrosanct princip of trend termination: "*An indication (*of price trend*) remains in force until is cancelled by another...*» Thus, we can emphasize that a trend is considered ongoing until the market flo performs a definite reversal, signalled by the "*the weight of evidence*". Once in motion, th trend has a higher probability to continue rather than to be interrupted, causing th market's reversal. Keep this in mind... It will save you a lot of money!

2.7 Price & Volume Relationship – The Provider of Trading/Investing Background

The volume is well known to reflect buyers/sellers enthusiasm. It also represents the attitude in changing markets. However, the market breadth measures the extent of the emotion.

We all agree that without price quotes there wouldn't be any financial markets. However, th eternal question is "*Which comes first... the price or the volume?*" Most of the mark technicians agSree that volume precedes price! *We usually observed that the Volume Oscillat leads the Price Oscillator!*

However, we should consider the interaction of the elements of the above duo in order t assess not only the short-term movement but also the maturity of the prevailing *Prima Trend.* It is common knowledge for an experienced trader that the volume should increase i the direction of the dominant trend. Going further, we notice:

- The *up-trend* is characterized by an increase on rallies and decrease on market drops
- The *downtrend* is signalled by an increase on market drops and by a decrease o corrective moves.

As a *trading tip,* we can affirm that any heavy volume signals a *genuine trend* and any lo volume activity indicates a very *probable false move.*

<u>Conclusion</u>:

We will not abandon the *Dow Theory* sub-chapter without emphasizing its great impact o *state-of-the-art* trading tools, in spite of its over 100 years old age:

- The concept of *Three Trends* at all times, opened the road, not only to multiple tim frames approach but also to better understanding of the fractals of any financi market.
- The "*Two Averages confirmation*" tenet settles in a way, the nowadays anguish of th trader when it comes to saying, "*How high is the High*?" or vice versa.
- The *Line* – announcing a high-momentum movement, like we said before, is th forerunner of nowadays energy-building rectangles, a very profitable techniqu extensively described in this book (*please see Contents).*
- The "*Price Action determines the Trend*" tenet is true nowadays as ever. Who woul dare today to buck the trend or trade most of the corrective moves?
- The "*Price & Volume Relationship*" settles today the same trading/investin background, as it did more than hundred years ago. Their importance is not to b proven whatever taken together or apart, as two distinct entities. The shrewd, wel trained trader could trade with a chart having on it just the price bars.
  The role of the volume is not to be re-affirmed nowadays, especially at the opening c closing periods of the trading day! A deep study of the daily trading volume wi greatly help the trader to elucidate the same question as the one mentioned abov "*How high is the High*?» especially if the past history is taken into account!

We will stop here the list, even if is not yet exhausted, due to the lack of space and planne topics of this book!

3 Specific Contexts: Inter-Market Pre-Open Conditions

You have become familiar in the above sub-chapter with the great influence that *Dow Theory* can still have, over 100 years after its creation.
In the following sub-chapters the trader will become more knowledgeable about *different specific contexts* that will really assist the trader to identify the low-risk high-probability trades.

The context of *inter-market pre-open conditions* is one of those possibilities that bring an optimal opportunity in trader's pocket, with very little risk.

3.1 Market Identification that has a Positive Correlation Coefficient (near 1), *in Regard to your Traded Vehicle*

The first step in accomplishing this task is to verify which markets, would behave almost identical to your usual traded vehicle. If we take the German Dax 30, as a traded index, we can count on, at least, two markets that will behave almost in the same manner: Eurostoxx 50 and S&P 500. We will also mention the German Bund and the Euro/US dollar currency pair. The difference is that the first two indexes will mostly have the same direction as the German Dax 30, but the last two vehicles won't necessary behave the same way. Then one question arises... *Why should you use the latter ones?* Well? We noticed that in spite of a possible contrary direction, *but not obligatory*, these two trading vehicles have an obvious euphoric or depressive activity when there are at stake financial events that will eventually shake-up the operating market. We shouldn't forget that the German Bonds is hyper-sensible when it comes to the rent of the European money and that the Euro/US dollar pair mimics the same type of phenomenon.

3.2 Pre-Open Identification of the Inter-Active Markets

Once the positive or negative correlation has been established the second step is to prepare for the final phase of trade execution.
This technique is mostly applied in *pre-open* but can also be implemented at certain hours, at the moment of financial news reports. The trade execution is mostly done, right after the opening of the traded instrument, but for some trading vehicles it can also be done in pre-market.
Before getting committed and entering the trade, we should be aware of several elements:

- **The *Open* and *Close* of all the implied markets,**
- **The time laps among the participating *Futures* markets,**
- **The time laps among the participating *Cash* markets,**
- **The possible *criss-crossing* comparison between the preceding *Close* of the *Cash* market and the *Close*, for the night of the *Futures* market. This is especially valid for markets that are not open for 24 hours. For instance, the German Dax 30 *Cash Index* closes in the after-noon, but its *Futures Index* closes only at 22:00hrs Central European Time (CET). The interval between these two closes finely illustrates the after-market mood of buyers and sellers. If the night won't be rich in any news, the acquired *after-market mood* will really dictate the opening market attitude.**

We will now try to describe this technique through the use of real-time cases. I hope that it will assist the trader in shortening his *learning curve*. One thing though... this technique can really augur the best trades...!

3.3 Real-Time Applications – S&P 500, German Dax 30, EuroStoxx 50 and Euro/US $

3.3.1 Pre-Open Set-Up

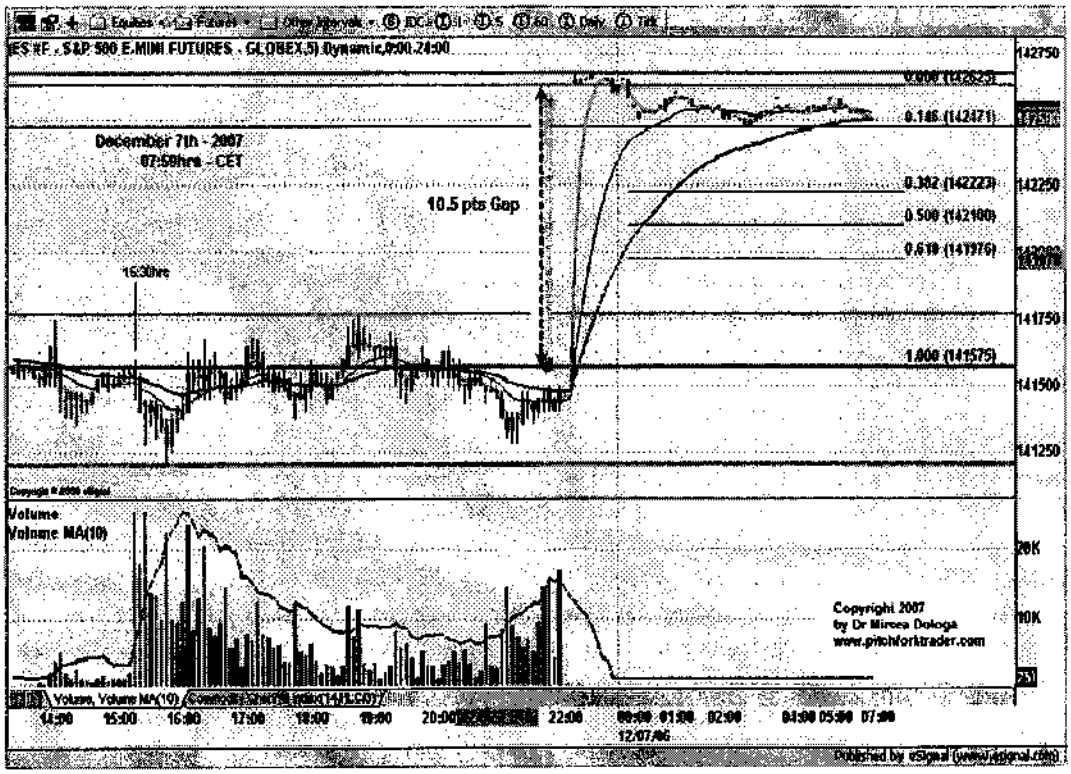


Figure 3 - ***This S&P 500 chart prepares a German Dax 30 trade in the pre-open period of Decemb 7th, 2006. We can observe the big 10.5 points up-gap. After the close of the S&P 500 and a short paus the night ES took over. The time is the Central European Time (CET) and reflects the night activity. A you can see it has an infinitesimal volume. As they say: "The life comes on where the sun arises"! Now... What should you retain, in order to prepare the German Dax 30 opening? Firstly, we note the strength of the market. Secondly, the night ES doesn't retrace more than 14.6 during the whole night. It means that the up-gap momentum is there for keeps and that the German D 30 will make a hell of an up-trend, at least during the morning of December 7th. In case you wonder wh caused this high-powered momentum, just read below, in Figure 4.***

Bloomberg.com

07/12/2006

Asian Stocks Climb to Six-Month High, Led by Canon; China Jumps

By Chen Shiyin and Stuart Kelly

Dec. 7 (Bloomberg) -- Asian stocks advanced to a more than six-month high, led by Canon Inc. and Honda Motor Co., after the dollar's rebound against the yen eased concern the value of Japanese exports to the U.S. will decline ... ...

Source : www.bloomberg.com

Figure 4 - ***Useless to say that the Asian markets were responsible for this high-power momentu provoking the big ES up-gap. If you want more detail about this, one can study the charts of the specif Asian markets: Nikkei 225, Hang Seng or S&P/ASX 100 the Australian index.***

Now that we are convinced of an implied high-powered momentum, which will "*spill-over*" the entire European market, let us observe the pre-open charts of German Dax 30, EuroStoxx 50 and Euro/US dollar.

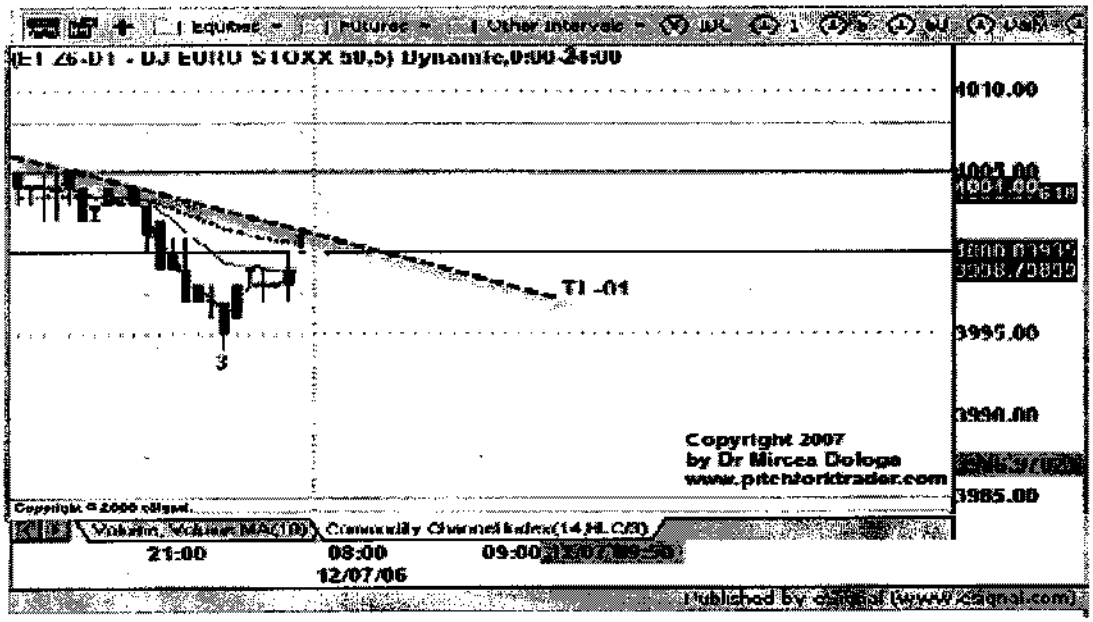


Figure 5 - ***The Asian markets didn't yet influence the EuroStoxx 50 index. Remember, the time is expressed in Central European Time units (CET). The 8:00hrs CET opening hour, coincides with 16:00hrs Tokyo time when Nikkei 225 closes. The trend line n° 1 (TL-01) is our landmark informing us of an eventual up sloping, under the "heavy weight of evidence" of the trend line's breakout. One thing before we go further... This trading vehicle is well known as "the father" of German Dax 30: it moves slower, it's more reliable in its changes, and is mostly followed by Dax 30.***
As a positive leading indicator it tries to calm down the* volatile *German Dax 30, as much as it can!

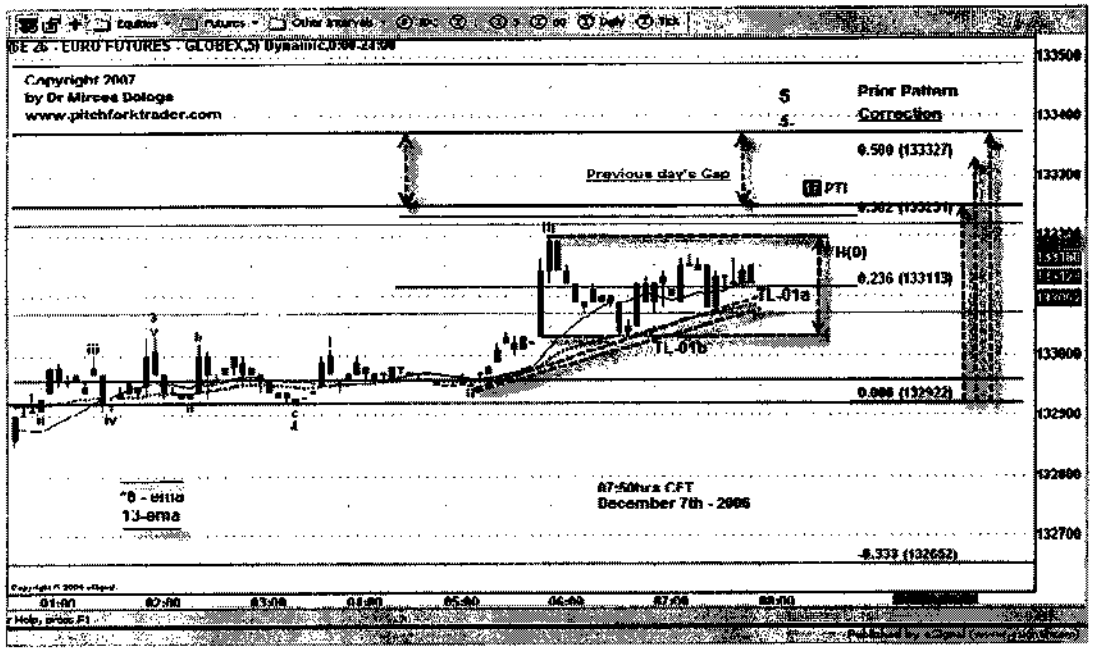


Figure 6 - ***The Euro/US dollar Futures were slightly influenced by the high-powered momentum of the Asian markets. However, on the above chart, it is only 07:50hrs CET, still in European pre-open market time. Most of the Exchanges in European capitals will open in ten minutes at exactly 08:00hrs. The elements of our toolbox are applied and the chart landmarks are drawn: the height of an eventual inceptive rectangle [H(0)] very convenient for future extensions, the two trend lines (TL-01a & T-01b),***

*the Fibonacci ratios applied to the prior pattern correction, the short-term moving averages (*8-ema & 1
ema*) and the very strong levels of the previous day's gap, located just above the inceptive rectangle.*

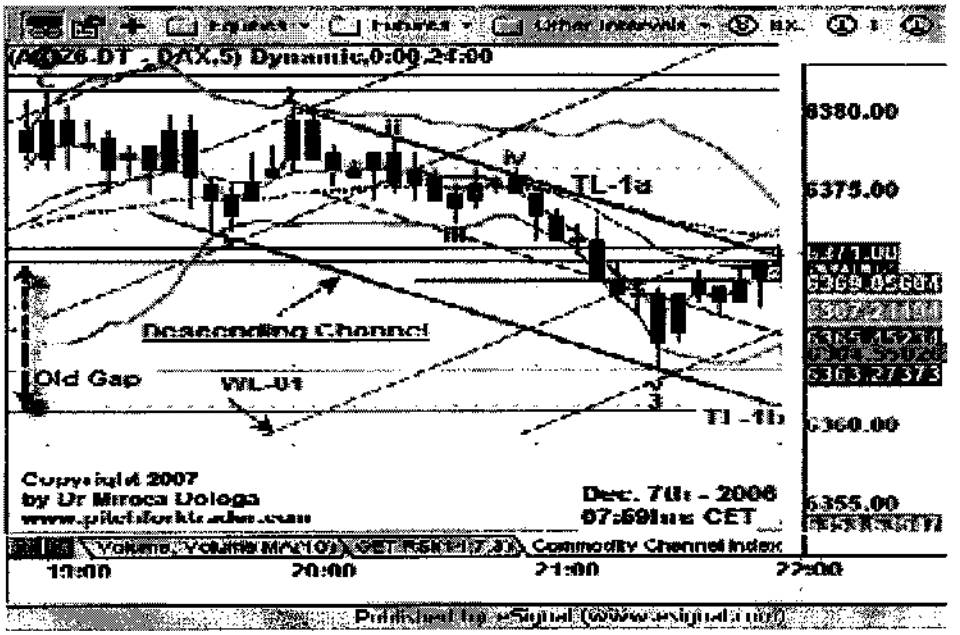


Figure 7 - *The German Dax 30 Futures weren't influenced yet by the high-powered momentum of t
Asian markets, because they were closed since yesterday's 22:00hrs CET. The above chart is still
European pre-open market time. The elements of our* <u>toolbox</u> *are in place and the* <u>chart landmarks</u> *a
drawn: the median lines of an up-sloping pitchfork, with its warning line n°1 (*WL-01*), just above t
close; the descending channel whose upper border (*TL-1a*) promptly halted the market, at close time; t
Bollinger Bands whose narrowing is capable of signalling an imminent high-powered momentum a
the very strong levels of the old gap, whose upper limit trend line promptly stopped yesterday's mar
right on it, at closing time.*

3.3.2 Open Unwinding – On the Watch for the Inter-Market Entry Signal

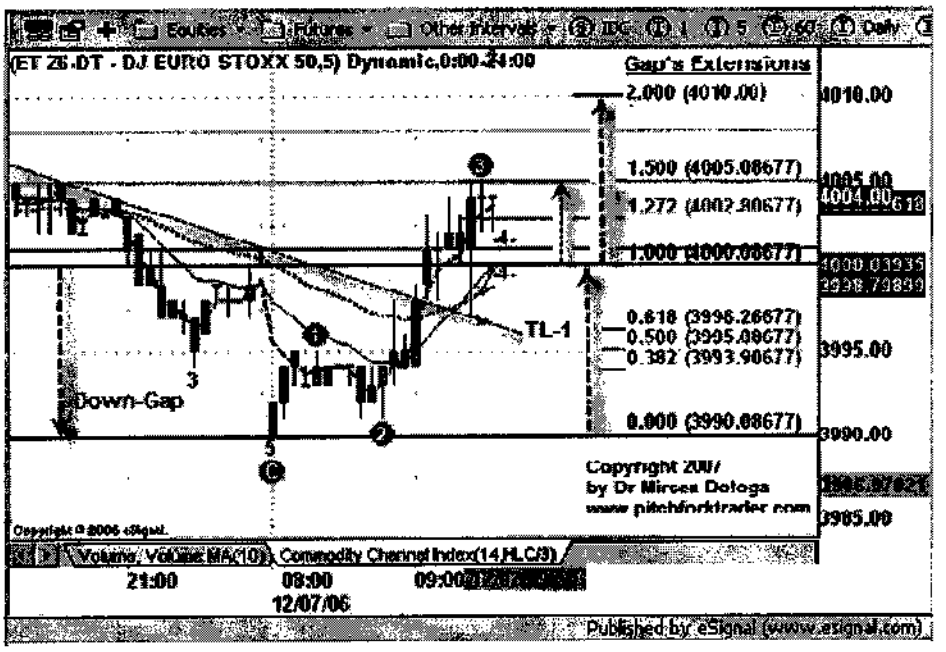


Figure 8 - Trespassing the trend line n°1 (TL-01) of the above EuroStoxx 50 chart has signaled the German Dax 30 long trade entry at exactly 9:00hrs CET, one hour after the opening. We will not go into the trade detail here, for lack of space.

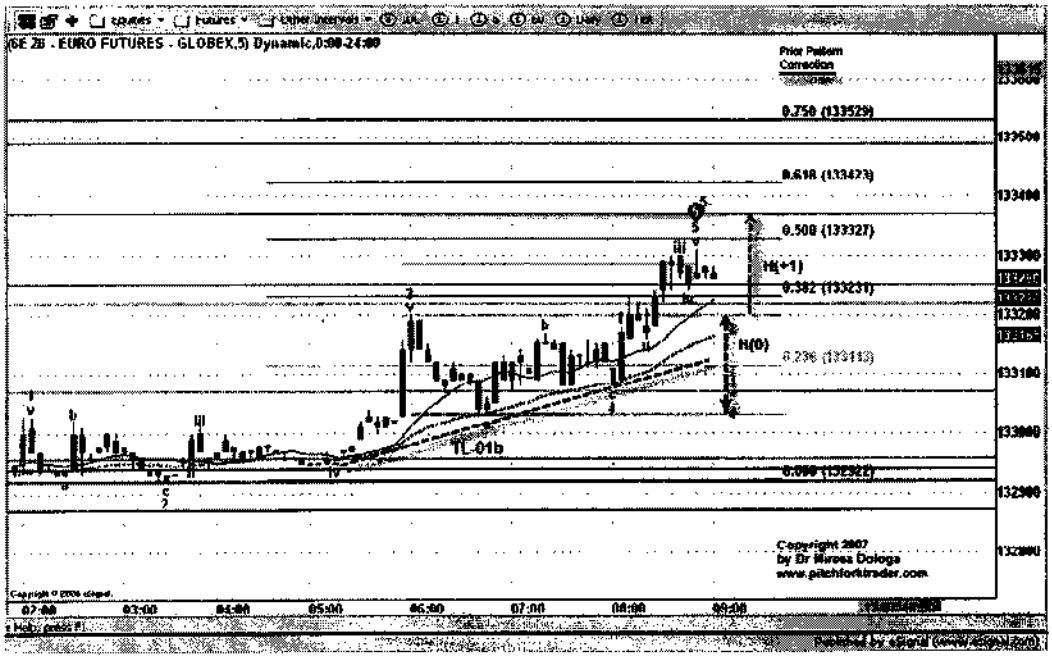


Figure 9 - *The above Euro/USD chart's upper border of the inceptive rectangle* **[H(0)]** *has signalled, around 8:00hrs CET, that the Asian market high momentum has begun to influence the European markets. However, this signal* <u>is not as reliable</u> *as that of the EuroStoxx 50, concerning direction or reliability. We consider that it should be rather used as a confirmation whatever its direction would be. However, in its recent behaviour it acts as an* <u>opposite leading indicator</u>. *Just for the record... given its monetary intricacy with the German Bund (currency conversion versus interest rate), we mention that the latter has exactly the same velleities as an* <u>opposite leading indicator</u>.

3.3.3 Opening - Trading the German Dax 30

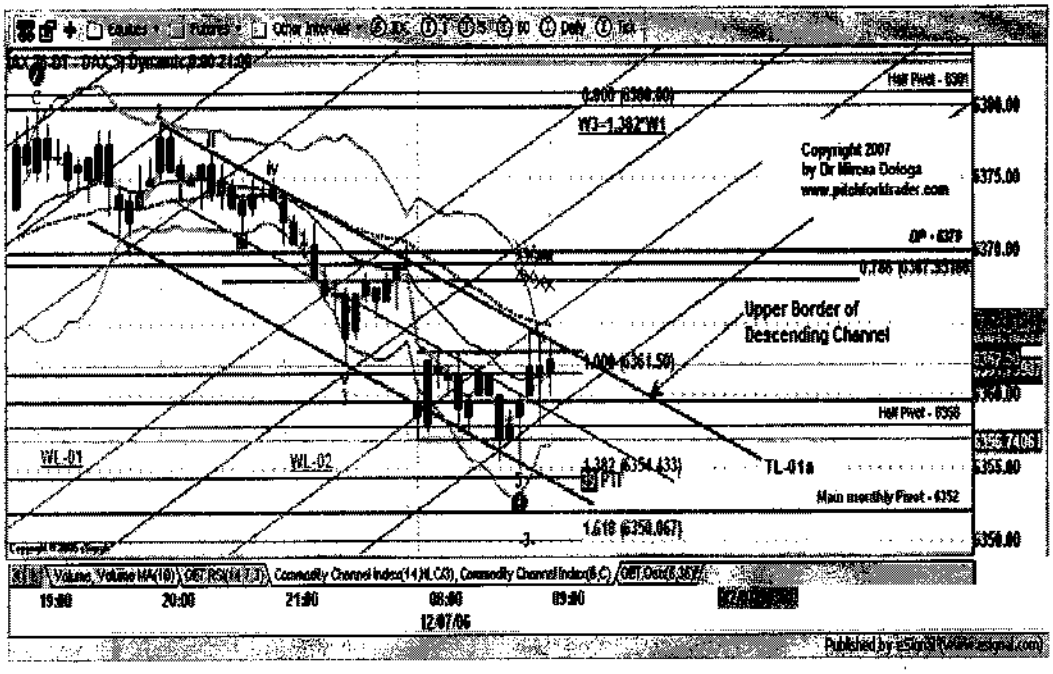


Figure 10 - *The market is aligned just under the upper border of the descending channel, a few minutes before 9:00hrs. We are waiting for the EuroStoxx 50's signal to enter or not in a long trade. The concomitance of the breakout of* **TL-1a** *with preferably expanded volume and the bursting of the EuroStoxx 50 long trade signal, at the same time, will definitely convince us to enter the market. Once again, we will not go into the trade's detail here, for lack of space.*

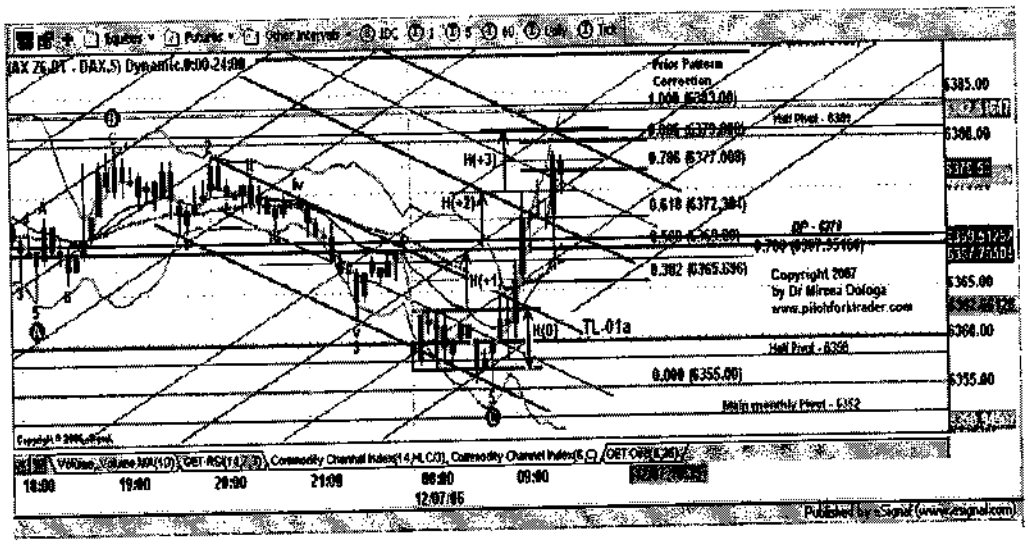


Figure 11 - *As the EuroStoxx 50 chart signaled (refer to Figure 8) the Dax 30 broke the TL-1a trend line, around 9:02hrs CET (refer to Figure 12) and shot straight up, to almost the upper border of the rectangle's n°3 extension [H(+3)]. The momentum confirmed by the expanded volume (not shown here) is closing in on the prior pattern 100% limit correction. As one can observe, the pre-market inter-market conditions brought to the trader's reach a highly profitable low-risk trade.*
Two questions though... Why the German Dax 30 broke the trend line 62 minutes after the opening bell? Why did it wait more than an hour? Well... This has to do with the time-of-the-day! The bulk of traders start their trading activity around 9:00hrs CET, and some German fund managers start taking decisions only at 10:00hrs CET, after they have fully analysed yesterday's after-market, the night's markets, today's pre-open and the early opening...! The trader can follow the values of the past volumes in order to get the backlog of the entries/exits in the day's market, beautifully illustrated by the waltz of the fluctuations!

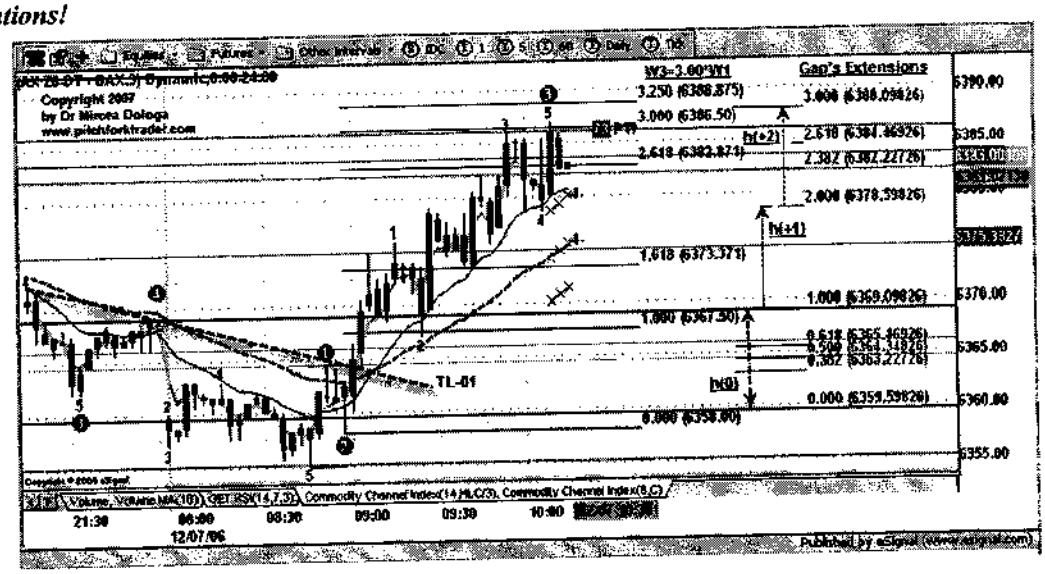


Figure 12 - *The above 3-min chart better illustrates the trading process from the entry at 6364 level, around 9:00hrs, until the last market bar at 10:15hrs. The elements of our* <u>toolbox</u> *used for entry (breakout of the TL-01 trend line & crossover of the two moving averages)) and also the trade's development are highly visible. The targeting and the stop trailing are optimally done through the use of Elliott waves (W3=3.00*W1), gap's extensions presently at h(+2) and the two moving averages. The trend is still in effect above both short-term moving averages.*
The trader should know that the small time frames (3-min and 5-min) used in this chapter, have only been selected for teaching. The usual operating TF are 15-, 30- and 60-minute chart

<u>Conclusion</u>: *Whatever you do, don't neglect the power of the Inter-Market Pre-Open Conditions!*

4 Specific Contexts: Time-of-the-Day

The answers to the two questions in the legend of *Figure 11* strongly suggest the importance of this temporal context. We have already seen the importance of the *earlier opening period*, from 08:00hrs to 9:00hrs CET, which establishes the day's opening gap and the first market movements. We have also seen the expanded volume supported by the bulk of traders, just after 9:00hrs and the bursting activity of the fund managers around 10:00hrs.

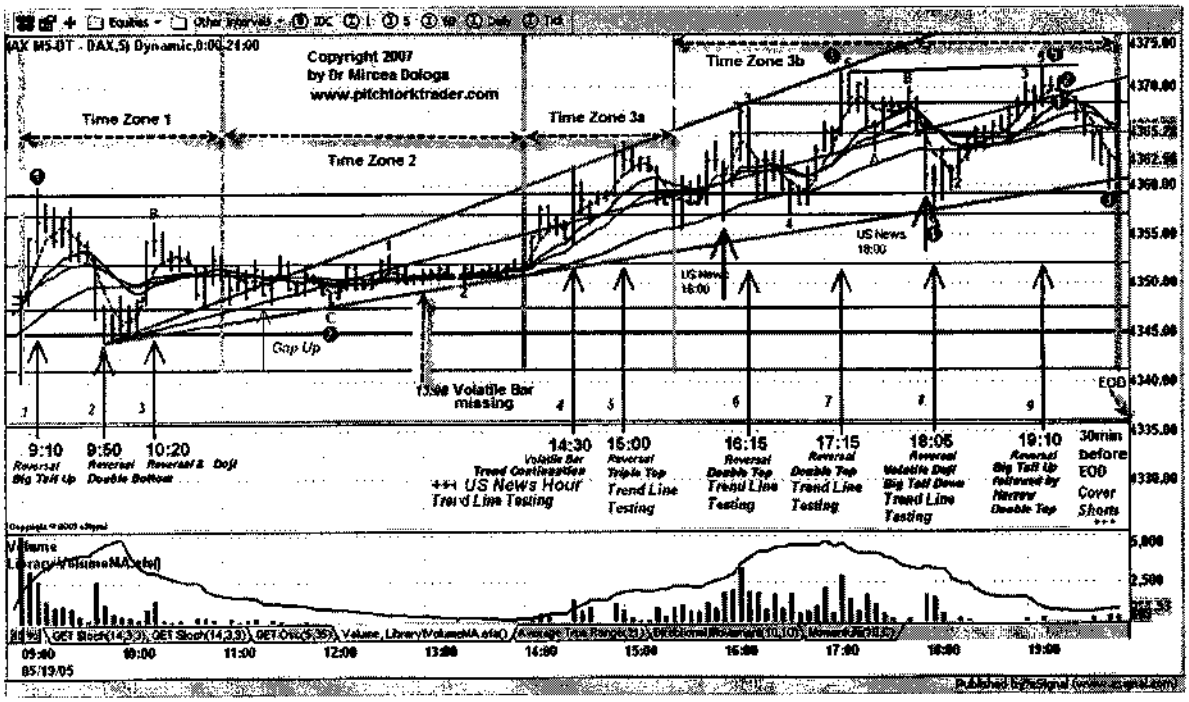


Figure 13 - *The above German Dax 30 chart faithfully reveals the importance of the time-of-the-day context!*

A detailed study of the above chart will reveal the different time zones with their internal events; so useful for trading when they are properly interpreted:

- ***Time Zone n° 1* embeds the first 90 to 120 minutes. The most important are the exact and half hours like 9:00hrs, 9:30hrs, 10:00hrs and 10:30hrs. However one should be aware that a lapse of 10 minutes period could apply before or after, like 9:10hrs, 9:50hrs or 10:20hrs in *Figure 13*. As one can see the volume is maximal at the German Dax 30 opening but not at the S&P 500 opening.**
- ***Time Zone n° 2* encompasses the 11 :00hrs to 14 :00hrs period. The volume is minimal, with the exception of a volatile bar or bars that can happen at 13:00hrs CET, or sometimes 12:00hrs CET. This is a nice, quick and juicy trade.**
- ***Time Zone n° 3a* includes 14:00hrs to 15:30hrs time period. Its first half an hour may contain FED reports with chairman's speech (refer to *Figure 14*) and its last 30 minutes culminate with the S&P 500 opening (refer to *Figure 15*). The trading volume might seem to be mostly at its apogee at 15:30hrs, but surely not always.**
- ***Time Zone n°* 3b contains the remaining time-interval from 15:30hrs to market's close at 22:00hrs CET. This period contains some prolific trading opportunities at:**
  - ***15:45 and 16:00 hrs CET* when frequent news reports are announced (*Figure 14*),**
  - ***18:00 hrs* which represents the midday of the S&P 500 market (12:00hrs US-ET),**
  - ***Closing time minus 20 to 40 minutes* is usually the entry of the day's last trade, especially when the market was dropping in the after-noon or during the whole day – *the covering shorts'* time.**

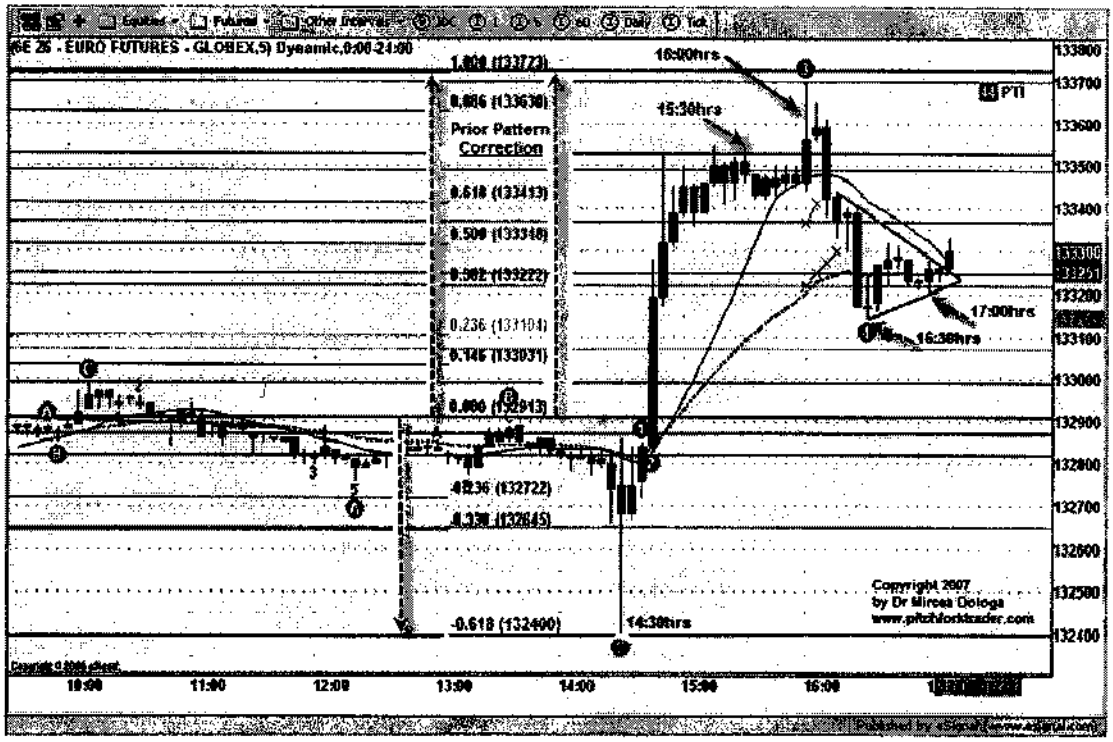


Figure 14 - ***The Time Zones 3a (14:00-15:30hrs) and also 3b (15:30-22:00hrs) are nicely illustrated in the above Euro/US dollar chart.***

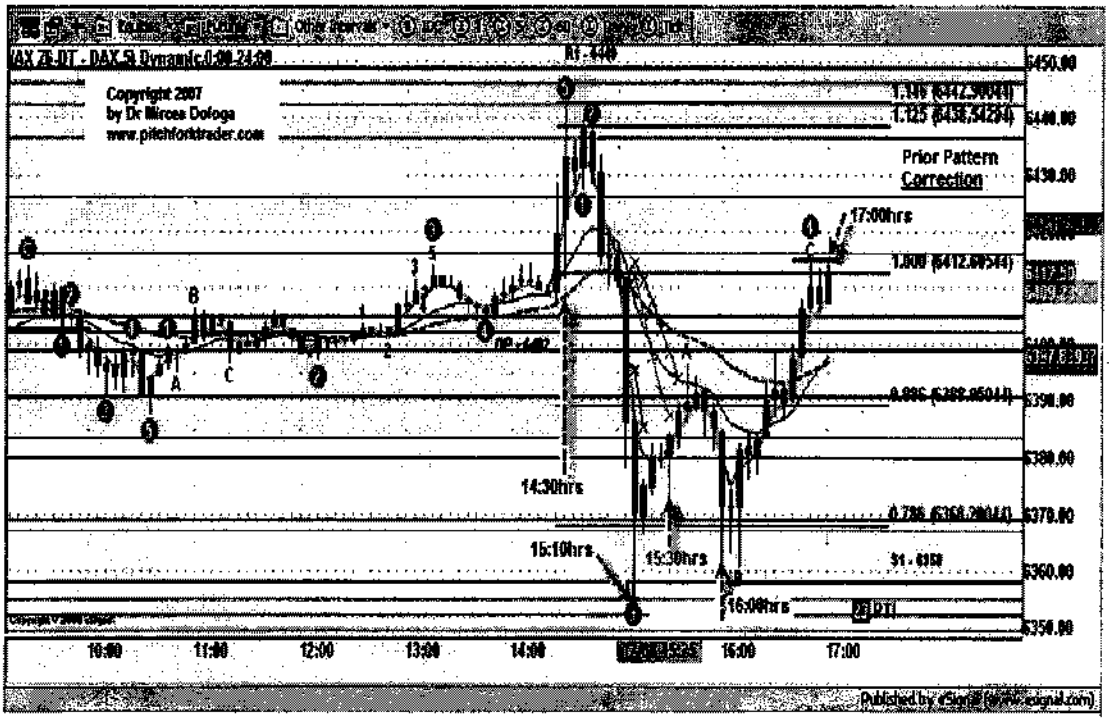


Figure 15 - ***The Time Zone 2, 3a and part of 3b are clearly illustrated in the above chart: the midday's doldrums, the 14:30hrs, 15:10hrs and 16:00hrs CET full reversals. The 15:30hrs S&P 500 opening just went along with the ongoing up-sloping swing – a no event move. It is interesting to note that, at 17:00hrs CET, an eventual reversal formed by a triple bar top and the 100% prior pattern correction level could be the start-up of the development of the wave 5 of the down-sloping impulsive pattern initiated at 6442.90 level.***

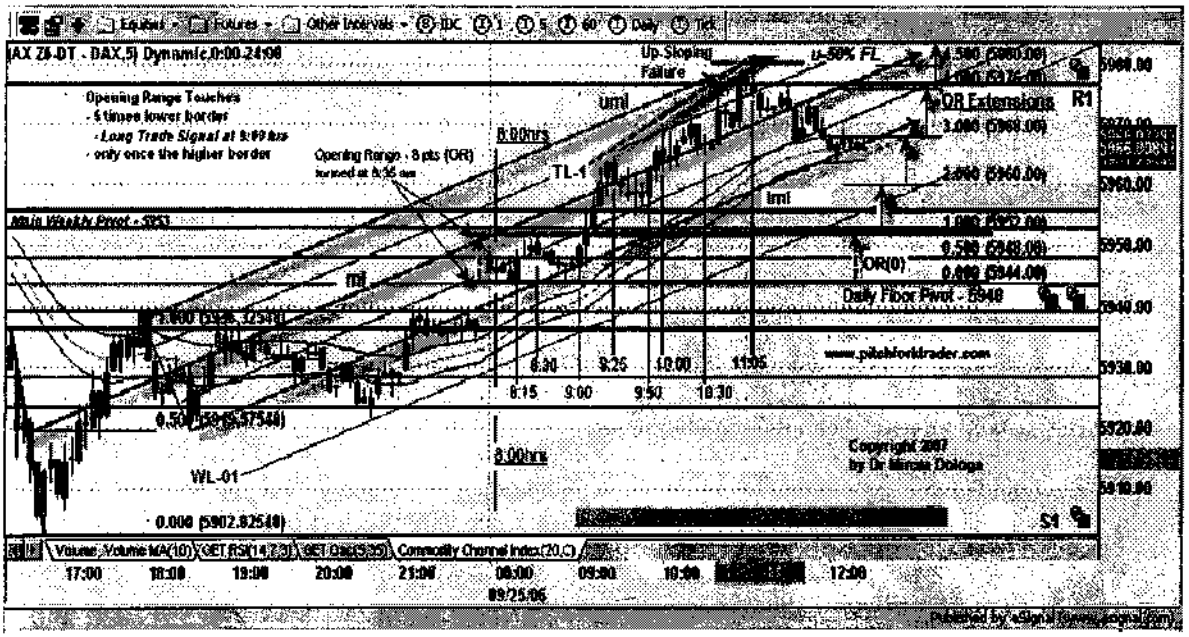


Figure 16 - ***The intricacies among various contexts is obvious in the above chart: time-of-the-day, patterns (*extensions of the OR rectangle*) and floor pivots; all these are delineated by the median lines of the up-sloping pitchfork. The market flow was promptly halted at 11:05hrs by the* tetra-confluence *of TL-1 trend line, upper median line, 450% Fib opening range rectangle's extension & R1 floor-pivot.***

5 Other Specific Contexts

The space in this book will not allow us to consider an exhaustive list of all the specific contexts, but we will try to describe a few more of them very shortly:

5.1 Sentiment Context

The answer at the eternal question "*Who is in control, the bulls or the bears?*" will greatly help the trader or the investor to obtain profitable trades. The trader would like to find the dominant trend in the adequate time frame chart. The investor will rather look at the *Sentiment indicators* and fully use the contrary opinion strategy. Our favoured choice goes to the Bullish Consensus Index at the website www.marketvane.net and WhisperNumber at www.whispernumber.com. The authors claim that if the numbers are at their extremes, *severely overbought or oversold*, then the price action will be expected to follow within a few days. We advise the trader to use these two indicators only as a confirming tool.

Important: ***It is not only to get an accurate reading by getting the right sentiment numbers. It is as important that before you take the trading decision to verify the adequate context by looking at the price action of the "to be traded" instrument.***

5.2 Contextual Background – Unique Time Frame or Multiple Time Frame Charts

This is a very neglected specific context because it goes, hand in hand, with the professional way of the trading, way out of the crowd's reach.
The experienced trader always scrutinizes his four or five multiple time frame charts, from left to right, trying to find the continuity of the market movements from one higher time frame chart to a lower one. On the same time frame chart, one should try to *embed the market flow energy into a hypothetic meandering river*. Then it will be easier to find the location of the current local market within the time frame/traded chart price context and try to visualize the up/down scenarios that will eventually "*bring the river to its delta, or its ocean*"! ALWAYS, *check first the most recent past activity (*Ex: yesterday's after-noon*)!*

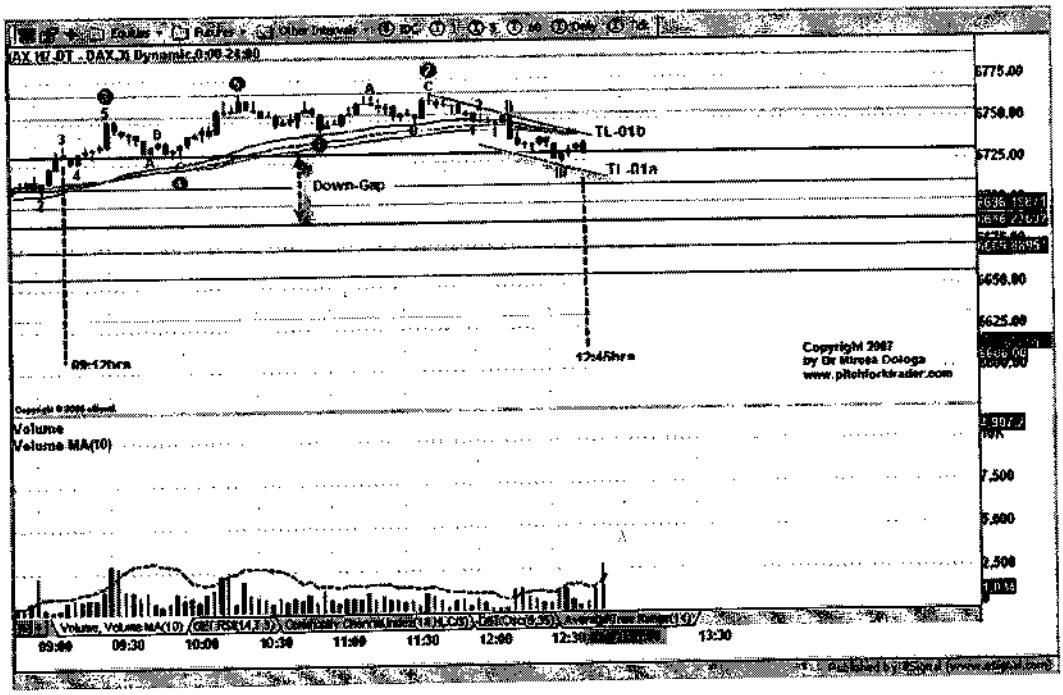


Figure 17 - ***From left to right: a sideways market with small bars and under-average volume, which lasted all morning. In spite of the down-gap and weak-power, the market kept its sustained level, so far! Be ready for a breaking up or down move!*** **Or should we rather say that we expect a market drop, in order to fill the down-gap?** ***The breakout of the*** **TL-01a** ***trend line will tell us...!***

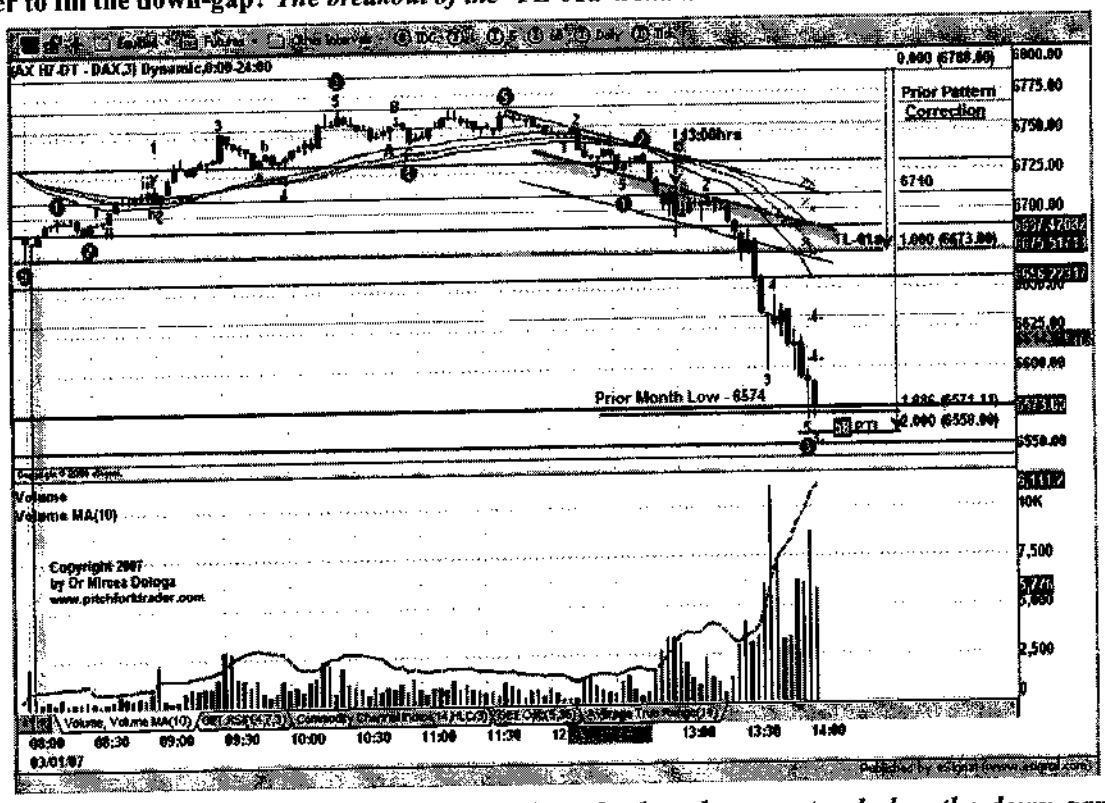


Figure 18 – ***Once the*** **TL-01a** ***trend line has been broken-down, not only has the down-gap has been filled but the market price dropped all the way down under the prior month's low at 6571 level. It was a 139 Dax points drop from the open of the 13:00hrs CET volatile bar at 6710 level. Money-wise it was a 3475 euros drop (139 x 25eus), about 4691 US dollars, and all this in only one hour, from 13:00hrs to 14:00hrs CET.***

Important: The trader should always be suspicious, *in a positive way*, of quiet markets, especially those having narrow bars and weak volume! And... watch out for the 13:00hrs CET volatile bar...! *It can surely make your day!*

5.3 Chart Pattern Concept

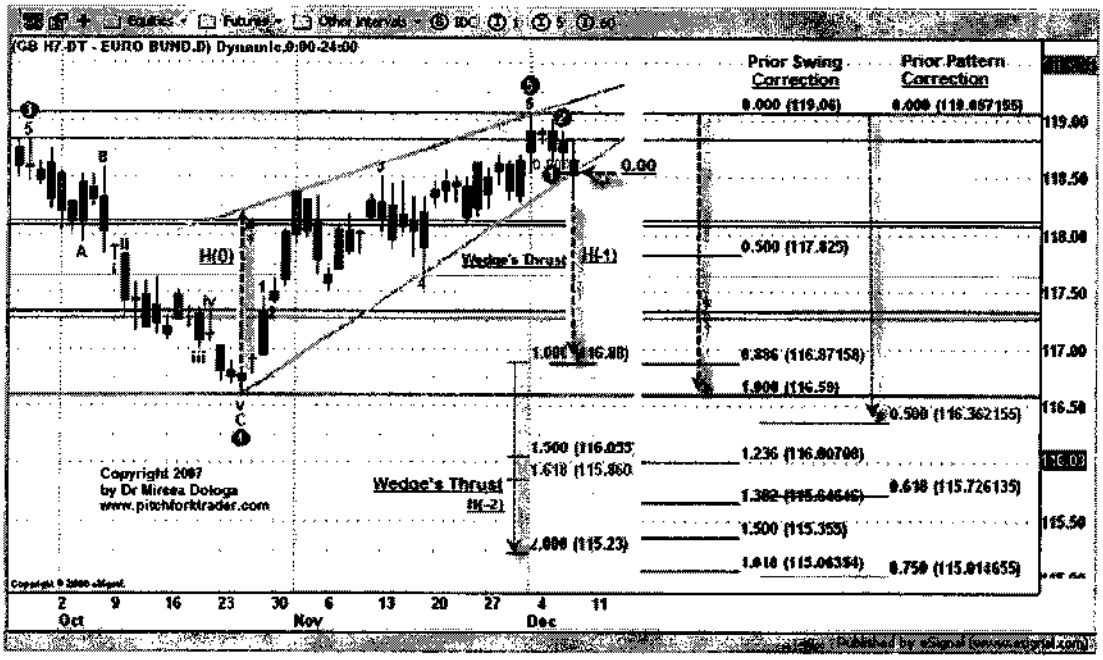


Figure 19 – *Isn't the market flow on the above chart ready to break the wedge? See below!*

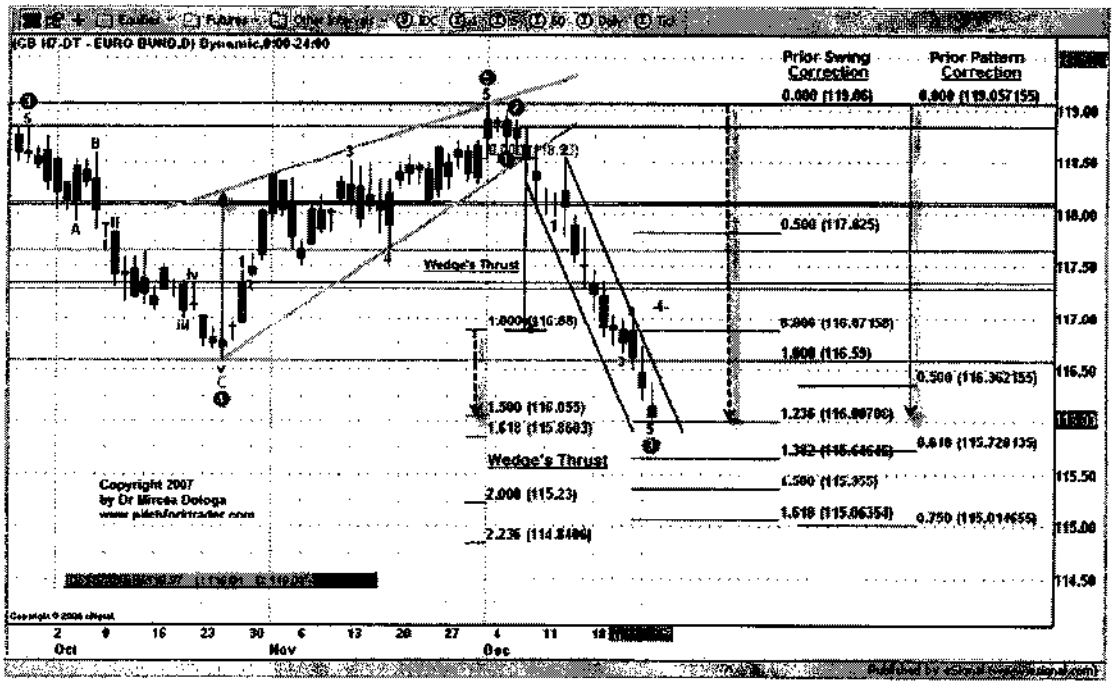


Figure 20 – *Not only the lower border of the wedge was broken, but it dropped like a stone!*

One thing... never neglect the revealing power of the various elements of the *toolbox* in synergy with the *chart's landmarks*: the Fibonacci ratios applied to the prior swing, prior pattern corrections and to the wedge's thrust; the delineating of the recent gaps; the key levels and the drawing of the patterns' boundaries.

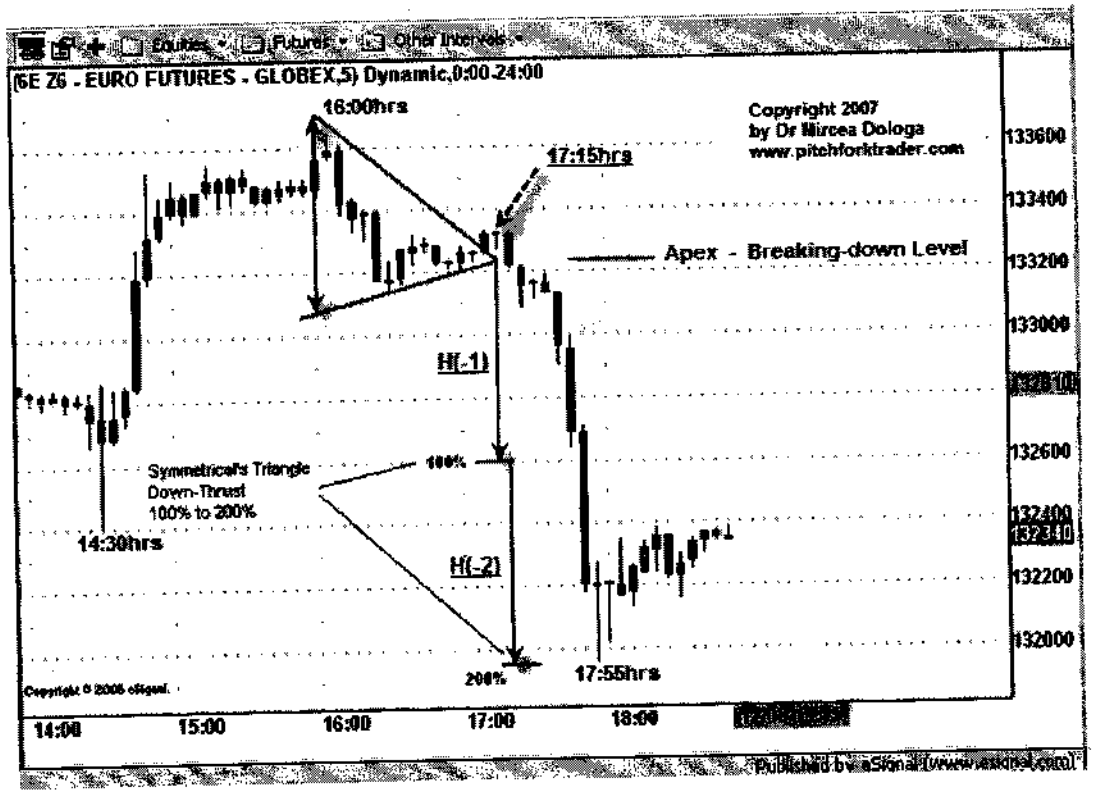


Figure 21 – *The pattern context meets the time-of-the-day concept. The symmetrical triangle's fall began at exactly 17:20hrs CET. In less than an hour, the market dropped 200% of the thrust!*

All the charts illustrated in *Figures n° 5, 16, 17, 18, 19* and *20*, underline the power of the chart patterns (the *descending trend line*, the *down-sloping channels*, the *ascending wedge* and *symmetrical triangle* in these examples), in forming the building blocks of the *intuitive approach*.
The outcome is there to speak!

CONCLUSION of the Chapter - As we have seen in these eighteen pages, the Context *of the Trade* can really assist the trader to improve his performance on his way to select highly profitable low-risk trades. In order to build the complex and ubiquitous task of the *intuitive approach* we will further study the other two building blocks: *the pre-open preparation* and the *inter-market analysis*. Don't be surprised if you'll find an intricacy of the internal elements of each block, or among these three building blocks!
It is only normal, in our fractal environment!

Key Points to Remember:

- **It is the most simple concept, that can become the most powerful and most efficient.**
- **The *Intuitive Approach* is like an expert guide unlocking the wisdom of the sub-conscious mind.**
- **Before you take any decisions, mark out your market's *spatial* and *temporal* cardinal orientations.**

- **Be sure you understand the labyrinth aspects of the Dow Theory, indispensable for successful applying of fundamentals tenets in trading.**
- **Most of the market technicians agree that the volume precedes price**
- **Any heavy volume might signal a *genuine trend* while any low volume activity indicates a very *probable false move.***
- **Whenever you'll study a chart make full usage of the indispensable elements of our toolbox and the chart's landmarks. Don't overdo it! You'll fall in Analysis Paralysis.**
- **Concerning the US markets, especially the S&P 500 and Dow Jones Industrial Index, we can't affirm that they *absolutely lead the German Dax 30 market. However we gladly accept this* leading role, of both indexes, whenever they are in a event-mode *spilling-over* the Europe their high-powered impact.**
  It's a question of timing and observation!
- **The same event-mode *spilling-over effect over* Europe is induced by the Asian Market, especially the Nikkei 225 index. Every morning, like a Swiss clock, the Japanese index guides the Dax 30 opening, especially when its just closed market has a certain percentage of trending mostly over 1% change.**
- **Don't forget that the EuroStoxx 50 index is a leading indicator that tries most of the time, to calm down the volatile German Dax 30, as much as it can!**
- **Be aware that the Euro/US dollar currency pair, used as an indicator for Dax 30 market, is not as reliable as EuroStoxx 50 idex. It's recent behaviour shows an opposite leading indicator role.**
- **Given Euro/US dollar's monetary intricacy with the German Bund (*currency conversion versus interest rate*), we mention that the latter has exactly the same velleities as an opposite leading indicator.**
- **As a single tip... Always be on the watch for the Covering Short's trade, half an hour before the close. *It might make your day!***
- **You'll know when you have already acquired the Intuitive Approach. It won't ring a bell, but it will make you *embed the market flow energy into a hypothetic meandering river!***
- **Always be suspicious of a quiet market...It might hide a great trade!**
- **Once in motion, the trend has a higher probability to continue rather than to be interrupted.**

Chapter 2

Pre-Open Preparation

We will begin this chapter with the words of Karl Popper, the great Austrian philosopher born in 1902 who opened, in a way, the gate towards an unconventional thinking. He published in 1984, in Paris *"The irresolute Universe"*:

"Any event is caused by a preceding event, letting us to believe in a possible forecast or explanation of any event... "

The *unconventional* is the attribute of a highly informed and educated person. The pre-open preparation is a well-kept secret of the professional trader. I let the reader imagine the reasons! As for us, we consider that *"sharing"* is one of the most exalting sentiments that a colleague trader could have, especially when the mentor sees the terrific results with his own eyes!
We have mentioned in the previous chapter (*page 12*) the following:

The bulk of traders start their trading activity around 09:00hrs CET, and some German fund managers start taking decisions only at 10:00hrs CET, after they have fully analysed yesterday's after-market, the night's markets, today's pre-open and the early opening...!

We are talking in the above paragraph about the European markets. Most of them open at 08:00 hrs CET but the majority of traders come in, one or even two hours later!
We started to explain that the importance of pre-open preparation is growing, year-after-year, due to its beneficial effect on trader's pocket. Some traders even say that more than 70% of the profitable trades are due to this factor. We completely agree with it!
We will try below to systematize a learning module, embracing this concept, which isn't an easy task. Thus, we will not only enhance the teaching of our *intuitive approach*, but we will also describe the various factors with their different levels of difficulties!

1. Defining the Influences of the External Fundamentals on the Traded Market(s)

Opening prices are a complex reaction to raft of news and market information. An understanding of what happened overnight will give us a clue as to the probable direction and strength of the opening gap, the morning bias and sometimes the direction of the whole day. Before taking any trading decisions, the conscientious trader has already done his *home work* concerning the *after market*, the *overnight markets*, the *pre-open* and the *early opening period* of the first 60 or even 120 minutes.
Even if it might seem weird to some traders; the operated market fully depends on the conditions of the other markets, indispensable for its own well-being.

1.1 S&P 500 and ES e-mini

The interaction of the US markets and European markets is deeply reciprocal even if, from time to time, the latter or the former will take the initiative, and lead the other. Over several years, our statistics couldn't prove which one really leads.

Normally, as the S&P 500 cash market closes, during the weekdays, at 22:00hrs CET (16:00hrs US ET), the same time as the German Dax 30 Futures, we can say that they are somewhat synchronous and concomitant. However the night ES (*S&P 500 e-mini*) will continue, but it will close a quarter of an hour later, at 22:15hrs CET. After a 15 minutes pause, the ES will re-open, at 22:30hrs CET, until next evening at 22:15hrs CET. On the weekends the ES will stay close from Friday night at 22:15hrs CET until Monday at 0:00hrs CET.

Take into consideration that there is a six hours lapse between Frankfurt and New York time. The S&P 500 opens at 9:30hrs US ET when in Frankfurt it is already after-noon at 15:30hrs CET. We conclude here by saying that it is important to be on the watch for the night ES which will monitor any night activity, thus influencing the Dax 30's opening at 8:00hrs CET.
As a *trading tip*, consider the edge of the bulk of weekend information given by the night ES early on Monday morning.

1.2 Nikkei 225

The Nikkei 225's informative power goes *hand-in-hand* with that of the night ES, because it is open, during the Europe night, from 02:00hrs CET until 08:00hrs CET. When one closes the other opens. Thus, all the Asian activity will strongly influence the opening of the European markets, including the German Dax 30.

1.3 German Bunds

For instance, any stock market index needs a stable Bond market (*interest rates*), which will establish the right cost of money so indispensable for the well being of that regional market. Moreover, the cost of the conversion value between the Euro and US dollar will play a certain role in exporting procedures.
The German Bunds are the equivalent of the US bonds. They are under the jurisdiction of the European Central Bank, whose chairman Claude Trichet is of French origin. This central bank injects or subtracts off the money markets, substantial amounts of funds, in order to influence the European money supply or demand. Its role is as identical as that of the US Fed's.
As for the traders, the German Bunds represent a German Dax 30 leading indicator having mostly an *inverse relationship*, or at the most being in sync. It can't be used as a positive or negative correlation indicator. Instead, it is precious when the market makes sudden moves, especially at the moment of the releases of European Central Bank or Fed's reports. Keep it in mind... at the most it is a confirming indicator, not more or less!
One last word... use the 5 minutes chart for details, and scrupulously note the gap and the immediate support and resistance key levels! Whatever the direction of Dax 30 would be, closely watch the trespassing of the German Bunds' key levels and their impact on the Dax.

1.4 Crude Oil

The *crude oil,* which is the soul of any larger consuming energy industries, will not be able to exist without an optimal equilibrium cost between the raw materials and the finished products. All this will drag along the cost of the natural gas and the heating oil. A consistent percentage of the costs of any finished product will be taken by the consumed energy.
The *crude oil* is in a way, the faithful brother of the German Bund, concerning the impact on German Dax 30. It is a leading indicator, but in the *opposite direction*. Note its day's direction and the after-noon tendency, just before the close of the market. The German Dax 30 will not flinch unless the *crude oil* will make a new high/low or will vehemently react to a disastrous Islamic terrorist act. Besides the eSignal charting, the trader can nicely see the crude oil fluctuations in a compact format, with a great visibility at www.futuresource.com

1.5 Euro versus US dollar

The foreign exchange rates between the Euro and US dollar are closely related to the economic environment and also constitute by themselves a real market. There is an eternal fight between the two economies, for economic supremacy. It is clear that the capital tends to move towards the country with stronger currency.

Speaking about trading the Dax 30, a pre-open watch on the conversion rates between the two currencies, will certainly ease up or, on the contrary, tighten the smooth development of the Dax 30 trading during that specific day.

There is a strong interrelation between the Euro/US dollar pair and the German Bunds. If a country has a strong currency it will attract flows of investment funds, which in turn will have a tendency to lower the interest rates. It is not excluded that the weakening of the currency will produce the perverse effect of pulling-out of the foreign investments with an increase in interest rates. As for the impact of this currency pair on Dax 30 behaviour, it will act as a leading indicator having an *inverse relationship*.

Once again, we will consider the currency pair's daily fluctuations for our intra-day German Dax 30 trading but rather as a confirming factor.

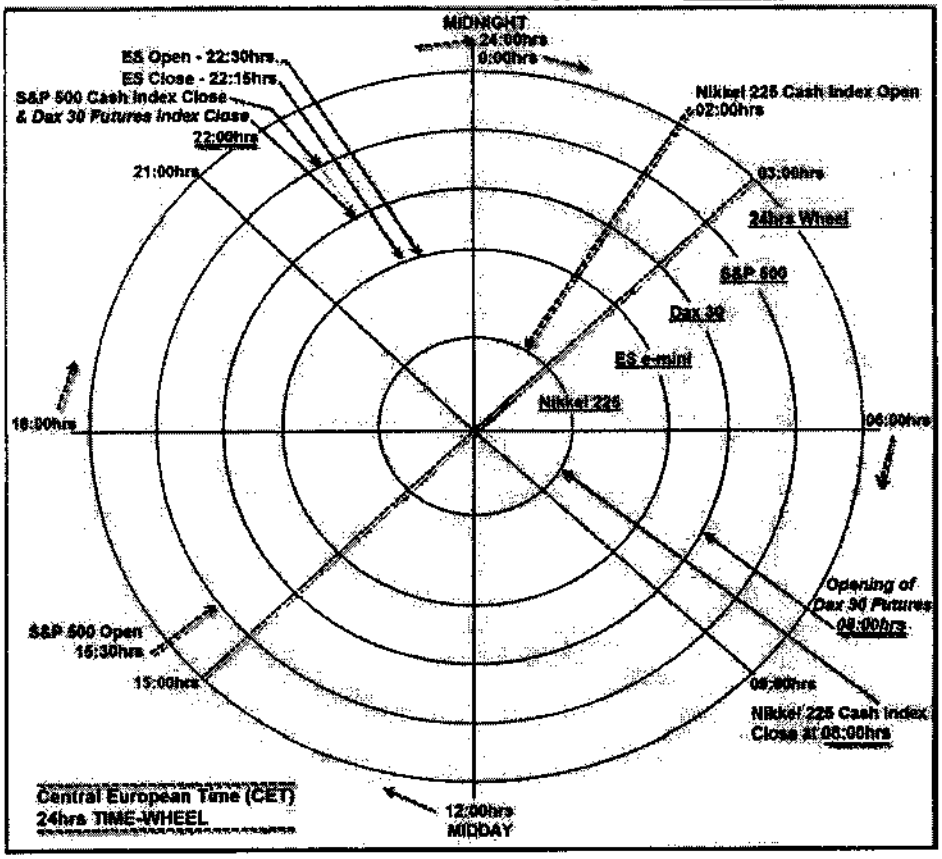


Figure 22 – *The above 24 hrs Time-Wheel illustration shows the inter-relations between the Opens and the Closes of the implied markets that will really influence the opening of the traded instrument, which in this case is the German Dax 30. We underline the fact that the Euro/US dollar currency pair behaves almost the same as the German Bunds, as of this period of the year (Fall of 2007). Therefore we didn't illustrate the pair on the above drawing.*

1.6 Overnight News

We will only mention the important role of the overnight news over the traded market(s), because given its importance we will consecrate a whole chapter to this. However, we would like to say that we distinct three categories of news:

- The *Events*, which will have the front page, thus having the power to drop or rally any type of markets, at least for the day,
- The common *News*, which will take their habitual place within the informational support, but which will only scratch the market movements,

- The *Releases*, whatever they are, economic or Fed oriented, could shake the markets but fortunately their effect will wane within 30 minutes or at the most, at the end o the day. Tomorrow will be another day, or should I rather say, *a train hides the nex one*?

CONCLUSION of the sub-chapter - We have systematized the above information, in a Excel spreadsheet called the *Dax Pre-Open Trading Study*, which encloses our pre-ope information, so valuable for the trader, especially during the opening period. Go to the end o this chapter (*Figure 40*) to visualize it and write to the author to get the Excel file.

2. Defining the Influences of the Internal Fundamentals on the Traded Market(s

In spite of their vehement impact, the influences of the external Fundamentals will wane an most of the time their effects will not really last the whole morning. Then, the loca supply/demand mechanisms mirrored by the chart-related internal factors will take ove continuing the ongoing trend, as if nothing has ever happened. We will describe in this sub chapter most of the internal traded-market factors that influence its movements.
As an index trader, one should first understand the nature of its composing stocks and th role of the *Tier 1* stocks of the index. Then, we should take into account the various technica elements that will guide us into a better comprehension of the trading decisions: the extrem and also the everyday key levels, the dominant trend but also the multiple time frame trends the floor and also Mark Fisher's pivots, the 80/20 rule, the volatility and the momentum bars

2.1 Role of the Composing Stocks of an Index in Real-Time Trading

2.1.1 Composition of a Stock Index – Identifying the Tier 1 Stocks

We will take as an index example the German Dax 30, the predominant market in Europ and will try to verify if there are any *Tier 1* stocks, first statistically identified and late through the charting.

DAX (PERFORMANCE-INDEX)

Source: *Deutsche Börse AG* - Frankfurt - Germany — September [illegible] - 2006 — All Excel Files can be obtained from the author mircea[illegible]@yahoo.com

[illegible]	Symbol	Reporting Instrument	Sector	Price (per Share)	N° of Shares	Market Capitalization (millions of euros)	[illegible] %	TOTAL %	from N° to N°
1	EOA	E.ON AG O.N.	Utilities	96.180	692,000,000	66,618.72	[illegible]		
2	SIE	SIEMENS AG NA	Industrial	65.720	[illegible]	54,[illegible]	[illegible]		
3	ALV	ALLIANZ AG VNA O.N.	Insurance	132.000	[illegible]	[illegible]	[illegible]		
4	DBK	DEUTSCHE BANK AG NA O.N.	Banks	[illegible]	[illegible]	[illegible]	[illegible]		
5	DCX	DAIMLERCHRYSLER AG NA O.N.	Automobile	40.140	[illegible]	37,044.[illegible]	[illegible]		
6	RWE	RWE AG ST O.N.	Utilities	70.[illegible]	[illegible]	32,[illegible]	[illegible]	[illegible]	N°1-6
7	BAS	BASF AG O.N.	Chemicals	[illegible]	[illegible]	[illegible]	[illegible]		
8	SAP	SAP AG O.N.	Software	[illegible]	[illegible]	22,070.01	[illegible]	[illegible]	N°1-8
9	DTE	DT.TELEKOM AG NA	Telecommunication	11.230	[illegible]	[illegible]	[illegible]		
10	BAY	BAYER AG O.N.	Chemicals	[illegible]	[illegible]	27,[illegible]	[illegible]	[illegible]	N°1-10
11	MUV2	MUENCH.RUECKVERS.VNA O.N.	Insurance	116.710	[illegible]	[illegible]	[illegible]		
12	CBK	COMMERZBANK AG O.N.	Banks	27.080	[illegible]	[illegible]	[illegible]	[illegible]	N°1-12
13	DPW	DEUTSCHE POST AG NA O.N.	Transportation & Logistics	20.070	1,1[illegible]	[illegible]	2.[illegible]%		
14	DB1	DEUTSCHE BOERSE NA O.N.	Financial services	11[illegible]	102,[illegible]	12,[illegible]	2.02%		
15	BMW	BAY.MOTOREN WERKE AG ST	Automobile	39.020	601,995,196	12,174.79	2.[illegible]%		
16	CON	CONTINENTAL AG O.N.	Automobile	[illegible]	[illegible]	11,[illegible]	1.[illegible]%		
17	TKA	THYSSENKRUPP AG O.N.	Industrial	[illegible]	614,420,044	10,430.67	1.77%		
18	VOW	VOLKSWAGEN AG ST O.N.	Automobile	62.150	260,210,447	10,[illegible]	1.[illegible]%		
19	MAN	MAN AG ST O.N.	Industrial	[illegible]	140,[illegible]	[illegible]	1.[illegible]%		
20	ADS	ADIDAS AG O.N.	Consumer	[illegible]	203,[illegible]	7,[illegible]	1.22%		
21	LHA	LUFTHANSA AG VNA O.N.	Transportation & Logistics	15.310	[illegible]	7,[illegible]	1.[illegible]%		
22	IFX	INFINEON TECH AG NA O.N.	Technology	9.100	747,[illegible]	[illegible]	1.14%		
23	SCH	SCHERING AG O.N.	Pharma & Healthcare	91.750	[illegible]	[illegible]	1.13%		
24	MEO	METRO AG ST O.N.	Retail	[illegible]	[illegible]	[illegible]	1.0[illegible]%		
25	HRX	HYPO REAL ESTATE HLDG ST	Banks	46.120	[illegible]	[illegible]	1.[illegible]%		
26	FME	FRESEN.MED.CARE KGAA ST	Pharma & Healthcare	[illegible]	[illegible]	[illegible]	[illegible]		
27	HEN3	HENKEL KGAA VZO O.N.	Consumer	[illegible]	[illegible]	[illegible]	[illegible]		
28	LIN	LINDE AG O.N.	Chemicals	[illegible]	[illegible]	[illegible]	[illegible]		
29	TUI1	TUI AG NA	Transportation & Logistics	[illegible]	[illegible]	3,435.23	[illegible]		
30	ALT	ALTANA AG O.N.	Pharma & Healthcare	[illegible]	[illegible]	3,170.20	[illegible]		

Figure 23 – *The above Excel spreadsheet assists the intra-day trader in identifying the Tier 1 stocks o the German Dax 30 whose behavior could greatly signal an early change in direction, especially a certain hours of the day.*

A detailed real-time analysis of the stock index (*refer to Figure 23*) will reveal:

- The weight of each stock within the stock index varies from 0.53% to 11.38% as of September 8th, 2006,
- The weight percentage addition of the first six to twelve composing stocks gives 48.75% to 76.14%:
  - *The first six ascending percentage sorted stocks form 48.75% of the total of the index,*
  - *The first eight ascending percentage sorted stocks form 59.48% of the total of the index,*
  - The first ten ascending percentage sorted stocks form 69.41% of the total of the index,
  - *The first twelve ascending percentage sorted stocks form 76.14% of the total of the index,*

Thus we can conclude that by following-up the first ten Tier 1 stocks. we can easily keep track of stock index's behaviour. They represent 69.41% of index's total (*more than two thirds*), in September 2006.

2.1.2 Stocks' Percentages - On the Real-Time Watch for Trending Stocks

Trying to find a *proxy* for an earlier trend identification of the stock index, we have analysed the behaviour of the composing stocks (*Fig. 24*). We tried to delineate the trending stocks from the non-trending and we reached the conclusion that the 80/20 Rule applies. It is important to note that some stocks vary several times the variation of the smallest change. For instance, Daimler has a 3.14% change, having the biggest change, and Deutsche PostBank AG has the smallest fluctuation at 0.09%, just before the open. Can we say that the latter stock is 35 times more stable than the former? May we say that Daimler leads the market? For that we will do some studies to establish the Dax 30's Tier 1 stocks.

Aktien im Index

WKN	Name		Geld	Brief	Veränd. (Brief) abs.	Veränd. (Brief) in %	Geld- und Briefkurs	Vortag
500340	ADIDAS		41,530	41,780	+0,470	+1,14%	Xetra	41,310
840400	ALLIANZ		158,120	158,520	+0,520	+0,33%	Xetra	158,000
760080	ALTANA		49,920	50,120	+0,620	+1,25%	Xetra	49,500
515100	BASF		86,660	86,860	+1,020	+1,19%	Xetra	85,840
575200	BAYER		49,070	49,220	+0,670	+1,38%	Xetra	48,550
519000	BMW		44,990	45,190	-0,210	-0,46%	Xetra	45,400
803200	COMMERZBANK	BC	33,450	33,610	+0,070	+0,21%	Xetra	33,540
543900	CONTINENTAL AG		100,160	100,510	+0,620	+0,62%	Xetra	99,890
710000	DAIMLER	DL	62,820	63,020	+1,920	+3,14%	Xetra	61,100
581005	DEUTSCHE BOERSE N		172,200	172,700	+0,450	+0,26%	Xetra	172,250
555200	DEUTSCHE POST		23,050	23,160	+0,270	+1,16%	Xetra	22,880
800100	DEUTSCHE POSTBANK AG	DK	84,010	84,310	+0,080	+0,09%	Xetra	84,250
514000	DT.BANK		102,590	102,890	+0,190	+0,19%	Xetra	102,700
555750	DT.TELEKOM		12,920	12,970	-0,030	-0,23%	Xetra	13,000
761440	E.ON		108,740	109,050	+1,800	+1,68%	Xetra	107,250
578560	FMC	DK	111,180	111,580	-0,720	-0,64%	Xetra	112,300
604843	HENKEL		111,760	112,160	+0,490	+0,44%	Xetra	111,670
802770	HYPO REAL ESTATE HOLDI...		49,280	49,560	+0,850	+1,74%	Xetra	48,730
623100	INFINEON	DK	11,000	11,050	+0,050	+0,43%	Xetra	11,000
648300	LINDE		81,840	82,340	+0,320	+0,39%	Xetra	82,020
823212	LUFTHANSA		21,460	21,560	+0,090	+0,42%	Xetra	21,460
593700	MAN		88,240	88,640	+0,940	+1,07%	Xetra	87,800
725750	METRO		52,730	52,930	-0,080	-0,15%	Xetra	53,010
843002	MUENCHENER RUECKVERSIC...	DK	126,070	126,470	+0,450	+0,36%	Xetra	127,990
703712	RWE		81,840	82,140	+0,100	+0,12%	Xetra	82,040
716460	SAP		34,730	34,930	+0,250	+0,72%	Xetra	34,680
723610	SIEMENS		83,210	83,410	+1,520	+1,86%	Xetra	81,890
750000	THYSSEN		37,510	37,680	-0,250	-0,66%	Xetra	37,910
TUAG00	TUI AG		18,410	18,560	+0,090	+0,49%	Xetra	18,470
766400	VW		110,840	111,090	-0,480	-0,43%	Xetra	111,570

Source: www.onvista.de

Figure 24 – *The above* real-time table *illustrates the* trend-wise percentage changes of the German Dax 30 stock index, *on the morning of April 10th, 2007, at 07:59hrs CET before market opening. As you can observe there is a very strong up-sloping movement. Only six stocks, out of 30, are in down trend position. Please observe the Down/Up-oriented arrows, in red versus green color. The demand/supply balance has reached 80% pleading for a strong up-trend. Please observe the corresponding charts at the end of this chapter. The change variations of the down-sloping stocks are under 0.66% which means that their down tendencies aren't so strong, and could reverse any time. In our experience we have found that a trend is strong enough to continue if 25 stocks out of 30 are trending in only one direction. Once again the Rule 80/20 has the last word!*

Source: www.onvista.de

N°	TIME	Up Stocks Green	Down Stocks Red	Un-changed Blanc	Total
	Pre-Open	25	4	1	
1	08:04	24	5	1	30
2	08:12	27	2	1	30
3	08:32	25	4	1	30
4	08:59	26	3	1	30
5	09:00	27	2	1	30
6	09:15	28	1	1	30
7	09:22	29	1	-	30
8	09:34	30	0	-	30
9	09:55	26	3	1	30
10	10:05	24	5	1	30
11	10:16	23	7	-	30
12	10:32	22	8	-	30
13	10:44	21	9	-	30
14	10:59	20	10	-	30
15	11:12	19	11	-	30
16	11:20	18	12	-	30
17	11:38	17	13	-	30
18	11:48	16	14	-	30
19	11:58	15	15	-	30
20	12:05	14	16	-	30
21	12:15	10	19	1	30
22	12:30	9	20	1	30
23	12:44	8	21	1	30
24	12:50	5	24	1	30
25	13:04	3	26	1	30

Figure 25 – *The above table illustrates the trending of the Dax stocks on September 8th, 2006. Not only we use the pre-market real-time data of the 30 stocks change table but also the intra-day data. As of September 8th, 2006, we have constituted an Excel spreadsheet, which is using this raw real-time data* (refer to Figure 25) *to reveal specific elements, as follows:*

- *The time-of-the-day as the first column (after the numbering column),*
- *The number of up-trending stocks, in the second column (in green),*
- *The number of down trending stocks, in the third column (in red),*
- *The number of non-trending stocks the fourth column (in blanc)*
- *and finally the last column (the fifth) with the total of the stocks.*

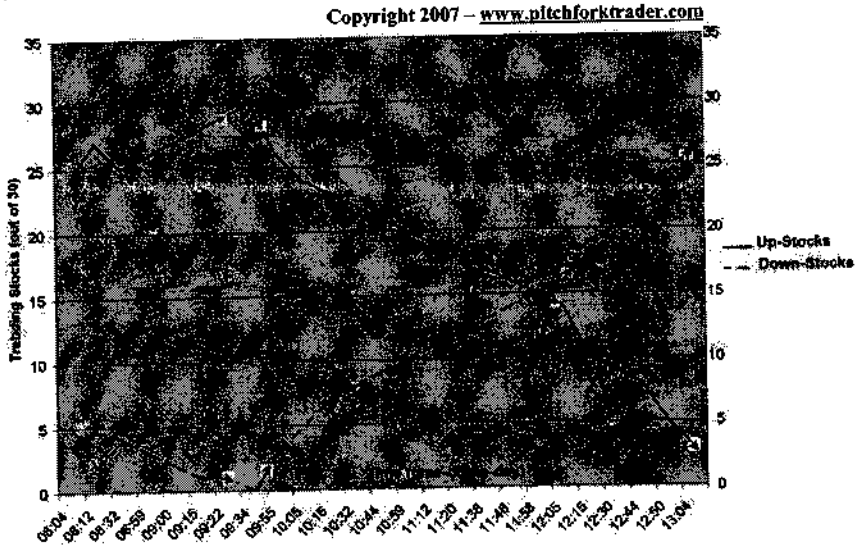


Figure 26 – *The above chart is a faithful graphical illustration of the trending of the Dax 30 stocks raw data of Sept 8th, 2006 shown in Figure 25.*

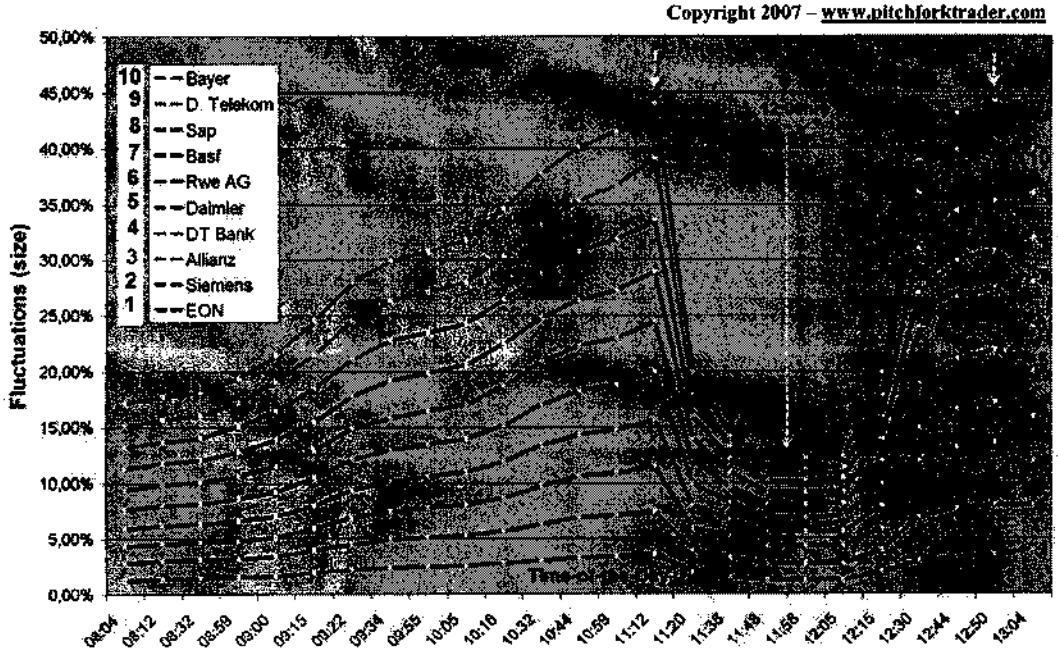
2.1.3 Tier 1 Stocks Act as a Proxy for the Stock Index

Following the above reasoning we have studied the Tier 1 stocks of Dax 30 to eventually use them as a proxy. We could study even in more detail, the percentage (*4.62% to 11.38%*) of the first 10 to 12 *heavy-weight composing stocks*, within the one colour trending group, and dramatically reduce the number of leading stocks, from 25 to 10 or even lower.
Considering the first ten Dax 30 stocks (refer to table of *Figure 23*), they represent 69.41% of the total weight of the index, more than two thirds. We will try now to visualize how each stock fluctuation will influence the whole movement of the Dax 30 index.

		Up Stocks Green	Down Stocks Red	Un-changed	Total	EON 11,38%	SIEMENS 8,12%	ALLIANZ 8,09%	DT Bank 7,50%	Daimler 6,29%	RWE AG 5,48%	BASF 5,41%	SAP 5,02%	D.Telekom 5,01%	Bayer 4,62%
						1	2	3	4	5	6	7	8	9	10
N°	TIME									Control 1-5			Control 1-8		Cum 1-10
Pre-Open		25	4	1						43,28%			65,46%		69,38%
1	08:04	24	5	1	30	1,25%	1,00%	1,50%	1,88%	1,70%	1,88%	1,85%	1,90%	1,86%	2,00%
2	08:12	27	2	1	30	1,40%	1,55%	1,55%	1,62%	1,77%	1,88%	1,88%	1,95%	1,98%	2,85%
3	08:32	25	4	1	30	1,44%	1,88%	1,58%	1,58%	1,80%	1,82%	1,85%	1,98%	2,02%	2,10%
4	08:58	26	3	1	30	1,50%	1,70%	1,60%	1,80%	2,60%	2,60%	2,20%	2,30%	2,15%	2,15%
5	09:00	27	2	1	30	1,50%	1,80%	1,70%	1,80%	2,20%	2,30%	2,40%	2,60%	2,55%	2,44%
6	09:15	28	1	1	30	2,00%	2,00%	2,00%	2,00%	2,60%	2,50%	2,50%	3,00%	3,00%	3,00%
7	09:22	29	1	-	30	2,20%	2,30%	2,40%	2,50%	2,70%	2,90%	2,90%	3,30%	3,40%	3,50%
8	09:34	30	0	-	30	2,40%	2,60%	2,90%	2,70%	2,80%	2,80%	2,90%	3,50%	3,60%	3,60%
9	09:55	26	3	1	30	2,50%	2,60%	2,70%	2,90%	2,90%	3,00%	3,60%	3,60%	3,60%	3,70%
10	10:05	24	5	1	30	2,60%	2,70%	2,80%	2,90%	3,00%	3,10%	3,60%	3,70%	3,70%	3,80%
11	10:10	22	7	-	30	2,80%	2,90%	3,00%	3,20%	3,20%	3,50%	3,80%	3,80%	4,00%	4,20%
12	10:32	22	8	-	30	3,00%	3,30%	3,50%	3,50%	3,70%	3,80%	3,90%	4,00%	4,40%	4,60%
13	10:44	21	9	-	30	3,30%	3,80%	3,70%	3,80%	3,90%	4,00%	4,10%	4,40%	4,60%	4,70%
14	10:59	20	10	-	30	3,40%	3,70%	3,80%	3,90%	4,00%	4,20%	4,30%	4,60%	4,80%	4,90%
15	11:12	19	11	-	30	3,60%	3,90%	4,00%	4,20%	4,30%	4,40%	4,50%	4,70%	5,50%	4,90%
16	11:30	18	12	-	30	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
17	11:38	17	13	-	30	1,60%	1,80%	1,90%	1,60%	1,60%	1,40%	1,30%	1,20%	1,10%	1,00%
18	11:49	16	14	-	30	1,25%	1,50%	1,50%	1,25%	1,30%	1,25%	1,10%	1,00%	0,95%	0,85%
19	11:58	16	16	-	30	1,25%	1,50%	1,50%	1,25%	1,30%	1,25%	1,10%	1,00%	0,95%	0,85%
20	12:05	14	16	-	30	1,26%	1,51%	1,52%	1,26%	1,33%	1,22%	1,11%	1,13%	1,01%	1,06%
21	12:15	10	19	1	30	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%	2,00%
22	12:30	9	20	1	30	3,00%	4,00%	5,00%	3,00%	4,00%	5,00%	3,00%	4,00%	5,00%	3,00%
23	12:44	8	21	1	30	3,30%	4,40%	5,50%	3,50%	4,40%	5,50%	3,30%	4,40%	5,50%	3,30%
24	12:50	6	24	1	30	3,50%	4,60%	5,80%	3,50%	4,60%	5,80%	3,33%	4,44%	5,55%	3,33%
25	13:04	3	26	1	30	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%

·day data.
real-time

Figure 27 – *The above table illustrates not only the* variation of the numbers of Dax's 30 stocks *(*left side*) but also the* timely variation percentages of the first 10 Tier 1 stocks (right side*). For instance, EON, the heaviest stock (*11.38%*) had 1.25% change at 8:04hrs and 1.40% change at 08:12hrs CET.*



30 stocks

Figure 28 – *The above table shows the chart of the* timely stocks variation *of the table on Figure 27. This fluctuation defines the change that took place from open until the specified time: 8:04, 8:12, 8:32...*

:om

We can draw some very interesting points of view from the chart illustrated in *Figure 28*:

- **The three hour long up-trending slope of these first ten Tier 1 stocks is classified as *average*, staying under 30° angle, until the reversal time at 11:15hrs. The heaviest weight stock (*11.38% for EON*) has the smallest progressive slope (*under 8° angle*) and the lighter weight stock (*4.62% for Bayer*) has a slope several times steeper.**
- **Even if the up trending movement lasted several hours, the 11:15hrs reversal fall took hardly 15 minutes. The dictum "*The markets drop by their own weight*!" is still valid here.**
  Once again, we observe that the dropping slopes are steeper for the lighter weight stocks and smoother for the heavies ones.
- **The middle of the "*abyss*" lasting around 90 minutes, is exactly at noon time.**
- **The up-trending recovery is already done at 13:00hrs. Once again, the slopes have the same behaviour concerning the more or less weighted stocks.**
- **Interesting to note that the market recovery reached exactly the same level as that of its dropping level at 11:15hrs.**

TIME	EON 1	SIEMENS 2	ALLIANZ 3	DT Bank 4	Daimler 5	RWE AG 6	BASF 7	SAP 8	D. Telekom 9	Bayer 10
08:12	11%	5%	5%	1%	4%	4%	2%	3%	2%	2%
08:32	3%	2%	2%	4%	2%	2%	3%	2%	2%	2%
08:59	4%	1%	1%	7%	10%	4%	11%	14%	6%	8%
09:00	8%	6%	6%	5%	9%	13%	8%	12%	18%	11%
09:15	20%	18%	15%	5%	12%	8%	4%	13%	16%	19%
09:22	9%	13%	17%	20%	7%	11%	14%	9%	12%	14%
09:34	6%	6%	6%	7%	4%	3%	12%	6%	3%	3%
09:55	4%	4%	4%	4%	3%	3%	3%	0%	3%	3%
10:06	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%
10:19	7%	7%	7%	9%	9%	11%	8%	8%	9%	10%
10:32	7%	12%	14%	11%	11%	6%	3%	3%	3%	6%
10:44	9%	6%	6%	6%	6%	6%	6%	9%	4%	2%
10:59	3%	3%	3%	3%	3%	6%	6%	4%	4%	2%
11:12	6%	6%	6%	7%	7%	6%	4%	2%	13%	2%
11:20	-80%	-86%	-100%	-110%	-116%	-120%	-125%	-136%	-175%	-146%
11:38	-33%	-11%	-6%	-33%	-29%	-43%	-64%	-67%	-82%	-100%
11:48	-20%	-20%	-19%	-30%	-23%	-17%	-18%	-20%	-11%	-14%
11:59	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%
12:06	1%	1%	1%	2%	2%	2%	1%	12%	2%	1%
12:15	57%	25%	19%	38%	34%	39%	48%	44%	50%	50%
12:30	37%	25%	19%	34%	34%	39%	48%	44%	50%	50%
12:44	33%	50%	60%	33%	50%	50%	33%	50%	60%	33%
12:50	9%	9%	9%	14%	9%	9%	9%	9%	9%	9%
13:04	8%	4%	2%	3%	4%	2%	1%	1%	1%	1%

Figure 29 – ***The above t able shows the table of the change variation from one value to another. This fluctuation defines the change that took place from one specific time until the next specified time: 8:04 to 8:12hrs (Ex: 11% for EON), 8:12 to 8:32hrs, 8:32 to 8:59hrs, etc. Refer also to table from Figure 27***

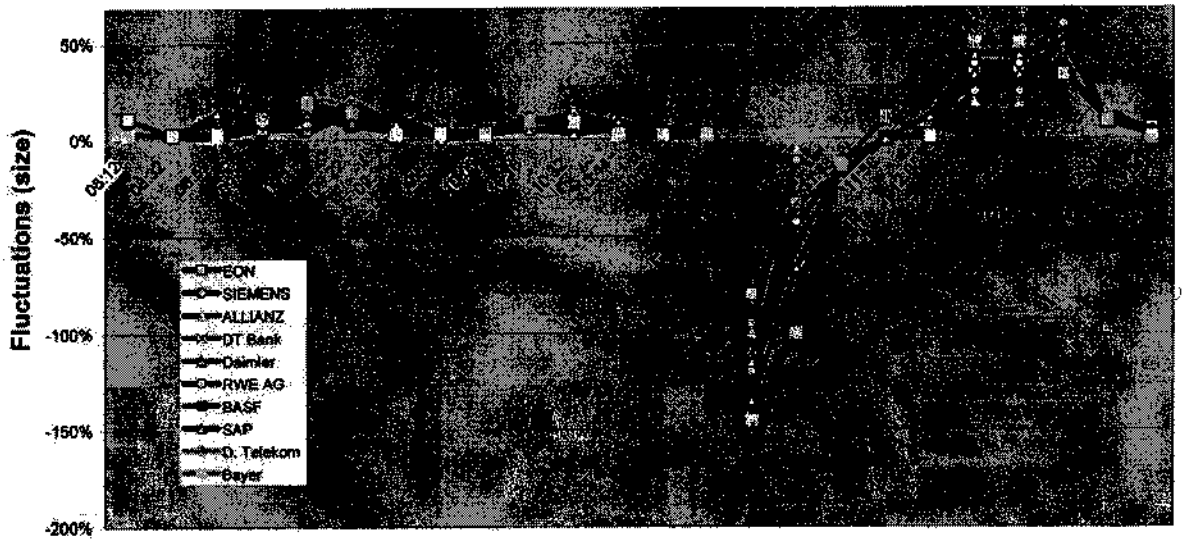


Figure 30 – ***The above chart illustrates the data from Figure 29***

The trader can see that the chart on *Figure 30* gives more detailed information than the one of *Figure 28* in regard to: the characteristics of the noon drop, the 11:15hrs and 13:00hrs CET reversals, the individual behavior of one of the stocks compared with that of the others, or an individual comparison with group's behavior, etc.
The raw data table and its graphical illustrations (refer to *Figures 25* and *30*) will suffice to closely follow the predominant number of trending stocks, in real-time (*therefore their predominant colour*), in order to observe the trend. Even more, we will ensure a very high continuation probability of the up/ down trend by considering at least 25 one-colour (green/red) plotted stocks, having the same direction.

2.2 Key Level Mapping of the Operational Time–Frame Chart

Most of the novice traders neglect the importance of the key levels. For us, it is a very important pre-open preparation phase. Not only we take into consideration the most recent past's key levels, usually the after-noon of the previous day, but also the key levels of the daily, weekly and monthly charts.

R2 +++	6,664		
Half Pivot +++	6,636	to 6638	Pivotal Cluster (x3) and Gann Dn 45°
++			0.382*W4 on 60min chart & 0.50 of prior w2:W5
+	6618		0.618*W4 on 60min chart
R1 +++	6,608		
+	6604		0.50*W4 on 60min chart
+++	6600		Upper Wedge Trend Line on 240min & 100's level & *W5 Sterling* **Signal**
+++	6590-94		Pivotal Cluster (x3) and Gann Dn 90°, Main Wkly Pivot
Half Pivot ++	6,592		
Pivot Range High	6587	++	
Daily Pivot	6,576	+++	
++	6572-74		Fibs Cluster
+	6568		Prior W3 Termination
Pivot Range Low	6564	++	
++	6552-53		**Close & Gann Dn 135°**
Half Pivot ++	6,548		also Pivotal Cluster (x2)
++	6545.5		50% W5 Retrace on 240min chart
+++	6543		Day's Low & Apex Wedge on 240min & 100% Down Thrust on 60min
	6537		Up-Trust Breaking-Up Level on daily chart
+++	6524		W3=2.618*W1 on 5min chart & W3=1.618*W1 on 60min chart
S1 +++	6,520	to 6519	W3=3.00*W1 on 15min chart & 0.382 of prior W4 & 0.382 daily correction
++	6515-14		0.618 of prior W4 on 240min chart & Old wkly support
++	6513		Gann Dn 180°
++	6511.5		w2:W5 of prior pattern
Half Pivot ++	6,504	to 6505	Pivotal Cluster (x2) & W4/W1 Overlap Border on 240min chart
	6501		21-EMA level on daily
S2 +++	6,487		W3=1.618xW1 on 60min chart & 34-EMA level on daily chart
	6471		50% Fibs of prior W4 retracement
Half Pivot ++	6,459		

Figure 31 – *The above* key level table *of Dax 30, on December 27th, 2006, is one of the most important factor in preparing the pre-open. The market flow will surely stumble, reverse or, on the contrary, will zoom through many of the above key levels, during the intra-day activity.*
We have calibrated the **importance of the halting power** *of most of the key levels, using as criteria the signs + to +++. Thus, we took into consideration a whole range of the key levels' strength:* Average *– the common price level (+),* Strong *– Fibonacci levels (++) and the* strongest level *– the pivotal cluster (+++) composed of multiple time floor pivots. We didn't neglect the daily floor pivot (strength +++) which usually delineates the up from the down day's bias.*

2.3 Pivotal Key Levels: Floor Pivots and Mark Fisher Pivots

The floor pivots are frequently used not only by the Exchange traders but also by the astute off-the-floor traders. We will consecrate a whole chapter to this very important topic.
Paul Tudor Jones said about Mark Fisher "*Fish's messianic willingness to share with the public the successful system he has developed is an opportunity to be exploited*".

Mark Fisher's system (*www.mbfcc.com*) described in his 2002 very practical book "*The Logical Trader*" defines the pivotal key levels indispensable for entry, exit and also stops. His ACD system is composed of four steps:

- **Information Collection,**
- **Information Analysis,**
- **Decision Taking and**
- **Decision Implementation.**

The concept of *Opening Range*, already adopted in 2000 by Larry Pesavento in his "*The Opening Price Principle – The Best Kept Secret ON wall Street*", begins the description of the ACD trading system.

2.4 Volatility Side of a Pre-Open Market

Volatility is one of the trading aspects that will enhance the edge of the trader. In the everyday trading, we illustrate its size by the fluctuations of the Average True Range – ATR(14) and also by the Bollinger Bands with their specific parameters: percentage and BB width. We will consecrate a whole chapter on this topic in our next volume.
There are also other elements that establish the degree of the volatility in pre-open:

- **The existence of a *narrow range* on the 60-min, daily or weekly charts,**
- **The small value (inferior to the *three value*) of the Mark Fisher pivot range size,**
- **The *small price-intervals* among the daily floor pivots,**
- **The single daily range of the Average True Range (1) compared with the value of its 14 days average – ATR(14). In this case the contraction of the Bollinger Bands will sustain the incoming high volatility (see volatility study in the table of *Figure 40*).**
- **The *implied volatility* in regard to *historical volatility*. We don't take this into consideration because of the plethora of options used by the funds managers in *hedging* which certainly distort the reality.**

2.5 Multiple Time Frame Charts

Nothing will hurt a trader more than missing the multiple time frame analysis. One should never neglect it. It is one of the most important factors in trying to understand the incoming market, with its probable bias. However, the trader must already have a "*What If*" strategy, just in case of a last minute disastrous change. This is the equivalent of a parachute for the pilots of fighter planes. *The trader must always expect the unexpected*!
We consider that the weekly chart is always able to inform us about the day's bias, even in spite of its strong movements. Most of the time, the dominant trend is obvious on week's time frame. One should learn how to evaluate the continuation or interruption of the current weekly behavior, even if the week is not over yet:

- **On Mondays and Tuesdays, we should check if the week's 40% activity (*2 days out of 5*) is within or outside the last week's bar: outside location signals a probable breakout and inside location witnesses a "*waiting status*" ready to blow-up or on the contrary, run into a *sideways mode*. The location of the *Close* of the ongoing week, in regard to prior's week, will tell more...!**
- **On Thursdays & Fridays (*over 80% weekly activity*), we can pretty well anticipate.**

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2.6 *Pre-Open Main Points*

Main Data

High	6631.50
Low	6543.00
Close	6552.50
Daily Pivot	6575.7

I. Market Direction

1	Rule 80% to 20%	
	Higher Border	89%
	Lower Border	11%
2	Close *versus* DP	-23
3	Close *vs* Pivot Range	
	Higher Border	-35
	Lower Border	-12

II. Market Volatility

4	Pivot Range Value < 3	23	
5	Opening Gap - pts	7.5	Up/Dn
6	Daily Range over ATR	133%	Expansion / Contraction
7	Bollinger Bands & Price		
	7.1 - Daily 21-MA Level	6501.[illegible]	
	7.2 - Close versus daily 21-MA	52	
	7.3 - % Bollinger Bands	61.6%	Upper / Lower Half % Price Location *within Boundaries*
	7.4 - Bollinger Bands Width		
	Hyper-Expension Value	2.6%	Sideways Market
	Blow Out Value	2.51	Imminent Price Blow Out Count the Narrow Bars (NR4 or NR7)
	50% Value	5.22	
	Current Value	6.7%	Un-Defined Opportunity

III. Market Trends

8	Long Term Trend	Monthly & Weekly Up-Sloping
9	Intermediate Trend	Daily & 240min Up-Sloping
10	Short Term	60-min & 15-min & 5-min Down Corrections

IV. Main Points *to watch closely* on Charts

11	Monthly Charts	*Up-Close monthly bar between 66% & 75% - Previous 5 Bars are Up*
12	Weekly Charts	Down-Close wkly bar in lower 10% above the low of prior huge up-bar W3=2.786*W1 trending strong - already 3 pullbacks - w5:W3 in progress w5 next to 1.38*w4:W3 & Bar's low halted by lower boundary of up-channel
13	Daily Charts	*Down-Close daily bar in its lower 10% below the low of prior bar* Prior impulsive pattern correction in progress, next to 0.382 of prior W4 Price halted at lower border of current Pattern: down Broadening Formation Price above EMAs & prior W5 at 0.786*W1 & 0.382*W1-3 RSI Divergence even if Close location within Up-Trend at 54.2 (>40)
14	240-min Charts	*Close bar forming a doji & price in down-sloping channel* Price halted by: LML & Triangle's Apex at 6543 just above Breaking point Down W4 in progress at 50% approaching W4/W5 overlap border at 6504.5 CCI in down-sloping channel forming Divergence deep in OS zone (-187)
15	60-min Charts	*Close bar forming a mini-consolidation & price in dn-sloping channel* Down W3=1.382*W1 in progress & 100% Thrust - Price Halt at Half Pivot CCI down channelling - Halt under Trend Line
16	15-min Charts	*Close bar forming a mini-consolidation & price in dn-sloping channel* Price testing 3 times the ML, closing underneath within consolidation Down W3=2.5*W1 in progress - Price Halt at Half Pivot RSI Divergence - Close location within a narrow range between 60 & 80
17	5-min Charts	*Close bar forming a mini-consolidation & price in dn-sloping channel* Down W3=2.236*W1 in progress forming a 5hrs narrow consolidation Price closed right under down-sloping ML W3 Time Fibs at 2.272*W1 & Close right under ML on 50% Consolidation CCI just bounced on 300 level - steep upward move in OS zone (-162)

V. Inter-Market Analysis — Short-Term charts of Bund, EurUsd, S&P 500 and Dow Jones Industrial are all downwards oriented.
Double Top on weekly chart of S&P 500 Cash Index.

VI. General Conclusion

Morning Bias	Continuation of the down-sloping dominant trend if no Positive Fundamentals Small counter move if Positive Morning News
Day's Bias	Very Probable continuation of the down-sloping dominant trend Hypo-Volatile day - market moves in smaller range, under daily ATR = 40 pts.

Figure 32 – *The above* The Pre-Open Main Points *table of German Dax 30, on December 27th, 2006, is the fruit of several years of research. Its outcome will really give an edge to the educated trader.*

Even if we will describe in detail, all along the book, with text and also illustrated charts the above table, we will briefly describe the main points of *Figure 32,* where it wasn't yet done:

- **The Main Data specifies the daily values of the *High,* the *Low,* and the *Close* of yesterday. These three key levels will be used to calculate the daily main floor pivot with its R & S acolytes and also the Mark Fisher Pivots.**
- **The Market Direction will assist the trader to localize the exact position of the pre-open and the opening market in the context of yesterday's market activity. Just one word about the 80/20 Rule; if the closing price is within the 20% of the upper/down extremities of the daily bar, we can expect to have an opening or even a morning that will keep the closing bias.**
- **The Market Volatility was already discussed in sub-chapter 2.4. The Bollinger Bands will be treated in our next book.**
- **The Market Trends describes the long-term, intermediate-term and short-term trends used by the trader.**
- **The Main Points on Charting *(sub-chapter IV in the above table)* are one of the best tools in the quest for revealing the dominant trend. Once a week, the monthly and weekly charts are studied in detail, and then the trader will perform a daily analysis of the other time frames: the daily, the 240-min or the 120-min, the 60-min and the 15-min charts. The 5-min chart is mostly used for pinpointing the entries and the exits or for teaching purposes.**
- **The Inter-Market Analysis was shortly treated in *Chapter 1/ subchapter 3.* Given its importance in modern trading we will consecrate the entire *Chapter 4* to this;**

The outcome of all these main points shortly described above but also in *Figure 32,* will allow the trader to draw the General Conclusion with their morning and day's bias.

3. The Top-Down Analysis in the Pre-Open Market

The traders must progressively monitor the conditions of the market movements that validate or invalidate the recommended forecasts. The market forecasts of this top-down analysis have a very high probability, but they might not be exact. An astute trader always trades the market behaviour, not only the forecasts. *Go with the market, let it be your guide and never impose anything on its behaviour.*

Important: All charts of this sub-chapter were drawn at the end of April 5th, 2007, in the pre-market of April 10th, 2007, unless otherwise specified. The markets were closed on April 6th to 9th.

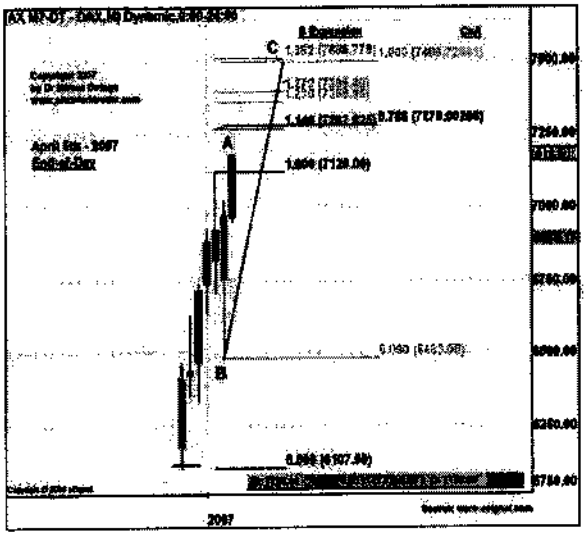


Figure 33 – ***The above monthly chart of the pre-open market of April 10th, 2007, clearly illustrates the long-term up-trend dictated by the procedure of the table on Figure 32*** **(refer to point III/ 8).**

Our research strongly suggests a "top-down" market analysis rather than other procedures. In our opinion, the performed studies with Cash Index data are more illustrative than those with Futures Index data, induced by the time continuity of the former. However, due to our Futures trading preferences, we will use every time, the most adequate data, for that specific traded vehicle.

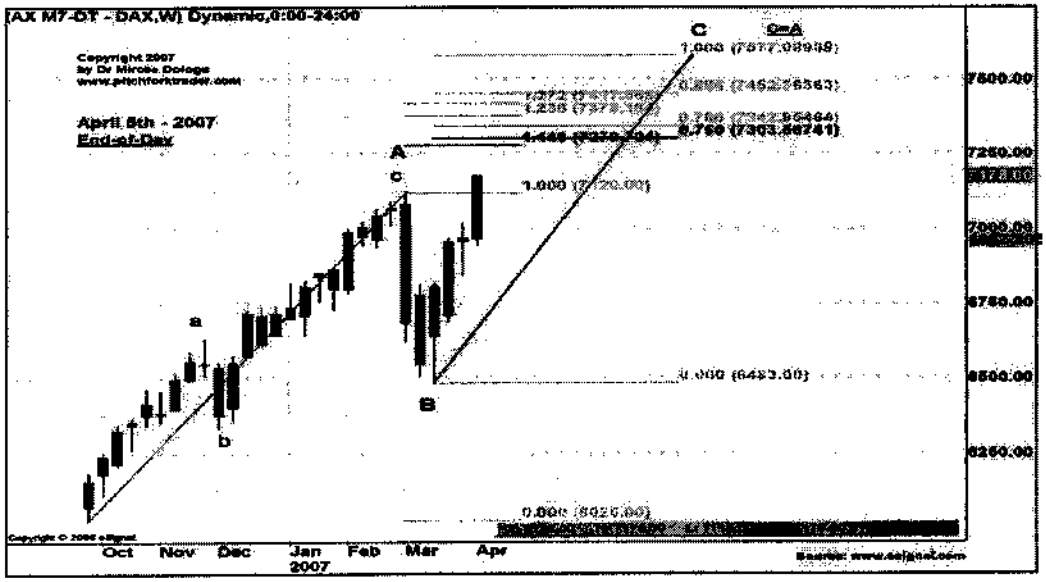


Figure 34 – *The above weekly chart of the pre-open market of April 10th, 2007, optimally shows the long-term up-trend dictated by the procedure of the table on Figure 32* **(refer to the point III/ 8).**

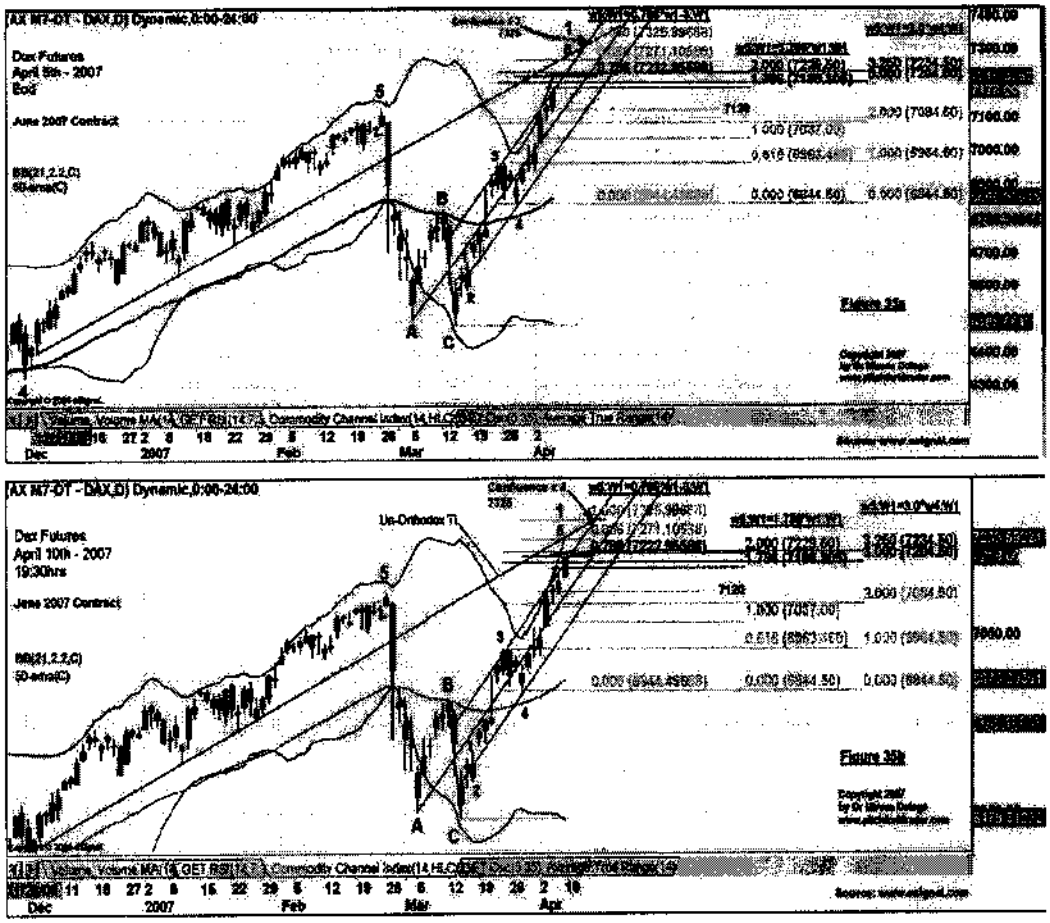


Figure 35a & 35b – *The above 2 daily charts of April 5 & 10th, 2007 clearly state the progression of the intermediate-term trend dictated by the procedure of the table on Figure 32* **(refer to point III/ 9). The market flow has a magnet-attraction for the triple confluence at the 7325 key level.**

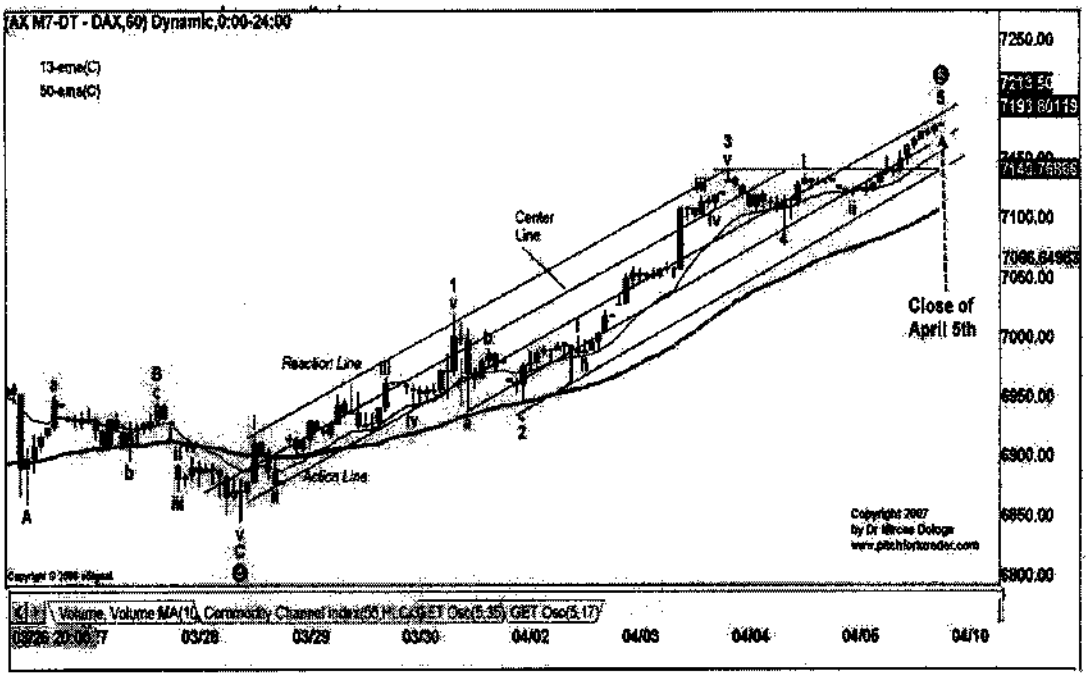


Figure 36 – ***The above 60-min chart of the pre-open market of April 10th, 2007, optimally shows the several days continuation of the short-term up-trend dictated by the procedure of the table on Figure 32*** **(refer to point III/ 10).** ***We note that the six days short-term trend was born out of three days nesting trading range (March 26 to 28th). The*** **action line** ***which behaved several days as a support switched to a resistance role at the end of April 4th. Keep in mind, that in this*** **"highest-high operational mode"** ***the*** **trader's attitude** ***is to*** **buy the highs... Investor's decision** ***is to*** **sell them.**

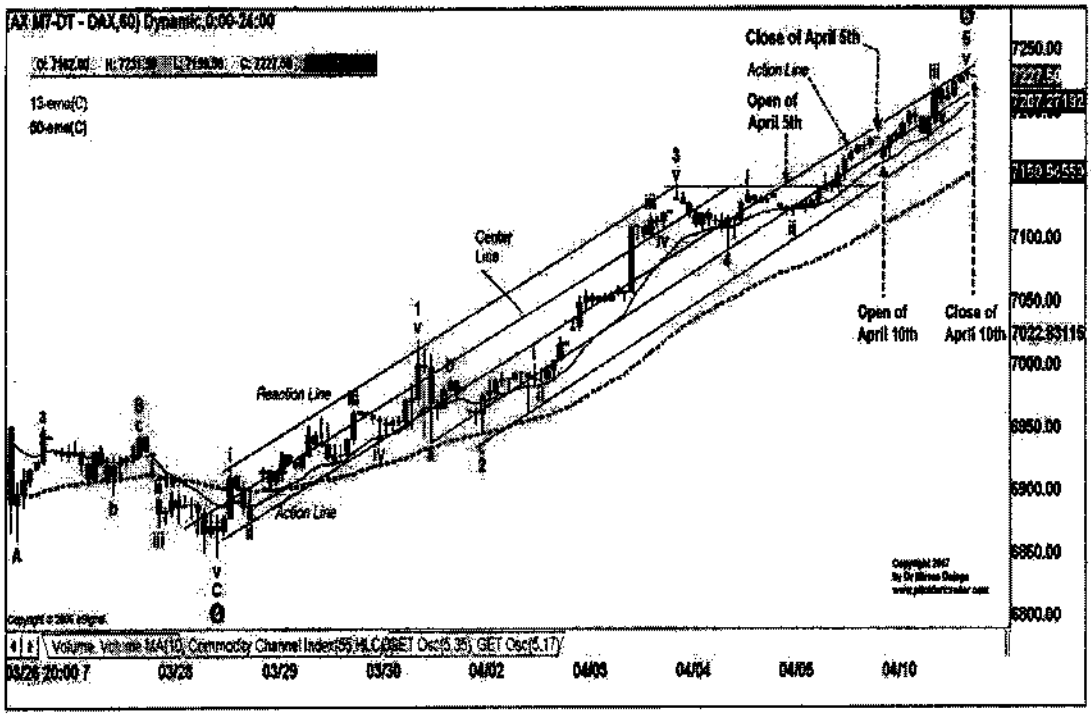


Figure 37 – ***The above 60-min chart of the post-close market of April 10th, 2007, illustrates the continuation of the short-term seven day up-trend dictated by the procedure of the table on Figure 32*** **(refer to point III/ 10).** ***The*** **action line** ***has been seriously tested but not pierced or trespassed yet by the ascending market flow. As long as the price is above both moving averages, not only we stay in, but at the propitious time we'll add contracts.***

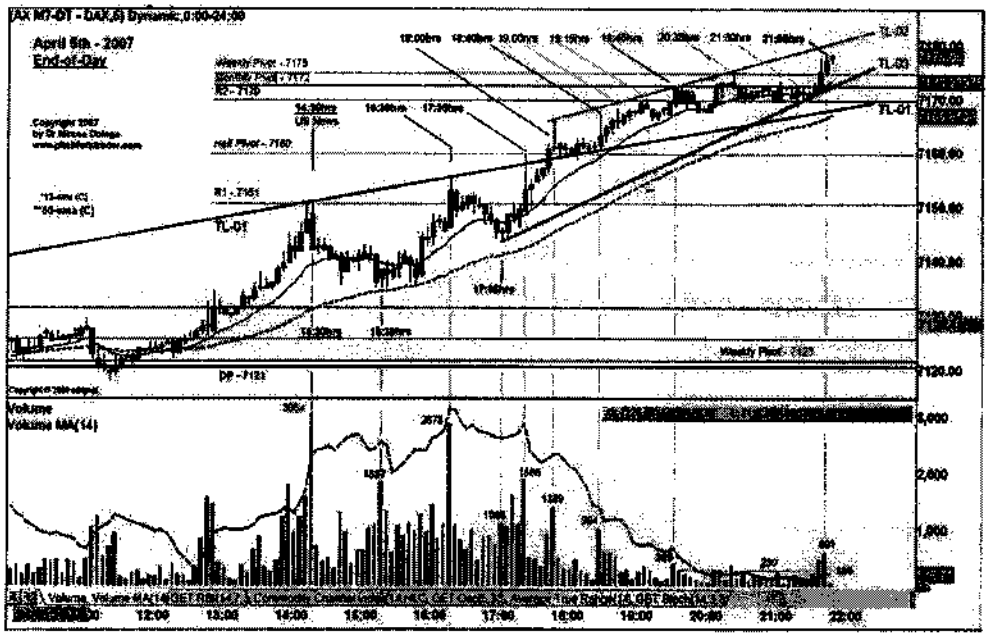


Figure 38 – *The above 5-min chart of the pre-open market of April 10th, 2007, optimally shows the day's continuation of the short-term up-trend dictated by the procedure of the table on Figure 32* (refer to point III/ 10). *This chart is rich in trading elements which are useful in teaching the best trading approach: wedge, trend line (TL-01), floor pivots, key levels, time-of-the-day context, moving averages, the Gaussian distribution of the volume throughout the day and its specific moving average.*

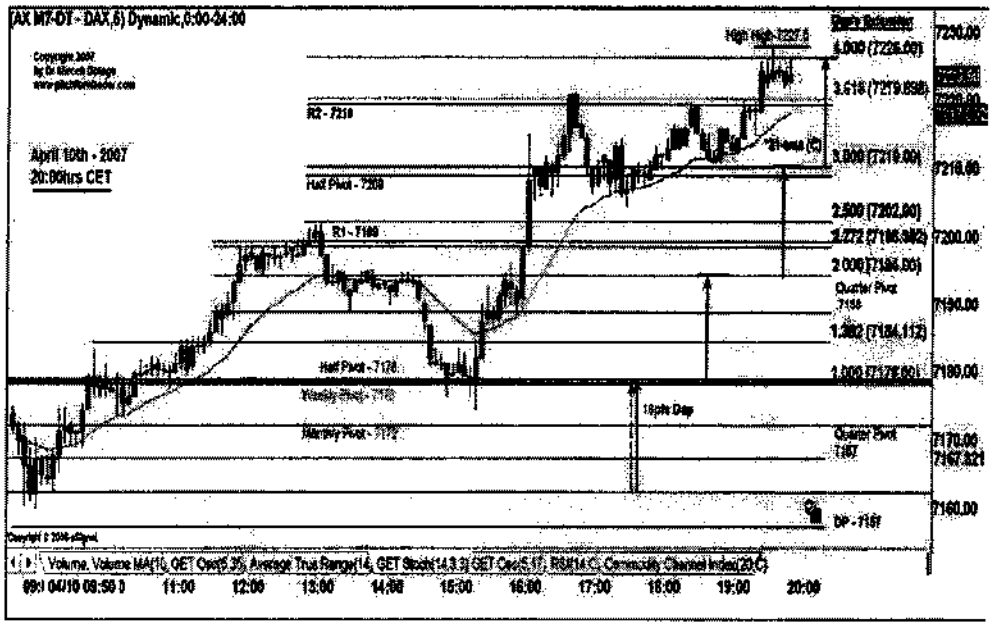


Figure 39 – *The above 5-min chart of the pre-close market (*20:00 hrs CET*) of April 10th, 2007, shows the day's continuation of the short-term up-trend (seven days, so far) dictated by the procedure of the table on Figure 32* (refer to point III/ 10). *The main elements contained in our toolbox were the monthly, weekly and daily floor pivots in full synergy with the up-gap's extensions. The 300% extension was shy of the highest high by only 1.5 points.*

<u>Conclusion of the sub-chapter</u>: **The description of the long-, intermediate- and short-term periods has shown that the pre-open market flow of April 10th, 2007 is still trending. However, we will complete this trending information with the synchronization or absence of the inter-market analysis influences (refer to *Chapter 3*).**

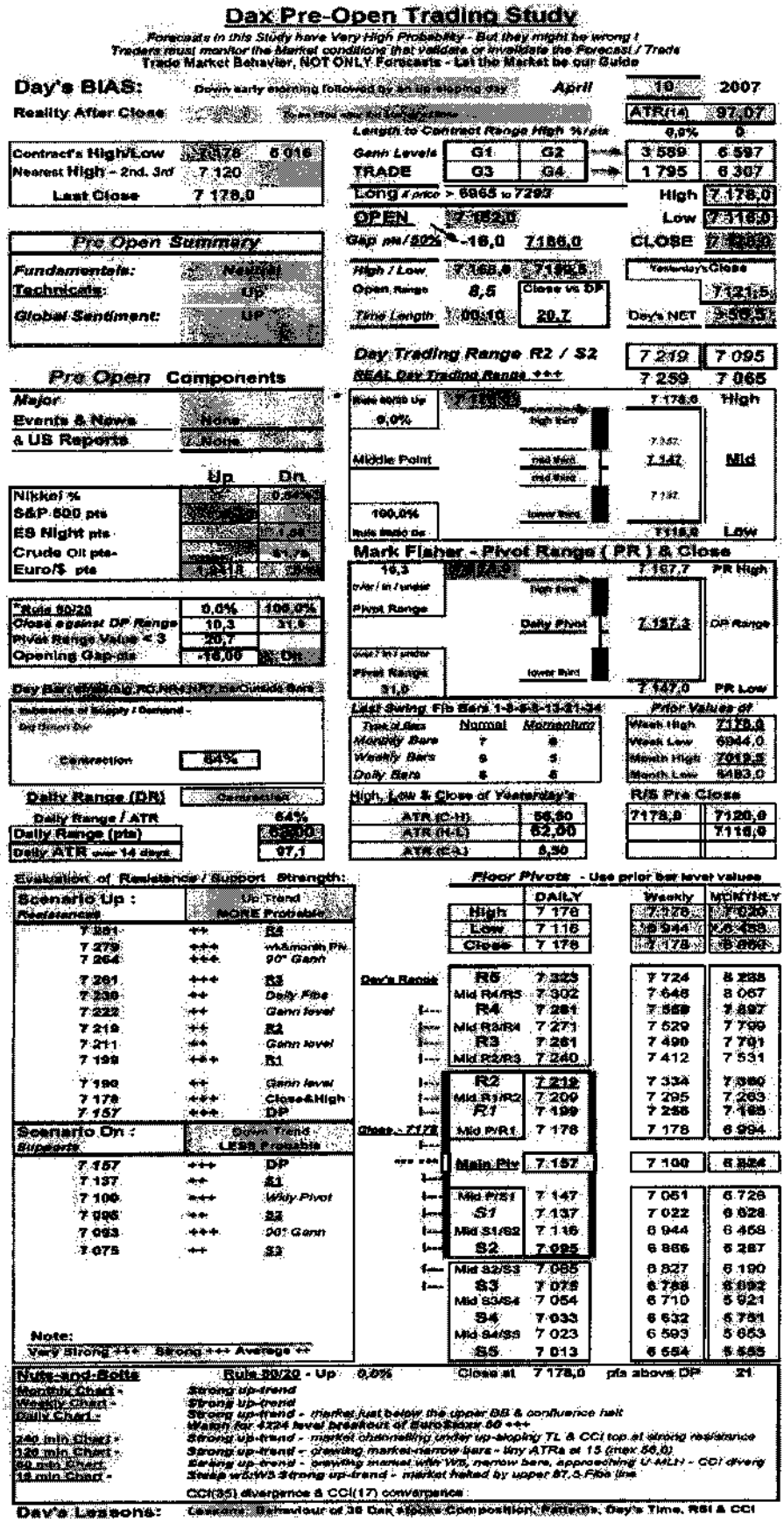


Figure 40 – *The above* Dax Pre-Open Trading Study *Excel file will be fully discussed along chapters!*
This file can be obtained from the author at mircdologa@yahoo.com

Key Points to Remember:

- **A large majority of the experienced traders consider that the pre-open preparation count for more than 70% of successful trading.**
- **The conscientious trader always does a thorough pre-open analysis before taking any trading decisions.**
- **Keep in mind that the most vivacious market activity is in the country where the sun is rising!**
- **We distinct three types of news categories: The Events, the common News and the Economic Releases. Each of them has their half-life within the day!**
- **The influences of the external Fundamentals will wane until the morning's end, most of the time. Then, the local supply/demand mechanism mirrored by the chart-related internal factors will take over, continuing the market activity, as if nothing has ever happened.**
- **The first ten Tier 1 stocks can easily keep track of stock index's behavior.**
- **The 80/20 Rule applies when the trader wants to delineate the index's trending from the non-trending stocks. We ensure a very high continuation probability of the up/down trend, if at least 25 plotted stocks are having the same direction.**
- **Don't ever neglect to take into consideration the most recent past's key levels, usually the after-noon of the previous day and also the key levels of the monthly, weekly and daily charts.**
- **The off-the-floor traders take advantage of the floor pivot edge, keeping ahead of the crowd.**
- **Nothing will hurt a trader more than missing the multiple time frame analysis.**
- **Any trading decision must be preceded by a "top-down" market approach.**
- **One of the toolbox elements of the successful traders is the Dax Pre-Open Trading Study. Get familiar with the table (Figure 40) and practice it everyday!**

iapters!

Chapter 3

News Trading – Overnight & Intra-Day Unfolding

One of the double edge swords in trading is surely the *News trading*... but not for everyone! The professional trader has already settled the pre-news preparation when it comes to scheduled economic or Fed report releases. He or she knows that one should prepare the money & risk management strategy, in such a way that the risk/reward ratio value is worth the trade's outcome... whatever that is! This is to say, that *news trading* is the appanage, or should we rather say "*the protected kingdom*" of the professional trader.

1. The Context of Expected and Un-Expected News

Even if time-wise we can classify the news in *overnight* and *intra-day unfolding*, we prefer to take them as *expected* and *un-expected news*.

1.1 Defining the Expected News

The *expected news* can take place in pre-open or during the day. Even the opening gap may be considered as the consequence of expected news. They have the big advantage that the trader is prepared to deal with them due to the *multiple preceding preparatory elements*: his pre-news psychological and chart preparation, his behaviour in identical situations and the past statistics of the same type of news, specifically done by the individual trader. The latter element has the enormous advantage that will reveal many hidden trading facets. These edges will not be found elsewhere. We call them the *news market mapping*:

- **The pre-open value of the volume which will eventually fuel the news' impact,**
- **The time length of waning period of the news's effect,**
- **The extreme price fluctuation during the news unfolding impact,**
- **The inter-market elements in regard to other correlated markets?**
- **The choice of the optimal time frame that catches the essential of the movements,**
- **The presence of any charting elements that will enhance the comprehension of the news impact: *volume* before and during the news and its *volatility* measured by the size of the market bars [ATR (1) or ATR (2)] in comparison with the Average True Range – ATR (14).**

<u>*Trading Tip*</u>: The closest elements of the news' impact on the chart are the volume and the market's volatility. They will also warn the trader on the intensity of the market reaction and also the waning effect of the entire process. Both of them must be closely evaluated by the most adapted elements of the toolbox:

- **Raw volume values, their Gaussian distribution or its absence, their moving average (*Volume-MA)* and also On-Balance Indicator (*OBV*),**
- **Volatility limits measured by the Bollinger Bands and the size of the current ATRs compared with their average ATR (14).**

<u>*Trading Tip*</u>: When the time will come, the market returns to its previous paced activity, once the news' effect is gone it is as if it has never happened. The trader must have the discipline or better said the routine, to study in advance the new parameters of a further market development. This trading tip is also valid for the un-expected news!

1.2 Description of the Un-Expected News

The monitoring of this type of news is very difficult to practice. How many times the market dropped like a stone without any apparent reasons?

It is like somebody hit you, from nowhere! How many times the trader has been watch with anguish a *very probable reversal* of the news' dropping effect, that was transform after the second bar in a disastrous abyssal drop?

Trading this type of news is even harder than trading the *expected news*. However, experience teaches us to have three approaches:

- Either wait for the termination of a reversing pullback and then enter in the direct of the trend with a minimal stop loss,
- Either optimizes the quest for the end of news impact. The use of adequate element the toolbox could eventually determine the terminal key level, like for instanc *multiple-level cluster* or a *confluence.*
  Anyway, the trader should always expect the unexpected!
  In case that this terminal projected key level is not attained, then the trader must consider a very probable but precocious reversal, which will certainly burst out, in opposite direction.
- In case of doubt, or if the trader doesn't control the situation, the best approach i stay aside.

2. Trading Approach of the Expected News

This type of news will exempt the trader to look for the news-generated momentum beca the *news is expected*, and even more precisely, they are scheduled. As a consequence, the fi outcome of the news effect is the momentum's behaviour, which goes *hand-in-hand* with volatility.
When preparing for the news outcome, whatever it would be, the trader must first verify eventual past statistics which will be his/her *market mapping*, carefully exposed at moment of the bursting news. This will certainly influence the trader to adapt his trad decision, as the *market mapping* will advise. For more details, please see *sub-chapter 1.1.*

2.1 Momentum Trading

One of the most adequate trading strategy for this type of news is *momentum trading*. In t environment, the resistances and supports will take advantage of the price swings that oc in *directionless markets*. This market usually happens 70% of the time and is also called *sideways market* with its characteristics: limited up/down moves by the upper and lower p established borders, smaller insignificant up/down moves that the trader will have carefully study.
It goes without saying that the trading elements of the toolbox are specific for this type trading:

- False Stochastics (*an eSignal proprietary tool that has a dual qualification, detecting only the ranges but also the trending, once the market flow burst out of range's limits)*
- The RSI and Momentum indicators,
- The short-term moving averages
- The height-size of the trading range, and
- The volume with its pertaining moving average and On-Balance Indicator.

We will see farther down, in this chapter and book, plenty of *nuts-and-bolts* examples of t type of trading.

2.2 Volatility Trading

The *volatility trading* is another adequate strategy for this type of news trading. The volatil breakouts have the advantage of the sharp price jumps characteristic of the volatile mark like most of the NASDAQ stocks. Always check if the traded instrument is or isn't a gappi market. The main tools of this type of trading are volume-related whatever they are:

- Raw Volume values and their pertaining Moving Average,
- On-Balance Volume indicator and
- Volume Rate-of-Change.

Once again we will appeal to the advantages of the past statistics composing the *news market mapping,* specifically done for this type of volatile context:

- Firstly, the trader will continuously study the virulence of each of the economic or Fed report news. It will start with the description and comparison of various types of news, then their degree of impact's intensity mirrored by the volatile bars' virulence of the charts. The impression on the public can be a double-edge sword situation: either an *exuberance/panic* or a complete *ignorance* when the market has already discounted the event.
- Secondly, in order to do the study of the volatile markets, the trader usually uses, as an analytic tool, the Average True Range – ATR, of a single bar or of an average, usually considered over a fourteen bar period.
  The trader must be warned that the calculation of the ATR can be tricky. It is nothing but an average of the True Range, which represents the greatest value of:
  - ATR (*H-L*), meaning the difference between the current bar *H*igh and *L*ow,
  - ATR (*C-H*), meaning the difference between the current bar *C*lose and *H*igh,
  - ATR (*C-L*), meaning the difference between the current bar *C*lose and *L*ow.

  It is important to mention that the differences of the last two ATRs must be considered as absolute values.

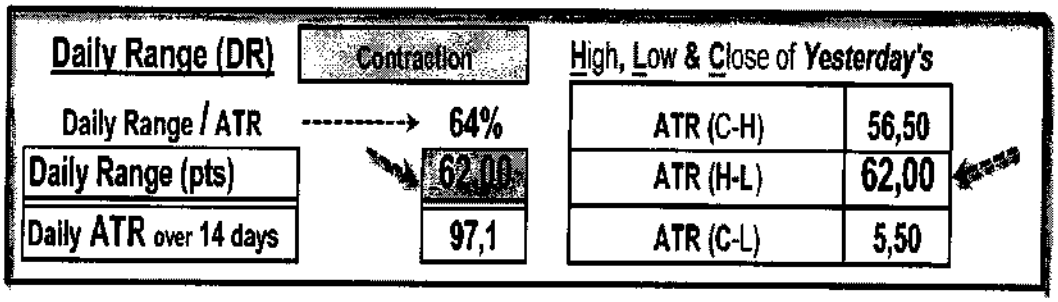


Figure 41 – *The above* Volatility Table *was extracted from the Dax* Pre-Open Trading Study *Excel file in the pre-open of April 10th, 2007 (refer to the half-height of the left side of Figure 40).*

We can observe, on the right side of the above volatility table, the three ATR Excel calculations, properly defined (*56.50, 62.00 and 5.50)*. The greatest value is 62-point ATR(1) corresponding to the average true range of the market activity at the end of April 5th 2007 (*pre-open market of April 10th, 2007*). The market was closed April 6th to 10th.
Knowing that the daily ATR over a period of 14 days was 97.10 Dax points we are now able to calculate the ratio of Daily Range ATR (1) divided by Daily ATR(14): 62/97.1=64%. The resulting 64% is compared with 100%, the standard value. Now, we can speak about a market contraction, thus a narrowing of the volatility. This edge is very useful for the trader who can now consider the eventuality of a breakout for today's market.
The most important edge of volatility trading is its "*reverse to mean*" which is also called the "*rubber band* " phenomenon. When it gets out of line, the market price will sagaciously return to mean. This can be fully exploited by the warned trader, either by using the Bollinger Bands or Keltner Bands, which will be extensively treated in our next book.
Keep in mind that volatility is the ideal tool to measure the mood of the crowd. What other better vector could be used to measure the crowd's sentiment in order to predict the outcome of the market flow? A simple rule of understanding this phenomenon is... *Up volatility*... if crowd is anguished... and *down volatility*... in case of self-satisfaction mostly accompanied by the unawareness of the actual dangers.

2.3 Description of ZEW and IFO Event Indicators

The ZEW and IFO are specific economic market indicators for the European markets especially for Germany's Dax 30 index.
The optimal management of ZEW trading consists in a pre-arranged entry, which should be prepared well ahead the 11:00hrs news release. In other words, the ZEW trading starts before 11:00hrs through its preparatory phase. The ZEW is an economic sentiment poll related indicator, which can really assist the astute trader to obtain the best trading results. For more ZEN information, go to the English website http://www.zew.de/en//index.php3.

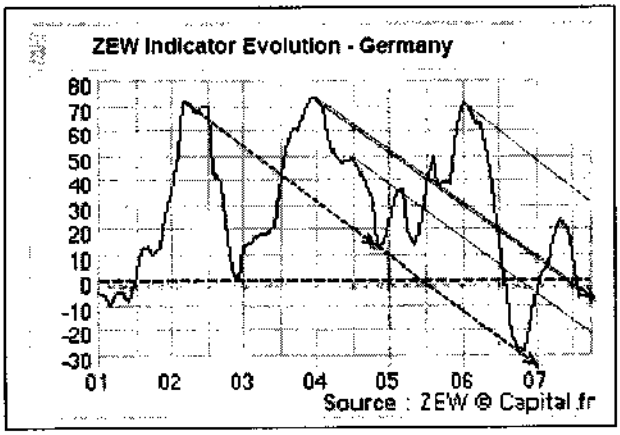
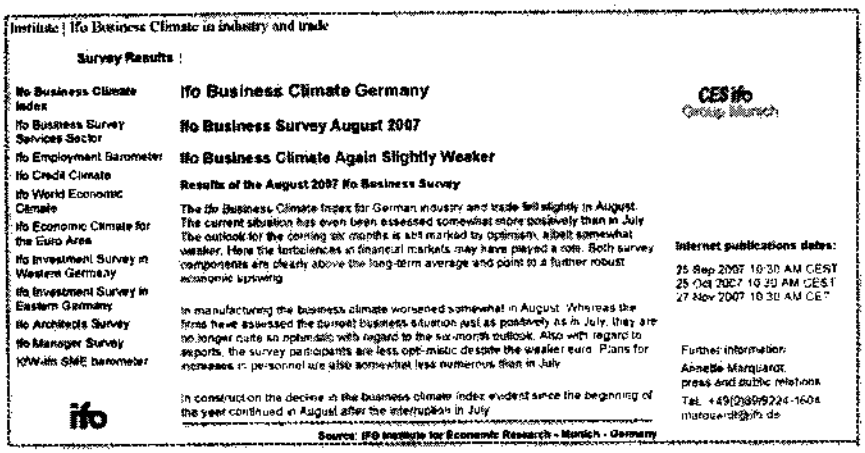


Figure 42 – ***The above ZEW chart shows a negative value, which started in the second quarter of 2007, in spite of the current well being of German economy. One should know that the ZEW is a monthly indicator that comes out each month. Anyway the exact date will be announced through the news releases of different websites.***

The IFO indicator is traded the same as the ZEW. The usual 10:00hrs CET release time is once a month. The IFO is a business sentiment poll-related indicator, which can increase the trader's earnings, if an adequate strategy is used. For more information on IFO, go to the English website:
http://www.cesifo-group.de/portal/page/portal/ifoHome/a-winfo/d1index/10indexgsk


Institute | Ifo Business Climate in Industry and trade

Survey Results

Ifo Business Climate Index
Ifo Business Survey Services Sector
Ifo Employment Barometer
Ifo Credit Climate
Ifo World Economic Climate
Ifo Economic Climate for the Euro Area
Ifo Investment Survey in Western Germany
Ifo Investment Survey in Eastern Germany
Ifo Architects Survey
Ifo Manager Survey
IHK-Ifo SME barometer

Ifo Business Climate Germany

Ifo Business Survey August 2007

Ifo Business Climate Again Slightly Weaker

Results of the August 2007 Ifo Business Survey

The Ifo Business Climate Index for German industry and trade fell slightly in August. The current situation has even been assessed somewhat more positively than in July. The outlook for the coming six months is still marked by optimism, albeit somewhat weaker. Here the turbulences in financial markets may have played a role. Both survey components are clearly above the long-term average and point to a further robust economic upswing.

In manufacturing the business climate worsened somewhat in August. Whereas the firms have assessed the current business situation just as positively as in July, they are no longer quite so optimistic with regard to the six-months outlook. Also with regard to exports, the survey participants are less opti-mistic despite the weaker euro. Plans for increases in personnel are also somewhat less numerous than in July.

In construction the decline in the business climate index evident since the beginning of the year continued in August after the interruption in July.

Source: IFO Institute for Economic Research - Munich - Germany

CESifo Group Munich

Internet publications dates:

25 Sep 2007 10:30 AM CEST
25 Oct 2007 10:30 AM CEST
27 Nov 2007 10:30 AM CET

Further information:
Annette Marquardt
press and public relations
Tel. +49(0)89/9224-1604
marquardt@ifo.de

Figure 43 – ***The above IFO study elaborates a business survey calculated for the past month. On the right side of the table, one can see the next Internet publications dates.***

As we have mentioned, the preparatory phase of intra-day trading of the ZEW or IFO takes place before the real entry. Besides the chart context we need a reliable news service, which will communicate the real-time values as soon as they are released. If you don't have a subscription with the Institute, the trader may freely use the below news websites to obtain the earliest ZEW or IFO values. Useless to say, that the trader must be already familiar with the previous data, and also with the expectations.

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We are using the following news-related websites:

2.3.1 *Trading News Website* n°1 - www.forexnews.com

Source : www.forexnews.com

Time (NYT)	Loc	Description	Fcst	Prev	Actual
3/27 04:00	E-13	March Germany Ifo Current Conditions	111.0	111.6	112.4
3/27 04:00	E-13	Germany March Ifo Index	106.5	107.0	107.7
3/27 04:00	E-13	March Germany Ifo Expectations	102.5	102.6	103.2

Figure 44 – ***The above* IFO or ZEW *data survey can be obtained from: http://www.forexnews.com/***

2.3.2 *Trading News Website* n°2 - www.marketwatch.com

ZEW German economic sentiment poll sours in September

By Steve Goldstein
Last Update: 5:05 AM ET Sep 19, 2006

LONDON (MarketWatch) -- The ZEW indicator of economic sentiment for Germany dropped to -22.2 in September from -5.6 in August, which was even worse than the -7.6 reading predicted by economists. The ZEW Institute, which polls institutional investors and analysts in its monthly survey, said an expected slowdown in the U.S. economy may negatively affect German exports, and added that a planned value-added-tax hike will slow down private consumption and "restrictive" ECB policy will make investment projects more expensive. Still, those polled gave a more favorable assessment of the current economic situation in Germany, as that measure rose to +38.9 points from +33.6 points in August. ■

Source: www.marketwatch.com

Figure 45 – ***The above* IFO or ZEW *data survey can be obtained from:***

http://www.marketwatch.com/News/Story/Story.aspx?guid=%7B274B3F74%2DE5A9%2D48A6%2D87C2%2D13A851835644%7D&siteid=mktw

2.3.3 *Trading News Website* n°3 - www.derivatecheck.de

Source: www.derivatecheck.de

Dienstag, 27.03.2007	DE ifo Geschäftsklimaindex März	Woche 13
Uhrzeit	10:00 (MEZ)	
Ort	München	
Land	Deutschland	
Beschreibung	Veröffentlichung der Zahlen zum deutschen ifo Geschäftsklimaindex für März 2007	
aktualisieren		

aktuell:

Der ifo Geschäftsklimaindex für Deutschland notiert für März bei 107,7. Erwartet wurde der Index bei 105,5. Im Vormonat hatte er bei 107,0 gelegen.

Der Index für die Geschäftserwartungen notiert bei 103,2 nach zuvor 102,6. Gerechnet wurde mit 102,5. Der Index zur Geschäftslage liegt bei 112,4 nach 111,6 im letzten Monat. Erwartet wurde der Index bei 111,2.

Figure 46 – ***Even if the above* IFO *survey data is in German language, an English speaking person can still understand the meaning of the entire message through the numbers (refer to the underlines), especially if he/she is already familiarized with the previous data. This effort is really worth because this website gives the earliest survey data, whatever the news is. The website specializes not only on German but also on US or worldwide news. The exact URL is: http://www.derivatecheck.de/termine/***

In order to have an optimal profit, a multiple contract trade is indispensable. Remember... ZEW comes around, once a month... It can earn you good monthly revenue by itself. You also have the monthly IFO trade opportunity. If you are capable of optimally managing both events, you only need to work two mornings a month... But, don't forget the 10 contracts!!!

3. The Mechanism of ZEW Breakout Trading

3.1 Trade Management: Dual-Time Frames & Chart Context

Our experience showed, that most of the time the effect of the monthly 11:00hrs ZEW and the 10:00hrs IFO news releases last an average period of 30 minutes. Thus, we have chosen as operating time frame, the 5-min chart. In order to implement the *pre-trade preparatory phase* and scrutinize the slightest movement during unfolding of the post-news period we have selected, this time, the 1-min chart.

As for the chart context we consider a breakout set-up that will reveal the slightest directional variation of Dax 30 associated with the unfolding of the trend. We are using:

- **The horizontally drawn boundaries of a *"to be broken"* rectangle or upper/lower limits of any gap,**
- **The slant trend lines, which delineate and define at the same time, the eventual breaking point of a *"to be broken"* channel.**

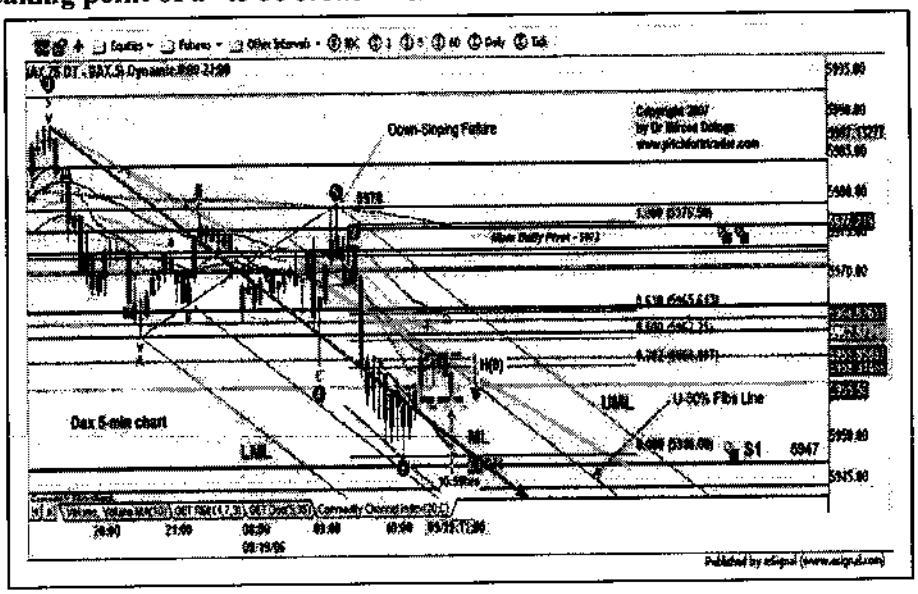


Figure 47 – ***The above 5-min Dax chart is set-up for reacting at the market's ZEW news effect.***

The chart illustrated in *Figure 47* has already drawn the *decisive breaking H(0) height rectangle.* The *trading-scene* was also set-up at 10:59hrs CET.

The *height-size of any rectangle* must be at least 4 points; otherwise we will have to suffer the influence of the market noise. The optimal height-size value should be near one ATR(14) value. In our case, the rectangle's height is exactly 5 points for an ATR(14) of 5. In case of a smaller than 5 point size, neglect this choice and if bigger than 10 points, divide the height-size in halves and quarters.

We are now ready for an eventual breakout, whatever the direction would be. We plead for a probable down-sloping move because of the following reasons:

- **An enhanced down-sloping momentum signaled by the W5 failure at 5978 level,**
- **A down-sloping contextual pitchfork whose median line (*ML*) serves as a symmetry axis. We note that the upper border of the rectangle was halted by the higher 50% Fibonacci trend line,**
- **A down market bias located *under* the daily main floor pivot of 5973 level,**

- A down sloping oriented impulse pattern, W1 through W3, being currently in a W4 unfolding. We can observe that the 50% classic retracement of this wave has attained the 5962 level.

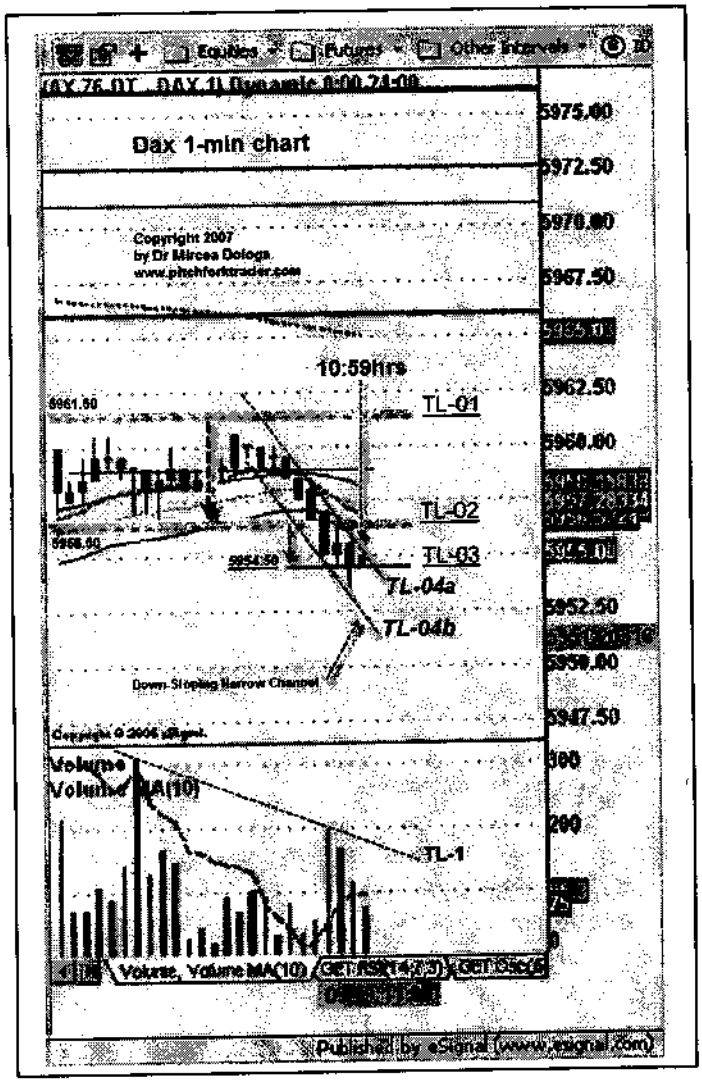


Figure 48 – *As we have already mentioned, the 1-min Dax chart is used as a magnifying tool of the news event, in order to better visualize the price fluctuations.*

An attentive observation of the above chart (*refer to Figure 48*) reveals the various decisive elements of the *trading-scene set-up:*

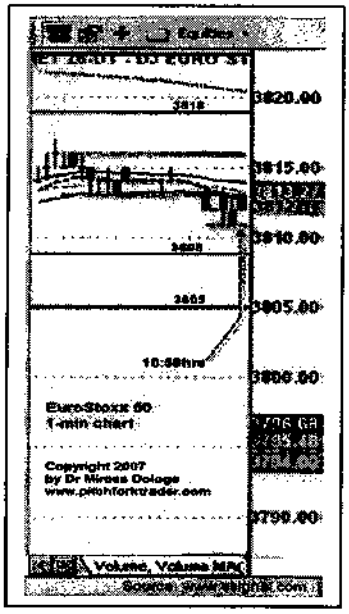
- A bigger height-size rectangle bordered by the T01 & TL-02 trend lines
- A smaller height-size rectangle limited by the TL-02 & TL-03 trend lines,
- A descending narrow channel bordered by TL-04a & TL-04b,
- A descending TL-1 volume trend line which will calibrate the intensity of the momentum if it is broken,

This smaller time frame chart will pinpoint the optimal entry and exit levels, once the 5-min time frame chart has grossly defined them.

However, we don't emphasize enough that a probable outburst of the market flow due to ZEW news impact is *independent* of the *before-the-news* market bias. Keep in mind that the elements of the *pre-event scene* will greatly assist the trader to establish, not only the probable final target of the impact but also the eventual reversal level of the contextual market, once the event has waned.

3.2 Trade Management: Inter-Market Context

The inter-market analysis will play a vital role for every aspect of trade management. V have already explained the details of this context (*refer to Chapter 1/* 3). In the below su chapter we will concomitantly study the *impact* of the behaviour of EuroStoxx 50 a German Bunds *over* the German Dax 30 charts. Please compare the below charts with the of the Dax 30 *already* illustrated in *Figure 47* and *48* and also those of *Figures 52* and *53.*



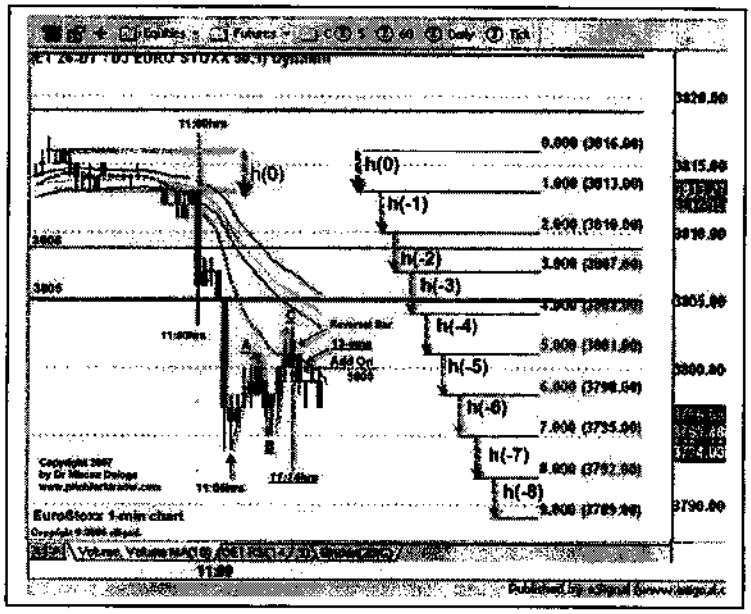


Figure 49a & 49b – *We have laid out, on the above two 1-min EuroStoxx 50 charts, the optim elements of the toolbox. The left chart (*Figure 49a*) is a 10:59hrs snapshot and the right chart (*Figu 49b*) has the same time frame, but 20 minutes later. We are interested in the latter chart because it is excellent teaching example of* an add-on *EuroStoxx 50 decision at 3800 level, for trading the Dax due to: the* ABC zigzag *where C=A; the* reversal bar*; the price dodges under the* 13-ema *ready to dr and of course, the* inertia *of the 11:00hrs* high ZEW momentum.

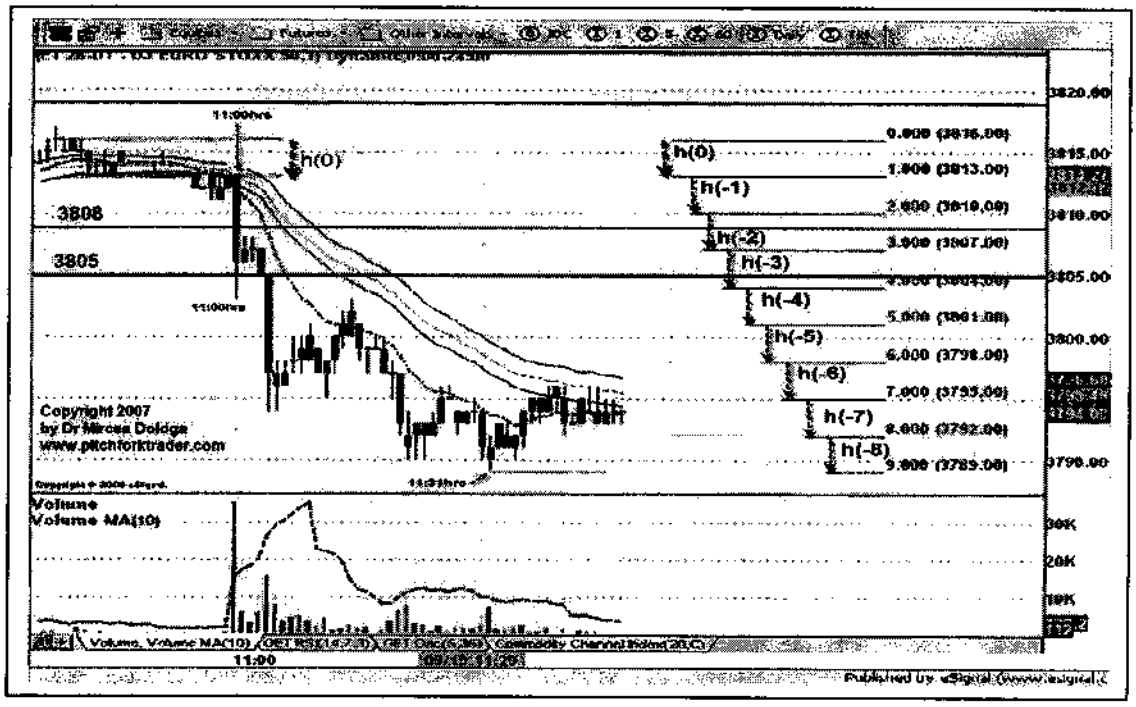


Figure 50 – *The ZEW momentum has waned at 11:31hrs on the above one-min EuroStoxx 50 chart.*

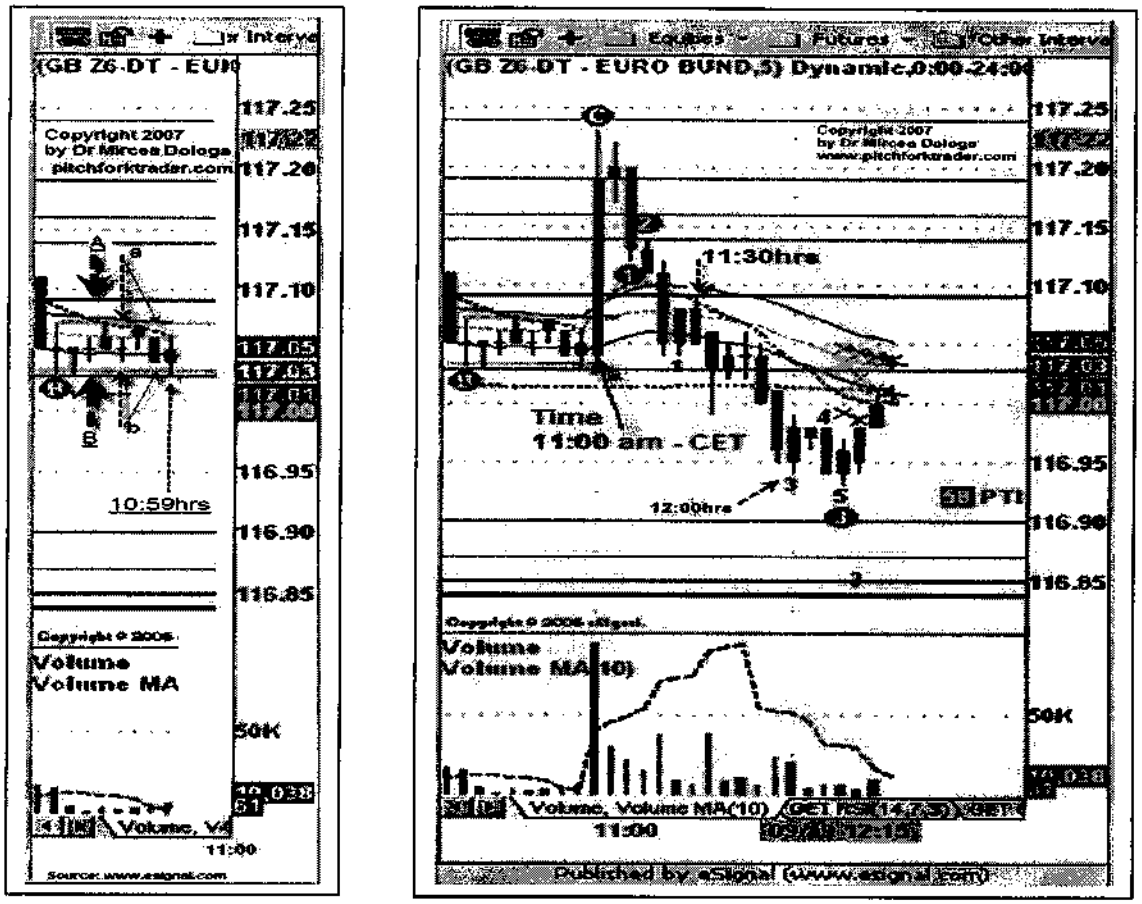


Figure 51a & 51b – *We have laid out, on the above two 5-min German Bund charts, the optimal elements of the toolbox. On the above Figure 51, the left chart (***Figure 51a***) is a 10:59hrs snapshot and the right chart (***Figure 51b***) has the same time frame, but 90 minutes later.*

We are rather interested in the above *Figure 51b* chart because it signals the *opposite direction impact* of the German Bund in relation to the German Dax 30 movements. We will compare the German Bund 5-min chart of *Figure 51b* with that of the German Dax 30 5-min chart of *Figure 53.* A careful chart observation immediately reveals the precision of the German Bund role as *an opposite leading indicator*. For the first bar… While one climbs, the other concomitantly drops.
However, *after the first volatile up-bar*, the German Bunds will align on the direction of Dax 30, which is downwards. Then, they rode down together for an hour. At noon, the DAX 30 reverses, followed by the German Bund, fifteen minutes later.

3.3 *Trade Management:* Automatic Mode of *Three Pawn Technique* Entry, Stop Loss & Targets

The 5-min time frame chart will impose the underneath trading decisions (*described in Volume I - pages 318-320 - and reprinted in the Appendix n° 11, at the end of this volume*) labelled the *Three Pawn Technique*. It is a "*to be or not to be*" situation or a "*to make or not*" entry decision. Due to the reliability and the automatism of this technique, we named it the *automatic trading mode.* If only two orders are pre-arranged, we are in a *semi-automatic mode.* If all three orders are not pre-arranged, we are simply in a *manual mode.* Even if the new or inexperienced traders frequently use the latter method, we hardly advise it!
The *Three Pawn Technique* is not only one of the best remedies for the "*trigger-shy*" syndrome, but also for relieving the trading anguish, so that the trader can get the optimal results.

This progressively developed order technique consists of three steps:

- *Entry level*, in accordance with the smaller time frame chart. For this trade, given the 5 points height size of the rectangle we have chosen:
  - *Long* at 5962 level, a pre-arranged entry, just 0.5 point above the upper border.
  - *Short* at 5954 level, a pre-arranged entry, just 0.5 points below the lower border.
- *Stop Loss* will be reciprocal: 5954 level is the *stop loss* for the *long trade* and 5962 level for the *short trade*. The 8-point risk (*5962 minus 5954*) is the same for both trades.
- Exceptionally, the *Reward/Risk Ratio* is not *here* as important as that of a *non-news regular trade*, because of the very probable *directional market mode* in which the *post-news* market flow will violently evolve, in this kind of special trading situation. We will *tranquilize* ourselves and will ensure our *peace of mind* with an 8-point loss/ Day contract, which is 200 euros, around $275. In our experience, the *Reward/Risk ratio* is most of the times, over three, except in quiet economic periods.
- Targets will be categorized on several levels, *to be expected, but not imposed*, by no means (*please see below*).

The *long trade's targets* are straightforward. In case of a weak-to-average strength up-momentum, the market will rise, at least to the daily pivot at 5973, which is only 11 points away, or 2 ATR(14) sizes. In case of a stronger momentum, the price may climb to the end of the prior W3 at 5989 level, which is 27 points away.

The *short trade's targets* are more probable because of the trade's context. In case of a weak-to-average strength down-momentum, the most probable target is 5948 level, which is also the current W3's level. If the market doesn't reverse here it will certainly stumble because of another key level present here, the S1 daily floor pivot located at 5947 level. In case of a stronger down-momentum, the market price will drop to the *confluence zone* composed by the *monthly floor pivot* at 5928.5 level, *weekly floor pivot* at 5924 level or even lower towards *S2 daily floor pivot* at 5918 level (*refer to Figure 53*). Once the latter level has been reached, about *five ATR(14)s* distance, the market will perform either a *trading range* or even a *reversal*. The down-sloping extensions of the initial rectangle synchronized with the median lines of the descending pitchfork will surely guide the trader, in his target quest.

The *final target* of an eventual breakout is often neglected. This has a double consequence because of its identification; not only will warn the trader of the news momentum limits but it will also prepare him for the eventual *add-ons* and also for the final incoming reversal trade.

This situation is a classic SAR (*stop-and-reverse*) trade, which I would rather re-name, *sell-and-reverse* in downtrend or *buy-and-reverse* in up trend.

The trading statistics clearly show that the most successful traders use routinely the *add-ons* and *SARs* tools. If you think about it... it's nothing but "*un état d'esprit*" or should I rather say *a spiritual state-of-mind*?

3.4 *Trade Management:* Unwinding the Trade

The above two charts illustrated in *Figures 47* and *48* set-up the scene for ZEW trading. In our experience the *breakout strategy* is the most suited for this type of trading. The breaking of the horizontal, slant and curvilinear trend lines will start the process of trade management.

However, the trader will have to perform first, the *pre-trade preparatory phase*. We have systematized this approach, including the different contexts and we have already described it in Context of the Trade (*Chapter 1*).

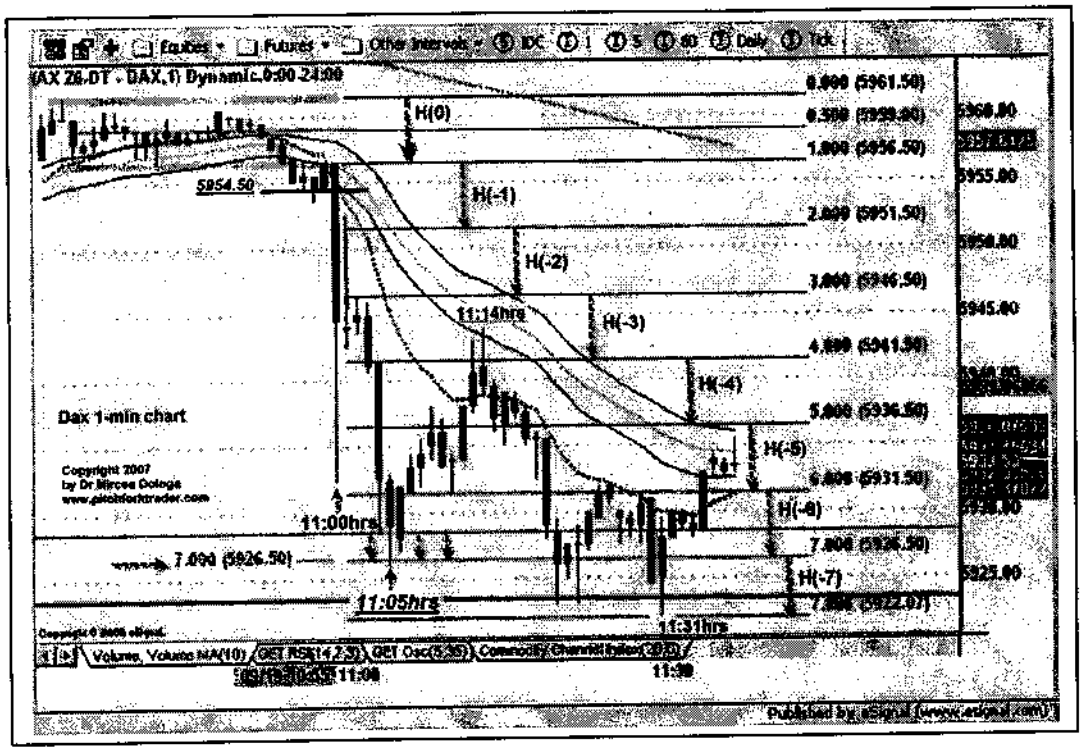


Figure 52 – *The above one-min German Dax 30 chart reveals the importance of* <u>number seven</u>. *A close observation shows that the ZEW impact has almost completely waned when its momentum has reached the seventh extension at 5926.50 level, in about six minutes, at 11:05hrs. It is important to note, that the extreme volatility of the first bar dropped the market all the way to the sixth ratio down-sloping extension at 5932 level. Thirty minutes later, at 11:31hrs CET, after a 50% retracement, the market flow finally reached the maximal 7.86 ratio down-sloping extension value at 5922 level.*

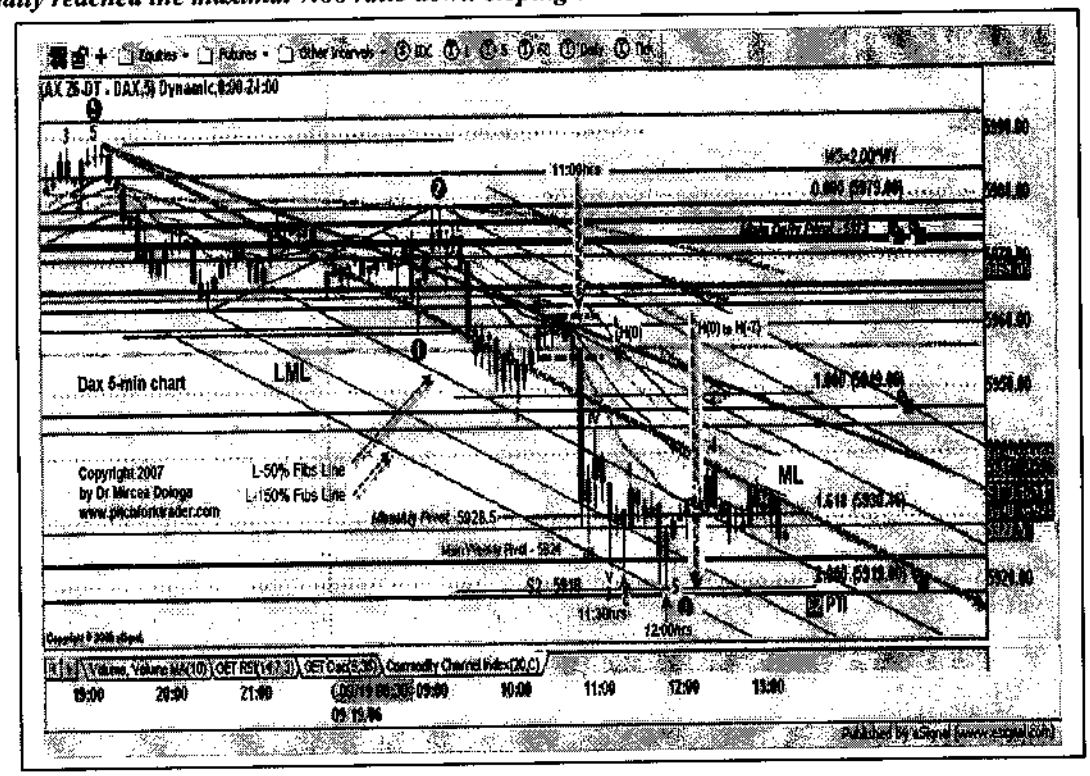


Figure 53 – *The above 5-min Dax chart shows the reaction of the market flow to the ZEW news effect. As on the smaller time frame (*refer to Figure 52*) the market has been halted at exactly* <u>seventh down-sloping extension</u>, *at 5919 key level, where W3=2.00*W1.*

In the above chart, the role of the monthly, weekly and daily floor pivots and at the same time, that of the median lines is obvious: the S2 floor pivot halted the market, thus terminating the W3 at 5919 level where W3=2.00*W1; the median line (*ML*) constituted a hard rock resistance, tested seven times without any breaches; the lower 150% Fibonacci trend line, which was equally tested four times, not only it didn't give in, but it efficiently halted the entire ZEW news momentum.

We will not go deeper into detail concerning the money management because an entire chapter is consecrated in our next book - please refer to *Case Studies* and *Risk & Money Management,* the last chapter.

4. The Mechanism of IFO Breakout Trading

4.1 *Trade Management:* Dual-Time Frames & Chart Context

Our experience showed, that most of the time the effect of the monthly 10:00hrs IFO news release lasts an average period of 30 minutes. Thus, we have chosen as operating time frame the 5-min chart. In order to implement the *pre-trade preparatory phase* and scrutinize the slightest movement during the unfolding of the post-news period we have selected, this time, the 3-min time frame chart. It seems that it is better than the 1-min time frame chart if we take into consideration the market noise. However this choice has the disadvantage of being too close to the 5-min time frame chart. When we consider using dual time frames, we choose a minimal multiple of 3 between them. Let us study the IFO breakout and draw our conclusions.

As for the chart context we consider a breakout set-up that will reveal the slightest directional variation of Dax 30 associated with the unfolding of the trend.

We will try to cover the price & time Cartesian area by using:

- **The horizontally drawn boundaries of a *"to be broken"* rectangle or upper/lower limits of any gap,**
- **The slant trend lines, which delineate and define at the same time, the eventual breaking point of a *"to be broken"* channel.**
- **A synchronous optimal Cartesian set-up including: horizontal, slant and curvilinear trend lines: the moving averages, the ellipses or the Fibonacci arcs.**

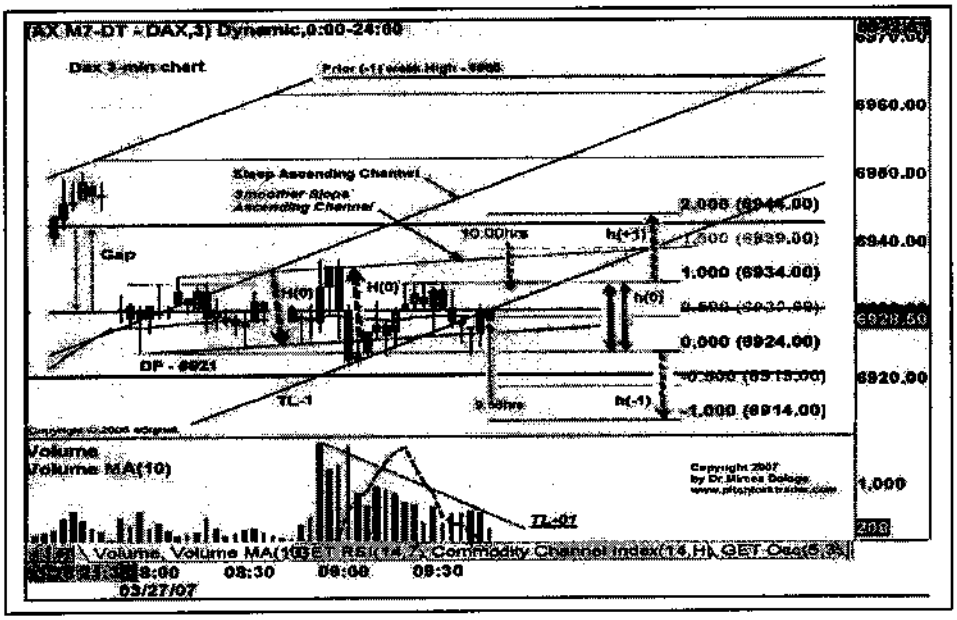


Figure 54 – ***The above 3-min Dax chart shows the* pre-trade scene, *4 minutes before the IFO news release.***

A close observation of the above Dax 3-min chart (*refer to Figure 54*) reveals the various decisive elements of the *trading-scene set-up:*

- A *steep ascending channel* with its TL-1 trend line which for the moment halted the market flow at 9:56hrs CET,
- A *smoother slope ascending channel* with its initial H(0) height,
- A *10-point height rectangle* which has an *initial h(0) height* to be extended during the trade development, after the 10:00hrs IFO news release. We have drawn the *first* positive extension [h(+1)] and also the *first* negative extension [h(-1)] with midlines.
- A *12-point down-gap* whose lower boundary has a *symmetry axis* role for the market. At the present time, the market flow oscillates between +50% and –50%,
- A *descending TL-01 volume trend line*, which will calibrate the strength of the momentum if the TL-01 is broken. The *volume study* is an indispensable factor in taking our decision. The tools used are the *raw volume*, the *volume-MA & OBV.*

This smaller time frame chart will pinpoint the optimal entry and exit levels, once the 5-min time frame chart has grossly defined them.

We never emphasize enough that a probable outburst of the market flow due to IFO news impact is *independent* of the *before-the-news* market bias. Keep in mind that the elements of the *pre-event scene* will greatly assist you to establish, not only the probable final target of the impact but also the eventual reversal level of the contextual market, once the event has waned.

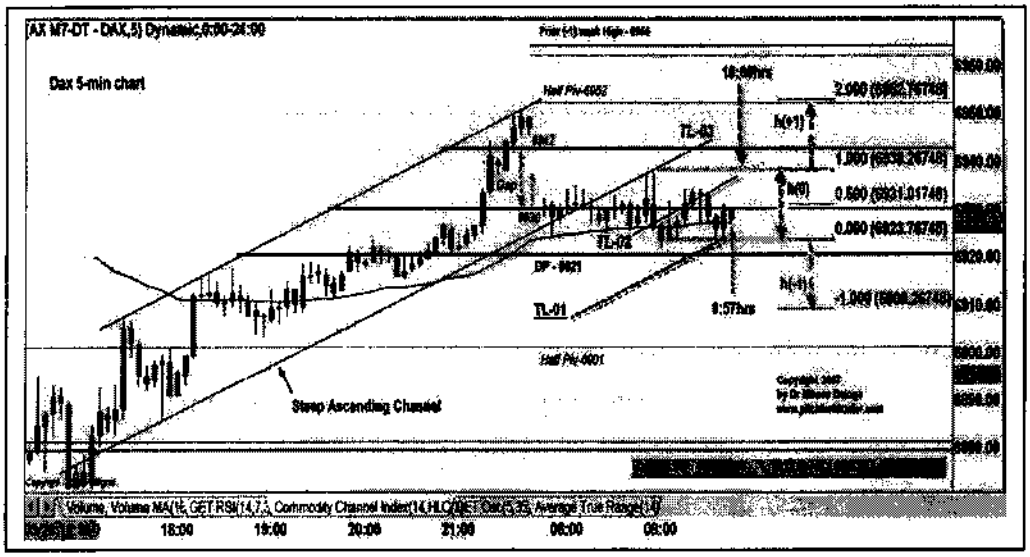


Figure 55 – *The above 5-min Dax chart shows the* pre-trade scene, *3 minutes before the IFO news release.*

A close observation of the above Dax 5-min chart (*refer to Figure 55*) reveals the various decisive elements of the *trading-scene set-up:*

- A *steep ascending channel* with its TL-01 trend line which for the moment strongly supports the up-trend market flow at 9:57hrs CET. Its immediate proximity with the current market and its double testing will comfort us for a probable *long* trade.
  The channel's TL-02 & TL-03 trend lines will be pierced progressively in case of an up-thrust.
- A *15-point height rectangle*, which has an initial h(0) height to be extended during the trade development, after the 10:00hrs IFO news release. We have drawn the *first* positive extension [h(+1)] and also the *first* negative extension [h(-1)] with midlines.
- A *12-point down-gap* whose lower boundary has a *symmetry axis* role for the market. At the present time, the market flow oscillates between +50% and –50%,

- **Please note the proximity of the market with the daily floor pivot at 6921 level, which separate the up/down bias of the day. Its breakdown will signal a very probable down trend for the rest of the day.**

4.1.1 Description of the *End-Run Phenomenon* – a Major Professional Trading Tip

In order to take a long/short trade decision, like trading the IFO or the ZEW indicators, we will carefully observe the market fields located *behind* or *ahead* of the *current market flow*. The trader must be aware of the eventual key levels, which could try very hard to *stumble*, to *halt* or even to *reverse* the market flow propelled by the news momentum.

Always be on the watch for a dearth or an abundance of these key levels in order to avoid the *End-Run phenomenon*, which will "*bug in*" certainly uninvited and will immediately take over. This occurs when the breakout high-powered momentum hits a strong resistance on its up-trending development.

***The End-Run phenomenon* will quickly reverse the up-trend and will exit out the ongoing trend. This is *a* failed *pattern* or an *out busted pattern* because it fails to carry out the stored energy, which exploded at the moment of the breakout. Don't confuse it with the *false moves*. They are only erratic movements, especially occurring in the *no man's land territory* (unstable & unsecured area) like the *apex* of a triangle, the *boundaries of any pattern* including *gaps*, *Gann hidden levels*, *floor pivots*, and so on!**

***CONCLUSION*: In order to master this key-level detecting procedure please inspire yourself from the "*The Key Mapping of the Operational Time-Frame Chart*" already treated in *Chapter 2* (*sub-chapter 2.2*).**

4.1.2 Practical Applications of the *End-Run Phenomenon*

In order to avoid this *End-Run phenomenon* we should be very cautious in analyzing the obvious or hidden preexistent elements distributed in the price/time Cartesian market space: the size of the rectangle's height, the size of the gap (if any), the location of the market price in regard to the floor main pivots, the old highs/lows, the Fibonacci key levels, the Gann hidden levels and the Gann angles, especially the 45° angle.

We will reveal below the most succinct elements to be considered when the trader will take the trading decision using the *Three Pawn Technique*. For our IFO breakout trade we will systematize them as it follows:

1. **The *Up-Scenario* will start only when the breakup momentum will trespass the upper border of the down gap at 6942 level, because of the rectangles upper border proximity (*only 4 points away*). Please refer to the chart on *Figure 55*. The optimal long entry for us would be 6943 level (*6942 + 1 pt*). The one point, which represents two ticks, is for market noise.**
2. **The *Down-Scenario* will start only when the breakdown momentum will trespass the main daily floor pivot at 6921 level. Please refer to the chart on *Figure 55*. The optimal short entry for us would be 6919.5 level (*6921 – 1.5 pt*). We subtracted 1.5 points due to the market noise (*1 point*) and the presence of 6920 level, a whole key number (*0.5 point*).**

4.2 Trade Management: Inter-Market Context

The inter-market analysis will play a vital role for every aspect of the trade management. We have already described the details of this context (*refer to Chapter 1, sub-chapter* 3).

The procedure of executing this phase for the IFO news breakout trading will be identical as that for the ZEW news, already developed in this chapter (*Sub-chapter 3.2*).

4.3 Trade Management: Automatic Mode of *Three Pawn Technique* Entry, Stop Loss and Targets

As we already know the uniqueness of the trade management will make the difference at the end of the month. We have chosen to use our method called the *Three Pawn Technique.* This progressively developed order technique consists of three steps:

- ***Entry level*, in accordance with the smaller time frame chart. For this trade, given already the reasons explained in the previous page's *sub-chapter 4.1.2*, we consider:**
  - ***Long* at 6943 level, a pre-arranged entry,**
  - ***Short* at 6919.5 level, a pre-arranged entry,**
- ***Stop Loss* at 6929 level for the *Long trade*, representing the lower boundary of the down-gap minus one point (*6930 – 1.0*). The 14-point risk (*6943 minus 6929*) is here optimal.**
- ***Stop Loss* at 6931.5 level for the *Short trade*, representing the lower boundary of the down-gap plus 1.5 points (*6930 + 1.5*). The 12-point risk (*6931.5 minus 6919.5*) is here optimal.**
- **Exceptionally, the *Reward/Risk Ratio* is not *here* as important as that of a *non-news regular trade*, because of the very probable *directional market mode* in which the *post-news* market flow will violently evolve, in this kind of special trading situation. We *tranquilize* and ensured our *peace of mind* with an 12 to 14-point loss/ Dax contract, which is a maximum of 350 euros, around $480. In our experience, the *Reward/Risk ratio* is most of the times, over three, except in quiet economic periods.**

Targets will be categorized on several levels, *to be expected, but not imposed*, by no means (*please see below*).

The *long trade's targets* are straightforward. In case of a weak-to-average strength up-trend momentum, the most probable target will be the *confluence* of the half daily pivot, the last high and the positive 200% extension of the rectangle at 6952 level (*refer to Figure 55*). It's only a 9-point hike, which will make the R/R ratio under 1.0 [Reward/Risk ratio is 0.64 due to the following: (6952-6943=9) / 14].

n case of an average-to-strong strength up-trend momentum, the most probable target will be the *confluence* of the prior week high and the positive 300% extension at 6965 level. It's a 22-point trip, which will make the R/R ratio under 2.0 [Reward/Risk ratio is 1.57 due to the following: (6965-6943=22) / 14].

The *short trade's targets* aren't numerous as those on the up side. We can count as the first target the *confluence* of the half daily pivot and the negative first extension at 6901 level.
In case of an average-to-strong strength down-momentum, the most probable targets will be around the main key levels: S1 daily floor pivot, negative 200% extension of the rectangle, etc...!

The *final target* of an eventual breakout is often neglected. This has a double consequence because of its identification; not only will warn the trader of the news momentum limits but it will also prepare him for the eventual *add-ons* and also for the final incoming reversal trade.

This situation is a classic SAR (*stop-and-reverse*) trade, which I would rather re-name, *sell-and-reverse* in downtrend or *buy-and-reverse* in up trend.
rather say *a spiritual state-of-mind*?

4.4 Trade Management: Unwinding the Trade of a Misfired Breakout

The above two charts illustrated in *Figures 54* and *55* set-up the scene for IFO news trading. In our experience the *breakout strategy* is the most adapted for this type of trading. The breaking of the horizontal, slant and curvilinear trend lines will start the process of trade management. However, the trader will perform first, the *pre-trade preparatory phase*.

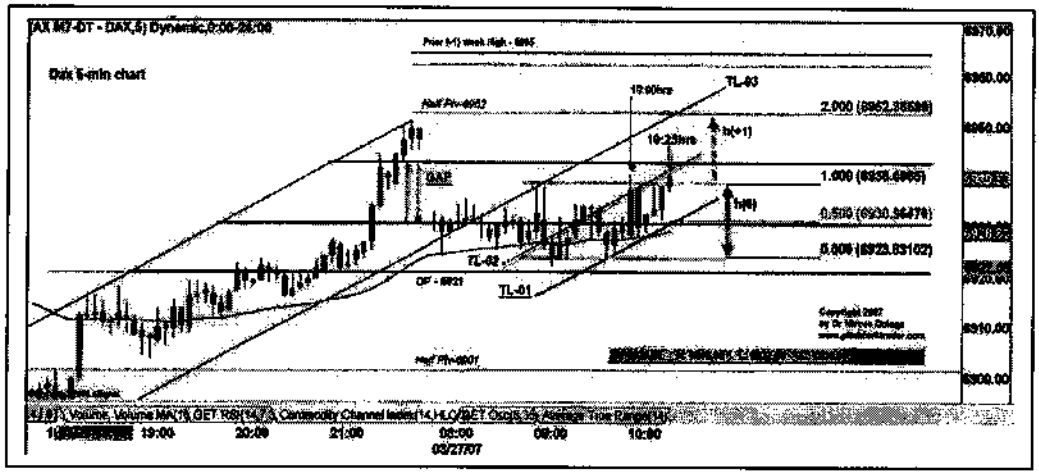


Figure 56 – *The above 5-min Dax chart shows the* trading scene, *after the IFO news release. A 25-minute delayed breakout is trying to shape up a long trade, towards entry at 6943 level.*

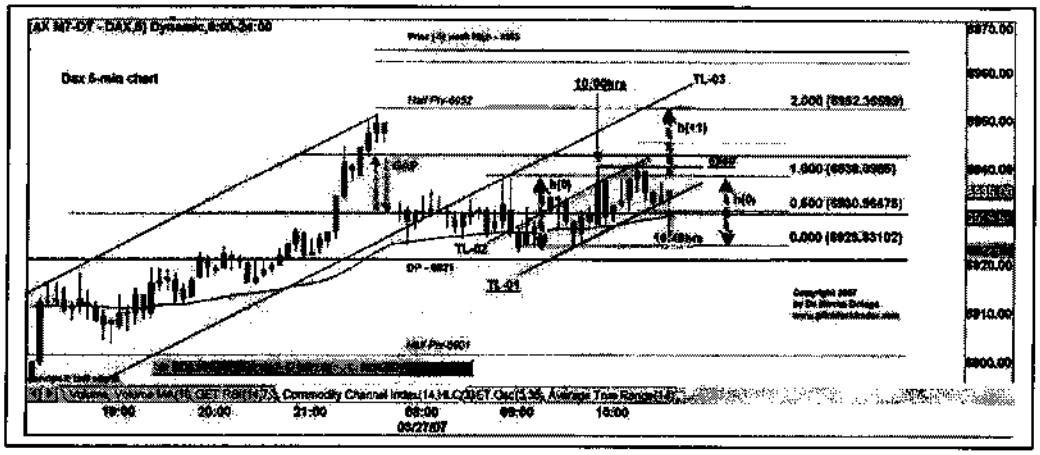


Figure 57 – *The above 5-min Dax chart shows the* trading scene, *48 minutes after the IFO news release. We observe that the breakout trade has misfired it won't take off. The price is still in rectangle.*

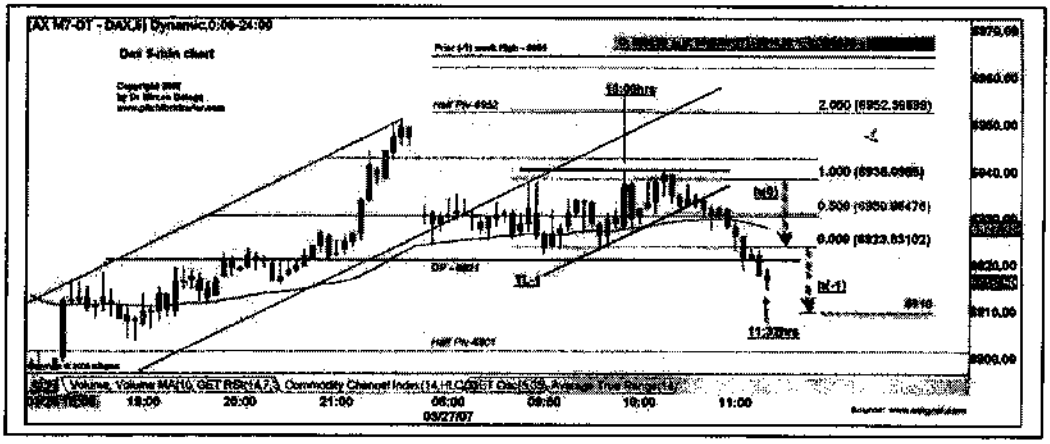


Figure 58 – *<u>The breakout misfired</u> – NO DAMAGE to the Trader: Ninety-two minutes, after the IFO news release, we don't consider the chart's context as belonging to the news impact. The market just broke-down the daily floor pivot at 6921 level and will probably evolves south.*

5. The Mechanism of Volatile Trading

As we have already mentioned in *sub-chapter 2.2*, the volatile trading is mostly for the extreme news but also for the usual high-volatile markets like NASDQ.

5.1 The 13:00hrs CET *Volatile Bar*

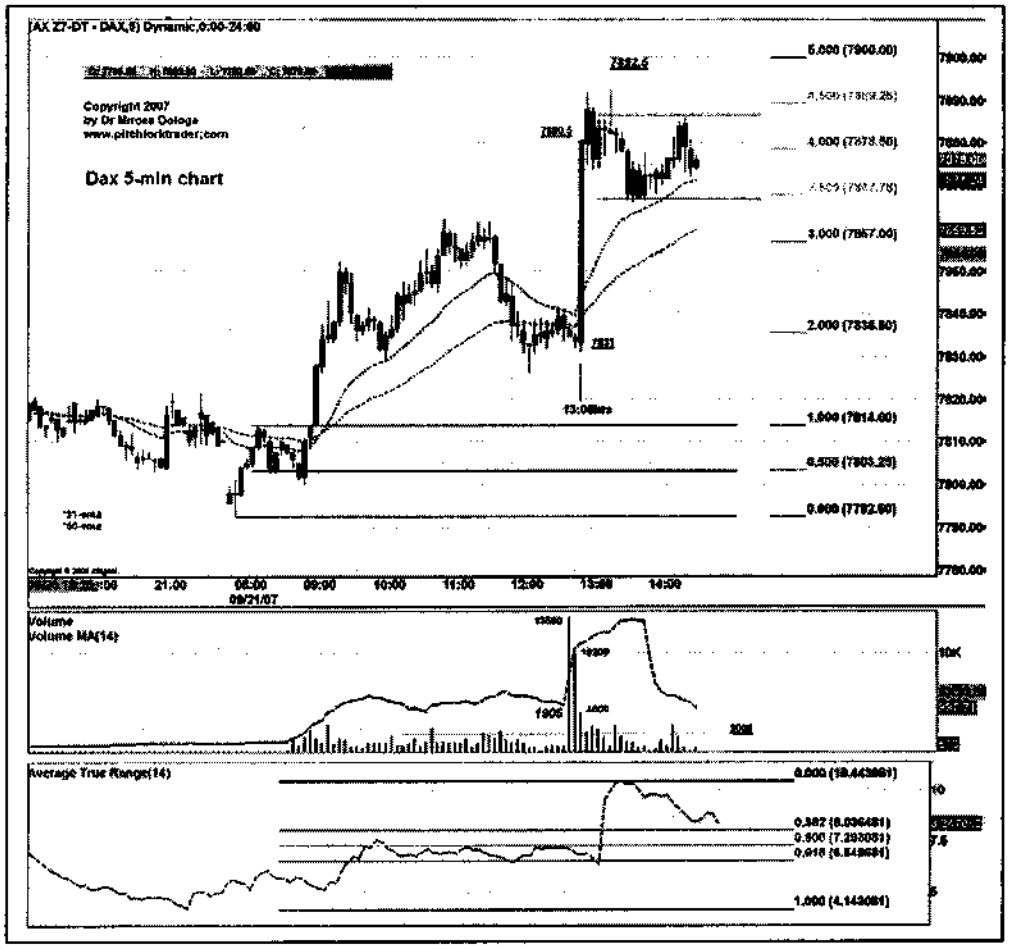


Figure 59 – The 13:00 hrs CET *Volatile Bar* : *The above 5-min Dax chart optimally illustrated the 13:00hrs CET volatile Dax bar.*

The 13:00hrs volatile bar on the above *Figure 59* has a huge price jump of 49.5 Dax points for a daily ATR(14) of 100 points, as of today. It's exactly the 50% of the daily range. If you observe the intra-day ATR, it jumped from the morning's 7 points to a max. of 10.44 pts.
The bar's volume reached a maximum of 13500 instead of the average 2000 for a 5-min bar, which is an almost 7 times increase... again the sacred seven!
It is clear that after such huge volatile bar, the market could continue, in up-trend a maximum of 1 or 2 bars, without entering a trading range or a violent drop...!
Let us say a few words about 13:00hrs CET bar:

- **13:00hrs splits the actual 14-hour Dax trading day in almost two halves,**
- **It is the equivalent of the 12:00hrs (*noon-time*) on the S&P 500 market. In spite of the fact that both aren't identical, in measuring time and that they are on two different continent markets, they have almost the same function... each of them will replace the powerful main daily floor pivot, which *leads the dance* of the day's bias.**

As always with a market, nothing is taken for granted! Check the above, on your specific market... If there is a 13:00hrs volatile bar, then you can be sure that the main daily floor pivot was replaced. *And don't forget*... The market always obeys the most recent key level!

5.2 Description of Multiple Days Volatile Markets

The several days volatile markets are markets that rotate in a wide range, price jumps t price jumps, only briefly interrupted by small bars that function as artificial breathin devices. The small bar pauses are used to quickly restore the bars' dispensed energy.
We should also mention: the *steep slopes*, the *sharp spikes and* the *TYPICAL variation of th price ranges between main supports & resistances, which is the Key Volatility Visualisation.*

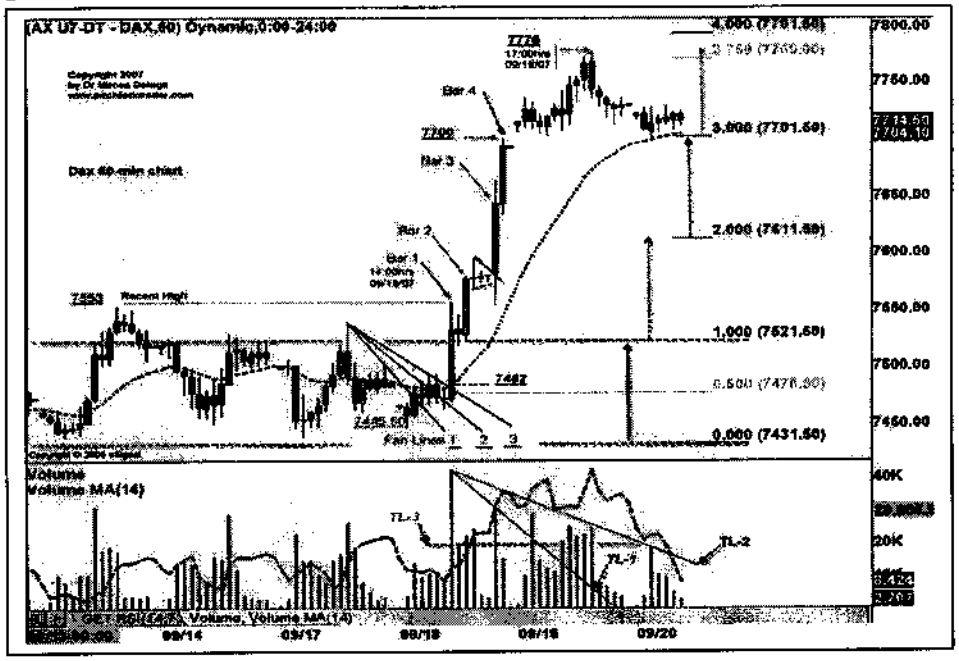


Figure 60 – ***The above 60-min Dax chart illustrates a six days market: the first four days constitute trading range and the last two days picture a high-volatile activity. The trade was triggered at th rectangle's outburst at 7521.50 level due to a conservative approach. In an aggressive approach, th trade could have been triggered earlier when the market broke the reliable third fan line at 7482 level.***

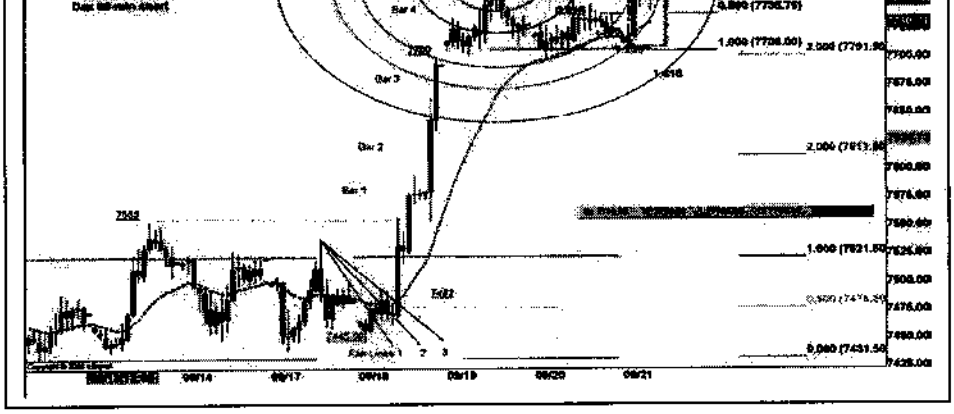


Figure 61 – ***The above 60-min Dax chart better illustrates the high-volatile market. As we can see th market still keeps its volatile aspect three days after it started on September 18th, 2007. After the firs three huge volatile up-bars, the market has entered in a trading range as predicted. As usually, we hav chosen the most adequate elements of the toolbox: the inceptive rectangle between 7431.5 & 7521. borders, its three positive extensions reaching the 400% level, the moving average and upper rectangl The local market beautifully strides along the up-corridor between the 1.00 and 1.236 Fibonacci arcs... The market flow strides along this up-corridor, a narrow strip of land through foreign-held territory !***

Key Points to Remember:

- **The news trading is the appange, or should I rather say "*the protected kingdom*" of the professional trader.**
- **A large majority of the experienced traders consider that the pre-trade preparatory phase of the expected news trading counts for more than 70% of its success.**
- **The breaking of the horizontal, slant and curvilinear trend lines will start the process of the trade management, but the trader will have to perform firstly, *the pre-trade preparatory phase*.**
- **The trader should specifically do the past contextual trading statistics of the same type of news. It has the enormous advantage of unveiling many hidden trading facets. We call them *News Market Mapping*.**
- **Best choice of the small time frame used to scrutinize the pre-open and also the unfolding trade is the one-minute or three-minute charts. One replaces the other if the *best fitted* is able to reveal the optimal boundaries, ready for a breakout decision**
- **An average strength *news breakout trade* usually last for an average of 30-45 minutes. Consider a misfired trade after 60 to 90 minutes.**
  Try to recuperate the misfired momentum, through the analysis of the pre-event and the day's bias, guided by the main daily floor pivot or the 13:00hrs CET key level.
- **The 13:00hrs CET volatile bar makes very often-great opportunities... Don't miss it... Be on top of it!**
- **The *Three Pawn Technique* is a progressively developed decisional trading technique – *a triple ordering system* – that is not only one of the best remedies for the "trigger-shy" syndrome, but also for relieving the trading anguish, so that the trader is free to get the optimal results.**
- **Don't ever neglect the final target of a breakout!**
  This has a double consequence – it warns the trader of the news momentum limits & it prepares the final incoming reversal trade – the SAR trade!
- **The *End-Run Phenomenon* description is the *Quest of key levels* on an *up/down market corridor*, a *narrow strip of land through foreign-held territory!***
  This is a *failed pattern*, an out busted chart formation, which failed to carry out the stored energy, which exploded at the moment of the breakout. Don't confuse it with False Moves...!
- **The most important edge of the *Volatility trading* is its "*reverse to mean*" which is also called "*rubber band*" phenomenon.**

- **The *Key Visualization* of the *Volatility* is the *typical price range variation between the S/R key levels*, besides huge bar jumps, sharp spikes and steep slopes of the corresponding swings.**

- ***As a Conclusion*... Don't forget...!**
  One can comfortably live by trading only two mornings a month... the ZEW and the IFO trades... And remember...!
  Ten contracts every time!

Chapter 4

Inter-Market Analysis - Fundamentals – Real-Time Use

Due to its labyrinth facets, the *Inter-market Analysis* is frequently misunderstood. It has the advantage of building, *not only* the road to the day's trading potential, *but also* to enhance the full comprehension of the market, days or weeks to come!
Many of us can still remember, the disastrous impact of the Russian or the Asian crisis that shook-up the entire world markets, some years ago.
We are now aware that the dragonfly's wing fluttering in Asia can be easily heard over the oceans...!
And... The impact of the different elements, of markets situated thousands of miles apart... isn't over... It will last as long as the markets!
A very recent example, in August 2007... The US real-estate business was plagued with the *sub-prime* meltdown of the mortgage sector... just one month ago. The internal links of the international monetary market mechanisms promptly released the consequent inter-reactions, even in Europe:

- **The intervention of the Bank of England to bring a British domestic bank, back from the brink of bankruptcy,**
- **Deutsche Bank, one of the Germany's biggest bank conglomerates had shyly admitted a substantial real-estate investment write-off.**
- **The US Dollar made an abyssal drop reaching parity with the Canadian dollar, for the first time in decades.**
- **The Euro made a leap to the upper stratosphere reaching the threshold of 1.40 level.**

Last Tuesday, September 18th, 2007, the intervention of the Fed cut the rates by 0.50%, and seemingly established a fragile equilibrium... for now! The US economy is not yet affected and whatever reasons that could have increased inflation seem to have stopped... for the moment!

1. Inter-Market Mechanisms - Global & Domestic Inter-Market Links

The tradability and diversification of the financial markets have enormously evolved since the 1990s. Nowadays markets are full of liquidity and some trading vehicles have an edge compared with other. For instance:

- **In today's turmoil days for the dollar, instead of trading the US dollar against the British pound, the trader will be better off trading the same commodity, which is marketed in New York and also in London. This would be the case with *cocoa* market, which trades in USA and also in England. If a weak dollar, then buy US *cocoa* and sell UK *cocoa*. This is a great trade, which takes advantage of a weak dollar and strong sterling – A truly currency-influenced commodity trade!**
- **Another example would be to trade the Gold Futures and get some clues from the US dollar behaviour. There is a true inverse relationship!**
- **As opposite charts, we can mention US dollar and Euro. Their inter-relationship is very tight!**

We can continue with these examples to prove with the chart assistance, that these tight inter-relations, not only exist, but they are one of the main trading factors.
In order to describe the entire array of these inter-dependencies it will be necessary to write several books. We acclaim the great writings in this field, so excellently done by John Murphy in his book *Inter-market Analysis (2004).* It should belong to the library of every professional trader or investor!

We will try to briefly emphasize the role of the principal players that perform a vital role in the mechanism of the inter-market analysis. By all means, this description will not be exhaustive, but evidently succinct and operational for trading this concept successfully.

1.1 Dynamic Mechanisms of Stock Indices

The constantly increasing the number of worldwide exchanges resulted in a local stock index, in almost any industrialized country. Whatever they are, *price weighted* or *un-weighted,* these indexes were carefully chosen by the local business community to ideally reflect the economic activity on their domestic markets. Whichever method of composing has been chosen, each index is constituted by Tier 1 stocks, which will certainly lead more than 51% of index's market activity impact, even if they represent less than 50% of the index, as constituents.

1.1.1 Internal Influences on Domestic Markets

The working mechanism of the economy forces each stock index to have functioning relations with each propitious economic factor that participates to the entire business activity (refer to *Figure 62*).

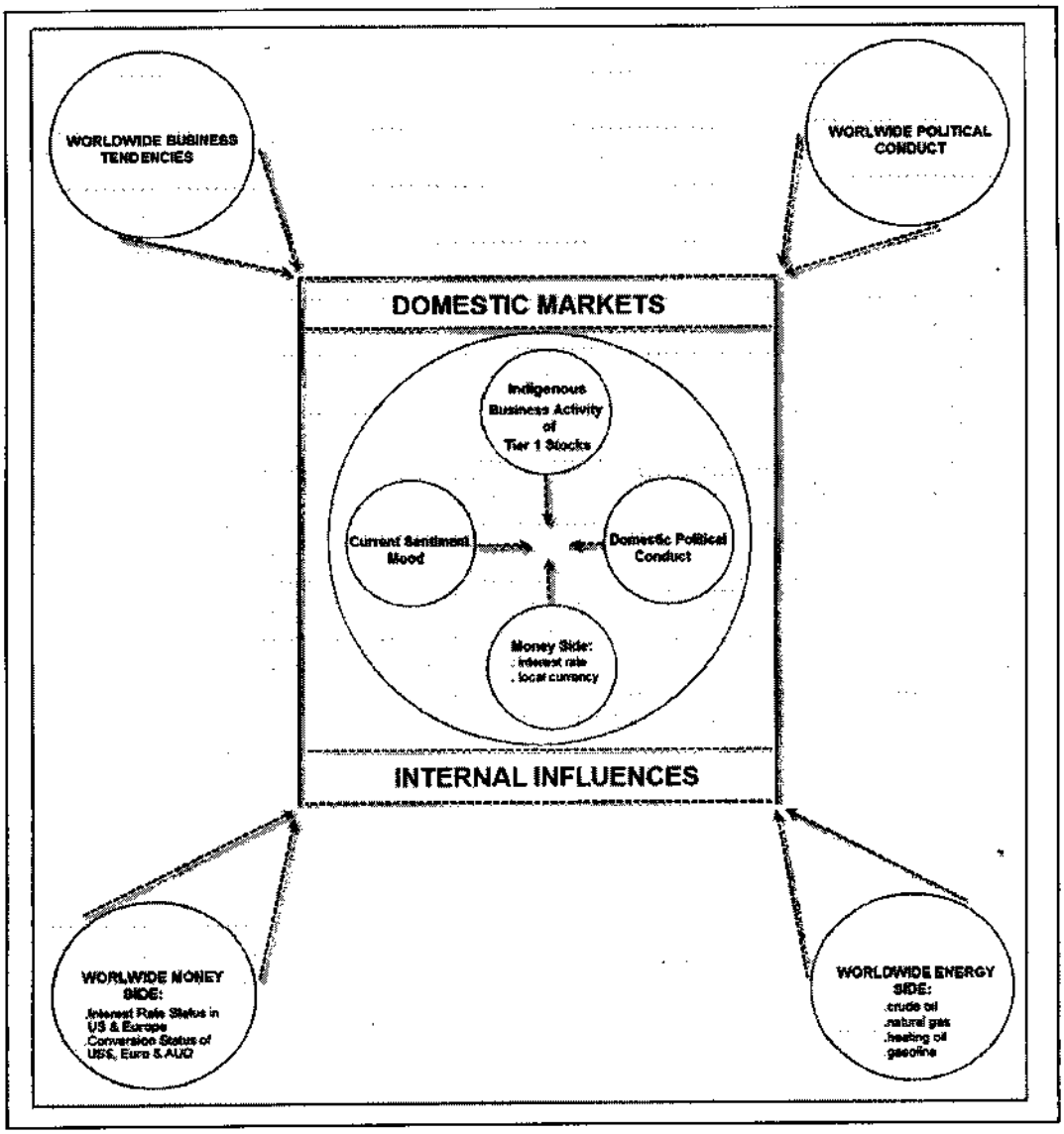


Figure 62 - Stock *Index INTER-MARKET ANALYSIS – Internal and external influences acting upon the domestic markets.*

A very close observation of the above table (refer to *Figure 62*) will quickly summarize the intricate inter-dependent factors of the inter-markets analysis. When we relate to *internal factors*, we should take into consideration most of the elements that optimally participate in these phenomena:

1.1.1.1 Indigene Business Activity affecting the Index's Tier 1 earning capabilities,
1.1.1.2 Domestic Political Conduct,
1.1.1.3 Current Sentiment Mood,
1.1.1.4 Money Side:
- *Current & Expected Interest Rates,*
- *Inflation, Disinflation & Deflation Propitious Conditions,*
- *Conversion of Local Currency Status against the other currencies, especially Euro & US dollar.*

1.1.2 External Influences on Domestic Markets

A very close observation of the above table (refer to *Figure 62*) will reveal the labyrinth of inter-dependent factors that *melt, lead* or *diverge* the *inter-markets analysis*. Speaking about *external factors* closely inter-related to domestic market, it means that the overall analysis is a huge task. However, for trading purposes we have systematized all these elements in a succinct table, practical for everyday use (refer to Figures *63 & 40*).
We should be able to take into consideration most of the elements that optimally participate in these phenomena:

1.1.2.1 Worldwide Business Tendencies in terms of global growth or recession, affecting the earning capabilities of the indices' Tier 1 stocks of the domestic markets,
1.1.2.2 Worldwide Political Conduct,
1.1.2.3 Worldwide Money Side:
- *Current & Expected Interest Rates of strong currencies like Euro & US dollar, and their conversion,*
- *Current & Expected Conversion Rate of the commodity currency, the Australian dollar,*

1.1.2.4 Worldwide Energy Side: Crude Oil, Gasoline, Natural Gas & Heating Oil with their worldwide impact

	Up	Dn
Nikkei %		0,64%
S&P 500 pts	0,85	
ES Night pts		
Crude Oil pts-		61,75
Euro/$ pts	1,3418	

Figure 63 – *The above* inter-market analysis table *was extracted from the Dax* Pre-Open Trading Study *Excel file in the pre-open of April 10th, 2007 (refer to the half-height of the left side of Figure 40).*

As you can observe on the above Table (refer to *Figure 63*) we have systematized the main external factors that can influence German Dax 30, in a very strong and efficient way, whenever that is: in pre-open or during the day. We emphasize the use of Nikkei 225, which closes at 8:00hrs CET, when the Dax 30 is opening! It goes also that the night ES has closely monitored the night worldwide activity. In spite of its low volume, it occurs that the night ES is very sensitive to any worldwide night events, whatever the geographic location or time zone would be.

With regard to Crude Oil, only its significant variations will be really felt by the Dax 30: new highs/lows, terrorist attacks, South American or Nigerian turbulences.

1.1.3 Systematized Comprehension of Worldwide Stock Indices

When a trader takes a decision he quickly needs a fuelling hint to perform the right task! Or... With the labyrinth aspects of inter-market analysis, this is not always easy, nor obvious. We have tried for years to compose a concise table, with regard to main criteria, indispensable to trading: comparison of world stocks indices, commodity array and the worldwide energy facets. Thinking of an easy memorization, they must be simple, efficient and ergonomically to be used. We have chosen, as functioning parameters: the *main users*, the *internal and external factors* acting on each studied index, the *trading and chart behavior*, and finally the *global particularities*, only pertaining to a specific studied index. The most practical items used in everyday trading being the two latter elements, we have tried to keenly emphasize them:

1.1.3.1 NORTH AMERICA - *S&P 500* Stock Index

	S&P 500 - *US Market*
Main Users	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
Internal Influences	Refer to *sub-chapter 1.1.1* Refer to *Figure 62*
External Influences	Refer to *sub-chapter 1.1.2* Refer to *Figure 62*
Trading & Chart Behaviour	High Liquidity - Actively Traded Market Lows in October Market Highs in Nov, Dec +, January High Volatility *but second to Dax 30*
Global Particularities	World Strongest Economy Largest Crude Oil Consumer US dollar use for Crude Oil US dollar use for Gold US dollar use for world's Commodities In spite of its strength is sensible to Overseas Equity Markets

Figure 64 -- *The above* S&P 500 Stock Index Inter-Market Analysis Table *uses the main constituting elements of a stock index. The trading and chart behavior are particularly of great interest, in the quest for low-risk high probability trades.*

1.1.3.2 EUROPE - *German Dax 30* Stock Index

	German Dax 30
Main Users	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
Internal Influences	Refer to sub-chapter 1.1.1 Refer to Figure 62
External Influences	Refer to sub-chapter 1.1.2 Refer to Figure 62
Trading & Chart Behaviour	High Liquidity - Actively Traded High Opening Dependency on Nikkei 225 when +/- 1,5% change Very High Volatility - Big size ATRs Morning & After-noon Swings Capable of very long intr-day Swings
Global Particularities	Europe's Strongest Economy Euro used for trading In spite of its strength is sensitive to Overseas Equity Markets especially US & Japon Central European Bank Dependency

Figure 65 – *German Dax 30* Stock Index - Inter-Market Analysis

1.1.3.3 EUROPE - *FTSE 100* Stock Index

	FTSE 100 - UK Market
	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
	Refer to sub-chapter 1.1.1 Refer to Figure 62
	Refer to sub-chapter 1.1.2 Refer to Figure 62
	High Liquidity - Actively Traded Reasonable Volatility - Lower than Dax 30 Morning & After-noon Average Swings Capable of very long-term period Trends Sharp rallies not as pronounced as sharp declines - Puts more expensive than Calls
	England's Leading Economy Index Pound Sterling used for trading In spite of its strength it is sensitive to Overseas Equity Mkts - second to Dax 30 Focus on Domestic Matters Bank of England Dependency

Figure 66 – *FTSE* 100 Stock Index - Inter-Market Analysis Table

1.1.3.4 EUROPE - *DJ EUROSTOXX 50* Stock Index

	DJ - EuroStoxx 50
Main Users	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
Internal Influences	Refer to sub-chapter 1.1.1 Refer to Figure 62
External Influences	Refer to sub-chapter 1.1.2 Refer to Figure 62
Trading & Chart Behaviour	High Liquidity - Actively Traded Much Lower Volatility than Dax 30 Morning & After-noon Average Swings Capable of very long-term period Trends
Global Particularities	Europe's Leading Economy Index Euro used for trading In spite of its strength is sensitive to Overseas Equity Mkts - second to Dax 30 Central European Bank Dependency

Figure 67 – DJ EUROSTOXX 50 Stock Index - Inter-Market Analysis Table

1.1.3.5 ASIA - *NIKKEI 225* Stock Index

	Nikkei 225 - Japanese Market
Main Users	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
Internal Influences	Refer to sub-chapter 1.1.1 Refer to Figure 62
External Influences	Refer to sub-chapter 1.1.2 Refer to Figure 62
Trading & Chart Behaviour	Actively Traded Second Least Volatility - after Australia's SPI 200 Index Capable of very long-term period Trends
Global Particularities	Asia's Leading Economy Index Yen used for trading In spite of its strength - it is sensitive to Overseas Equity Mkts, especially the US Extreme Focus on Domestic Matters Yen Weakness Bias against US$ in autumn: - Japanese Multinationals Yen Overseas Repatriation - for half-fiscal-year accounting - Bank of Japan Dependency

Figure 68 – *German Dax 30* Stock Index – Inter-Market Analysis Table

1.1.3.6 ASIA - *HANG SENG-HK* Stock Index

	Hang Seng - HK
Main Users	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
Internal Influences	Refer to sub-chapter 1.1.1 Refer to Figure 62
External Influences	Refer to sub-chapter 1.1.2 Refer to Figure 62
Trading & Chart Behaviour	Actively Traded - High Speculative Interest Frequent Volatile Trading Patterns Sharp rallies not us pronounced as sharp declines - Puts more expensive than Calls
Global Particularities	Asian's Leading Speculative Index Trading HK$ pegged at a fixed rate to US$ Extreme Sensitivity to Overseas Equity Markets: China & USA Remember: Macao & Casinos - part of HK economy Monetary Policies done by the US Fed Reserve

Figure 69 – *FTSE 100* Stock Index – Inter-Market Analysis Table

1.1.3.7 AUSTRALIA - *SPI 200* Stock Index

	SPI 200 - Australia MKT
Main Users	Institutional & Bank Investors Institutional & Bank Traders Insurance Fund Managers Mutual Funds Hedge Fund Managers Speculators & Independent Traders
Internal Influences	Refer to sub-chapter 1.1.1 Refer to Figure 62
External Influences	Refer to sub-chapter 1.1.2 Refer to Figure 62
Trading & Chart Behaviour	Optimal Liquidity only in Financial Months The Least Volatile Stock Index - described here Sharp rallies not us pronounced as sharp declines - Puts more expensive than Calls
Global Particularities	Australia's Leading Stock Index Mining & Bank Conglomerates Australian Dolar used for trading, also named the Commodity Currency Sensitive to Overseas Equity Mkts especially the Japan and recently big focus on China Bank of Australia Dependency

Figure 70 – AUSTRALIA's - SPI 200 Stock Index - Inter-Market Analysis Table

1.2 Mechanism of Currencies – Local & Worldwide Inter-Links

We have already swiftly mentioned the major influence of the US dollar and Euro currencies (refer to *Chapter 1 / sub-chapter 1.5*). The inter-links between these currencies coupled with every country's local currency will make things even more than a labyrinth. On top of all these, we will note the link between commodities and currencies, like the *Australian dollar*, which is also called the *commodity currency* or the *Canadian dollar*, lately at parity with the *US dollar* (as of *September 2007*). This rare event hasn't been seen in several decades.
These currencies may play a dramatic role in case of the raw material scarcity, high degree of speculation, and enormous demand from China, like copper, or major social problems in mining overseas corporations. Not only a pernicious intra-day influence will be provoked but it can be surely perpetuated for the long-term periods.

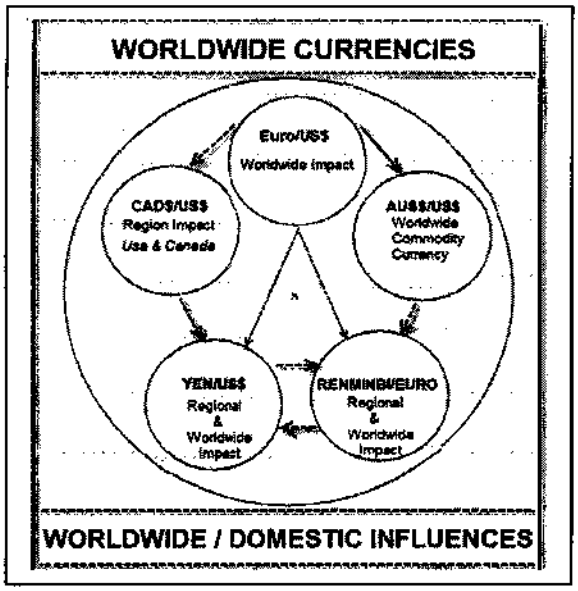


Figure 71 – *CURRENCY Inter-RELATIONSHIPS – The worldwide and local currencies tight inter-dependencies.*

A very close observation of the above table (refer to *Figure 71*) will quickly summarize the inter-dependent factors that will intricately occur in the currency inter-markets. The currencies tight inter-dependency will become here obvious, simple to understand and to use:

- **1.2.1** **Euro/ US dollar** – ***Worldwide impact – the most liquid currency market and the most significant against the US dollar,***
- **1.2.2** **Canadian$/ US dollar** – ***Strong impact on regional level, especially on Energy & Commodities, including Resources & Balance of Payments,***
- **1.2.3** **Australian$/ US dollar** – ***Strong impact on regional level due to Australia's high-dependency on income from trading commodities – named commodity currency. It has a great impact on worldwide commodities prices. It is highly capable of very long-term trends!***
- **1.2.4** **Japanese Yen/ US dollar** - ***Strong impact on regional & worldwide levels due to the massive imports/exports that affect currency demand. There is an inverse relationship with European currencies – If Yen goes up, Euro drops. It is capable of very long-term trends! It is also extremely sensitive to the intervention of Bank of Japan,***
- **1.2.5** **Honk Kong dollar** – ***is pegged at a fixed exchange rate to the US dollar – a unique situation. The decline in Fed Funds rate was followed by a decline in HK dollar.***
- **1.2.6** **Chinese Renminbi/Euro** – ***Strong impact on worldwide levels due to the massive export/imports that affect demand for the currency. Extremely sensible to the intervention of Chinese Central Bank and political influence.***

1.3 Mechanism of Energy Markets – Local & Worldwide Inter-Links

An astute householder will always balance between choosing the best and the most optimal energy source, whatever that would be: natural gas, heating oil or electric energy. What is not really obvious is the labyrinthine relationship that exists among different factors that influence the internal and external factors contributing to a *balanced energy market.*
The inter-links between these various facets are coupled with every possible *"ingredient"* whatever that would be: *US dollar value, local currency, geopolitical turmoil,* and *seasonal factors*... We could go on forever! Crude oil is not only the most traded physical commodity but also it enhances the other energy markets like: gasoline, heating oil and natural gas. On top of all these, on the currency/energy aspect, the non-US countries are stringently dependent on the US dollar in order to acquire the needed crude oil for refineries.

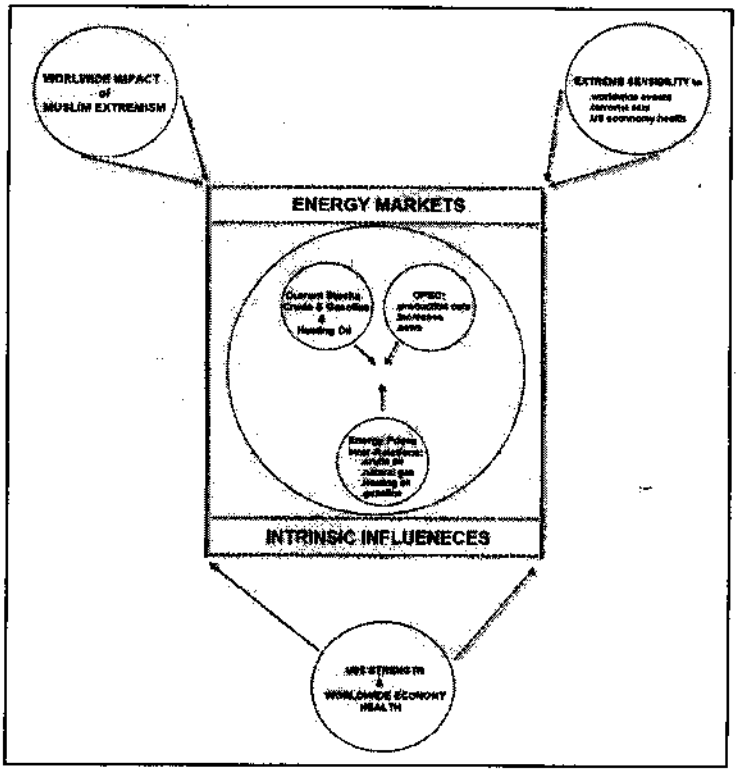


Figure 72 – ***ENERGY Inter-MARKET ANALYSIS – Intrinsic & extrinsic influences acting upon the worldwide energy markets.***

An attentive observation of the above table (refer to *Figure 72*) will quickly summarize the multiple facets that intricately occur in the energy inter-market analysis. Thus, the tight inter-dependency factors will become easier to understand and especially optimal to use:

- **1.3.1 Extrinsic Influences:**
  - **1.3.1.1 Strength of the US dollar value & worldwide economy health,**
  - **1.3.1.2 Extreme SENSIBILITY to:**
    - ***Worldwide events, especially terrorist acts,***
    - ***Health of US economy.***
- **1.3.2 Intrinsic Influences:**
  - **1.3.2.1 Current storage levels and draws of crude oil & gasoline/heating oil**
  - **1.3.2.2 Heavy influences of the seasonal factors,**
  - **1.3.2.3 OPEC: news, increases or production cuts,**
  - **1.3.2.4 Key Reports – American Petroleum Institute weekly report & U.S. Department of Energy (DOE) periodic reports,**
  - **1.3.2.5 Tight inter-relationship with the prices of gasoline, heating oil & natural gas.**

2. Professional Tools for Applying Inter-market Analysis: *Intra-Day, Intra-Week & Intra-Month*

2.1 Inter-Market Analysis Preparation for Intra-Day Opening Trade

The preparation of the opening trade is one of the most important tasks in order to obtain low-risk high-probability trades. Our decision for executing or not, an European trade, early in the morning, *preferably at the opening*, will mostly depend on the depth of the market analytic factors belonging to markets in US, Japan and Europe. Once studied, these factors should be systematized, hierarchized and only then the decisions should be taken.

2.1.1 Analytic Preparation - *US Markets*: Dow Jones Industrial & S&P 500 Indices

Figure 73 – This weekly DJI index chart certainly keeps its *strong up-trending* in a 45° angle slope. The market price just broke the median line (ml) of the up-trending minor pitchfork. The market swiftly heads towards the 13000-confluence level, formed by the median line (ML) of the major ascending pitchfork and the upper 50% Fibonacci trend line of the minor pitchfork, once it has broken the preceding 12796-threshold level.

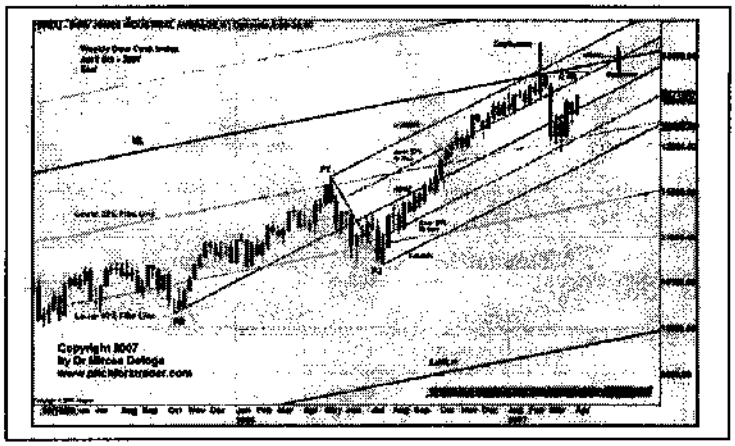


Figure 74 – This daily DJI index bar chart materializes the market flow's *up-sloping pathway* towards the weekly confluence level, already mentioned above. The location of the last price bar above the center line of the ascending channel clearly identifies the market's desire to continue its up-trend.

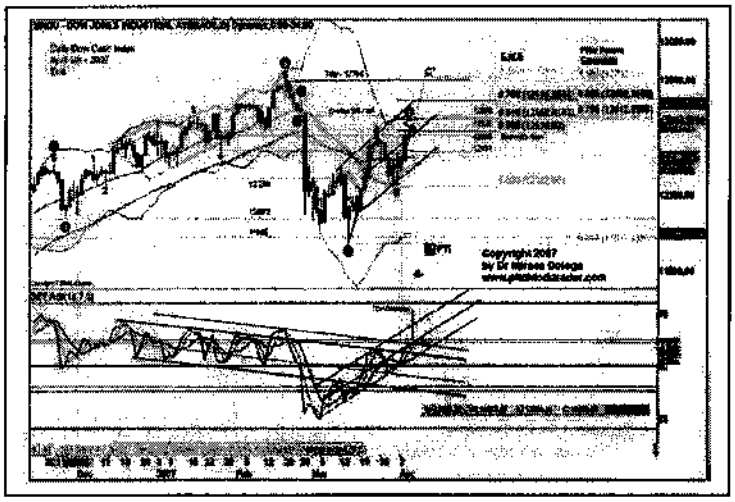


Figure 75 – It is very curious to notice how this daily DJI index line chart clearly unveils a *stronger up-sloping trend* than that of the same daily chart, but using the bars. It is very frequent that professional traders use the line charts for better revealing the Relative Strength (*not RSI*), the trends, or the pathways of Elliott waves. One thing... For its calculations, set the Source settings to the ***Close*** or ***Pivot*** **[*(H+L+C)/3*]**.

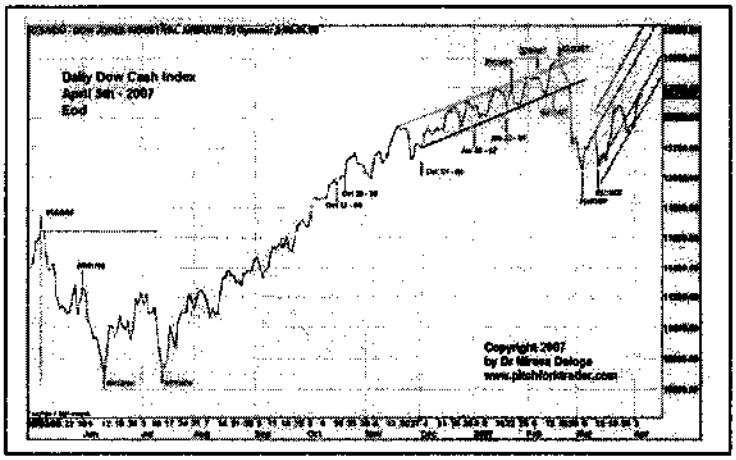


Figure 76 – This monthly S&P 500 index bar chart strives to swiftly attain the highest high 1552.87 key level. Its 30° slope *ascending channel* and the already reached up/down threshold of the 88.6% correction level of the prior pattern are warranties for this arduous up-sloping task.

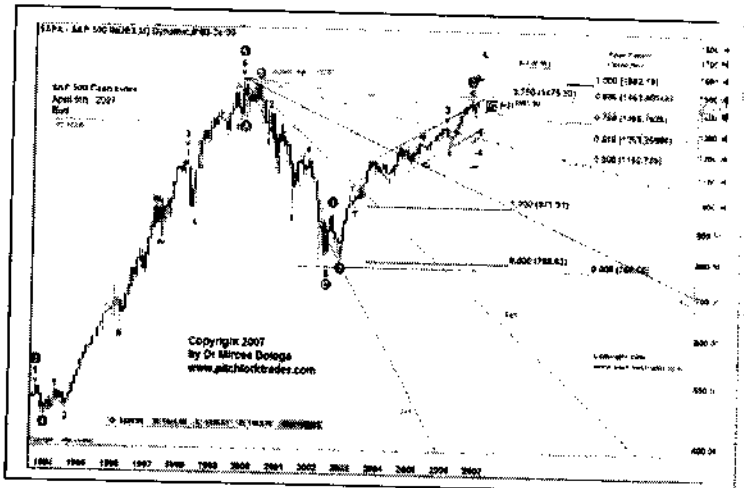


Figure 77 – This weekly S&P 500 index bar chart certainly resembles that of the weekly DJI index chart (*refer to Figure 70*). The only difference that seems hardly visible is a 10% increase in the *up-trending slope*, to 55° angle size. As usual, the attentive trader can observe the most optimal elements of our professional toolbox: major ascending pitchfork with its Fibonacci ratio trend lines, the ascending channel associated with the orthodox and un-orthodox trend lines, the prior trend correction level, the proximity of the highest high and the confluence zones.

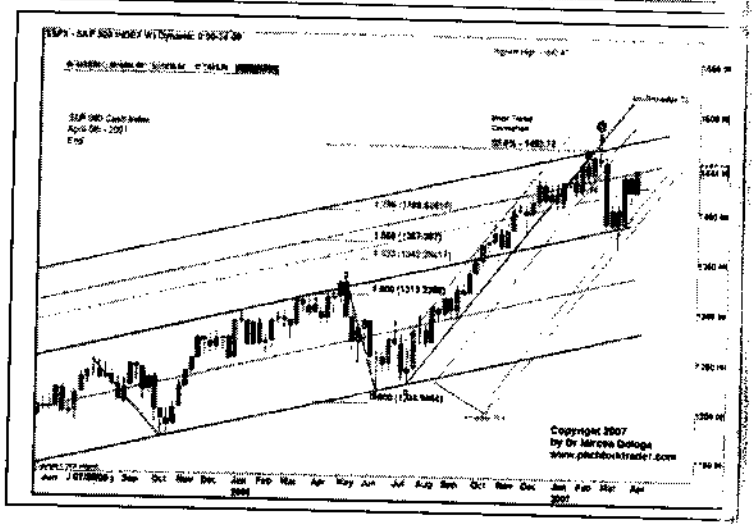


Figure 78 - This daily S&P 500 index bar chart states that the US market has already reached a top, and it is actually hesitating whatever the conditions are propitious for a new high, or it should reverse. The use of rectangles' extensions and that of RSI indicator certainly helps to take an optimal decision when the market will be ready to move. In spite of the market flow's high level location (*now at 1443.75 level*), only 110 points away from the highest high at 1552.87 level, the RSI is only at 60%. The market is not yet overbought and there is still plainly of room to develop upwards.

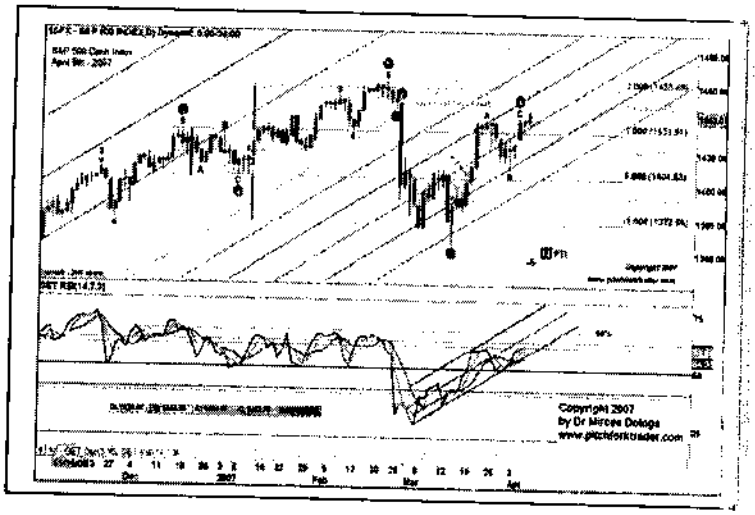


Figure 79 – Synopsis table of the US markets

Market Direction	Dow Jones Ind	S&P 500
Long-Term		
Intermediate-Term		
SHORT TERM		
Observations:	DJI .20 day sharp up-channelling above the midline .Green candle approaching the Highest High .RSI has a 60% up-sloping channel	S&P 500 .20 day sharp up-channelling above the warning line .Green candle approaching the Highest High .Market in first up-sloping rectangle's extension .RSI has a 60% up-sloping channel

2.1.2 Analytic Preparation - *ASIA Market*: Nikkei 225 Index

Figure 80 – This daily Nikkei 225 index bar chart certainly shows that the market flow is trying to finish the last W5 impulsive Elliott wave, in order to reach the highest high, still far away. The reasons stipulating that there is still a continuation of the *ongoing up-trend* is the breakout of the two trend lines (TL & TL-02), today's and prior day bar's narrow range, which is a nest of a very probable future volatility explosion.

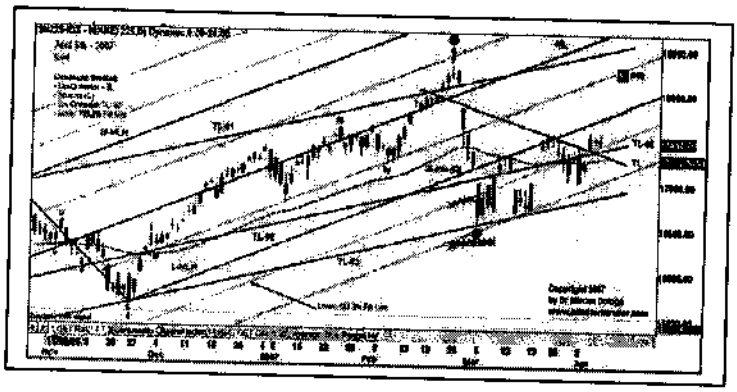


Figure 81 – This daily Nikkei 225 index line chart using the RSI indicator, shows much better the local market present situation, than the bar chart. The latter seems to be hesitating for a moment, confused about the right direction, even if the local activity is concentrated at the top of the range (*next to the horizontal TL trend line*). The RSI *ascending channel* is still up-sloping. In order to better visualize the market flow, the trader should lower the observed time frame. In this case, we mostly use the 120-min or 240-min charts.

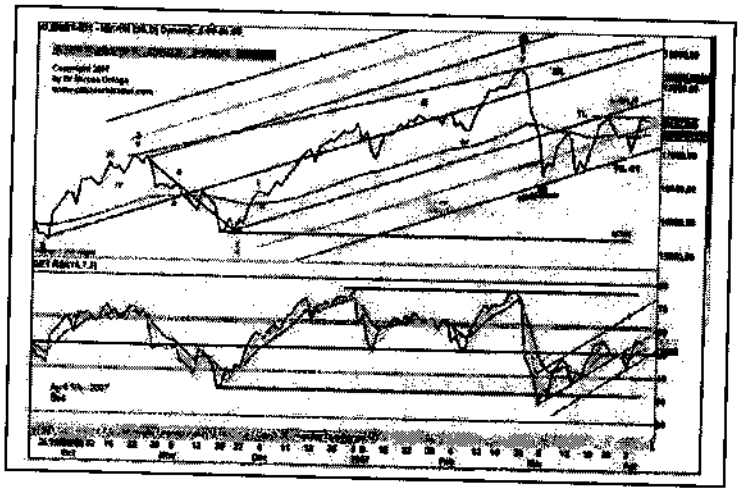


Figure 82 – This 120-min Nikkei 225 index line chart using the RSI indicator, visualize even better the current environment. The market seems to be slightly hesitating due to a temporary brief immobilisation in an expanding triangle. The ascending pitchfork of the RSI is still up-sloping. The penetration or the bounce on the 50% RSI line will certainly clarify the situation.

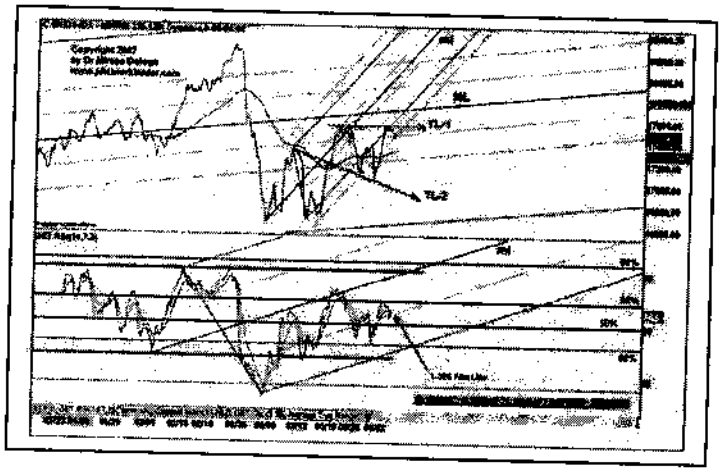


Figure 83 – Synopsis table of the ASIA markets

Market Direction	NIKKEI 225
Long-Term	
Intermediate-Term	
SHORT TERM	
Observations:	.Market in W4 of an up-sloping impulsive pattern .Narrow range activity with the market flow at the upper channel .Inside Bar Pattern - Two extremely narrow candles, doji-like .RSI has a 60% up-sloping channel

2.1.3 Analytic Preparation – *EUROPE Markets*: Dax, EuroStoxx, Euro/US$, FTSE 100 & Ba

Figure 84 – This weekly German Dax 30 index bar chart *shoots straight up propelled by a 45° slope momentum*. The huge last bar closed right on its high and the highest high was just broken. The market flow, doesn't probably want to stop until the common extension of wave C will be equal to 1.00*wave A, thus bringing the market to 7577 level.

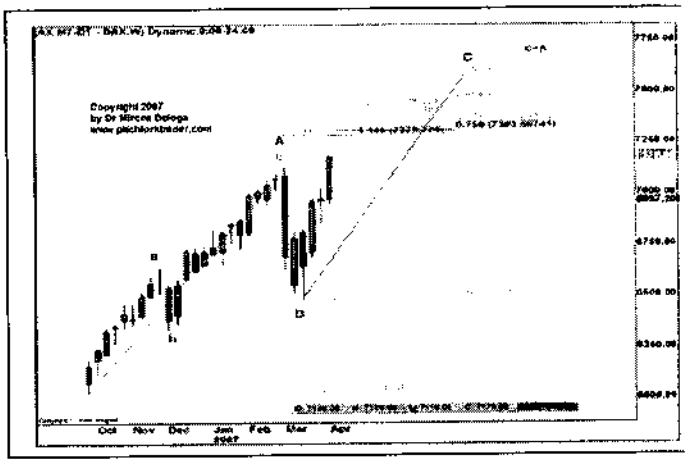


Figure 85 – This daily German Dax 30 bar chart goes into the tracks of the weekly chart, with a better visibility. The chart's 60° slope, re-confirms the upper time frame *dominant up-sloping trend*. The boiling up-sloping momentum will certainly catapult the market price, all the way up to the confluence of the trending line (TL-1), the upper median line of the ascending pitchfork and the 100% level of the sub-wave 5 of W1 (w5:W1=1.00*w1-3:W1).

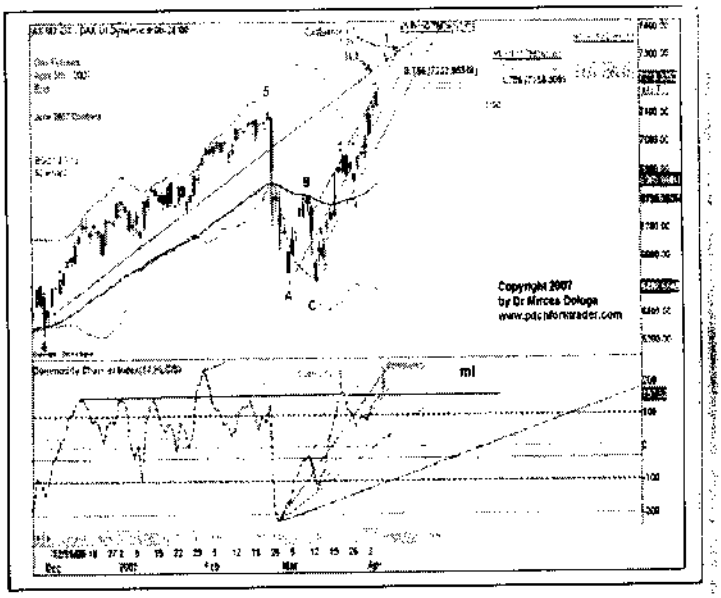
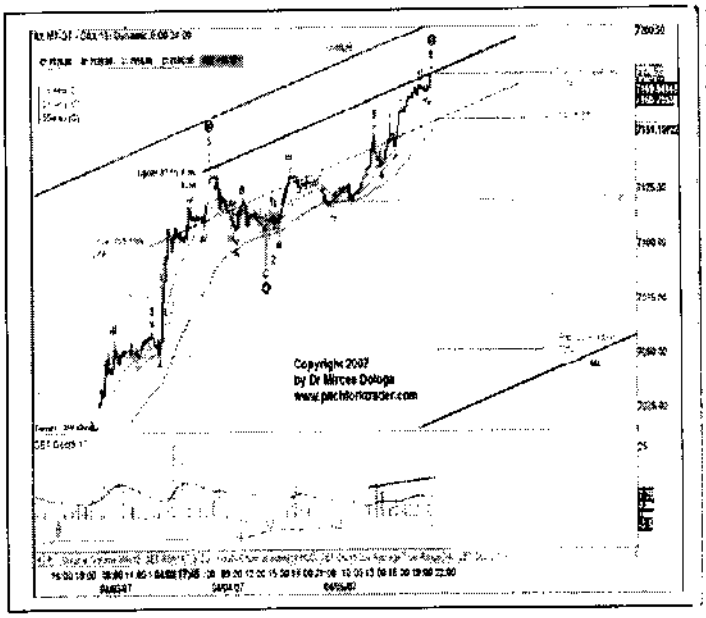


Figure 86 – This 15-min German Dax 30 index chart momentum is synchronuous with the convergence of GET OSC (5,17) indicator. It signals the reliable character of the *ongoing up-trend*. Be on the watch for the breakout of the upper 87.5% Fibs line. It will be an efficient way of an *add-on trade*, having a tiny stop-loss.



FSE 100 & Bu

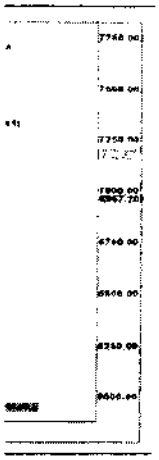
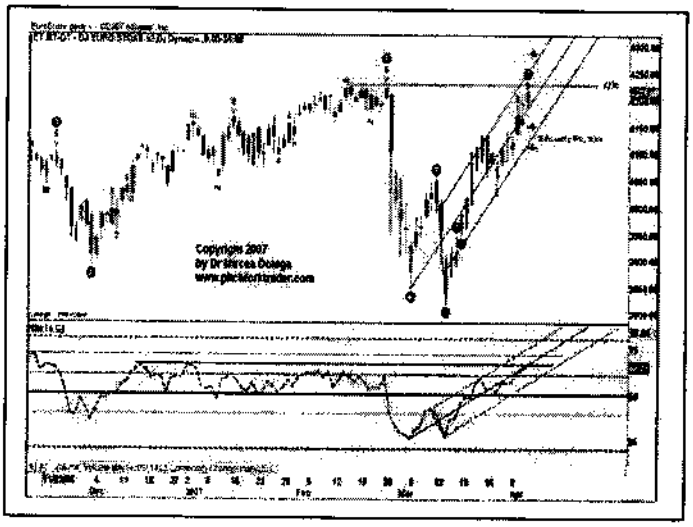


Figure 87 – This daily DJI EuroStoxx 50 index bar chart certainly shows that the market is only 10 points away from the highest high at 4226, marking a strong up-sloping trend. The *up-sloping move* will continue in spite of a probable brief pullback at the 4226 level. The first target will be the termination of the extended W3 at 4585 level.
The *up-sloping pitchfork* of the RSI, certainly confirms the up-trending scenario.



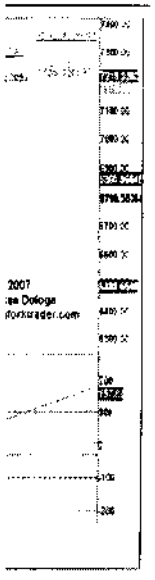
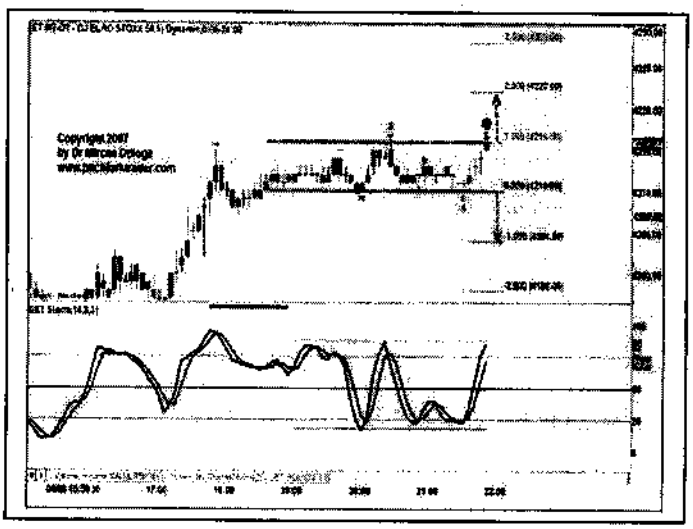


Figure 88 – This 5-min DJI EuroStoxx 50 index bar chart is shown only as an optimal tool for *trading small sideways* markets with the add of False Stochastics a *dual role indicator*. It can reveal not only the various inflexions of the trading range markets but it can also identify the entry of a market flow into a trend.



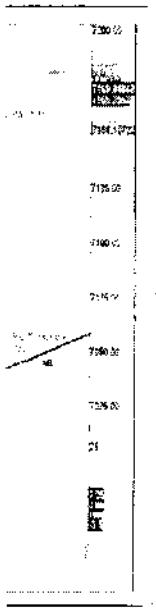


Figure 89 – The market price of this daily Euro/US$ Futures chart has *culminated*, all the way up to the *highest high level, tested* for the *sixth time*. In spite of the up-sloping channel, the Euro/US dollar might reverse. Keep an eye on the RSI's hook... It might assist you with a short trade. For the moment, the market is in balance, undecided.

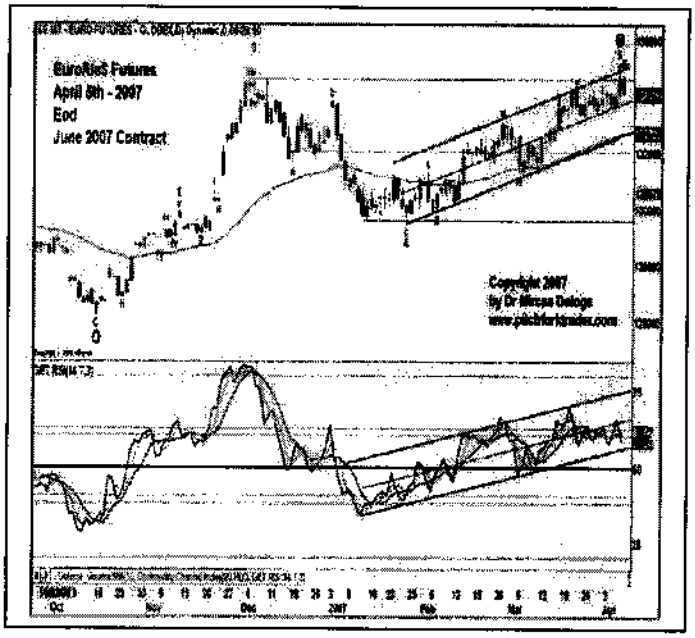


Figure 90 – This daily German Bund Futures bar chart is in a *strong down-sloping move*, trying to terminate the last impulsive W5 wave. We have used the volume fan lines, which are an efficient way of quantifying the fuelling intensity of the down movement.

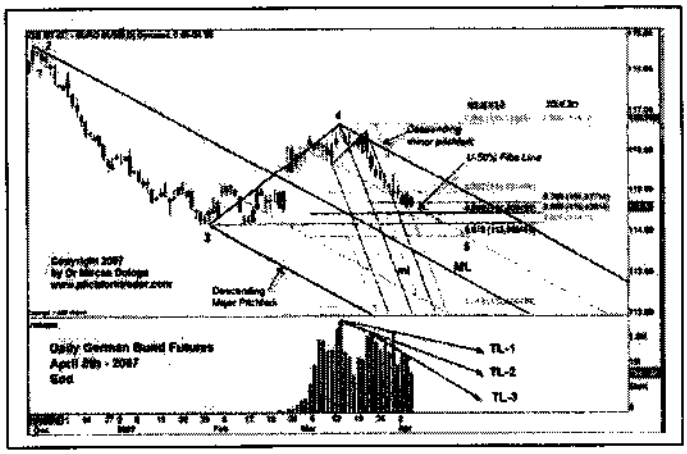


Figure 91 – This daily FTSE 100 index bar chart illustrates the *strong up-sloping market*, which is only 54 points away from the highest high at 6451.39 level. The 60° slope of the RSI indicator vehemently corroborates the up-sloping scenario.

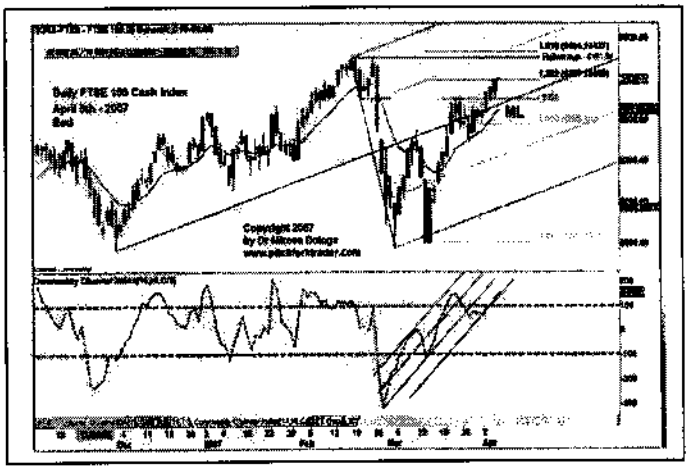


Figure 92 – This 120-min FTSE 100 index bar chart is the optimal intermediate time frame to be used between the daily and the 60-min. It clearly shows that the market is at the confluence of the median gap line (TL) and lower median (LML) at 88.6% threshold (*6398.72 level*) of the prior pattern correction. Once this crucial level exceeded, be aware of the imminent highest high breakout.

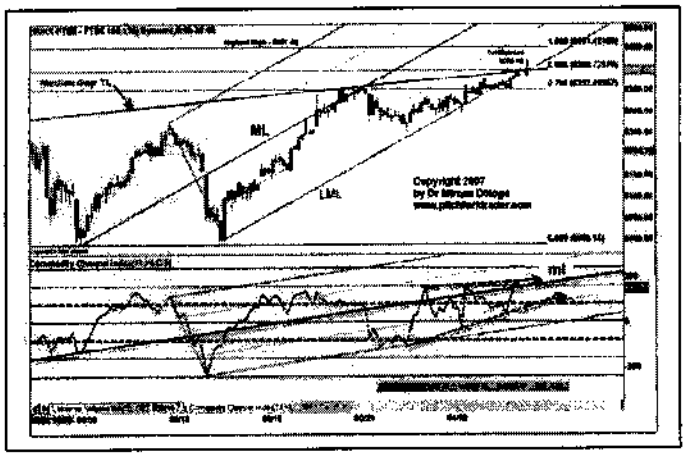
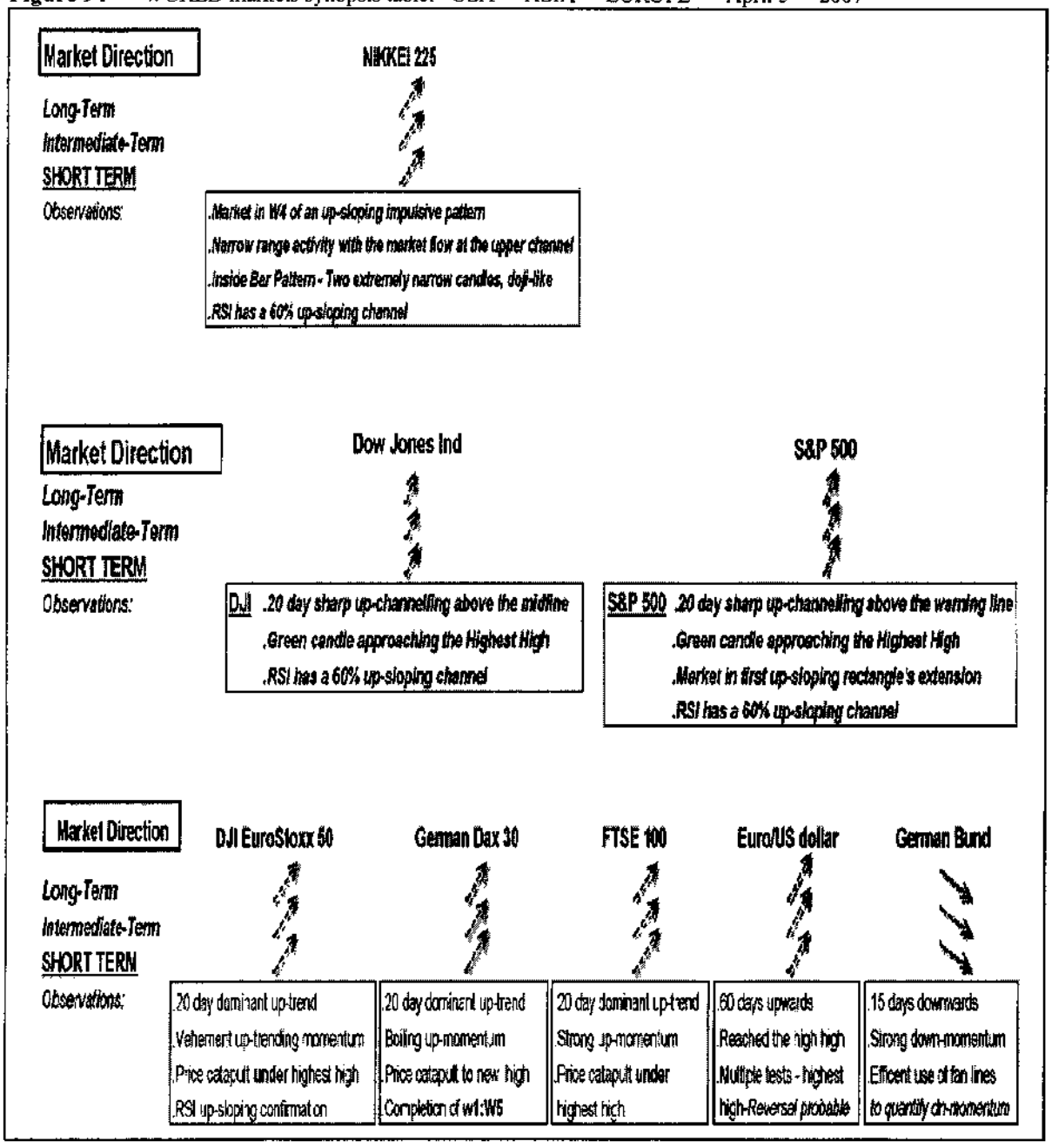


Figure 93 – EUROPE markets synopsis table

Market Direction	DJI EuroStoxx 50	German Dax 30	FTSE 100	Euro/US dollar	German Bund
Long-Term					
Intermediate-Term					
SHORT TERM					
Observations:	20 day dominant up-trend Vehement up-trending momentum Price catapult under highest high RSI up-sloping confirmation	20 day dominant up-trend Boiling up-momentum Price catapult to new high Completion of w1:W5	20 day dominant up-trend Strong up-momentum Price catapult under highest high	60 days upwards Reached the high high Multiple tests - highest high-Reversal probable	15 days downwards Strong down-momentum Efficient use of fan lines to quantify dn-momentum

Figure 94 – WORLD markets synopsis table: USA - ASIA - EUROPE - April 5th - 2007



Conclusion:

A close observation of the *Synopsis Table of World Markets* (refer to *Figure 94*) will reveal a *cumulative up-sloping context* of the current dynamic conditions in the world markets, just before the opening of the European markets. As we can see, *all the markets are up-sloping*, *except* the German Bund, which is down-sloping, thus safeguarding its advantage as an *opposite direction indicator* for the German Dax 30 trading.

2.2 Inter-Market Analysis Preparation for Multiple Day Length Trade (*Intra-Week*)

The global approach of this *multiple days length trade* is identical to that used in pre-opening trade. The only difference would be the time length observation. The trading decisions are taken in correlation with the assigned correlative markets, meaning that any German Dax 30 trade will not be taken unless the multiple days inter-market analysis will vouch for it.

Figure 95 – Daily Inter-Market Analysis – 04/20/07

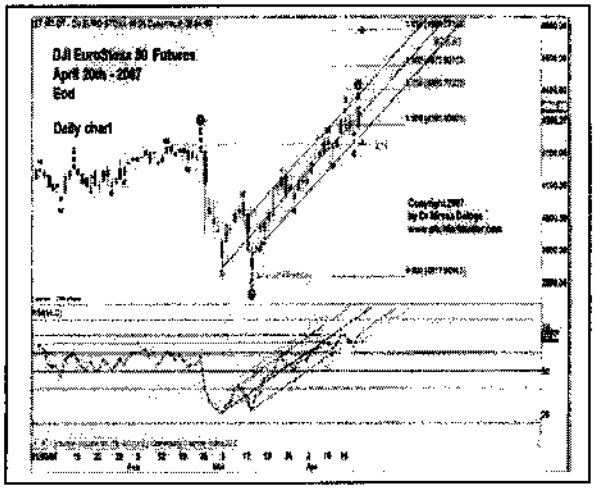
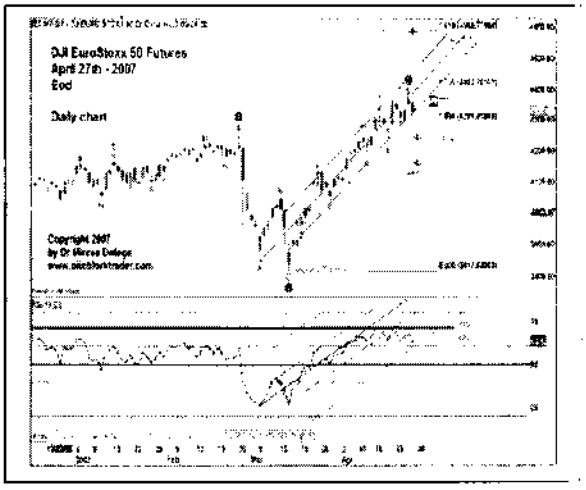
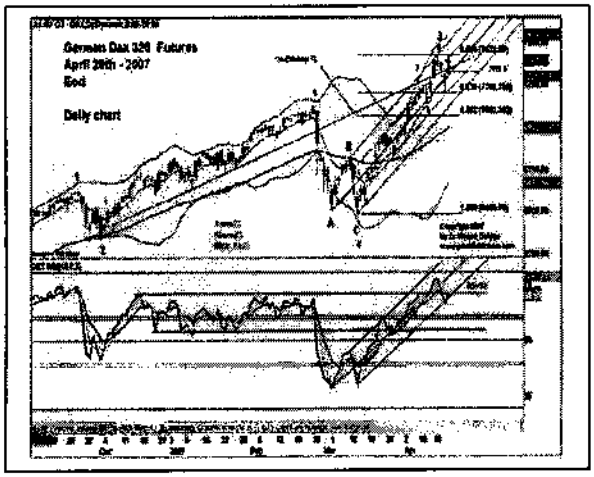
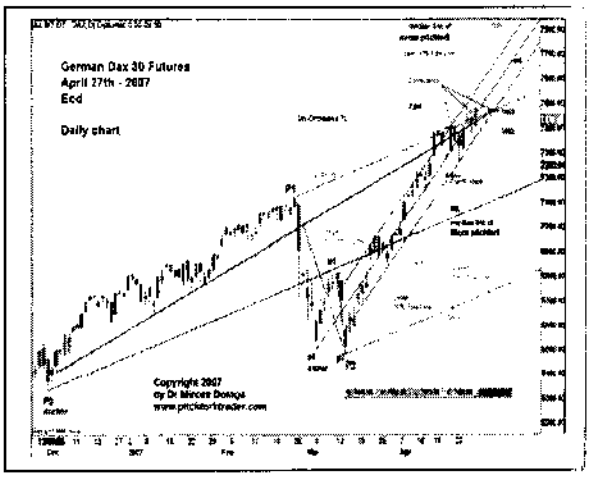
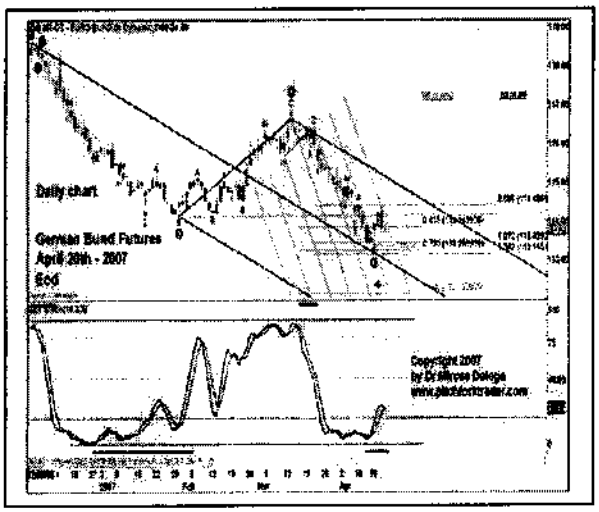


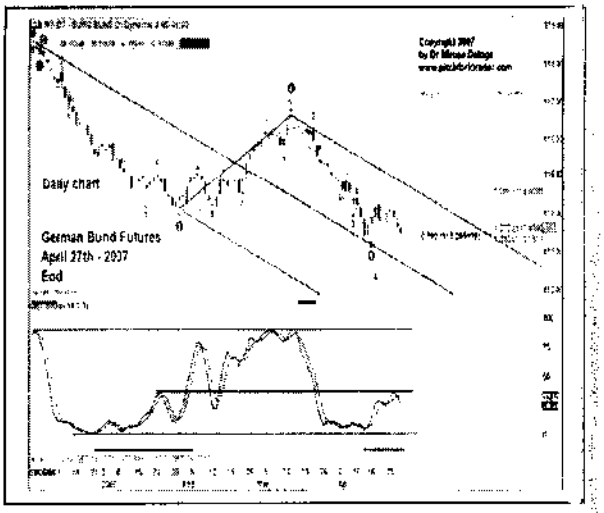
Figure 96 – Daily Inter-Market Analysis – 04/27/07











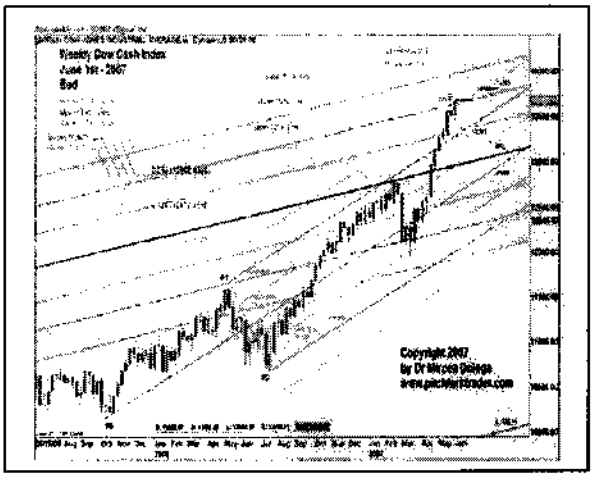
***Conclusion*:**

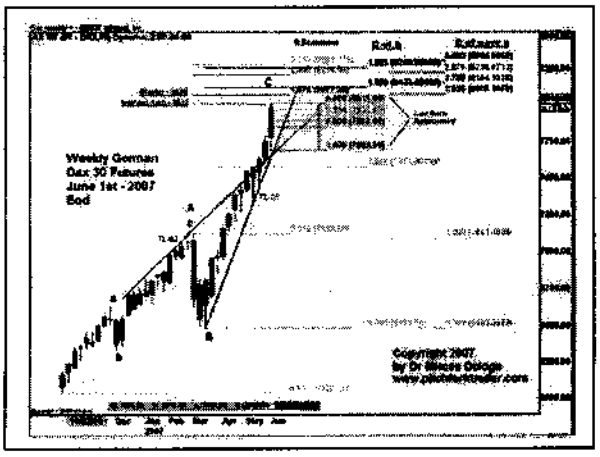
The left chart column contains three vertical daily charts (refer to *Figure 95*) illustrating the inter-market analysis of April 20th – 2007. The right chart column containing three vertical daily charts (refer to *Figure 96*) is the evolved up-sloping daily chart situation, five trading days later to April 27th – 2007.

As most of the times, the German Dax 30 *is lead* by the EuroStoxx 50 and the *opposite leading indicator* role of German Bund is confirmed, once more!

2.3 Inter-Market Analysis Preparation for Multiple Week Length Trade (*Intra-Month*)

Figure 97 – Weekly Inter-Market Analysis – 06/01/07





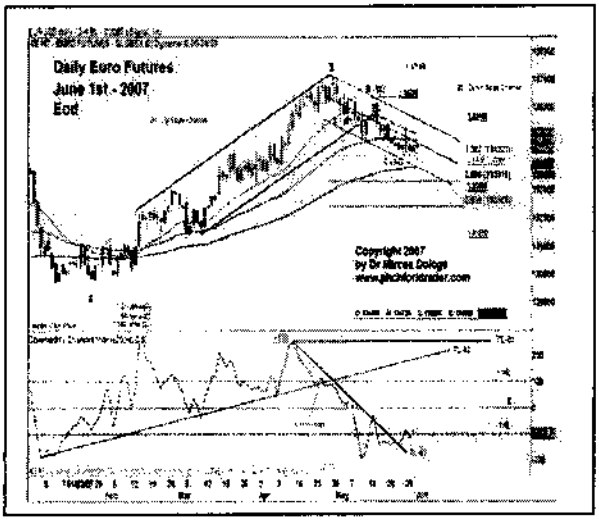
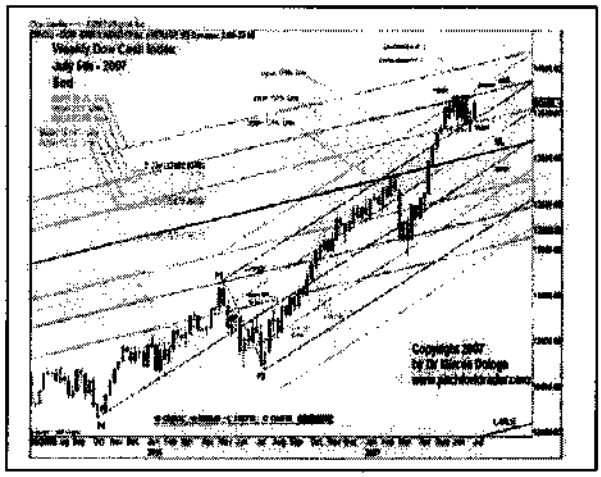
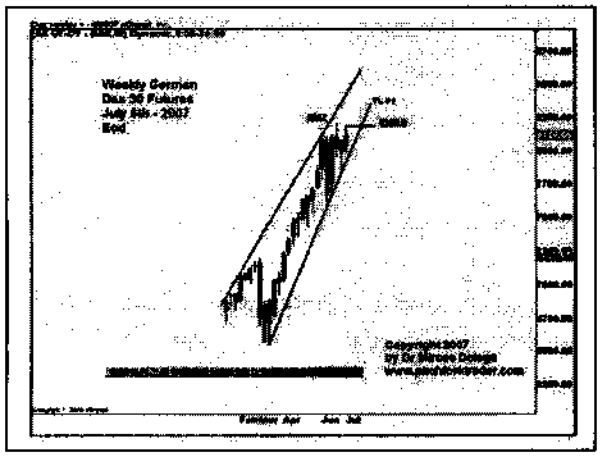
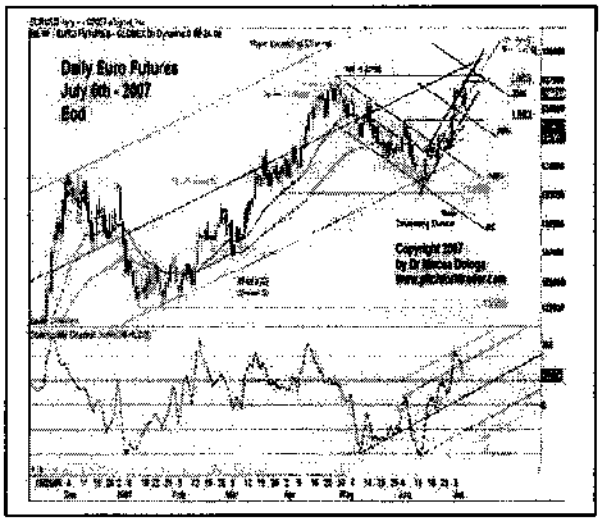


Figure 98 – Weekly Inter-Market Analysis – 07/06/07







***Conclusion*:**

The left chart column contains three vertical weekly & daily charts (refer to *Figure 97*) illustrating the inter-market analysis of June 1stth – 2007. The right chart column (refer to *Figure 98*) is the evolved up-sloping weekly & daily chart situation, five trading weeks later to July 6th - 2007.

As most of the times, the German Dax 30 *is lead* not only by the EuroStoxx 50 (refer to *Figure 95*), but also by the Dow 30. The *opposite leading indicator* role of Euro/US dollar is confirmed again!

Key Points to Remember:

- **We are aware nowadays that the dragonfly's wing fluttering in Asia can be easily heard over the ocean...!**
- **The dynamic mechanisms of the stock indices are dependent on multiple factors: the main users, the internal & external influences, the trading/chart behaviour and the global particularities. The most practical ones, the two latter, have a great impact on the everyday trading approach!**
- **Before you decide to approach trading any market make sure you are fully familiar with its particularities and main chart behaviours!**
- **The world of raw physical commodities are mainly based on the US dollar fluctuations, the commodity dollar (*Australian dollar*) and recently on the US$/Canadian dollar parity, a rare event not seen in the last decades.**
- **Whenever you decide to trade energy markets, be aware that the crude oil is the most traded physical commodity. Its inter-links markets are coupled with every possible "*ingredient*" whatever that would be: US dollar value, local currency, geopolitical turmoil, the danger of terrorist attacks and seasonal factors.**
- **A unique situation arises with the Hong Kong dollar which is pegged at a fixed rate to the US dollar. Thus, the US Federal Bank will settle the monetary policies of the Hong Kong economy.**
- **The decision for executing a morning trade in an European environment should be considered only after the Asian, US & European market analytic factors have been fully analysed**
- **Take advantage of the optimal inter-market tools of our toolbox. A close observation of the Synopsis Table of World Market (refer to *Figure 94*) readily reveals the presence / absence of a cumulative directional context, indispensable in trading decisions.**

Chapter 5

Elliott Waves – Real-Time & Intermediate-Term Use

Pitchforks Intricacy

The *Elliott waves* intricacy use with the single or multiple pitchforks is one of the most valuable tools available to the astute trader. It can, not only identify the trend and the counter-trend, but can also unveil the exact location of the market flow within the contextual or the local market. Thus, we can observe the maturity of the trend, the price targets and finally the specific levels where the market might encounter any weaknesses or even fail.
Due to the common difficulty or even to the inability of some traders to understand the *Elliott waves concept*, the author emphasized the use of applied principles of epistemology, in teaching this topic through the use of progressive modules, of the process of mental assimilation based on repetitive real-time cases, and of the *Key Points to Remember* section, at the end of each chapter. The latter takes its full applicability in the learning process, later on, when the trader can use it as a quick reference guide, whenever needed.

1. Elliott Wave Theory

Firstly described by Ralph Nelson Elliott in the early 1930s, the *Elliott Wave theory* takes up the hard task of defining a structured market based on *pattern, ratio* and *time*. The mathematical model of quantifying the market moves was a sequence of whole numbers called the price Fibonacci ratio sequence - refer to *Chapter 14* / Volume 1 and to our next book, for time Fibonacci ratios.
The theory describes the market flow as a numerous series of variable length price movements forming the impulsive and corrective chart patterns. The former is cruising in the direction of dominant trend and the latter, is counter-trending it. The impulsive pattern contains five waves and the corrective pattern only three waves. There are three impulsive waves (*W1, W3 and W5*) within the impulsive pattern that will be corrected by two inner corrective waves (*W2* and *W4*). The corrective chart pattern, which corrects and retraces the forgoing impulsive pattern is constituted of three waves (*wave-A, wave-B and wave-C*).
The purpose of this book is not to treat exhaustively the Elliott wave theory. There are already specialized books in this field by Glenn Neely called *Mastering Elliott Wave* (1990) and *Elliott Wave Principle (2000)* by Frost & Prechter.
The author has taken as main objective to perform a simpler and more efficient teaching of the Elliot wave *concept* and to adapt it for an easy real-time use without getting involved into the details of this highly sophisticated area. We will have just one Elliott wave *credo*:

Lack of a clear chart pattern, is the Ultimate* no Action *Indicator !

By the above affirmation we mean that the Elliott wave *concept* should be used only when there is a clear chart pattern formation, which will really enhance trader's advantage compared to the crowd.
Charles Dow in Wall Street Journal of January 4, 1902 mentioned the idea of multiple wave concepts through the markets for the first time:

"Nothing is more certain than that the market has three well-defined movements which fit into each other. The first is the variation due to local causes and the balance of buying and selling at that particular time. The secondary movement covers a period ranging from 10 days to 60 days, averaging probably between 30 and 40 days. The third movement is the great swing covering from four to six years".

Thirty years later, Elliott brought this multiple wave market *concept*, even farther and implemented the concept of five-wave pattern corrected by the ensuing three-wave pattern.

2. Description of the Impulsive Pattern

We will try to elucidate the mechanism of the impulsive pattern for an easy use in real-time markets. As we have already mentioned this pattern is constituted of five waves labeled W1 to W5, where:

- **W1, W3 and W5 are classified as impulsive waves (*in the direction of the trend*) and**
- **W2 and W4 are classified as corrective waves (*counter-trending the direction of the trend*).**

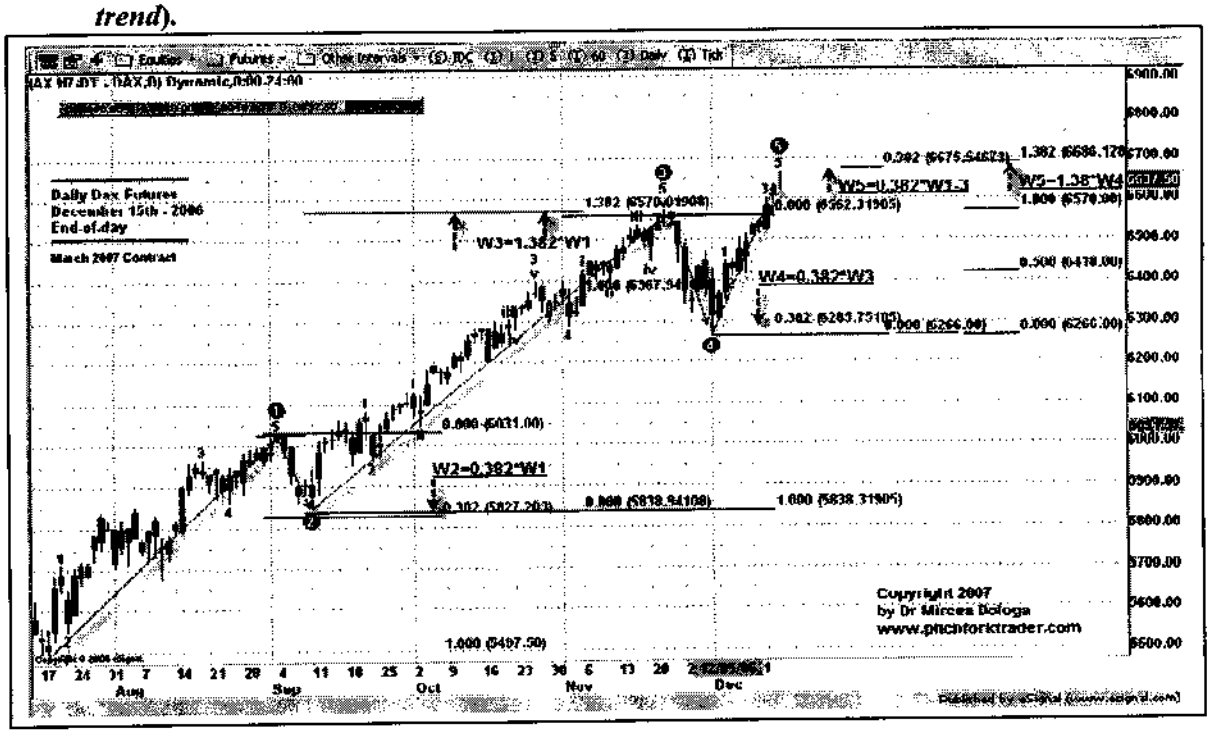


Figure 99 - *The above daily German Dax 30 chart illustrates an ascending impulsive pattern containing the W1, W2, W3, W4 and W5 waves. We note that W1, W3 and W5 impulsive waves are oriented towards the up-sloping dominant trend and that the W2 and W4 corrective waves are counter-trend oriented. A trained eye can rapidly see the Fibonacci ratios as the mathematical model of quantifying the market moves, which will harmoniously guide the intra-pattern development of the five waves: W2=0.382*W1, W3=1.382*W1, W4=0.382*W3, W5=0.382*W0-3, and also W5=1.382*W4.*

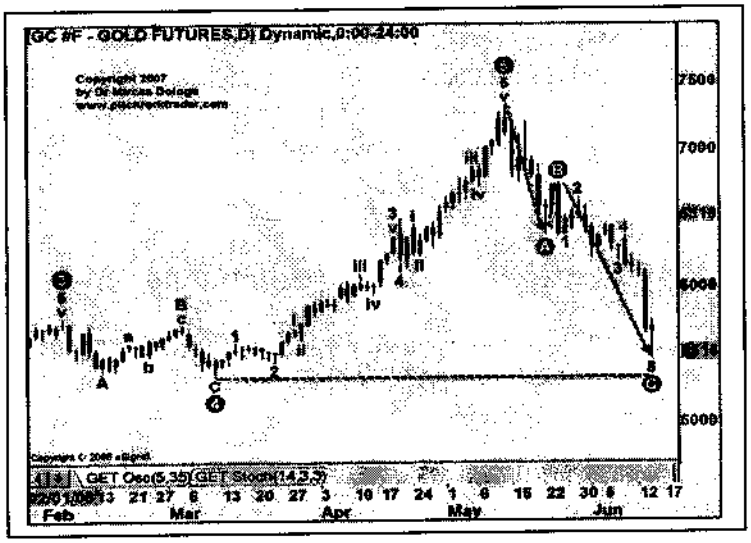


Figure 100 - *The above daily Gold Futures shows the down-sloping ABC zigzag-type corrective pattern of the prior impulsive pattern, which already reached the classic target of prior pattern's W4 level. There are visible only W3, W4 and W5.*

3. **Impulsive Wave 1 - (W1)**
Lack of a clear chart pattern is the Ultimate no Action *Indicator!*

3.1 Description : Impulsive wave - 5 wave count – (*3 impulsive & 2 corrective waves),*

3.2 *Advanced Market Indicators*: Conception of W1 *may* begin, when:

- The GET OSC(5,35) indicator of the *prior corrective pattern* shows an important divergence. An average to important market convergence will be only signalled, once the reversal chart formation of the prior pattern took place and the W1 started its development.
- The GET False Stochastics (14,3,3) indicator crosses above/below 80/20 limits, in the *overbought/oversold zones*, after the trend has been implemented. The beginning of a "*to be prolonged horizontal black line*" above indicator's curvilinear lines will start to witness the W1 trend.

3.3 Origin of W1:

- Be aware of the *time-of-the-day* and its *rhythm,*
- Last Low/High of the preceding pattern,
- Secondary *spike* or *through*, following an important High/Low,
- Be on the watch for significant amount of consolidations near (*after*) an important High/Low, a terminal wedge-like triangle of the prior pattern, or a C-wave – higher than the lowest low. Be on the watch for these chart formations because they are most of the time responsible for the W1 inception.
- Look for the W1 inception in:
  - Previous day's pre-close (*near or right into the Close*),
  - Wave C - terminal pattern, or
  - Exhaustion Gap, announcing the final move, before reversal, or
  - Trading range consolidation, or
  - Pre-arranged time levels: Vertical Gann or Fibonacci time lines,
- Current opening (*near or right into W1's origin*), especially in case of an opening gap. The presence of an exhaustion gap, announces the final move, just before reversal.
- The use of 21-ema: first counter-trend witnesses the trend inception, and then the following counter-trends establish the trend.
- *Parabolic indicator* gives a "*change of trend*" signal earlier than that of the ema. Use "*Optimize*" & "*Fine-tune*" features and experiment with various settings. Ride it, all the way down to the *Parabolic*, even if one could take a trade on a lower time frame (*Very efficient for Money Management*).

3.4 Wave W1 Characteristics:

- Find the *longest*, *shortest* and/or *equal* size *sub*-waves of W1. This is based on the *strict Elliott's rule* that the *wave 3 (or any sub-wave 3) can't be the shortest*, out of the 3 impulsive waves:
  - If the *middle* wave is *longer* in price, then the impulsive sub-wave pattern is *legitimate*,
  - If the *middle* wave is the *shortest*, this pattern is *corrective*,
  - If all three waves are similar in price, this move is a possible *zigzag*.
  - Slope dictated by the *emas* and the *trend lines* define the inception and the degree of the trend,
- W1 Extension *Absent*:
  - If W1 is not the sub-divided pattern, then it must be W3, being longer than W1,
  - W2 can retrace as much as 99% of W1,
  - W2 may sub-divide whether W1 might or might not divide,
  - No specific price level are required for W1 termination,

- If *w1 sub-wave* belongs to a larger W3 or W5 wave, then *w1* should approach (*and preferably exceed*) the termination point of the last impulsive wave of this larger degree.
- W1 Extension *Present*:
  - W1 extended, W5 shortest, W3 middle size,
  - W2 move that follows extended W1, cannot retrace much more than 38.2%,
    - *w2 of W1:*
      - Will not likely be a zigzag pattern, *except* when it could be the prelude of a more complex correction (*the zigzag is the completion of only wave-A of a larger flat correction for w2*),
      - w2 will probably be more complex, more time-consuming than w4,
      - w2 will probably be more complex and more time-consuming in the entire W1-5 impulsive pattern,
    - *w5 of W1* must be the shortest of three thrust waves (1, 2, 3),
    - If *w1* is not the sub-divided pattern, then it must be *w3 of W1*,
- Gaps: *good indication* of *W1, in progress*,
  - Beginning of the wave: breakaway gap announces a strong momentum,
  - End of wave: exhaustion gap announces the end of trend.

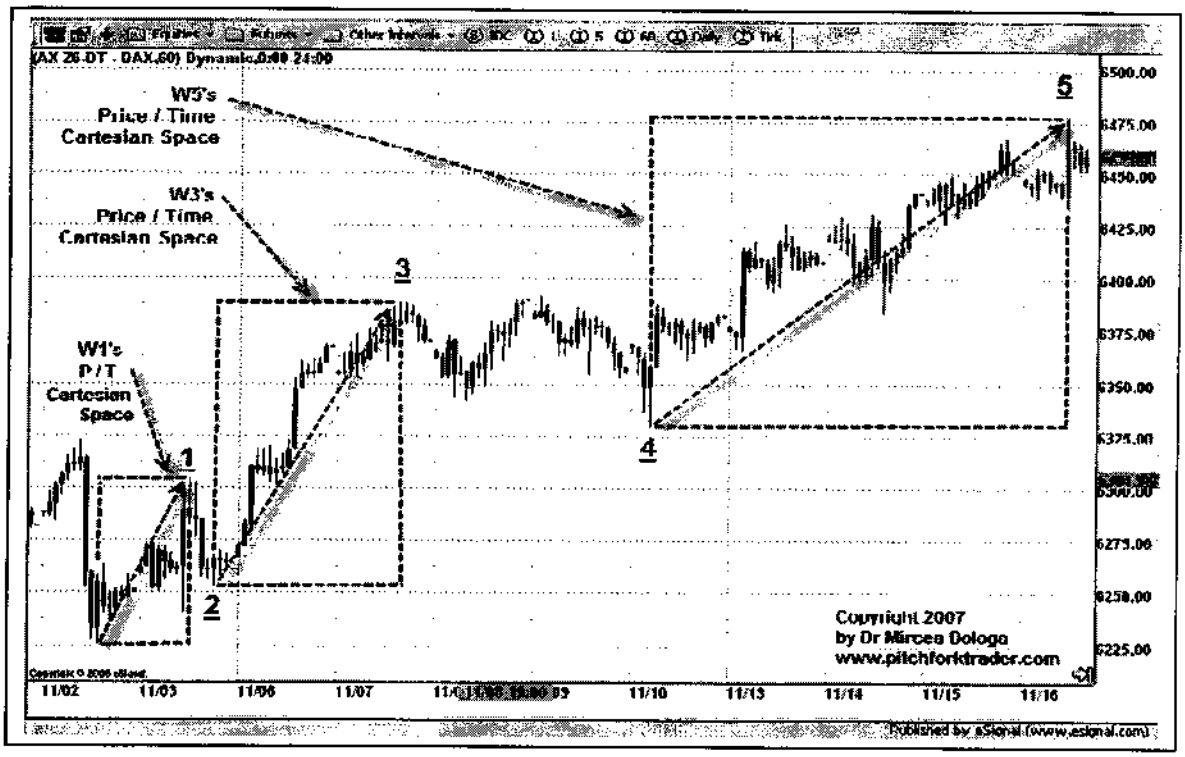


Figure 101 - *The above rectangles of the 60-min German Dax 30 chart illustrate the up-sloping impulsive pattern containing the price/time Cartesian space of the three impulsive Elliott waves: W1, W3 & W5. The space outside the rectangles pertains to the two corrective waves (W2 & W4). They were labelled but the rectangles aren't drawn.*

3.5 *Pinpoint the End of W1*, by using:

3.5.1 Global Tools:

- Be aware of the *time-of-the-day* and its *rhythm*,
- Fib extensions with regard to W1's projected termination, applied to:
  - The first trend-wise bar, and if possible,
  - The height of the pre-close trading range,

(1.382, 1.618, 2.236, 2.618, 4.236)

- **Use the 13, 21, 50-ema:**
  - **A multitude of counter-trends is the *anti-chamber* of trend's termination,**
  - **Coincidental cross-over of 13-/21-ema or together with 50-ema, or other cross-over with trend lines, Fib levels, Gann lines & angles, represent a key reversal level.**
- **The prior pattern correction using the following Fibonacci ratios: 38.2%, 50% and 61.8%,**
- **Daily pivots alone, or together with weekly or/and monthly pivots, form a very strong key reversal level.**
- ***Parabolic indicator* gives a "*change of trend*" earlier than that of the ema (*can be used for Money Management*).**
- **Previous key levels:**
  - **Yesterday's High/Low,**
  - **Weekly & monthly High/Low,**

3.5.2 **Channelling Tools (*refer to Chapter 7 for explicative charts*):**

- **The *channeling* of the prior pattern will reveal the inception timing & price location of the W1,**
- **The *Fan* and/or the *Speed lines* will be drawn from the starting pivot of the prior pattern. The decisive opposite direction breakout of these lines will signal the start/development of W1,**
- **The drawing of a *trend line* from the lowest low of the starting zone of the "*presumed*" W1 origin, *usually the w2:W2 pivot,* to the *low of the w4:W1*, will give an efficient W1 termination signal. This trend line is nothing more than the 2-4 base line of the sub-waves belonging to W2.**

3.6 Corrective Sub-Waves Characteristics **of w2 and w4 of W1 poly-wave:**

- ***Alternation principle rules*: w2 & w4:W1 are noticeable different +++**
  Enable, at least one of them:
  - **Price** – distance covered,
  - **Time** – time covered – check Fib time ratio, w2 with regard to w1:W1, w4 with regard to w2 & w3:W1, and w5 with regard to w1:W1 & w1-3:W1,
  - **Severity** – check Fibonacci price retrace, w2 with regard to w1:W1 & w4 with regard to w3:W1,
  - **Intricacy** – number of sub-divisions of waves,
  - **Construction (*wave structure*)**: degree of complexity (**abc** *vs* **abcde** pattern)

  Write down the characteristics, and get ready to apply the *alternation principle rules* (*w2 against w4:W1*), when it is time for this.
- **Be on the watch for the temporary counter-trend moves (*pullbacks/thrusts*), on light volume, right after the move has started. It will confirm the current impulsive pattern.**
- **The use of the 21-ema will better visualize the counter-trend moves (*use current volume in relation to average volume, of other trends' periods*).**

3.7 Relationships with Other Chart Formations and Key Levels:

- **Pivot range: very small or very large dictate the current day's volatility,**
- **Previous impulse/corrective pattern:**
  - **Its common % retracement (*around 61.8%*),**
- **Last corrective pattern:**
  - **Describe and list its characteristics,**
- **Last corrective wave (*wave C or triangle*) within last corrective pattern:**
  - **Description & characteristics,**
  - **Exhaustion gap announces the final move before reversal,**

- **Opening range within the first 15 minutes, could be the High/Low extreme zones of the current day,**
- **Daily pivot & its range,**
- **Next patterns:**
  - **W2: get ready to forecast the depth of W2 retrace, in concordance with the slope of the trend line (*slight, average, steep*),**

3.8 ***Differential Diagnosis*:**
- **Corrective waves:**
  - **Zigzag: *If none of the alternation principle rules is enabled, then it might be a zigzag pattern, which often acts as an impulsive wave.***
  - **Wave B: *If you believe you are in W1 and you count only three waves, before W4 enters the price area of W1, you are now in wave B of a corrective pattern.***
- **Impulsive wave:**
  - **Wedge: *Could be the nest of a seed wave (W1+W2+W3 inception)***

4. Corrective Wave 2 - (W2)
Lack of a clear chart pattern is the Ultimate* <u>no Action</u> *Indicator!

4.1 ***Description*** **: <u>Corrective wave</u> which can be :**
- **Simple ABC (*only 3 mono waves*),**
- **Complex "*double-three poly-waves*" – 6, 7, 9, 11 waves,**

4.2 ***Advanced Market Indicators:***
- **The GET False Stochastics (14,3,3) is a dual role indicator which will efficiently signal the corresponding "*pullback*" move within the up-sloping trend pattern, for the W2 inception, development and termination.**

4.3 ***Origin of W2*** **- Change of W1 trend :**
- **Be aware of the *time-of-the-day* and its *rhythm*,**
- **End of W1 Fibonacci extensions of :**
  - **First trend-wise bar, or**
  - **Height of the pre-close trading range**

  (1.382, 1.618, 2.236, 2.618)

4.4 ***Wave 2 Characteristics*:**
- **Be ready to prepare the *alternation principle* rules:**
  - **Price** – distance covered,
  - **Time** – time covered – check Fib time ratio, with regard to W1,
  - **Severity** – check Fibonacci price retrace, with regard to W1,

    50% or 61.2% most common,
  - **Intricacy** – number of sub-divisions of waves,
  - **Construction** (*wave structure*): degree of complexity (mono / poly-waves),

  Write down its characteristics, and get ready to apply the *alternation principle rules* (*w2 against w4*), when it is time for this.
- **Be on the watch for the temporary counter-trend moves (*pullbacks/thrusts*), on light volume, right after the move has started. It will confirm the current impulse pattern.**

  Use the 21-ema, to better visualize the counter-trend moves (*use current volume with regard to average volume, of other trends' periods*)
- **Common price retracement:**
  - **Expect a 38% retracement if W1 *is* the *longest* wave in pattern. The new highs will follow.**
  - **Expect a 50% to 61.8% retracement if W1 *is not* the *longest* wave in pattern. These retracements are the *common values* used by the W2,**

- An almost full retracement of 99% of W1, can also occur, if W1 is not the longest wave. However, one should remember that a retracement over the 88.6% has very slim chances to reverse and continue the initial trend.
- As a *strict Elliott rule*, the *W2 retracement can't exceed the 100%.*
- If W1 is a poly-wave or higher, W2 must subdivide into a poly-wave or higher,
- If W2 subdivides and wave-A of W2 retraces more than 61.8% of W1, the entire correction will inevitably turn out to be a *double failure* or a *wave C-failure*, with the *wave C-failure* occurring at a point 61.8% or less of W1.

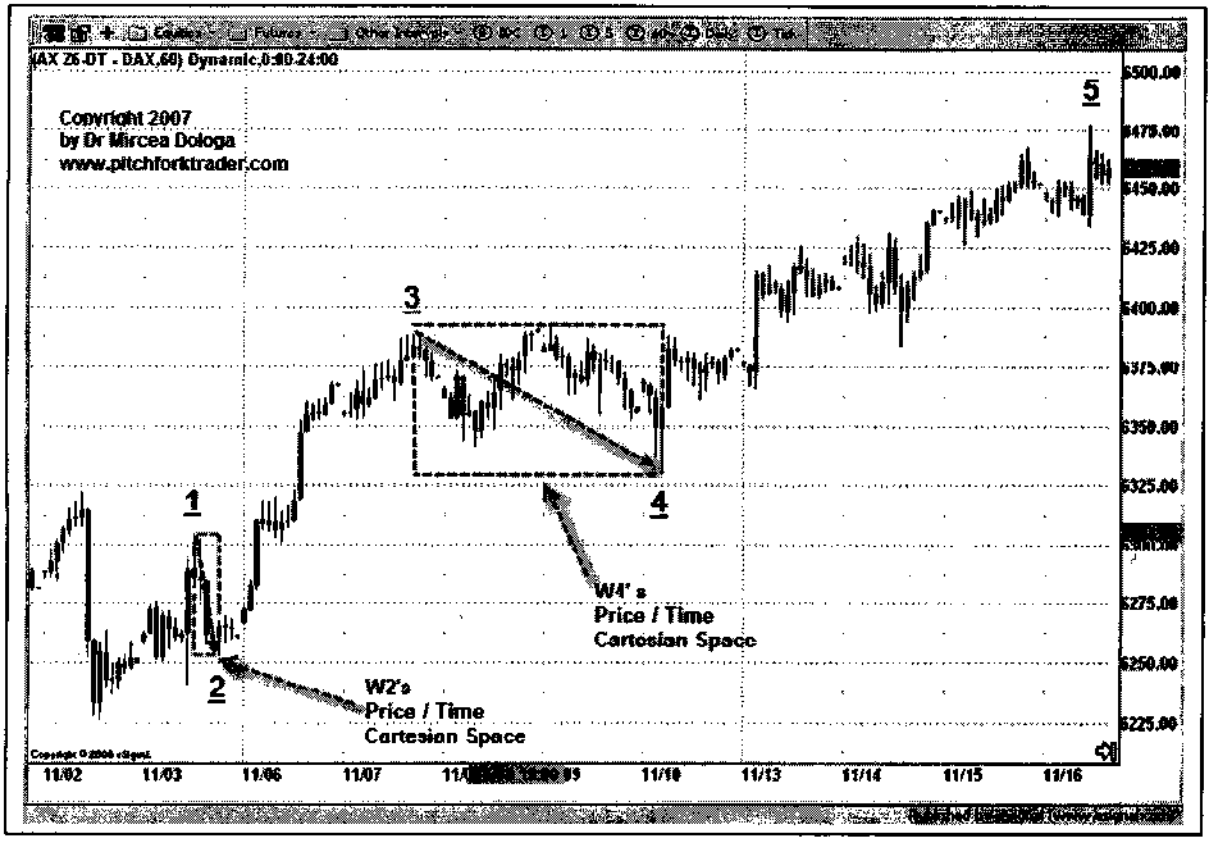


Figure 102 - *The above rectangles of the 60-min German Dax 30 chart illustrate the up-sloping impulsive pattern containing the price/time Cartesian space of the two corrective Elliott waves: W2 & W4. The space outside the rectangles pertains to the three impulsive waves (W1, W3 & W5). They were labelled but the rectangles aren't drawn.*

4.5 *Pinpoint the End of W2* by using:

4.5.1 Global Tools:

- Be aware of the *time-of-the-day* and its *rhythm,*
- Fib retracement in relation to W1,
- At least, one third of the W1 *time* has to be completed,
- Wave C sub-division into five waves – strong chance that the W2 is complete, with an imminent entry (*terminal triangle is usually the last pattern, in a consolidation*),

4.5.2 Channelling Tools (*refer to Chapter 7 for explicative charts*):

- A 45° trend line drawn from the W1 termination level (*works better if W2 is a poly-wave*),
- The *Fan lines* and/or the *Speed lines* will be drawn from the W1 termination level. The decisive opposite direction breakout of these lines will signal the termination of W2.

4.5.3 **Moving Average Tools:**

- **Add a 50-exponential moving average to your chart. If the retracement does not exceed this moving average then its value should be between 38.2% and 50%.**
  In case that the retracement does break this moving average then look for a 50% to 61.8% retracement.

4.6 ***Relationships with Other Chart Formations and Key Levels*:**

- **Previous wave *(impulsive wave):***
  - **Retracement 50% to 61.8%, mostly 73% of the time,**
  - **Steeper W1 slope, lesser W2 correction,**
- **Next patterns:**
  - **High W3 probability extension, if:**
    - ***50% retrace or less of W2,***
    - ***A flat or irregular retrace.***

4.7 ***Differential Diagnosis*:**

Corrective waves*:*

- **B wave:**
  - ***If the retracement is bigger than 99%,***
  - ***If a five wave triangle occurs within every wave clearly sub-divided, you are in B wave, not in W2,***
- **Complex sideways pattern *(flat, irregular or triangle) usually retracement is 38.2% or exceptionally 50%,***
- **W1 steep trend *implies a 38.2% retracement,***
- **Lasting consolidation *is a prelude of an imminent explosion,***
- **Zigzag:**
  - ***It could be the prelude of a more complex correction,***
- **Triple Zigzag:**
  - ***It reacts perfectly in channelling,***
  - ***It is the most powerful correction,***
- **Flats:**
  - ***It isn't a terrifically strong pattern, but it does imply more strength than a zigzag,***
  - ***Two successive flats imply a third correction pattern, usually a triangle.***

5. Impulsive Wave 3 - (W3)

Lack of a clear chart pattern is the Ultimate* <u>no Action</u> *Indicator!

5.1 ***Description*** **: <u>Impulsive wave</u> - 5 wave count (*3 impulsive & 2 corrective waves*),**

5.2 ***Advanced Market Indicators*: Conception of W3 *may* begin, when:**

- **The GET OSC(5,35) indicator may show a divergence, once the W2 reversal-bar took place.**
- **The GET False Stochastics (14,3,3) indicator crosses above/below 80/20 limits.**

The beginning of a "*to be prolonged horizontal black line*" above indicator's curvilinear lines will start to witness the W3 trend inception. As soon as the W3 is on its way, a divergence could occur.

5.3 ***Origin of W3*:**

- **Be aware of the *time-of-the-day* and its *rhythm,***
- **Most recent Low on *0-2 base line* (*channelling*), which does not break it. The wave W3 could be the breakout of a wave C-triangle pattern,**

- **Use the 21-ema: first pullback witnesses the trend inception, then the following pullbacks will establish the trend.**
- ***Parabolic indicator* gives a "*change of trend*" signal earlier than that of the *ema*. Use "*Optimize*" & "*Fine-tune*" features and experiment with various settings. Ride it, all the way down to the *Parabolic*, even if one could take a trade on a lower time frame** (Very efficient for Money Management).

5.4 Dynamics of W3 Inception:

- **W3 equals 1.000 of W1:**
  - **If the price continues in the same direction, there are sufficient grounds that W3 will reach 1.618 of W1, 2.618 of W1 or even more,**
- **W3 between 1 and 1.618 of W1, *15% of the time*:**
  - **At 1.100 of W1 (*110% of the W1 added to the W3's inception level*):**
    - **Execute an entry with a maximum of contracts,**
      The whole trading effort has been geared towards this big *momentum* opportunity!
      All the trades, before and after this juncture are merely surrogates!
    - **In this zone the exact labelling is: *wave 1 or A, wave2 or B, wave 3 or wave C.***
      Mathematical relationship between *W1-2-3* and *A-B-C patterns* is the same until W3 finally extends beyond 1.618!
      One should always have an *alternate escape scenario* or a *reversal strategy*, until W3 becomes *legitimate.*
- **W3 between 1.618 and 1.750, *45% of time*.**
  The critical junction between a "*last-chance*" wave C-failure or a stronger W3 trend will continue to build,
- **W3 above 1.750 to 2.618, *30% of the time*. The high-powered momentum movement could go as high as 4.25, or even 6.85.**
  See more confidence in a higher quality *highly probable buy/sell high-powered momentum trade*, In this situation the odds begin to work 60% of the time or greater, into a better quality trade. It becomes a *momentum* trade, clearly seen by the crowd!
- **At the W3 termination, make sure that you analyse the length of the W3 in relation to W1:**
  - **In case that W1 is longer than W3, expect the W5 to be shorter than W3,**
  - **In case that W1 is shorter than W3, expect the W5 to be equal to W1,**

5.5 Wave W3 Characteristics:

- **Find the *longest*, *shortest* and/or *equal* size *sub*-waves of W3. This is based on the *strict Elliott rule* that *the wave 3 can't be the shortest*, out of the 3 impulsive waves. One should also compare the size of W1 with that of W3:**
  - **If the *middle* wave is longer in price, then the impulsive sub-wave pattern is *legitimate*,**
  - **If the *middle* wave is the shortest, then this pattern is *corrective*,**
  - **If all three waves are similar in price, this move is a possible *zigzag*,**
  - **The slope illustrated by the *emas* and the *trend lines* define the inception and the degree of the trend.**
- **W3 Extension *Absent*:**
  - **Then W3 is equal to 1.618 or 1.750 of W1, 45% of time,**
  - **W1 or W5 will be shorter,**
  - **If W3 is shorter than W1, then W1 is extended, and W5 is shorter than W3,**
  - **When W1 extends, W3 should complete not farther away than 61.8% above from the end of W1,**

- If W5 is extended, W1 will be shorter than W3,
- W3 Extension *Present - 3rd of the 3rd* wave:
  - W3 is the most likely wave to extend,
  - If W3 is also the sub-divided wave, w3 of W3 has a strong tendency to extend,
  - If W1 is not the subdivided pattern, then it must be W3,
  - Must be big enough, to be a "*true*" impulsive wave:
    - *3rd of the 3rd* wave, must be the *longest* wave,
    - w1 *or* w5 of W3, is the *shortest* wave,
    - w2 and w4 of "3rd of the 3rd", must respect *alternation principle rules.*
- W3 is:
  - Equal to 2.618, 4.25, 6.85 of W1,
  - More extended than W5,
- 3rd of the 3rd wave:
  - Larger W3 will sub-divide more and will be larger than W1 or W5,
  - There are five sub-divided waves: w1 and w2 will usually mimic the price action of the larger W1 and W2,
  - It means a subsequent explosion, followed by a waning of selling pressure,
  - Check GET OSC(5,35) indicator for a "*double hump*":
    - The first bigger dome corresponds to *3rd of the 3rd* wave,
    - The second dome corresponds to W3,
    - Both domes are usually merged,
  - Volume is bigger, over the impulsive pattern,
  - Middle of this wave (*at half distance*), usually marks the center of the entire W3,
  - Always be aware that W5 can fail if W3 extends,
- Gaps: A good indication of an *extended W3*, in progress,
  - Beginning of wave: Breakaway Gap announces a strong momentum,
  - End of wave: Exhaustion Gap announces the end of trend.

5.6 *Pinpoint the End of W3*, by using:

5.6.1 Global Tools:

- Be aware of the *time-of-the-day* and its *rhythm*,
- Fib extensions in relation to W3's projected termination, applied to:
  - W1,
  - w1:W3 and w5:W3,
  - First trend-wise bar and if possible,
  - The height of the pre-close trading range,

  (1.382, 1.618, 2.236, 2.618, 4.236)
- The use of the 21-ema: a multitude of counter-trends is the *anti-chamber* of trend's termination.
- The prior pattern correction using the Fibonacci ratios: 38.2%, 50% and 61.8%,
- Coincidental crossover of 21-ema alone or together with 50-ema, with trend lines? Fib levels, Gann lines & angles signals a key reversal level.
- Daily pivots alone, or together with weekly or/and monthly pivots, form a very strong key reversal level.
- *Parabolic indicator* gives a "*change of trend*" earlier than *ema.*

  (can be used for Money Management)

5.6.2 Channelling Tools (*refer to Chapter 7 for explicative charts*):

- 0-2 trend line and W1-parallel trend line,
- 0-1 trend line, which could halt the progression of an elongated W3.

5.6.3 **Dr Andrews' Pitchfork & Median Lines:**

- **There are at least two choices of constructing this ascending pitchfork:**
  - **The P0 anchor pivot is labelled at the start of W1 level. The P1 and P2 are labelled at the W1's termination and W2's end levels, respectively. This pitchfork choice might involve *less* warning lines.**
  - **The P0 anchor pivot is labelled at the antecedent low of the lowest low of the prior correction. The P1 and P2 are labelled at the W1's termination and W2's end levels, respectively. This pitchfork choice might involve *more* warning lines.**
- **The best pitchfork choice will be the one that optimally describes the local market flow.**
- **Be on the watch for constructing a second pitchfork, called *minor* which is characterized by a mini-median line. This will have the merit to closely follow-up the progression of the W3 at the lesser degree wave levels. It will reside within the first built pitchfork, called the *major pitchfork*.**
- ***Confluence zone*: The median lines & its acolytes of these two pitchforks will create confluence zones which are capable of identifying the W3's sub-waves, the progression & termination of the *3rd of the 3rd wave* and the W3 termination.**
- **W3 end is usually at the median line or at the upper median line level of the major pitchfork.**
- **In case of an extended W3 termination might climb even farther to the warning line levels (*WL-01 to WL-03*).**

5.7 ***Corrective Sub-Wave Waves Characteristics* of w2and w4 of W3 poly-wave and *3rd of the 3rd* wave:**

- ***Alternation principle rules*: w2 & w4 are noticeable different!**
  Enable, at least one of them:
  - **Price** – distance covered,
  - **Time** – time covered – check Fib time ratio, w2 with regard to w1:W3, w4 with regard to w2 & w3:W3, and w5 with regard to w1:W3 & w1-3:W3,
  - **Severity** – check Fibonacci price retrace, w2 with regard to w1:W3 & w4 with regard to w3:W3,
  - **Intricacy** – number of sub-divisions of waves,
  - **Construction** (*wave structure*): degree of complexity (**abc** *vs* **abcde** *pattern*)

  Write down the characteristics and get ready to apply the *alternation rules principle* (*w2 against w4*) when it is time for this.
- **Be on the watch for the temporary counter-trend moves (*pullbacks / thrusts*), on light volume, right after the move has started. It will confirm the current impulsive pattern.**
  The use of the 21-ema, will better visualize the counter-trend moves (*use current volume in relation to average volume of other trends' periods*).

5.8 ***Relationships with Other Chart Formations and Key Levels*:**

- **Pivot range: very small or very large dictate the current day's volatility,**
  - **Small range: big volatility to come,**
  - **Big range: see Mark Fisher pivots techniques,**
- **Corrective wave – W2 of impulsive pattern, in progress:**
  - **High W3 extended probability, if**
    - **W2 – 23.6% to 50%,**
    - **W2 - flat or irregular retrace ,**
- **Other impulsive waves (*previous & next*):**
  - **w1:W3's slope is steeper than that of W1's,**

- **w3:W3's volume is greater than the w5:W3 volume, culminating with *3rd of 3rd* volume,**
- **w5:W3 - When w3:W3 is extended, then w5:W3, is less than 61.8% of w1:W3.**

5.9 Differential Diagnosis:

- **Corrective waves:**
  - **Zigzag**: ***if none of the alternation principle rules is enabled, on w2 and w4 of W3, then this might confirm a zigzag pattern, which often acts as an impulsive wave.***

6. Corrective Wave 4 - (W4)

Lack of a clear chart pattern is the Ultimate <u>no Action</u> Indicator!

6.1 Description: **<u>Corrective wave</u> which can be:**

- **Simple ABC (*only 3 mono waves*),**
- **Complex "*double-threes poly-waves*" – 6, 7, 9, 11 waves,**

6.2 Advanced Market Indicators:

- **The GET OSC(5,35) indicator may show an important market divergence, once the reversal-bar took place. The market price must pull back minimum 90%, but no more than 140%.**
- **The GET False Stochastics (14,3,3) is a dual role indicator which will efficiently reveal the corresponding reversal for the W4 inception.**

6.3 Origin of W4 - **Change of W3 trend:**

- **Be aware of the *time-of-the-day* and its *rhythm*,**
- **End of w1 Fibonacci's Extensions of:**
  - **First trend-wise bar, or**
  - **Height of the Pre-close Trading Range** (1.618, 2.236, 2.618, or more)

6.4 Wave 4 characteristics:

- **Be ready to prepare the *alternation principle rules*:**
  - **Price** – distance covered,
  - **Time** – time covered – check Fib time ratio, with regard to W3,
  - **Severity** – check Fibonacci price retrace, with regard to W3,
    38.2% - 50% most common,
  - **Intricacy** – number of sub-divisions of waves,
  - **Construction** (*wave structure*): degree of complexity (mono/ poly-wave)

  Write down its characteristics and get ready to apply the *alternation principle rules* (*w4 against w2*) when W4 is terminated.
- **Be on the watch for temporary counter-trend moves (*pullbacks / thrusts*) on light volume. It will confirm the current impulse pattern.**
- **The use of 21-ema will better visualize the counter-trend move** (use current volume in relation to average volume of the other trends' periods);
- ***If W4 is more complex*, more time consuming, and possibly of a greater complexity than that of W2, *then* W5 will probably extend. The W4 should retrace a greater percentage of W3, than W2 does of W1. The W5 should fail if the W4 complex pattern retraces more than 38.2% (*as much as 61.8% allowable*),**
- ***If W4 is simpler* in price, time and structure than W2, then W1 should have been extended.**

6.5 Pinpoint the End of W4, **by using:**

6.5.1 **Global Tools:**

- **Be aware of the *time-of-the-day* and its *rhythm*,**

- Fibonacci retracement in relation to W3 is mostly 38.2% to 50% ratios. The trader must be familiar with the *Elliott rule*, which *stipulates that the W4 can't retrace lower than the termination of W1.* This seems to be an absolute Elliott rule for the stocks, in spite of the fact, that it is commonly allowed an overlapping of maximum 17% when trading *Futures.*
- At least, one third of the W3 *time* has to be completed,
- Wave C sub-division into five waves – strong chance that the W4 is completed, with an imminent entry (*terminal triangle is usually the last pattern in a consolidation*).

6.5.2 Channelling Tools (*refer to Chapter 7 for explicative charts*):
- Channelling of the W4 development using the regression trend channels,
- 0-2 trend line *(works better if W4, is a poly-wave),*
- W1- & W3-parallel trend lines,
- Be on the watch for drawing an Elliott triangle (horizontal *contracting limiting triangle*) which is a very frequent pattern for a W4,
- The *Fan lines* and/or the *Speed lines* will be drawn from the W3 termination level. The decisive opposite direction breakout of these lines will signal the termination of W4, mostly on the third testing attempt.

6.5.3 Moving Average Tools:
- Add a 50-exponential moving average to your chart. If the retracement does not exceed this moving average then its value should be between 38.2% and 50%.
  In case that the retracement does break this moving average than look for a 50% to 61.8% retracement.

6.6 Relationships with Other Chart Formations and Key levels:
- Previous wave (*impulse wave*):
  - Retracement 30% to 50%, mostly *60% of the time,*
  - Steeper W3 slope, lesser W4 correction,
- Next patterns:
  - High W5 probability extension, if
    - *A 50% retrace or less of W2,*
    - *A flat or irregular retrace.*

6.7 Differential Diagnosis:
- Corrective waves:
  - B wave:
    - *If retracement bigger than 99%,*
    - *If a five wave triangle occurs within every wave clearly sub-divided, you are in wave B, and not in W2,*
  - Complex sideways pattern *(flat, irregular or triangle) usually when occurs has a 38.2% retracement or exceptionally 50%,*
  - W1 steep trend implies a *38.2% retracement,*
  - Lasting consolidation *is a prelude to an imminent volatility explosion,*
  - Zigzag:
    - *It could be the prelude of a more complex correction,*
  - Triple Zigzag:
    - *It reacts perfectly in channelling,*
    - *It is the most powerful correction.*
  - Flats:
    - *It isn't a terrifically strong pattern, but it does imply more strength than a zigzag,*
    - *Two successive flats imply a third correction pattern, usually a triangle.*

7. Impulsive Wave 5 - (W5)

Lack of a clear chart pattern is the Ultimate <u>no Action</u> Indicator!

7.1 ***Description*** **: <u>Impulsive wave</u> - 5 wave count (*3 impulsive & 2 corrective waves*),**

7.2 ***Advanced Market Indicator*****: Conception of W5 *may* begin, when:**

- **The GET OSC(5,35) indicator may show a drop under the zero line. Its reversing move is obvious, once the W4 reversal-bar took place. The indicator must drop to a minimum of 90%, but no more than 140% before it starts the implementation of W5. Most of the time, there is a divergence announcing the W5 termination.**
- **The GET False Stochastics (14,3,3) indicator crosses above/below 80/20 limits. The beginning of a "*to be prolonged horizontal black line*" above indicator's curvilinear lines will start to witness the W5 trend inception.**
  Be on the watch for a final impulsive pattern divergence, which will signal the W5's termination.

7.3 ***Origin of W5*****:**

- **Be aware of the *time-of-the-day* and its *rhythm*,**
- **Most recent low on *2-4 base line* without any breakout,**
- **W5 could be the breakout of a C-triangle pattern,**
- **Use the 21-ema: the first counter-trend witnesses the trend inception, then the following counter-trends establish the trend,**
- ***Parabolic indicator* gives a "*change of trend*" signal earlier than the ema could signal. Use "*Optimize*" & "*Fine-tune*" features and experiment with various settings. Ride it, all the way down to the *Parabolic*, even if one could take a trade on a lower time frame** (Very efficient for Money Management).

7.4 ***Dynamics of W5 Inception:***

- **Check the following objectives:**
  - **1st Objective: 50% of W1,**
  - **2nd Objective: 100% of W1,**
  - **3rd Objective 62% of W0-W3,**
  - **4th Objective 100% of W3.**
- **At the inception of W5's development, make sure that you analyse the length of the W3 in relation to W1:**
  - **In case that W1 is longer than W3, expect the W5 to be shorter than W3,**
  - **In case that W1 is shorter than W3, expect the W5 to be equal to W1,**
- **Most of the time, the W5 will exceed the W3's termination key level. If it doesn't, it means that we have a *W5 failure*, which is characterized by a strong reversal movement towards the beginning of the W4.**

7.5 ***Wave 5 Characteristics*****:**

- **Find the *longest*, *shortest*** and/or ***equal* size of the three waves. This is based on the *Elliott rule* that *the wave 3 can't be the shortest*, out of the 3 impulsive waves**
  - **If the *middle* wave is longer in price, then W3 is *legitimate*,**
  - **If the *middle* wave is the shortest, this move is *corrective*,**
  - **If all three waves are similar in price, this move is a possible *zigzag*,**
  - **The slope illustrated by the *emas* and the *trend lines* define the inception and the degree of the trend.**
- **W5 Extension *Absent:***
  - **If W3 is more than 1.62xW1 (*Extended W3*):**
    - **Then W5 could be:**
      - **1.00 *x* length of W1,**
      - **1.62 *x* length of W1,**
      - **2.62 *x* length of W1,**

- **Non-extended W5 should be retraced close to 100% or more, at the level of next corrective pattern,**
- **If W1 is extended in the sequence and the sequence concludes W1 or wave-A of a *larger degree*, then the correction after W5 should drop into the W2 price zone.**
- **If the sequence completes W3 of a *larger degree*, then the correction after W5 will probably stop in the W4 zone,**

- **W5 Extension *Present*:**
  - **If W4 is more complex, more time consuming, and possibly of a greater complexity degree than W2, then W5 will probably extend. The W4 will retrace a greater percentage of W3, than W2 does in regard to W1,**
  - **If W3 is less than 1.62 *x* W1** (W3 non-extended):
    - **Then W5 could be:**
      - **0.62 *x* length of 0 to W3, very frequent Fibonacci key level,**
      - **1.00 *x* length of 0 to W3,**
      - **1.62 *x* length of 0 to W3,**
      - **A maximum length of 261.8% of 0 to W3,**
    - **W1 should progress at the steepest angle with W3 following closely behind. The W5 will have the slowest rate of acceleration,**
    - **A W5 extension cannot be completely retraced unless it is the end of a larger W5 extension or the C-wave of a correction,**
  - **Gaps: a good indication of an extended W5, in progress,**
    - **Beginning of wave: Breakaway Gap announces a high-powered momentum,**
    - **End of wave: Exhaustion Gap announces the end of trend.**

7.6 W5 Failures:

- **The W5 failure is very probable when W3 is an extended wave,**
- **W4 should:**
  - **Be more complex than W2,**
  - **Retrace more of W3, than W2 retraces in relation to W1,**
- **W5 will probably fail if the W4 complex pattern retraces more than 38.2% (*61.8% retracement value is allowed*),**
- **Almost always, W1 is equal to W5, in *price* and *time*!**
  Less frequently the price and time will relate by 61.8% Fibonacci ratio.

7.7 Diagonal Triangle (*Terminal impulse pattern*)

- **The *diagonal triangle* or an *ascending wedge* is a chart pattern that often might terminate an impulsive pattern, thus impersonating the W5.**
- **Don't forget its main characteristics, which is the five ABC wave pattern. It is the only allowed impulsive pattern containing the ABC waves.**

7.8 Pinpoint the End of W5 by using:

7.8.1 Global Tools:

- **Be aware of the *time-of-the-day* and its *rhythm*,**
- **Fib extensions/corrections in relation to W5's projected termination, applied to:**
  - **W1 and W0-3,**
  - **The first trend-wise bar and if possible,**
  - **The last pre-close swing,**

- **The height of the pre-close trading range,**
  (1.382, 1.618, 2.236, 2.618, 4.236)

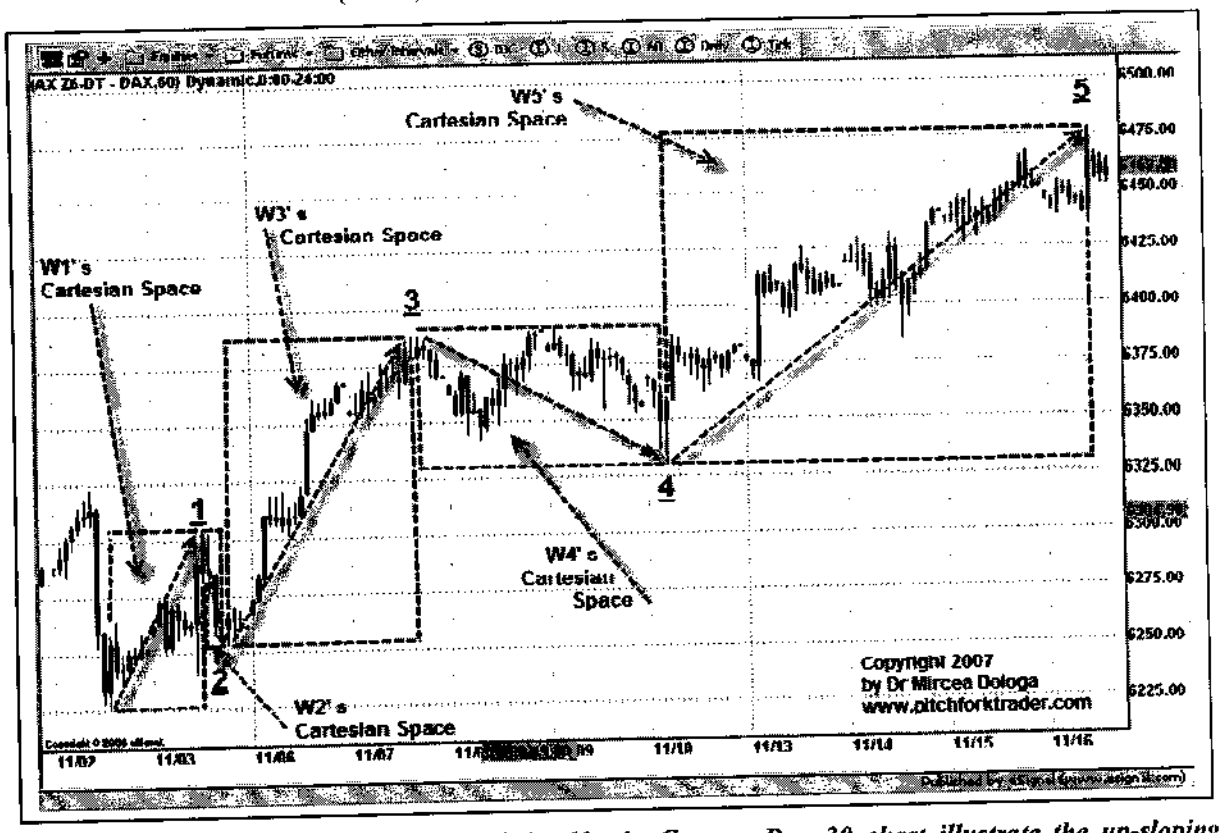


Figure 103 - *The above rectangles of the 60-min German Dax 30 chart illustrate the up-sloping impulsive pattern containing the price/time Cartesian space of the five Elliott waves: three impulsive waves (W1, W3 & W5) and two corrective waves (W2 & W4). The trader can easily observe that the impulsive waves are progressing in the direction of the up-sloping trend and that the corrective waves counter the main trend.*

- **The use of the 21-ema: a multitude of counter-trends is the *anti-chamber* of trend's termination.**
  The prior pattern correction using the Fibonacci ratios: 38.2%, 50%, 61.8%, 78.6%, 88.6% or the whole correction (*100% level*). The best level signal will be given by the existence or absence of the W5 failure.
- **The coincidental cross-over of 21-ema alone or together with 50-ema, with Gann levels, trend lines or Fib levels signals a key reversal level.**
- **Daily pivots alone, or together with weekly or/and monthly pivots, form a very strong key reversal level.**
- ***Parabolic indicator* gives a "*change of trend*" earlier than the *ema*.**
  (can be used for Money Management)

7.8.2 **Channelling Tools (*refer to Chapter 7 for explicative charts*):**
- **2-4 base line, W1-parallel & W3-parallel trend lines,**
- **0-1 trend line, which could halt the progression of an elongated W5.**

7.8.3 **Dr Andrews' Pitchfork & Median Lines:**
- **There is at least one choice of constructing this ascending pitchfork:**
  - **The P0 anchor pivot labelled at the start of W3 level and the P1 and P2 at the W3's termination and W4's end levels, respectively. This choice might involve less warning lines.**
- **The best pitchfork choice will be the one that optimally describes the local market flow.**

- **Be on the watch for constructing a second pitchfork, called a minor pitchfork, which is characterized by a mini-median line. This will have the merit to closely follow-up the progression of the W5 at the lesser degree wave levels. It will reside within the first built pitchfork, called the major pitchfork.**
  ***Confluence zone*: The median lines & its acolytes of these two pitchforks will create confluence zones which are capable of identifying the W5's sub-waves, the progression and the W5 termination.**
  W5 end is usually at/above the upper median line level of the major pitchfork.
- **In case of an average to extended W5 length termination, the market price might climb even farther to the warning line (WL-1 to WL-3).**

7.9 Corrective Sub-Wave Characteristics **of w2 and w4 of W5 poly-wave:**

- ***Alternation principle rules*: w2 & w4 are noticeably different!**
  Enable, at least one of them:
  - **Price** – distance covered,
  - **Time** – time covered – check Fib time ratio, w2 with regard to w1:W5 & w4 with regard to w3:W5,
  - **Severity** – check Fibonacci price retrace, w2 with regard to w1:W5 & w4 with regard to w3:W5,
  - **Intricacy** – number of sub-divisions of waves,
  - **Construction** (*wave structure*): degree of complexity (**abc** *vs* **abcde** *pattern*)

  Write down the characteristics and get ready to apply the *alternation rules principle* (*w2 against w4*) when the time is ripe.
- **Be on the watch for the temporary counter-trend moves (*pullbacks / thrusts*), on light volume, right after the move has started. It will confirm the current impulsive pattern.**
- **The use of the 21-ema, will better visualize the counter-trend moves *(use current volume with regard to average volume, compared to the other trend periods*). The strict watch of the pullbacks, especially those leaning on the 21-*ema* is highly recommended, due to their abilities to divulge, not only the continuation of the trend but also its termination.**

7.10 Relationships with Other Chart Formations and Key Levels:

- **Pivot range: very small or very large they dictate the current day's volatility,**
- **Corrective waves,**
- **Other impulse waves (*previous & next*):**
  - **w1:W3's slope is steeper than W1's,**
  - **W3 volume is less than that of W5's, culminating with 3rd of 3rd volume,**
  - **When W3 is extended, then W5, measures 0.618% or more of W1.**

7.11 Differential Diagnosis

- **Corrective waves:**
  - **Non-extended W5 should be retraced close to 100% or more of the next corrective pattern,**
  - **If W1 is extended in the sequence and the sequence concludes W1 or wave-A of a *larger degree*, the correction after W5, should drop into W2 price zone.**
  - **If the sequence completes W3 of a *larger degree*, the correction after W5 will probably stop in the W4 zone.**

8. Description of the Corrective Patterns: *ZigZags, Flats, Irregular Flats and Triangles*

If you go back on *Figure 100*, you can see that we have already briefly *touched* the subject of ABC corrective pattern.

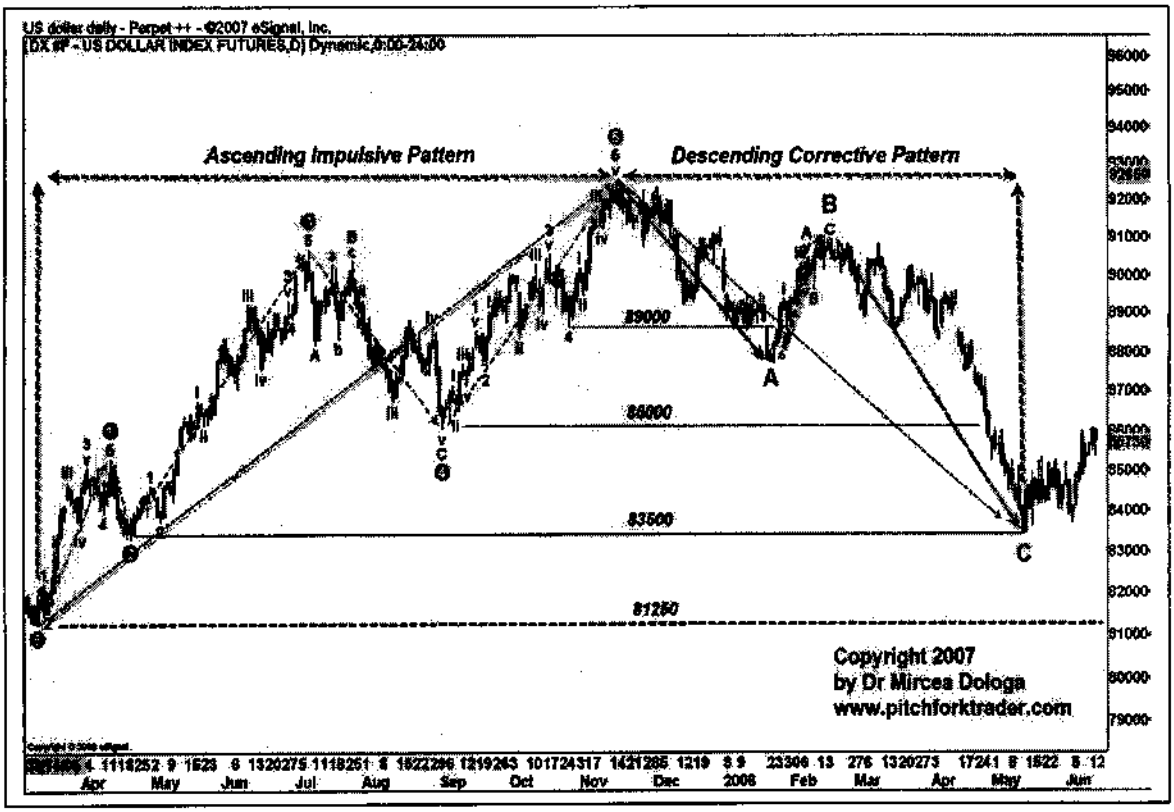


Figure 104 - *The above daily US dollar Index Futures chart illustrates the up-sloping trend-wise oriented impulsive puttern and the down-sloping corrective ABC pattern, which counter-trends it. All this occurs during the process of a 78.6% price retracement, all the way down to 83500 level.*

A close observation of the above chart on *Figure 104* illustrates on the left side, the impulsive pattern and on the right side, the main corrective pattern. The impulsive pattern has five waves which we have already been described as the W1, W2, W3, W4 and W5.The corrective pattern located on the right side of the chart is constituted of three waves: *wave-A*, *wave-B* and *wave-C*. By just glancing, the trader can see that they form a *zigzag* chart formation.
Within this down-sloping corrective pattern (refer to *Figure 104*), we can see that:

- **The first wave (*wave-A*) travelled in the direction of the correction, just below the sub-wave 4 of W5, but above the W4 of the prior impulsive pattern.**
- **The second wave (*wave-B*) moves against the *wave-A*, in a local corrective manner, retracing 62% of wave-A *and***
- **The third wave (*wave-C*) dropped like a stone, guided by the high-powered down-sloping correction-wise oriented momentum. It performed a *wave-C* extension equal to 1.5**wave-A*, thus reaching the W2 of the prior impulsive pattern at 83500 level.**

As we have already seen, the corrective pattern on the above chart (refer to *Figure 104*) took the form of a zigzag characterized by *wave-A* equal to *wave-C* and a common 38.2% retrace of *wave-B*. In spite of this, the corrective movements can also form some other geometrical chart formation (*refer to the Figures 105 to 110*):

- ***Flat* where all three waves are in a trading range, usually equal among them,**
- ***Irregular Flat* where *wave-B* retraces up to 125% of *wave-A***
- ***Triangles* characterized by *five ABC-type corrective waves* arranged in a triangle pattern.**
- ***Complex sideways patterns* containing multiple zigzags, flats and triangles.**

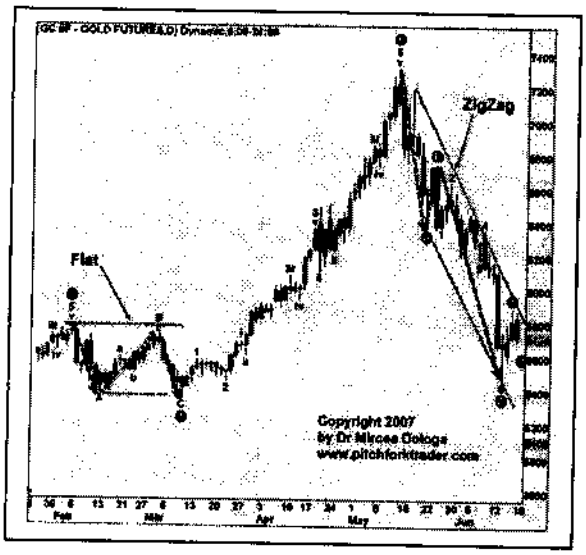


Figure 105 - *Daily Gold Futures Flat & Triangle*

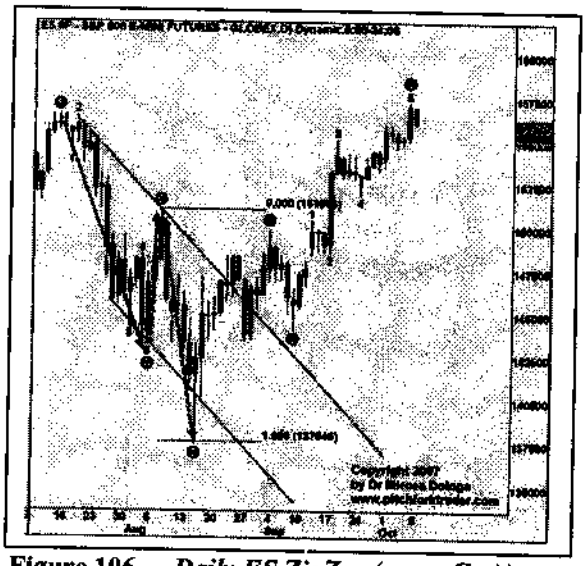


Figure 106 - *Daily ES ZigZag* (wave-C=A)

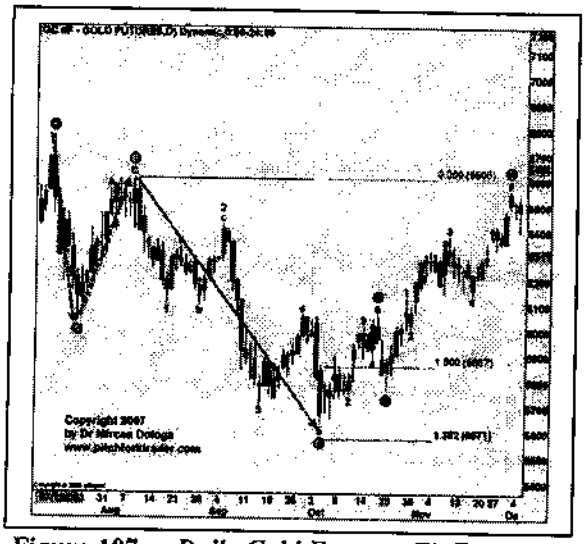


Figure 107 - *Daily Gold Futures ZigZag where wave-C is equal to 1.382*wave-A.*

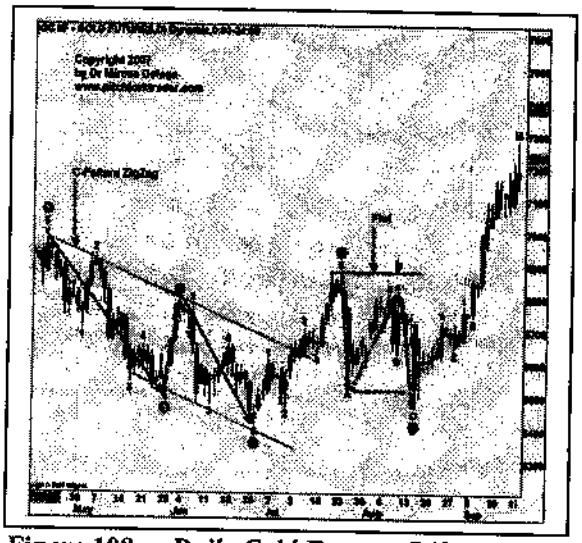


Figure 108 - *Daily Gold Futures C-Failure ZigZag* (wave-C is less than wave-A) *and Flat.*

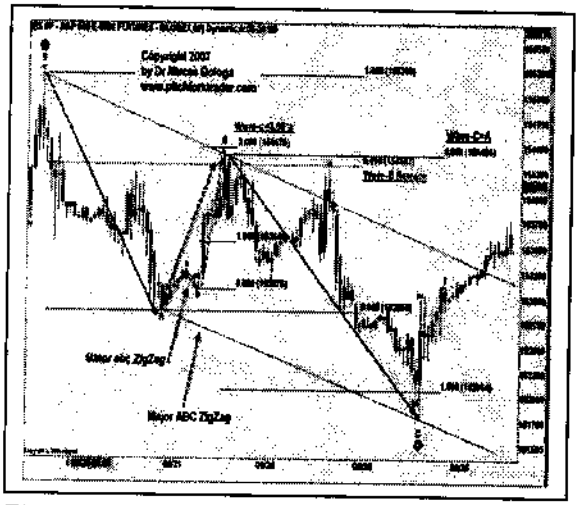


Figure 109 - *A minor ZigZag within a major ZigZag First has* wave-c=3.00*a *& second has* wave-C=A.

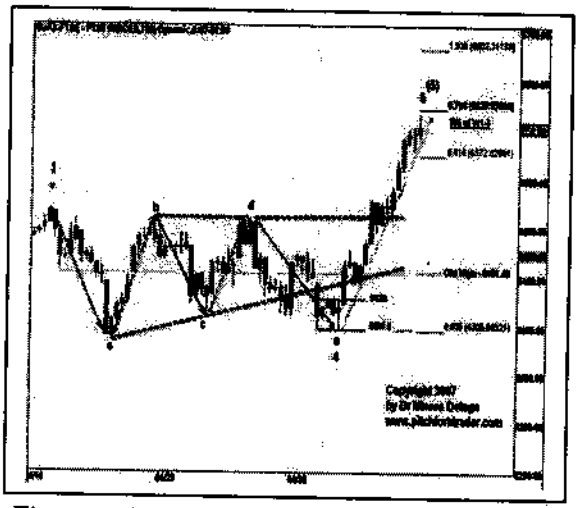


Figure 110 - *FTSE 100 Cash index forms a classic horizontal triangle also called Elliott triangle.*

Key Points to Remember:

- **Our Elliott credo is:**
  Lack of a clear chart pattern is the Ultimate no Action Indicator!
- **The use of Elliott waves is a serious edge with regard to the crowd's trading or investing. It not only identifies the trend but also unveils the exact location of the market, the maturity of the trend, the price targets and the specific levels where the market flow might endure any weaknesses or may even fail.**
- **When using Elliott waves based on pattern, ratio & time, always respect the *three rules*: W3 can't ever be the shortest wave, W2 can't retrace more than 100% and W4 may not overlap on W1 zone (*Futures allowed 17%*).**
- **The exhaustion gap presence announces the final move.**
- **Don't neglect the routine of using channelling tools & pitchforks.**
- **Whenever trading Elliott waves the trader must have an alternate scenario, just in case that the current one isn't working. *Differential diagnosis* technique takes here its full credit!**
- **The most common Elliott Fibs ratios to be retained: W3 = 1.618*W1; W5 = 1.00*W1 ;W5 = 0.618*W1-3; W2 = 0.618*W1 & W4 = 0.382*W3.**
- **A lasting consolidation is a prelude to an imminent volatility burst.**
- **A ZigZag may be a prelude to a more complex correction.**
- **Triple ZigZag reacts perfectly in channelling being very powerful.**
- **Flats imply more strength then a ZigZag. Two successive Flats imply a third correction pattern, usually a triangle.**
- **Elliott triangle is born out of a horizontal W4.**
- **A *complex sideways pattern* usually retraces 38.2% or max 50%**
- **A steep impulsive wave signals a small retracement up to 38.2%.**
- **Don't ever neglect the use of Dr Andrews' pitchfork technique by drawing a major & minor median line, checking the confluences.**
- **Always be aware of the-time-of-the-day and its rhythm,**
- **Parabolic indicator gives a "*change of trend*" signal earlier than *ema*.**
- **Be aware that the Elliott Alternation Principle opens the high-probability way of forecasting the W4, W3 and W5 targets.**

Chapter 6

Original Tools for Impulsive Pattern End
Diagnosis, Kinetics & Management

How many times have you heard the question "*How high is High?*"
Many generations of *novice traders* have tried to get a "*home run*" and make a lot of money. They were trying to catch the highest high, and then go short or the lowest low, and then go long. Unfortunately, this trading strategy is doomed to fail and most of the traders invariably lose their capital. The difficult task of getting the low-risK high-probability trades is based on

- ***Money management*, by applying small stop losses, but this implies to be as close as possible to the *highest high* level or *lowest low* level.**
- ***Highest high diagnosis* (and vice versa), but this implies that the trader is on a high level of the *knowledge curve*, thus making him/her capable of applying optimal timing when the *weight of evidence* signals the reversal phenomenon.**
- **Even if a precocious *identification of the incoming trend* is performed right after the confirmation of the reversal, there is a big difference between trend identification and actually entering the trade. The decisive influencing factor is the degree of risk that the trader wants to take or he can afford. We could talk here about a *conservative* or an *aggressive trade*. The former choice is based on the confirmation of the reversal by the weight of evidence and the latter choice, being riskier thus more profitable, is performed without any reversal confirmation.**

As we have seen in the above paragraphs, one of the keys to profitable trading is the identification of the *highest high* and *the lowest low*. We will try to present in this chapter, the tools and their management that will enable the trader to take the trading decisions with much better confidence and psychological comfort. Thus the *"trigger shy'* syndrome will be permanently eliminated.

1. Weight of Evidence for Vouching the Breaking of Trend Lines

Some readers may have wondered how we define the "*weight of evidence*". This process will identify the termination of the previous trend and the building of the trend reversal. It will finally signal the inception and development of the new trend. The sooner this is performed, the earlier the trader can enter the trade and the more profitable the trade will be!
The "*weight of evidence*" may take the form of a trend line breakout with a certain percentage of penetration advance in the opposite direction (*usually between 1 and 3% depending on the time frame).* We can also mention an impulsive pattern termination followed by a corrective pattern, a time analysis of the formation of the W5 and its complete retracement once the reversal is pronounced, a price/indicator divergence and others.

2. Systematized Visualisation Tool

If we read or re-read the second sub-chapter of the *Chapter 13*, page 216 of the first volume, which presents what we have baptized the *Systematized Visualization Tool*, we will agree that the visual act is one of the best tools. However, everything is in the way you look at the charts. It is well known that two traders will have two distinct opinions about the same chart. In order to see what it counts and also not to miss important details, the best approach is to train our eyes *to scan* the chart in a systematized manner.
The educated trader will always look in a routine manner to a chart, following in his mind, various learnt modules, which have become like a second nature to him. This process will always be the same, over and over again: the zigzag pattern; the size, the slope depth and the composition of each swing; the rough labeling of Elliott waves with close follow-up of the

three distinct rules concerning the W2 retracement, the W3 length and W4 overlapping (*or not*) of the W1 and other parameters.
Don't forget... A well known multi-million dollar trader used to say... *We are what our routines are!*

2.1 *Swing Distribution Technique*

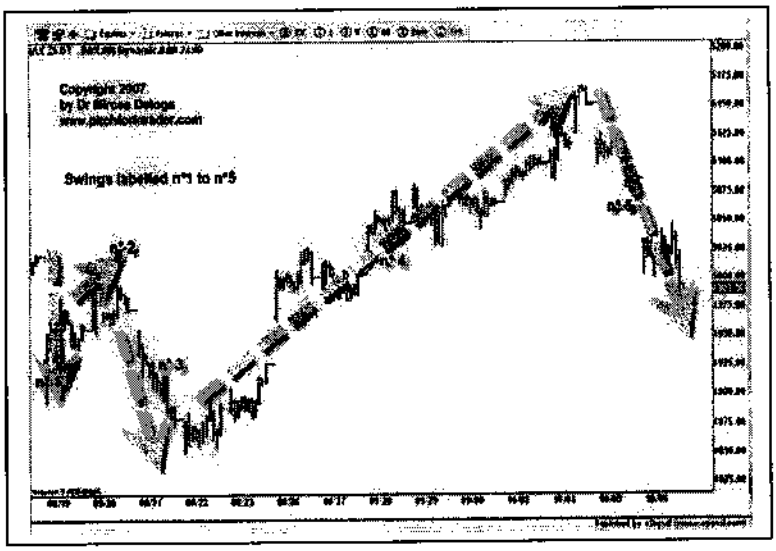


Figure 111 - *The swing distribution technique, on the above chart, is our first studying module that will assist the trader with contextual market flow.*

The first chart module using the *swing distribution technique*, is our first studying element that will help the trader to fully understand the contextual chart concept. Starting from left to right, we have noticed in *Figure 111*:

- **A large *zigzag pattern* composed of the swings n° 1, 2 & 3, leads the market flow in a down- trend.**
- **A very *strong up-sloping n° 4 swing*, which has a steep 45° slope. It does not only correct the previous down-sloping zigzag trend but it more than doubles its length.**
- **A very *steep 28° slope zigzag pattern*, composed of n° 5 swing, which falls, in a hurried and forceful momentum, that the trader would expect the retracement to exceed the 100% limit value.**

2.2 *Territorial Distribution Technique*

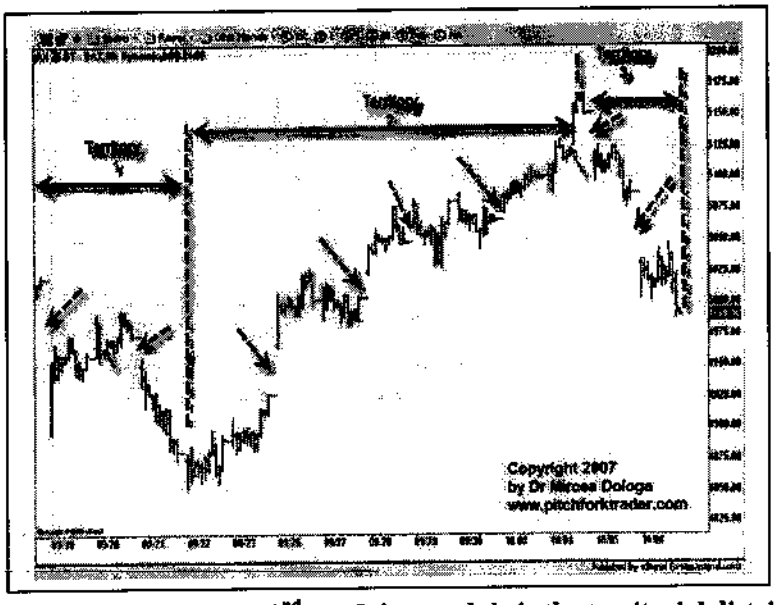


Figure 112 - On the above chart, the 2nd studying module is the territorial distribution technique.

We continue applying the tool of *systematized visualisation,* but this time to the chart from *Figure 112.* Our second studying module is using the *territorial distribution technique.* The purpose is the same as for the first chart module. Thus, the trader will fully understand the contextual concept. This technique immediately reveals the whole market concept composed of three territories, from left to right:

- The *n° 1 territory* which encloses the 3 swings (*not illustrated above, but seen in Figure 111*), and whose trend has a predominant down bias, containing three gaps.
- The *n° 2 territory* encases only one swing, which has an almost continuous up-sloping movement and it contains 5 gaps.
- The *n° 3 territory* has only one swing, which has the hard task of correcting the previous strong and lengthy swing. The corrective pattern, which has a roller coaster down momentum, expressed by the swing's steep down slope, should be capable of accomplishing the 100% corrective task.
  The two gaps in this territory have an above average size. They were hastily created by the strong momentum's impatience to reach the lowest level. This expressed even more the eagerness of the forceful momentum to cover as much corrective ground as possible.

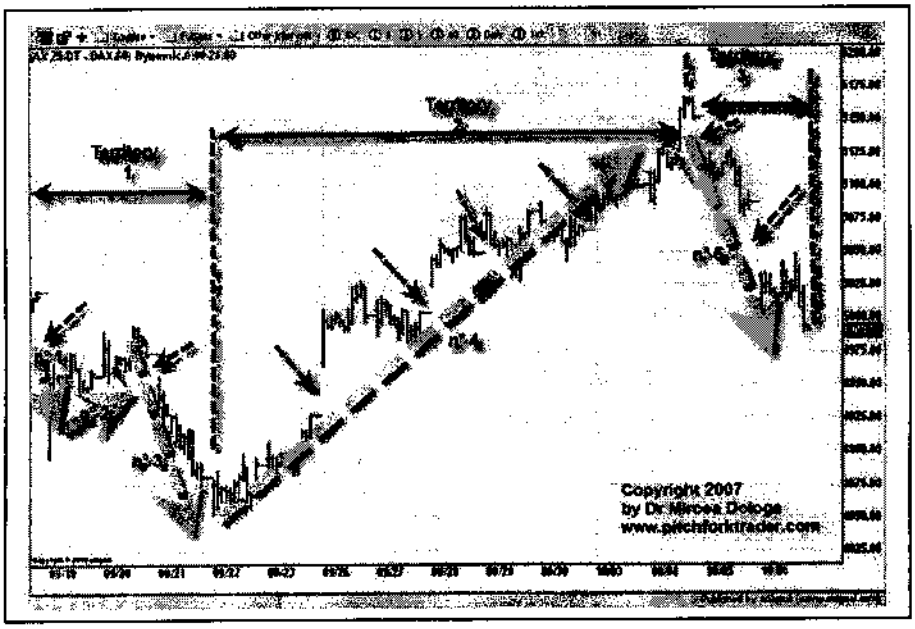


Figure 113 - *The two studying modules of the systematized visualisation tool (swings and territorial techniques) are clearly illustrated on the above chart.*

2.3 *Systematized Visualisation Main Factors - The trader should always think in terms of:*

2.3.1 *Peaks and Troughs* **on the three main multiple time frames.**
(the significance of a peak and trough reversal is determined by the strength, the slope and the direction of the ongoing swings and their reactions),

2.3.2 *Breaches of Trending Levels* **of :**
- **Peak series alone are only *half reversal signal,* but synchronized with at least 3 indicators they will probably signal an aggressive trade,**
- **Added trough series complete the *reversal signal* and propose a conservative trade verified by price change, trend breach & consolidation. (*Ex: a 3% penetration completes the breakout).***

2.3.3 *Fibonacci & Gann Retracements*: **1/3rd to 2/3rd forming new peaks & troughs,**

2.3.4 *Last Close* **compared with the previous one,**

2.3.5 *Trend Line Drawings* **on Primary, Intermediate & Short-Term time frames,**

2.3.6 *Chart Formations*: *Reversal & Continuation Patterns*: **Head & Shoulder, Double Bottom, Double Tops, Triangle, Cup-and-Handle, Diamonds, etc...**

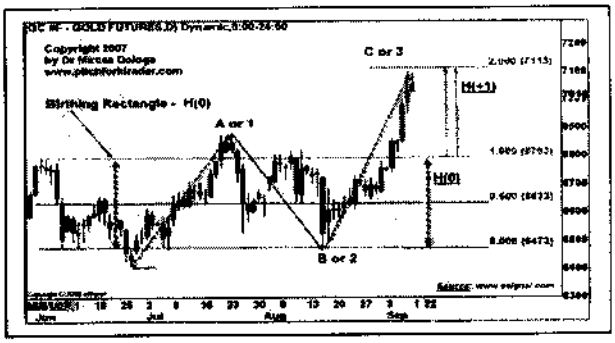
2.3.7 *Reversal Bars* **to be closely watched.**

3. W3 Termination Level

The Elliott wave 3 is the strongest wave of the impulsive pattern. As we already know, it can't be the shortest wave. Once it exceeds the length of the first impulsive wave (*wave-A or "to be" wave 1*) we can speak about the beginning of an impulsive pattern, if the W4 and W5 will be within the defined rules. Some traders trade the W3, once W3=1.10*W1 or 1.146*W1.

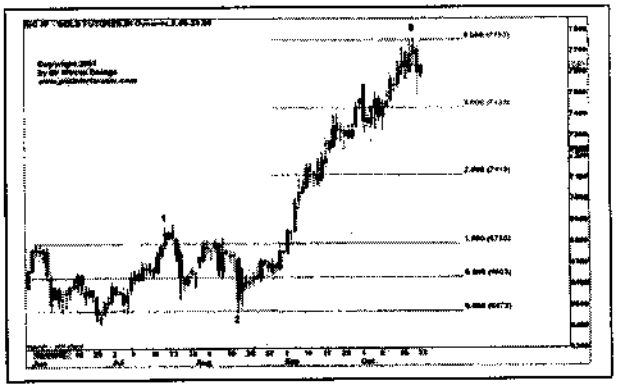
3.1 Wave 3 (W3) & Birthing Rectangle

Figure 114 – *On the chart of the right side, the market flow has finally broken the trading range at 6900 level, above wave A or W1 and started to shoot straight up. In this high-powered momentum situation, after almost four months of consolidation, the market flow is ready to develop a strong W3 impulsive pattern.*



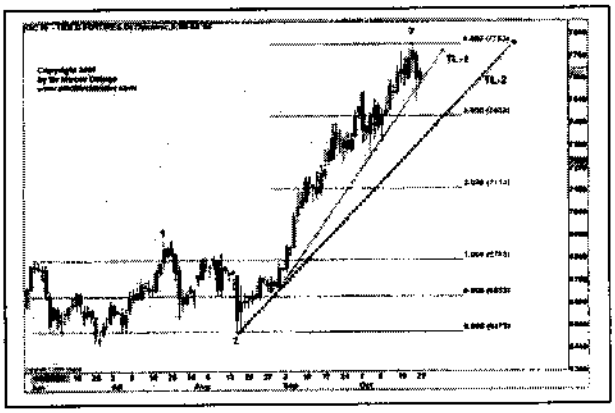
3.2 W3 End -Birthing Rectangle Extensions

Figure 115 – *Once the W3=1.146*W1 threshold has been attained we mention an impulsive pattern rather than a corrective pattern. Always be on the watch for rectangles' extensions, which can define the W3 termination level. Even if on the right-side chart the rectangle reached the 4th extension, be aware that the 7th extension is very common. Watch for a W5 termination at the 7th extension of the birthing rectangle.*



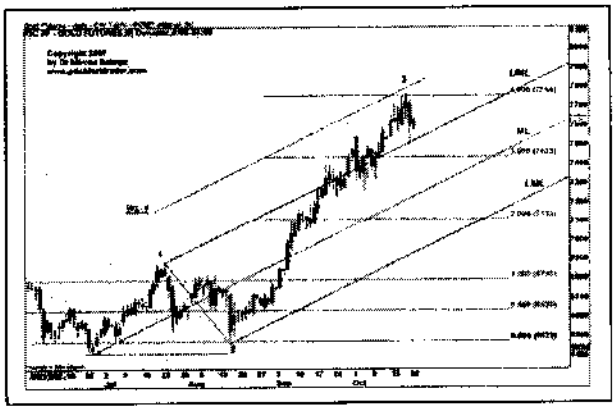
3.3 W3's Two Main Trend Lines

Figure 116 – *The breakout of the trend line (s) remains one of the most reliable tools and the simplest to quantify the* weight of evidence *which will pronounce the trend's termination. The degree of penetration will complete the* weight of evidence *and will protect the trader from a false move. Don't hesitate to draw 2 to 4 trend lines, if necessary, in order to optimally illustrate the contextual market flow. Don't forget - a trend line breakout can bounce back !*



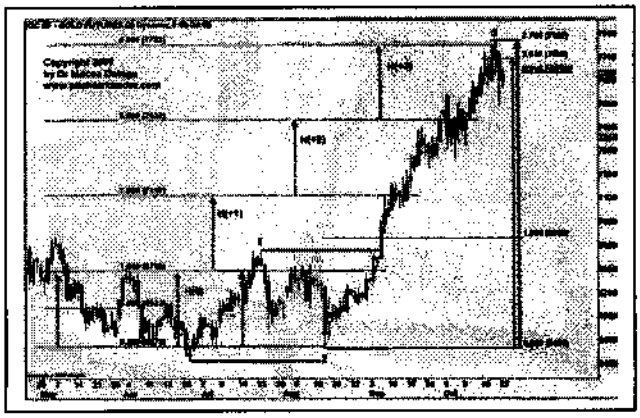
3.4 W3's Allocated Major Pitchfork

Figure 117 – *One of the most reliable tools of the* weight of evidence *is the multi-level confluence. Whenever a trend is developing immediately apply a major pitchfork. The association of the median line & its acolytes with other trading techniques, like the rectangles' extensions will create confluences, which are reliable to signal a change of trend, especially when they contain more than 3 levels.*



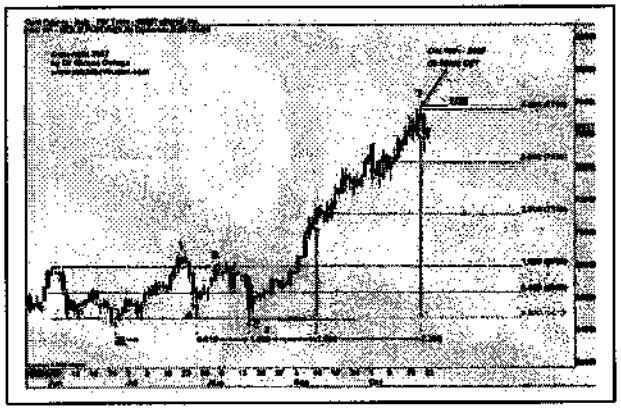
3.5 W3 Confluence - Price Fibs & Rectangles

Figure 118 – *The drawn price Fibonacci ratios rather then the calculated versions can have initially, the advantage of the visual effect. However, when the chart contains more than 3, this visual advantage rapidly disappears. As a routine, we draw a maximum of three price Fibonacci ratio trend lines. The rest of the Fibonacci ratio levels will be calculated as soon as the necessary conditions are present. An Excel Table will serve as guide for multiple Fibs levels.*



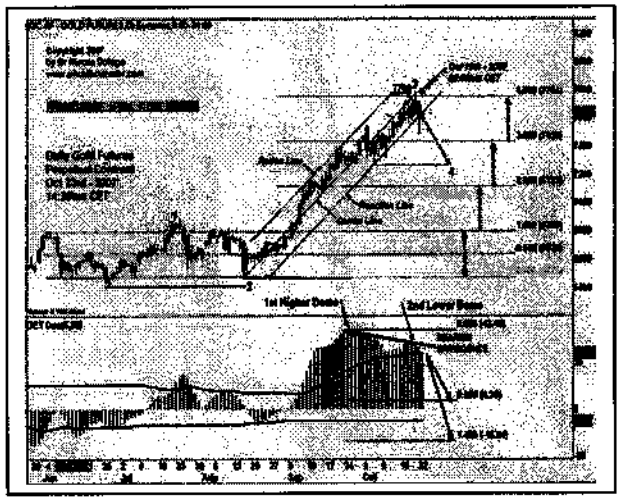
3.6 W3 Confluence – Time Fibs & Rectangles

Figure 119 – *The time Fibonacci ratio trend lines are certainly poorly used by most of the traders. It takes some time to excel in this task, but once trained, their advantage is far worth the learning efforts. They take a full importance when they are confirmed by other time- or price-related tools. The occurrence of a Cartesian location where the price meets the time provokes a high probability that the market flow will change the trend.*



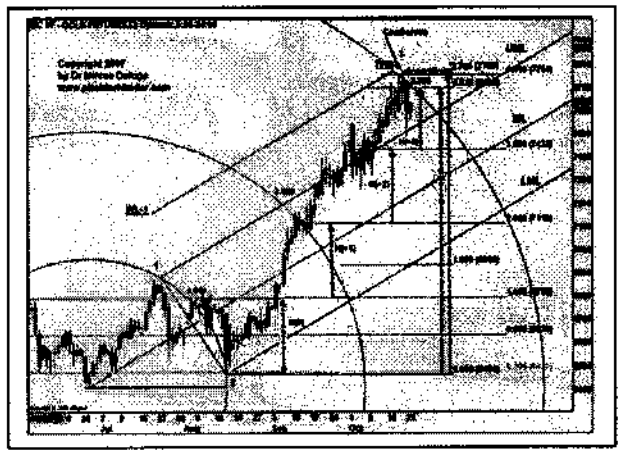
3.7 W3's Allocated Action/Reaction Set-Up

Figure 120 – *Whenever is impossible to draw a major pitchfork, the use of the Action/Reaction set-up turns out to be very efficient. Its purpose and interpretation are identical as those of the major pitchfork. An indicator confirmation will always be useful, even if most of them are lagging Try to interpret the A/R set-ups as the bigger brother of the regression channels. Any trespassing of the lower border can be a trade signal.*



3.8 W3 Confluence - Fibs Arcs - Price Fibs & Rectangles' Extensions

Figure 121 – *The use of Fibonacci arcs look not only very elegant on a chart but they also are very useful. The W3 of the chart on the right side of the page, has been halted by at least* six factors *that built a strong* multi-level confluence*: the 3.33 Fibonacci arcs, the 2.786 price Fibonacci ratio level, the 4th birthing rectangle's extension, the WL-1 warning line of the ascending major pitchfork, the bearish divergence of OSC(5,35) of Figure 120 and the 2.33 time Fibonacci ratio (refer to Figure 119).*



3.9 W3's Termination Level Calculated with Miner Fibonacci Ratios

The chart of *Figure 122* illustrates that the W3 is in progress but it didn't yet terminate. Will it be an extended W3? Which will be the highest high of W3? The answer at these two questions can be obtained by using W3 projected level technique, calculated with Miner or/and Fisher Fibonacci ratios.

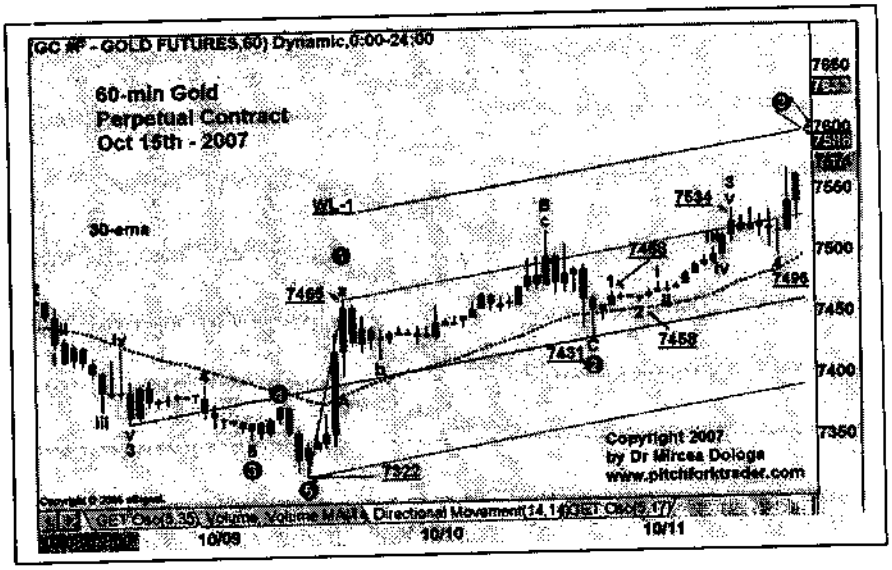


Figure 122 – ***On the above chart, the last bar of the current local market flow has a strong up-sloping momentum, hurrying-up to reach the probable final W3 destination at the intersection with the WL-1 warning line of the ascending pitchfork, around 7600 level. In order to pinpoint the most probable W3 cluster zone, we will firstly use Miner Fibonacci ratio, and then Fisher Fibonacci ratio calculations. The purpose of these calculations is to acquire the narrowest cluster zone!***

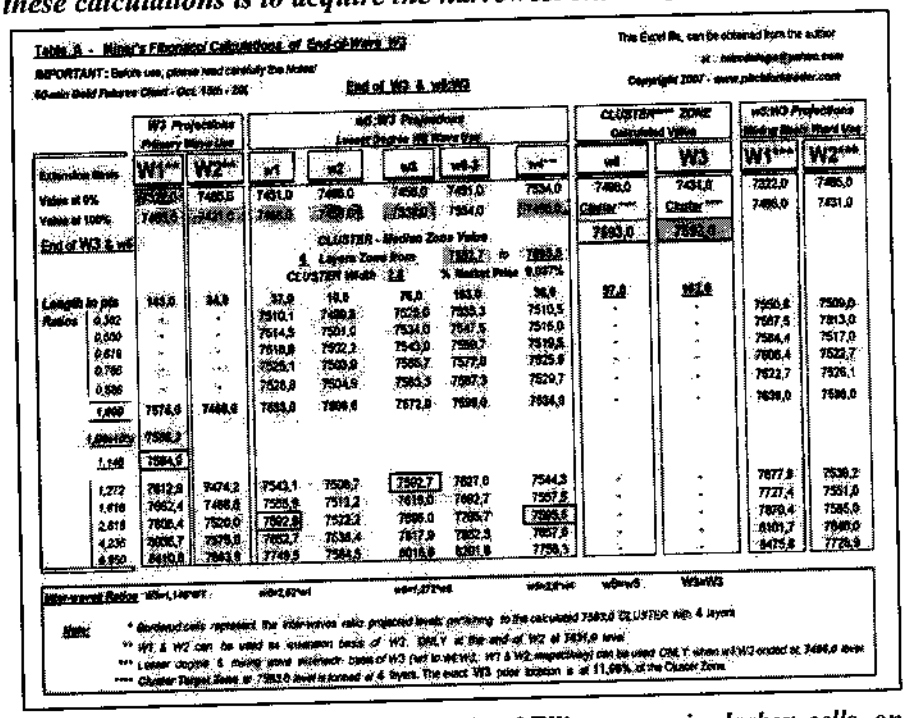


Figure 123 - ***The trader fills in, only the extremity levels of Elliott waves in darken cells, on the above Table A, with the exception of W3's cell. Once the cells are filled in, cluster's multiple levels will appear on the Excel sheet. Find visually the most adequate cluster zone ahead of the market and border its cells. When the market will reverse at a level located within the cluster zone, then fill in the W3's end level in its darken cell. The table is now ready for study! As accepted criteria of the cluster zone we have: its number of levels, its width and its % market price.***

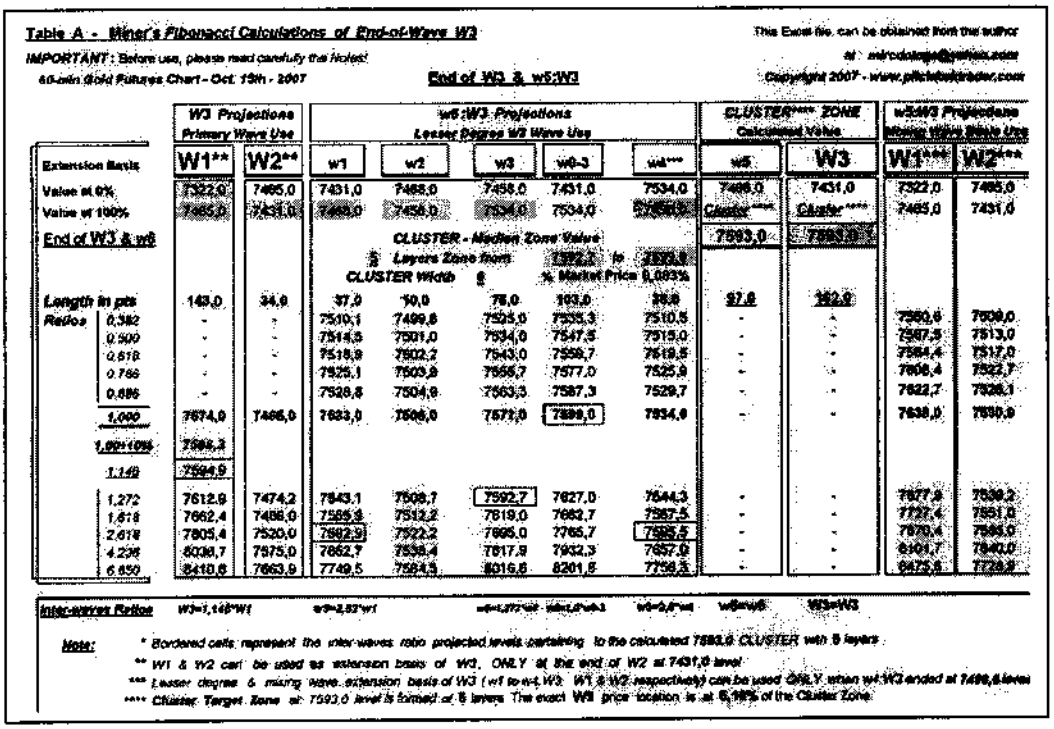


Figure 124 – *There are a few differences between the above Table A and the Table A of Figure 123: the number of cluster levels is now 5, instead of 4, its width is presently 6 points instead of 2.8 points, the % market price is now 0.083%, instead of the old 0.037% and the W3 location is in cluster zone's 5.18% lower level against 11.6% level.*

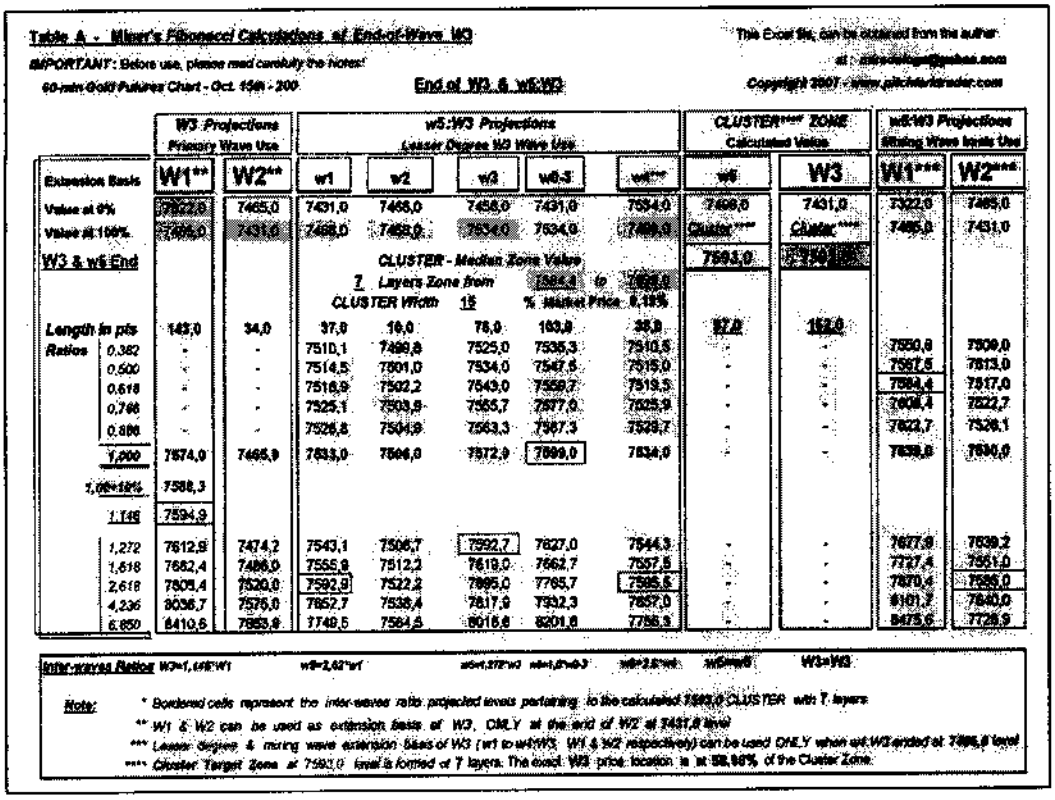


Figure 125 - *There are a few differences between the above Table A and the Table A of Figure 124: the number of cluster levels is now 7, instead of 5, its width is presently 15 points instead of 6 points, the % market price is now 0.19%, instead of the old 0.083% and the W3 location is in cluster zone's 58.98% middle level against 5.18% level.*

Figure 126 – *The* **Table B** *located on the right side of this page, synthesizes ONLY the Miner calculated W3 cluster levels obtained by the three prior tables (Fig. 123, 124 & 125). The projected W3 termination levels formed three clusters, each of them having its specific characteristics: the number of cluster levels, the cluser's upper & lower borders, the cluster width, the % of the current market price and the W3 location within the cluster zone.*
The **purpose of these calculations** *is to acquire the narrowest cluster zone having the maximum levels, thus the most probable W3 termination level.*
As **accepted trading decision criteria** *of the cluster zone we have: the number of levels, its width and its % of current market price.*
On the **restrictive side** *of the cluster zone we have imposed a minimum of 4 layers, a cluster size of maximum 15 points and a max. % of the highest market at 0.20%.*

Table B - W3 Cluster ZONE Synopsis of *Miner* Calculations
60-min Gold Futures chart — Oct 15th - 2007

1	Elliott Wave Move in Progress	w5:W3	w5:W3	w5:W3
2	Fibonacci Ratio Calculation Applied	Miner	Miner	Miner
3	Cluster's Number of Layers	4	5	7
4	Cluster Width (pts)	2,8	6	15
5	Cluster's % of Current Highest Market	0,037%	0,083%	0,190%
6	W3 Level Location within the Cluster Zone (0% is Lowest & 100% is Highest)	11,66%	5,18%	59,00%
7	Dollar Value of W3 Level Location within the Cluster Zone ($0 to maximum $535,35)	$11,65	$11,09	$315,86
8	Most Frequent Fibonacci Ratio	2,618	2,618	2,618
Note:	Maximum % of Current Market allowed	0,200%	0,200%	0,200%
	Maximum Cluster Width allowed	15	15	15
	Maximum Dollar Value of the Cluster Zone (1 Dax market point value is 25 euros - as of 10/18/07 is worth $35,69)	$99,93	$214,14	$535,35
	Minimum number of layers allowed	4	4	4

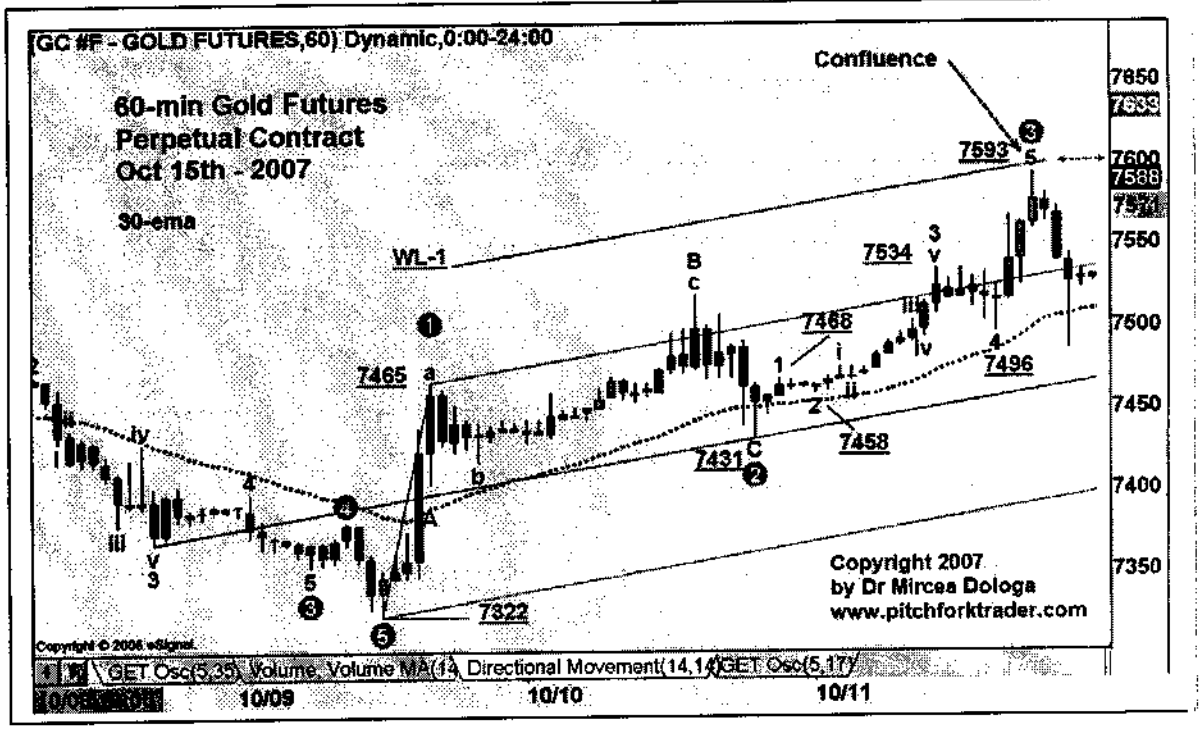


Figure 127 – *A closer observation of the above 60-min German Dax 30 chart reveals that the market flow has reached the W3 termination at 7593 level and then it quickly started to retrace. This event occurred at a multiple level confluence formed by the WL-1 warning line, the whole hundred number at 7600 level and the entire panoply of the Miner Fibonacci ratio extensions (refer to the calculated tables of Figures 123, 124 & 125). It's important to mention two criteria of this study:*
- *The Miner Fibonacci calculations used not only the primary waves (W1 & W2) but also the corresponding lesser degree waves of W3 (w1, w2, w3, w0-3 & w4).*
- *The Miner Fibonacci calculations might not suffice, most of the time, to amply project the entire array of the probable cluster levels. Then, we will also apply the Fisher Fibonacci ratios (refer to tables in Fig. 128 & 129).*

3.10 W3 Termination Level Calculated with Miner and Fisher Fibonacci Ratios

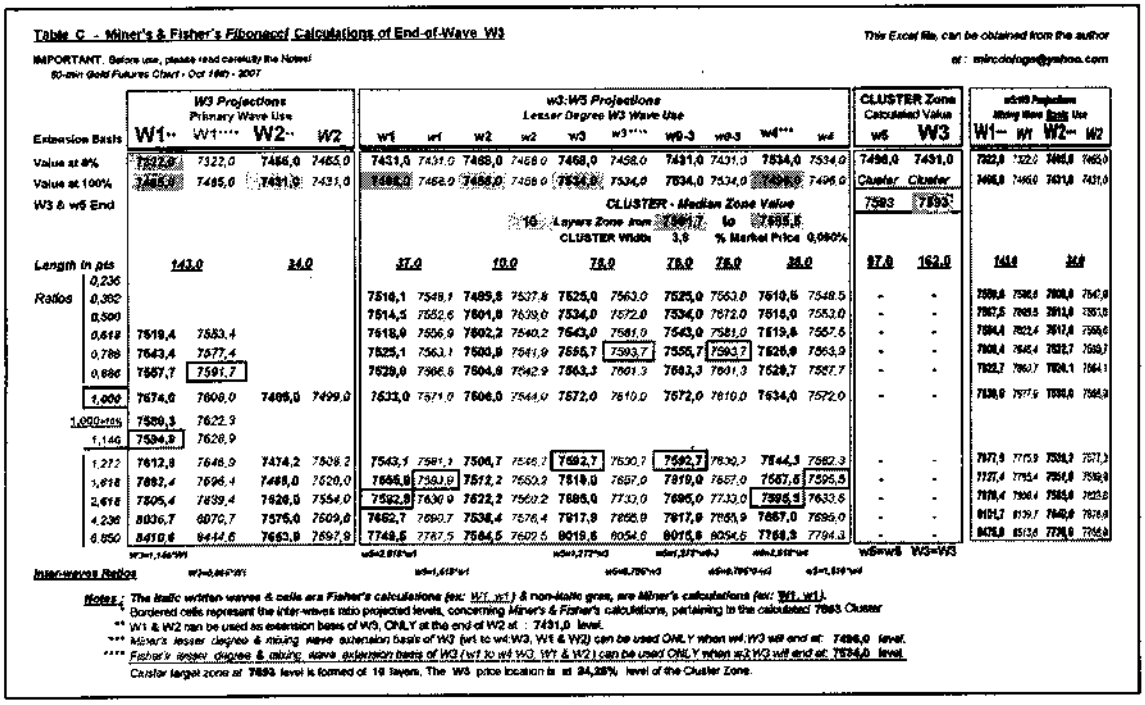


Table C - Miner's & Fisher's *Fibonacci* Calculations of End-of-Wave W3

This Excel file, can be obtained from the author

IMPORTANT. Before use, please read carefully the Notes!

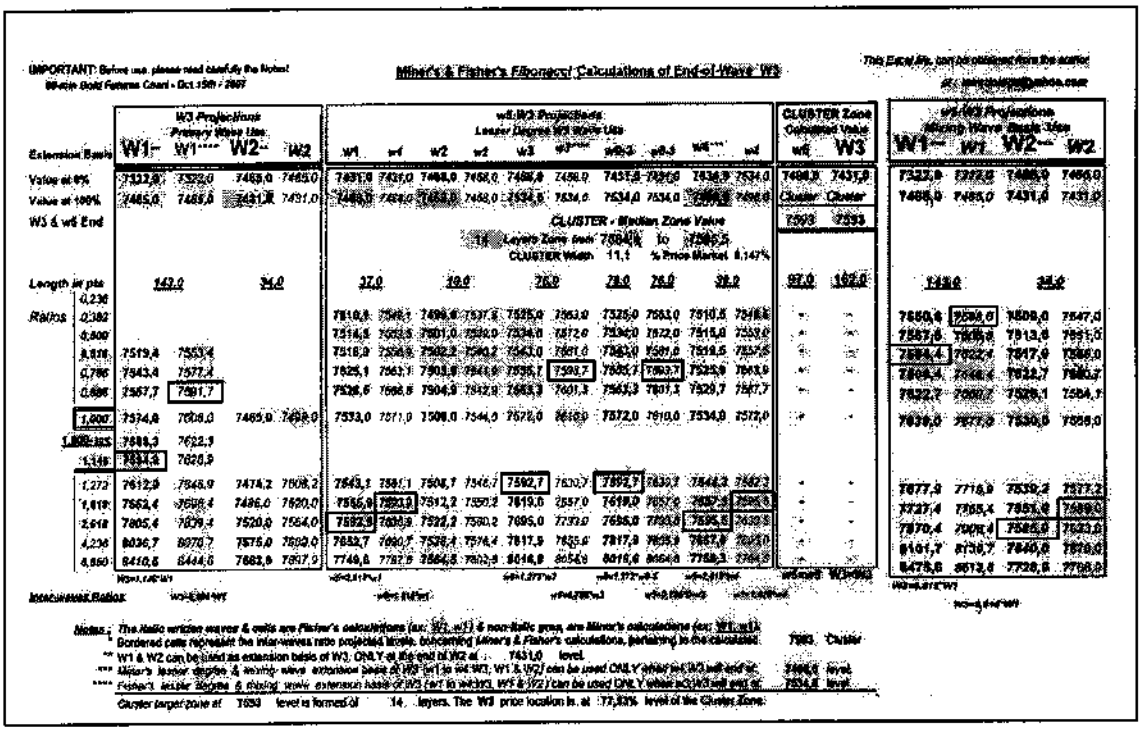
60-min Gold Futures Chart - Oct 19th - 2007

at : mircdologa@yahoo.com

Extension Basis	W3 Projections Primary Wave Use W1**	W1***	W2**	W2	w3:W5 Projections Lesser Degree W3 Wave Use w1	w1	w2	w2	w3	w3****	w3-3	w3-3	w4***	w4	CLUSTER Zone Calculated Value w5	W3	w5:W5 Projections Minor Wave Basic Use W1**	W1	W2**	W2
Value at 0%	7512,0	7522,0	7486,0	7465,0	7431,0	7431,0	7468,0	7468,0	7468,0	7458,0	7431,0	7431,0	7534,0	7534,0	7496,0	7431,0	7522,0	7522,0	7486,0	7465,0
Value at 100%	7465,0	7485,0	7431,0	7431,0	7496,0	7462,0	7468,0	7468,0	7534,0	7534,0	7534,0	7534,0	7496,0	7496,0	Cluster	Cluster	7496,0	7465,0	7431,0	7431,0
W3 & w5 End															7593	7593				
					CLUSTER - Median Zone Value															
					10 Layers Zone from 7591,7 to 7595,5															
					CLUSTER Width 3,8 % Market Price 0,050%															
Length in pts	143,0		34,0		37,0		10,0		76,0		76,0		76,0	38,0	97,0	162,0	143,0		34,0	
Ratios 0,236																				
0,382					7516,1	7548,1	7485,8	7537,8	7525,0	7563,0	7525,0	7563,0	7610,5	7548,5	-	-	7589,6	7586,6	7508,8	7540,8
0,500					7514,5	7552,6	7501,8	7539,0	7534,0	7572,0	7534,0	7572,0	7615,0	7553,0	-	-	7567,5	7585,5	7513,8	7551,8
0,618	7519,4	7553,4			7518,9	7556,9	7502,2	7540,2	7543,0	7581,0	7543,0	7581,0	7619,5	7557,5	-	-	7584,4	7522,4	7517,8	7556,0
0,786	7543,4	7577,4			7525,1	7563,1	7503,8	7541,9	7555,7	7593,7	7555,7	7593,7	7625,9	7563,9	-	-	7608,4	7546,4	7532,7	7569,7
0,886	7557,7	7591,7			7529,0	7566,9	7504,9	7542,9	7563,3	7601,3	7563,3	7601,3	7629,7	7567,7	-	-	7622,7	7560,7	7604,1	7564,1
1,000	7574,0	7608,0	7485,0	7499,0	7533,0	7571,0	7506,0	7544,0	7572,0	7610,0	7572,0	7610,0	7634,0	7572,0	-	-	7638,0	7577,0	7539,0	7558,0
1,000+18%	7589,3	7622,3																		
1,146	7594,9	7628,9																		
1,272	7612,9	7646,9	7474,2	7508,2	7543,1	7581,1	7506,7	7544,7	7592,7	7630,7	7592,7	7630,7	7644,3	7582,3	-	-	7677,9	7715,9	7539,2	7577,2
1,618	7662,4	7696,4	7486,0	7520,0	7585,9	7623,9	7512,2	7550,2	7619,0	7657,0	7619,0	7657,0	7657,5	7595,5	-	-	7727,4	7765,4	7551,0	7589,0
2,618	7805,4	7839,4	7520,0	7554,0	7592,9	7630,9	7522,2	7560,2	7695,0	7733,0	7695,0	7733,0	7695,5	7633,5	-	-	7870,4	7908,4	7589,0	7627,0
4,236	8036,7	8070,7	7575,0	7609,0	7652,7	7690,7	7538,4	7576,4	7917,9	7955,9	7917,9	7955,9	7957,0	7895,0	-	-	8101,7	8139,7	7640,0	7678,0
6,850	8410,6	8444,6	7663,9	7697,9	7748,5	7787,5	7584,5	7622,5	8019,6	8058,6	8019,6	8058,6	7768,3	7794,3			8475,8	8513,8	7726,5	7764,5
	w3=1,146*W1				w4=2,618*w1				w5=1,272*w3		w5=1,272*w3		w5=1,618*w4		w5=w5	W5=W3				
Inter-waves Ratios	W2=0,618*W1				w3=1,618*w1				w4=0,786*w3		w4=0,786*w3		w5=1,618*w4							

Notes : The *italic written waves & cells are Fisher's calculations (ex: W1, w1) & non-italic ones, are Miner's calculations (ex: W1, w1).*
Bordered cells represent the inter-waves ratio projected levels, concerning Miner's & Fisher's calculations, pertaining to the calculated 7593 Cluster
** W1 & W2 can be used as extension bases of W3, ONLY at the end of W2 at : 7431,0 level.
*** Miner's lesser degree & missing wave extension basis of W3 (wt to w4:W3, W1 & W2) can be used ONLY when w4:W3 will end at: 7496,0 level.
**** Fisher's lesser degree & missing wave extension basis of W3 (w1 to w4:W3, W1 & W2) can be used ONLY when w3:W3 will end at: 7534,0 level.
Cluster target zone at 7593 level is formed of 10 layers. The W3 price location is at 34,25% level of the Cluster Zone.

Figure 128 - ***The trader fills in only the extremity levels of Elliott waves in darken cells, on the above Table C, with the exception of W3's cell. Once the cells are filled in, the cluster's multiple levels will appear on Excel sheet. Find visually the most adequate cluster zone ahead of the market & border its cells. When the market will reverse at a level located within the cluster zone, fill in the W3's end level in its darken cell. The table is now ready for study! As accepted criteria of the cluster zone we have: its number of levels, its width and its % market price.***



Miner's & Fisher's *Fibonacci* Calculations of End-of-Wave W3

This Excel file, can be obtained from the author

IMPORTANT: Before use, please read carefully the Notes!

60-min Gold Futures Chart - Oct 19th / 2007

at : mircdologa@yahoo.com

Extension Basis	W3 Projections Primary Wave Use W1-	W1****	W2-	W2	w1:W3 Projections Lesser Degree W3 Wave Use w1	w1	w2	w2	w3	w3****	w3-3	w3-3	w4***	w4	CLUSTER Zone Calculated Value w5	W3	w5:W5 Projections Minor Wave Basic Use W1-	W1	W2-	W2
Value at 0%	7512,0	7522,0	7486,0	7465,0	7431,0	7431,0	7468,0	7468,0	7468,0	7458,0	7431,0	7431,0	7534,0	7534,0	7496,0	7431,0	7522,0	7522,0	7486,0	7465,0
Value at 100%	7465,0	7485,0	7431,0	7431,0	7496,0	7462,0	7468,0	7468,0	7534,0	7534,0	7534,0	7534,0	7496,0	7496,0	Cluster	Cluster	7496,0	7465,0	7431,0	7431,0
W3 & w5 End															7593	7593				
					CLUSTER - Median Zone Value															
					14 Layers Zone from 7584,4 to 7595,5															
					CLUSTER Width 11,1 % Price Market 0,147%															
Length in pts	143,0		34,0		37,0		10,0		76,0		76,0		76,0	38,0	97,0	162,0	143,0		34,0	
Ratios 0,236																				
0,382					7516,1	7548,1	7485,8	7537,8	7525,0	7563,0	7525,0	7563,0	7610,5	7548,5	-	-	7589,6	7586,6	7508,8	7540,8
0,500					7514,5	7552,6	7501,8	7539,0	7534,0	7572,0	7534,0	7572,0	7615,0	7553,0	-	-	7567,5	7585,5	7513,8	7551,8
0,618	7519,4	7553,4			7518,9	7556,9	7502,2	7540,2	7543,0	7581,0	7543,0	7581,0	7619,5	7557,5	-	-	7584,4	7522,4	7517,8	7556,0
0,786	7543,4	7577,4			7525,1	7563,1	7503,8	7541,9	7555,7	7593,7	7555,7	7593,7	7625,9	7563,9	-	-	7608,4	7546,4	7532,7	7569,7
0,886	7557,7	7591,7			7529,0	7566,9	7504,9	7542,9	7563,3	7601,3	7563,3	7601,3	7629,7	7567,7	-	-	7622,7	7560,7	7604,1	7564,1
1,000	7574,0	7608,0	7485,0	7499,0	7533,0	7571,0	7506,0	7544,0	7572,0	7610,0	7572,0	7610,0	7634,0	7572,0	-	-	7638,0	7577,0	7539,0	7558,0
1,000+18%	7589,3	7622,3																		
1,146	7594,9	7628,9																		
1,272	7612,9	7646,9	7474,2	7508,2	7543,1	7581,1	7506,7	7544,7	7592,7	7630,7	7592,7	7630,7	7644,3	7582,3	-	-	7677,9	7715,9	7539,2	7577,2
1,618	7662,4	7696,4	7486,0	7520,0	7585,9	7623,9	7512,2	7550,2	7619,0	7657,0	7619,0	7657,0	7657,5	7595,5	-	-	7727,4	7765,4	7551,0	7589,0
2,618	7805,4	7839,4	7520,0	7554,0	7592,9	7630,9	7522,2	7560,2	7695,0	7733,0	7695,0	7733,0	7695,5	7633,5	-	-	7870,4	7908,4	7589,0	7627,0
4,236	8036,7	8070,7	7575,0	7609,0	7652,7	7690,7	7538,4	7576,4	7917,9	7955,9	7917,9	7955,9	7957,0	7895,0	-	-	8101,7	8139,7	7640,0	7678,0
6,850	8410,6	8444,6	7663,9	7697,9	7748,5	7787,5	7584,5	7622,5	8019,6	8058,6	8019,6	8058,6	7768,3	7794,3			8475,8	8513,8	7726,5	7764,5
	w3=1,146*W1				w4=2,618*w1				w5=1,272*w3		w5=1,272*w3		w5=1,618*w4		w5=w5	W5=W3				
Inter-waves Ratios	W2=0,618*W1				w3=1,618*w1				w4=0,786*w3		w4=0,786*w3		w5=1,618*w4							

Notes : The *italic written waves & cells are Fisher's calculations (ex: W1, w1) & non-italic ones, are Miner's calculations (ex: W1, w1).*
Bordered cells represent the inter-waves ratio projected levels, concerning Miner's & Fisher's calculations, pertaining to the calculated 7593 Cluster
** W1 & W2 can be used as extension bases of W3, ONLY at the end of W2 at : 7431,0 level.
*** Miner's lesser degree & missing wave extension basis of W3 (wt to w4:W3, W1 & W2) can be used ONLY when w4:W3 will end at: 7496,0 level.
**** Fisher's lesser degree & missing wave extension basis of W3 (w1 to w4:W3, W1 & W2) can be used ONLY when w3:W3 will end at: 7534,0 level.
Cluster target zone at 7593 level is formed of 14 layers. The W3 price location is at 77,93% level of the Cluster Zone.

Figure 129 - ***There are a few differences between the above Table C and the Table C of Figure 128: the number of cluster levels is now 14, instead of 10, its width is presently 11.1 points instead of 3.8 points, the % market price is now 0.147%, instead of the old 0.050% and W3 location is in cluster zone's 77.53% higher portion against 34.25% level, in its lower third.***

Figure 130 – *The* **Table D** *located on the right side of this page, synthesizes the Miner & Fisher calculated W3 cluster levels obtained by the two prior tables (Figures 128 & 129). The projected W3 termination levels formed two clusters, each of them having its specific characteristics: the number of cluster levels, the cluser's upper & lower borders, the cluster width, the % of the current market price and the W3 location within the cluster zone.*
The **purpose of these calculations** *is to acquire the narrowest cluster zone having the maximum levels, thus the most probable W3 termination level.*
As **accepted trading decision criteria** *of the cluster zone we have: the number of levels, its width and its % of current market price.*
On the **restrictive side** *of the cluster zone we have imposed a minimum of 4 layers, a cluster size of maximum 15 points and a maximum % of the current higest market price at 0.20%.*

Table D - W3 Cluster ZONE Synopsis of *Miner & Fisher* Calculations
60-min Gold Futures chart — Oct 15th - 2007

1	*Elliott Wave Move in Progress*	w5:W3	w5:W3
2	*Fibonacci Ratio Calculation Applied*	Miner & Fisher	Miner & Fisher
3	*Cluster's Number of Layers*	10	14
	(Quantity of Each)	*Miner 5 & Fisher 5*	*Miner 5 & Fisher 5*
4	*Cluster Width (pts)*	3,8	11,1
5	*Cluster's % of Current Highest Market*	0,050%	0,147%
6	*W3 Level Location within the Cluster Zone (0% is Lowest & 100% is Highest)*	34,25%	77,53%
7	*Dollar Value of W3 Level Location within the Cluster Zone ($0 to maximum $535,35)*	$46,45	$307,14
8	*Most Frequent Fibonacci Ratio*	2,618 1,272 0,786	2,618 1,272 0,786
Note:	*Maximum % of Current Market allowed*	0,200%	0,200%
	Maximum Cluster Width allowed	15	15
	Maximum Dollar Value of the Cluster Zone (1 Dax market point value is 25 euros - as of 10/18/07 is worth $35,69)	$135,62	$396,16
	Minimum number of layers allowed	4	4

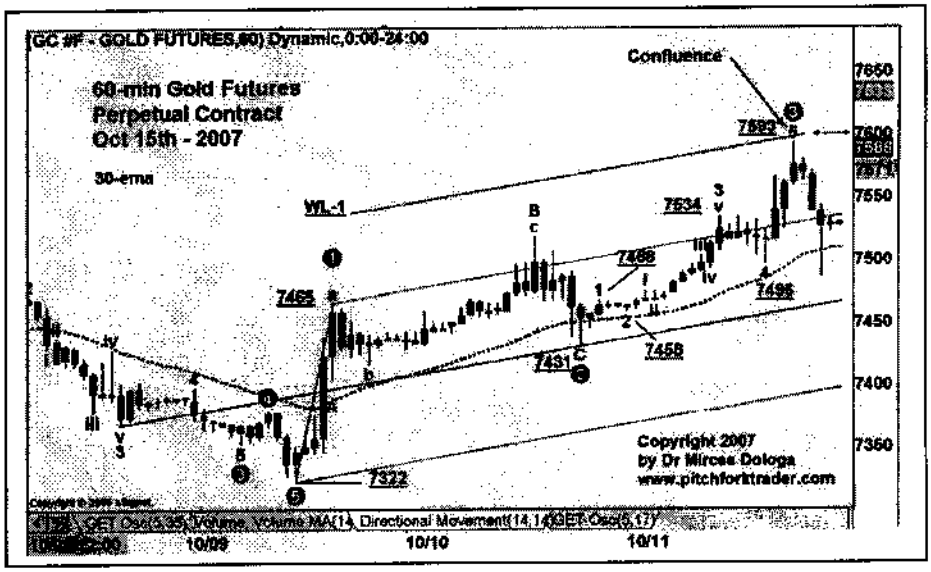


Figure 131 – *A closer observation of the above 60-min German Dax 30 chart reveals that the market flow has reached the W3 termination at 7593 level and then it quickly started to retrace. This event occurred at a multiple level confluence formed by the WL-1 warning line, the whole hundred number at 7600 level and the entire panoply of the Miner & Fisher Fibonacci ratio extensions (refer to the calculated tables of Figures 128 & 129). It's important to mention a few criteria of this study:*
- The above Miner & Fisher Fibonacci calculations used not only the primary waves (W1 & W2) but also the corresponding lesser degree waves of W3 (w1, w2, w3, w0-3 & w4).
- The above Miner & Fisher Fibonacci calculations amply suffice because they have obtained a maximum of 14-layer cluster zone, therefore a high probability reversal level. They all obey the restrictive conditions: a min of 4 layers, a cluster size of max 15 points and a max % of the current market - 0.20%.
- The Table C of Figure 128 is the most optimal cluster zone choice obtained so far: **10 layers** *above the imposed 4,* **0.050%** *of market price, instead of the imposed 0.20% & a cluster width of only* **3.8** *points.*

3.11 How Low is the Next High & How High is the Next High?

Once we have obtained the most optimal cluster zone having only a 3.8-point width, a natural question comes to the trader's mind. Can I use these tables to project an even higher high, even if this could be the termination of the extended W3, the W5 or one of the sub-waves' high? Or can I calculate, in the same way, the next lower high? Well... Let's us try and carefully observe the outcome, in the tables below!

Figure 132 – *The* **Table E** *located on the right side of this page, has used the same Miner Fibonacci technique, with the same set of Elliott waves and sub-waves, as in the previous tables. The 7576 cluster zone level, a* **lower high level,** *was thus obtained due to the halting power of the upper median line - UML (refer to the chart of Figure 134).*

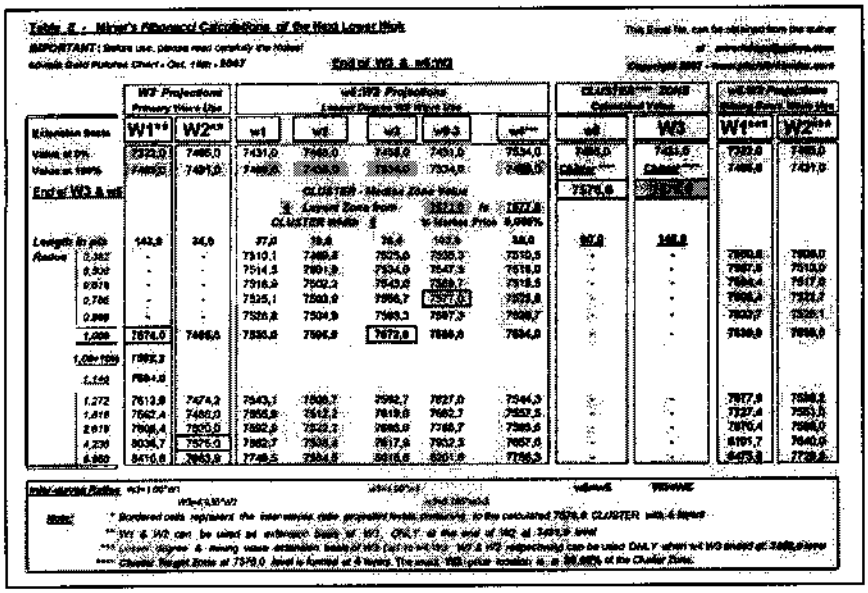


Figure 133 – *The* **Table E** *located on the right side of this page, has used the same Miner Fibonacci technique, with the same set of Elliott waves and sub-waves, as in the previous tables. The 7655 cluster zone level was thus obtained, which is the next* **highest high** *level (refer to the chart of Figure 134). The impulsive pattern end-up, signaled by the W5 termination was due to the halting power of the WL-1 warning line at 7655 level.*

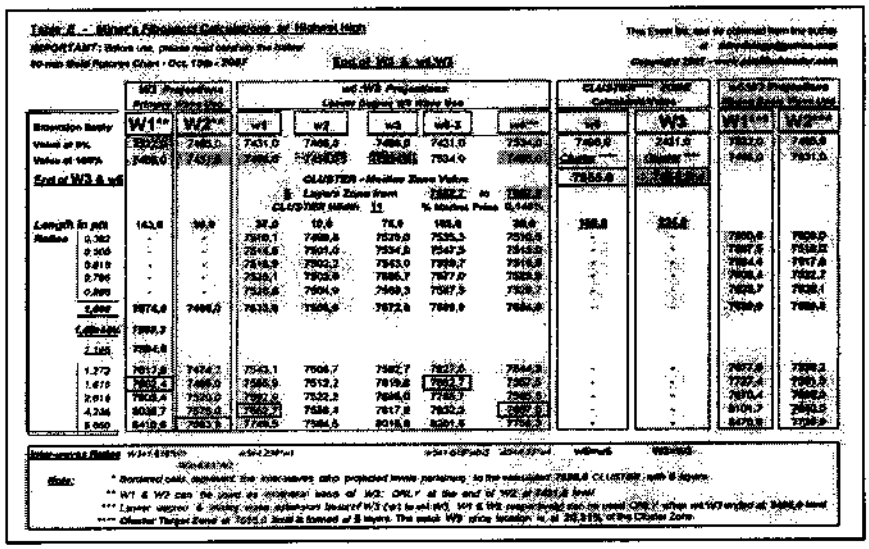
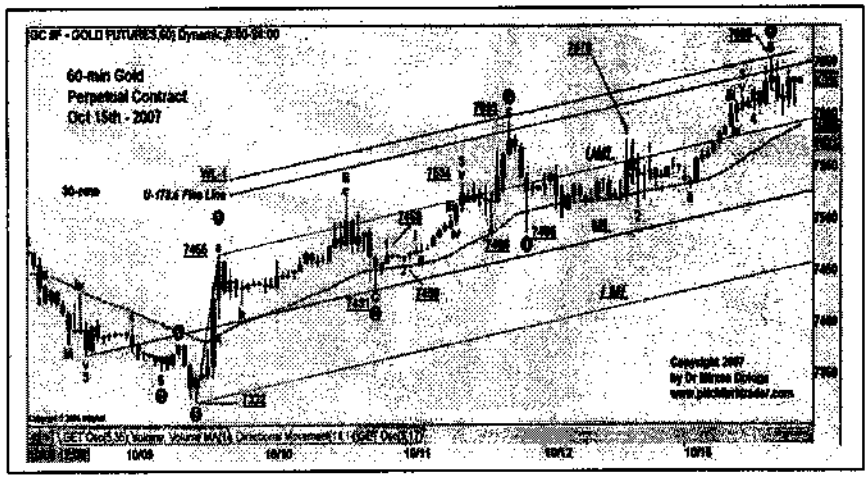


Figure 134 – *Once the W3 termination at 7593 level has been done, the trader can continue his calculations using the Miner Fibonacci ratios and calculate the next* **lowest low** *at 7576 level (***UML's responsibility***) and also the termination of the impulsive pattern signaled by the W5 end at 7655 level (***WL-1's responsibility & *that of* U-178.6% Fibs Line***).*



4 W5 Termination Level

4.1 W5's Termination Level Calculated with Miner Fibonacci Ratios

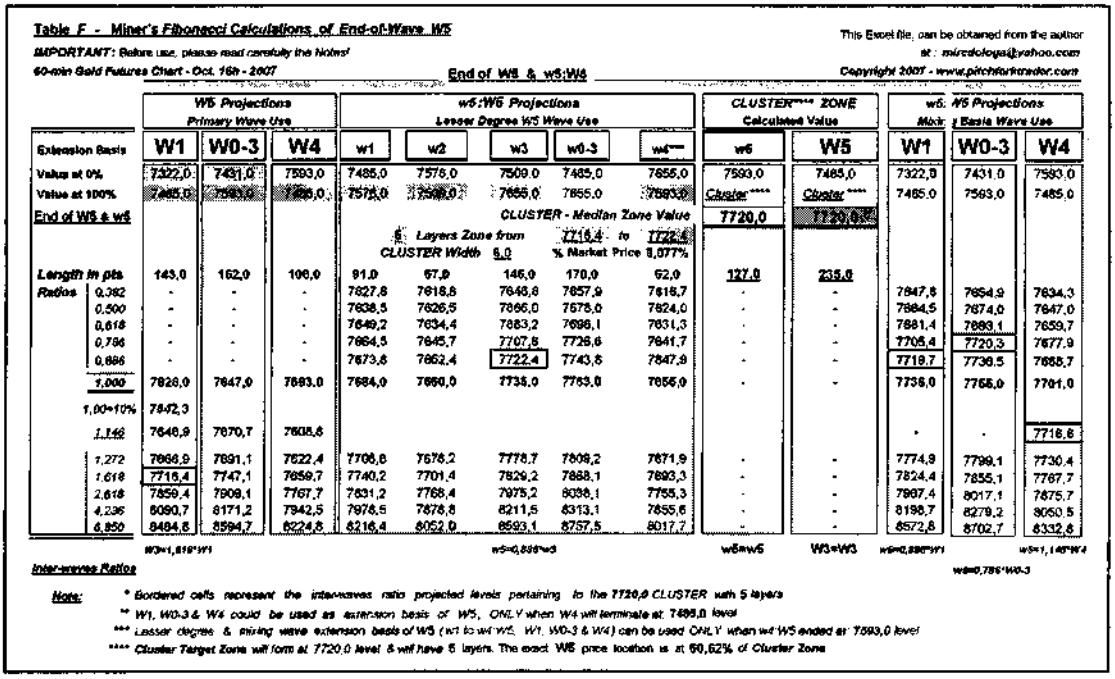


Table F - Miner's Fibonacci Calculations of End-of-Wave W5

This Excel file, can be obtained from the author at : mircdologa@yahoo.com

IMPORTANT: Before use, please read carefully the Notes!

60-min Gold Futures Chart - Oct. 16th - 2007

End of W5 & w5:W5

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	W5 Projections Primary Wave Use			w5:W5 Projections Lesser Degree W5 Wave Use					CLUSTER*** ZONE Calculated Value		w5: W5 Projections Minor Basis Wave Use		
Extension Basis	W1	W0-3	W4	w1	w2	w3	w0-3	w4**	w5	W5	W1	W0-3	W4
Value at 0%	7322,0	7431,0	7593,0	7485,0	7575,0	7509,0	7485,0	7655,0	7593,0	7485,0	7322,0	7431,0	7593,0
Value at 100%	7485,0	7593,0	7485,0	7575,0	7509,0	7655,0	7655,0	7593,0	Cluster****	Cluster****	7485,0	7593,0	7485,0
End of W5 & w5									7720,0	7720,0			
									CLUSTER - Median Zone Value				
						5 Layers Zone from			7716,4 to	7722,4			
						CLUSTER Width			6,0 % Market Price	0,077%			
Length in pts	143,0	162,0	106,0	91,0	67,0	146,0	170,0	62,0	127,0	235,0			
Ratios 0,382	-	-	-	7627,8	7618,8	7648,8	7657,9	7618,7	-	-	7647,8	7654,9	7634,3
0,500	-	-	-	7638,5	7626,5	7666,0	7675,0	7624,0	-	-	7664,5	7674,0	7647,0
0,618	-	-	-	7649,2	7634,4	7683,2	7696,1	7631,3	-	-	7681,4	7693,1	7659,7
0,786	-	-	-	7664,5	7645,7	7707,8	7726,6	7641,7	-	-	7705,4	7720,3	7677,9
0,886	-	-	-	7673,8	7662,4	7722,4	7743,8	7647,9	-	-	7719,7	7736,5	7688,7
1,000	7828,0	7647,0	7593,0	7684,0	7660,0	7736,0	7763,0	7656,0	-	-	7736,0	7756,0	7701,0
1,00+10%	7842,3												
1,146	7648,9	7670,7	7608,6										7716,6
1,272	7668,9	7691,1	7622,4	7706,8	7678,2	7778,7	7809,2	7671,9	-	-	7774,9	7799,1	7730,4
1,618	7716,4	7747,1	7659,7	7740,2	7701,4	7829,2	7868,1	7693,3	-	-	7824,4	7855,1	7767,7
2,618	7859,4	7908,1	7767,7	7831,2	7768,4	7975,2	8036,1	7755,3	-	-	7967,4	8017,1	7875,7
4,236	8090,7	8171,2	7942,5	7978,5	7878,8	8211,5	8313,1	7855,6	-	-	8198,7	8279,2	8050,5
6,850	8484,8	8594,7	8224,8	8216,4	8052,9	8593,1	8757,5	8017,7	-	-	8572,8	8702,7	8332,8
	W3=1,618*W1					w5=0,886*w3			w5=W5	W5=W5	w5=0,886*W1		w5=1,146*W4
Inter-waves Ratios													w5=0,786*W0-3

Note:
* Bordered cells represent the inter-waves ratio projected levels pertaining to the 7720,0 CLUSTER with 5 layers
** W1, W0-3 & W4 could be used as extension basis of W5, ONLY when W4 will terminate at 7485,0 level
*** Lesser degree & mixing wave extension basis of W5 (w1 to w4 W5, W1, W0-3 & W4) can be used ONLY when w4 W5 ended at 7593,0 level
**** Cluster Target Zone will form at 7720,0 level & will have 5 layers. The exact W5 price location is at 60,62% of Cluster Zone

Figure 135 - ***The trader fills in only the extremity levels (0% & 100%) of Elliott waves in darken cells, on the above Table F, with the exception of W5's cell. Once the cells are filled in, the cluster's multiple levels will appear on the Excel sheet. You should find visually the most adequate cluster zone ahead of the market and then border its cells. When the market will reverse at a level located within the cluster zone, then fill in the W5's end level value in its darken cell. The table is now ready for study!***
As accepted criteria of the cluster zone we have: the number of levels, its width and its % market price. An attentive observation of the above Table F will signal that with regard to the preceding tables, the number of waves available for Fibonacci calculations has been increased with four additional waves: W0-3, W4, w0-3 & w4.

Figure 136 – *The* Table G *located on the right side of this page, synthesizes ONLY the Miner calculated W5 cluster levels obtained by the prior table (Figures 135). The projected W5 termination levels formed a cluster, having its specific characteristics: the number of levels, the upper & lower borders, the width, the % of the current market price and the W5 location within the cluster zone.*
The* purpose of these calculations *is to acquire the narrowest cluster zone having the maximum levels, thus the most probable W5 termination level.
As* accepted trading decision criteria *of the cluster zone we have: the number of levels, its width and its % of current market price.
On the* restrictive side *of the cluster zone we have imposed a minimum of 4 layers, a cluster size of maximum 15 pts and a maximum % of the current highest market price at 0.20%.

Table G - W5 Cluster ZONE Synopsis of *Miner* Calculations
60-min Gold Futures chart — Oct 16th - 2007

1	*Elliott Wave Move in Progress*	w5:W5
2	*Fibonacci Ratio Calculation Applied*	Miner
3	*Cluster's Number of Layers*	5
4	*Cluster Width (pts)*	6
5	*Cluster's % of Current Highest Market*	0,077%
6	*W3 Level Location within the Cluster Zone (0% is Lowest & 100% is Highest)*	60,62%
7	*Dollar Value of W3 Level Location within the Cluster Zone ($0 to maximum $535,35)*	$129,81
8	*Most Frequent Fibonacci Ratio*	0,886

Note:	*Maximum % of Current Market allowed*	0,200%
	Maximum Cluster Width allowed	15
	Maximum Dollar Value of the Cluster Zone (1 Dax market point value is 25 euros - as of 10/18/07 is worth $35,69)	$214,14
	Minimum number of layers allowed	4

4.2 W5's Termination Level Calculated with Miner & Fisher Fibonacci Ratios

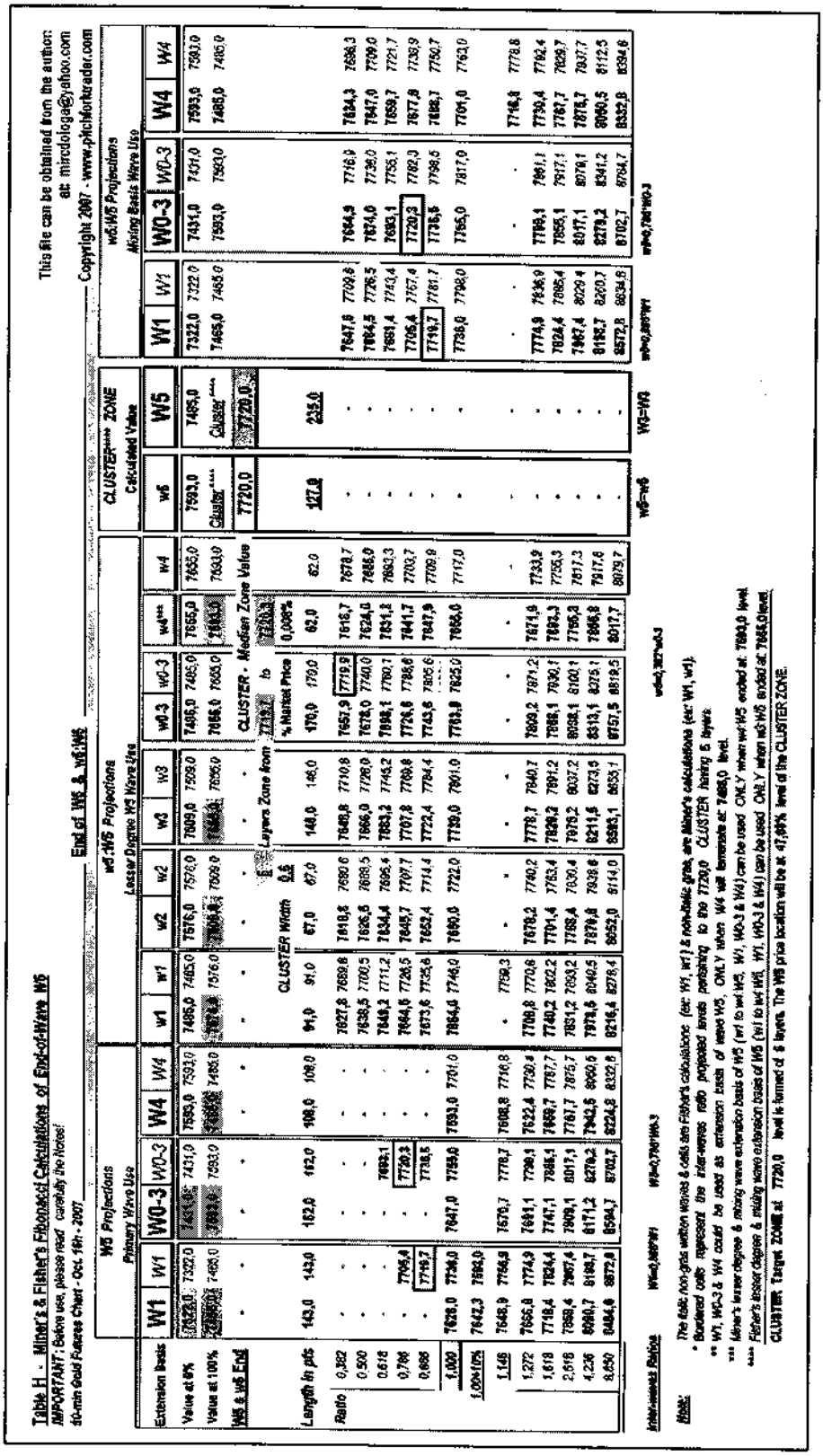

Figure 137 - *The trader fills in only the extremity levels (0% & 100%) of Elliott waves in darken cells, on the underneath Table H, with the exception of W5's cell. Once the cells filled in, the cluster's multiple levels will appear on the Excel sheet. You should find visually the most adequate cluster zone ahead of the market and then border its cells. When the market will reverse at a level located within the cluster zone, then fill in the W5's end level in its darken cell. The table is now ready for study!*

As accepted criteria of the cluster zone we have: the number of levels, its width and its % market price. An attentive observation of the above Table H will signal that with regard to the preceding W3's tables, the number of waves available for Fibonacci calculations has been increased with four additional waves: W0-3, W4, w0-3 & w4.

Figure 138 – *There are a few differences between the underneath Table H and the Table H of Figure 137: the number of levels forming the cluster zone has been doubled and is now 10, its width is presently 5.6 points instead of 0.6 points, the % market price is now 0.072%, instead of the old 0.008% & W5 location is in cluster zone's 57.84% mid level against 47.63% level.*

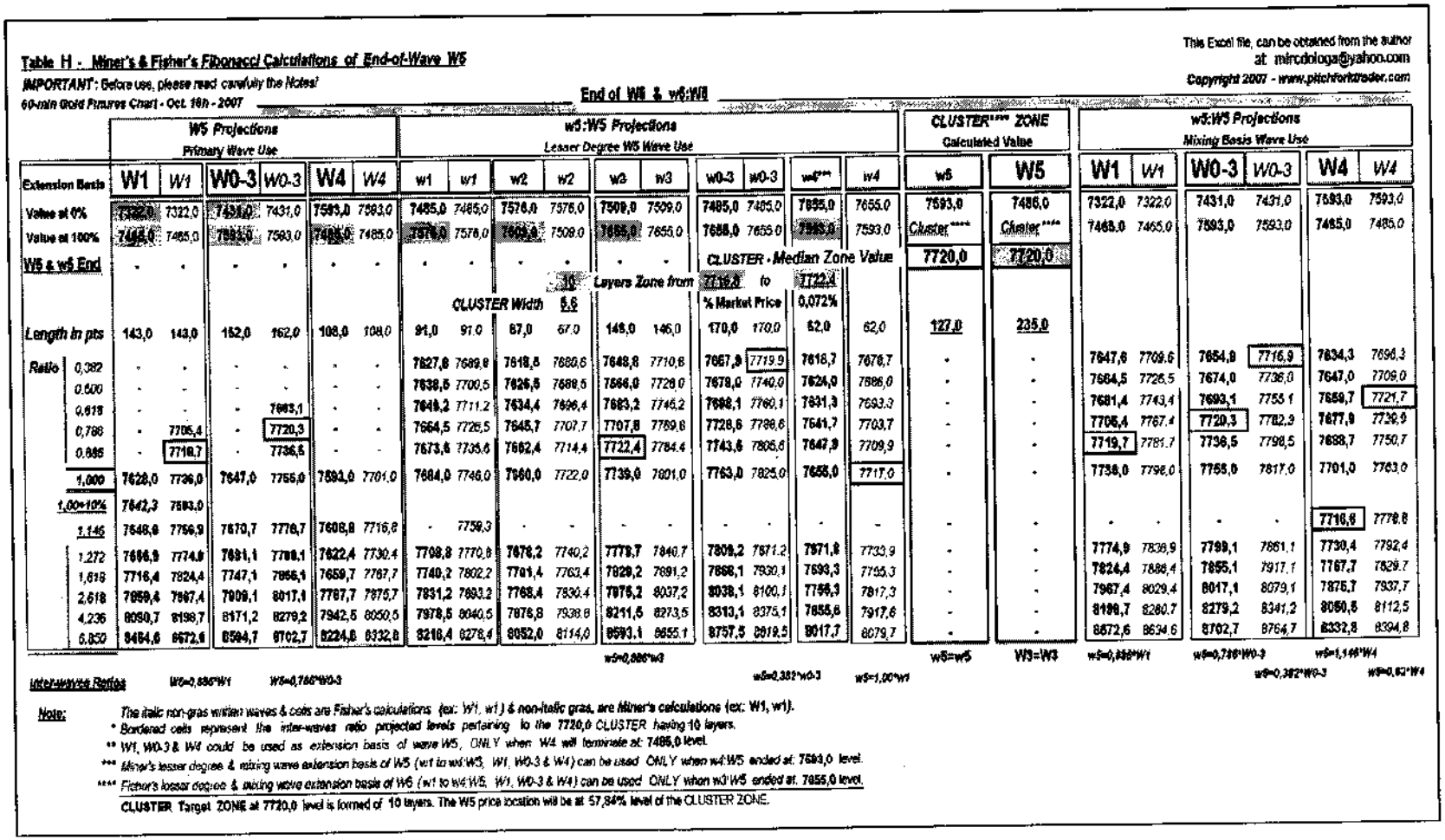

Table H - Miner's & Fisher's Fibonacci Calculations of End-of-Wave W5

This Excel file, can be obtained from the author at: mircodologa@yahoo.com

IMPORTANT: Before use, please read carefully the Notes!

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60-min Gold Futures Chart - Oct. 16th - 2007

End of W5 & w5:W5

	W5 Projections (Primary Wave Use)						w5:W5 Projections (Lesser Degree W5 Wave Use)										CLUSTER*** ZONE (Calculated Value)		w5:W5 Projections (Mixing Basis Wave Use)					
Extension Basis	W1	W1	W0-3	W0-3	W4	W4	w1	w1	w2	w2	w3	w3	w0-3	w0-3	w4**	w4	w5	W5	W1	W1	W0-3	W0-3	W4	W4
Value at 0%	7322,0	7322,0	7431,0	7431,0	7593,0	7593,0	7485,0	7485,0	7576,0	7576,0	7509,0	7509,0	7485,0	7485,0	7655,0	7655,0	7593,0	7486,0	7322,0	7322,0	7431,0	7431,0	7593,0	7593,0
Value at 100%	7485,0	7485,0	7593,0	7593,0	7485,0	7485,0	7576,0	7576,0	7509,0	7509,0	7655,0	7655,0	7655,0	7655,0	7593,0	7593,0	Cluster****	Cluster****	7485,0	7485,0	7593,0	7593,0	7485,0	7485,0
W5 & w5 End	-	-	-	-	-	-	-	-	-	-	-	-	CLUSTER - Median Zone Value				7720,0	7720,0						
													10 Layers Zone from	7716,8	to	7722,4									
							CLUSTER Width	5,6					% Market Price		0,072%									
Length in pts	143,0	143,0	152,0	162,0	108,0	108,0	91,0	91,0	67,0	67,0	146,0	146,0	170,0	170,0	62,0	62,0	127,0	235,0						
Ratio 0,382	-	-	-	-	-	-	7827,8	7689,8	7818,5	7688,5	7648,8	7710,8	7657,9	7719,9	7618,7	7678,7	-	-	7647,6	7709,6	7654,9	7716,9	7634,3	7696,3
0,500	-	-	-	-	-	-	7638,5	7700,5	7826,5	7688,5	7566,0	7728,0	7679,0	7740,0	7624,0	7686,0	-	-	7684,5	7726,5	7674,0	7736,0	7647,0	7709,0
0,618	-	-	-	7693,1	-	-	7649,2	7711,2	7634,4	7696,4	7683,2	7745,2	7698,1	7760,1	7631,3	7693,3	-	-	7681,4	7743,4	7693,1	7755,1	7659,7	7721,7
0,786	-	7705,4	-	7720,3	-	-	7664,5	7726,5	7645,7	7707,7	7707,8	7769,8	7728,8	7788,8	7641,7	7703,7	-	-	7706,4	7767,4	7720,3	7782,3	7677,9	7739,9
0,886	-	7716,7	-	7736,5	-	-	7673,8	7735,8	7662,4	7714,4	7722,4	7784,4	7743,6	7805,6	7647,9	7709,9	-	-	7719,7	7781,7	7736,5	7798,5	7688,7	7750,7
1,000	7628,0	7736,0	7647,0	7755,0	7593,0	7701,0	7684,0	7746,0	7660,0	7722,0	7739,0	7801,0	7763,0	7825,0	7655,0	7717,0	-	-	7736,0	7798,0	7755,0	7817,0	7701,0	7763,0
1,00+10%	7642,3	7693,0																						
1,146	7648,8	7756,9	7670,7	7778,7	7608,8	7716,8	-	7759,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7716,8	7778,8
1,272	7696,9	7774,9	7691,1	7798,1	7622,4	7730,4	7798,8	7770,8	7676,2	7740,2	7778,7	7840,7	7809,2	7871,2	7671,8	7733,9	-	-	7774,9	7836,9	7799,1	7861,1	7730,4	7792,4
1,618	7716,4	7824,4	7747,1	7866,1	7659,7	7787,7	7740,2	7802,2	7701,4	7763,4	7829,2	7891,2	7868,1	7930,1	7593,3	7655,3	-	-	7824,4	7886,4	7855,1	7917,1	7767,7	7829,7
2,618	7959,4	7967,4	7909,1	8017,1	7787,7	7875,7	7831,2	7893,2	7765,4	7830,4	7975,2	8037,2	8038,1	8100,1	7756,3	7817,3	-	-	7967,4	8029,4	8017,1	8079,1	7875,7	7937,7
4,236	8090,7	8198,7	8171,2	8279,2	7942,5	8050,5	7978,5	8040,5	7876,8	7938,8	8211,5	8273,5	8313,1	8375,1	7855,6	7917,6	-	-	8198,7	8260,7	8279,2	8341,2	8050,5	8112,5
6,850	8464,6	8672,6	8564,7	8702,7	8224,6	8332,6	8218,4	8278,4	8052,0	8114,0	8593,1	8655,1	8757,5	8819,5	8017,7	8079,7	-	-	8672,6	8634,6	8702,7	8764,7	8332,6	8394,6
											w5=0,886*w3						w5=w5	W5=W3	w5=0,886*W1		w5=0,786*W0-3		w5=1,146*W4	
Inter-waves Ratios	W5=0,886*W1		W5=0,786*W0-3										w5=0,382*w0-3		w5=1,00*w1								w5=0,382*W0-3	W5=0,82*W4

Note:

The italic non-gras written waves & calls are Fisher's calculations (ex: W1, w1) & non-italic gras, are Miner's calculations (ex: W1, w1).

* *Bordered cells represent the inter-waves ratio projected levels pertaining to the 7720,0 CLUSTER having 10 layers.*

** *W1, W0-3 & W4 could be used as extension basis of wave W5, ONLY when W4 will terminate at: 7485,0 level.*

*** *Miner's lesser degree & mixing wave extension basis of W5 (w1 to w5:W5, W1, W0-3 & W4) can be used ONLY when w4:W5 ended at: 7593,0 level.*

**** *Fisher's lesser degree & mixing wave extension basis of W5 (w1 to w5:W5, W1, W0-3 & W4) can be used ONLY when w3:W5 ended at: 7655,0 level.*

CLUSTER Target ZONE at 7720,0 level is formed of 10 layers. The W5 price location will be at: 57,84% level of the CLUSTER ZONE.

Figure 139 – *There are a few differences between the underneath Table H and the Table H of Figure 138: the number of levels forming the cluster zone is now 13 from the old 10, its width is presently 6 points instead of 5.6 points, the % market price is now 0.077%, instead of the old 0.072% & W5 location is in cluster zone's 60.62% mid level against 57.84% level.*

Figure 140 – *There are a few differences between the Table H, on this page and the Table H of Figure 139: the number of levels forming the cluster zone is now 16 compared with the old 13, its width is presently 10.2 points instead of 6 points, the % market price is now 0.133%, instead of the old 0.077% & the W5 location is in cluster zone's 35.39% mid level against 60.62% level.*

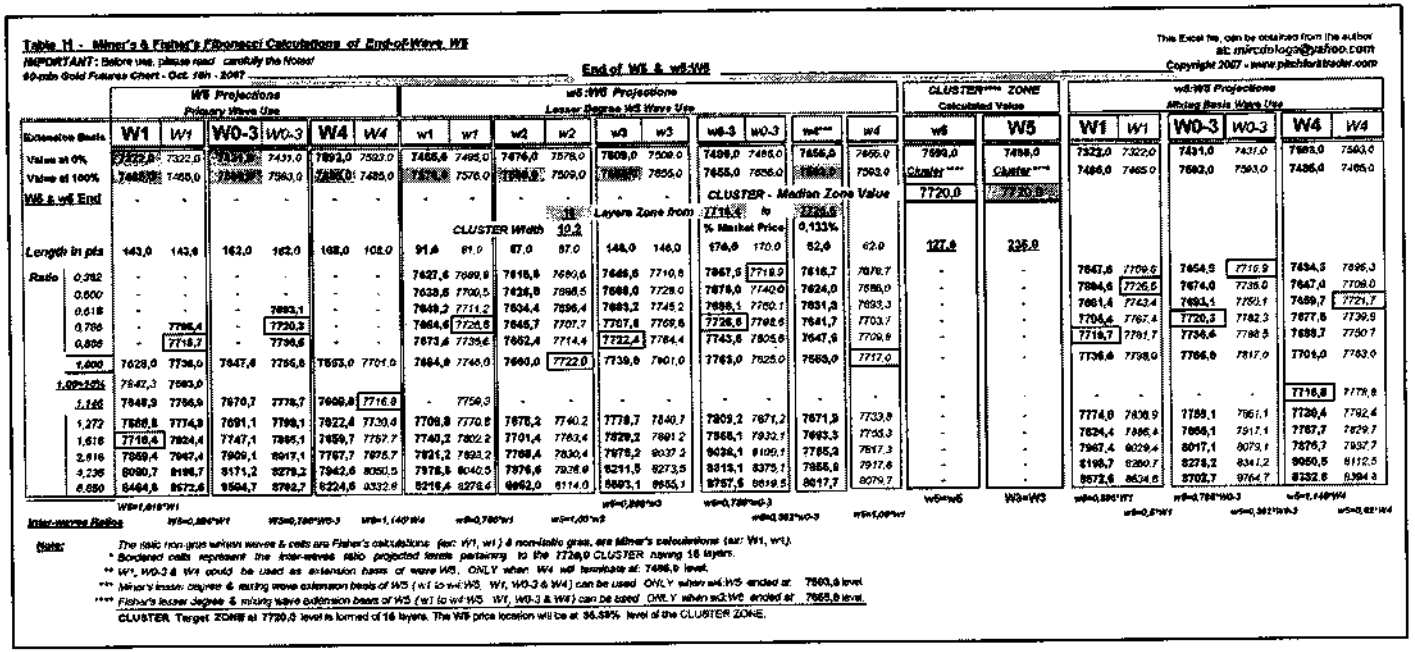

Table H - Miner's & Fisher's Fibonacci Calculations of End-of-Wave W5

This Excel file, can be obtained from the author at: mircodologa@yahoo.com

IMPORTANT: Before use, please read carefully the Notes!

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60-min Gold Futures Chart - Oct. 16th - 2007

End of W5 & w5:W5

Extension Basis	W1	W1	W0-3	W0-3	W4	W4
Value at 0%	7322,0	7322,0	7431,0	7431,0	7592,0	7592,0
Value at 100%	7486,0	7465,0	7592,0	7563,0	7486,0	7465,0
W5 & w5 End	-	-	-	-	-	-
Length in pts	143,0	143,0	162,0	162,0	168,0	168,0
Ratio 0.382	-	-	-	-	-	-
0.500	-	-	-	-	-	-
0.618	-	-	-	7693,1	-	-
0.786	-	7796,4	-	7720,3	-	-
0.886	-	7718,7	-	7796,6	-	-
1.000	7628,0	7736,0	7647,6	7756,6	7593,0	7701,0
1.09=10%	7647,3	7563,0				
1.146	7648,9	7766,9	7670,7	7778,7	7668,8	7716,9
1.272	7668,8	7774,8	7691,1	7799,1	7822,4	7730,4
1.618	7716,4	7824,4	7747,1	7855,1	7859,7	7767,7
2.618	7859,4	7967,4	7909,1	8017,1	7767,7	7875,7
4.236	8090,7	8198,7	8171,2	8279,2	7942,6	8050,5
6.854	8464,6	8572,6	8504,7	8792,7	8224,5	8332,5

Extension Basis	w1	w1	w2	w2	w3	w3
Value at 0%	7466,6	7495,0	7676,0	7576,0	7609,0	7509,0
Value at 100%	7574,6	7576,0	7594,6	7509,0	7666,6	7655,0
W5 & w5 End	-	-	-	-	-	-
CLUSTER Width	91,6	81,0	87,0	87,0	146,0	146,0
Ratio 0.382	7627,6	7669,8	7615,6	7589,6	7646,6	7710,8
0.500	7638,6	7700,5	7626,6	7598,5	7668,0	7728,0
0.618	7649,2	7711,2	7634,4	7596,4	7689,2	7745,2
0.786	7664,6	7726,6	7645,7	7707,7	7707,6	7769,6
0.886	7673,6	7735,6	7652,4	7714,4	7722,4	7784,4
1.000	7684,6	7746,6	7660,6	7722,0	7739,6	7801,0
1.09=10%						
1.146	-	7756,9	-	-	-	-
1.272	7706,8	7770,8	7676,2	7740,2	7778,7	7840,7
1.618	7740,2	7802,2	7701,4	7763,4	7829,2	7891,2
2.618	7821,2	7883,2	7768,4	7830,4	7978,2	8037,2
4.236	7978,6	8040,5	7876,6	7938,6	8211,5	8273,5
6.854	8216,4	8278,4	8062,0	8114,0	8593,1	8655,1

Extension Basis	w0-3	w0-3	w4***	w4
Value at 0%	7609,0	7509,0	7656,0	7556,0
Value at 100%	7486,0	7455,0	7556,0	7563,0
W5 & w5 End	-	-	-	-
CLUSTER - Median Zone Value				
Layers Zone from	7716,4	to	7726,6	
% Market Price			0,133%	
Ratio 0.382	7647,5	7718,9	7616,7	7676,7
0.500	7668,5	7710,8	7678,7	7740,0
0.618	7668,2	7745,2	7656,1	7693,3
0.786	7726,6	7782,6	7641,7	7703,7
0.886	7743,6	7805,6	7647,6	7709,6
1.000	7763,0	7825,0	7663,0	7717,0
1.09=10%				
1.146	-	-	-	-
1.272	7809,2	7871,2	7671,9	7733,9
1.618	7868,1	7932,1	7693,3	7755,3
2.618	8038,1	8100,1	7755,2	7817,3
4.236	8313,1	8375,1	7855,8	7917,8
6.854	8757,6	8819,5	8017,7	8079,7

CLUSTER*** ZONE Calculated Value	
w5	W5
7593,0	7486,0
Cluster***	Cluster***
7720,0	7720,0
127,6	235,0
w5=w5	W5=W5

w5:W5 Projections Mixing Basis Wave Use					
W1	W1	W0-3	W0-3	W4	W4
7322,0	7322,0	7431,0	7431,0	7592,0	7592,0
7486,0	7465,0	7592,0	7563,0	7486,0	7465,0
7647,6	7709,6	7654,5	7716,9	7634,3	7696,3
7684,6	7726,6	7674,0	7735,0	7647,0	7709,0
7661,4	7743,4	7693,1	7750,1	7659,7	7721,7
7704,4	7767,4	7720,3	7782,3	7677,5	7739,5
7716,7	7781,7	7736,6	7798,5	7688,7	7750,7
7736,6	7798,6	7766,6	7817,0	7706,0	7763,0
-	-	-	-	7716,8	7778,8
7774,0	7836,9	7788,1	7851,1	7720,4	7782,4
7824,4	7886,4	7856,1	7917,1	7757,7	7829,7
7967,4	8029,4	8017,1	8079,1	7875,7	7937,7
8198,7	8260,7	8278,2	8341,2	8050,5	8112,5
8572,6	8634,6	8703,7	8764,7	8332,6	8394,6

Inter-waves Ratios

Note:
- The italic non-grey written waves & cells are Fisher's calculations (ex: W1, w1) & non-italic grey, are Miner's calculations (ex: W1, w1).
- * Bordered cells represent the inter-waves ratio projected levels pertaining to the 7720,0 CLUSTER having 16 layers.
- ** W1, W0-3 & W4 could be used as extension basis of wave W5, ONLY when W4 will terminate at: 7486,0 level.
- *** Miner's lesser degree & mixing wave extension basis of W5 (w1 to w5:W5, W1, W0-3 & W4) can be used ONLY when w5:W5 ended at: 7593,0 level.
- **** Fisher's lesser degree & mixing wave extension basis of W5 (w1 to w5:W5, W1, W0-3 & W4) can be used ONLY when w5:W5 ended at: 7665,8 level.

CLUSTER Target ZONE at 7720,0 level is formed of 16 layers. The W5 price location will be at 35,39% level of the CLUSTER ZONE.

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Figure 141 & 142 – *Once the w4:W5 termination is completed, at 7593 level, the trader uses the Miner & Fisher Fibonacci ratios to calculate the probable W5 termination* cluster. *The 30-ema is ideally calibrated because the market flow has leaned on it, at least ten times.*

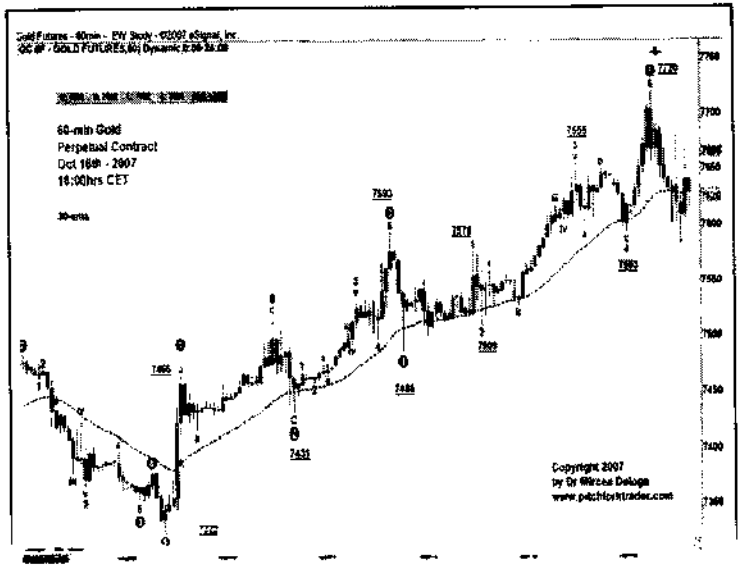


Table I - W5 Cluster ZONE Synopsis of Miner & Fisher Calculations

60-min Gold Futures chart — Oct 16th - 2007

	w5:W5	w4:W5	w3:W5	w2:W5	w1:W5
1 Short Wave Move in Progress	Miner & Fisher	Miner & Fisher	Miner & Fisher	Miner & Fisher	Miner & Fisher
2 Fibonacci Ratio Calculation Applied	5	6	10	13	16
3 Cluster's Number of Layers	Miner 2 & Fisher 3	Miner 3 & Fisher 4	Miner 4 & Fisher 6	Miner 5 & Fisher 8	Miner 6 & Fisher 10
(Counting of Each)	0,6	2,6	5,6	8,6	10,2
4 Cluster Width (pts)	0,008%	0,027%	0,072%	0,077%	0,133%
5 Cluster's % of Current Highest Market	47,63%	14,78%	57,64%	58,62%	35,39%
6 W5 Level Location within Cluster Zone (0% = Lowest & 100% = Highest)	$10,26	$10,54	$115,60	$125,51	$126,83
7 Dollar Value of W5 Level Location within Cluster Zone ($2 to maximum $535,20)	0,886 (x2)	0,886 (x2)	0,886 (x2)	1,146 (x2)	1,146 (x2)
8 Most Frequent Fibonacci Ratios	0,786 (x2)	0,786 (x2)	0,786 (x2)	1,000 (x2)	0,886 (x3)
				0,886 (x2)	0,786 (x3)
				0,786 (x2)	0,382 (x2)
				0,382 (x2)	

Note:					
Maximum % of Current Highest Market	0,200%	0,200%	0,200%	0,200%	0,200%
Maximum Cluster Width (pts)	15	15	15	15	15
Maximum Dollar Value of the Cluster Zone	$21,41	$71,58	$192,06	$214,14	$364,04

5 CONCLUSION of W3 & W5 Termination - Calculation of the Optimal Cluster Zone Level

We have seen in the prior tables, that the Miner & Fisher Fibonacci ratio calculations, can supply the termination levels of the W3 and W5. It seems that used together they perform more efficiently. We have noticed that this technique is very simple, once you have *filled in,* the extremity (*0% & 100%*) key levels of the primary waves and their lesser degree waves.
The great advantage of this technique is that not only it doesn't crowd the chart, but it signals, well in advance, the very probable termination of the corresponding Elliott wave. The results are optimal when the number of levels is optimal (*greater than 4*) and the narrowness (*sometimes less than 2 points*) of the cluster zone is propitious.

6 W5: Ascending Time-Length versus its Correction Time-Length - Optimal Timed Reversal

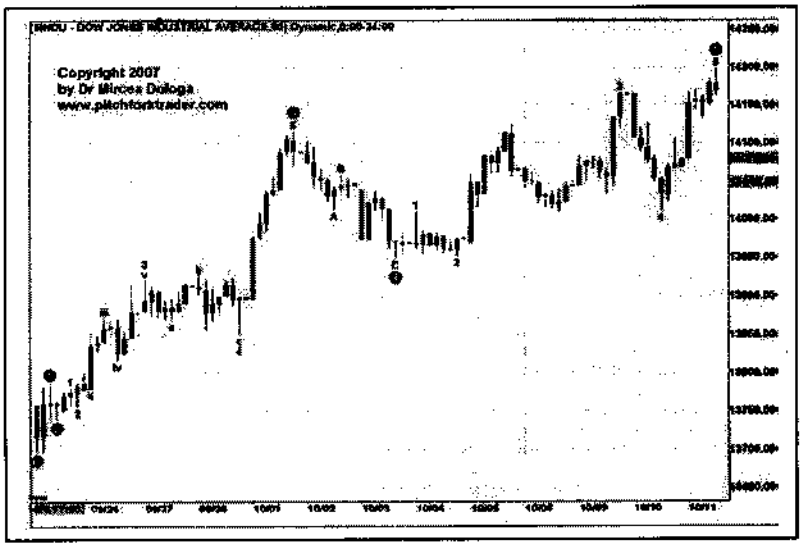


Figure 143 – *We can observe on the above chart that the impulsive pattern seems to be completed, but we will need at least one confirmation. The research of Glenn Neely showed more than 10 years ago that the ascending time-length of the W5 compared with its correction time-length, may signal its completion*

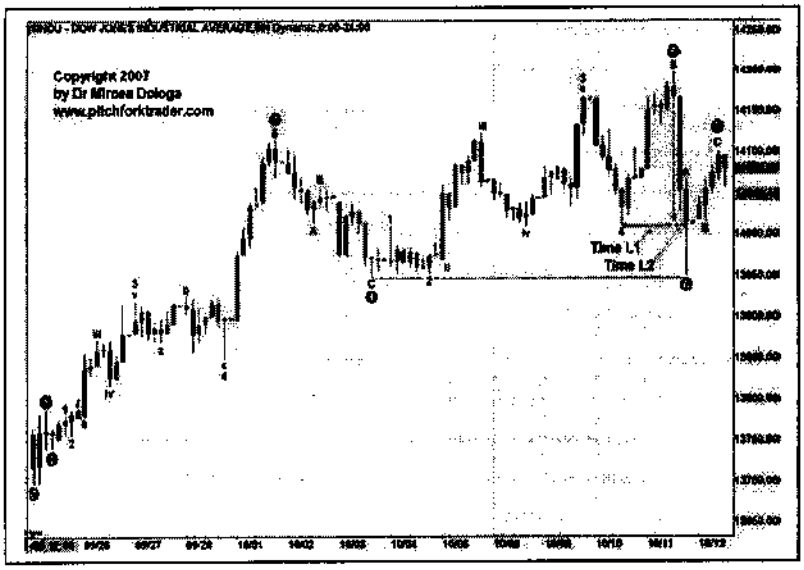


Figure 144 – *Dropping a vertical trend line from the high of W5, we can evaluate the time that it took the W5 to rally and to complete the impulsive pattern. By drawing a horizontal trend line from the last low of the impulsive pattern (w4 of W5 level), we are able to compare the time-lengths of both movements: the last rally of the W5* (Time L1= 8 bars) *and the inceptive W5's retracement* (Time L2=2 bars). *If the time-length of the retracement is shorter than the time of the rally* (optimally under 50%), *we may conclude that the W5 has completed its reversal.*

7 Bearish or Bullish Divergence – A Classic Way of Identifying the Trend's Reversal

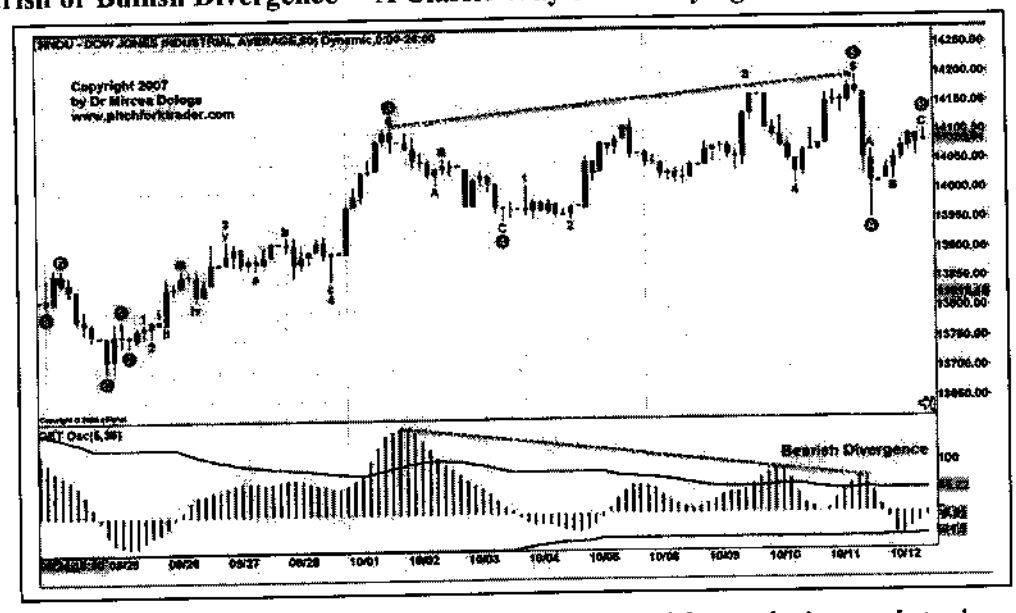


Figure 145 – *When an indicator trends in the opposite direction of the up-sloping market price, a bearish divergence occurs and we are expecting a reversal (and vice versa for the down-trend). However the trader should be aware that not every divergence unveils a reversal and not every reversal is accompanied by a divergence.*

8 2-4 Base Base Line - Sure Way of Vouching the Impulsive Pattern Reversal

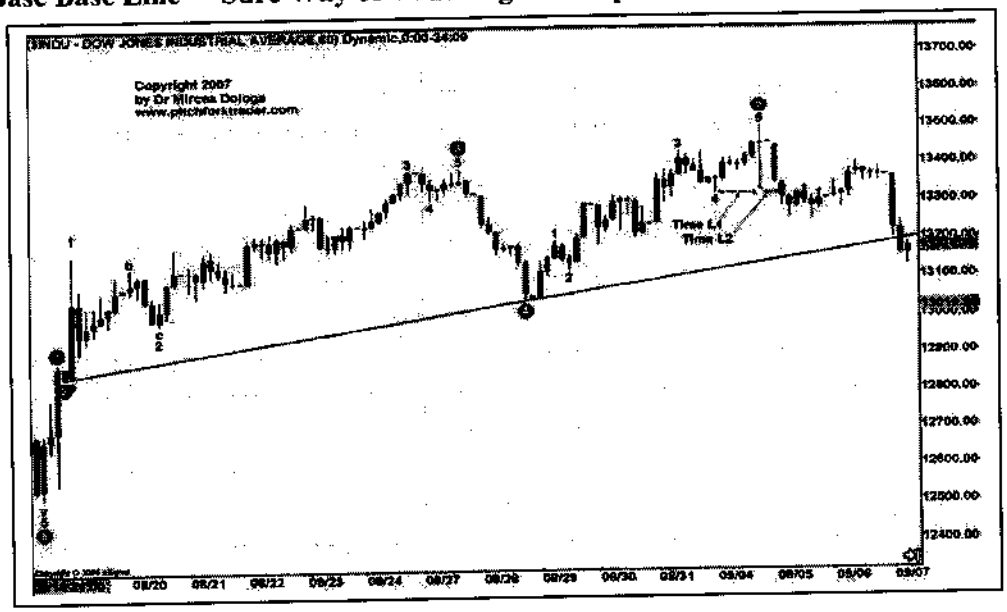


Figure 146 – *Channeling has always been a preferred tool of the successful traders. One of the less known W5 termination tools is the breakout of the 2-4 base line even if its efficiency depends on its slope angle. The steeper the slope the less lagging the W2-W4 base line. This is an excellent confirmation tool after we found that Time L2* **(2 bars)** *is less than the Time L1 - 6 bars (refer to Figures 146 and 144).*

Conclusion of the Chapter:

As we have seen above, the termination of an impulsive pattern goes mainly through the termination of W5 but also through that of W3. The tool array is numerous and mostly efficient, but they don't have all the same degree of efficiency. The first step is to get familiar with them and then practice as much as possible. Your level of proficiency will decide, which tool in what situation should be applied. And... One thing more... the number of described tools in this chapter is not exhaustive! We have shared with you, the best of them!

Key Points to Remember:

- **Don't try to get a "home run"!**
  This trading strategy is doomed to fail and to loose your capital.
- **Always keep in mind the "*Systematized Visualization*" main factors and think in terms of:**
  - **Peaks & Troughs on all three multiple time frames,**
  - **Breaches of Trending Levels,**
  - **Fibonacci & Gann Retracements,**
  - **Last Close compared with the previous one,**
  - **Trend Line Drawings,**
  - **Chart Formations**
  - **And Reversal Bars.**
- **Be fully aware of the "*weight of evidence*". Let it decide for you when the trend's reversal might take control of the market flow.**
- **The "*Systematized Visualization*" is a visual act, which can really emphasize the trading result outcome. Train your eyes to *scan* the chart in a systematized manner!**
- **Whenever in front of an Elliott pattern, immediately apply our credo: "*Lack of a clear chart pattern is the Ultimate no Action Indicator!*" Make sure that the distinct rules of impulsive pattern are/aren't respected: the W2 retracement, the W3 length & the W4 overlapping/or not of the W1.**
- **Keep in mind that when W3 is equal or bigger than 1.146*W1, an impulsive pattern is developing rather than a corrective pattern.**
- **Whenever facing a trending situation, whether that could be (a W1, a W3 or a W5), immediately think of our tools and implement only the most efficient: the birthing rectangle & its extensions, the two main ascending trend lines, the allocated major pitchfork, the price & time Fibonacci ratios and their Arcs, the Action/Reaction set-up.**
- **The Miner & Fisher Fibonacci Ratio Calculations give a real professional edge over the crowd. Their purpose is to acquire the narrowest cluster zone having the maximum levels.**
- **Remember that the most probable target of the W5's reversal move is the W4 belonging to the same prior impulsive pattern.**

Chapter 7

Channelling – Pathways in the Sand – Market Move Projections

The channels or channelling is a useful tool very often neglected by the inexperienced trader. Its quintessence is to use the past and the current market information and then project it into the future. The construction is very simple because it links the *troughs* of the trend to form the lower border and the *peaks* to constitute the upper border of the up-sloping channel. When the width of the channel is too wide, with regard to the Average True Range (*ATR*) of the currently used time frame chart, the trader can divide it into multiple portions using the Fibonacci ratios. Whatever you do, don't ever neglect to use the middle channel line, which is of preponderant importance.

The huge advantage of channelling is that it allows the trader to better understand the market whether it is: the *contextual* or the *local market*. Moreover, it represents a real edge to the professional trader, allowing him/her to find, in a blink of an eye, the exact location of the current market action within the trend and also to prepare for the next trading decisions. This tool supplies the propitious entry level, and it also assists the trader in money management techniques.

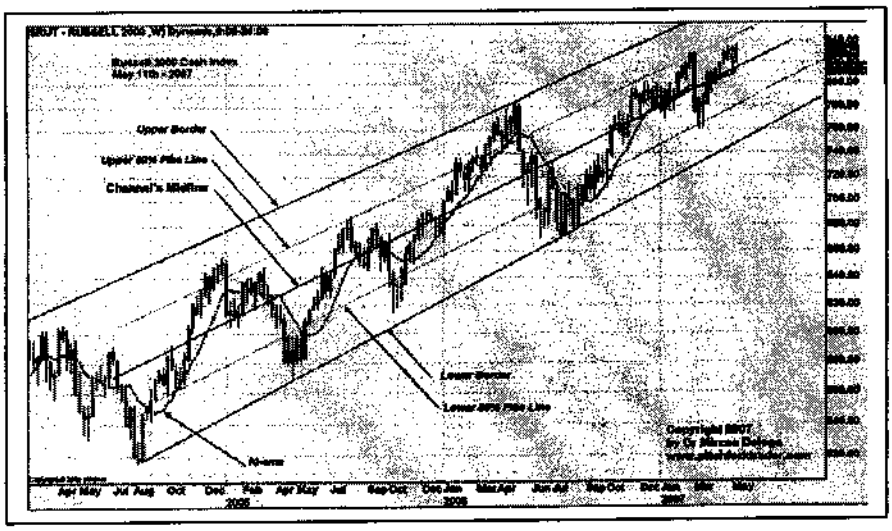


Figure 147 - ***The drawing of the channeling is very simple: the linkage between the troughs and peaks.***

1. Channelling of Elliott Waves

As we have already mentioned in *Chapter 5*, the *Elliott waves* concept does not only identify the trend and the counter trend but can also unveil the exact location of the market flow within the contextual or the local market. Its idiosyncrasy splendidly allows a symbiosis with the channelling and also an enhanced potentiality.

Should we follow the development of an Elliott impulsive pattern, *wave by wave*, we will realize the importance of channelling. The inception and the development of each wave can thus be methodically observed and exploited:

- ***The study of W1*** **can be done, not only through the practice of the prior impulsive pattern channelling, but also through the analysis of its *preliminary* and *inceptive* market activity: the first volatile bar, the trading range and its extensions and the opening range and its extensions.**
- ***The study of W3*** **can be done, through the practice of the prior impulsive pattern channelling for targeting its termination, and also through the channelling analysis of its own *inceptive impulsive pattern:* W0-W2- and W1-parallel trend lines, the major/minor pitchforks, the major pitchfork's P1-P2 trend lines, the multi-level confluences and the OSC(5,35)'s convergence/divergence.**

- *The study of W5* can be done, through the practice of the prior impulsive pattern channelling for targeting its termination, and also through the channelling analysis of its own *inceptive impulsive pattern:* the 2-4 base line, the W1-, W3- and the W1-W3-parallel trend lines, the major/minor pitchforks, the major pitchfork's P1-P2 trend lines, the multi-level confluences and the OSC(5,35)'s predominant divergence.

The study of the Elliott corrective pattern can be done through the practice of the prior impulsive pattern channelling for targeting its termination and also through the channelling of its own *inception* and *development*. We have noticed that the high-powered momentum corrective patterns, like zigzags, faithfully follow the channelling structures, much better than the impulsive formations. The latter prefer the multi-story channelling with its adequate Fibonacci ratios.

1.1 Quest for W1 Inception

1.1.1 End of Prior Pattern & Its Channelling - Gathering the Preliminary Information

Figure 148 - *A close observation of the right-side chart reveals a terminal wedge, which signals the termination of the current pattern. This preliminary information pertaining to the formation of the next impulsive pattern greatly assists the trader to consider the very probable incoming inception of the W1.*
In spite of this precious edge, the professional trader must also take into account the blocking factors of an eventual up-trend market development: the multiple resistance levels between 4871.50 and the daily pivot at 4904 level and the breakout of the 2-4 base line. Its breakout will caution and will strongly confirm not only the development of the W1 but also the inception of the new up-sloping impulsive pattern.

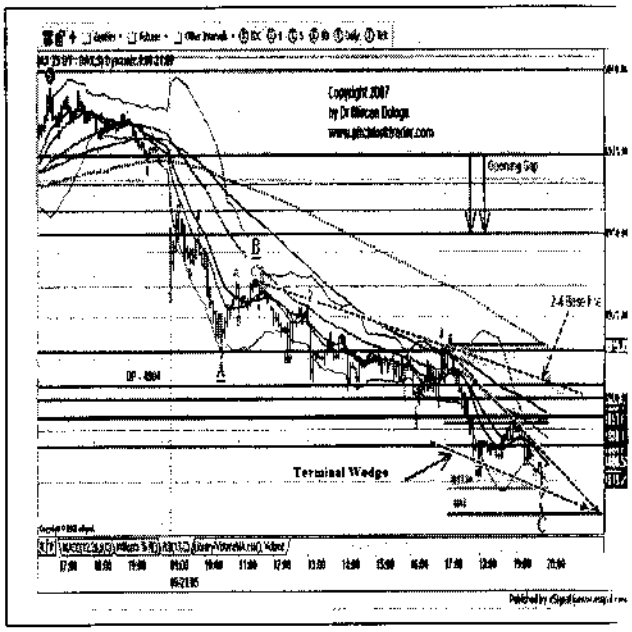


Figure 149 - *The analysis of the right-side chart unveils the intricacy of the prior and the current pattern. The chart shows that the W1 inceptive nest occurred at the confluence of the old low 13400 key level support and the lower border of the first down-extension of the prior down-sloping pattern. The inception and the development of W1 was announced through multiple signals: the bounce on the confluence level (*end of C-wave*), the lowest low of W1's dome, the triple tests of the lower border of the down-sloping channel with the zooming through and its re-test moves and the failure to reach the prior W2's 13700 key level.*
When W2 is terminated, with the usual 61.8% correction of W1, it signalled the inception of the new pattern.

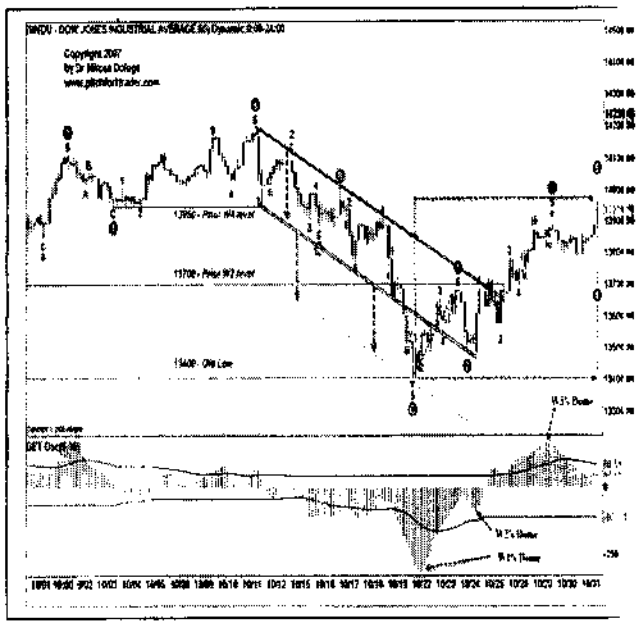


Figure 150 – *The observation of the right-side chart shows the prepared set-up for an eventual up-sloping scenario. The breakout of the TL-01 upper border of the prior corrective pattern will engender the inception of an impulsive pattern and the development of W1. The up-sloping momentum will direct the market flow towards the 6633 & 6712 key levels, which represent old highs of the prior pattern. Whichever target will be reached, the upper border of the ascending channel will be probably tested.*

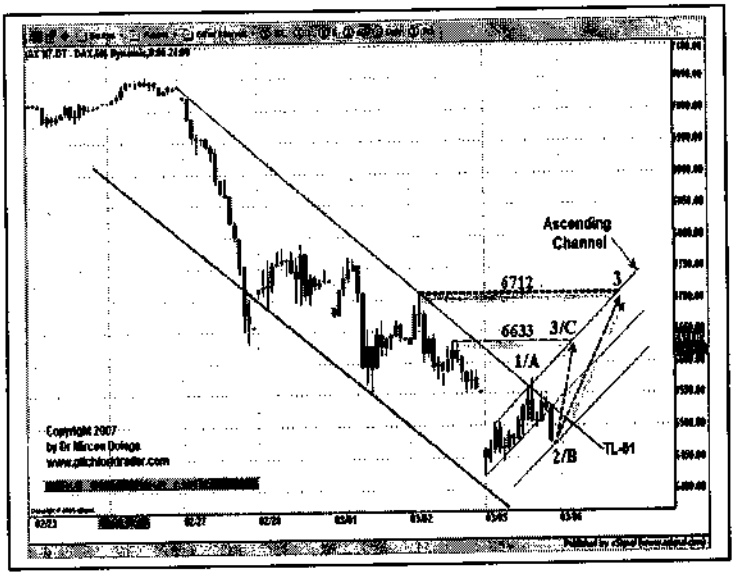


Figure 151 – *The analysis of the right-side chart shows that the "would be" up-sloping pattern has become a reality. The upward momentum has been temporarily halted at the first target at the 6633 key level. The* **Center line** *of the ascending channel faithfully guides the local market flow through multiple ascensional tests.*
For the moment, the progressive narrowing of the advancing bars may signal a probable retracement, before the market will « **take-up** *» the next target at 6712 key level.*

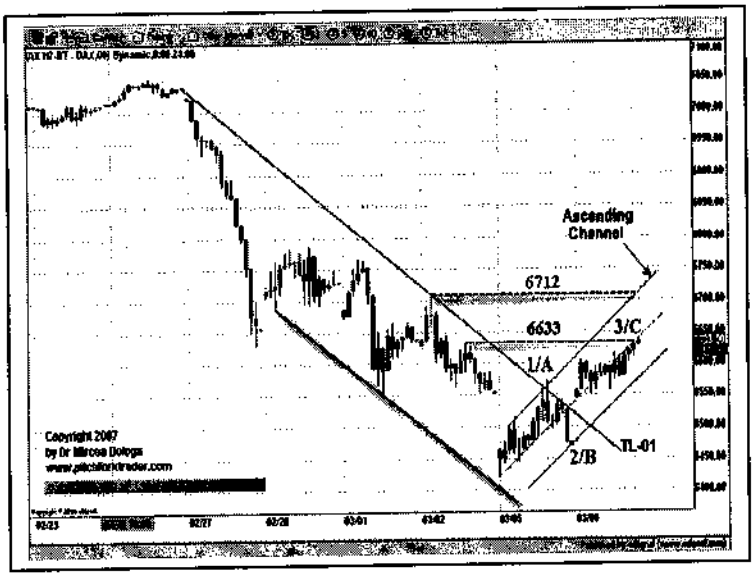
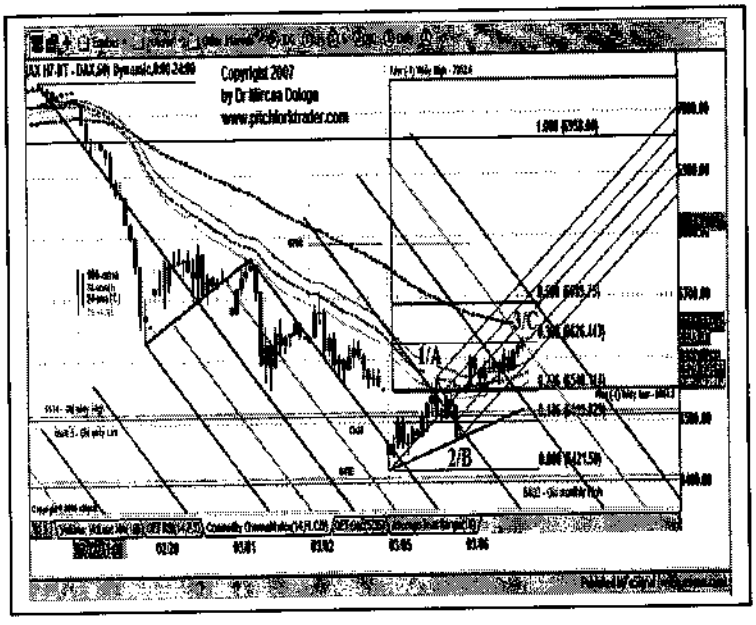


Figure 152 – *The right-side chart is identical to that of Figure 151. However it shows the prepared set-up for whatever direction the market might take.*
Should the market be halted and probably retrace, the warning lines of the descending major pitchfork will faithfully guide our trader in his decisions.
In case of the up-sloping continuation movement, the ascending minor pitchfork will visually enhance the depth of the slope's characteristics. The latter scenario must take into account the resistances at 6654 (100-ema) and 6689 (50% retrace of the prior pattern).



1.1.2 First Volatile Bar Extensions

Figure 153 – *The right-side chart illustrates the technique of the* **first volatile bar**. *When the beginning of a pattern starts with a volatile bar, but not necessarily the first bar, we can extend the size of this bar. More often than not, the first swing, usually the W1, will terminate in an extension guided by a Fibonacci ratio.*
Most of the time, a volatile bar has its size at least twice the size of the Average True Range (ATR) on the traded time frame chart. It goes without saying that this technique is used only as confirmation, in the process of creating multi-level confluences.

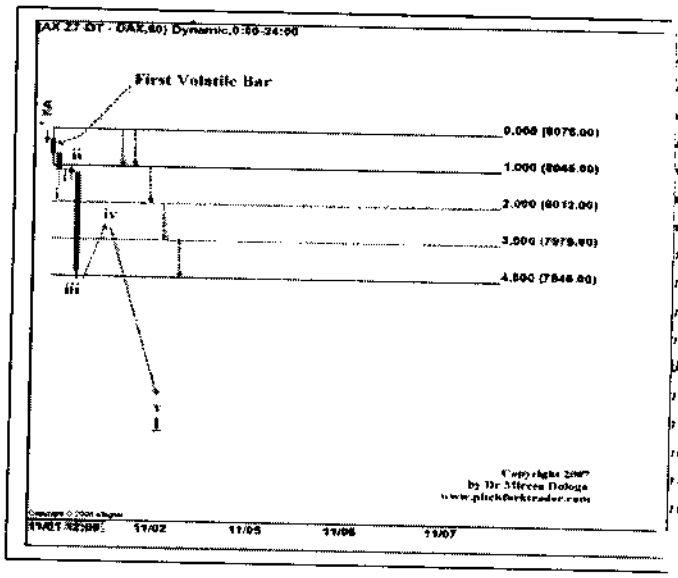
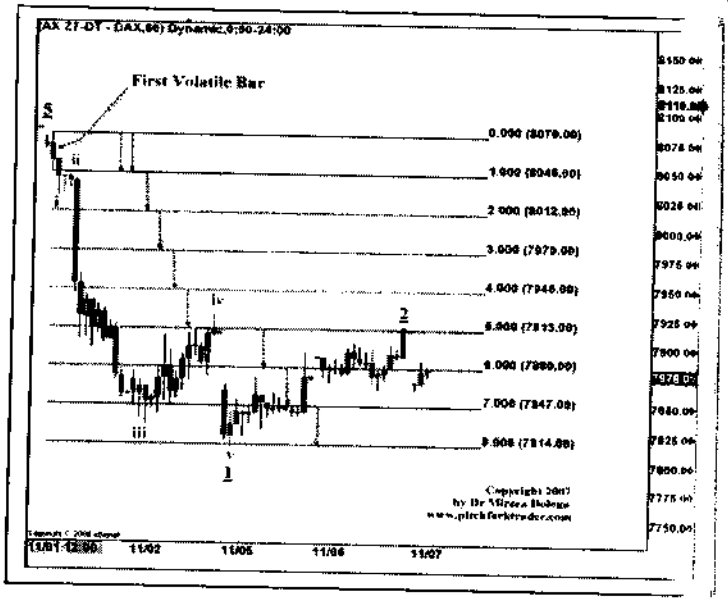


Figure 154 – *The right-side chart shows the outcome of the chart in Figure 153. We can observe that the market flow has stumbled on the whole number extensions in the developing process of its sub-waves. We must confess that the number seven* (**the seventh extension**) *occurs very often. The market has so well memorized the extension levels of the first volatile bar that they dominate even the retracement levels.*



1.1.3 Trading Range & Its Extensions – W1 Nest Inception

Figure 155 – *The right-side chart illustrates the technique of the trading range and also its extensions. As most of us know, the longer the trading range the stronger the incoming expansion will be.*
By extending the size of the trading range, more often than not, the final extension will be located on a targeted-location guided by a Fibonacci ratio.
The chart clearly shows the formation of A-wave or W1, the B-wave or W2 and an inceptive C-wave or W3. By using the channelling tools (**0-2 trend line & W1-parallel trend line**) *the ascending channel scenario is ready to roll!*

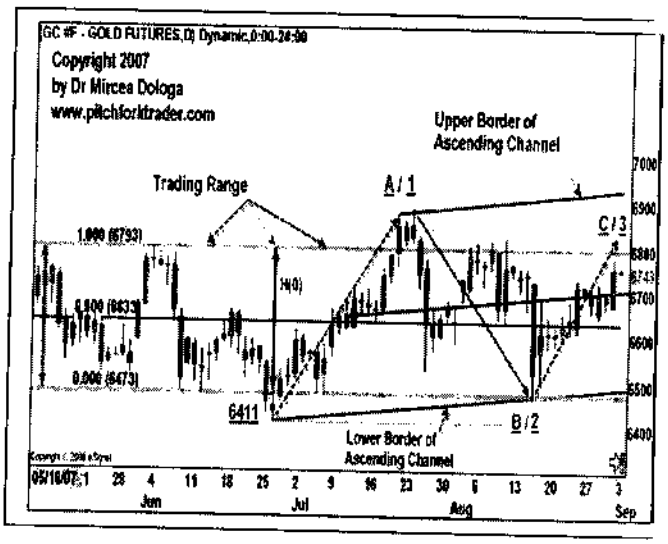


Figure 156 – *The right-side chart shows that the market flow has evolved almost all the way up to the third extension (300%) of the initial trading range, creating a confluence with the 150% Fibonacci ratio trend line of the major ascending pitchfork.*
We have replaced the use of the initial ascending channel with the use of major pitchfork, which appears to optimally describe the market flow.

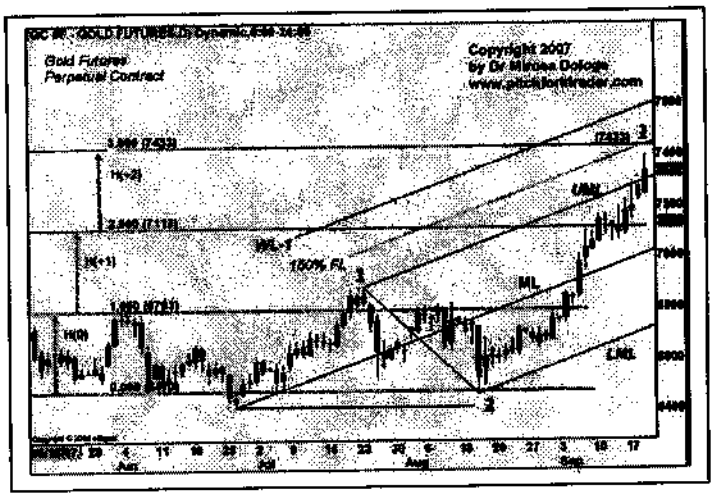
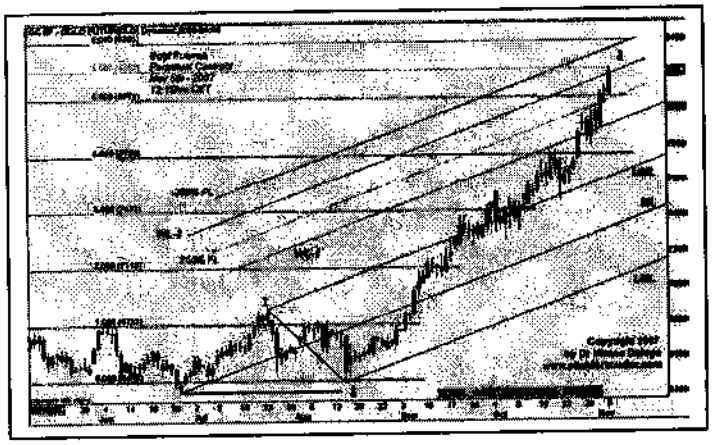


Figure 157 – *The right-side chart unveils that the local market flow has a very high-powered momentum which will shoot the market price, all the way up to the second warning line (WL-2) above the fifth extension (550%) of the initial trading range. This represents an excellent example of the synergy, which could occur between the pitchfork and the trading range extensions.*



1.1.4 Opening Range & Its Extensions – Another Probable W1 Nest Inception

Figure 158 – *The right-side chart will illustrate the technique of the opening range* (OR) *and also its extensions.*
By extending the size of the opening range, more often than not, the final extension will be located on a targeted-location guided by the Fibonacci ratios.

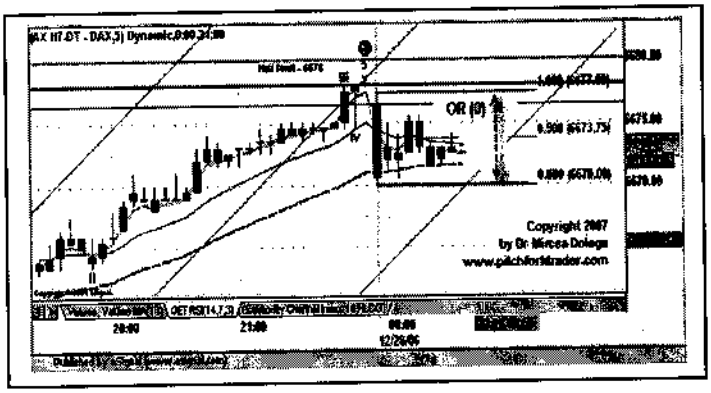
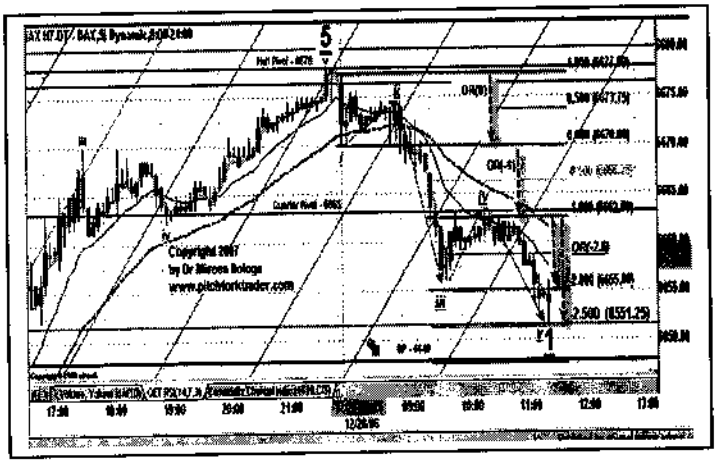
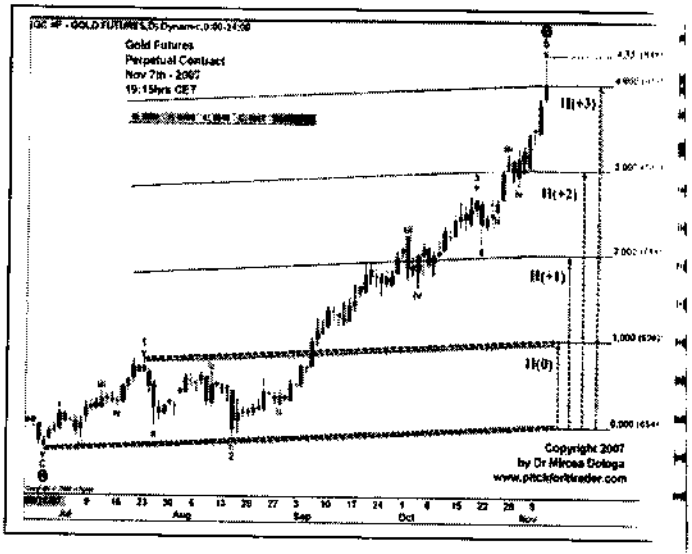


Figure 159 – *The right-side chart shows that the extension of the opening range reached the 250% extension level. It was halted by the very strong old 6550 key level support. At the end of the day, the opening range will be located at one of the day's market extremity, more then 70% of the time.*
On the right-side chart we can see that the first bar of the opening range was left far behind and that its high represents the day's high.



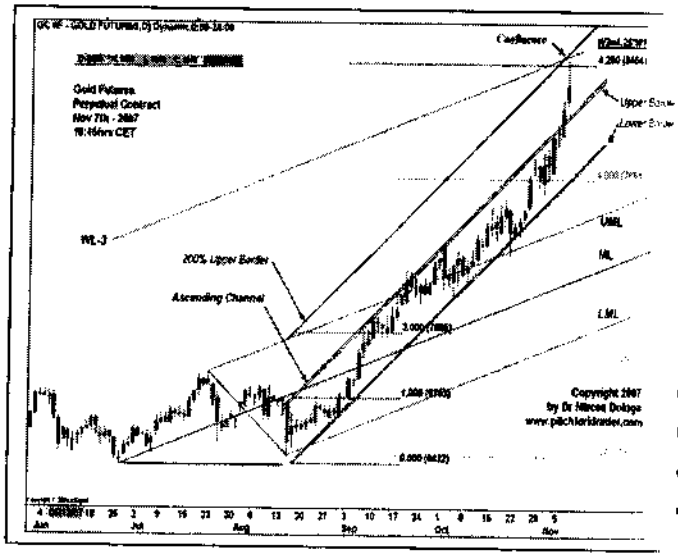
1.2.1 Single or Multi-Story Channelling – W0-W2 TL & W1-Parallel Trend Line

Figure 160 – *The right-side chart shows that once that W3 is in progress and* (W3 exceeds 1.146*A-wave), *we can then determine its termination with a high probability efficiency by using the W0-W2 trend line and its W1-parallel trend line.*
On the right-side chart the market flow has climbed all the way to the 4th extension of the H(0), representing the height of the channelling formed by the W0-W2 trend line & W1-parallel trend line. Even if the market price closed at the 400% extension the highest high attained the 433% extension level at 8493 value.



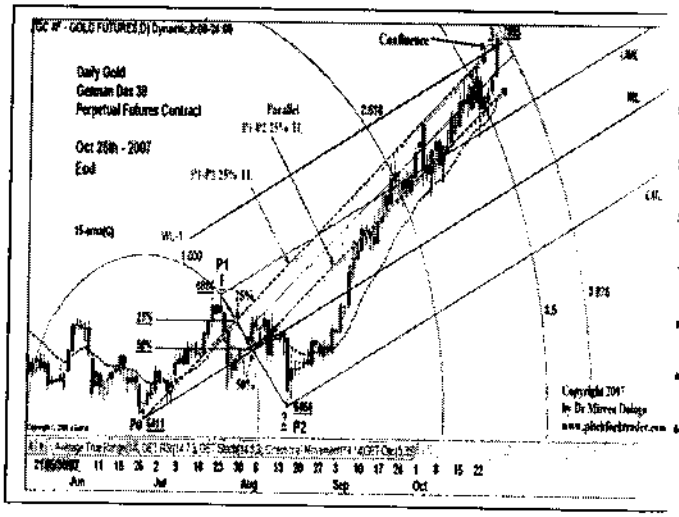
1.2.2 Channelling & Pitchfork Symbiosis

Figure 161 – *The right-side chart illustrates the profitable symbiosis that exists between the pitchfork and channelling. This working relationship has as consequence the formation of a multi-level confluence. One can observe on the chart that the market price has been halted at the intersection of the 200% upper border of the ascending channel with the pitchfork's warning line* (WL-3) *and the 4.25 Fibonacci ratio horizontal trend line.*



1.2.3 Pitchfork's P1-P2 Trend Lines

Figure 162 – *The right-side chart unveils the practical use of the* P1-P2 trend lines *a* derivate tool *of the* pitchfork. *In spite of its efficiency, the technique is very little known even among the pitchfork traders.*
The chart pinpoints toward the 7895 level confluence where the P1-P2 25% trend line intersects the same pitchfork's warning line (WL-1) with the 3.875 Fibonacci arc.
Used as a confirmation factor, this tool has the advantage of using price associated with time. Their intersection is one of the strongest signals in trading.



1.2.4 Multi-Level Confluence - One of the Best Targeting Tools

Figure 163 – *The right-side chart reveals the use of confluences as a very efficient tool. We have consecrated to it the entire Chapter 15 of the first volume. One of its merits is that it offers many low-risk high-probability trades. In spite of the* **hidden trend line** *specificity they represent a real professional edge. Defined as an intersection zone* **(point)** *of multiple-vectorial market forces, they promptly halt the market's kinetic moves, most often than not.*
The more numerous levels, the stronger the confluence's halting power will be.
*The right-side chart illustrates the confluence formed by the 4.0 Fibonacci ratio rectangle's extension, the W3=4.25*W1 and the WL-3.*

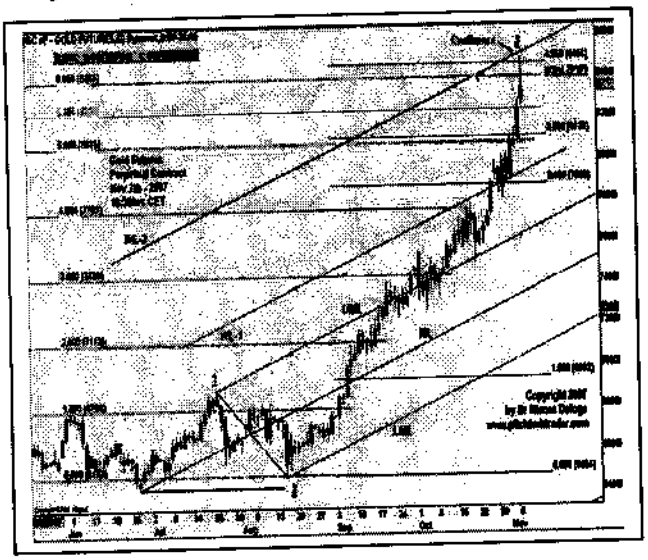
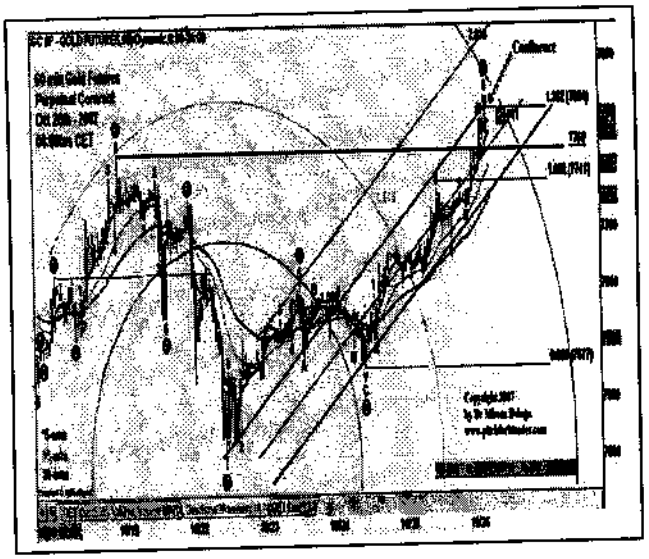
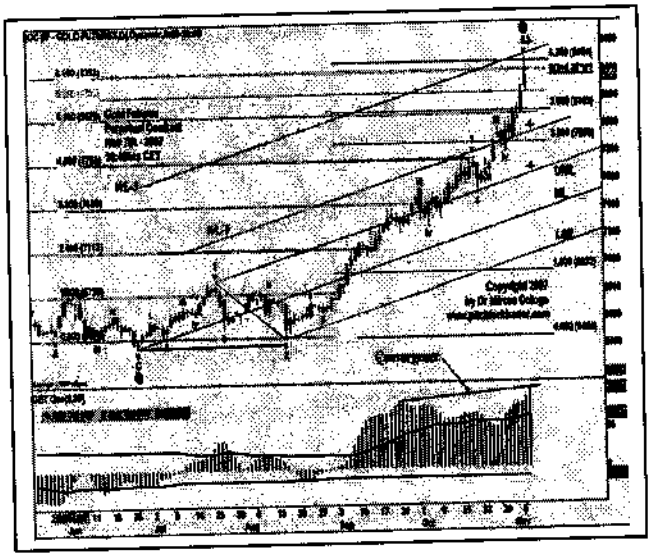


Figure 164 – *The right-side chart illustrates the confluence formed by the upper border of the ascending channel, the 2.618 Fibonacci ratio arc and the W3=1.382*W1 level. In spite of this formed confluence zone, please keep in mind that the overall context may often signal in advance a very probable non-respect of the halting confluence. In the right-side chart there might be an overwrite effect of the confluence's influence due to: the W3 which did not yet reach its classical value* **(W3=1.618*W1)**, *the three-bar-old zooming through the highest high resistance at 7769 key level and the existence of the high-powered momentum with consistent price location above the 5-ema.*



1.2.5 OSC(5,35) - Building of W3's Dome - Convergence versus Divergence

Figure 165 – *The right-side chart signals the use of the convergence as a confirmation factor in the development of the W3. The trader must be very attentive before declaring a reversal, especially if the W3's dome is in a continuing progression.*
Its opposite partner, the **divergence** *will divulge an incoming reversal. However, keep in mind that not every divergence signals a reversal and that not every reversal has a divergence.*
The entire Chapter 13 will be consecrated to the use of this two trading elements belonging to the OSC(5,35) or OSC(5,17).



1.3 W4 Channelling

1.3.3 2-4 Base Line

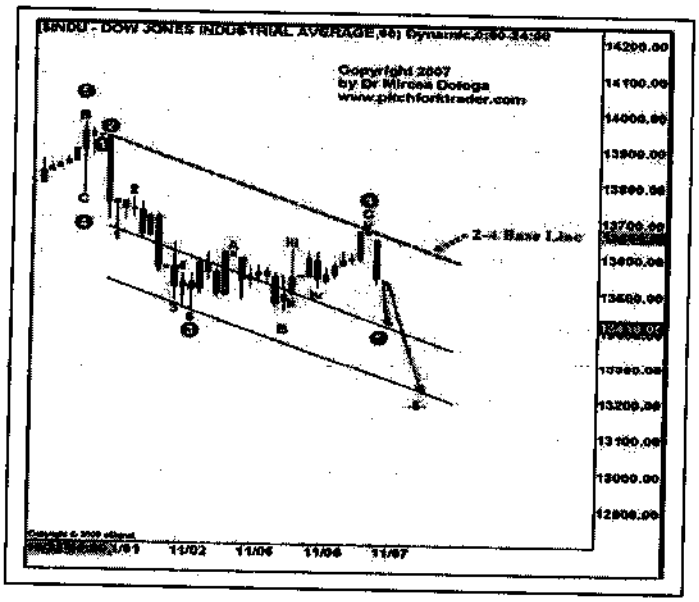


Figure 166 – *The above chart efficiently shows the contribution of the trend lines used to delineate the expanding potential of the impulsive pattern. The* **2-4 base line** *is the most important tool in measuring the termination of the impulsive pattern and serves as a landmark for the end of W5.*

1.3.4 OSC(5,35)'s Delineating Rol

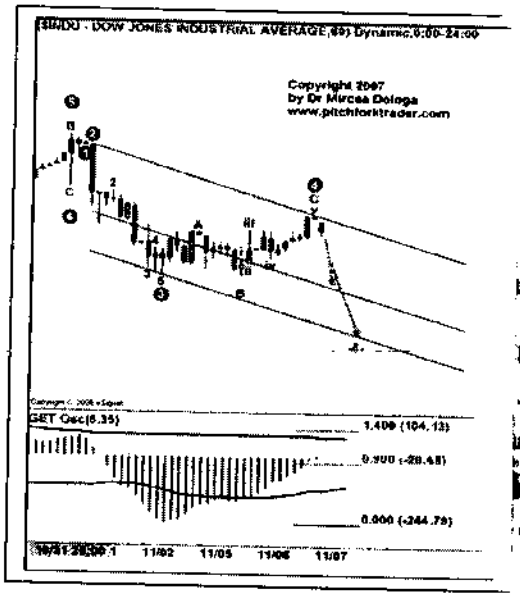


Figure 167 – *The above chart illustrates W4's termination at the moment when OSC(5,35) indicator reached the 0.90 to 1 Fibonacci zone and then it decided to reve Thus, the W5's inception has been launched.*

1.4 W5 Channelling

1.4.1 W1- & W3-Parallel Trend Lines

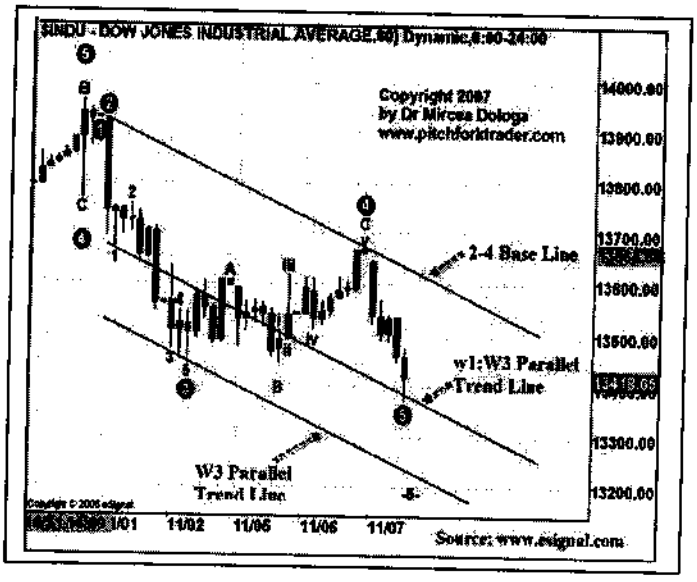


Figure 168 – *The above chart illustrates the use of the W1- and W3-parallel trend lines in delineating the limits of the W5's termination. The 2-4 trend line serves as an extension base.*

1.4.2 W1-W3 Trend Line

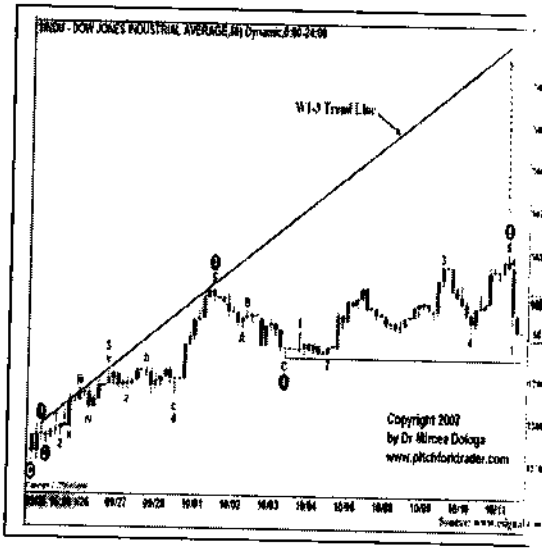
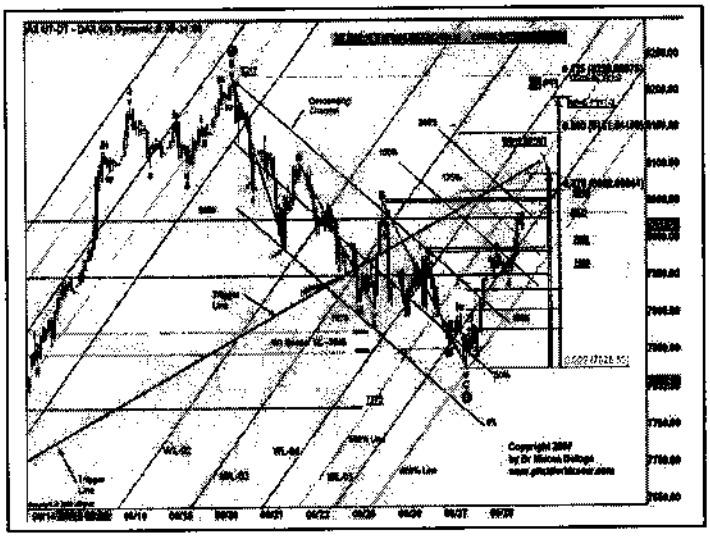


Figure 169 – *The above chart shows the limits of an eventual elongated W5 delineated by the W1-W3 trend line.*

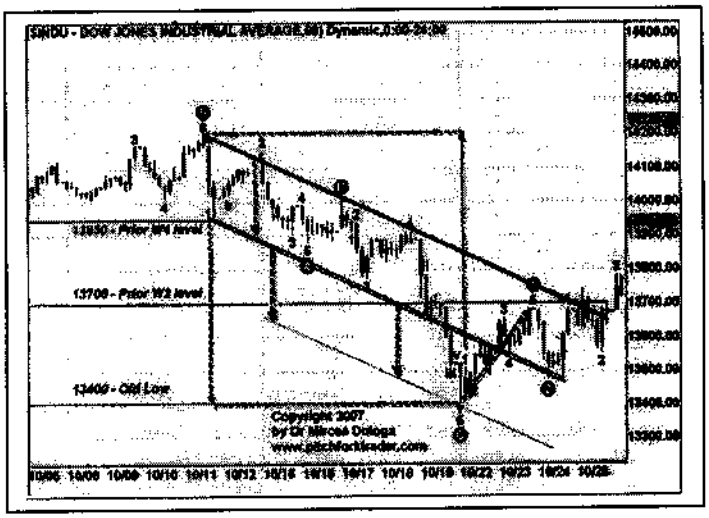
1.4.3 Contextual Channelling

Figure 170 – *The right-side chart reveals the complexity of the contextual scene. As we can observe the W5 is in progress having almost reached the last high of the prior B-wave:W4 at 8050 level. Its size is equal to about 0.886*W1 and 0.33*W1-3. The nearness of the trigger line of the major ascending pitchfork will make us consider an eventual W5 failure around 8100 key level. On the other hand, if this failure occurs it may be only the w1:W5 termination and the market is on its way to form the w2:W5.*



1.5 Channelling of the Corrective Pattern

Figure 171 – *A close observation of the right-side chart reveals the meanders of the waves & sub-waves of the corrective pattern. As a rule, every correction should have as a prime target the W4 of the prior impulsive pattern, followed by the W2 level.*
Be on the watch out to graphically channel the corrective process, which will ideally obey the channelling borders, especially in the case of a strong-fuelled zigzag. Don't hesitate to use a second or even a third extension of the initial channelling, in case of a non-zigzag. The attainment of these recommended targeted levels are fulfilled on the right-side chart.



2. Channelling within a Rectangle

Figure 172 – *The right-side chart reveals the use of the channelling within a rectangle. This is a very neglected topic, as the case with rectangles, in general. Consider the inside channelling of a rectangle only if its height value equals at least two Average True Ranges (ATR) of the traded time frame chart, otherwise the trader will pay a tribute to the market's noise.*
*Once the TL-1 drawing is done, be confident and closely follow the outcome (*please follow-up on the Figure 173's chart*). The use of the rectangle's inside channelling is even more important when the market opens forming the opening range rectangle or during the intra-day activity when the market is indecisive and trades, more or less, in a trading range.*

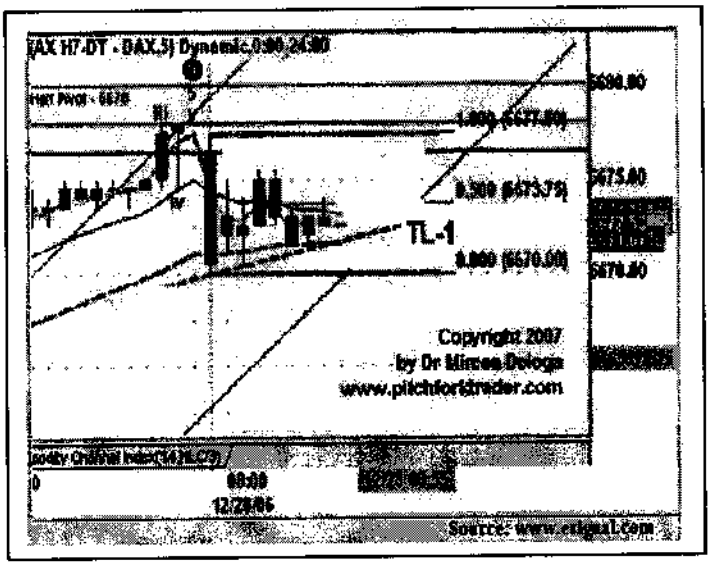
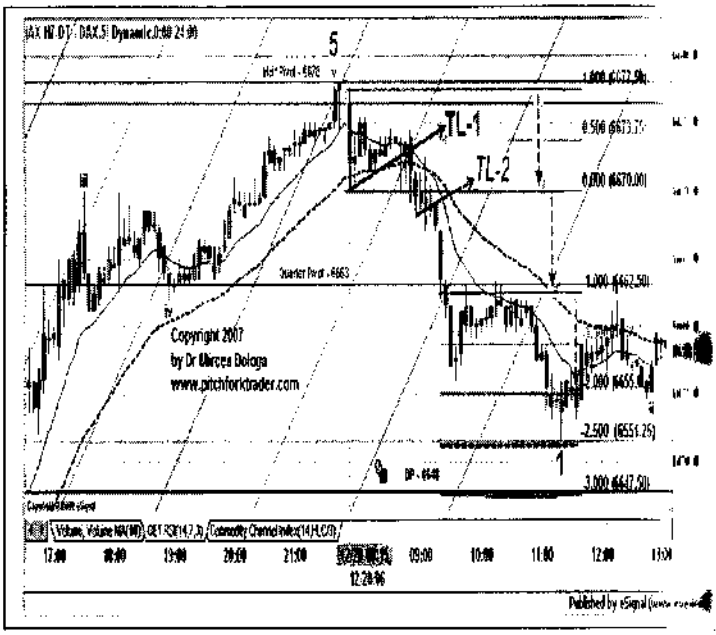


Figure 173 – *The right-side chart continues the chart of the Figure 172. The trader can see that the inside TL-1 trend line has been penetrated and that the market flow has been directed towards the lower border of the rectangle. At that moment, we have considered the drawing of TL-2 parallel trend line to the initial TL-1. After the pierce and test of the TL-2 there was a propitious entry with a tight stop loss just above the lower borderline of the rectangle. After that, we have monitored* **not only** *the extent of the down-move by using the initial rectangle's extensions,* **but also** *the existence / absence of the key levels: old lows, pivots and Fibonacci extensions.*



3. Landscape Contextual Channelling – Pathways in the Sand

Figure 174 – *We have to confess that the trade's context is one of the secrets of a trader's success or failure. Most of the inexperienced traders, neglect it, so they are doomed to fail.*
By observing the right-side chart, the novice trader can only see the direction of the market. He will completely miss the other important contributing factors of the trading process: the location of the market price within the up-sloping trend, the probable termination of the current move, the impulsive or corrective type of up-swing, etc.

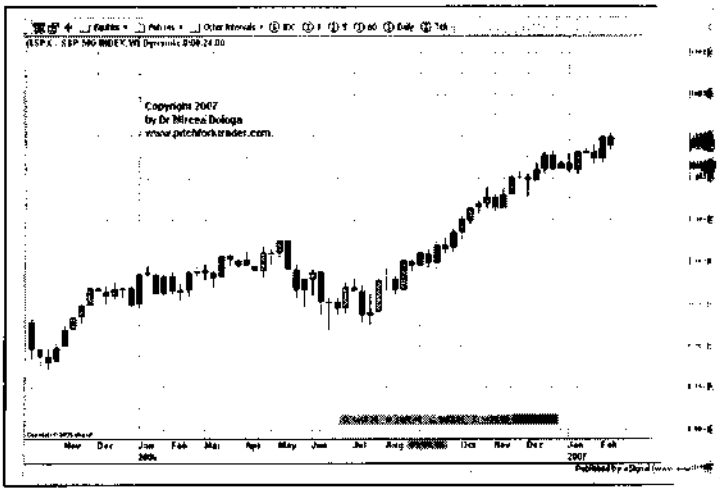


Figure 175 – *The right-side chart is identical to that of the Figure 174 but isn't anymore* **"naked".**
By using the contextual and local market techniques we realize that the market is terminating the current impulsive pattern once that W5 has ended. The market is located exactly at the confluence of 88.6% correction of the prior trend with the **Center line** *of the inside ascending channel and the 1.786% extension of the larger ascending channel. In case of a failed halting confluence, more often than not, the market will climb at least, all the way to 100% limit at the 1552.87 level.*

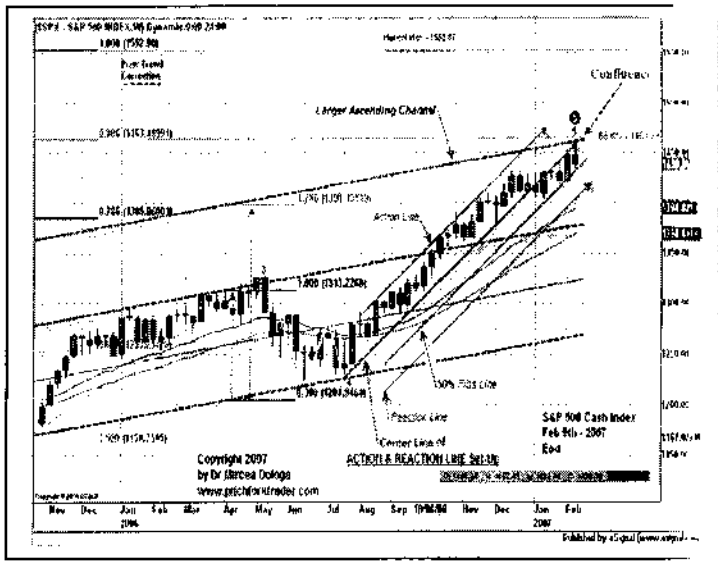


Figure 176 – *The right-side chart is a continuation of that of Figure 175. We can observe that the 1461.5 confluence level has performed its halting job and reversed the market, at least temporarily. The huge volatile down-bar has been halted by the confluence of the upper border of the larger ascending channel and the lower border of the first down extension of the inside ascending channel. Seeing all this... One can truly say that the market may move from one confluence zone to another.*

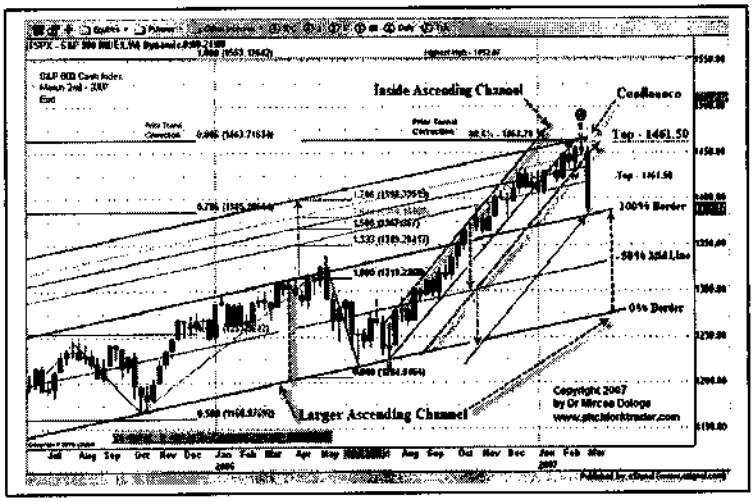


Figure 177 – *The right-side chart is a perfect example of mapping the landscape of the contextual chart. We see from left to right: the termination of the ascending impulsive pattern through a terminal wedge, the variable size descending channels forming the corrective pattern from W1 to W3 and finally the W4 correction using a major pitchfork.*

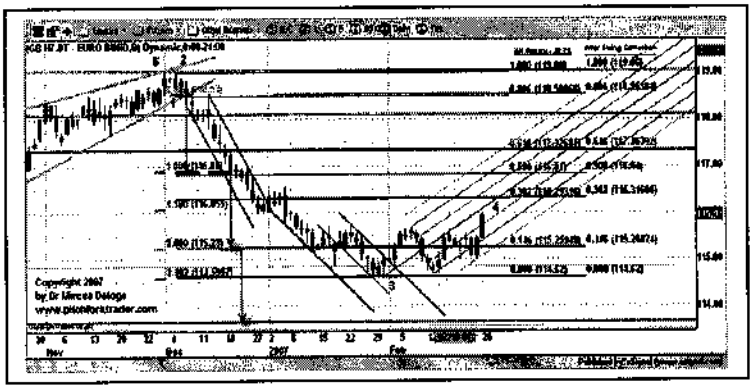
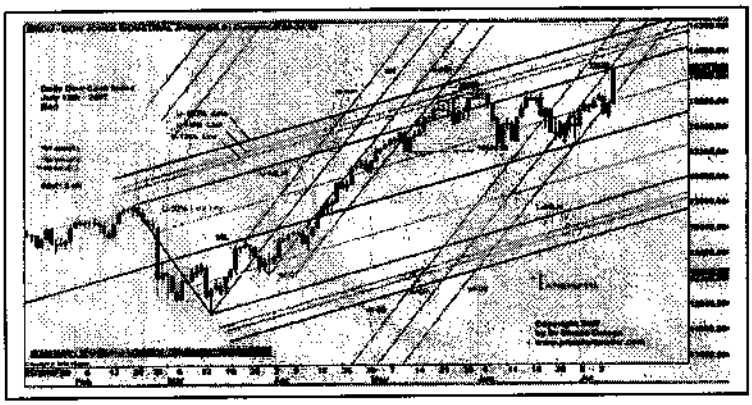


Figure 178 – *The right-side chart reveals the landscape of the contextual chart. Using a major ascending pitchfork with a grafted minor ascending pitchfork, on top of it, we can see that the market remembers, even four months later the memorized key levels. The last bar is a huge volatile bar which joints, straight up, the seventh & the eighth warning line of the major pitchfork.*



4. Breakouts & False Moves of Channel's Boundaries

Figure 179 – *The right-side chart illustrates the volatile-bar breakout of the descending channel. Before entering the trade, we will verify the momentum's pugnacity and the resistances lying ahead of the market flow, in order to avoid the false moves and the* **end-run phenomenon.**
The confirmation of at least one indicator, will certainly build-up our confidence and will also assist the trader with money management.

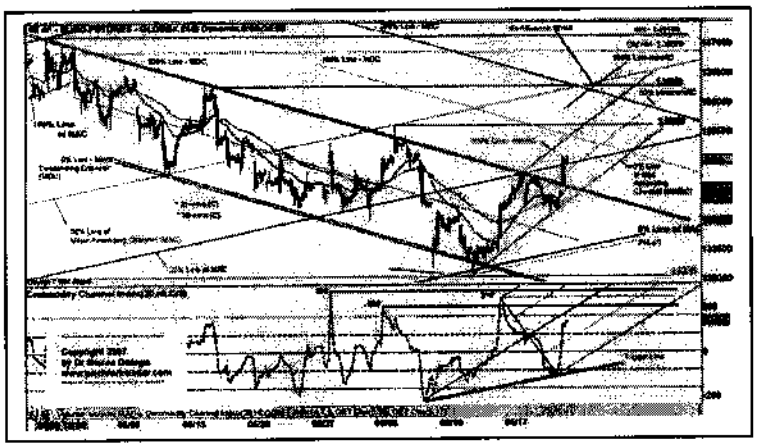


Figure 180 – *The right-side chart illustrates the volatile-bar breakout on the lower border of the ascending channel. This real breakout was preceded by several false moves that did not accomplish the final breakout. One must be aware of the elements that protect the trader from these false moves while a breakout is attempted: the high volume, the zooming through the breaking line with huge bars, the preceding gap preferably a breakaway gap, the preceding terminal wedge finishing-up the prior pattern and the build-up of the momentum through a series of widening bars culminating with the big breaking bar.*

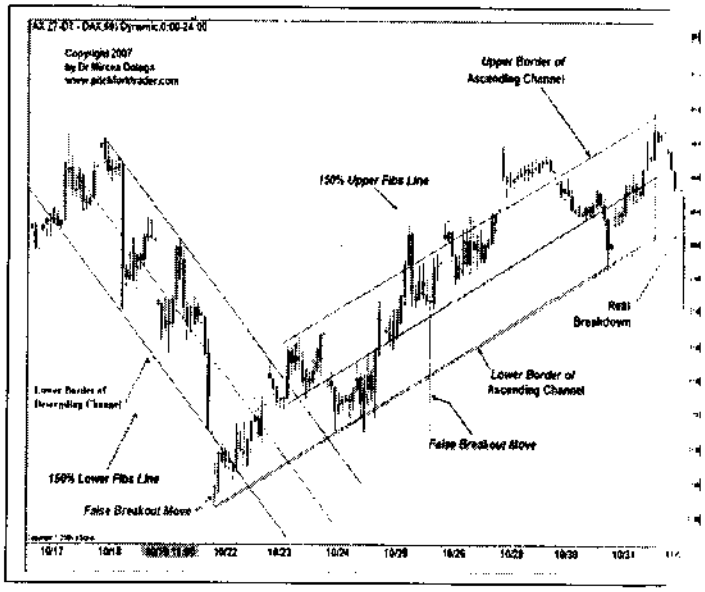
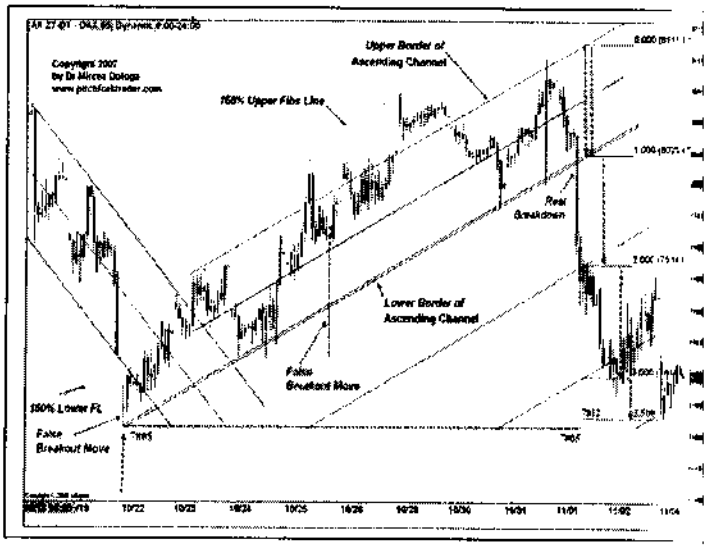


Figure 181 – *The right-side chart continues that of the Figure 180. The real 8000 key level breakdown having a zooming-through-mechanism has been so powerful that brought the market flow all the way down to 7812 value to the 3.500 Fibonacci ratio extension level. The high-powered momentum of the breakdown has wiped out the entire gain of the nine-day trend in only forty-eight hours. The drop has halted just 7 points away from the old low of 10/22/2007. After such a drop with huge-energy consumption, the market is now restoring its kinetic energy in sideways formation… As it does most of the time.*



5. Fan Lines

Figure 182 – *The right-side chart illustrates three accelerating trend lines called fan lines. They can be drawn on a bar chart or on a line chart. The latter type of chart seems to be more visual.*
The construction of the accelerating trend lines is done by linking the same departure pivot, usually the highest high in a down-trend, with the following three accelerating pivots (next lower highs) – *refer to right-side chart.*
In case of the decelerating trend lines of an up-trend, the linkage is done from the same lowest low with the following three decelerating pivots (next higher lows) – *no chart has been shown here.*

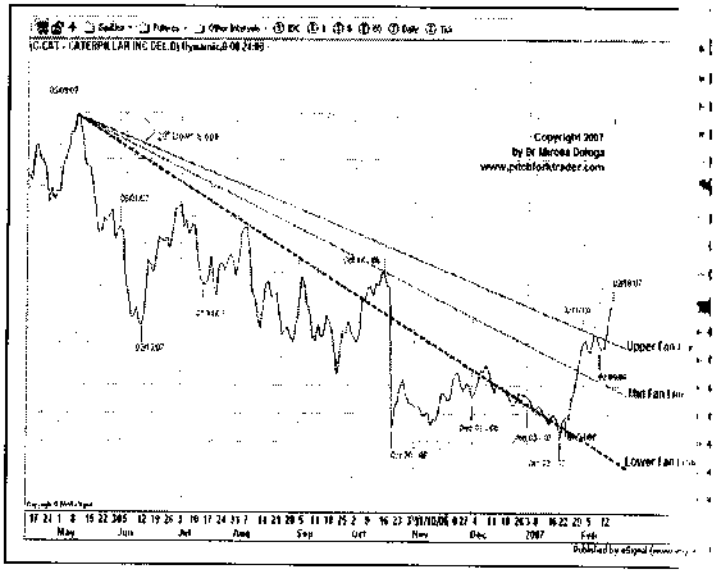
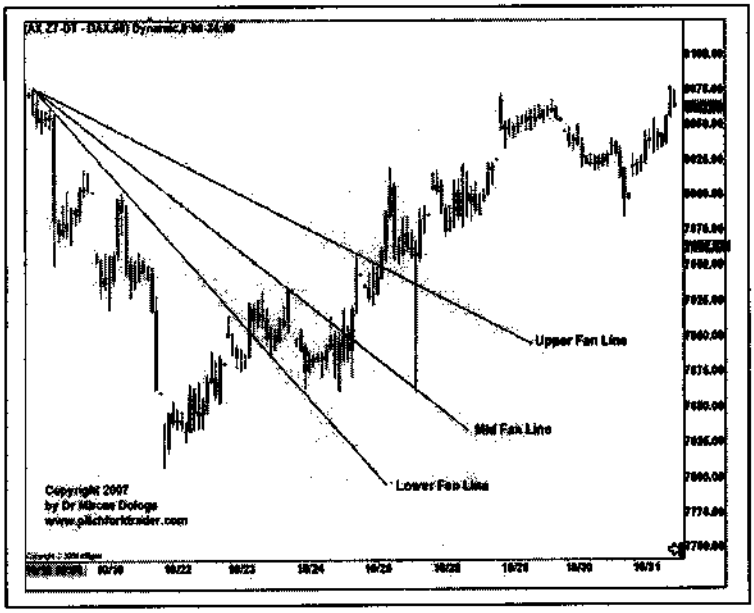


Figure 183 – *The right-side chart illustrates three accelerating trend lines – the fan lines. They are the same as those on Figure 182, but the market prices are represented in candle bars.*
Most of the professional traders consider that after three fan lines the trader should expect a reversal, more often than not or at least a small correction or testing.
In the absence of a prominent reversal, be ready for a zooming-through phenomenon, which will enhance the strength of the ongoing trend. And don't forget the old adage... An old resistance may become a new support and vice versa.



6. Speed Lines

Figure 184 – *The right-side chart shows the speed lines, firstly used by Edson Gould, an early contributor to the technical analysis. They are possible to be drawn only after the completion of a swing by linking the same higher high of a down-trend with the progressive ratios signalled on the vertical line of the down swing. The first ratios used were Dow's 33%, 50% and 66% with a later Fibonacci addition of 38.2% and 61.8%.*
The right-side chart shows the use of these tools applied to a line chart, which seems to be more visible than bar charts.

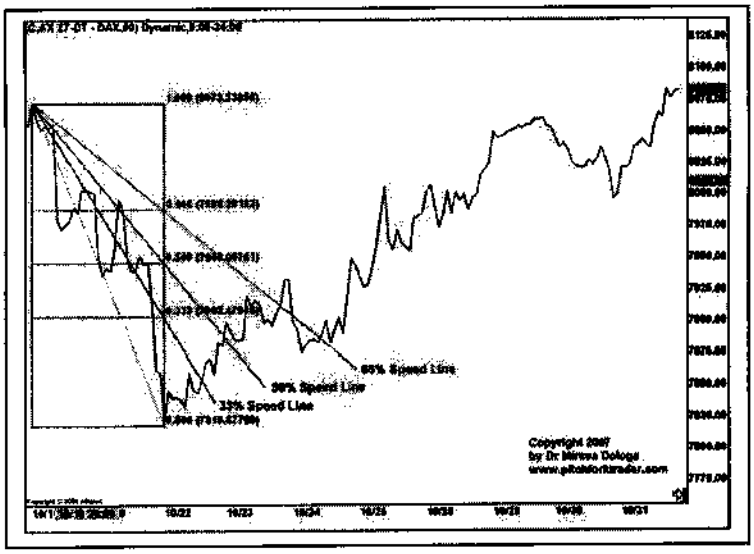
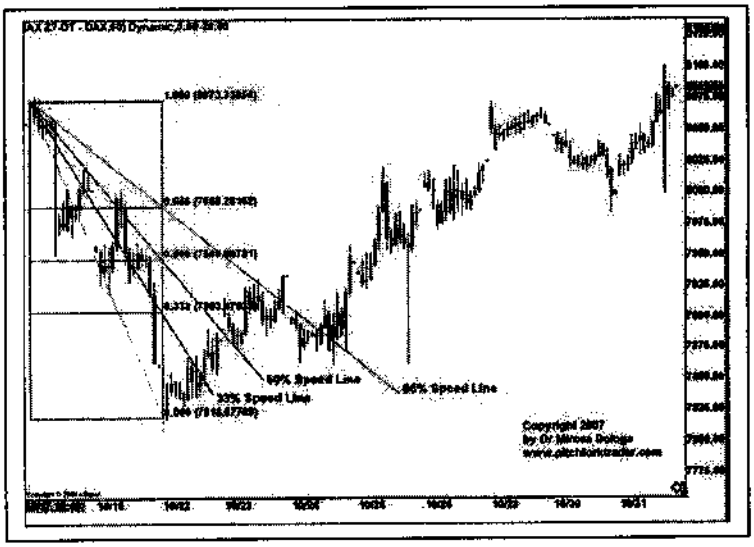


Figure 185 – *The right-side chart is the same as that of Figure 184 but this time, it uses the candle bars.*
Its advantage with regard to the line chart is that the trader can also see the reactions of the volatile bars' spikes on the speed lines.
When the market flow reaches a speed line, one of the following mechanisms may occur: a reversal, a pierce, a test, a re-test or a zooming-through. None of these can be accurately predicted, even if a high volume with volatile bars, in the nearness of the speed line might plead for a zooming- through choice.



7. Channels Drawn within Indicators

Figure 186 – *The right-side chart illustrates the termination of the current down-sloping impulsive pattern once the terminal wedge formation has been completed.*
A confirming indicator (RSI) *has been drawn at the bottom of the bar chart.*
The reversal will be confirmed by the RSI only if it break-ups its down-sloping TL-1 trend line. At that moment, the aggressive traders will enter the trade, but not the conservative traders. The latter will wait for additional signals: the breakout of RSI's 50% horizontal line associated with the breakout of the 2-4 base line located on the chart, just above the daily floor pivot at 4904 key level... As you can see... A triple confirmation is better than one!

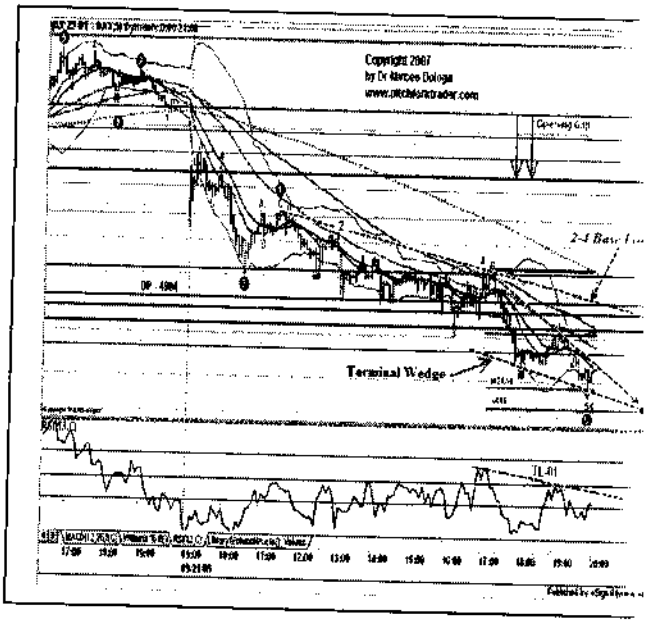


Figure 187 – *The right-side chart is the same as that of Figure 186 but a few 5-min bars later. The RSI's TL-1 trend line has been broken upward... And the aggressive traders stepped already in!*

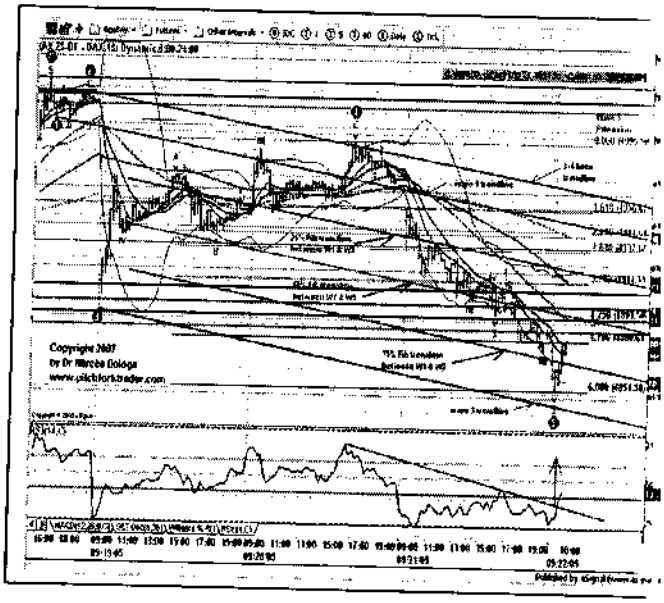
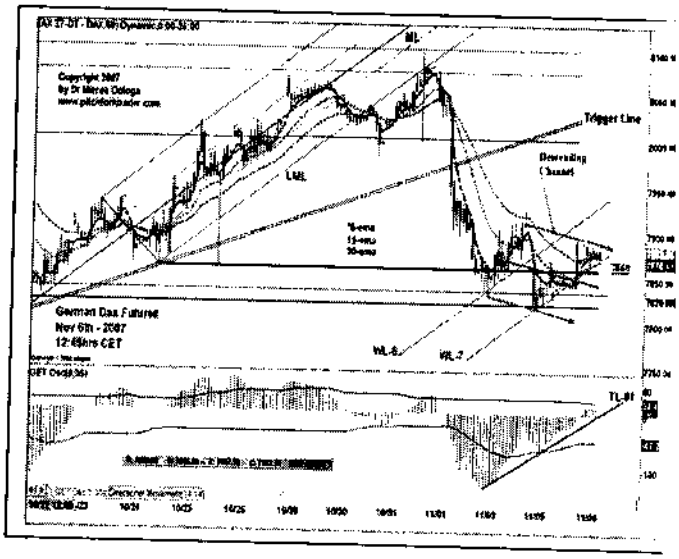


Figure 188 – *The right-side chart uses OSC(5,35) as a confirming indicator, drawn at the chart's bottom.*
Even if the market price had the power to lift itself above the 7860 old low level, the descending channel indicates that the local market is in a down mood, which will be exacerbated if progressively:

- *The triple moving averages (5-, 15- & 30-emas) will be broken,*
- *The warning line (WL-7) will be broken,*
- *The 7860 key level will be broken, and*
- *The OSC(5,35)'s TL-01 trend line will be broken.*



8. Channelling of the Line Charts

Figure 189 – *We have applied the channelling on the right-side line chart and readily noticed that, in a way, the visibility is better as that on the bar charts.*
Without any Elliott wave labelling, we observe right away that the market price spills out of the channel's initial bedding. This is an excellent Elliott differential diagnosis tool.
As we have already mentioned the corrective patterns ideally obey and lay within the boundaries of the channel, especially when they are high-powered momentum zigzags.
The impulsive pattern has a tendency to spill out of the initial channel bedding, forming multiple-storey-channels (chart on the right).

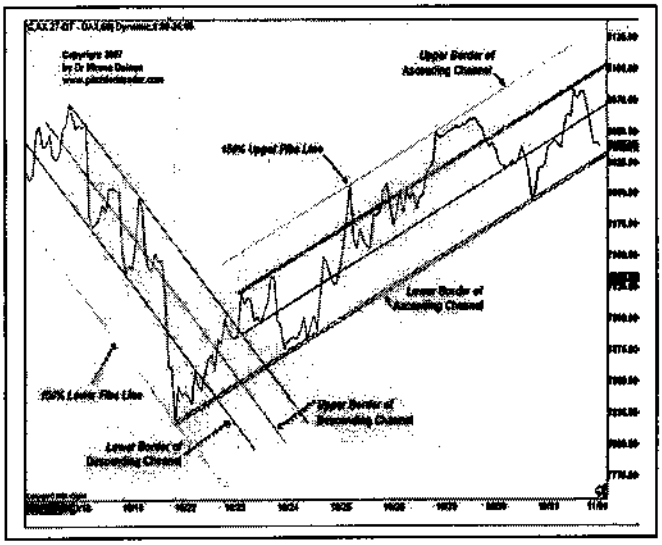
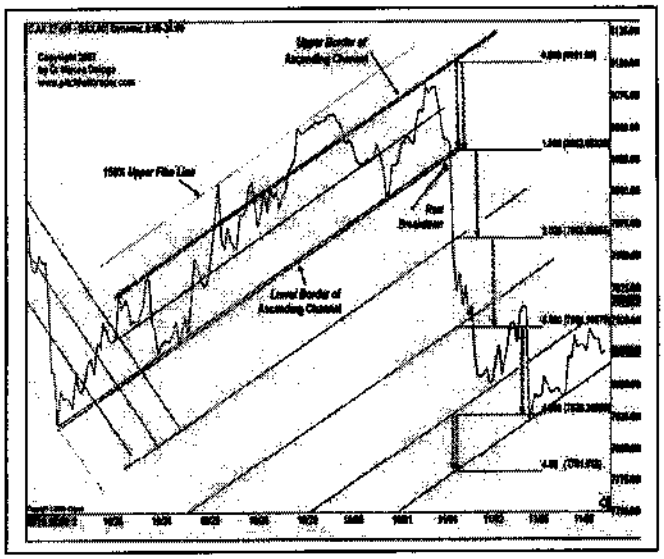


Figure 190 – *The right-side chart is a continuation of the chart of Figure 189, but three days later.*
We noticed that the downward extensions of the line chart's initial channel have strongly extended to the channel's fourth storey.
In spite of its apparent better visibility, the line chart is unable to show the individual corrective pattern moves of the volatile bars' spikes on the channels' boundaries.
Thus, the use of the line or bar channels is symbiotic and necessitates either a dual or a separate use, depending on the market's behaviour at the moment of trading.



9. Gap Channelling – High Precision & Reliable Tool

Figure 191 – *We have noticed that the use of the gap channelling allows not only to successfully trade the gap itself, but also to enter trades, long time after the prominent gap has taken place. The right-side chart shows the symbiosis, which could exist between the gap and its allocated descending pitchfork. As we can observe on left side, there were at least two trading opportunities: the filling in of the gap and the breakout with test and re-test of the trigger line of the pitchfork, which happened three days later.*
We have to confess that this technique is very profitable, although poorly known. We have decided to consecrate an entire chapter in our next book, besides the already consecrated one in the first volume.

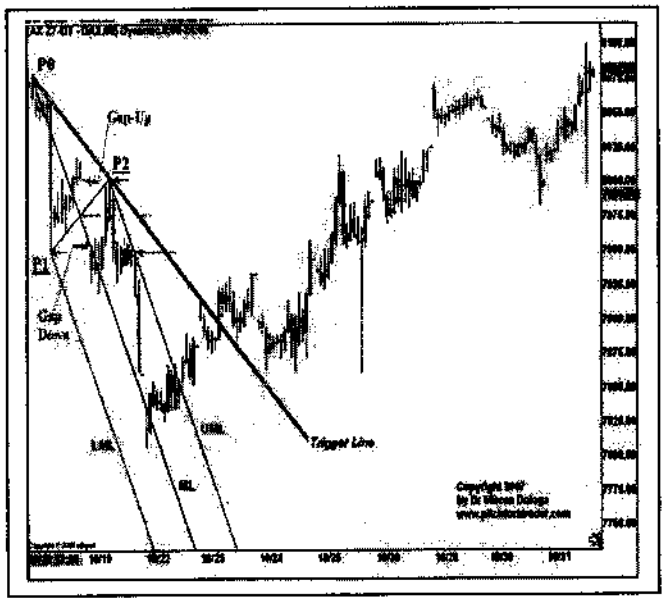


Figure 192 – *The right-side chart shows the influence of the major pitchfork gap's more than ten days after its occurrence. Not only are pitchfork's warning lines (***WL-8 to WL-14***) still very influential on the market flow but also the gap's chart formation offers numerous low-risk high-probability trade opportunities.*

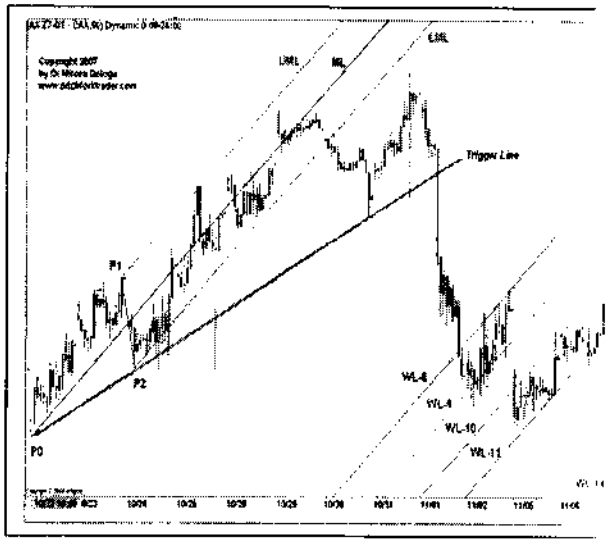


Figure 193 – *The down-gap channelling illustrated in the right-side chart can offer at least two scenarios. We have prepared the most probable set-up that could closely follow the market flow, as soon as the market price will evolve, whatever the market direction is.*
At a first glance there are multiple conditions that will plead for the continuation of the downtrend:
- *The down-sloping contextual market,*
- *The huge volatile last bar,*
- *The minimum P1 level retrace - only 38%*

However there are also, not so obvious factors that could influence an incoming reversal:
- *The nearness of the P0 old low,*
- *The P2 level can be the W5's termination,*
- *And, the often forgotten* **Contrary Opinion.**

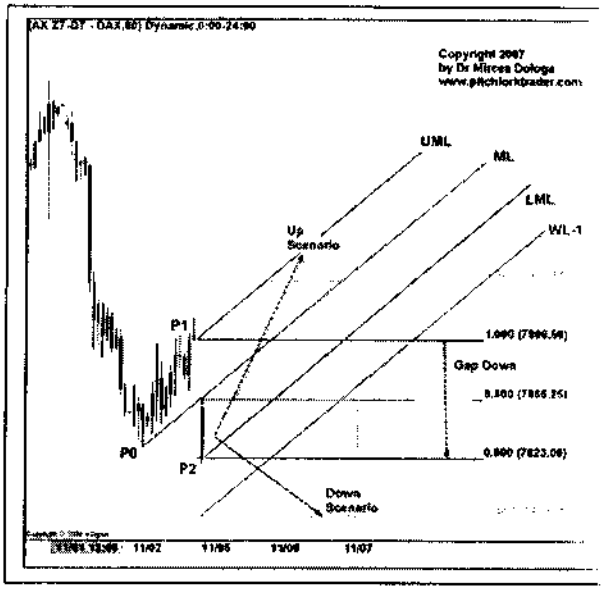
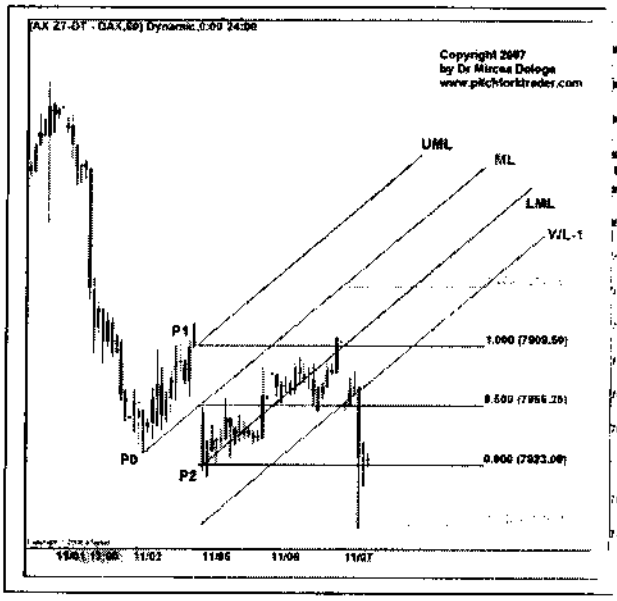


Figure 194 – *The right-side chart is a continuation of the chart in Figure 193, but two and a half days later.*
As most of the time, the market has decided to fill the gap, and develop the third non-mentioned scenario, the sideways movements. Due to the local market activity - the last three bars, we are inclined to consider an up-move to at least the upper border of the gap at 7909 key level. A more detailed analysis must be considered at that moment.



10. Un-Orthodox Channelling

Figure 195 – *Please imagine that you have drawn the right-side chart set-up but you feel that something is missing for taking an optimal decision. In that case, the* **un-orthodox channelling** *is precious and it shows all its value. Given its importance, we have dedicated an entire chapter to this subject, in volume one (***refer to page 117***). Defined as a link of a series of higher highs or lower highs, the un-orthodox trend line differ from the orthodox (***traditional***) trend lines because they traverse the market, camouflaged between the numerous valleys and peaks. For that reason, many inexperienced traders are not familiar with their existence and profitable use.*

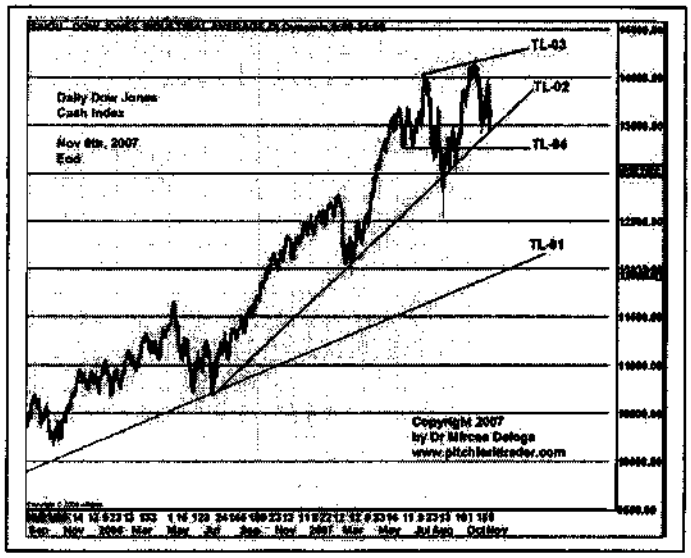


Figure 196 – *The right-side chart is the same as that of Figure 195, but with an un-orthodox channel drawn on it.*
We see right away its advantage because among other things, its upper boundary has created a confluence around 13500 zone with the TL-02 orthodox trend line and the whole hundred 13500 number key level. The creation of this confluence has a big advantage because now the trader knows to expect either a strong bounce on it, or on the contrary, a zooming-through move at the speed of a freight-train.

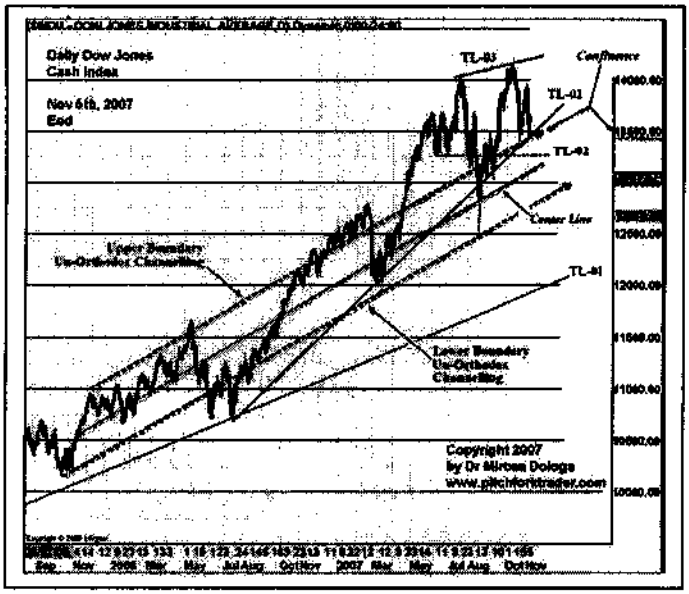


Figure 197 – *The right-side chart is the same as that of* **Figure** *196, but three days later.*
As we have anticipated above, the market dropped at the speed of a freight train to 13000 key level zone, leaving well behind the initial confluence of the 13500 key level. The trader should expect another critical event **(zooming-through or bounce)** *when the market flow will trespass, or not, the lower boundary of the ascending un-orthodox channel. Now… Looking back, we suddenly realize… The chart set-up without the un-orthodox channelling wouldn't have sufficed to optimally manage these moves.*

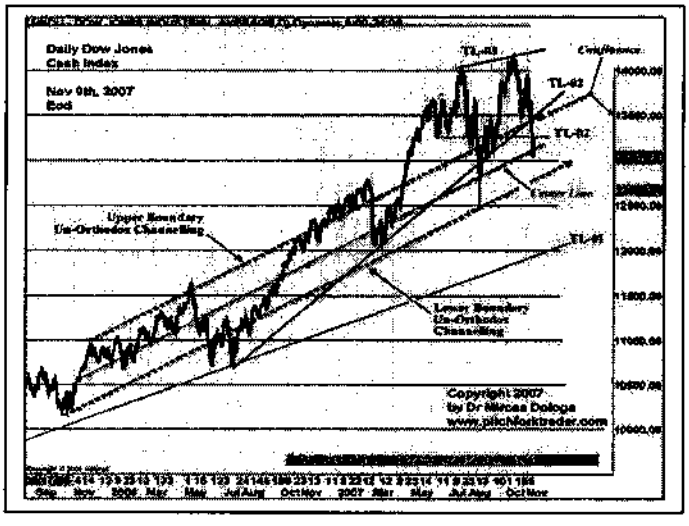
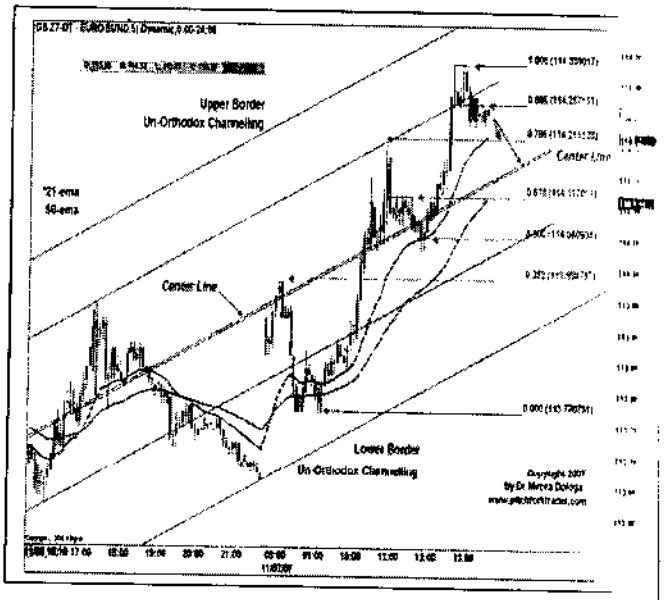


Figure 198 – *The right-side chart shows a focused segment of an un-orthodox channelling pertaining to the contextual market flow.*
*Its presence allows the trader to better manage the "*would be*" market movements.*
A close observation of the chart will reveal that the market flow has tested almost all the Fibonacci ratio levels on its way to climb, all the way to the highest high, at the 114.33 key level.
Even if, for the moment, the high-powered momentum seems to be intact, due to the market price's location well above the 21-ema, be on the watch out for a market price drop to the old 78.6 Fib level and then to the un-orthodox channel's Center line.



11. Regression Trend Lines (RTL) – Automatic Channelling

Figure 199 – *We can see on the right-side chart the use of the automatic regression trend lines (RTC).*
We named it automatic because a charting software program draws it. The trader will only have to manage the starting point of the ascending or descending trending data and its slope. We have been using for years the Advanced GET of www.esignal.com and we can say that it is very efficient.
*The software program calculates the "*best fitted*" channel lines encompassing most of the data within the standard deviation lines.*
Always use the Pearson's R coefficient.

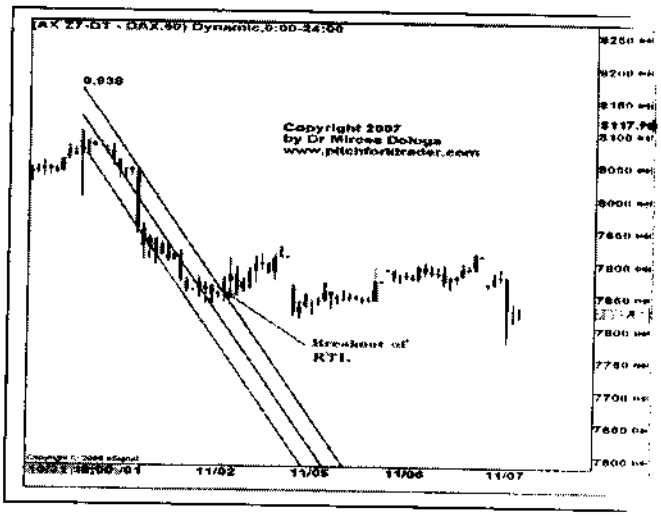


Figure 200 – *The right-side chart shows the influential power of the RTC in embedding the market flow. It also illustrates the assistance of the OSC(5,35).*
*The use of Pearson's R coefficient, which can be turned on or off, is beneficial because it gives the trader a clue of how efficient the RTC may be: the closer to the 1.00 value, the "*best fitting*" of the data is performed. A 90% coefficient is excellent while a 5% is unacceptable.*
In case that the market flow bedding isn't propitious to the use of the RTC, the trader can replace it with the Displaced Moving Averages (DMA) having a period of 6 bars with 4 displaced bars.

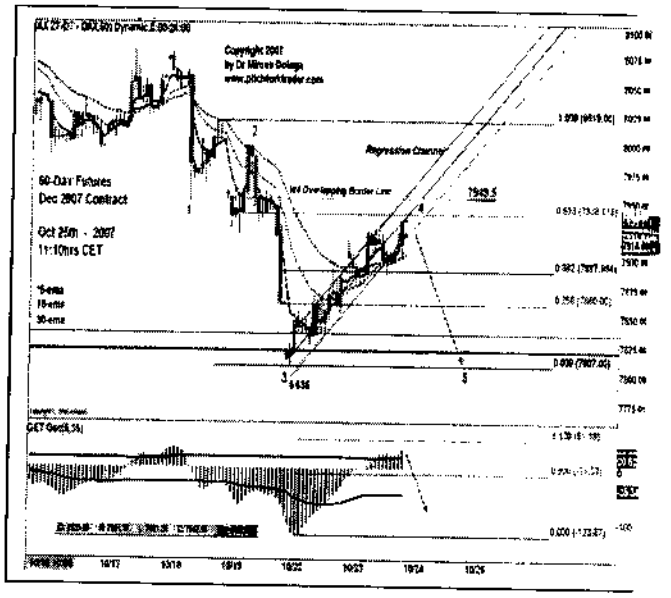
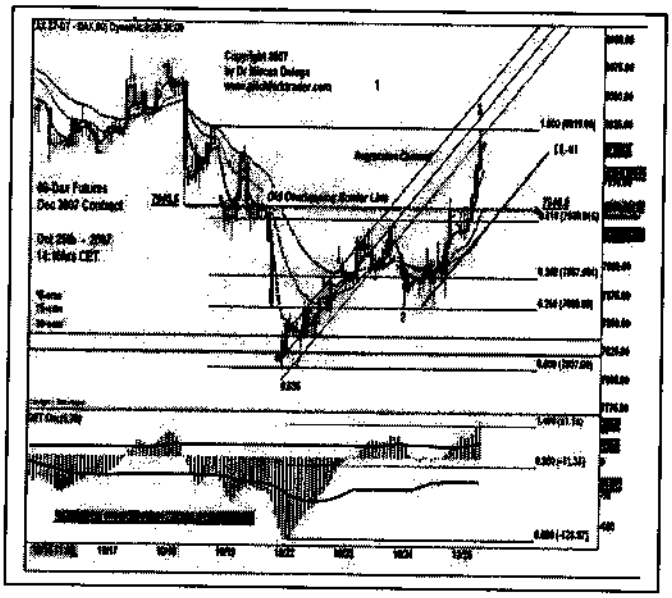


Figure 201 – *The right-side chart illustrates the use of the RTC associated with the TL-01 trend line. We can see that even if the market flow exited the regression trend channel, it not only returned to it two days later, but it was also halted by the lower boundary. Judging by the OSC(5,35)'s dome it seems that the market price is ready for another drop.*
In this chart example we can notice that the use of a parallel trend line, related or not to the Fibonacci ratios, can be of a great assistance in the revealing process of low-risk high-probability trades.



12. Global Channelling - The Final Conclusion

Figure 202 – *Now that we have reached the end of this very useful chapter, representing a real professional edge for the trader, we will try to show on the right-side chart, an advanced use of the channelling. This technique not only associates multiple tools but it makes sure that the management of a trade is closely followed with adequate money management.*
We can consider the chart as a quintessence of channelling where different tools not only work together in synergy but they enhance each other for a better trading outcome: criss-cross channelling technique, accelerating volume trend lines, rectangles' extensions, gap's measurements, price Fibonacci ratios, orthodox trend lines, etc.

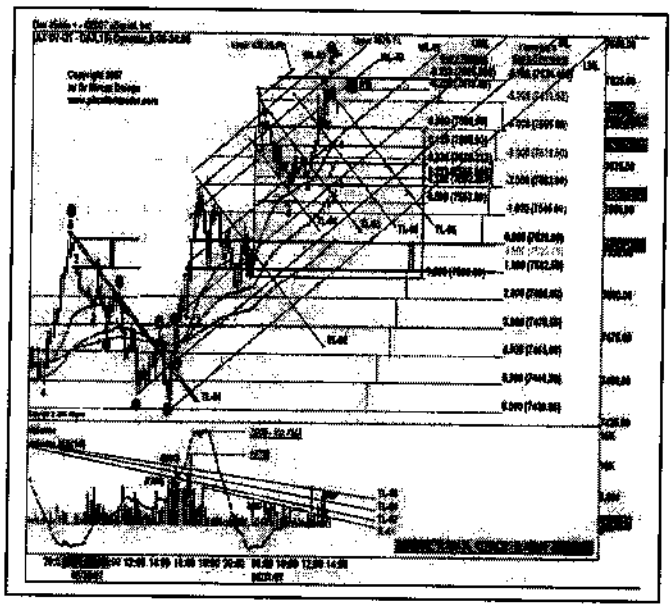
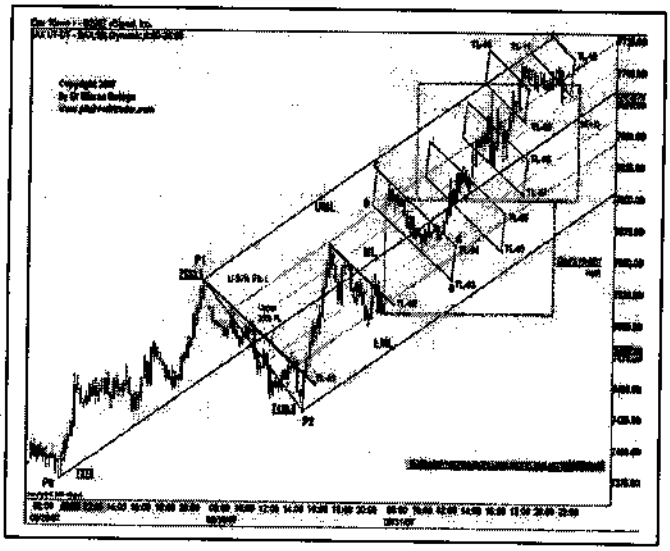


Figure 203 – *The right-side chart is the same as that of Figure 202, but a few hours later, at the end-of-the-day.*
This time we tried to remain simple: an ascending major pitchfork, multiple counter-trend parallelograms & their extensions, a gap's extensions and two "to be broken" orthodox trend lines.



Key Points to Remember:

- The huge advantage of channeling is that it allows the trader to better understand the market flow whatever it is: the contextual or the local market.
- The study of Elliott patterns can be done through the practice of the prior pattern channeling for targeting its termination and also through the channeling of its own inception & development.
- The high-powered momentum corrective patterns, like steep zigzags, faithfully follow the channeling structures, much better than the impulsive patterns. The latter prefer the multi-story channeling guided by adequate Fibonacci ratios.
  This behavior can serve as *an Elliott differential diagnosis tool.*
- More often than not, the extensions of the first volatile bar, the trading range and the opening range, will terminate their entire swing (trend) on an extension guided by a Fibonacci ratio.
- At the day's end, the opening range will be located, more than 70% of the time, at one of the day's market extremities.
- The P1-P2 trend line technique is a derivate tool of the pitchfork. Used as a confirmation tool, it has the advantage of associating price & time. Their intersection is Gann oriented and supplies one of the strongest & the most reliable signals in trading.
- The 2-4 base line is another reliable trading tool, which measures the termination of the impulsive pattern. It serves as a landmark for the W5's end.
- We have to confess that the trade's context is one of the closely guarded secrets responsible for trader's success or failure.
- A detailed study of the confluences reveals that the market is nothing else but a continuous move, from one confluence zone to another.
- In order to avoid a failed breakout only fuelled by the false moves the trader must constantly be on the watch out for protecting elements: the high volume occurrences, the zooming through the breaking line, a preceding gap preferably a breakaway gap, the existence of an expanding condition, preferably in the nearness of the breaking line like a string of narrow bars, a terminal wedge or a long-duration consolidation. One should avoid taking any breakout when there are disparate bars with variable sizes, near the breaking line.
- Most of the professional traders consider that after three fan lines the trader should expect a reversal, more often than not, or at least a test with a small correction.
- When a speed line is approached by the market price, the trader must expect: a reversal, a pierce, a test, a re-test or a zooming-through.

- **Be aware that in spite of their better apparent visualisation, the line bar channelling are unable to show the individual corrective pattern moves of the volatile bars' spikes on the channel boundaries.**
- **Gap channelling often acts as a high precision, reliable & profitable tool**

Chapter 8

Variable Time/Price Location of Pitchfork's Anchor
Parallel Trigger Lines & P1-P2 Fibs Trend Lines

As most of us know, a pitchfork can't be constructed without knowing the location of the anchor (*P0 pivot*) and the P1 and P2 pivots, which will dictate the size, and the slope of the P1-P2 swing.

We have already described in the first volume (*refer to Chapter 6*) that:

- **The length and the slope of the handle will definitely influence the performances of the pitchfork's task. *The handle is defined as the distance between the anchor (P0 pivot)) and the P1-P2 swing's midpoint.***
- **The height and the slope of the P1-P2 swing will also play an important role in creating the slope of the trigger lines. A steeper slope causes a taller height and a smaller height is caused by a leaner slope (*refer to Figure 101 of volume one).***
- **The handle's size and the P1-P2 swing's size angle rotation will greatly influence the risk of the trade.**
- **A trend failure will convert a trigger line into a Hagopian line.**

After the detailed study of the handle and P1-P2 characteristics done in the first volume, we will try to understand if the pitchfork task efficiency will be modified by the choice of the anchor location. This is very possible because we know already that the choice of pitchfork's pivots will greatly engender its efficiency, which is expressed as how well the market flow is described.

After the variable anchor location subject we will go into a greater detail with the synergetic effect of the parallel trigger lines and P1-P2 Fibs ratio trend lines.

1. Variable Time/Price Anchor Location of the Pitchforks

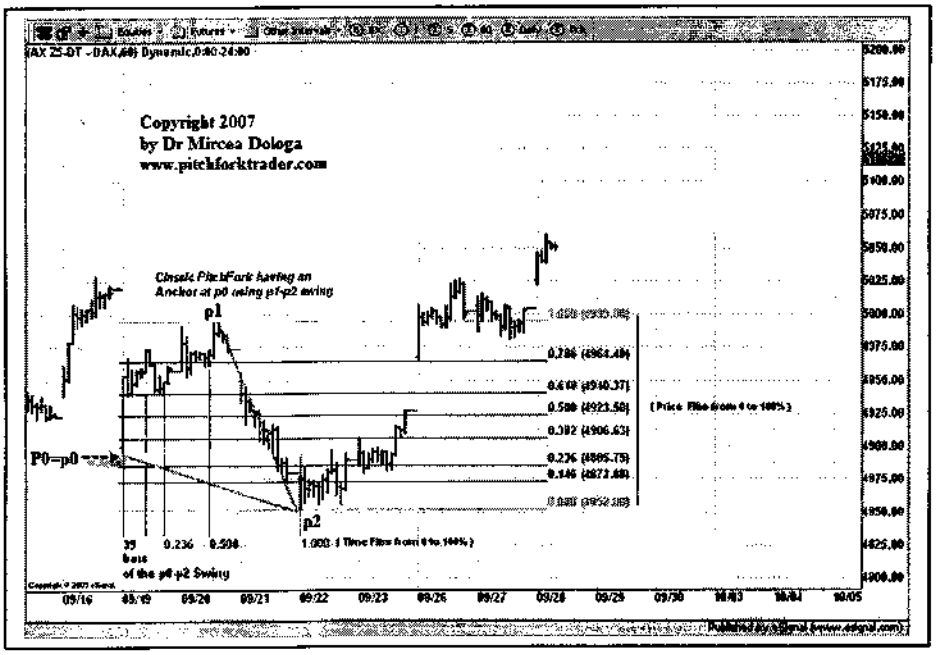
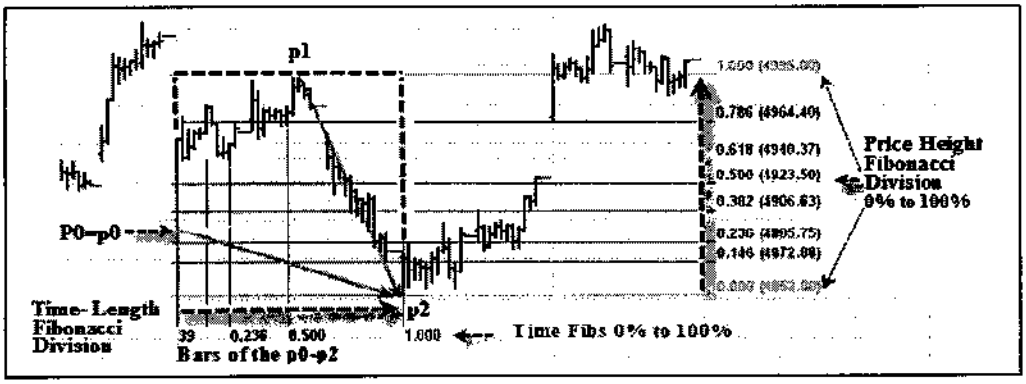


Figure 204 - *The above chart sets the scene of choosing the best anchor location through the use of the Cartesian coordinates. The anchor's location will be chosen at the price and time intersection, due to the Gann's principle which states that the high probability reversals occur where time meets the price.*



 Source: eSignal.com

Figure 205 - *The above chart illustrates the criss–cross of the time/price Fibonacci trend lines. They set the scene of choosing the best anchor location through the use of the Cartesian coordinates.*

1.1 Description of the Variable Anchor Location Set-up

We are guided by the concept that the anchor's location (P0 *or* p0) can be situated anywhere in the area delineated, *at right* of the chart *(refer to Figure 205)*, by the p1-p2 swing, and *at left* of the chart (*refer to Figure* 205) by the vertical line dropped from the major P0 pivot which represents the lowest low of the preceding swing.
The anchor's location will be given by the intersection of a horizontal Fibonacci trend line (*division of the price–height of the chart-space*) with a vertical Fibonacci trend line (*division of the time–length of the chart-space*). The former will be obtained by applying the Fibonacci ratios to the height of the p1-p2 swing and the latter will be obtained by applying the Fibonacci ratios to the p0-p2 horizontal distance. We should mention that the P0 pivot will remain immobile representing a classic pivot, while the p0 variable location pivot will move in the delineated area stabilizing at the intersection of the time/price Fibs lines, identified by the Cartesian coordinates.

1.2 Description of the Classic Anchor Set-up (P0=p0)

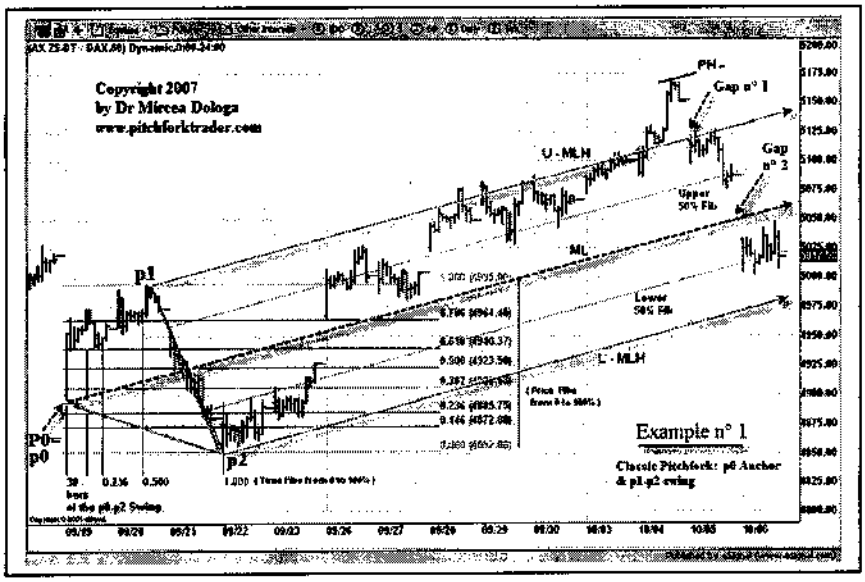


Figure 206 - *A classic pitchfork has been drawn in the above chart. The anchor location (P0=p0) is the low of the preceding swing.*

The *first example* of the *anchor location* illustrated in *Figure 206* is classic using the lowest low of the swing opposite to the p1-p2 swing, where P0 equates p0. An attentive observation

of the context of the chart will show if the pitchfork will optimally describe the market flow:

- The slope of the drawn pitchfork is ascending encasing the most of the chart, with the exception of the Gap n° 1.
- Both of the descending opening gaps (*Gaps n° 1 & 2*) of the terminal portion of the local market chart have their specific roles:
  - *Gap n° 1* was conceived while the market flow considered the upper median line (*U-MLH*) as a very strong support; therefore it jumped it rather than testing it before zooming through. Then, the market price tried to fill the gap but it encountered a very solid resistance by the gap's floor formed by the upper median line (U-MLH). After the latter has been tested several times, but it didn't give in, the market finally decided to drop testing on its way down the upper 50% Fibonacci lines.
  - *Gap n° 2* was formed under the influence of the high-powered down momentum. As a consequence, this second gap jumped over the median line (ML) zooming through it all the way down to the lower 50% Fibonacci line.
- The median line (ML) passes through the 61.8% of the September 26th opening gap.

We have purposely omitted to draw a minor down-sloping pitchfork, having an anchor on the highest high, right on the sliding parallel line (*PH*). It would have probably described very well the local market. But we didn't do it because of the crowding the chart reasons.

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe the market flow, on a scale from 1 to 10, we would give it an *eight.*

1.3 Description of the First Variable Anchor Set-up (23.6% & 23.6% T/P Cartesians)

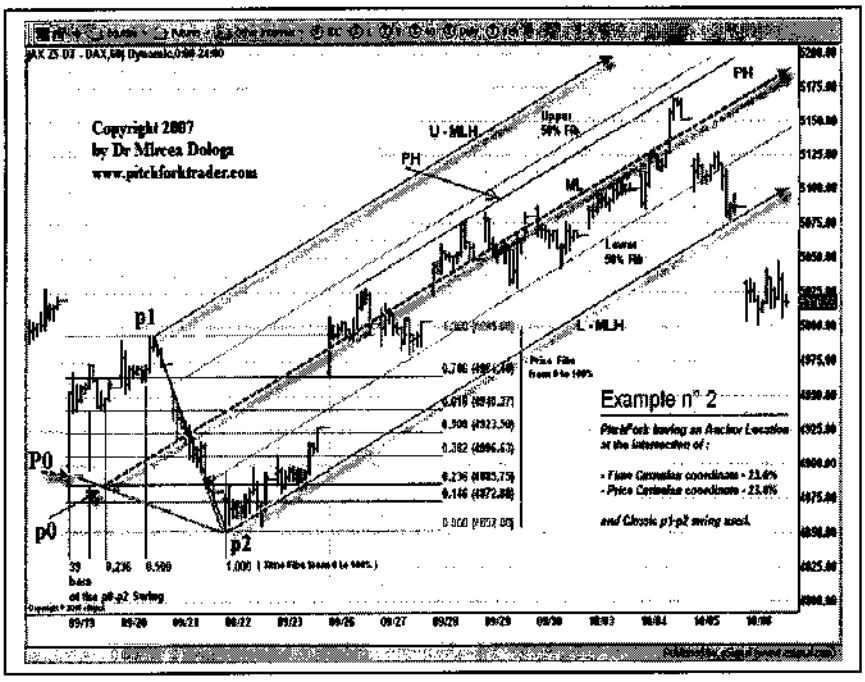


Figure 207 - *The above pitchfork is our first variable anchor version. This time the anchor location is at a time/price Fibonacci intersection lines. The classic P0 pivot doesn't coincide with the variable p0 pivot.*

The *second example* of the *anchor location* illustrated in *Figure 207* uses a variable p0 pivotal anchor established at the confluence of the 23.6% time Cartesian coordinate and the 23.6% price Cartesian coordinates. A careful examination of the context of the chart will show if the pitchfork will optimally describe the market flow:

- The slope of the drawn pitchfork is ascending encasing the most of the chart, with the exception of the last portion of the local market containing the recent moves,

- Both of the descending opening gaps of the terminal portion of the local market ch has their specific roles (*Gaps n° 1 & 2 – not labelled here but identical as those of Figure 206*).
- The median line serves as a symmetry axis for the last eight trading days.
- The last gap (*Gap n° 2*) has been formed out of the main body of the pitchfork, ri under the lower medial line (*L-MLH*).

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe market flow, on a scale from 1 to 10, we would give it a *nine.*

1.4 Description of the Second Variable Anchor Set-up (14.6% & 23.6% T/P Cartesians)

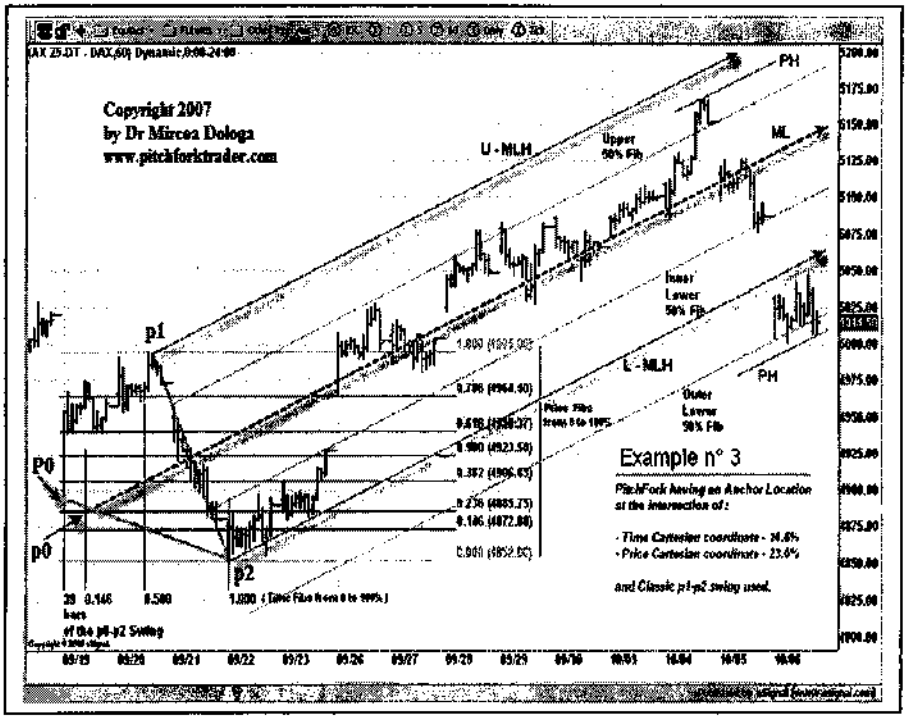


Figure 208 - *The above pitchfork is our second variable anchor version. The anchor location is a time/price Fibonacci intersection lines.*

The *third example* of the *anchor location* illustrated in *Figure 208* uses a variable p0 pivot anchor established at the confluence of the 14.6% time Cartesian coordinate and the 23.6 price Cartesian coordinates. A careful examination of the context of the chart will show if t pitchfork will optimally describe the market flow:

- The slope of the drawn pitchfork is ascending encasing the most of the chart, with t exception of the last portion of the local market, almost identical as the example *Figure 207.*
- Both of the descending opening gaps of the terminal portion of the local market cha have their specific roles (*Gaps n° 1 & 2 – not labelled here but identical as those of t Figure 206*),
- The median line serves as a symmetry axis for the last eight trading days, but less as the second example.
- The last gap (*Gap n° 2*) has been formed mostly within the main body of the pitchfor with the lower medial line (L-MLH) serving as the gap's last third delineated frontier.

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe t market flow, on a scale from 1 to 10, we would give it a *nine.*

1.5 Description of the Third Variable Anchor Set-up (50 % & 50% T/P Cartesians)

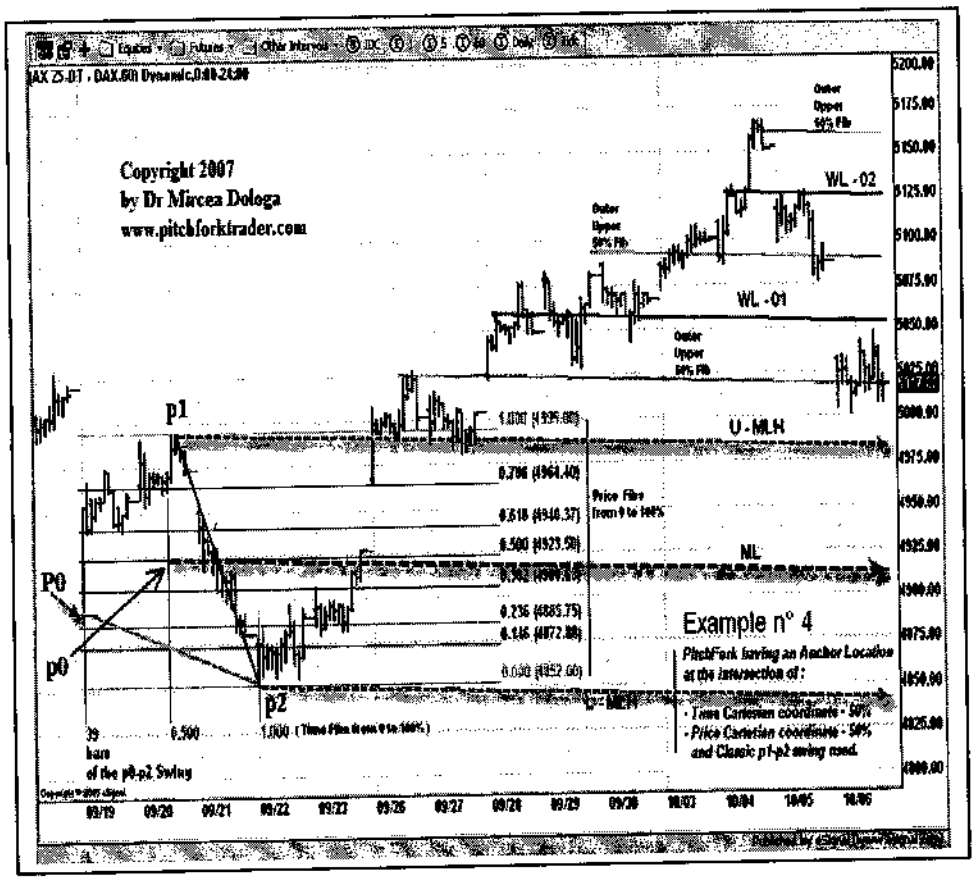


Figure 209 - *The above pitchfork is our third variable anchor version. The anchor location is at a time/price Fibonacci intersection lines.*

The *fourth example* of the *anchor location* illustrated in *Figure 209* uses a variable p0 pivotal anchor established at the confluence of the 50% time Cartesian coordinate and the 50% price Cartesian coordinates. A detailed study of the context of the chart will reveal if the pitchfork will optimally describe the market flow:

- **The slope of the drawn ascending pitchfork has drastically changed compared with the preceding examples. It has been simply inversed, being now, less than horizontal.**
- **The market flow is not encased anymore in the pitchfork's main body. In spite of this, the pitchfork acolytes describe pretty well the contextual and local market. Almost each of them constitutes a strong resistance or support.**
- **Both of the descending opening gaps of the terminal portion of the local market chart have their specific roles (*Gaps n° 1 & 2 – not labelled here but identical as those of the Figure 206*), even if they are located now outside of the pitchfork's main body.**
- **It seems that the median line has lost for now its magnet role and it doesn't serve as a symmetry axis. This is only normal, because the median line yielded for the moment, its principal roles to its acolytes, especially to the warning line and the upper 50% Fibs lines.**

We have purposely omitted to draw a minor down-sloping pitchfork, having an anchor on the highest high, just above the last upper 50% Fibs line. It would have probably described very well the local market. But we didn't do it because of the crowding the chart reasons.

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe the market flow, on a scale from 1 to 10, we would give it *an eight.*

1.6 Description of the Fourth Variable Anchor Set-up (38.2 % & 38.2% T/P Cartesians)

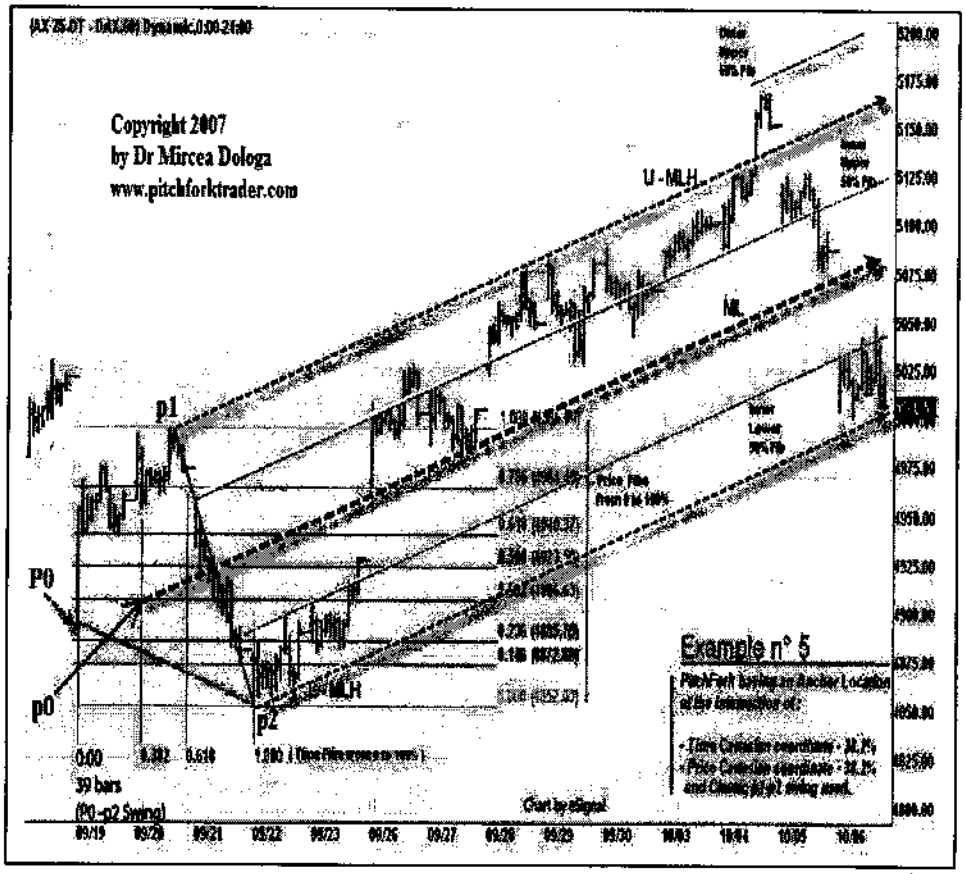


Figure 210 - *The above pitchfork is our fourth variable anchor version. The anchor location is at time/price Fibonacci intersection lines.*

The *fifth example* of the *anchor location* illustrated in *Figure 210* uses a variable p0 pivot anchor established at the confluence of the 38.2% time Cartesian coordinate and the 38.6% price Cartesian coordinates. A careful study of the context of the chart will reveal if th pitchfork will optimally describe the market flow:

- **The slope of the drawn ascending pitchfork is now up around 22°.**
- **The market flow is almost encased in the pitchfork's main body.**
- **Both of the descending opening gaps of the terminal portion of the local market char are now almost encased in the pitchfork's main body and have their specific roles (*Gap n° 1 & 2 – not labelled here but identical as those of the Figure 206*).**
- **It seems that the median line has now recovered its magnet role and serves again, as symmetry axis.**

We have purposely omitted to draw a minor down-sloping pitchfork, having an anchor o the highest high, just above the last upper 50% Fibs line. It would have probably describe very well the local market, but we didn't do it because of crowding the chart.

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe th market flow, on a scale from 1 to 10, we would give it *a 9.5*

1.7 Description of the Fifth Variable Anchor Set-up (14.6 % & 14.6% T/P Cartesians)

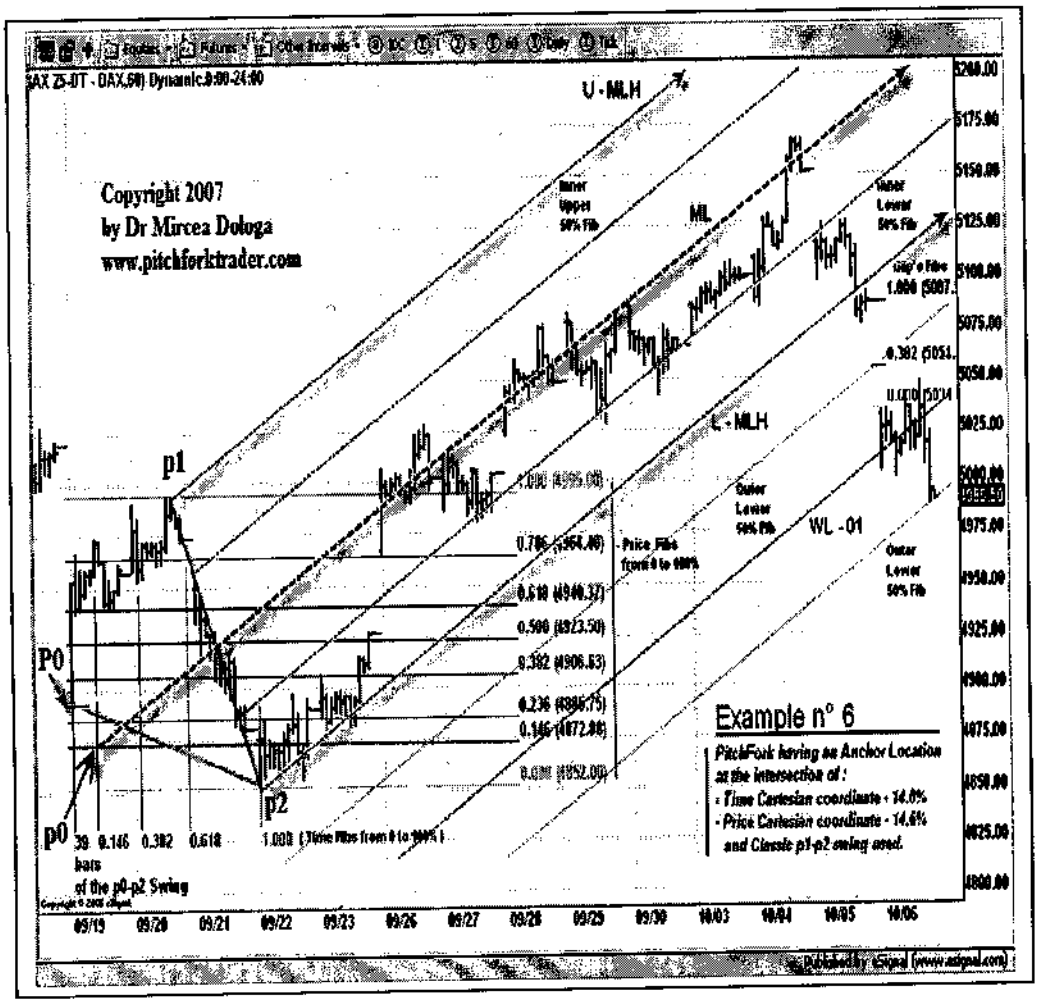


Figure 211 - ***The above pitchfork is our fifth variable anchor version. The anchor location is at a time/price Fibonacci intersection lines.***

The *sixth example* of the *anchor location* illustrated in *Figure 211* uses a variable p0 pivotal anchor established at the confluence of the 14.6% time Cartesian coordinate and the 14.6% price Cartesian coordinates. A careful observation of the context of the chart will reveal if the pitchfork will optimally describe the market flow:

- **The slope of the drawn ascending pitchfork is now up around 30°.**
- **The market flow is almost encased in the pitchfork's main body, with the exception of the last down-gap.**
- **Both of the descending opening gaps of the terminal portion of the local market have their specific roles (*Gaps n° 1 & 2 – not labelled here but identical as those of the Figure 206*).**
- **It seems that the median line has how recovered its magnet role and serves again, more or less, as a symmetry axis.**

We have purposely omitted to draw a minor down-sloping pitchfork, having an anchor on the highest high, just above the median line (ML). It would have probably described very well the local market. But we didn't do it because of the crowding the chart reasons.

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe the market flow, on a scale from 1 to 10, we would give it *a nine.*

1.8 Description of the Sixth Variable Anchor Set-up (50 % & 14.6% T/P Cartesians)

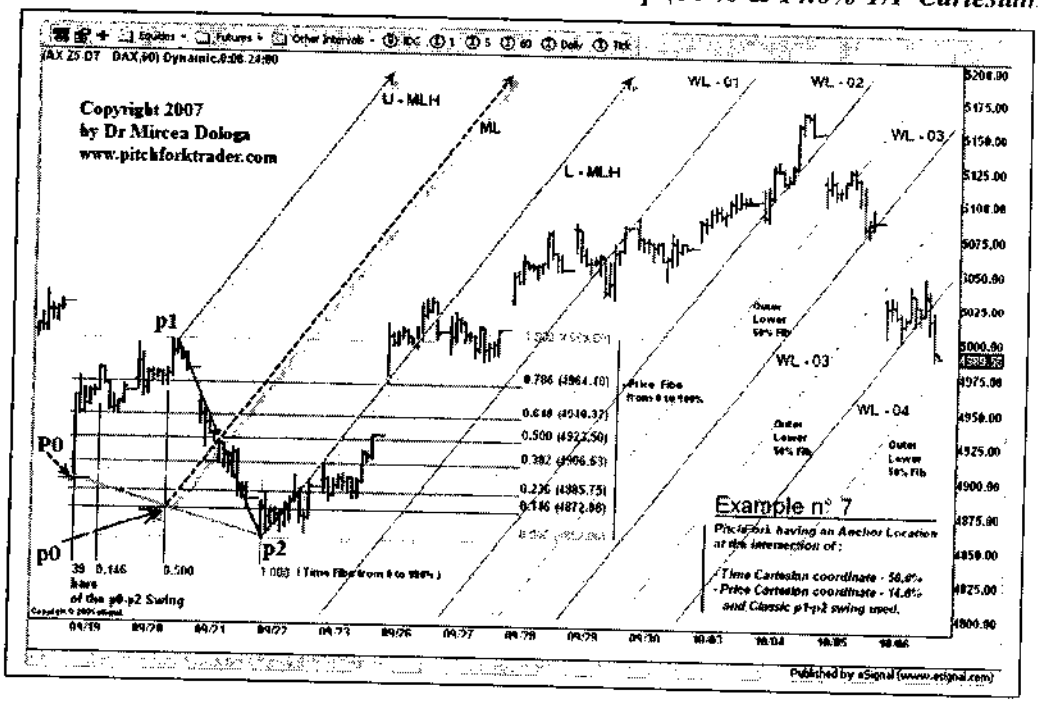


Figure 212 - *The above pitchfork is our sixth variable anchor version. The anchor location is at a time/price Fibonacci intersection lines.*

The *seventh example* of the *anchor location* illustrated in *Figure 212* uses a variable p0 pivotal anchor established at the confluence of the 38.2% time Cartesian coordinate and the 38.6% price Cartesian coordinates. A careful observation of the context will reveal if the pitchfork will optimally describe the market flow:

- **The slope of the drawn ascending pitchfork is now up around 45°.**
- **The market flow is almost outside of the pitchfork's main body.**
- **Both of the descending opening gaps of the terminal portion of the local market chart are now almost encased in the pitchfork's main body and have their specific roles (*Gaps n° 1 & 2 – not labelled here but identical as those of the Figure 206*). They are both located outside the main pitchfork's body.**
- **It seems that the median line has lost for now any kind of a role. This is only normal, because the median line yielded for the moment, all its roles to its acolytes, the warning line and the upper 50% Fibs lines.**

It is odd to observe that in spite of the median line's principal and un-contested roles, this variable anchor location version has completely eliminated the ML's functions. However, like a grafted organ, its acolytes took over, and the obedient market flow follows them. We can observe that ALL the warning lines and the lower 50% Fibs lines, constitute, in a more or less pronounced manner a support or a resistance... As far as the chart can contain...up to the third warning line (*WL-3*) and the last lower 50% Fibs line.

Conclusion: If we would have to evaluate the efficiency of the pitchfork to describe the market flow, on a scale from 1 to 10, we would give it *a nine.*

Conclusion of *Sub-Chapter n° 1*: Out of the seven examples, we strongly plead and prefer the example n° 5 (*refer to Figure 210*). It is due to the contextual & local market flow almost complete encasement in the pitchfork's main body, the enhanced role of the median line, the long–lasting channel formed by the ML & U-MLH and the two obvious gap opportunity trades... and... Most of all, due to the *most optimal market flow description*!

2. Parallel Trigger Lines

Given the importance of the trigger line we have consecrated an entire chapter in the first volume. We have expressly omitted to treat the parallel trend line, in order to describe them together with the P1-P2 Fibs trend lines (*refer farther to the last sub-chapter*).
The construction of the trigger line (*TL*) is handy to follow; its line joints the pivotal anchor (*P0*) with the P1 pivot (*upper trigger line (U-TL)*) or with the P2 pivot (*lower trigger line (L-TL)*) for an up-sloping pitchfork (*refer to Figure 213).*
Whenever a failure (*momentum cut-off)* occurs, the trigger line can be used as a confirmation of the change of the trend.
The way these trigger lines are behaving, while touched or penetrated, it is not different from that of the median lines or its associates, especially when it concerns testing, piercing or zooming.

2.1 Hagopian Rule and Line

Given the importance of the very little known *Hagopian rule* we would like to repeat it for the benefit of the trader, in spite of the fact that we have already described it, in the second sub-chapter of the *Chapter 6* of the first volume. It simply applies when an up-sloping market is approaching a significant trend line (*slant, horizontal or curvilinear)* but it's not strong enough to test it (*Example: the ML of an up-sloping pitchfork).*

The rule states that, the price will reverse vigorously, after approaching the ML, in a big counter-move. It drops like a rock, towards an opposite strong trend line (*L-MLH* and the *lower trigger line* (*L-TL*), *in our Figure 213 example*). Its reverse momentum is usually stronger than the momentum of its prior approach.
In its strong counter-move impetus, the price will meet the same trend line that it was drifting along before reversing. In our example, that is the *lower trigger line* (*L-TL*), which joined the anchor (*P0*) and the P2 of the up-sloping pitchfork (*refer to Figure 213*). It represents the *Hagopian line*, which has the merit of completing the set-up of the price failure rule.

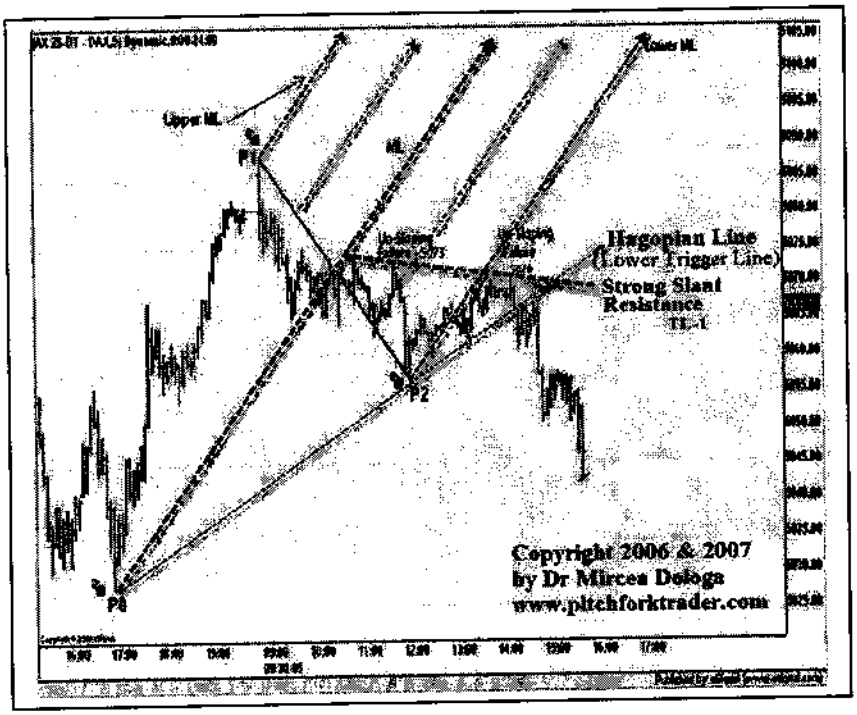


Figure 213 - *The lower trigger line of the above pitchfork naturally converts into a Hagopian line at the occurrence of the double up-sloping price-failures revealed by the strong slant resistance (TL-1).*

Concerning the *Hagopian line*, Dr Alan H. Andrews clearly stated:

"When prices reverse trend before reaching a line (ML in our example) at which probability indicates such a reversal could start, proper action may be taken in buying or selling, if prices cross the trend line (L-TL in our example) they were moving along before reversing".

The *Hagopian rule* concept is ideally illustrated in the above 5-min German Dax Futures chart (refer *to Figure 213*); after the two up-sloping failures in the 5073-5070 price zone (*lower highs),* the price dropped like a stone, in a huge counter-trend movement. It zoomed through the *Hagopian line* (*Lower Trigger Line – in our case)* and then re-tested twice the line, before deciding to take *the path of least resistance*, in a high downward momentum mood. The numerous huge down-sloping bars confirmed it.

2.2 Parallel Trigger Line Channel can Signal the Trend's Termination

Whenever the trigger lines are out of the market flow's field we can successfully replace them with the parallel trigger lines.

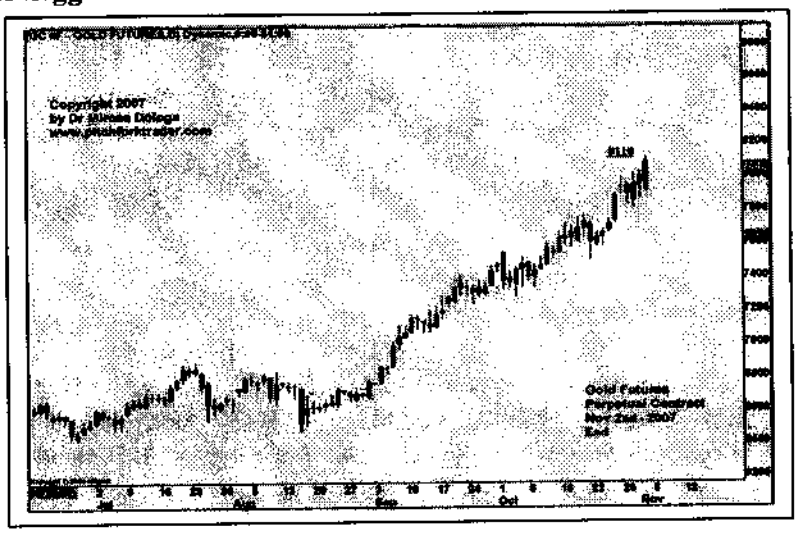


Figure 214 - ***The presence of the above Gold Futures chart with its current 8110 highest high, might make the trader wonder... What is so special about it? We have drawn it because we would like that the trader imagine what tools would be the best for the "would-be" pitchfork's trigger lines or the parallel trigger lines.***

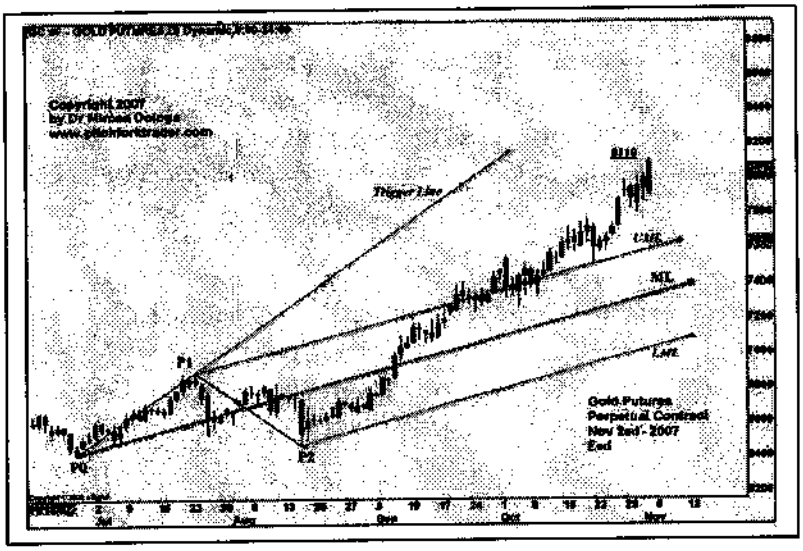


Figure 215 - ***The above pitchfork with its upper trend line have been drawn on the chart of Figure 214. One can obviously see that the trigger line is outside, far away from the market flow's field.***

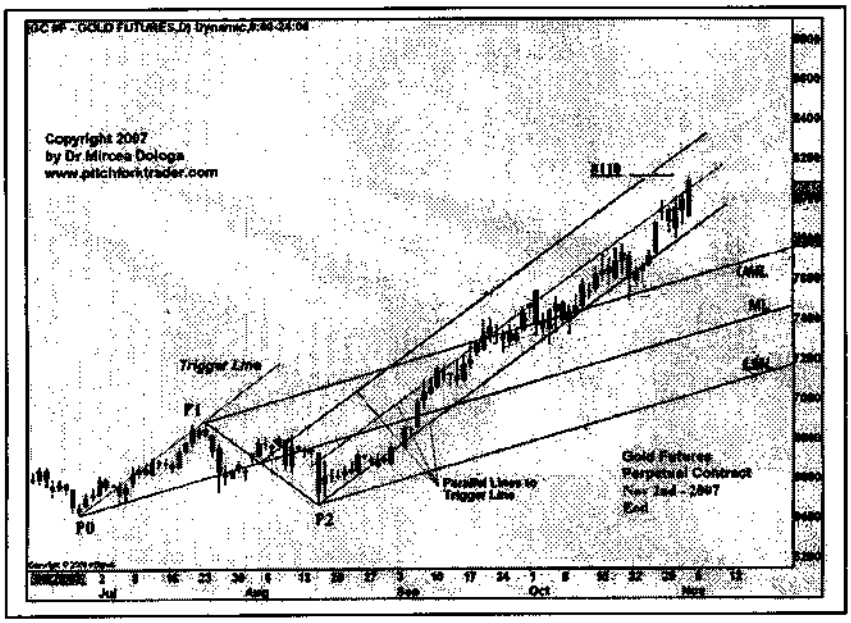


Figure 216 - *We have drawn on the above pitchfork not only its upper trigger line, like in Figure 215, but also its parallel trigger line up-sloping channel formed by:*

- *The upper border parallel trigger line, drawn from the intersection of the P1-P2 midpoint swing with the median line,*
- *The lower border parallel trigger line, drawn from the pitchfork's P2 pivot*
- *The mid-channel line which splits the channel in two parts.*

One can obviously observe that the market flow is cruising upward along the lower mid-channel. It seems that the last price bar is initiating a breakout of the mid-channel line, having as a prime target the upper border or may be higher. The ultimate target would be the upper part of the trigger line, in case of an extended trend.

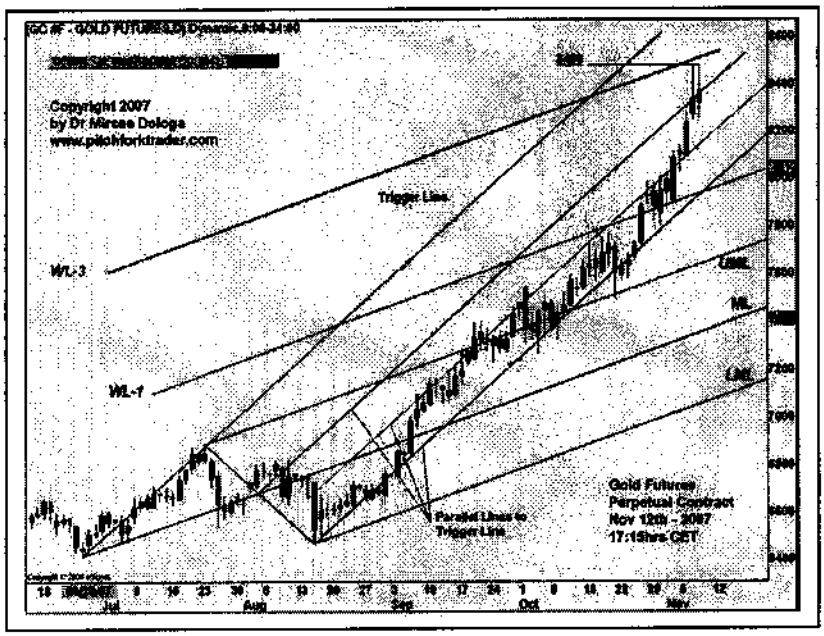


Figure 217 - *We have drawn on the above pitchfork not only its parallel trigger line up-sloping channel, like in Figure 216 but also pitchfork's third warning line (WL-3). The market flow has continued its climbing from 8110 to 8480 key level. As we have anticipated, the market price already attained the upper border of the parallel trigger line channel, and now it is being trapped under it, in spite of the last two bars' highs, which almost reached the WL-3. This double halting, on the highs and close levels of the last two bars signals a very strong and very probable reversal.*

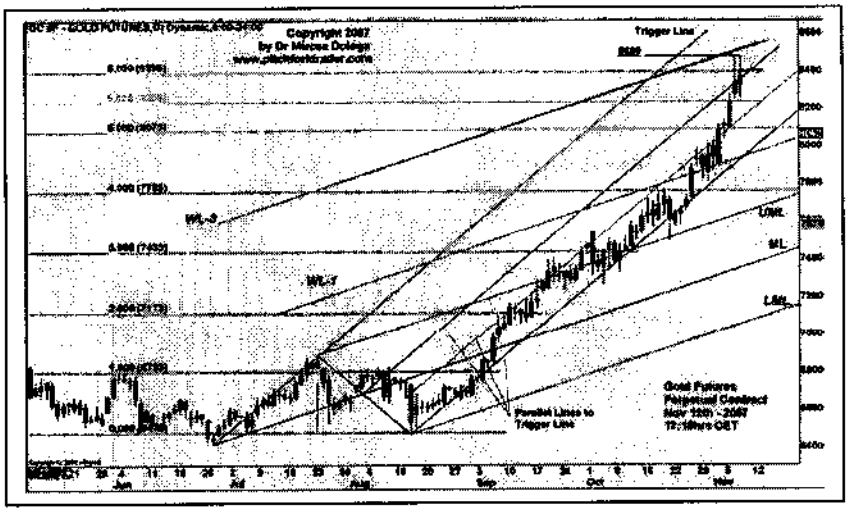


Figure 218 - *It is always safe to have another signal confirmation. We were able to find the birthing rectangle, which has constituted the foundation of this strong three month trend. We can observe that the 839.3 key level is its sixth extension, just a few points away from the current highest high at 848.0. Our confidence has considerably improved and we are ready for a short trade, if the market flow will reverse.*

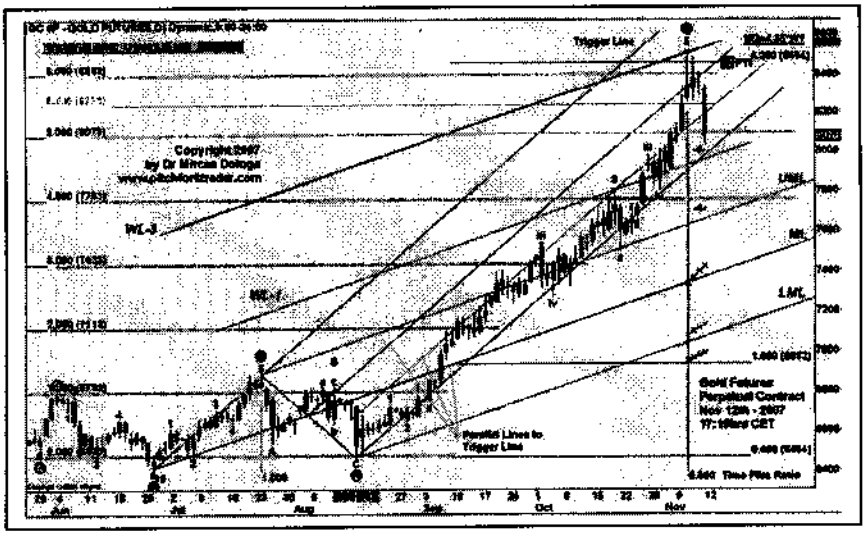


Figure 219 - *As we have anticipated, after performing a small doji, the market has suddenly dropped!*

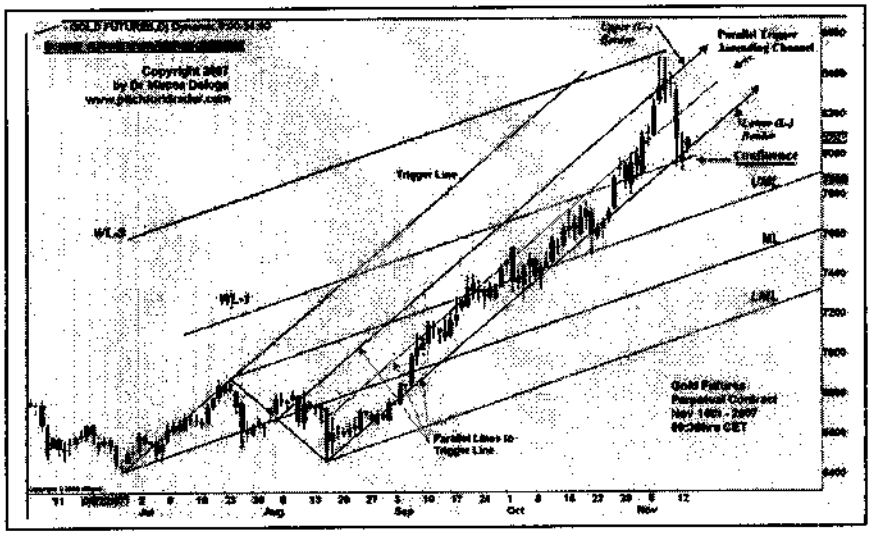


Figure 220 - *Even on its way down, the market obeys the WL-1 & channel's lower-border confluence.*

2.3 *Parallel Trigger Line Channel & its Extensions - Corrective Wave Projection*

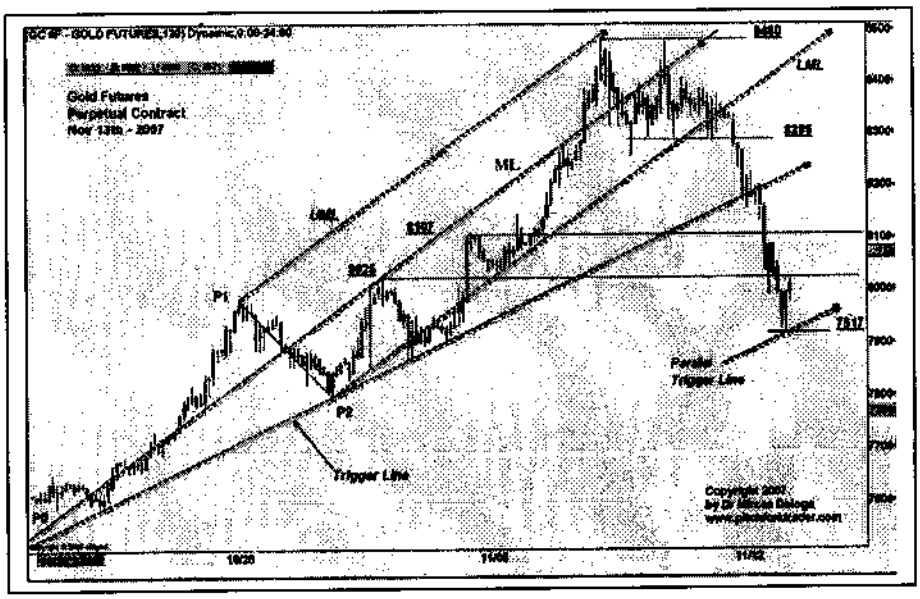


Figure 221 - *Once the high-powered down-sloping impulsive wave has been halted at 7917 key level, we have drawn a parallel trigger trend line. We are expecting now a correction wave, which can be a zigzag, a flat or a triangle pattern. We have opted for the zigzag correction pattern given the down high-powered momentum, which will probably travel along a parallel trigger line channel, whose lower border is already drawn. If we apply the "What If..." concept we should be also prepared for a flat or a triangle correction, thus we have drawn the horizontal trend lines at 7917, 8025 and 8107 key levels.*

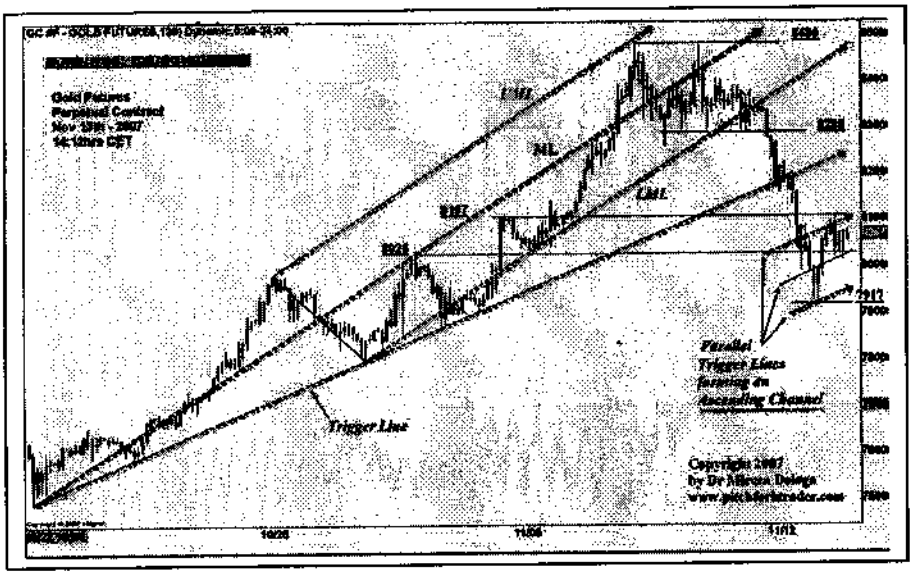


Figure 222 - *The advantage of the parallel trigger line channel is that it can be constructed only with two opposite touches, instead of the four indispensable touches necessary to construct the classic channel. Thus we have started to draw an ascending channel whose final form is not yet finally defined. If we carefully study the inception of the correction movement, we realize that we have, so far, two possible chart formation choices:*

- *Our* **expected chart formation** *having an up-sloping direction conform to that of the trigger line. It is graphically oriented after the direction of the parallel trigger channel direction. So far, we have already two touches, on the upper and lower parallel trigger lines. We'll see what the following bars will have to offer...!*
- *A less probable chart formation, under the form of a* **flat or complex pattern,** *taking the configuration of a* **horizontal pattern...** *Maybe a* **rectangle.** *Once again, the next bars will have a word to say...!*

Figure 223 - *The market dropped, in the right-side chart, all the way down to the lower border of the parallel trigger line channel. For now, it seems that our expected chart formation probability is enhanced and even vouched for, because it has already four touches and it has not only tested and re-tested the lower border but it has also reversed and started to climb. Anyway, the 7917 lowest low of the local market hasn't been yet touched, meaning that the probability of a rectangle choice is for the moment, close to zero.*

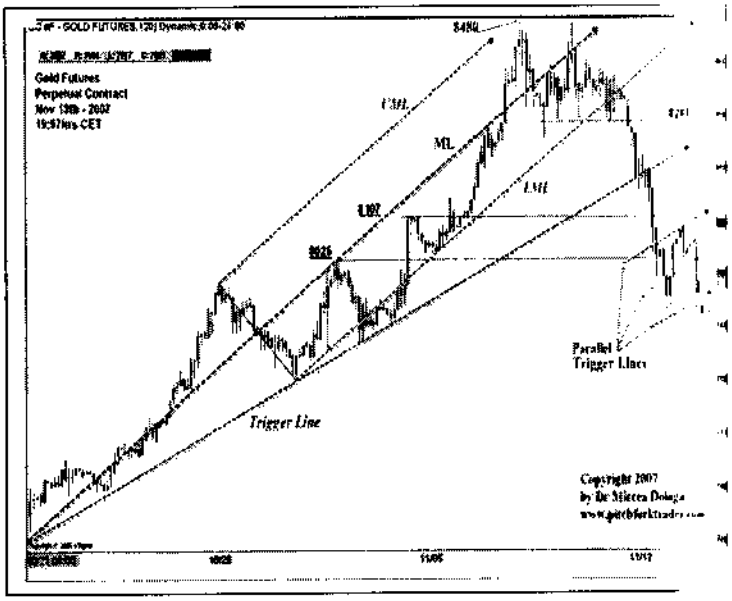


Figure 224 - *As we have anticipated the up-sloping parallel trigger channel is confirmed with a steep 45° slope, on the right-side chart. The channel is well established having three lower border channel touches and seven upper border channel touches.*
The local market seems to be inclined to reverse, but it was, for the moment, halted just on the midline of the channel.

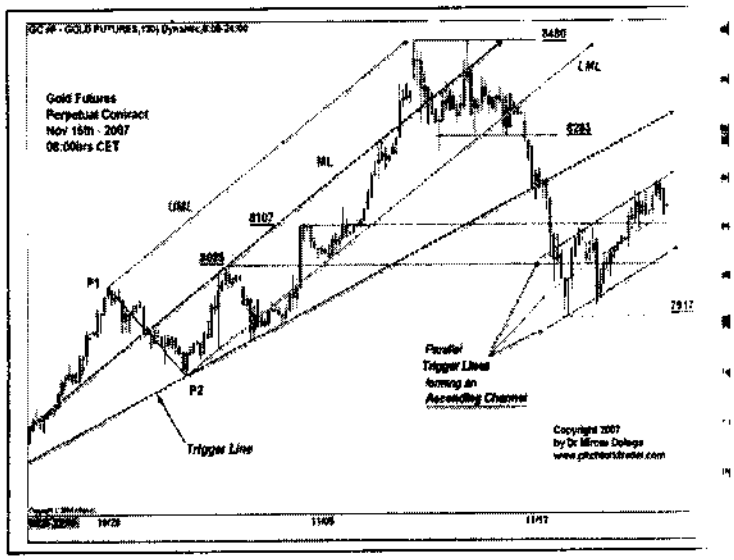
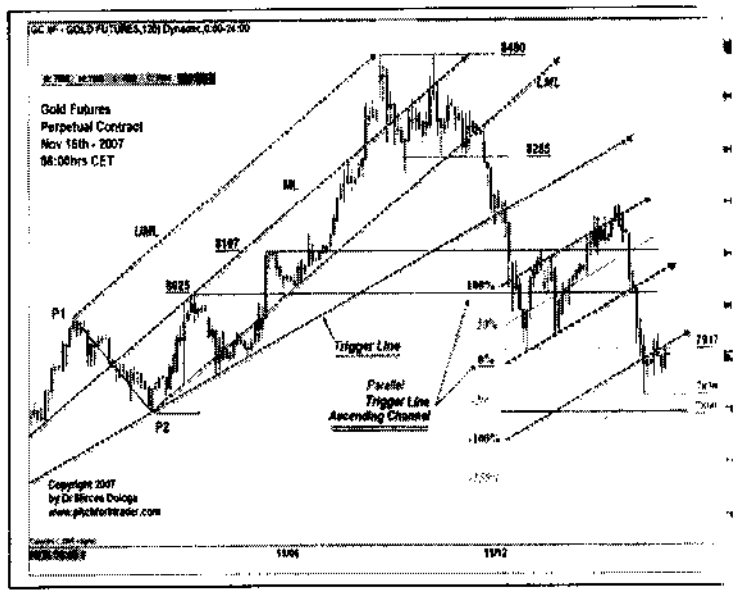


Figure 225 - *As we have taken into consideration, in the prior chart, the market flow not only reversed but it spilled down from the initial channel. It dropped all the way down to the 150% extension of the initial channel to the 7830 key level, being short of only 30 pts of the whole number 7800 key level, and at the same time, a strong old low level (P2).*
As one can see, the parallel trigger line channelling is a very advantageous edge for the professional trader, combined with its extensions and guided by the Fibonacci ratios.



3. P1-P2 Fibonacci Ratio Trend Lines

3.1 Market Flow Description – Variable Anchor Location & Fixed P1-P2 Swing Midpoint

In the *first sub-chapter* of this *chapter* we have described our original research concerning the variable anchor location of a traditional pitchfork. In order to do that, we have utilized the pitchfork's classically allocated P0, P1 and P2 pivot. P0 and p0 correspond to a fixed and a variable anchor, respectively.
It's important to note that the median line has been constructed by linking the variable anchor (p0) and the fixed midpoint of the P1-P2 swing. It had a variable angle slope given by the Cartesian location of the variable anchor (p0) and the fixed P1-P2 swing midpoint (P1/2).
We mentioned that the main purpose of this study was to obtain the best pitchfork that optimally describes the contextual and the local market. And...As we have seen, we have inclined towards a pitchfork choice that completely encases the market flow, thus giving all the power to the median line to exert its main functions: the powerful market price magnet and the symmetry role.

3.2 Market Flow Delineation – Fixed Anchor Location & Fixed P1-P2 Swing Midpoint

In the *second sub-chapter* of this *chapter* we have discussed our original research concerning the parallel trigger line with their principal functions: the signalling of the trend's termination and the use of the parallel trigger line channel for corrective wave projection.
It's important to note that the median line has been constructed by linking the anchor and the midpoint of the P1-P2 swing. It had the same angle slope given by the fixed Cartesian anchor (P0) and the fixed P1-P2 swing midpoint (P1/2).
The use of these parallel trigger lines with their eventual channel and extensions represents a real edge when the classic trigger line is way out of the market flow's embedding.

3.3 Market Flow Delineation – Fixed Anchor Location & Fixed P1-P2 Swing Midpoint

In this *sub-chapter* we will study the possibility of using a variable "*median line*" function due to the variable P1-P2 swing midpoint location. The exact chosen position will be guided by applying the Fibonacci ratios to the price-height of the P1-P2 swing.
The *slant linking trend line* of the fixed anchor (P0) with the variable P1-P2 swing midpoint location (P1/2 level) will create what we have called the *P1-P2 Fibonacci ratio trend lines*.

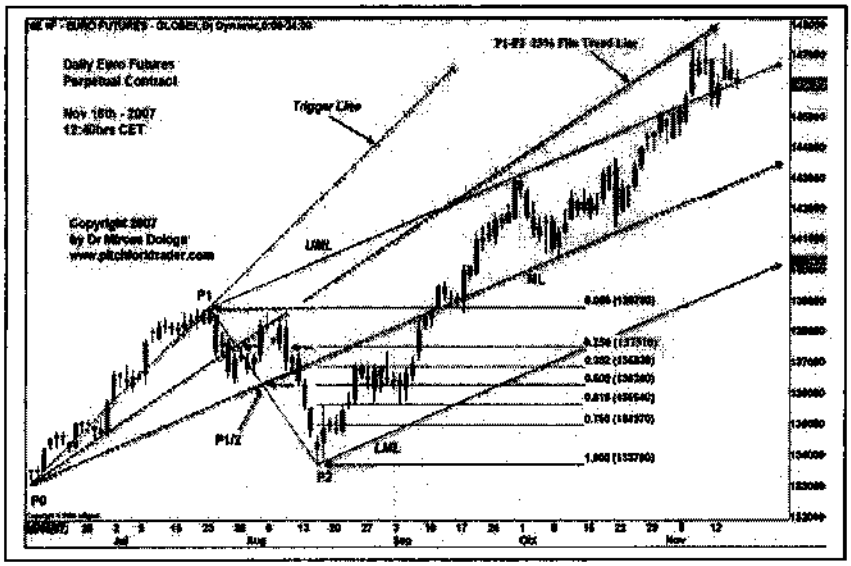


Figure 226 - ***As we can see in the above chart the P1-P2 25% Fibs trend line has halted the highest high of the local market. We have expressly chosen only certain Fibonacci ratios (38.2% & 61.8%) and Gann ratios (25%, 50% & 75%). For convenience purposes, we work with them only under the Fibonacci name***

3.4 Highest High Delineated by the P1-P2 Fibonacci Ratio Trend Lines

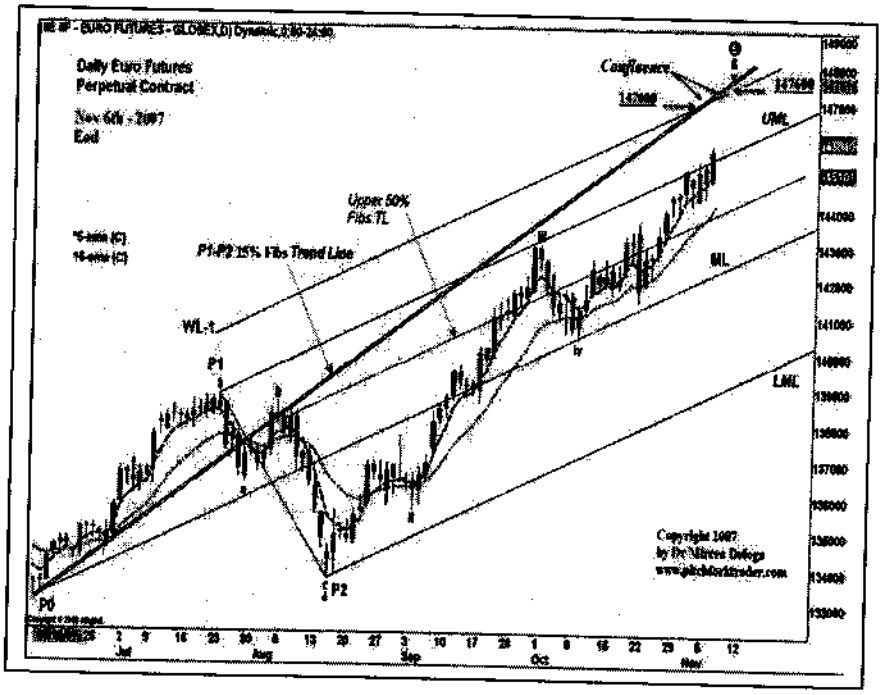


Figure 227 - *As we can see in the above chart the P1-P2 25% Fibs trend line has been drawn, in orde to try to delineate the highest high of the current trend. The drawing of the warning line (WL-1), whic has created a confluence zone (147000 to 147600), is one of the tools that optimise the trade's outcome. In case that the trader wonders about the confluence zone's width - the allowed number of bars - w consider the confluence valid only if the price bars will either cross the intersection zone (point) or will b very near, no farther than 1 to 3 bars.*

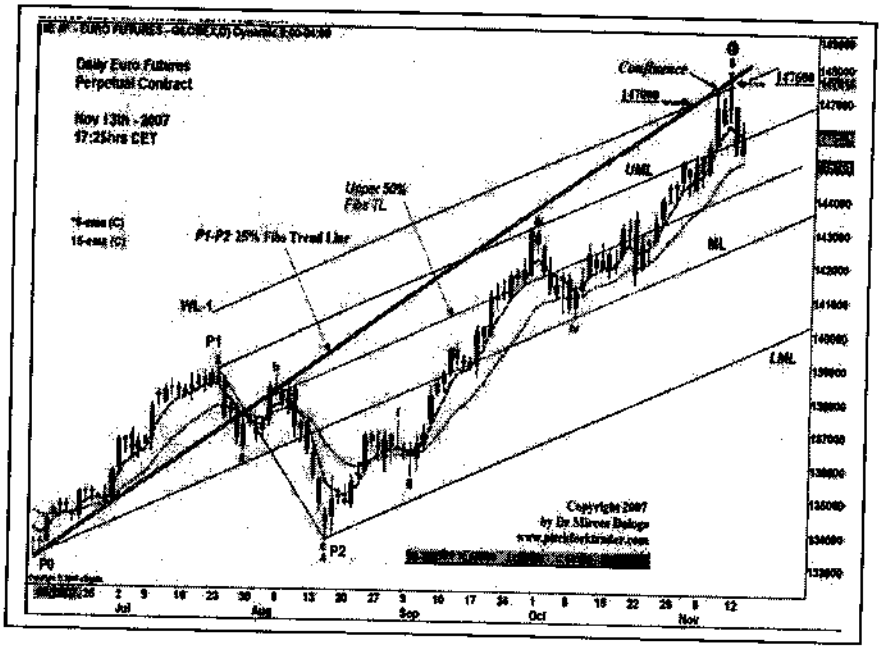


Figure 228 - *The above chart continues the preceding chart. As we can see, three days later, the market flow reached the P1-P2 25% Fibs trend line and touched it twice. It performed a big doji with a long upper tail, which signalled that the bulls lost the battle for now, and finally decided to reverse. As it happens, more often than not, the market will firstly drop to pitchfork's median line and then, to the fourth lesser degree Elliott wave of the prior pattern. But... Will the weight of evidence factors validate the reversal? For a plausible reply, we will look for an additional confirmation tool.*

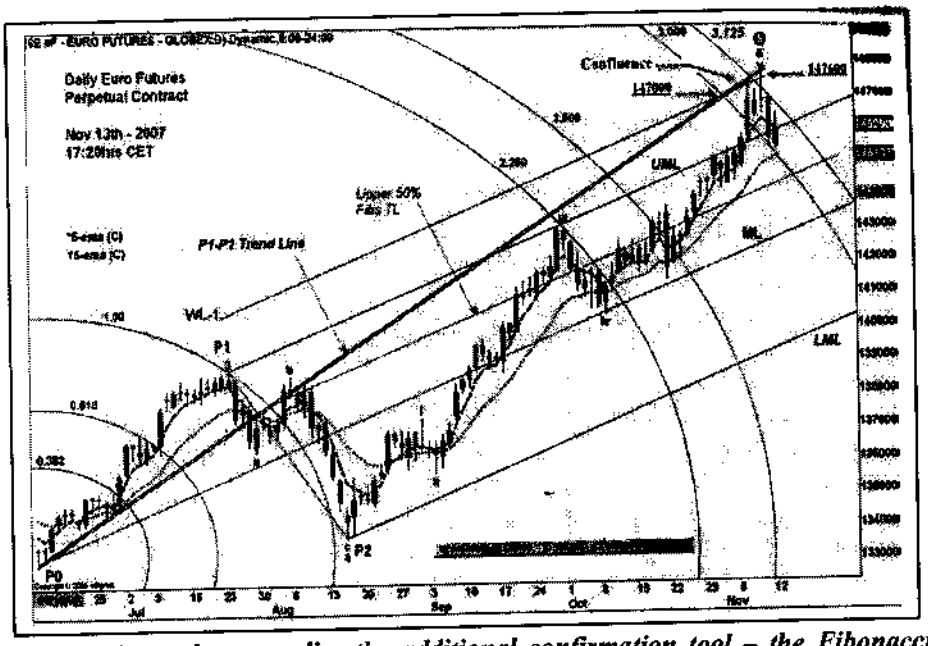


Figure 229 - *The above chart supplies the additional confirmation tool – the Fibonacci arcs – for enhancement of the reversal probability. The 147600 confluence zone is enhanced by the 3.125 Fibonacci ratio arc. The last four bars are embedded within a curvilinear channel formed by the 3.0 & 3.125 Fibonacci ratio arcs. Any trespassing of this channel will signal an enhanced reversal or, on the contrary, a trend continuation. In the latter case, the channelled portion will be considered as a pullback.*

3.5 P1-P2 Fibonacci Ratio Trend Lines - The Ideal Follow-up Tool of the Trend

The use of the P1-P2 Fibonacci trend lines is usually optimal outside of the pitchfork's main body. However, we can start applying them as early as possible, when we closely follow the market flow breaking the main body's limits, the upper or the lower median line.

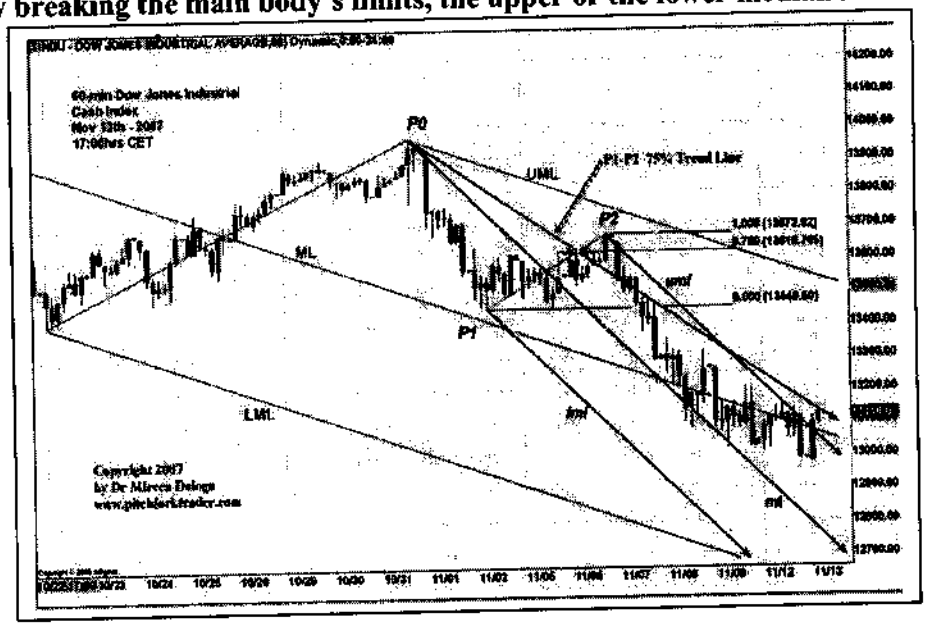


Figure 230 - *The above chart illustrates the last bar's break-up of the upper median line (uml) pertaining to the minor down-sloping pitchfork. At the same time, the market flow is getting away from the major pitchfork's median line (ML) targeting its upper median line (UML). However, the separating distance is a multiple ATRs farther away. The trader would need a tool to assist him/her to immediately enter, in case of a precocious reversal. It will surely offer a small stop loss, which will optimise the trade. We have decided to use the P1-P2 75% Fibs trend line for this close follow-up task. For the moment this trend line has probably temporarily halted the market price, with the last bar just underneath it.*

Figure 231 - *The right-side chart is the same as the preceding chart, but a 60-min bar later. We can easily observe, that the market flow continues its high-powered movement. The last bar, which is the reversal's third bar, has just jumped the P1-P2 75% Fibonacci trend line. We should adapt our Fibonacci set-up now and draw the next Fibs line – the P1-P2 78.6% Fibonaci trend line.*

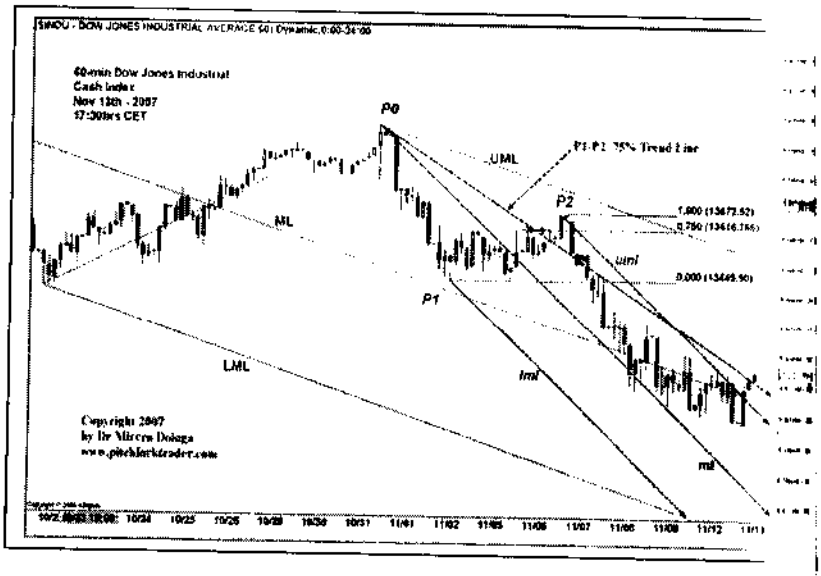


Figure 232 - *The right-side chart is the same as the preceding chart, but two 60-min bars later. We can easily observe, that the market flow continues its high-powered movement, and also jumped the new P1-P2 78.6% Fibonacci trend line.*
The vigorous breakout of the latter trend line illustrates the high strength of the current market flow and its potential to reach at least the upper trigger line.

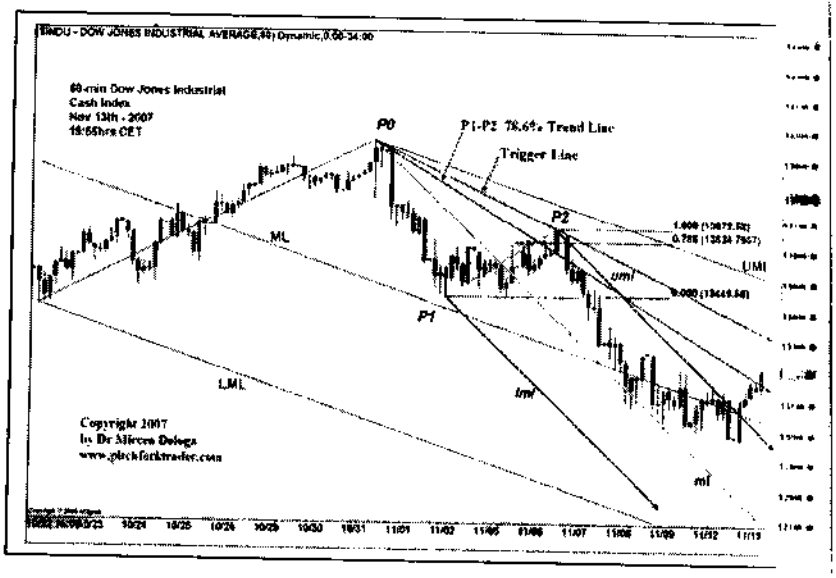
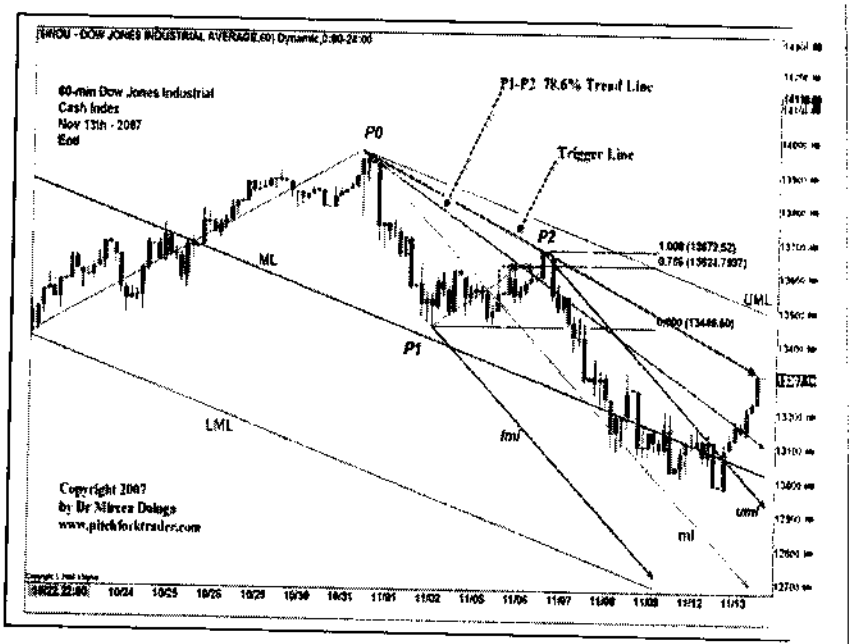


Figure 233 - *The right-side chart is the same as the preceding chart, but two 60-min bars later. We can easily observe, that the market flow continued its high-powered movement, and has been temporarily halted by the minor pitchfork's trigger line. The last bar being very volatile it signals two future behaviours of the local market flow: either a zooming through or a multiple bar trading range due to its gradual energy consumption. The UML target is closing in.*



Key Points to Remember:

- The best anchor location of a pitchfork is at the time/price intersection, due to the Gann's principle that the high probability reversals occur where time meets the price.
- The traders frequently wonder how do we choose the best pitchfork. We can say that it is a question of optimizing the market flow description: a complete encasement of the market flow in the pitchfork's main body and an enhanced role of the median line.
- Don't neglect the role of the Hagopian line. It is one of the keys to finding the low-risk high-probability trades.
- Whenever the trigger lines are out of the market flow's field we can successfully replace them with the parallel trigger lines. Their channeling combined with its extensions and guided by the Fibonacci ratios constitute a real edge for the experienced trader.
  Their advantage is that initially, it needs *only* a two points channel in order to draw a channel, in comparison with the needed four points of the classic channel. In case of a breakout energy pattern, a horizontal channel can also be drawn by using only three touches, where the fourth is counted as the breaking point.
- When you believe that you have the surest strategy always remember the "What if..." concept and act in concordance!
- The P1-P2 Fibonacci trend lines are optimally used when the market price starts to leave the pitchfork's main body. Used, as early as possible, they constitute an efficient tool for trend's follow-up and reversal's detection.

Chapter 9

Variable Time/Price Location Anchor in Schiff Pitchfork

As we have already mentioned in the first volume, the Schiff pitchfork is nothing else but a substitute for the traditional pitchfork, especially when the latter can't be constructed, or... It can be drawn but it doesn't optimally describe the market.

1. Schiff Pitchfork Description and Construction

Jerome Schiff, who was a student of Dr Alan H. Andrews, has created this alternate pitchfork, because he couldn't always find the necessary three pivots to build the traditional pitchfork. Knowing the importance of the time/price relationship, especially the Gann's 50% key level, he came to the conclusion to divide the A/B swing, which precedes the P1/P2 segment, in two parts. This midpoint level was used as the anchor (P0) of its pitchfork. The attributed name was *50% median line or Schiff median line.*
If we ask ourselves when *should we use the Schiff pitchfork*, there are several opportunities:

- **When the traditional pitchfork pattern is not possible to be drawn because it is not possible to detect neither the anchor (*P0*), the P1 nor the P2.**
- **At the reversal's low or high, in order to optimally describe the ensuing trend.**
- **When a trading range is in effect, or we are in an energy-building rectangle, using (*or not*) the *minor* pitchforks.**

When drawing a pitchfork, the best attitude is to study the context where the dominant trend leads the way and see what kind of a *major* pitchfork (*Schiff or traditional*) will optimally describe the market flow.
The same judgment should be done when we are trying to draw a *minor* pitchfork for enclosing the local market, whether that is: a reversal, a pullback or rally or a trading range, at the topping or the bottoming market flow. The most important factor is to have these parameters constantly present in your mind. This can be done if it becomes a daily routine.

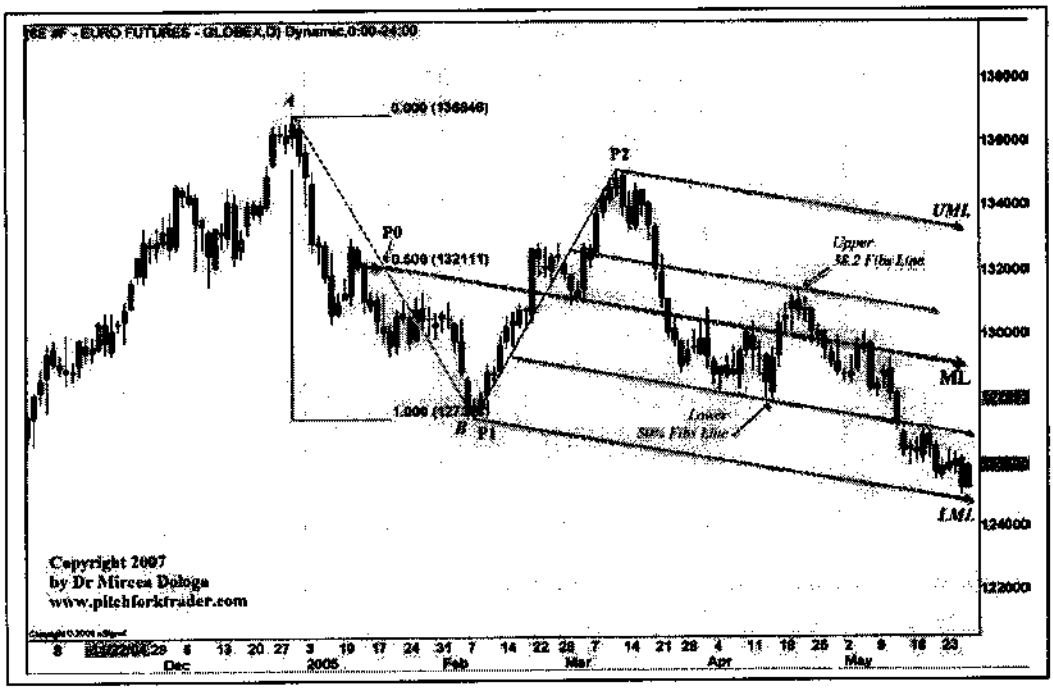


Figure 234 - *The above Schiff pitchfork was constructed because it optimally describes the market.*

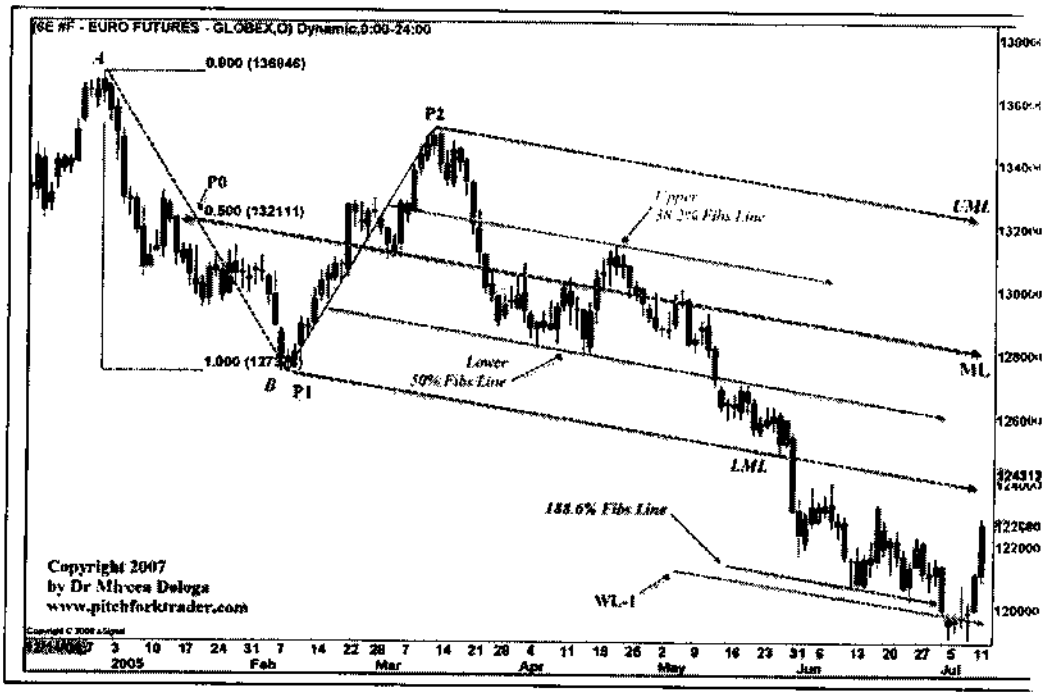


Figure 235 - *The above chart is the same as the preceding chart but 30 trading days later. We observe that the virulent breakout of the lower median line (LML) has continued the initial down-slop dominant trend. After multiple tests of the 188.6% Fibonacci line, the market flow finally penetrate but it was halted and reversed by the first warning line (WL-1). As we can see, the choice of the pivo this Schiff pitchfork has been beneficial, because it optimally describes not only the down-slop contextual dominant trend but also the local market flow with its halting and reversal.*

2. Variable Time/Price Location in Schiff Pitchfork

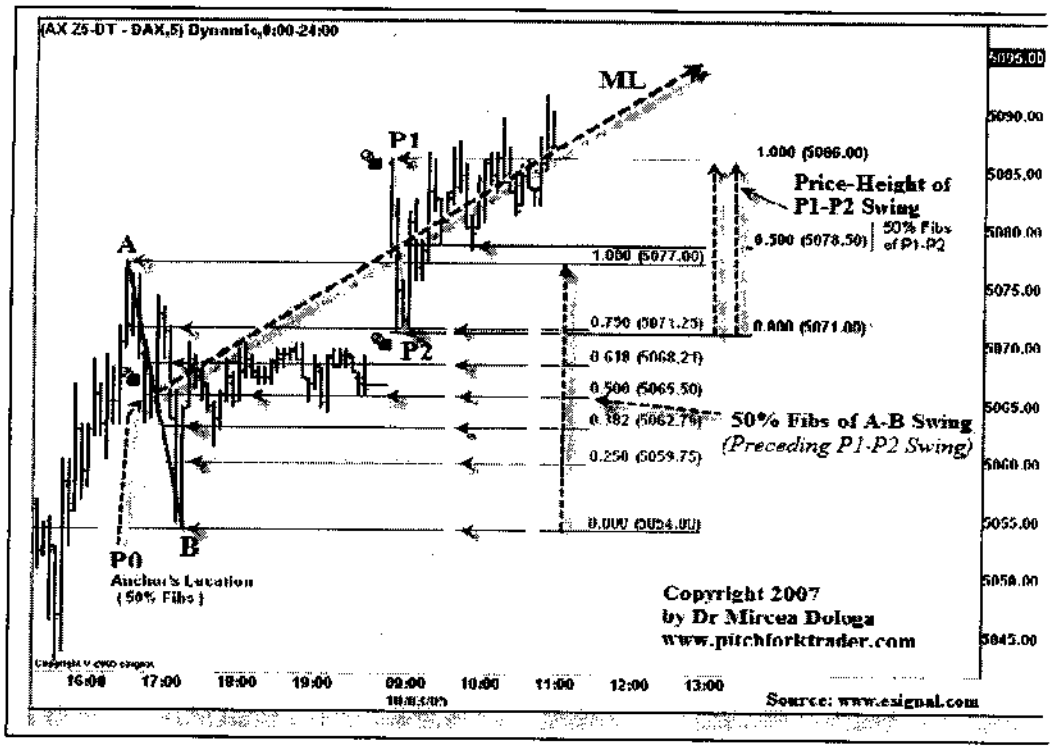


Figure 236 - *The above chart sets the scene of choosing the best anchor location through the use of Cartesian coordinates. The anchor's location will be chosen at the price and time intersection, due to Gann's principle which states that the high probability reversals occur where time meets the price.*

2.1 Description of the Variable Anchor Location Set-Up

We are guided by the concept that the anchor's location (P0) can be situated anywhere on the A/B swing. Its precise location is guided be the Fibonacci ratios applied to it *(refer to Figure 237)*.

The anchor's exact location will be given by the intersection of the horizontal Fibonacci trend line (*division of the price–height of the A/B swing*) with the A/B slant segment. The former will be obtained by applying the Fibonacci ratios to the height of the A/B swing and the latter will be obtained by linking the A and B pivot points. We should mention that the P0 pivot would travel freely along the A/B segment in the quest for the optimal location. Once this has been established, the trader will link it to the midpoint of the P1/P2 swing.

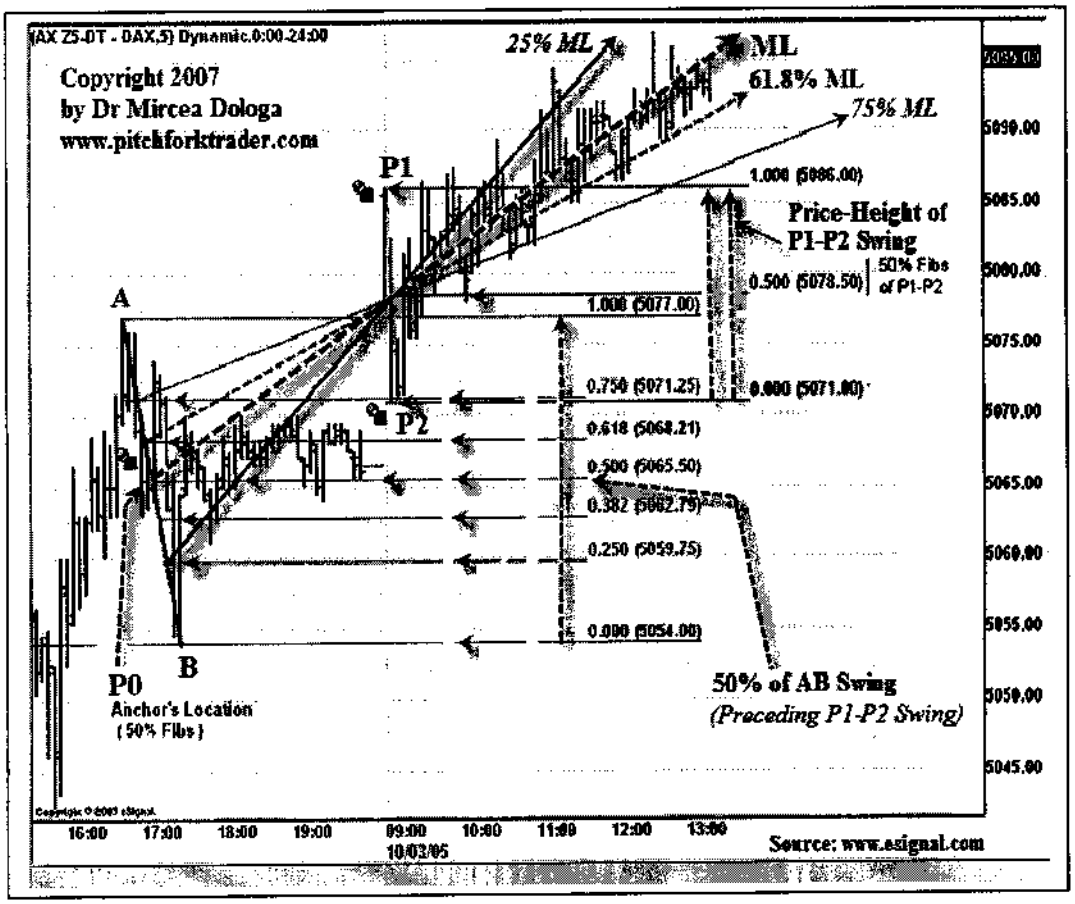


Figure 237 - *The above chart sets the scene of choosing the best anchor location through the use of the two Cartesian coordinates: the mobile P0 anchor and the fixed P1/P2 midpoint.*

The linkage of the Cartesian coordinates will create the median line of the Schiff pitchfork, which will connect the variable location of the anchor (P0) on A/B slant segment and the fixed P1/P2 midpoint. The generated slope of the median line will probably dictate the pitchfork's behaviour in such a way that the market description should be optimal.

This drawing technique is valid whether the Schiff pitchfork is contextual or for the local market flow. In order to get another confirmation and eventually create confluences, we could also use a bigger time frame Schiff pitchfork and overlap it on the operational time frame.

One question arises... *How do we know which anchor location will generate the optimal Schiff pitchfork? We don't...*! The only way to find it out will be to try out the different choices of the '*would be final*" pitchforks! Thus, the best choice will be readily exposed.

Let us study several versions!

And keep in mind... the anchor is mobile and the P1/P2 midpoint is fixed.

2.2 *Description of the Classic Anchor Set-Up (P0 at 50% Fibonacci Ratio)*

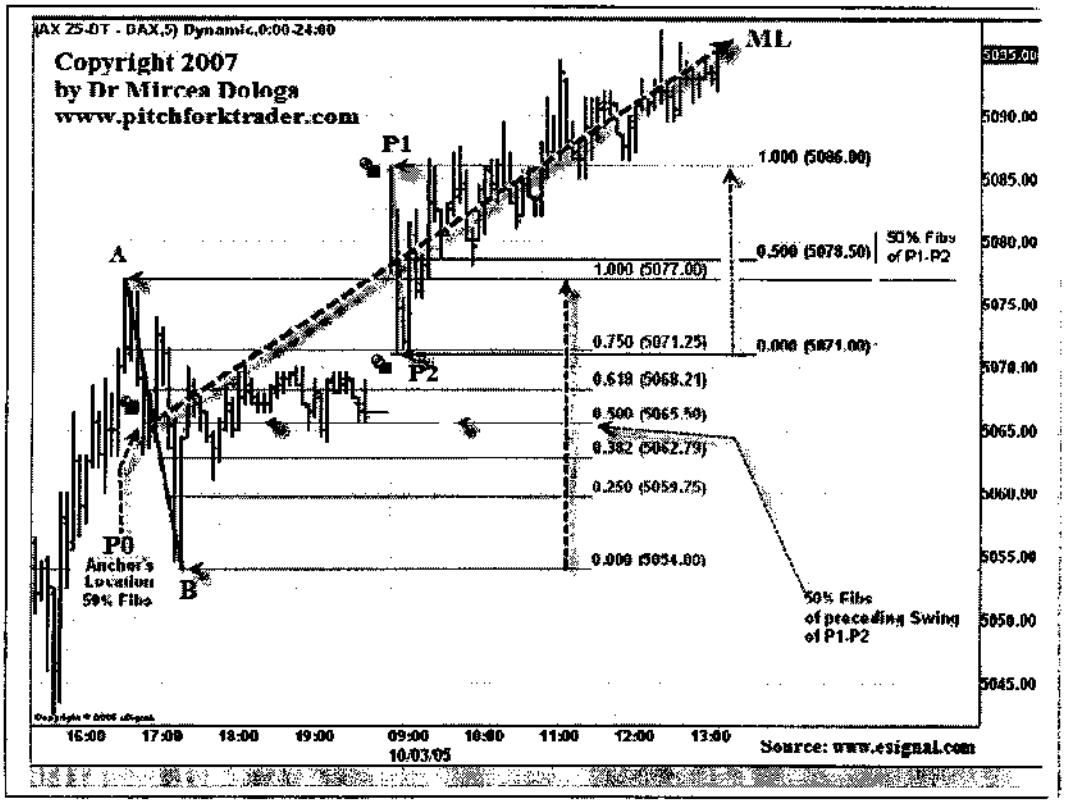


Figure 238 - *A classic Schiff pitchfork has been drawn in the above chart. The anchor location (P0) is located at the 50% Fibonacci ratio level of the A/B swing. The median line has a symmetry role.*

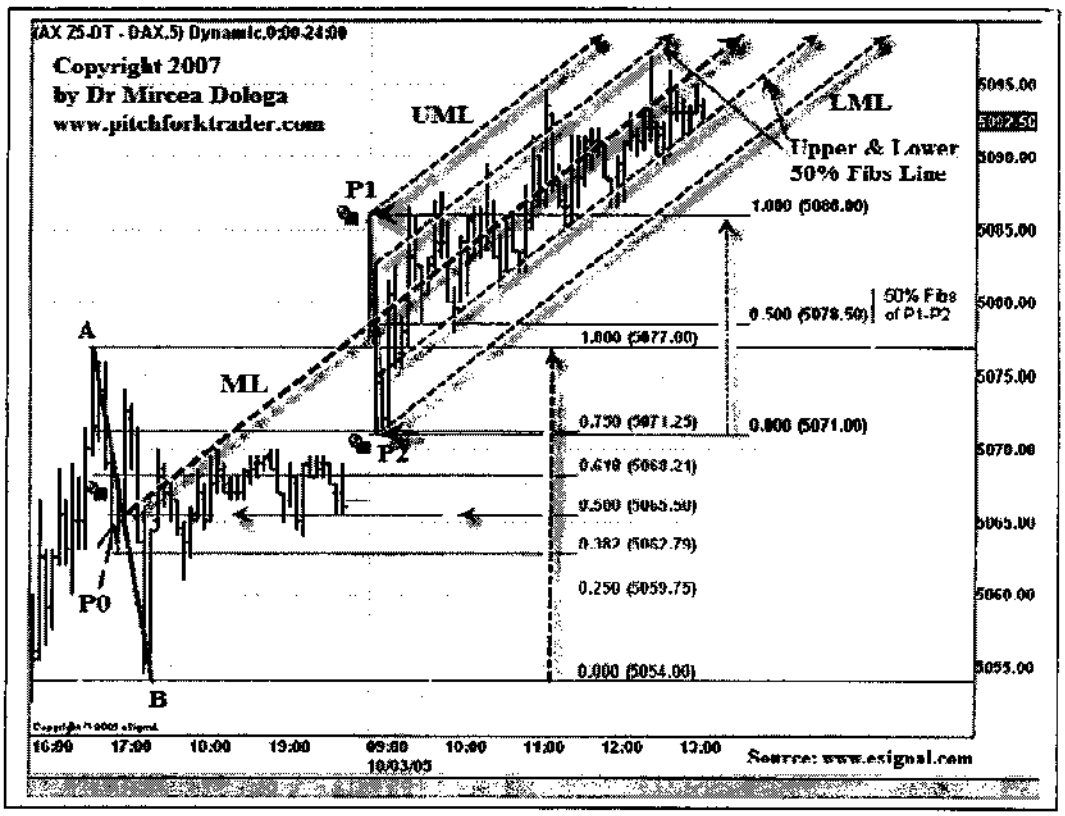


Figure 239 - *The classic Schiff pitchfork drawn in the above chart describes the market flow very well.*

The *first example* of the *anchor location* illustrated in *Figure 239* is a classic use of the 50% Fibonacci ratio applied to A/B swing. An attentive observation of the context of the chart will show if this Schiff pitchfork version will optimally describe the market flow:

- The 45° steep slope of the pitchfork is ascending encasing the 100% of the chart's area.
- The median line (ML) serves very well here, as a symmetry axis.
- *Particularity*: The upper and lower 50% Fibonacci ratio lines constitute a real up-sloping channel. Its spilling over upward or downward will probably signal a change of trend, thus a low-risk high-probability trade!

Conclusion: If we would have to evaluate the efficiency of this Schiff pitchfork version to describe the market flow, on a scale from 1 to 10, we would give it a *nine.*

2.3 Description of the First Variable Anchor Set-Up (P0 at 25% Fibonacci Ratio)

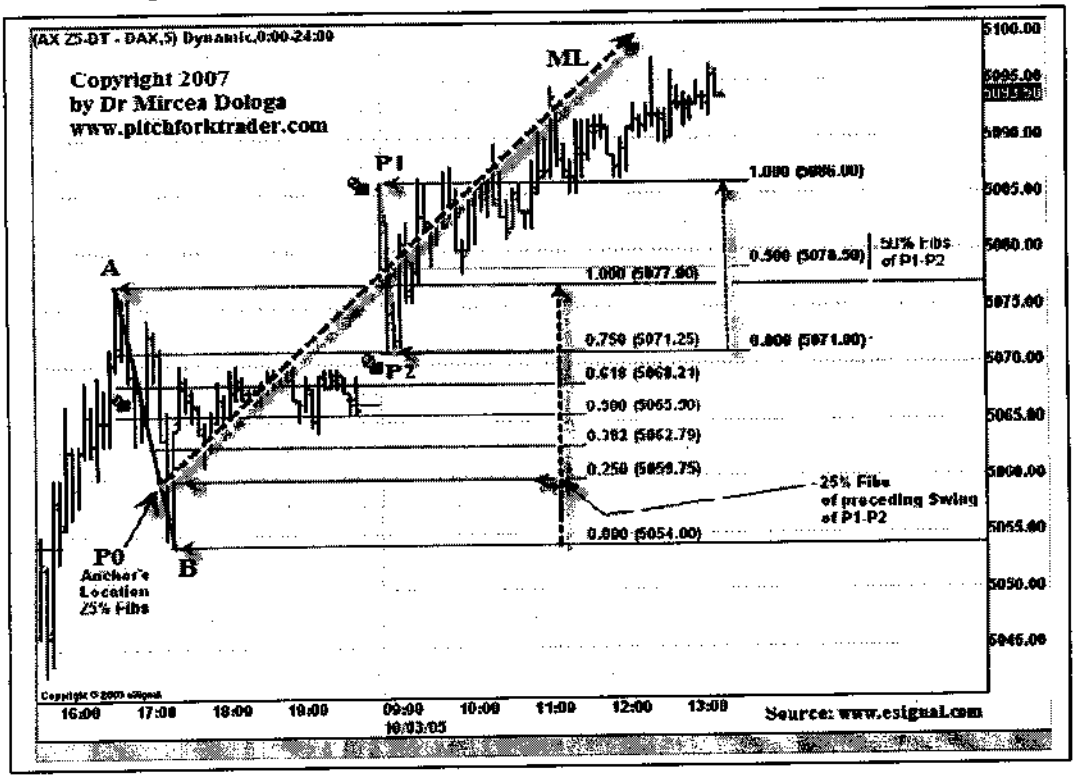


Figure 240 - *A variable anchor location Schiff pitchfork has been drawn in the above chart. The anchor location (P0) is located at the 25% Fibonacci ratio level of the A/B swing. The median line's symmetry role has disappeared and the local market flow seems to be shifting towards the right side of the chart.*

The *second example* of the *anchor location* illustrated in *Figure 241* is a variable location guided by the use of the 25% Fibonacci ratio applied to A/B swing. An attentive observation of the context of the chart will show if this Schiff pitchfork version will optimally describe the market flow:

- The 50° steep slope of the pitchfork is ascending encasing most of the chart.
- The median line (ML) doesn't serve here, as a symmetry axis.
- *Particularity*: The upper 50% Fibonacci ratio line and the lower median line (LML) constitute a steep up-sloping channel. Its spilling over downward will probably signal a change of trend, thus a low-risk high-probability trade!

Conclusion: If we would have to evaluate the efficiency of this Schiff pitchfork version to describe the market flow, on a scale from 1 to 10, we would give it an *8.5.*

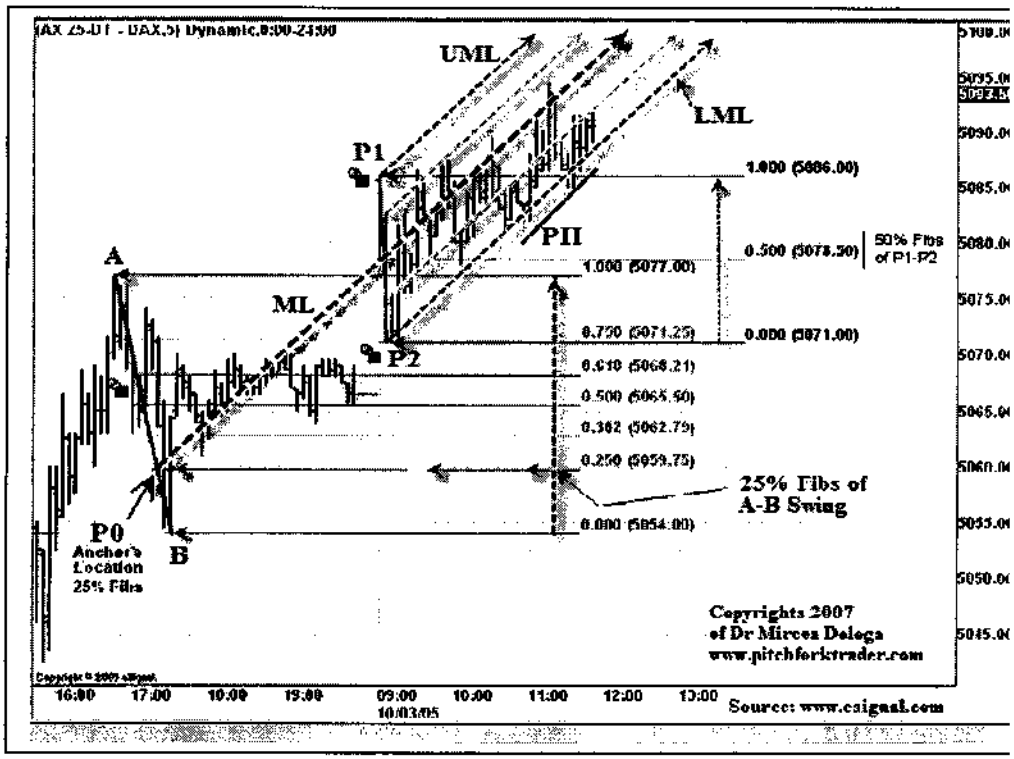


Figure 241 - *The variable anchor 25% Fibs location Schiff pitchfork drawn in the above chart de the market flow pretty well, so far* (noon-time)*, but less that the version one (refer to Figure 239).*

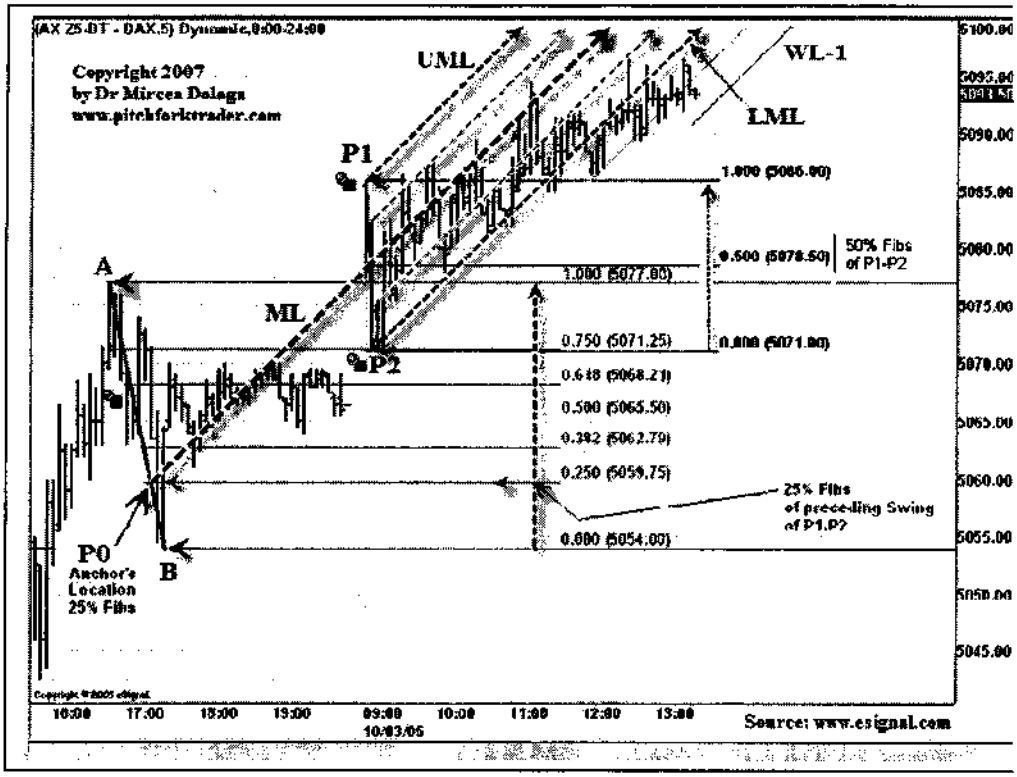


Figure 242 - *The variable anchor 25% Fibs location Schiff pitchfork drawn in the above char same as that of the chart illustrated in Figure 241, but 90 minutes later. It describes the mark pretty well, so far (13:30 time), but with a vivacious shifting-to-the-right tendency. This kind o often represents the prelude of a change in trend, especially when the trend's slope is superior to 4*

2.4 *Description of the Second Variable Anchor Set-Up (P0 at 61.8% Fibonacci Ratio)*

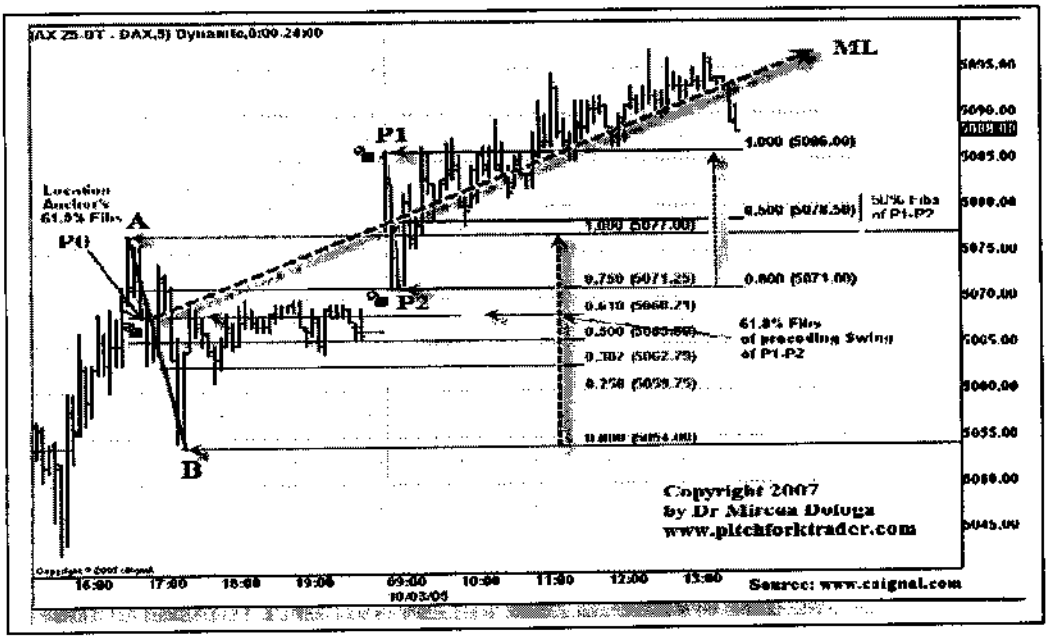


Figure 243 - *A variable anchor location Schiff pitchfork has been drawn in the above chart. The anchor location (P0) is located at the 61.8% Fibonacci ratio level of the A/B swing. The median line's symmetry role has disappeared and the local market flow seems to be shifting towards the upper side of the chart, above the median line.*

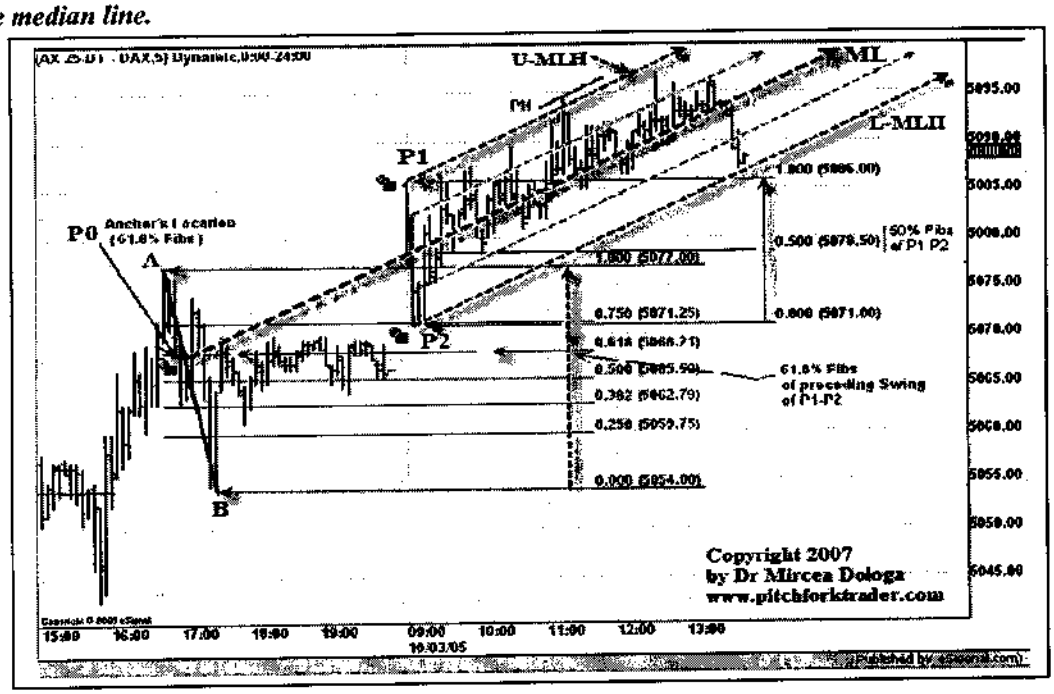


Figure 244 - *The variable anchor 61.8% Fibs location Schiff pitchfork drawn in the above chart describes optimally the market flow whether it is:* **contextual** *or* **local market flow.**

The *third example* of the *anchor location* illustrated in *Figure 244* is a variable location guided by the use of the 61.8% Fibonacci ratio applied to A/B swing. An attentive observation of the context of the chart will show if this Schiff pitchfork version will optimally describe the market flow:

- **The 30° steep slope of the pitchfork is ascending encasing the 99% of the chart.**
- **The median line (ML) doesn't serve here, as a symmetry axis, but as a very strong up-sloping support.**

- *Particularity*: The upper median line (UML) and the lower median line (LML) constitute a steep up-sloping channel. Its spilling over downward will probably signal a change of trend, thus a low-risk high-probability trade!

Conclusion: If we would have to evaluate the efficiency of this Schiff pitchfork version to describe the market flow, on a scale from 1 to 10, we would give it a *nine*.

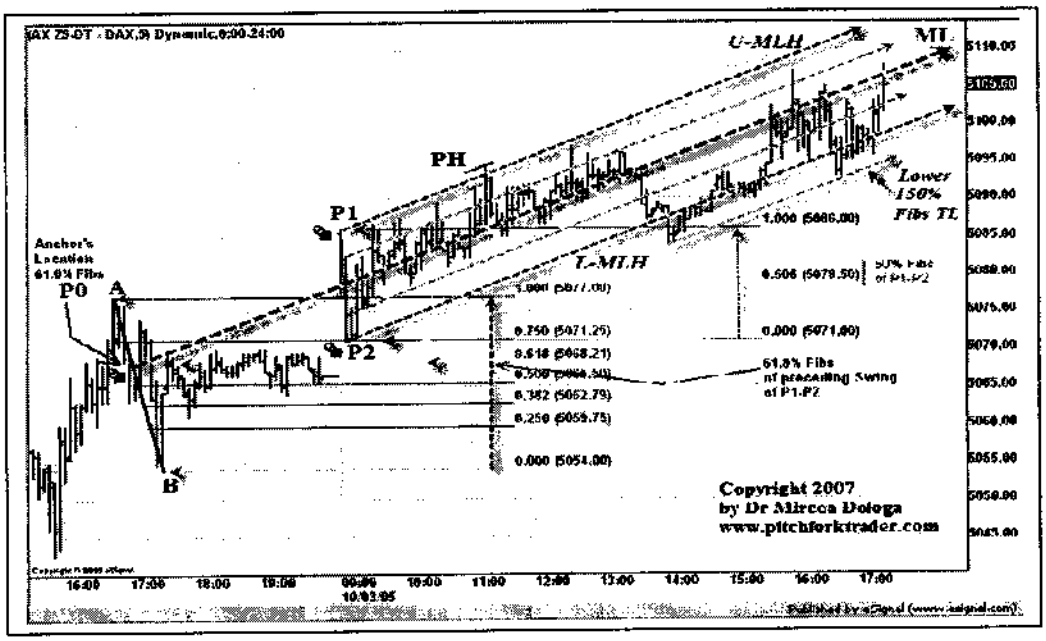


Figure 245 - *The variable anchor 61.8% Fibs location Schiff pitchfork drawn in the above chart is the same as that of the chart illustrated in Figure 244, but several hours later, in the afternoon. It describes the market flow pretty well, with the continuation of the up-sloping trend. As we can observe the 150% Fibonacci line, has been already twice tested, so far, preventing the market price from a change the trend.*

2.5 *Description of the First Variable Anchor Set-Up (P0 at 75% Fibonacci Ratio)*

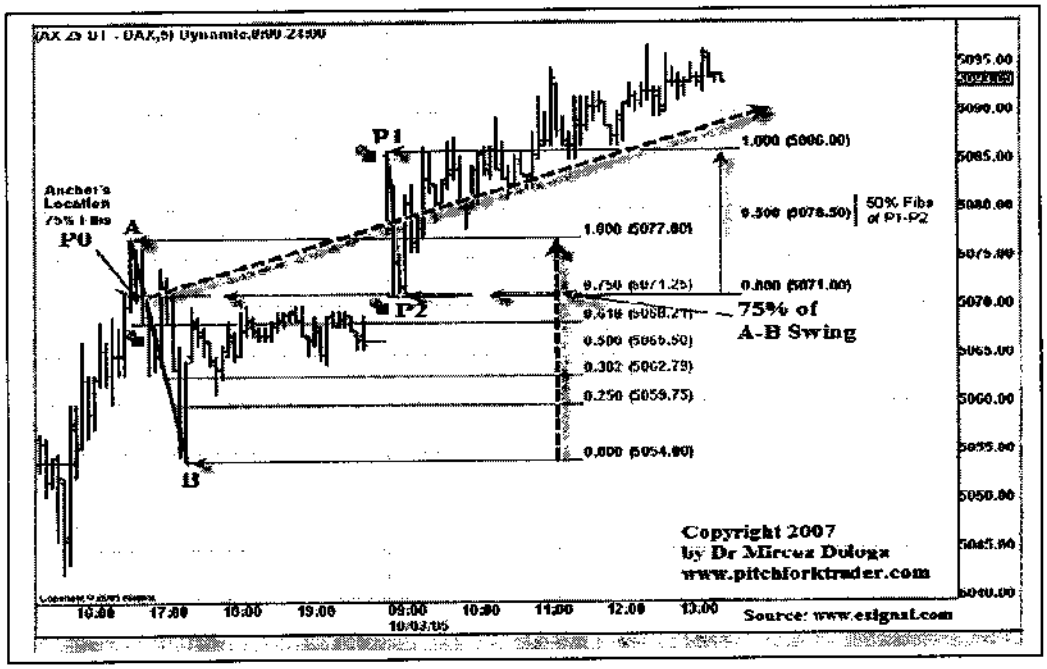


Figure 246 - *A variable anchor location Schiff pitchfork has been drawn in the above chart. The anchor location (P0) is located at the 75% Fibonacci ratio level of the A/B swing.*

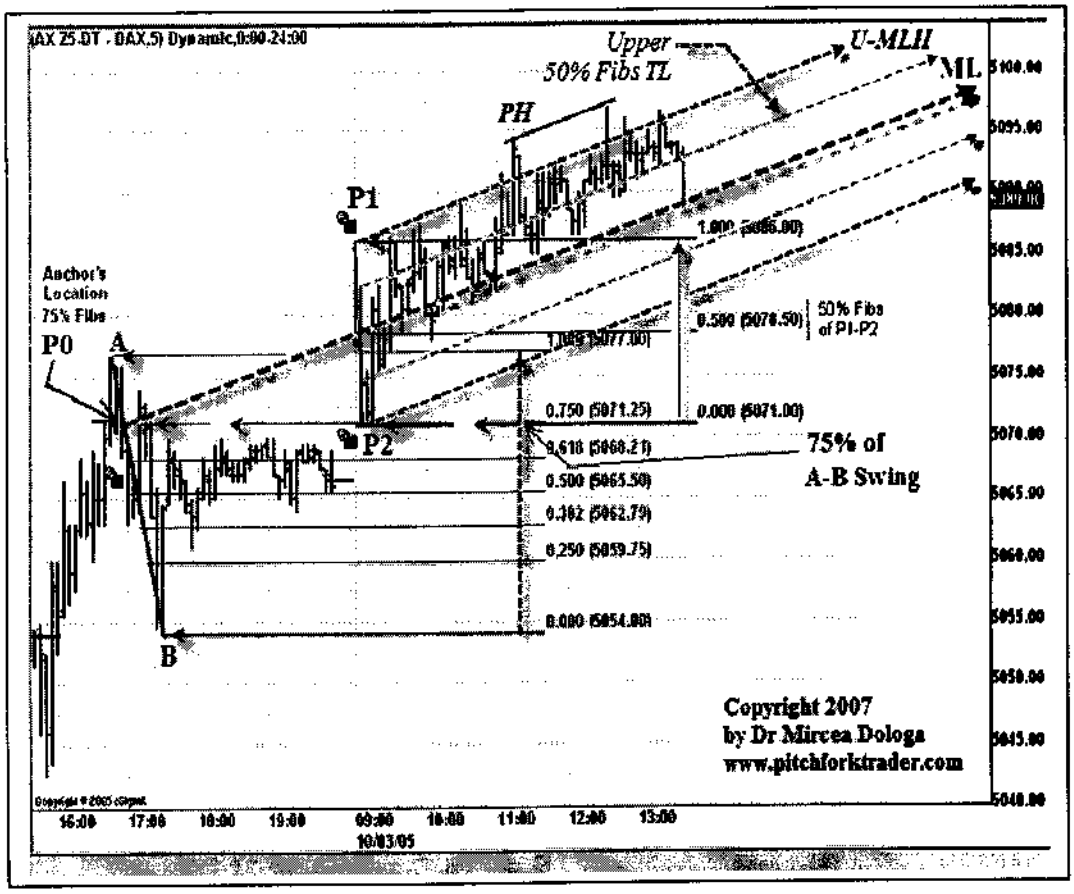


Figure 247 - ***The variable anchor 75 % Fibs location Schiff pitchfork drawn in the above chart optimally describes the market flow whether it is:*** **contextual *or* local.**

The *fourth example* of the *anchor location* illustrated in *Figure 247* is a variable location guided by the use of the 75% Fibonacci ratio applied to A/B swing. An attentive observation of the context of the chart will show if this Schiff pitchfork version will optimally describe the market flow:

- **The 30° steep slope of the pitchfork is ascending encasing the 99% of the chart.**
- **The median line (*ML*) doesn't serve here, as a symmetry axis, but as a very strong up-sloping support. The last market bar has halted the market flow just on the median line.**
- ***Particularity*: The upper median line (*UML*) and the median line (*ML*) constitute a steep up-sloping channel. Its spilling over downward will probably signal a change of trend, thus a low-risk high-probability trade!**

Conclusion: If we would have to evaluate the efficiency of this Schiff pitchfork version to describe the market flow, on a scale from 1 to 10, we would give it a *9.5*.

Conclusion of *Sub-Chapter n° 2*:
Out of the four examples, we strongly plead and prefer the example n° 4 (*refer to Figure 247*). It is due to:

- **The contextual and local market flow's almost complete encasement in the Schiff pitchfork's main body,**
- **The enhanced role of the median line,**
- **The long–lasting channel formed by the upper median line (*UML*) and the median line (*ML*), and...**

Most of all, due to the best market flow description!

3. Minor Schiff Pitchfork used as Confluence Tool

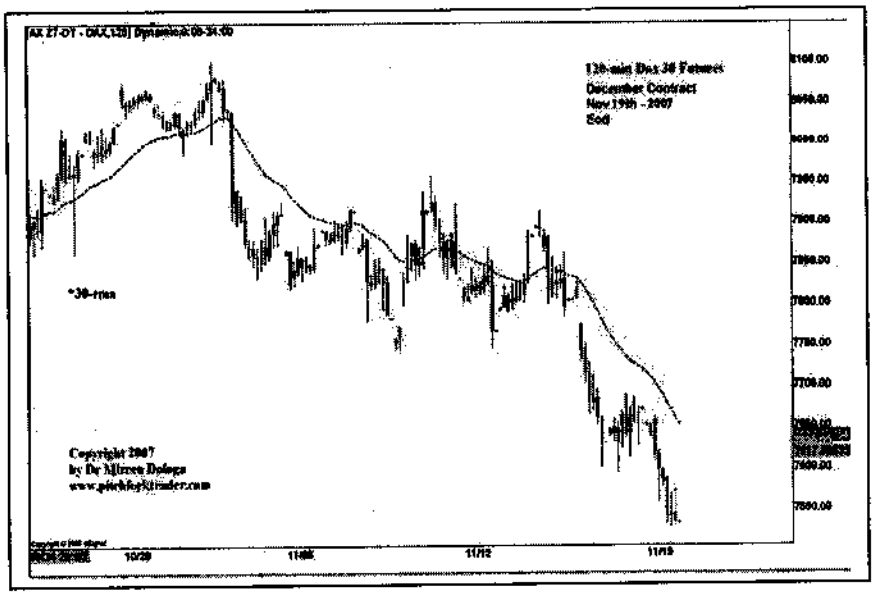


Figure 248 - *The above naked Dax 30 Futures chart illustrates its dominant down-sloping trend.*

In the above chart (*refer to Figure 248*) the local market drops under the 30-ema. Togeth with the steepness of the slope, the market price dropping will signal an enhancement of t down-sloping momentum... Two questions arise...
***How long will this down-sloping trend continue?* And should there be an inflexion point, *Where will it be located*?**
In order to reply to these two questions, we will try out several pitchfork choices of t "*would be final*" pitchforks! Thus, the best choice will be readily exposed. *Let us study seve versions!*

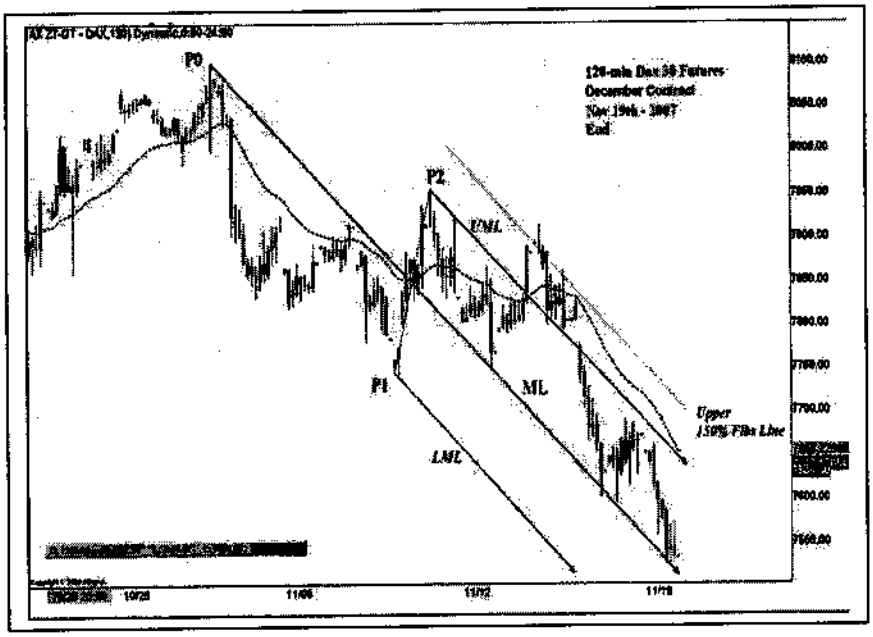


Figure 249 - *The above chart is the same as in Figure 248 on which we have drawn a classic pitchfor*

The classic pitchfork of the above chart (*refer to Figure 249*) has been constructed by using highest high as the P0 pivotal anchor and the P1 and P2 major pivots of the first correction. As can observe, the market flow is only partially embedded in the pitchfork's main body and there is any minor pitchfork, which will describe the local market with its impact on the contextual mark However, we must underline the excellent down-sloping supportive role of the median line.

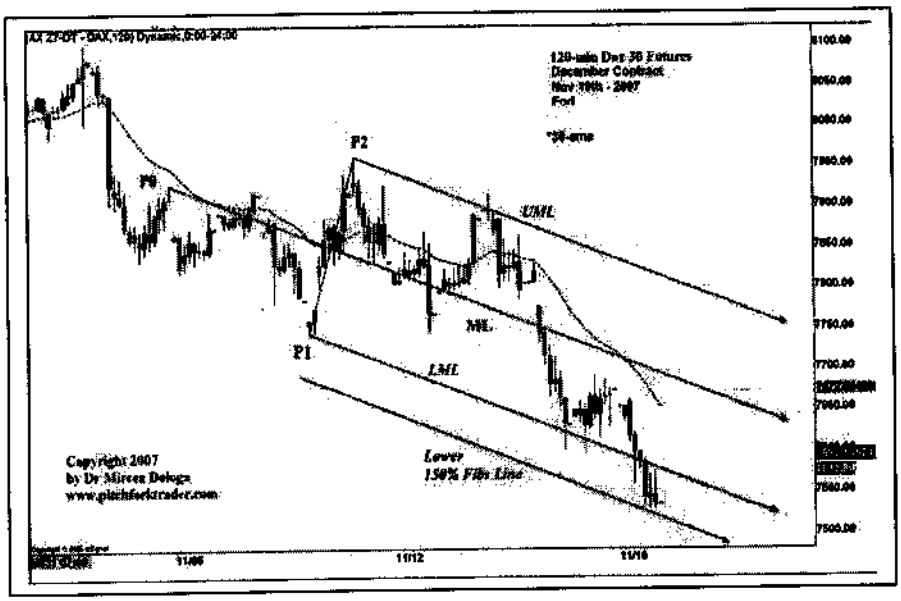


Figure 250 - *The above chart is the same as the chart in Figure 248 on which we have drawn a different classic pitchfork, than that on the chart of Figure 249.*

The classic pitchfork of the above chart (*refer to Figure 250*) has been constructed by using a minor pivot as the P0 pivotal anchor and the P1 and P2 major pivots of the first correction. As we can observe the market flow is only partially embedded in the pitchfork's main body. There isn't any minor pitchfork to describe the local market with its impact on the contextual market. However, we must underline the several bar testing of the lower 150% Fibonacci line.

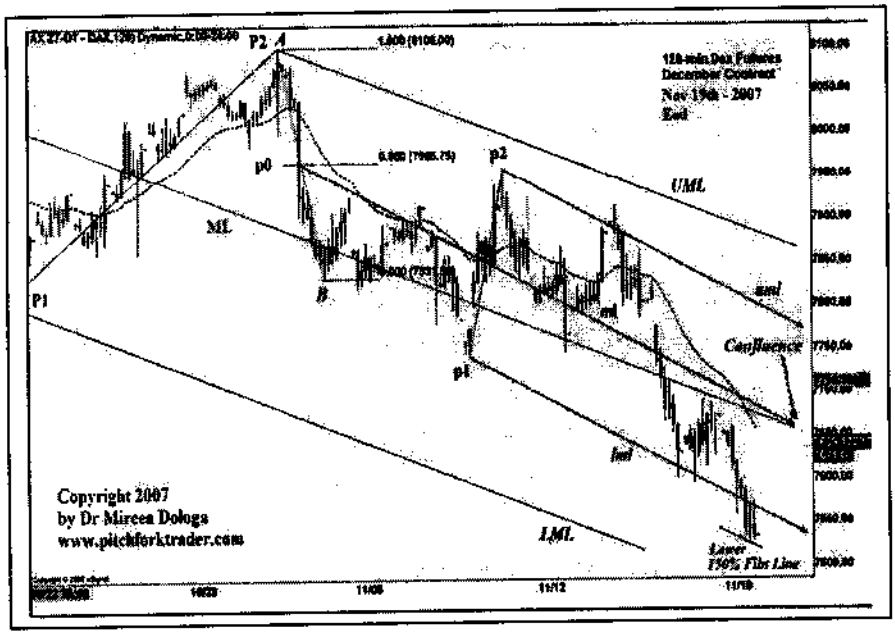


Figure 251 - *The above chart is the same as the chart in Figure 248 on which we have drawn, this time, a contextual major classic pitchfork with its corresponding minor Schiff pitchfork.*

The minor Schiff pitchfork of the above chart (*refer to Figure 251*) has been constructed by using the p0 non-pivotal anchor and the p1 and p2 intermediate pivots of the first correction. As we can observe, the market flow is totally embedded in the contextual major pitchfork's main body and there is built a minor Schiff pitchfork describing the local market with its impact on the contextual market. The latter pitchfork has already halted the market flow with its lower 150% Fibonacci ratio line and has created an intersection above 7650 key level. This confluence has been constructed by the median line (*ML*) of the major pitchfork and the median line (*ml*) of the minor Schiff pitchfork.

More often than not, the confluence of two median lines will promptly halt the market flow!

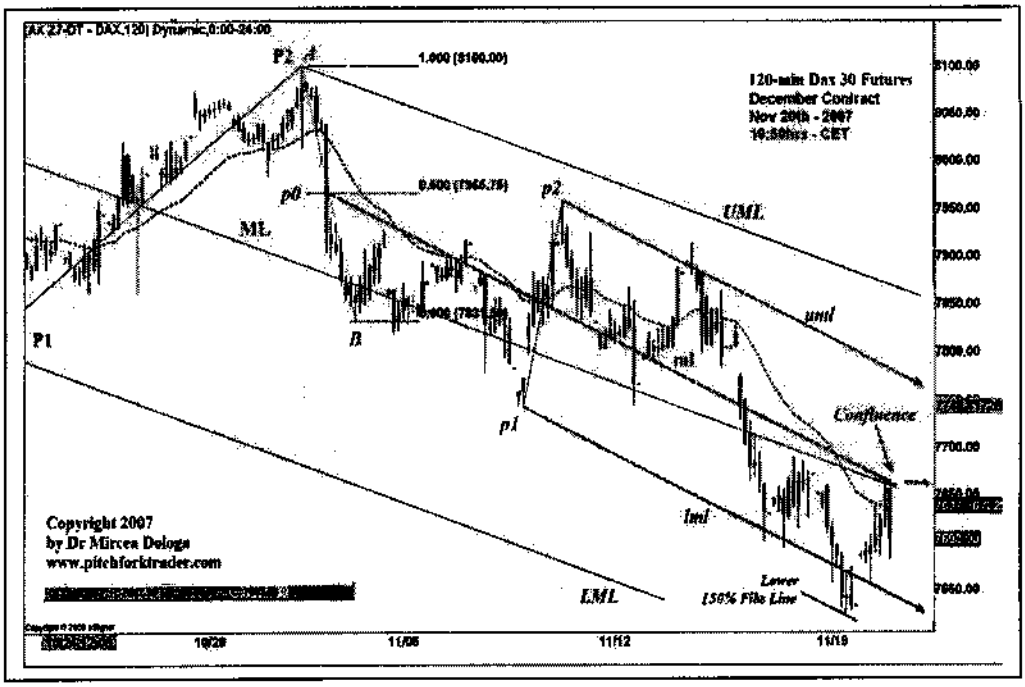


Figure 252 - *The above chart is the same as the chart in Figure 251, but one day later. As we can observe, the multiple testing of the local market flow has finally not only halted price but it also propelled it all the way up to the 7650-confluence zone. Even more... The vigorous halting power of this confluence has managed to downward catapult the market price. The last huge down bar is signalling the occurrence of a very strong down-momentum with the continuation of the initial down-sloping trend.*

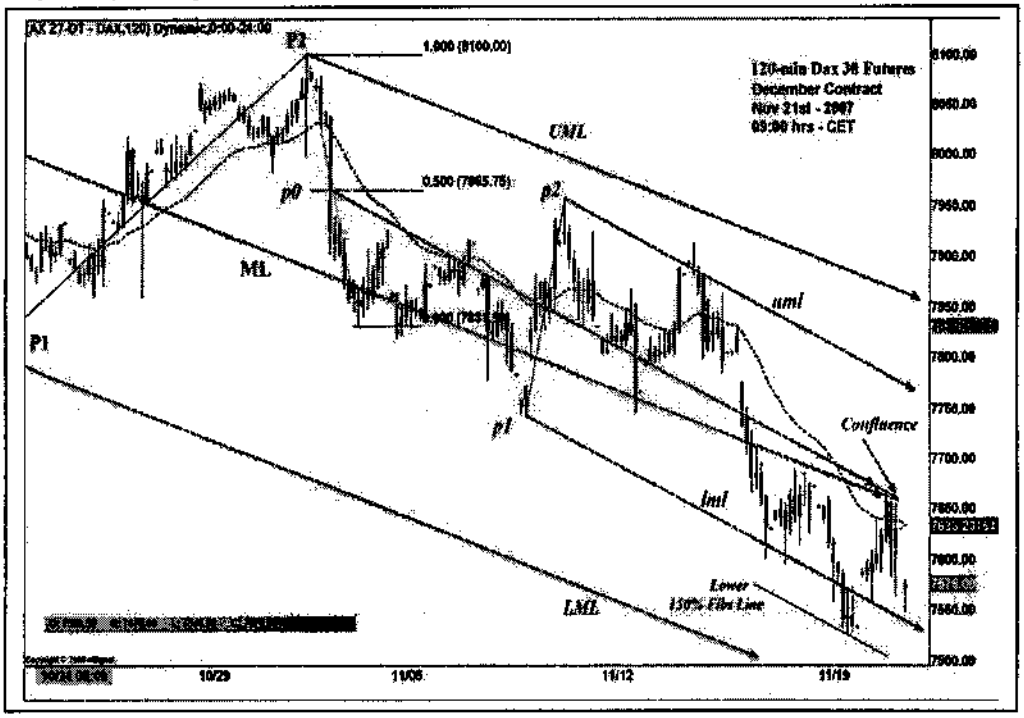


Figure 253 - *The above chart is the same as the chart in Figure 252, two 120-min bars later. As we can observe, the testing of the local market flow, by the before-last bar, has bounced the market price a second time all the way down near the lower median line (lml) of the minor Schiff pitchfork. Even more... The vigorous halting power of this confluence has managed to catapult the market price downward. The huge down gap is signalling the occurrence of a very strong down-momentum with the continuation of the initial down-sloping trend.*

Conclusion of *Sub-Chapter n° 3*:

Out of the three examples, we strongly plead and prefer the third example (*refer to Figure 251*). It is due to:

- **The contextual and local market flow's 100% encasement of the contextual major classic pitchfork's main body,**
- **The long–lasting channel formed by the major pitchfork's body helped in its guiding by the dominant trend with the assisting influence of the minor Schiff pitchfork.**
- **The indispensable role of the minor Schiff pitchfork with its median line (*ml*) and its lower 150% Fibonacci ratio line,**
- **The enhanced role of the median line (*ML*) of the major pitchfork as a supportive trend line and also the role of the median line (ml) of the minor Schiff pitchfork as a support but also as a resistance. Their intersection has created the confluence zone.**

Important: ***We consider a confluence valid only if the price bars will either cross the intersection zone (point) or should it be very near it, but no farther than 1 to 3 bars.***

4. Contextual Major Schiff Pitchfork & Fibonacci Arc Interactions

The Schiff pitchfork has a great flexibility because it can be used not only as often and as profitable as the classic pitchfork but it can also reveal a hidden usage that one can unveil only by practicing with it. The revealing power of the unseen non-pivotal anchor (*P0*) will allow the trader to construct a Schiff pitchfork, which otherwise couldn't be built. One of these edges would be its contextual use associated with any other tool of the *Integrated Pitchfork Analysis* technique.

We will study in this sub-chapter the interaction with the Fibonacci Arcs.

We have also illustrated for teaching purposes, the construction of two classic pitchforks, to be compared by the reader with the operational Schiff pitchfork.

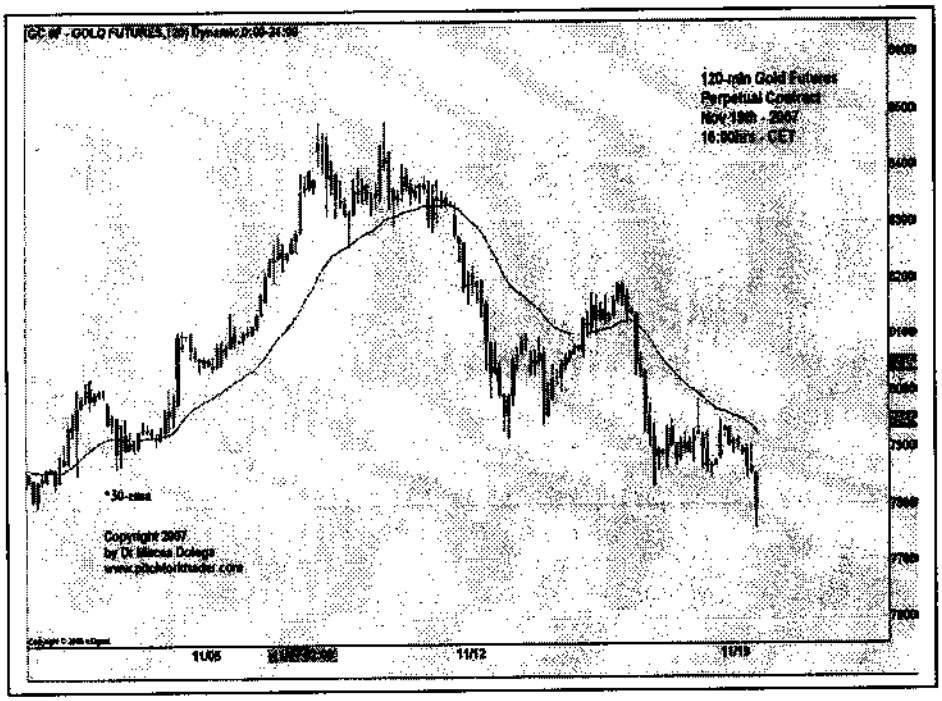


Figure 254 - *The above naked 120-min Gold Futures chart illustrates its dominant down-sloping trend.*

The naked chart study is a great idea not only for the newcomers but also for the experienced traders. For the former, it helps to learn and for the latter it takes the experienced trader out of his/her *conceived thinking*, given him another view of seeing the market moves differently.

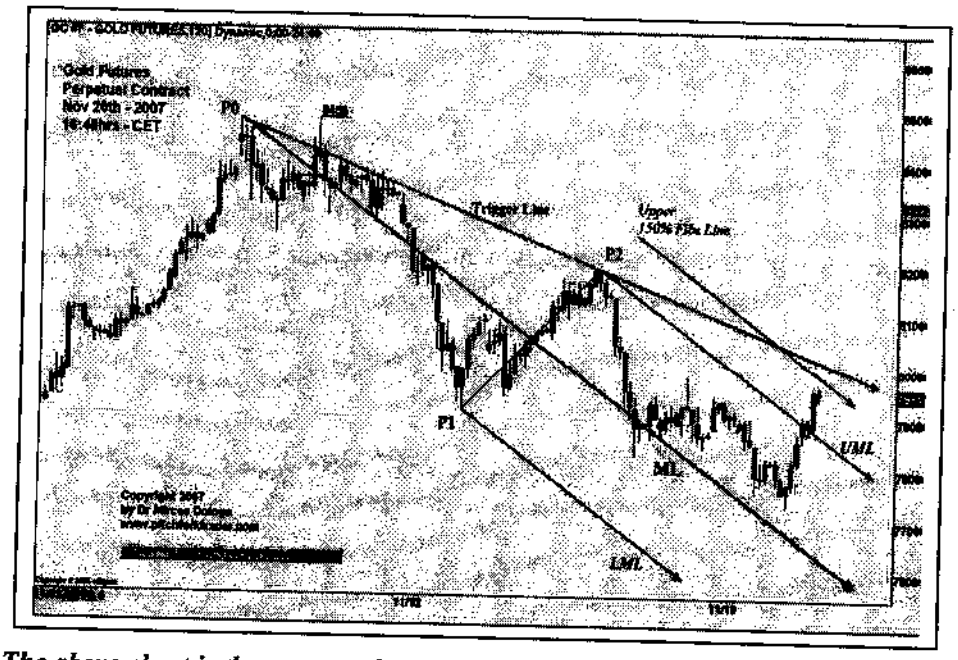


Figure 255 - *The above chart is the same as the chart in Figure 254 on which we have drawn a classic pitchfork. The 30-ema has been removed.*

The classic pitchfork of the above chart (*refer to Figure 255*) has been constructed by using the highest high as the P0 pivotal anchor and the P1 and P2 major pivots of the second correction. As we can observe the market flow is almost totally embedded in the pitchfork's main body. There isn't any minor pitchfork describing the local market with its impact on the contextual market. However, we must underline the excellent test and re-test of the upper median line (*UML*).

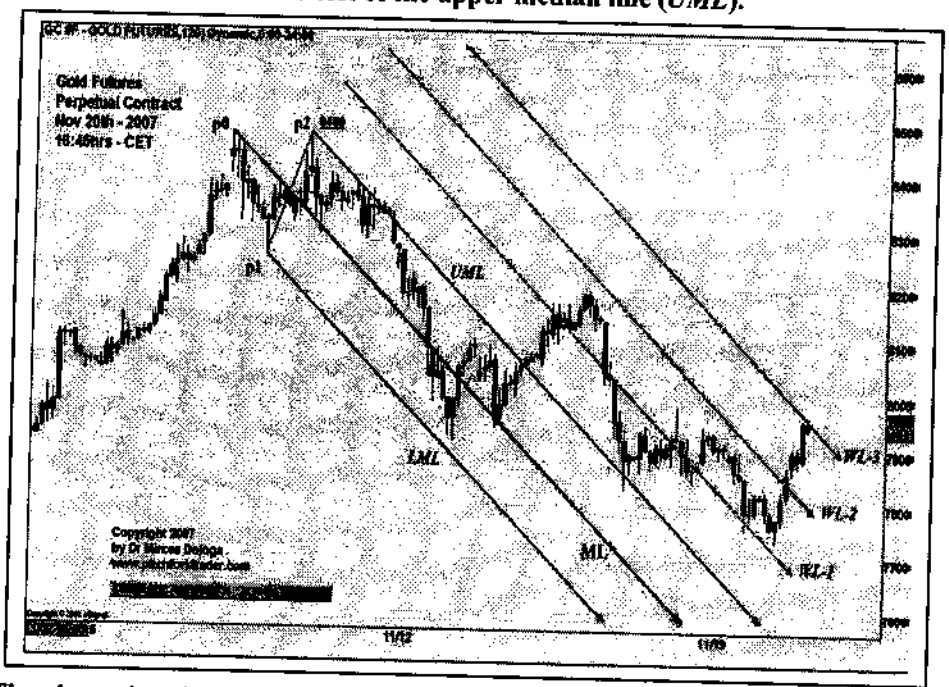


Figure 256 - *The above chart is the same as the chart in Figure 254 on which we have drawn a different classic pitchfork, than that on the chart of Figure 255.*

The classic pitchfork of the above chart (*refer to Figure 256*) has been constructed by using the highest high as the p0 pivotal anchor and the p1 and p2 major pivots of the first correction. As we can observe the market flow is less than 50% embedded in the pitchfork's main body. There isn't any minor pitchfork describing the local market with its impact on the contextual market. However, we must underline the testing of the upper median line (*UML*) and the warning lines (*WL-1 & WL-3*).

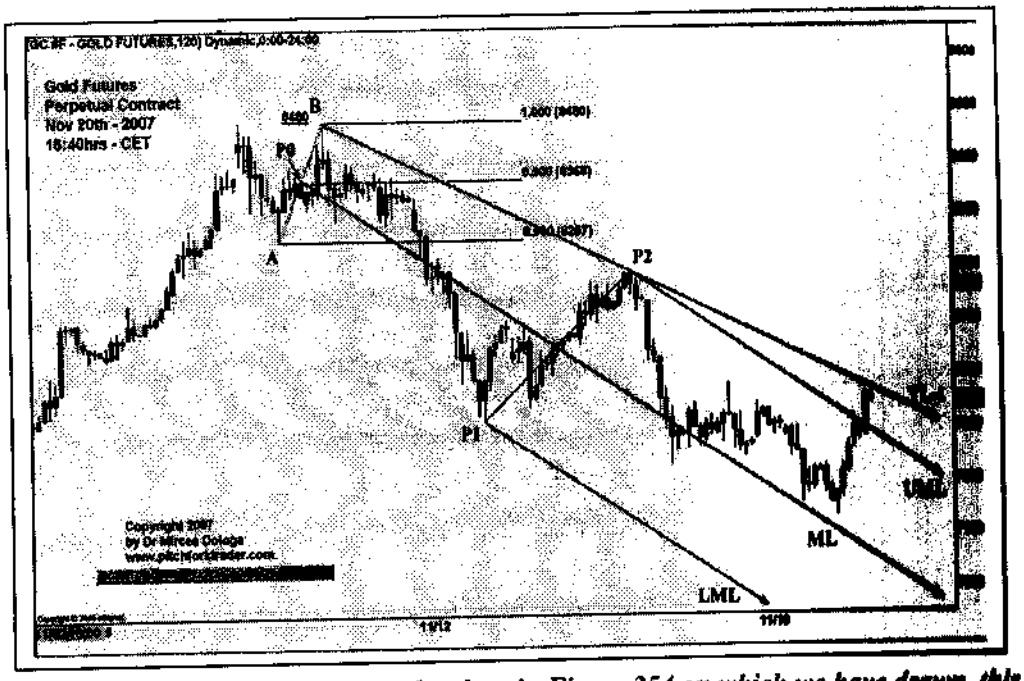


Figure 257 - *The above chart is the same as the chart in Figure 254 on which we have drawn, this time, a contextual major Schiff pitchfork with its corresponding TL-1 trend line.*

The contextual major Schiff pitchfork of the above chart (*refer to Figure 257*) has been constructed by using the P0 non-pivotal anchor and the P1 and P2 major pivots of the second correction. As we can observe the market flow is almost totally embedded in the pitchfork's main body. The pitchfork's corresponding trend line has already halted the market flow above 7950 key level.

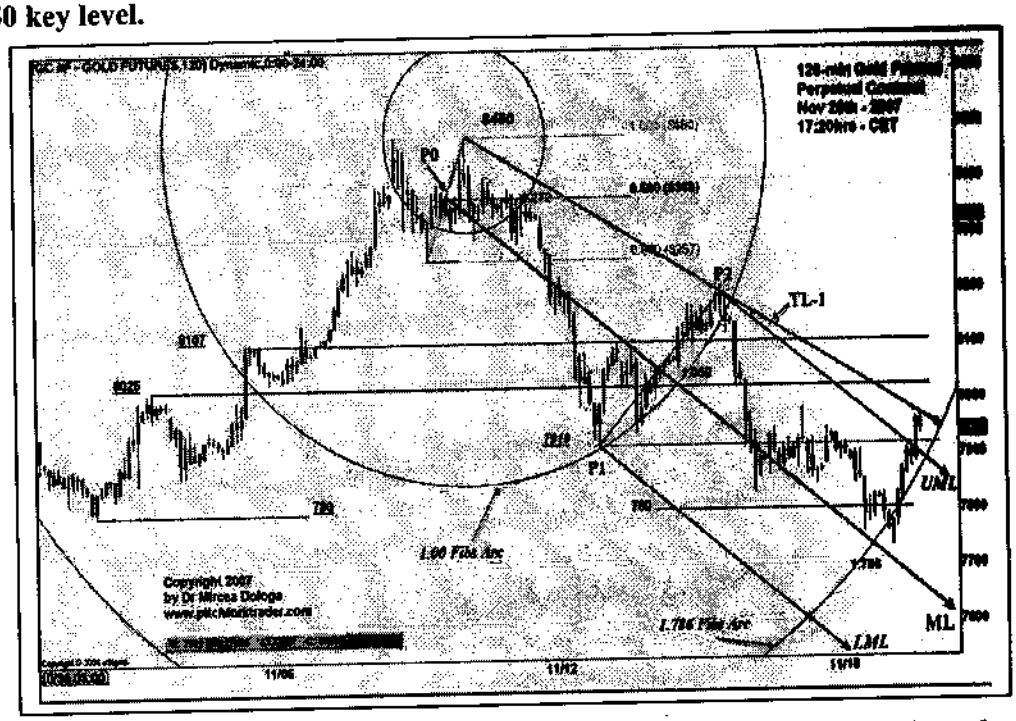


Figure 258 - *The above chart is the same as the chart in Figure 257 on which we have drawn the corresponding Fibonacci ratio arcs. They serve not only as support or resistance trend lines but also they can form a curvilinear channel that could efficiently guide the local market flow. The market price has apparently reversed its down-sloping trend just on the 1.786 Fibonacci ratio arc and is currently climbing toward the first target, the 8025 key level. This won't be an easy task because it will first have to break-up the TL-1 trend line.*

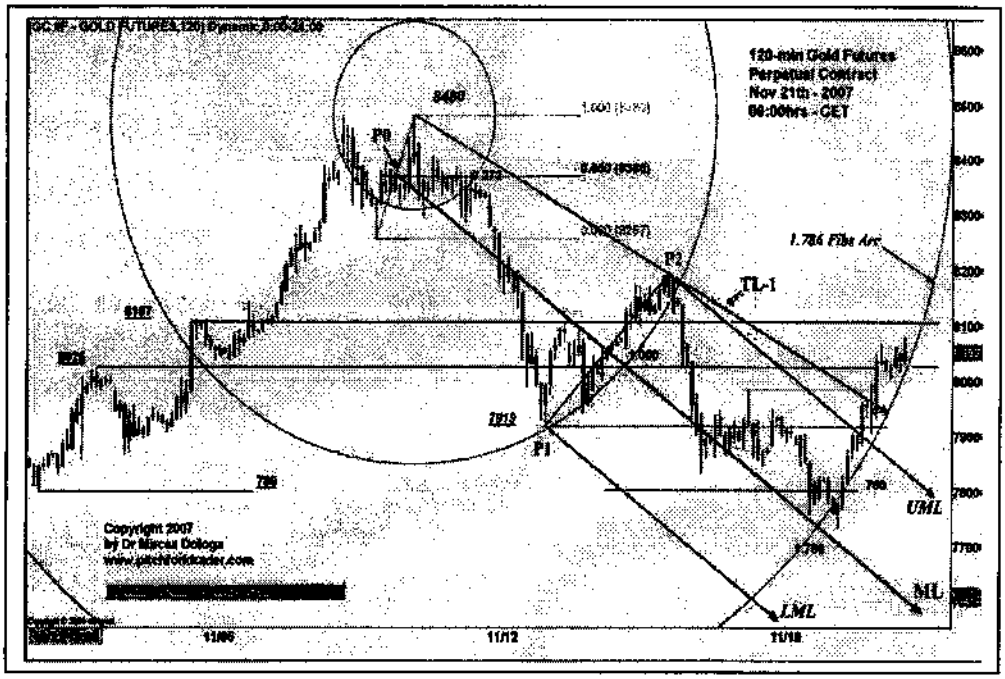


Figure 259 - *The above chart continues the chart in Figure 258. As we have anticipated, the market flow continued its up-trend, breaking-up the TL-1 trend line thus reaching the 8025 key level. A seven bar trading range has been created at this level against the 1.786 Fibonacci ratio arc. The high-powered emerging momentum of this sideways move will either propel the market price up to the next target 8107 key level, or will drop the market price toward the pitchfork's upper median line (UML), but... not before penetrating the 1.786 Fibonacci ratio arc.*

5. Original Research: T-Pitchfork - a Better Choice than Schiff Pitchfork

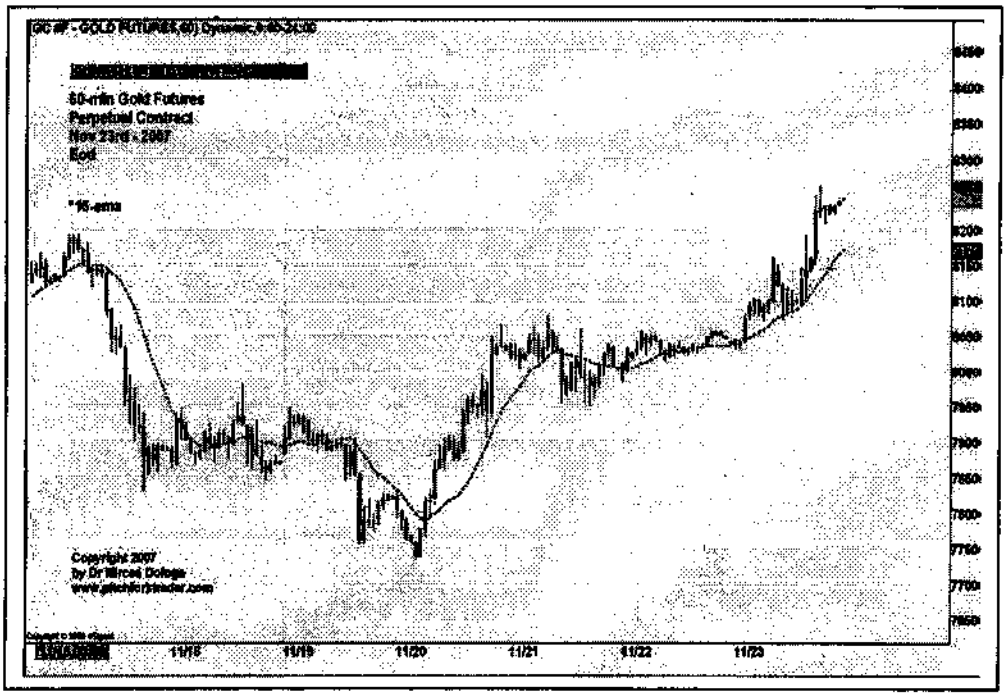


Figure 260 - *The above 60-min Gold Futures "naked" chart will be used to illustrate the best choice among the following pitchforks: the traditional , the Schiff and the T-pitchfork. There is only one question...Which of them will optimally describe the market flow?*

Figure 261 - *The right side 60-min chart is the same as the chart in Figure 260 on which we have drawn a* **classic pitchfork** *using the three pivots (P0, P1 and P2) among those of the prior trend. We can easily see that the choice of pivots has given a pitchfork that doesn't really optimally describe the current market flow.*

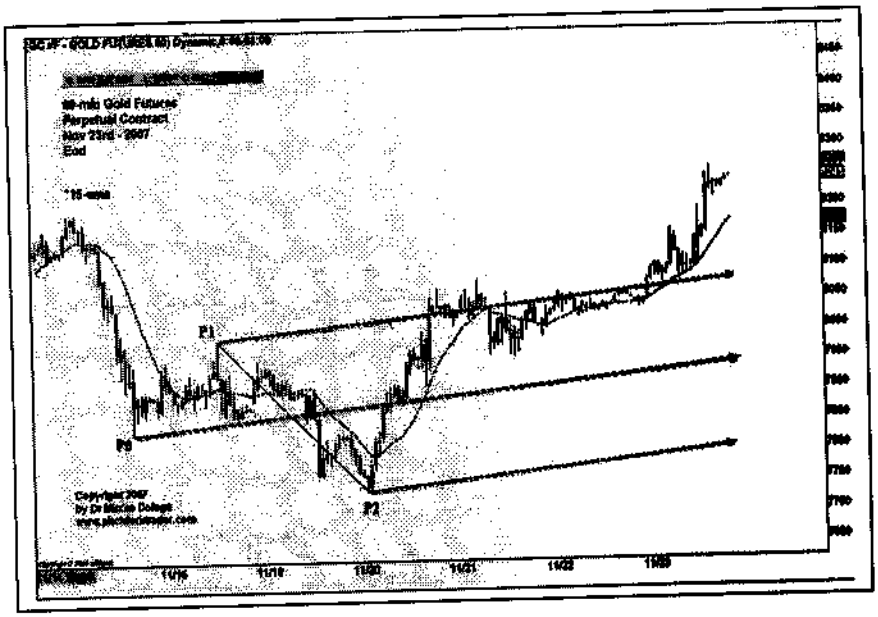


Figure 262 - *The right side chart is the same as the chart in Figure 260 on which we have drawn a* **traditional pitchfork** *using the last three pivots (P0, P1 and P2) among those of the prior trend. We can easily see that the choice of pivots has given a pitchfork that doesn't really optimally describe the market flow.*

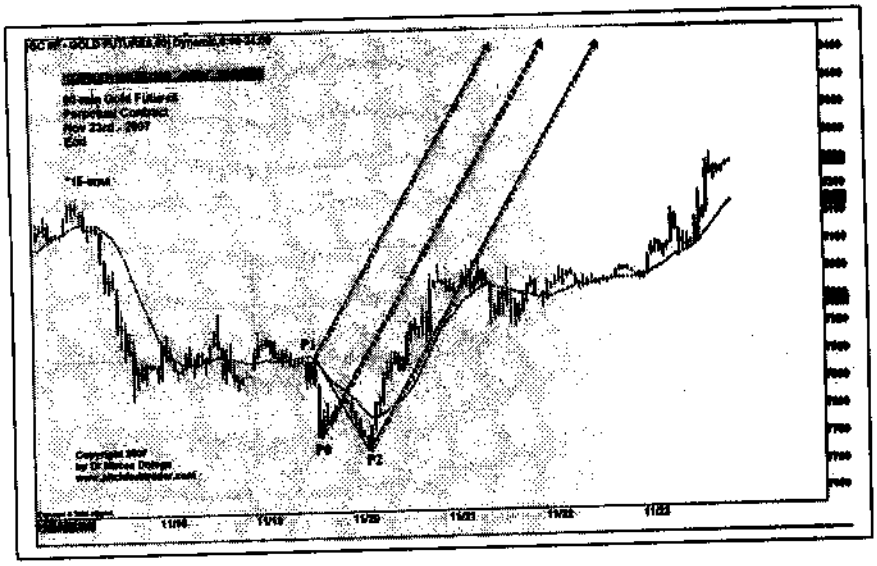


Figure 263 - *The right side 60-min chart is the same as the chart in Figure 260 on which we have drawn, this time, a* **Schiff pitchfork** *using the conventional P0 anchor with the P1 and P2 pivots of the prior trend. We can easily see that this choice of pivots has given a better encasing pitchfork than the preceding two examples but it still does not optimally describe the market flow.*

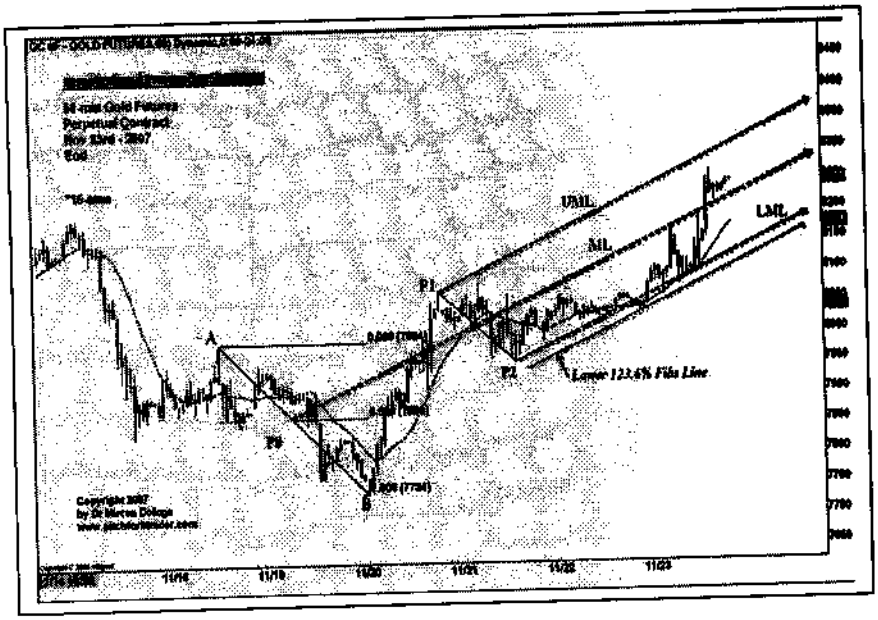


Figure 264 - *The right side 60-min chart is the same as the chart in Figure 260 on which we have drawn a* **T-pitchfork**. *We have used the 50% Fibs ratio of the A/B segment as the P0 anchor with the P1 and P2 pivots of the prior trend. It is the best choice out of the three preceding pitchforks, embedding the entire market flow within its main body.*

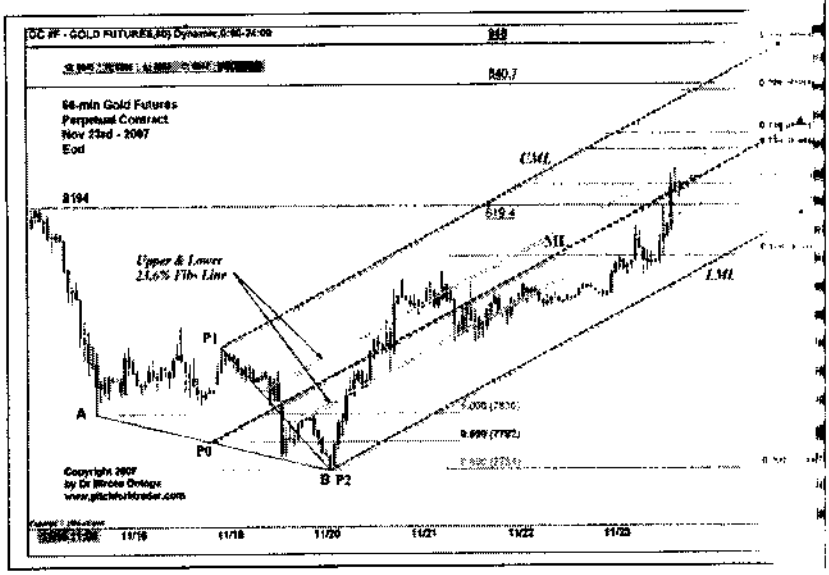


Figure 265 - *The right side 60-min chart is the same as the chart in Figure 264 on which we have labelled the Elliott waves, all within the* **T-pitchfork**. *We can easily see that the local market flow has built a small trading range, just above the median line, in order to restore the necessary kinetic energy to catapult the price all the way up to the upper median line.*

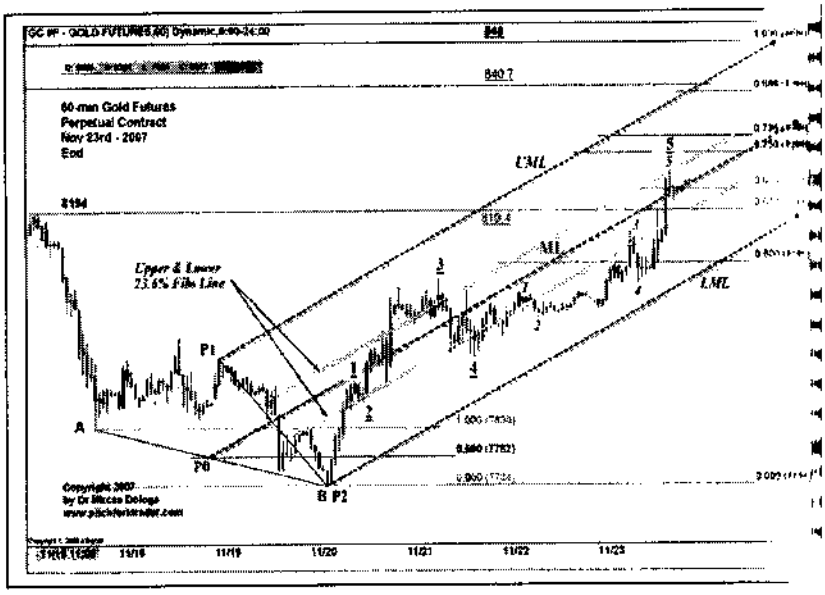
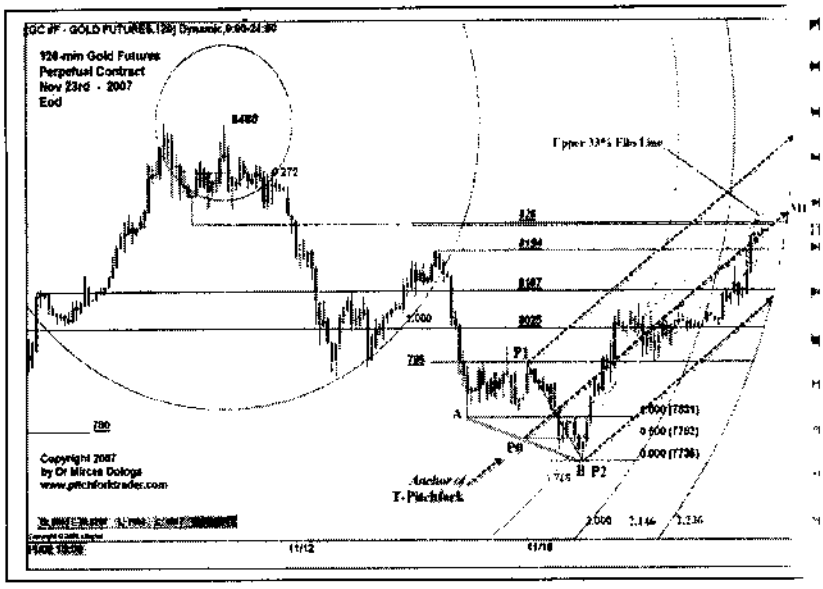


Figure 266 - *The right side chart is the same as the chart in Figure 265 but on the 120-min time frame, on which we have drawn a* **T-pitchfork**. *We have used the 50% Fibs ratio of the A/B segment as the P0 anchor with the P1 and P2 pivots of the prior trend. We can say that together with the preceding 60-min chart T-pitchfork, they will represent the best choice.*



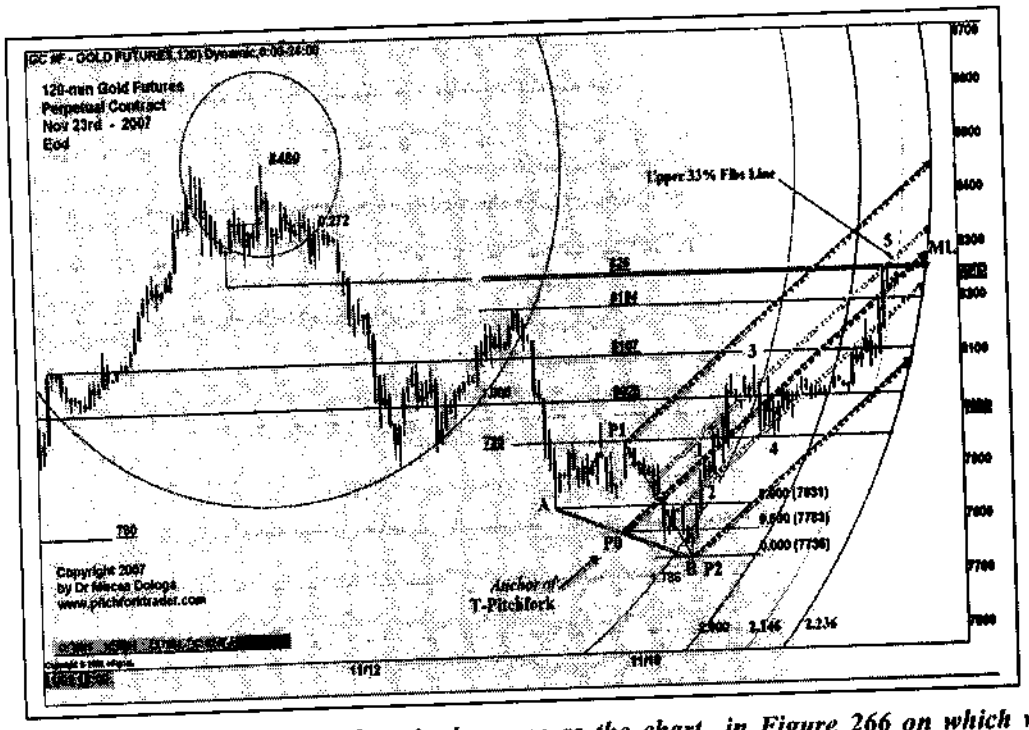


Figure 267 - *The above 120-min chart is the same as the chart in Figure 266 on which we have labelled the Elliott waves, all within the* T-pitchfork. *We can easily see that the local market flow has built a small trading range, just above the median line, in order to restore the necessary kinetic energy to catapult the price all the way up to the upper median line. Watch out for the Fibonacci ratio arc confluences.*

Key Points to Remember:

- The Schiff pitchfork is nothing else but a traditional pitchfork's substitute when the latter can't be constructed or it can't optimally describe the market flow.
- The Schiff pitchfork's optimization depends on multiple factors: the degree of market flow embedding by the main body, the enhancement role of the median line or any long lasting channel formed by the median lines and its acolytes.
- Keep in mind the two primordial roles of the Schiff pitchfork: a contextual function encasing as much as possible the overall market and also a local role. In spite of its apparently limited action on the local market flow, the corresponding minor Schiff pitchfork can strongly influence not only the context of the global market but also on the trade's outcome.
- Be aware that a vivacious shift-to-the-right tendency in an up-sloping trend may signal the prelude of a change in trend.
- The revealing power of the unseen non-pivotal P0 anchor will give the trader the chance of building a Schiff pitchfork, which couldn't be otherwise constructed. This will constitute a real edge, placing the trader well ahead of the crowd.
- The T-pitchfork can efficiently replace not only the classic pitchfork but also the Schiff pitchfork.

Chapter 10

Fibonacci & Momentum Bar Count related to Pitchfork's Pivots

This chapter will describe the time variable through the bar count technique. We can never emphasize the importance of the time factor enough in detecting the low-risk high-probability trades. This chapter is even more precious because the trading literature material is so scarce in this area.

As a physics and medicine trained person, I could never believe, until a few years ago, that the numbers are *well and alive* forming the science of numerology, which is a real edge in trading. Even if we couldn't even scratch the surface of this huge domain related to trading, we would try to do our best to describe a few aspects that will enrich the trader's arsenal.

1. **Pivot Counts of the Swings**

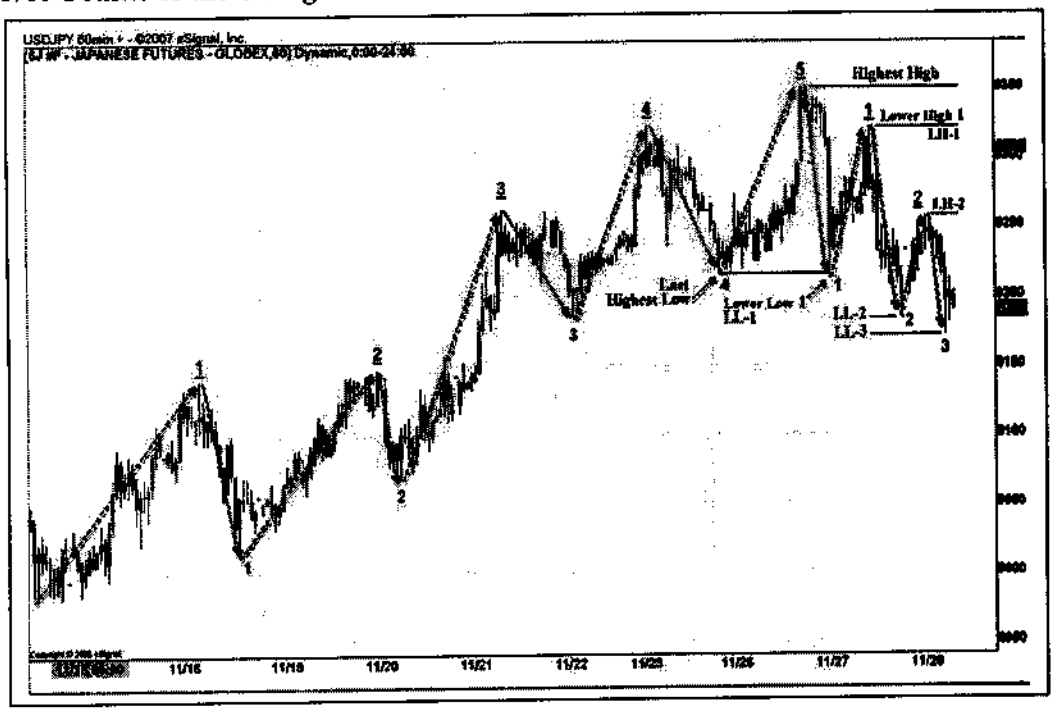


Figure 268 – ***Numerous higher highs*** **(1, 2, 3, 4 and 5)** ***and higher lows*** **(1, 2, and 3 and 4)** ***on the above chart will give precious information about the trend's behaviour: inception, development and termination.***

Before we will go into detail with bar count concept it is wise to first understand the count of the higher highs and higher lows within the current trend.

The pivotal bar count is preceded by marking the significant up-sloping swing with a trend line, from its lowest low toward its highest high and vice versa for a corrective swing. The main purposes of this pivotal bar count are:

- **To optimally understand the impulsive/corrective patterns with the corresponding waves. For example: *three higher highs with two higher lows, could signal an impulsive pattern.***
- **To locate the exact position of the current market flow within the developing trend.**
- **To signal, as early as possible, the occurrence of the change of trend. On the right side chart of *Figure 268* the reversal was signalled at the first lower low (*LL-1*), it has started at the first lower high (*LH-1*) and then re-confirmed at the second lower low (*LL-2*).**

As most of the experienced traders know, the trend is defined as the continuous kinetics of higher highs and the higher lows (*in an up-trend*). As long as this developing movements

continue, the momentum of the trend will remain in power. Even if the market flow should perform a lower high, this trend will still be continuing if the incoming low does not break the previous low's level. If the market flow breaks the low of the prior swing level and drops, then it is probable that the trend has reversed. If the highest high drops and behaves in the same down-sloping manner, then the reversal is confirmed. Otherwise said, the trend will be broken only when both - the high and the low - drop and break the previous levels, respectively.

2. Counting the Developing Bars: Fibonacci Bars (*Successive Bars*) and Momentum Bars

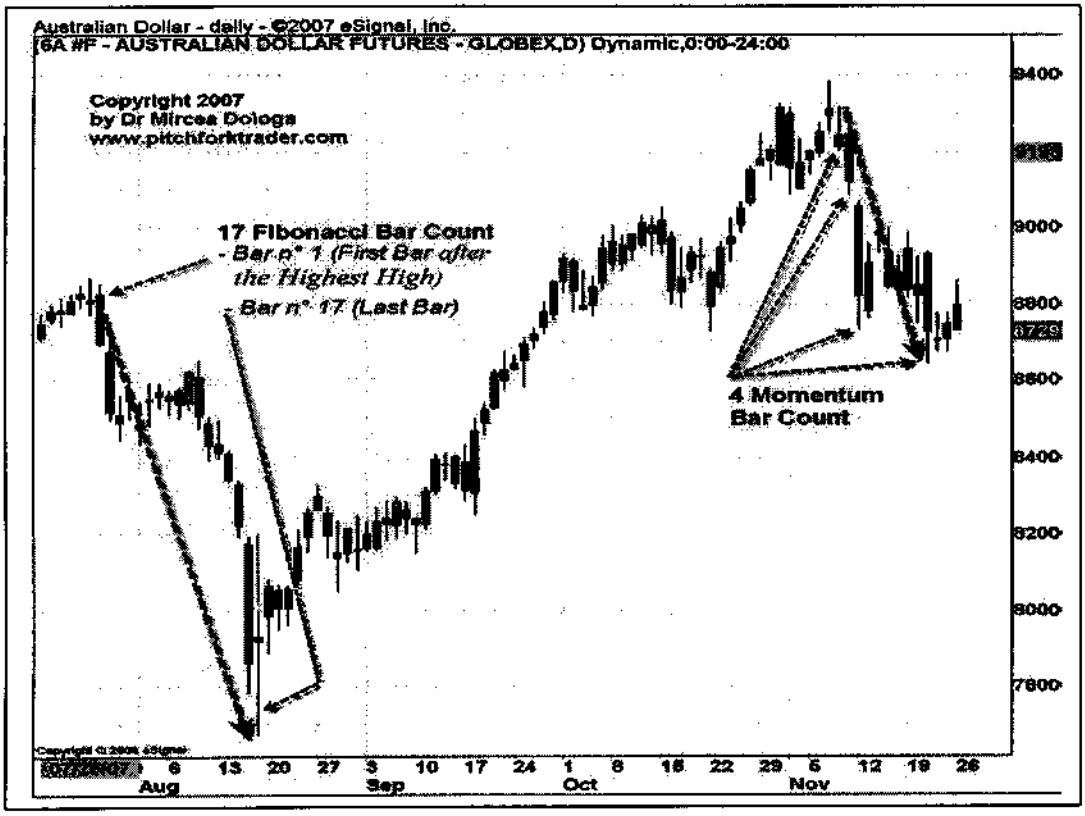


Figure 269 – *Even if it seems obvious, the bar count should be performed following a strict procedure.*

Experience has showed that time plays a very important role in trading. One way of revealing time's effect on the market flow and exploit its advantages, is the bar counting. We will start counting on a new up/down swing. There are two ways of counting:

- The *Fibonacci Bar Counts* or *Successive Bar Counts,* which means counting one by one, in a natural ensuing order. The counting will start with the first bar, after the highest high, in a downtrend swing (refer to *Figure 269*) and vice versa (*the first bar, after the lowest low, in an up trend swing*). The last counted bar will be the downswing's lowest low and vice versa (*the highest high, in an up trend swing*). When we will reach one of the bar count numbers listed in the table of *Figure 271,* the market flow is susceptible to reverse, more often than not.
- The *Momentum Bar Counts*, which means counting in a natural ensuing order, only the bars that exceed the prior bars. Otherwise said, we don't count all the bars, only the higher ones, in the up swing and the lower ones, in the down swing (refer to the *right-side of the Figure 269*) The inside bar(s) among higher high bars or lower low bars, are not counted.
  The counting will start with the first bar, after the highest high, in a down-trend swing (refer to the *right-side of Figure 269*) and vice versa (*the first bar, after the lowest low, in an up-trend swing*). The last counted bar will be the down-swing's lowest low and vice versa (*the highest high, in an up-trend swing*).
  When we will reach one of the bar count numbers listed in the table of *Figure 271,* the market flow is susceptible to reverse, more often than not.

From the cyclical point of view, the bar count is mostly done, from a low to the next low, thus measuring the cycle's length. An entire chapter will be dedicated to the science of cycles, in our next volume. Some traders, count from a high to the next high. Concerning the intra-day trading aspect, most of the traders perform the bar count, from the last low to the next high, thus revealing the trend's length, and enabling the trader to acquire a huge edge. When the market flow will reach the *time/price confluence*, or the *measured time with another measured time confluence*, the market will reverse, more often than not.
The better-defined pivots, with numerous dual bar count confluences are the most reliable reversal patterns.
The bar count mainly uses the Fibonacci numbers and their ratios, the Lucas numbers, the square roots, the squares and the cubes of numbers and the symbolic numbers like 6 and 144 with their corresponding multiples and divisors (*please refer to Figure 270 and 271*).
Throughout this chapter we will note a few simple guiding rules:

- The width of the *measured time (1) / price confluence zone* may vary between 1 and 3 bars, in case of a single bar count.
- The width of the *measured time (1)* and the *measured time (2) confluence zone* vary between 1 and 2 bars, in case of a dual bar count.
- The width of the above two type *confluence zones* should be no more than one bar, in case of multiple bar count (*above 3 bar counts*).
- Be aware that the efficient chart patterns, more often than not, have their reversal levels, closely guided by the time/price confluences. The same is valid for triangles' apex and the highest high or the lowest low. At that moment, be on the watch for timing the swings of the sideways market flow that will ensue - a prelude to the incoming volatile movements.

Table compiled by Dr Mircea Dologa — www.pitchforktrader.com

Pivotal Bar Count Table

Fibonacci Ratios	Fibonacci Ratios x 100	Fibonacci Ratios x 1000	Fibonacci Numbers n°
.146	15	146	5
.236	24	236	8
.382	38	382	13
.618	62	618	21
.786	79	786	34
.886	89	886	55
1.272	127	1272	89
1.618	162	1618	144
2.618	262	2618	233
4.236	424	4236	377
6.854	685	6854	610

Lucas Numbers n°
7
11
18
29
47
76
123
199
322
521
843

Square Root	Square Root x 100	Square Root x 1000
.382	38	382
.486	48	486
.618	62	618
.786	79	786
.886	89	886
1.120	112	1120
1.272	127	1272
1.618	162	1618
2.058	206	2058
2.618	262	2618

Squares of Numbers	Cubes of Numbers
4	8
9	27
25	64
36	125
49	216
64	343
81	512
100	729
121	1000
144	
169	
196	

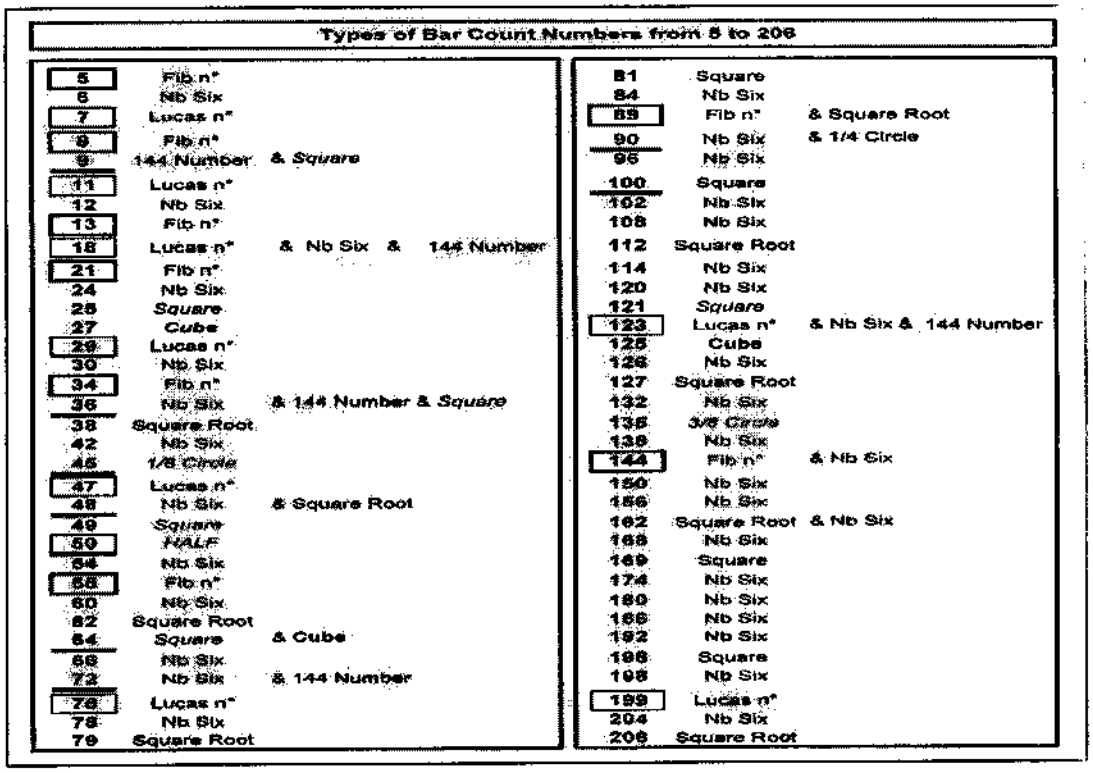
Symbolic Number Six and its Multiples

6	66	126	186	246	306	366	426	486
12	72	132	192	252	312	372	432	492
18	78	138	198	258	318	378	438	498
24	84	144	204	264	324	384	444	504
30	90	150	210	270	330	390	450	510
36	96	156	216	276	336	396	456	516
42	102	162	222	282	342	402	462	522
48	108	168	228	288	348	408	468	528
54	114	174	234	294	354	414	474	534
60	120	180	240	300	360	420	480	540

Symbolic Number 144 Divisors & Multiples

144	
3	216
9	288
18	324
36	360
72	432

Figure 270 – *The above* Pivotal Bar Count Table *contains the main numbers used in intra-day trading. The bar counting mainly uses the Fibonacci numbers and their ratios, the Lucas numbers, the square roots, the squares and the cubes of numbers and the symbolic numbers like 6 and 144 with their corresponding multiples and divisors.*



Types of Bar Count Numbers from 5 to 206

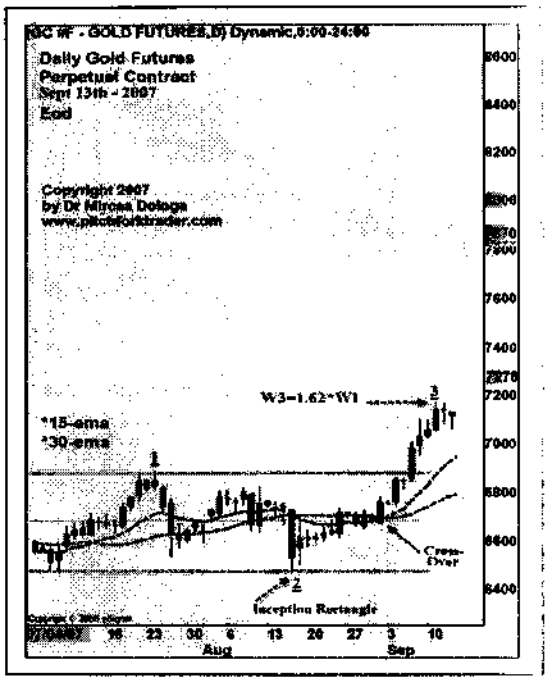
5	Fib n°	
6	Nb Six	
7	Lucas n°	
8	Fib n°	
9	144 Number	& *Square*
11	Lucas n°	
12	Nb Six	
13	Fib n°	
18	Lucas n°	& Nb Six & 144 Number
21	Fib n°	
24	Nb Six	
25	*Square*	
27	*Cube*	
29	Lucas n°	
30	Nb Six	
34	Fib n°	
36	Nb Six	& 144 Number & *Square*
38	Square Root	
42	Nb Six	
45	*1/8 Circle*	
47	Lucas n°	
48	Nb Six	& Square Root
49	*Square*	
50	*HALF*	
54	Nb Six	
55	Fib n°	
60	Nb Six	
62	Square Root	
64	*Square*	& Cube
66	Nb Six	
72	Nb Six	& 144 Number
76	Lucas n°	
78	Nb Six	
79	Square Root	
81	Square	
84	Nb Six	
89	Fib n°	& Square Root
90	Nb Six	& 1/4 Circle
96	Nb Six	
100	Square	
102	Nb Six	
108	Nb Six	
112	Square Root	
114	Nb Six	
120	Nb Six	
121	*Square*	
123	Lucas n°	& Nb Six & 144 Number
125	Cube	
126	Nb Six	
127	Square Root	
132	Nb Six	
135	*3/8 Circle*	
138	Nb Six	
144	Fib n°	& Nb Six
150	Nb Six	
156	Nb Six	
162	Square Root	& Nb Six
168	Nb Six	
169	Square	
174	Nb Six	
180	Nb Six	
186	Nb Six	
192	Nb Six	
196	Square	
198	Nb Six	
199	Lucas n°	
204	Nb Six	
206	Square Root	

Figure 271 – *As we can observe on the above table named* **Types of Bar Count Numbers** *are listed 68 bar count numbers, varying from 5 to 206. They represent 34% out of the 201 (205-4) total possible numbers. The 17 bordered count numbers are the most frequently used and they represent 25% out of the 68 and 8.4% out of the total 201. The trader might wonder if all this is not only a coincidence. The coincidence probability for a single bar count is 8.4% & diminishes 12 times for a dual bar count to 0.7%.*

3. Single Bar Count Implementation: Higher Highs - Reversal

The implementation of the single bar count will be progressively done, as the swings of the market flow are advancing. Let us first study the progression of a classic trend, with its three stages: the inception, the development and the termination.

Figure 272 – *As we can observe on the right side chart, the market flow is bursting out of the inception rectangle. The price just reached the limits of the classic size of the wave 3 where W3=1.618*W1. A first aggressive trade choice has been possible when the market price bounced on the lower boundary of the rectangle, right after the termination of W2. The second aggressive opportunity trade was revealed when the market price exceeded the crossover zone of the 15- and 30-emas. The last aggressive trade choice would have been possible when the market price has broken-up through the upper boundary of the rectangle. Even aggressive, the trades have benefited of the edge of a comfortable small stop loss, due to the nearness of the key level support. Now... Knowing the classic W3 size, is the wave terminated? Will an extension occur or not...? How high will the market climb?*



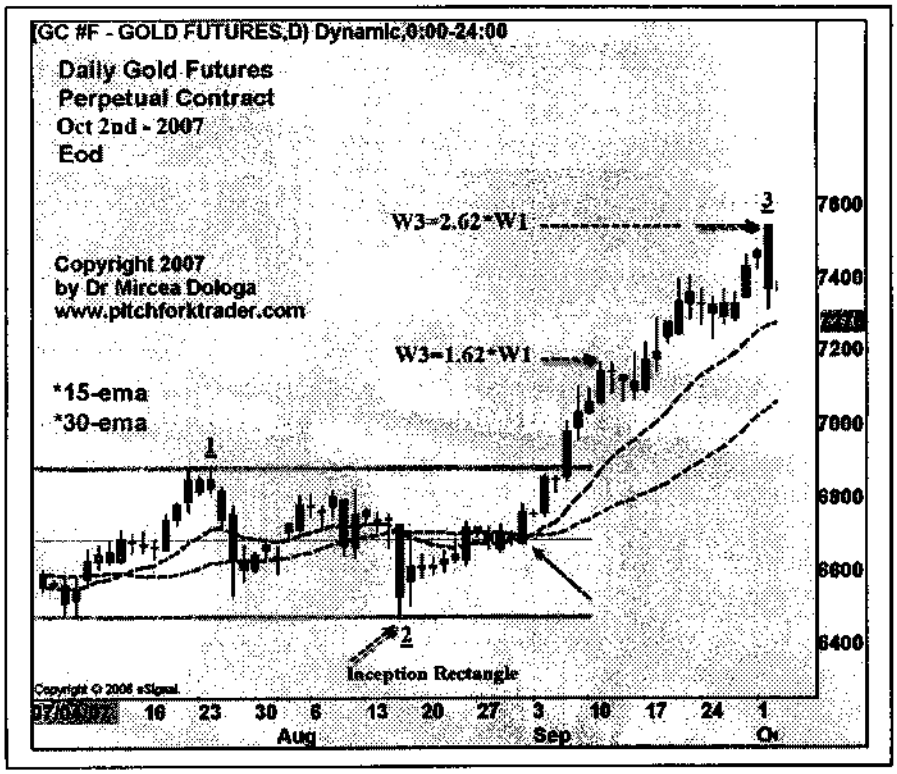


Figure 273 – *The questions at the end of the legend of Figure 272 seem to be legitimate. The W3 has extended more than twice the W1 size – W3=2.62*W1 – to be exact. Now... Knowing the current extended value of W3 size... Is the wave three terminated? Will a W3 elongation take place? ... And if yes... How high will the market climb again?*

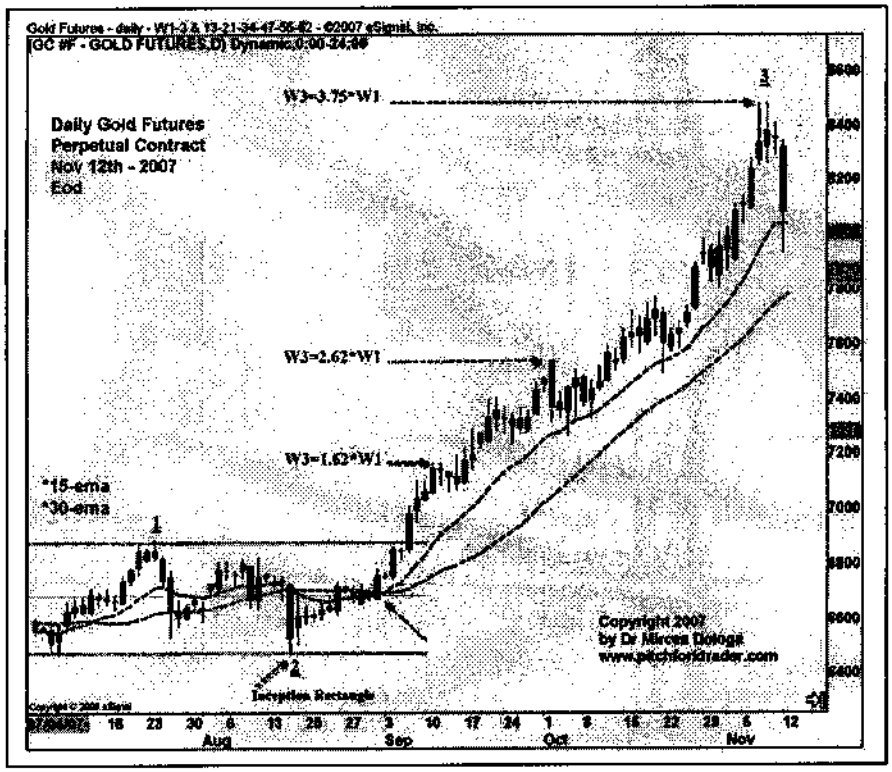


Figure 274 – *Once again, the questions at the end of the legend of Figure 273 were legitimate. The W3 has elongated all the way up to 8480 key level, where W3=3.75*W1.*

So far, we have studied in this sub-chapter, only the price context of the last three charts (*refer to Figures 272, 273 and 274*). We have closely observed the W3 development guided by the Fibonacci ratio price-measuring tool: 1.62, 2.62 and 3.75. The latter number is rather a Gann number. We'll study the time evolving context of the same W3, using the bar counts

3.1 *Bar Count Grid Definition – an Ergonomically Structured Time Tool*

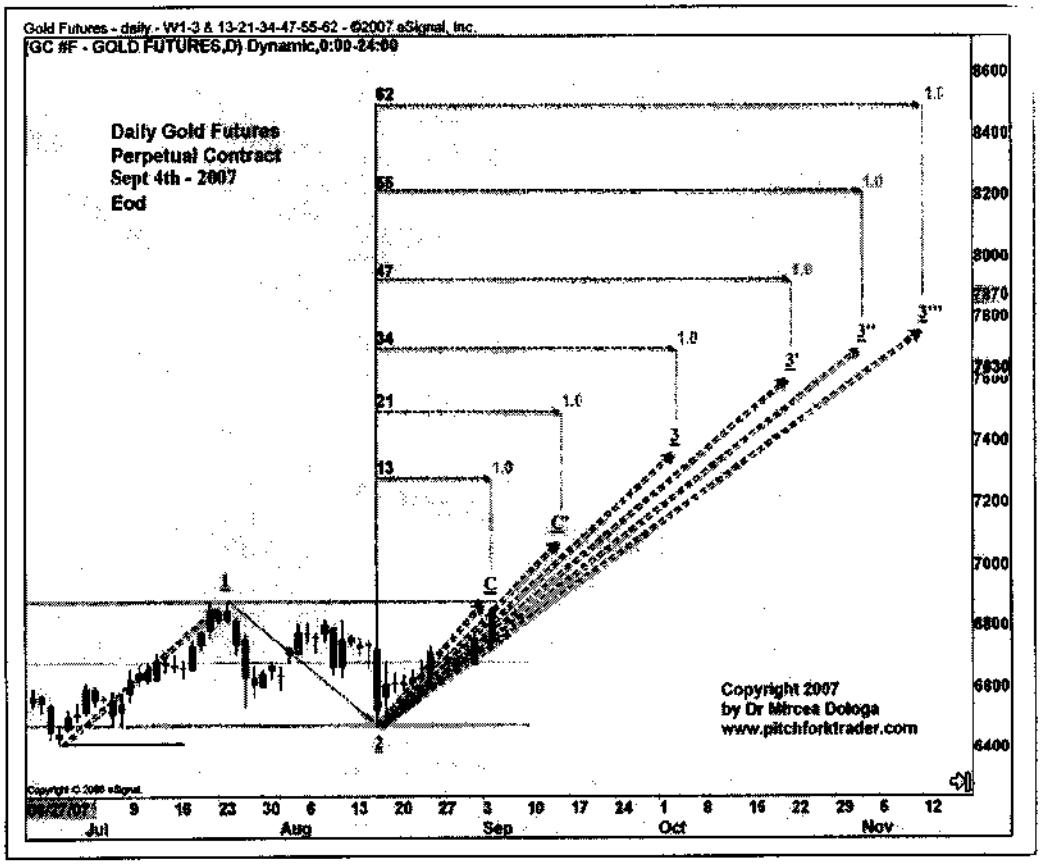


Figure 275 – *The above* **Bar Count Grid** *tool was initially used for quantifying the development of an up-sloping trend. The C-wave has travelled exactly 13* (13-*0*) *bars (C-wave = A-wave). The number 13 in front of the parenthesis is the* **bar count**, *the first number in the parenthesis* (13) *is the closest* bar type *(Fibonacci, Lucas, etc) and the subtracted number in the parenthesis* (*0*) *is the* **error interval**.

The implementation of the above drawn *Bar Count Grid* tool starts from the low of W2 where the trader wishes to begin the study of the future up-sloping trend. We will identically proceed as we have already done in *Figure 272 to 274*, but we will study the time context. As we can observe (*refer to Figure 275*), the tool is positioned at the inception of a "*would-be*" origin of the W3. The choice of this low (*W2 end & W3 commencement*) has been based on:

- The presence of the inception rectangle,
- The bounce of the market price on the lower boundary of the rectangle and
- The breakout of the mid-channel trend line. It is very probable that the market flow will break the upper boundary, and commences a *classic*, *an extended* or *an elongated W3*.

The vertical lines are *time-lines in the sand*, the probable time-locations of the projected bar reversals of the various swings created during the development of the W3. As the market flow will progress, the number of bars will increase and the W3 will have:

- A *classic size* of 13 to 21 bars, having W3=1.62*W1, as the most common relation,
- An *extended size* of 34 to 47 bars with W3=2.618*W1, as the most frequent relation,
- An *elongated size* if the number of bars will exceed 50 bars with W3=3.00*W1 or W3=3.5*W1 or W3=3.75*W1 or W3=4.236*W1.

3.2 *Applying the Bar Count Grid Tool*

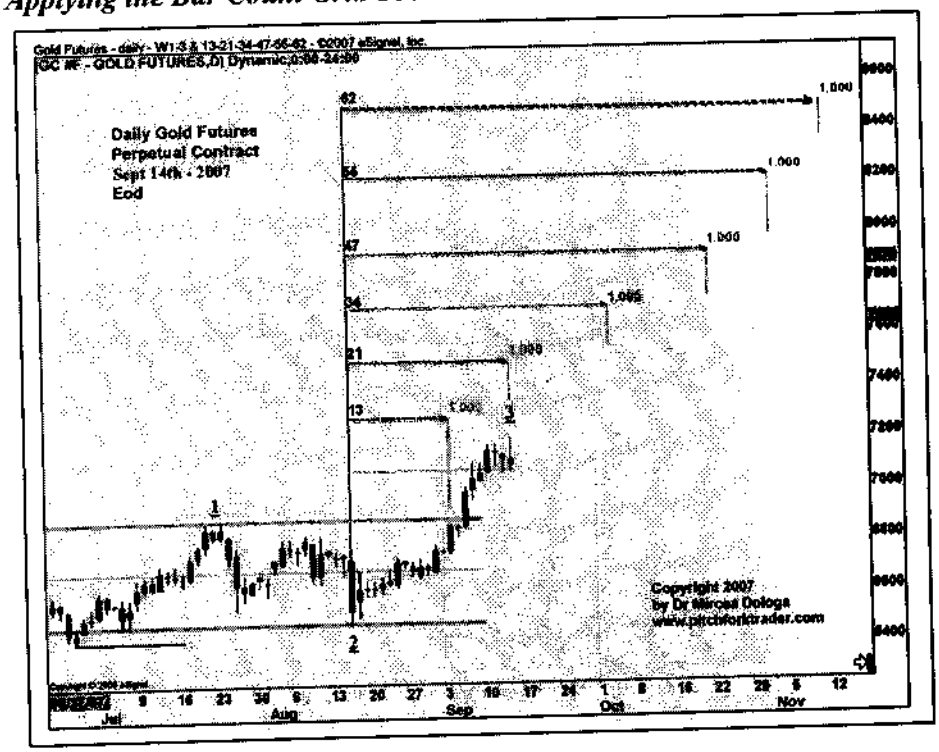


Figure 276 – *The above* **Bar Count Grid** *tool was applied as we have previously described. The W3 has travelled exactly 21* (21-*0*) *bars. At this stage of development we can say that the W3 has reached the classic size that we have previously defined. Will it become extended? The next chart will tell!*

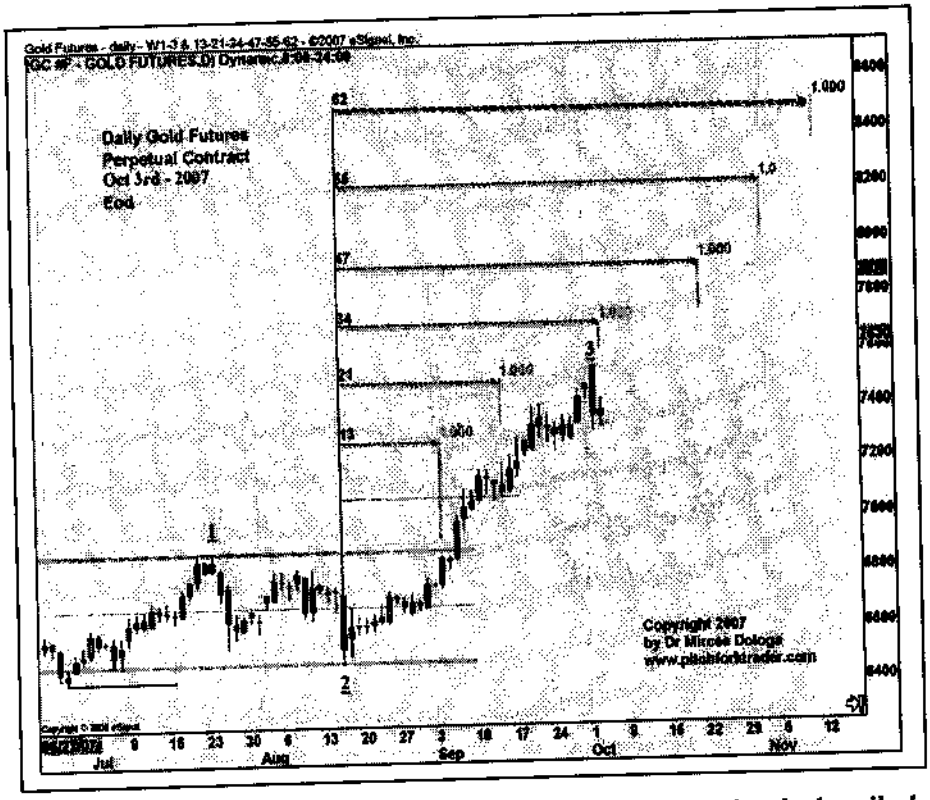


Figure 277 – *The above* **Bar Count Grid** *tool was applied as we have previously described. The W3 has already travelled 33* (34-*1*) *bars. At this stage of development we can say that the W3 has reached the extended size that we have previously defined. Will it become more extended? The next chart will tell!*

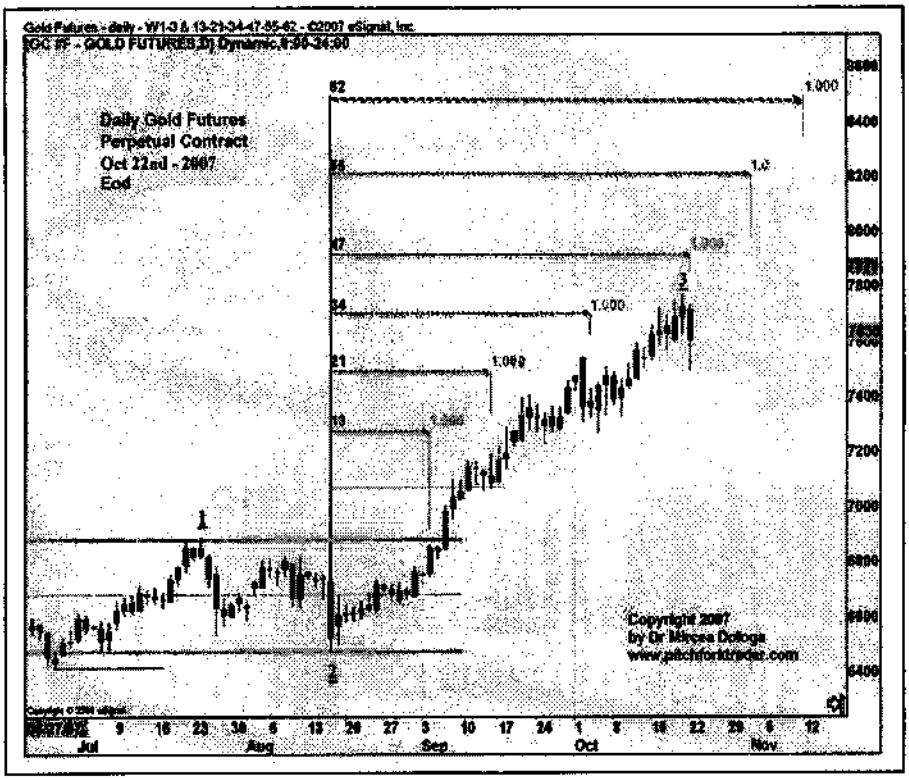


Figure 278 – *The above* **Bar Count Grid** *tool was applied as we have previously described. The W3 has already travelled 46 (47-1) bars. At this stage of development we can say that the W3 has reached the maximum extension size that we have previously defined. Will it continue its trend and become elongated?*

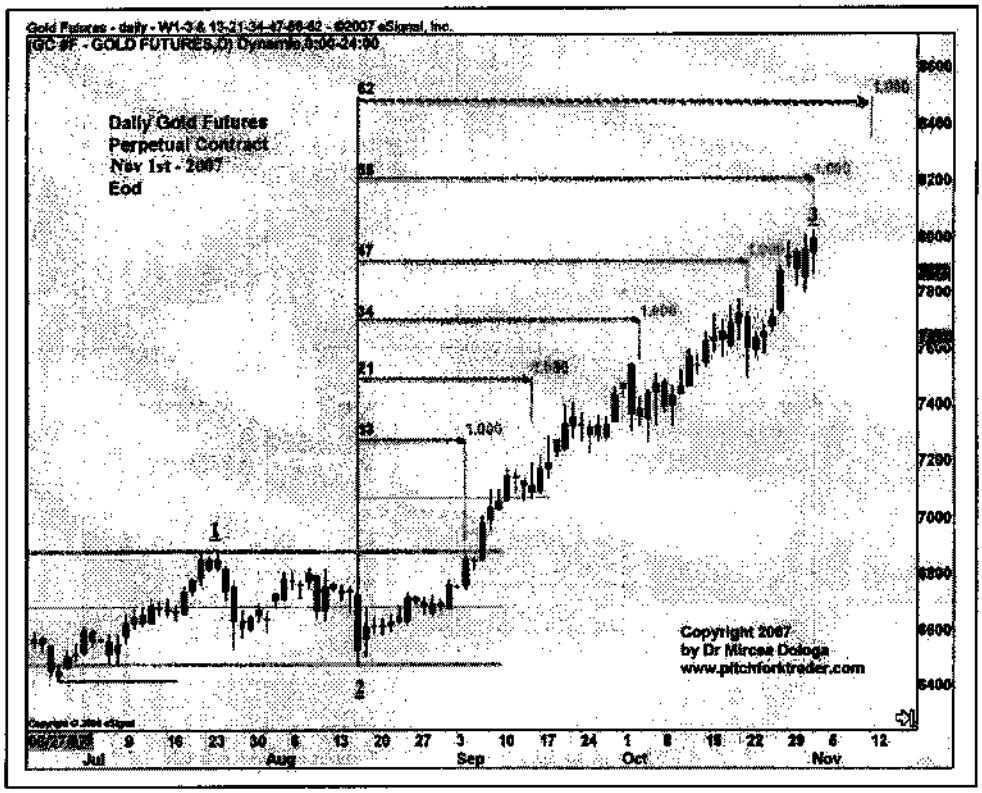


Figure 279 – *On the above chart the W3 has travelled exactly 55 (55-0) bars. At this stage of development we can say that the W3 has reached the elongation size that we have previously defined. Will it become more elongated?*

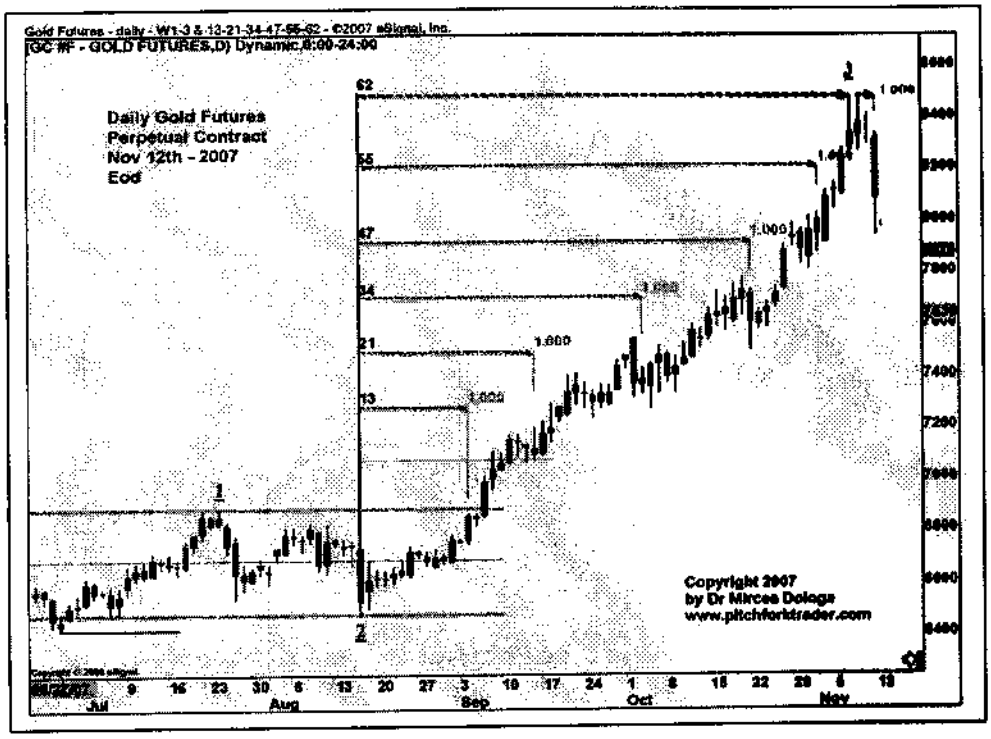


Figure 280 – *The above* **Bar Count Grid** *tool was applied as we have previously described. The W3 has already travelled 60* **(62-2)** *bars. At this stage, we can see that the market flow has reversed due to the presence of the mirror bars, doji - an inside bar here and the huge last down bar, which confirms the reversal. The count number 62 is a square root (refer to the table in Figure 271).*

3.3 Confirmation of the Bar Counts by Rectangles

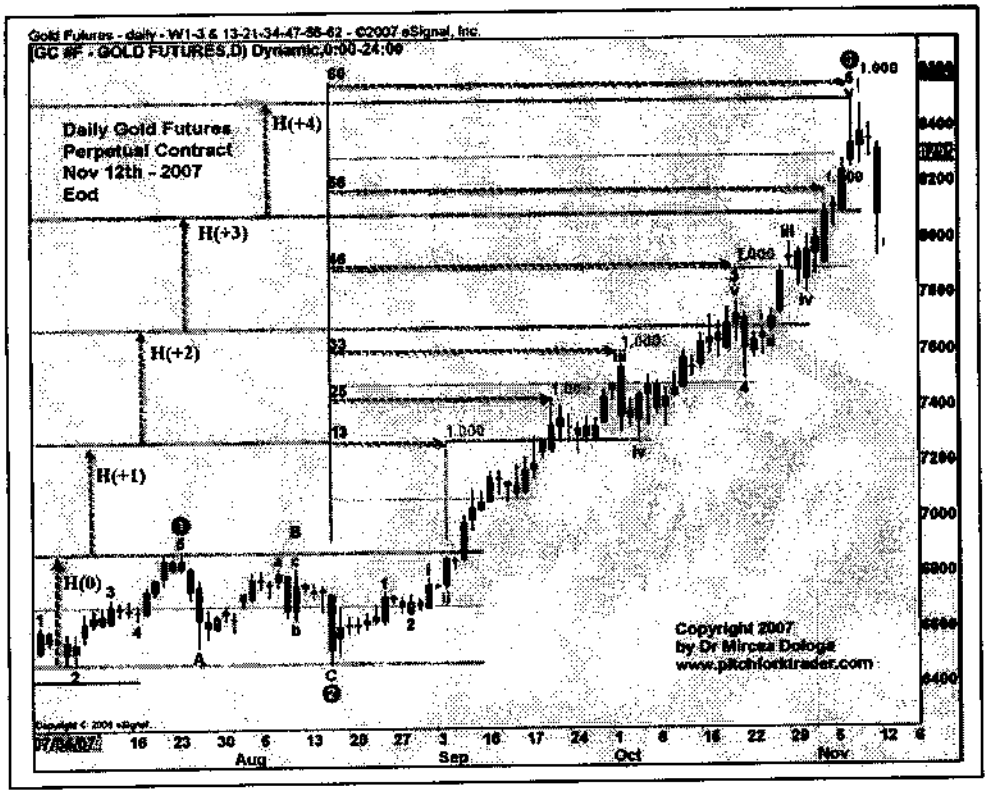


Figure 281 – *The* **Bar Count Grid** *tool applied on the above chart illustrates not only the location of the bar counts but also the W3's sub-waves & their confluences formed with the H(0) rectangle's extensions.*

Going back to the chart in Figure 281 we will try to make an *inventory* of the bar counts, in order to see how well they have projected the reversals and the pullbacks. We will also describe the influences of the rectangles' boundaries:

- *Bar count 13* (13-*0*) did exactly indicate a one bar pullback rather than a reversal. The influence of the inception rectangle is here exerted by the upper border of its first H(+1) extension. For memory, 13 is a *Fibonacci number* (refer to the *Types of the Bar Count Numbers* table in *Figure 271*).
- *Bar count* 25 (25-*0*) did exactly indicate a three bar pullback rather than a reversal. The influence of the inception rectangle wasn't here exerted by the upper/lower border of its second H(+2) extension. For memory, 25 is a *square number* and also a *quarter* of 100.
- *Bar count 33* (34-*1*) was short of one bar to indicate a two bar pullback rather than a reversal. The influence of the inception rectangle wasn't here exerted by the upper/lower border of its second H(+2) extension. For memory, count bar 34 is a Fibonacci number and, on the other hand, 33 represents a third of 100.
- *Bar count 46* (47-*1*) was short of one bar to indicate a huge volatile one bar pullback rather than a reversal. The influence of the inception rectangle was here exerted by the lower border of its third H(+3) extension, where the count bar closed. For memory, 47 is a Lucas number.
- *Bar count 56* (55+*1*) was long one bar to indicate a one bar doji pullback rather than a reversal. The influence of the inception rectangle was here exerted by the lower border of its fourth H(+4) extension, where the count bar closed. For memory, 55 is a Fibonacci number.
- *Bar count 60* (60-*0*) has exactly indicated the trend's reversal. At this stage, we can see that the market flow has reversed due to the presence of the mirror bars, doji, which is also here an inside bar and the huge last down-bar which confirms the reversal. The influence of the inception rectangle was here exerted by the upper border of its fourth H(+4) extension, where the count bar has its high. For memory, 60 is a multiple of the symbolic number six (*60=6*10*).

3.4 Confirmation of the Bar Counts by Pitchfork's Warning & Parallel Trigger Lines

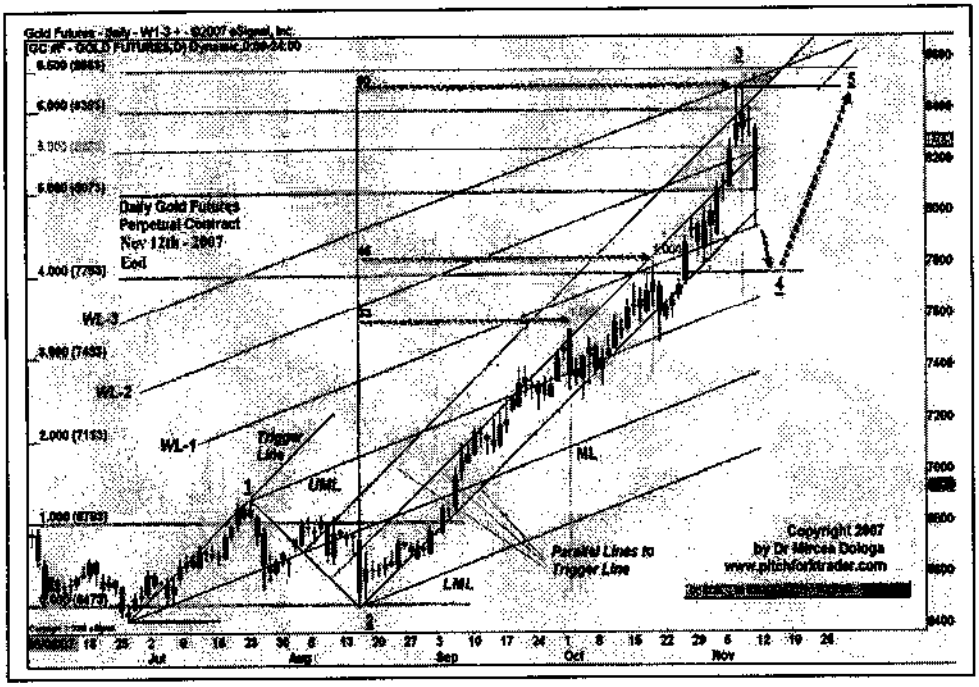


Figure 282 – *The* Bar Count Grid *tool applied on the above chart illustrates not only the exact location of the bar counts but also their formed confluences with the ascending pitchfork's acolytes: parallel trigger lines and the warning lines (WL-1, WL-2 and WL-3).*

3.5 *Confirmation of the Bar Counts by Fibonacci Ratio Arcs*

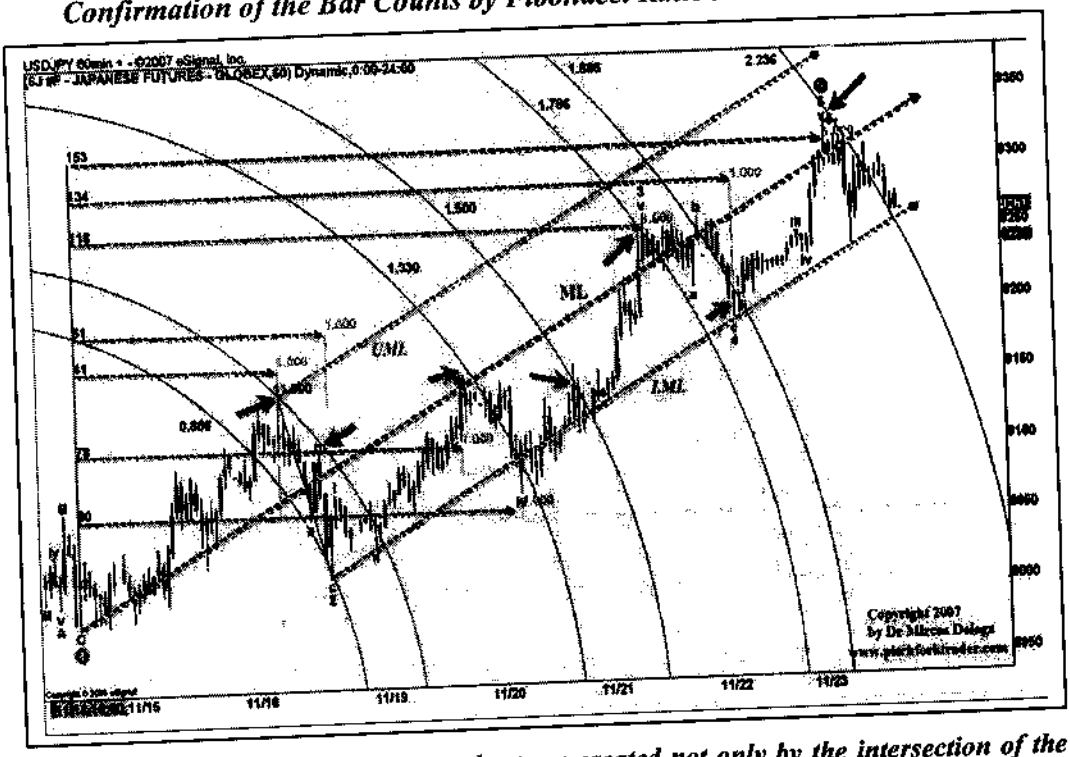


Figure 283 – *The confluences on the above chart are created not only by the intersection of the count bars with the pitchfork's median lines but also with the following Fibonacci ratio arcs: 1.000, 1.000* (a 2nd time)*, 1.330, 1.500, 1.786, 1.886 and 2.236 – refer to the multiple thickened arrows.*

4. Single Bar Count Implementation: Higher Highs – Higher Lows - Trend's Reversal

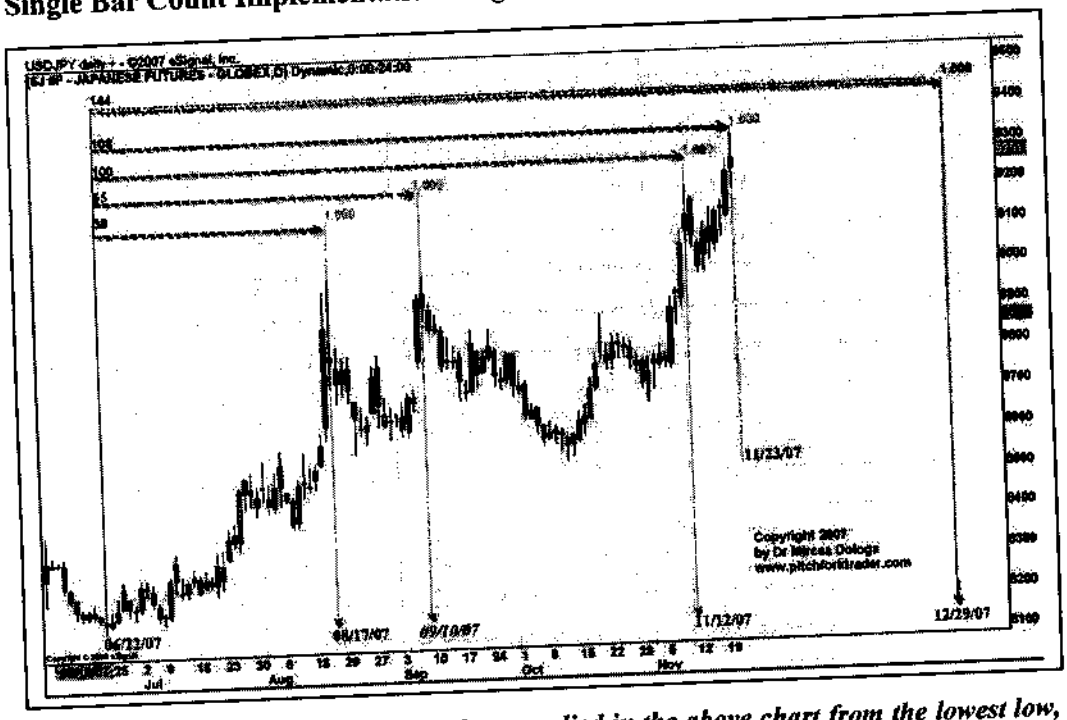


Figure 284 – *The* **Bar Count Grid** *tool has been applied in the above chart from the lowest low, on the left-side on 06/22/07. We have identified the following* **higher highs***: 39 count bars (38+1) on 08/17/07, 55 count bars (55-0) on 09/10/07, 100 count bars (100-0) on 11/12/07 and 108 bars (108-0) on 11/23/07. The 144 bar has been drawn only as an eventual time target. The type of the under-lined count bars (38, 55, 100 and 108) can be known by referring to the* **Types of the Bar Count Numbers** *table in Figure 271.*

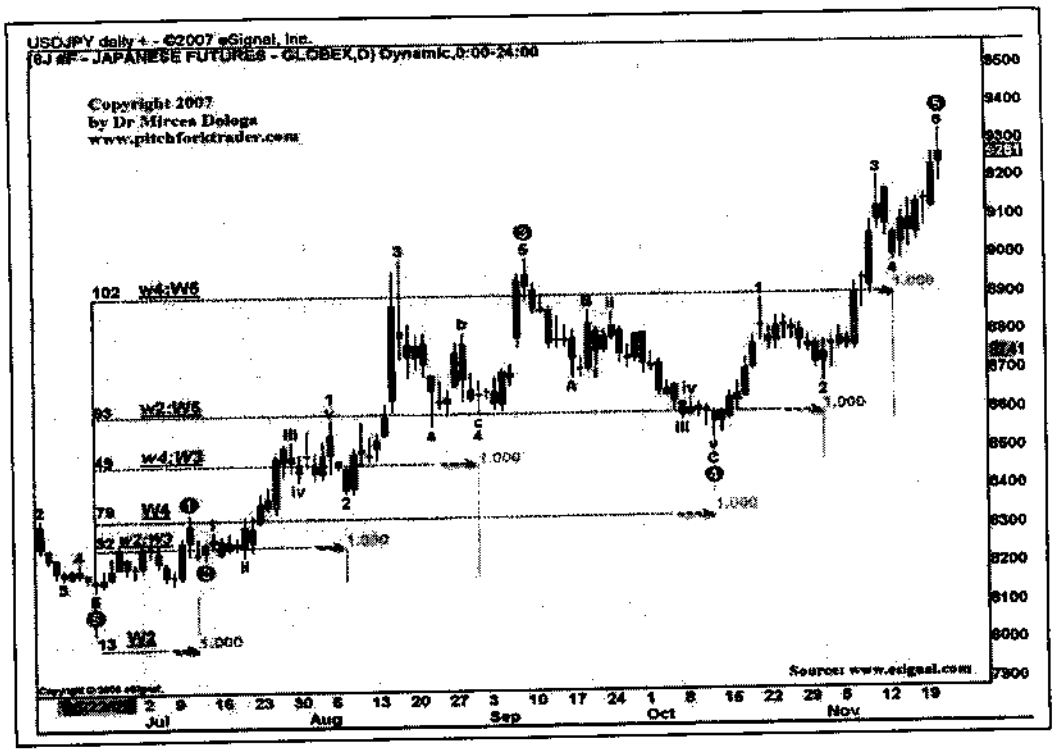


Figure 285 – *The* **Bar Count Grid** *tool has been applied in the above chart from* **the lowest low,** *on the left-side. We have identified the following* **higher lows:** *13 count bars (13-0) for W2, 32 count bars (34 2) for w2:W3, 49 count bars (47+2) for w4:W3, 79 count bars (79-0) for W4, 93 count bars (89+4) for w2:W5 and 102 count bars (102-0) for w4:W5. The type of the under-lined count bars (13, 32, 49, 79, 93 and 102) can be known* **by** *referring to the* **Types of the Bar Count Numbers** *table in Figure 271.*

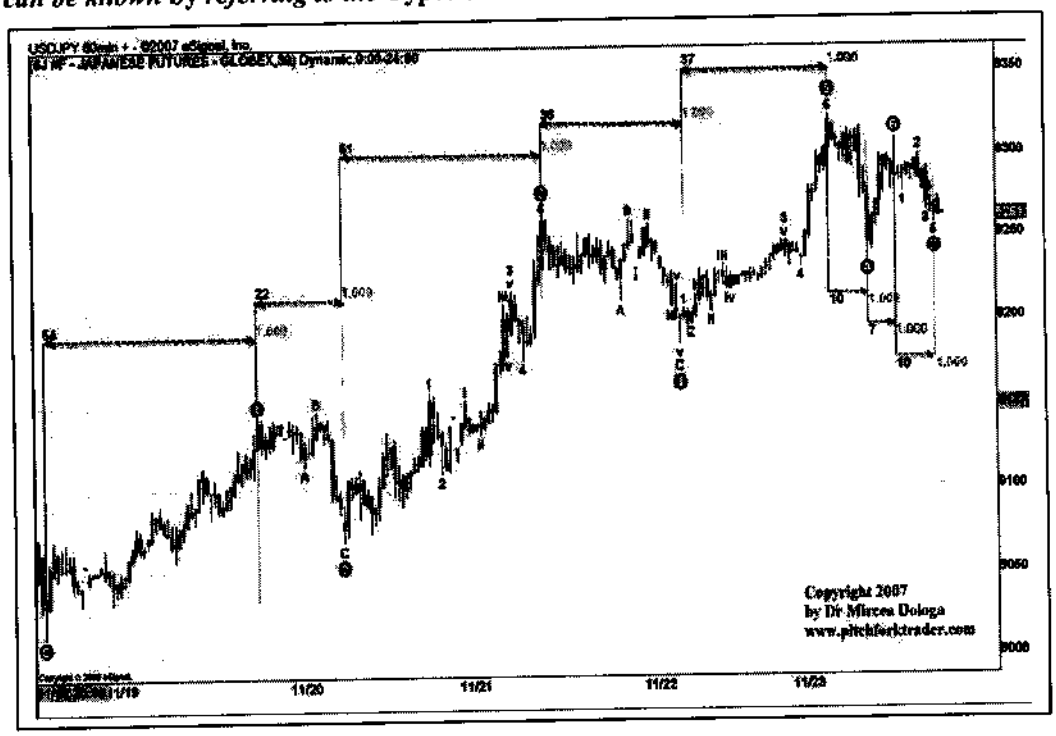


Figure 286 – *The* **Bar Count Grid** *tool has been applied in the above chart* **either from a low to a high or from a high to a low.** *We have identified the following* **time segments:** *54 count bars (55-1) for W1 22 count bars (21+1) for W2, 51 count bars (50+1) for W3, 36 count bars (34+2) for W4, 37 count bars (34+3) for W5, 10 count bars (11-1) for A-wave, 7 count bars (8-1) for B-wave and 10 count bars (11-1) for C-wave.*

It is a real beneficial experience to verify the time Fibonacci ratios corresponding to the Elliott wave cycle illustrated in the previous chart. It will also be a good opportunity to verify these time ratios for each Elliott wave:

- **W2=0.41*W1, W3=0.95*W1, W4=0.70*W3 and W5=0.68*W1 or W5=0.29*W0-3**
- **B-wave=0.70*A-wave, C-wave=A-wave and C-wave=1.42*B-wave**

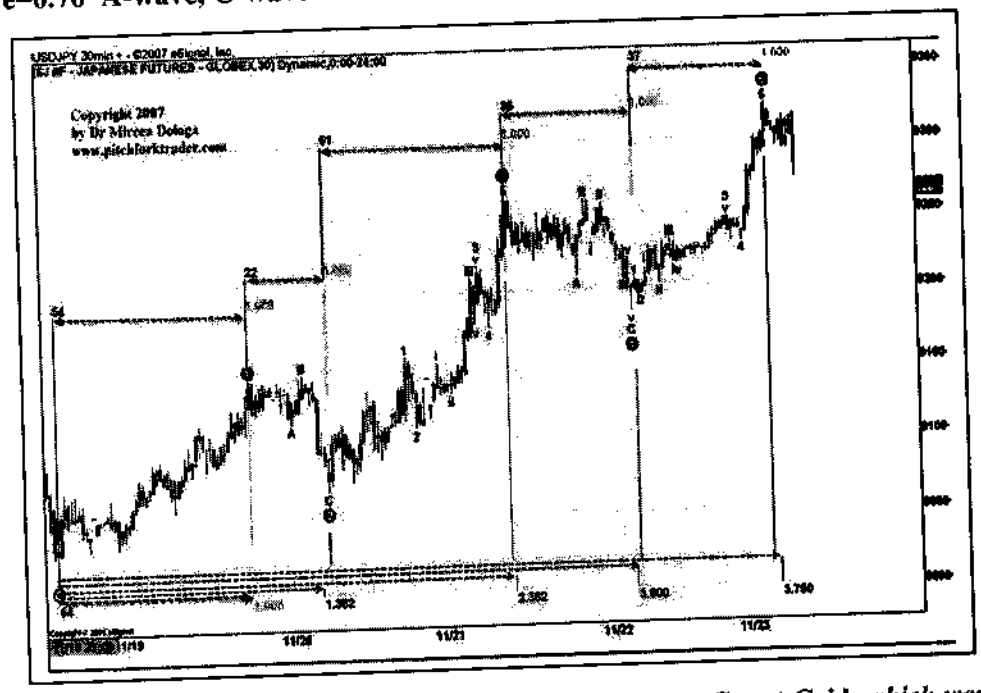


Figure 287 – *The upper half-side of the above chart illustrates the* **Bar Count Grid,** *which was applied as in Figure 286. On the lower half-side of chart, we have applied the Fibonacci ratios to the count bar of the W1, starting from its origin (*lowest low*). We can observe that the distance of each Elliott wave from the inception of W1, faithfully obeys the following Fibonacci ratios: 1.000, 1.382, 2.382, 3.000 and 3.75. For the memory, the latter is a Gann ratio.*

5. Labelling the Elliott Waves with the Bar Counts

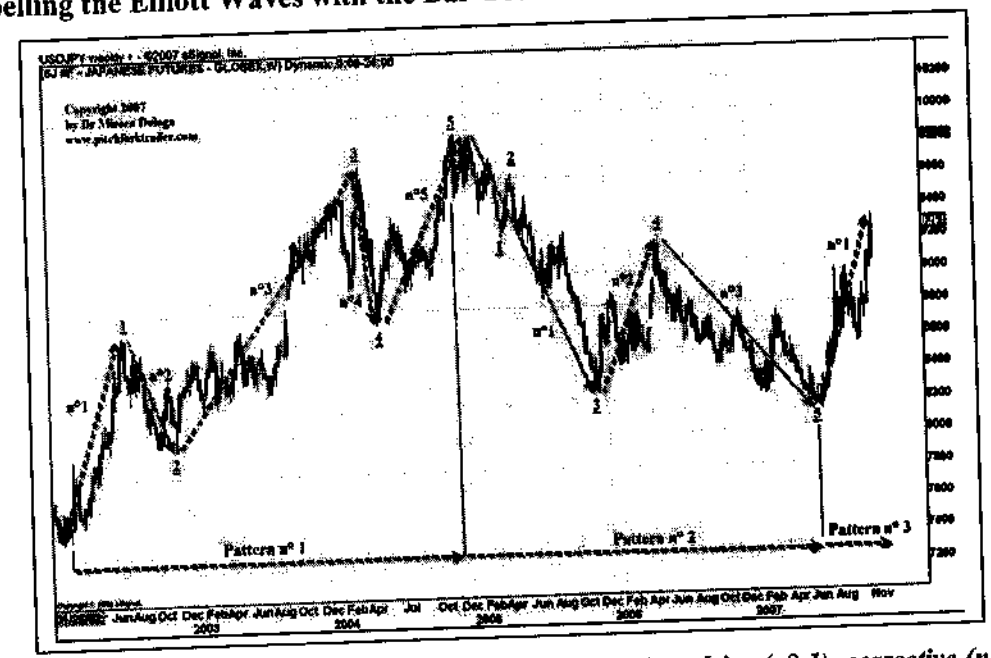
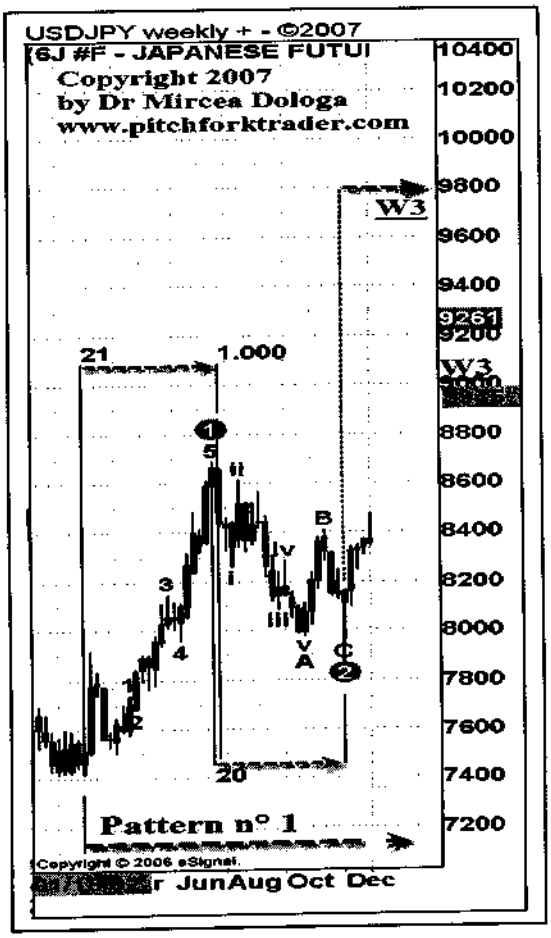


Figure 288 – *The above chart illustrates the three type patterns: impulsive (n° 1), corrective (n° 2) and impulsive (n° 3) again. The W0-3 of the second pattern is contained in the swing n° 1.*

In this sub-chapter we will try to progressively label the Elliott waves of the three patterns by applying the *Bar Count Grid* tool described in 3.1 *sub-chapter* (refer to *Figure 275*). The tool will be applied at the origin of each wave. Thus, every time, we will have a bar count confluence at the end of that specific wave.



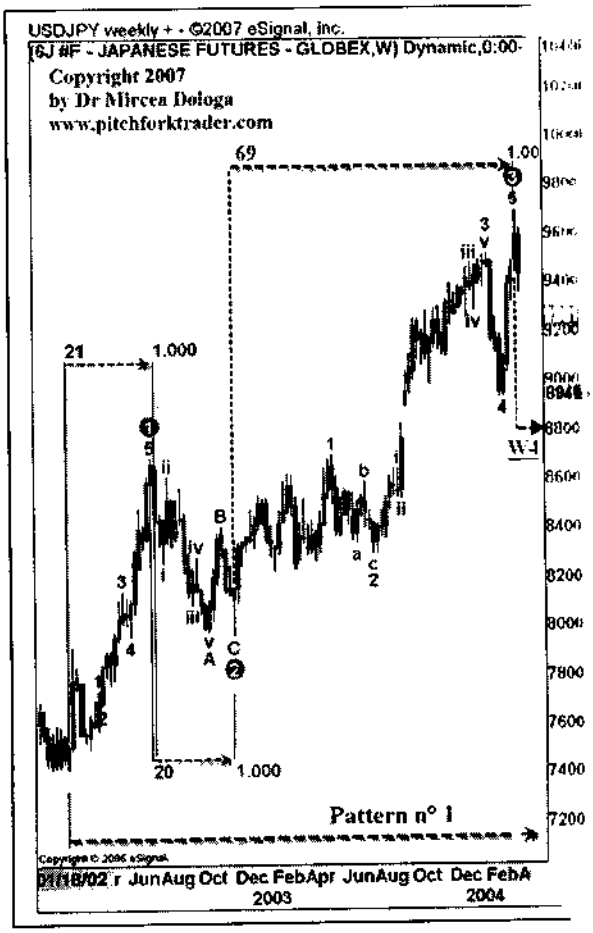


Figure 289 - ***The above* Bar Count Grid *tool was applied as we have previously described. The W1 has travelled exactly 21 (21-0) bars and the W2 has retraced 20 (21-1) bars, representing a 58% correction. At this stage of development we can say that the W3 is on its way to become one of the following choices: classic, extended or elongated wave. Thus, we will expect a bar count varying from 21 to more than 50 bars. The bar count 21 is a Fibonacci number (refer to the table in Figure 271).***

Figure 290 - ***The above* Bar Count Grid *tool was applied as we have previously described. The W3 has travelled 69 (72-3) bars. At this stage of development we can say that the W3 is an elongated wave. The bar count 72 is a symbolic number – a multiple of 6 and a divisor of 144 (refer to the table in Figure 271).***
Now… What should be expected for the incoming W4? Once we have applied the tool we will scrutinize for possible price key levels that will meet the bar count creating the time/price confluences. The following levels could terminate the current W4 at: the prior* w4:W3, *the borders of the runaway gap occurred within the previous* wiii:w3:W3 *or the prior* w1:W3. *We will remember that the classic W4 retracement varies between 38.2% and 50%.

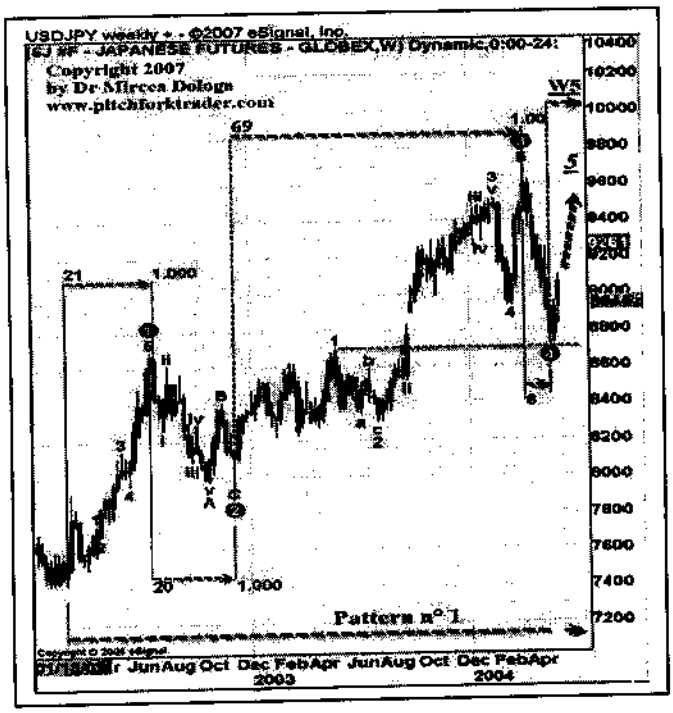


Figure 291 - *The above* **Bar Count Grid** *tool was applied as we have previously described. As anticipated the W4 was halted by the w1:W3 of the prior pattern. The W4 has travelled 6 (7-1) bars. At this stage of development we can say that the W4 performed a classic retracement making a 56% correction. The bar count 7 is a Lucas number (refer to the table in Figure 271).*
*Now... What should be expected for the incoming W5? Once we have applied the tool we will scrutinize for possible price key levels that will intersect the bar count creating time/price confluences. The high of W3 could terminate the current W5, but we will remember that W3 was extended meaning that the W5 will usually equal the W1. In case that we are interested to create multiple confluences, we can use the latter key level, where W5=W1 and project W5=0.50*W0-3, W5=0.62*W0-3 or W5=1.27*W4.*

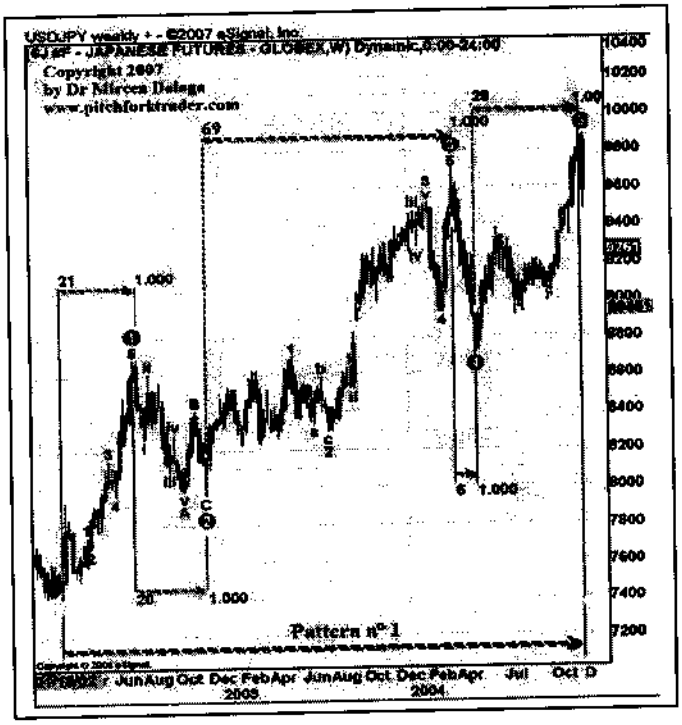
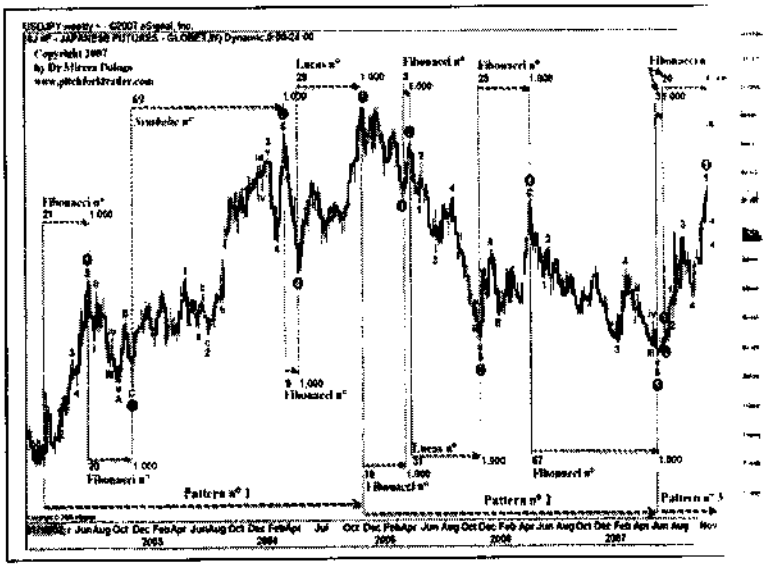


Figure 292 - *On the above chart, the W5 has travelled 29 (29-0) bars, the latter being a Lucas number. As for the price, the W5 reached the following key levels: 0.886*W1, 0.5*W0-3 and 0.236*W4.*

Figure 293 - *On the right side chart, we have summarized all the bar counts corresponding to the three Elliott wave patterns. We can see that the majority is formed of Fibonacci and Lucas numbers. Out of 12, only one was classified as a double symbolic number. We have allowed a tight error interval of +/- 2 bars. As you can observe, the bar count can be a reliable trading tool.*



6. Dual Bar Counts

Figure 294 - *On the right side of the chart, we have performed a dual bar count, applying twice the tool and obtained (63,80) for w3:W3 & (5,85) for w4:W3. On the right side of the chart we have performed time & price projections for the development of W4. The first parenthesis n° is the bar count of the last swing and the second n° is the bar count from the lowest low [Ex. (63,80)].*

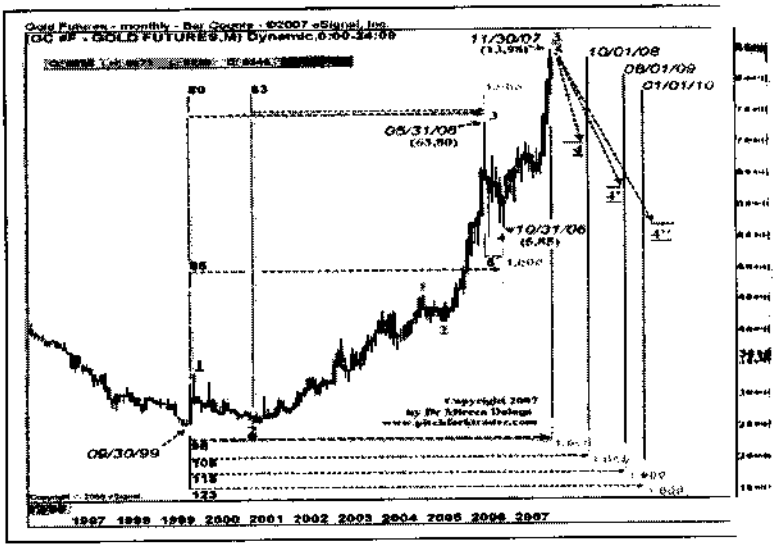
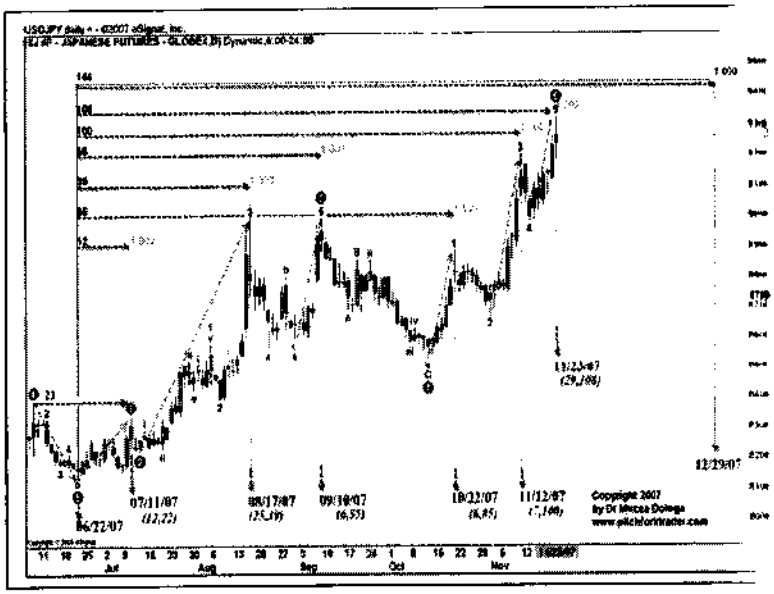


Figure 295 - *On the right side of the chart, we have performed a dual bar count, applying twice the tool (horizontal & slant arrows), on the same pivot. As we can see the efficiency of the dual bar count is much enhanced compared with that of the single bar count. Our experience showed that a pivotal bar identified through the dual bar count has more than 50% probability to reverse the market.*



7. Momentum Bar Count

The *Momentum Bar Count* is another counting technique that is implemented in the same way as the technique previously described. The name emphasizes that the only difference is in the manner that the bars are counted.

The *Momentum Bar Count*, which means counting in a natural ensuing order, only the bars that exceeded the prior bars. Otherwise said, we don't count all the bars, only the higher ones, in the up swing and the lower ones, in the down swing (refer to the *right-side of the Figure 269*). The inside bar(s) among the higher high bars or the lower low bars, are not counted.

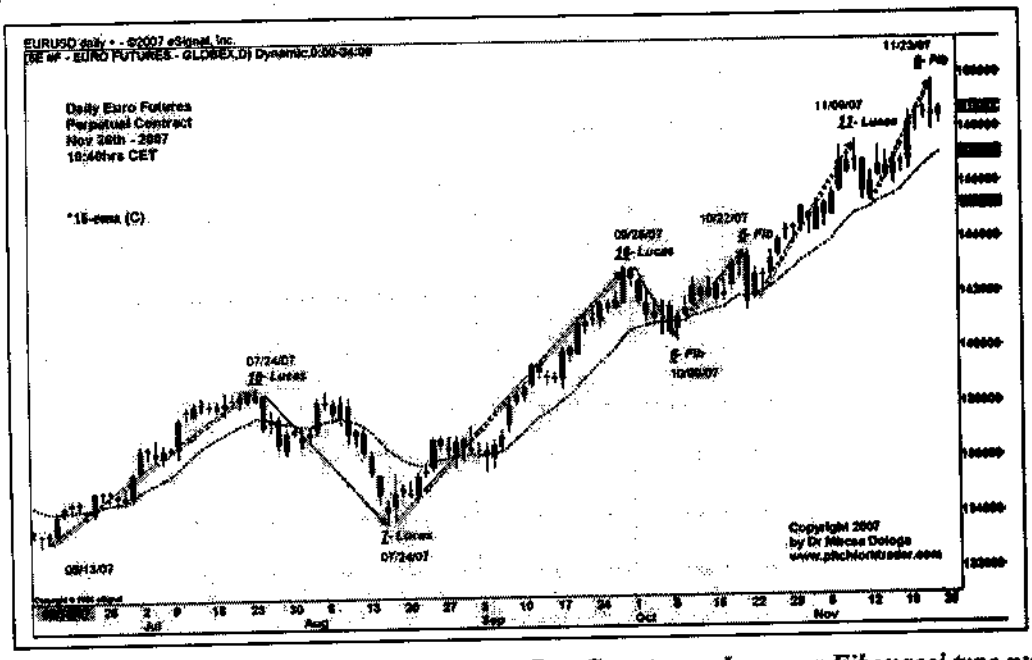


Figure 296 - ***On the above chart, all the* Momentum Bar Counts *are Lucas or Fibonacci type numbers (refer to the table in Figure 271). The counting precision is much better than that of the Successive Bar Count that we have previously described. The error interval was this time, more than tight; it was zero bars***

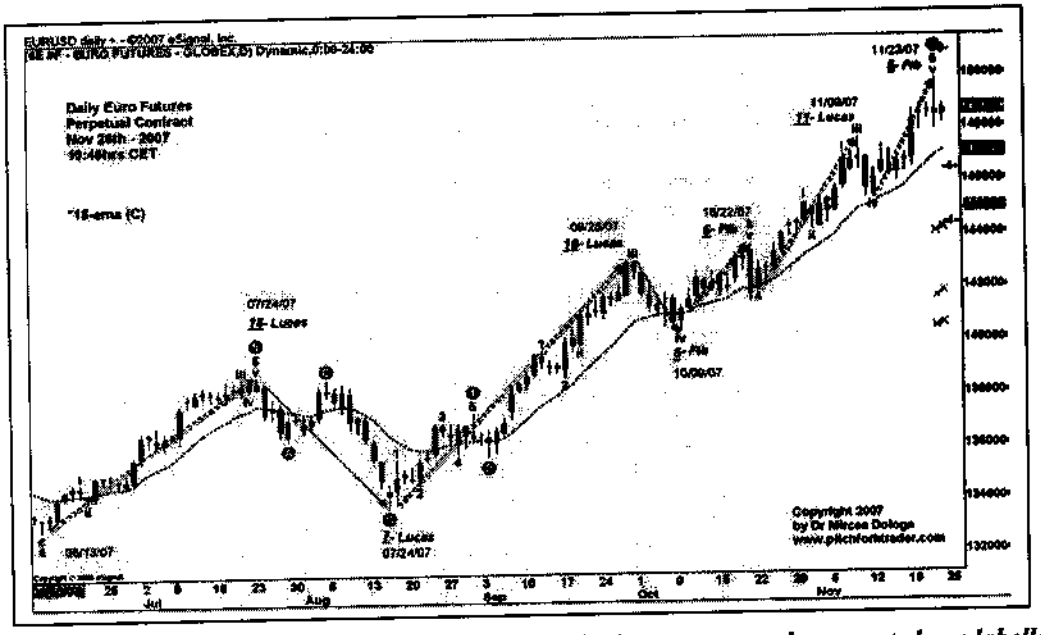


Figure 297 - ***On the above chart, we observe how faithfully the momentum bar counts have labelled the Elliott waves. An attentive observation will reveal that for all the above bar counts the interval error is 0.***

8. Bar Counts and the First Pullback Trade – W3 Trading

We couldn't close this very important chapter for the professional trader, without revealing the most efficient and profitable application – *the first pullback trade of the W3 trend.* As most of the experienced traders know, it is almost impossible to catch an early stage of a long trend without considering the *first pullback.* Most of the inexperienced traders enter when the crowd has already identified the trend. Let us see below how it is done!

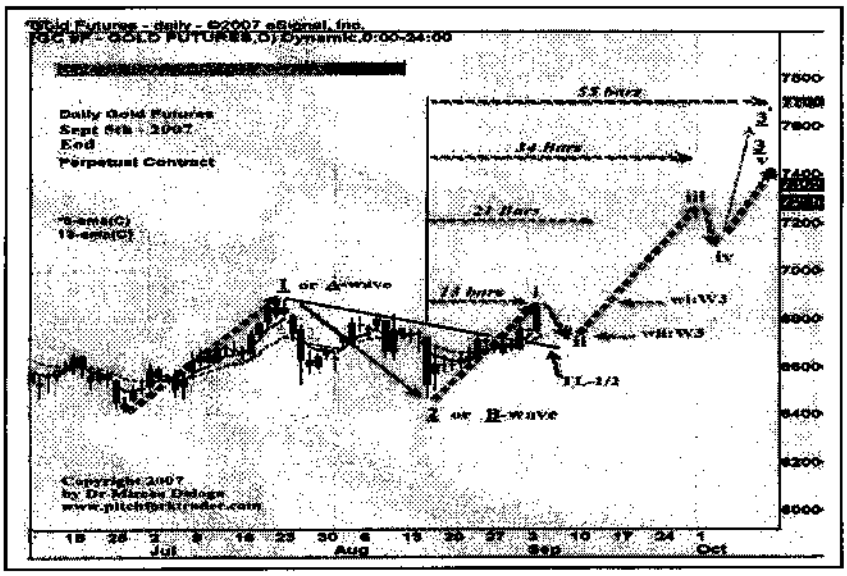


Figure 298 - ***On the above chart, we have applied the* Bar Count Grid *tool just at the termination of the W2 or the B-wave. We are now expecting the formation of a classic, an extended or an elongated W3. This is the order of usual frequency of their occurrences.***

We have used on the above chart, the *Successive Bar Count* technique, but the trader can also use the *Momentum Bar Count* technique, or both of them but on different charts. We have projected, not only the bar counts but also the classic price sizes of the Elliott incoming waves for the time/price confluences. At this stage of the trend's development we can observe several choices of entering the W3 trade: at the breakout of the TL-1/2 trend line, after the first reversal bar, which signals the termination of the wii:W3, or at the breakout of the wi:W3 level.
If we have entered at the first choice, the other two entry levels can be used as the "add-ons" levels.

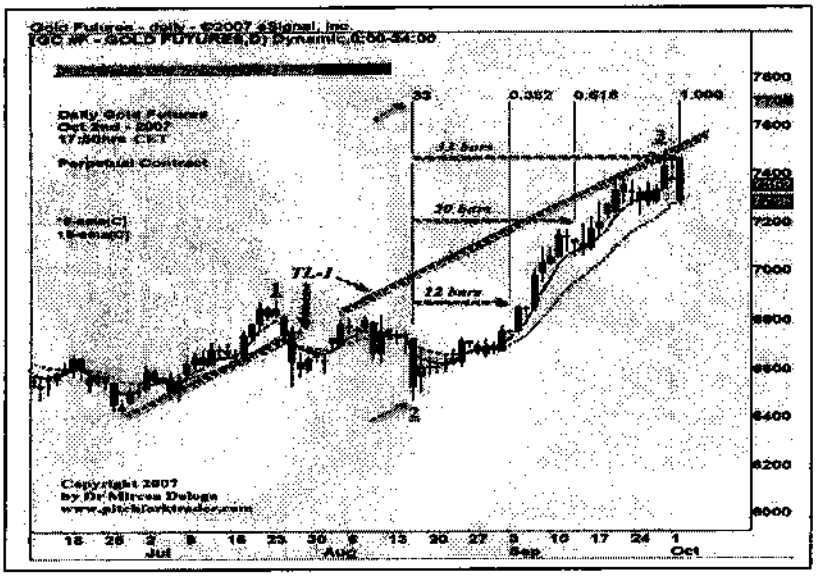


Figure 299 - ***On the above chart, we can observe that the tool has performed very well with a bar count of 33 (34-1). The TL-1 trend line has here a confirmation role and it was drawn just after the W2 inception, even before the bar count tool was applied***

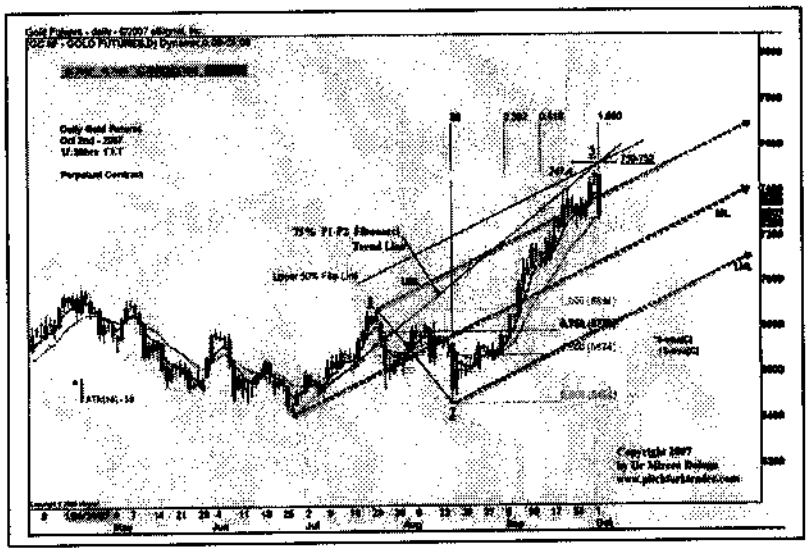


Figure 300 - *On the above chart, we can observe that the tool has performed very well. The ascending pitchfork and its 75% P1-P2 Fibonacci trend line have played a confirmation role here. Notice that they were drawn just after the W2 termination, synchronic with the Successive Bar Count tool.*

Key Points to Remember:

- **We can never emphasize enough the importance of the time factor in detecting *low-risk high-probability trades.***
- **Don't be surprised if the science of numerology will greatly influence the outcome of your trading.**
- **The bar count will not only assists the trader to better understand the trends with their waves, but it will also locate the position of the local market within the context.**
- **The bar count has an edge to signal, as early as possible, the occurrence of a change in trend.**
- **Whenever applied, the bar counts can measure: the time/price confluences, the single time confluences and also multiple time confluences. Remember to also apply the Momentum Bar Count!**
- **Be aware that most of the efficient chart patterns, more often than not, have their reversal levels closely guided by the time/price confluences. Do the same for the Elliott wave pattern.**
- **Keep next to you, the *Types of Bar Count Numbers* table, in order to quickly identify the importance of the time confluence.**
- **Don't neglect the fact that the dual bar count gives a better outcome than the single bar count.**
- **Whenever you decide to apply *the Bar Count Grid* tool, the trader's outcome will be drastically improved if there are favourable factors for a trend inception: the presence of a rectangle, a bounce on a boundary, the breakout of a trend line, a Fibonacci, a pivot or a Gann level and an old key level or a gap.**
- **Always help yourself by adding other confirmation tools to the projected time level: the Fibonacci ratios, the pitchforks, etc.**
- ***Don't forget the first pullback trade – it could make your day!***

Chapter 11

RSI and Pitchfork Synergism

This chapter will describe one of the very frequently used indicators – The Relative Strength Index (RSI). Most of the traders reserve its use for signalling the *overbought/oversold zones* and *divergences* with their expected effect – the reversal.
In reality, there is a whole world out there for using efficiently the RSI. We will try to describe, as much as possible, these additional unknown aspects to the inexperienced traders, which will really put them well ahead of the crowd.

1. Relative Strength Index (RSI) - Definition

Welles Wilder has introduced the RSI, for the first time in 1978. He mainly described its use for detecting the overbought/oversold levels, which incite the local market to reverse. A momentum related indicator, the RSI was conceived to compare the market price's current strength to the history of market price change by comparing the *up* bars to the *down* bars.
We will not go into the math details because of lack of space and also because we would like to emphasize RSI's practical aspect rather than the theoretical one.
Measured on a scale from 0 to 100, it goes without saying that the RSI's lower portion (*0 to 20*) is considered as the *oversold zone*, and the upper portion (*80 to 100*) is named the *overbought zone* (*refer to Figure 301*). The midpoint of this bound range is the 50 level. Its up-sloping trespassing is considered as a commencement (*or continuation*) of an up-trend and its drop below 50 level will signal a weak market, ready to collapse... Even if it's not always that way! The 20 to 80 level zone is considered as a *"no man's land"* where the market noise dominates the bulls/bears battle with its chaotic volatility... Or, in reality it doesn't happen that way!
In order to optimize, some traders use exponential moving averages on the RSI's chart. The setting we have always used is 14 - the half of the lunar cycle length. Some traders also use 9, 7 or even 5 but we consider that 14 is the ubiquitous setting for any time frame.

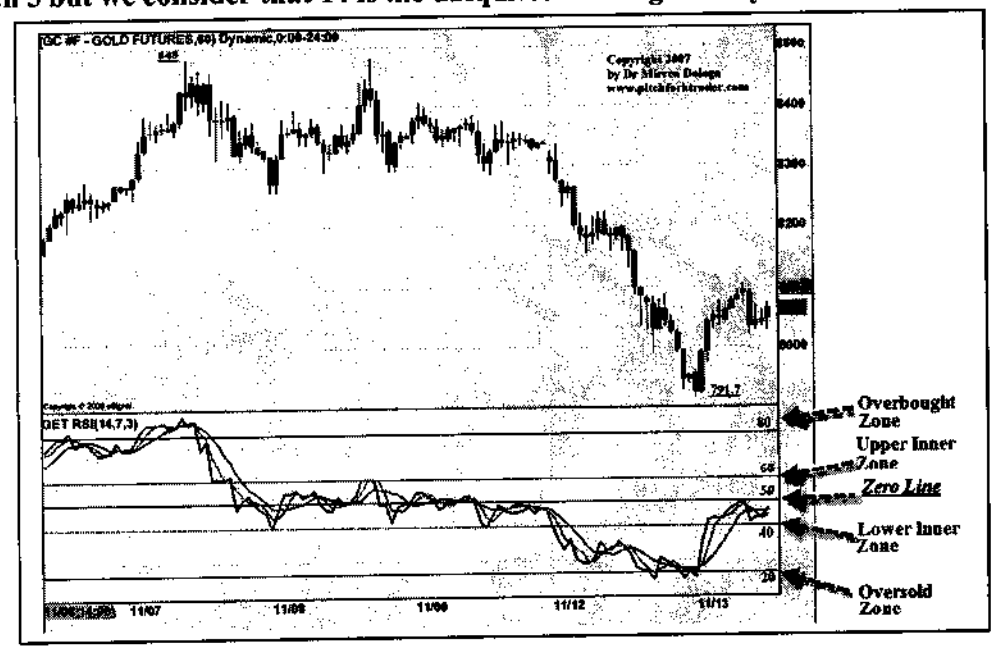


Figure 301 – *Conceived as a momentum related indicator, the RSI faithfully signals to the trader, the market flow's movements. Thus, an almost perfect price/RSI symbiosis is implemented. The name of the game is knowing how to interpret and correlate it.*

2. Overbought and Oversold Zones – Detecting the Tops and Bottoms

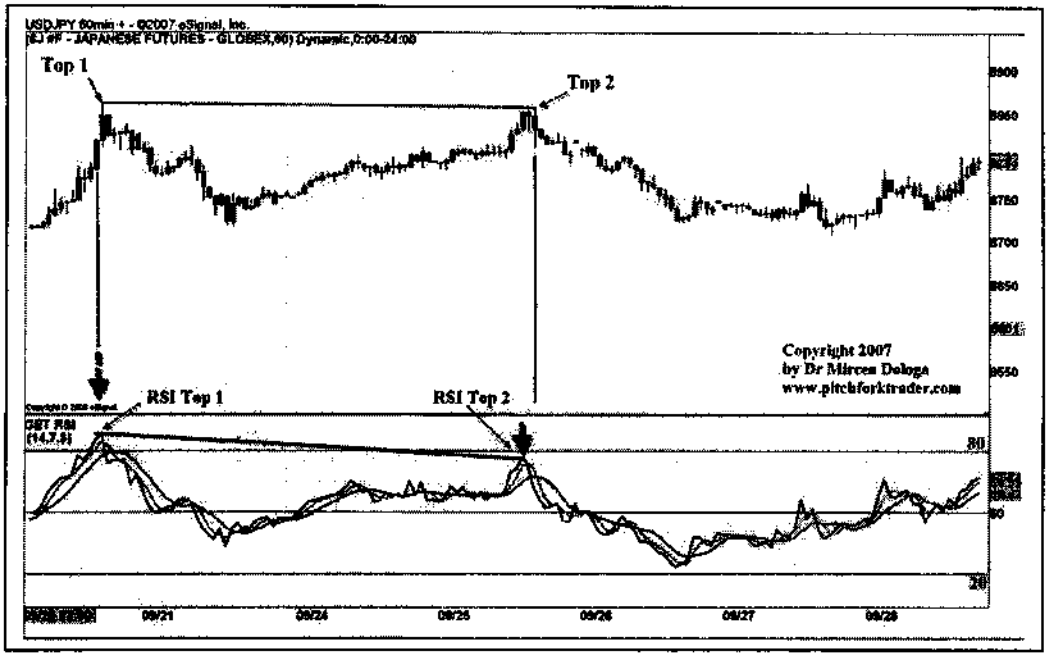


Figure 302 – *Welles Wilder considered the overbought/oversold warning above/below 70 and 30 respectively. In our experience we opted for 80/20 limits. The RSI's tops precede, more often than not, those of the market. We can observe on the above chart that the RSI Top 1 has preceded with one bar the market's Top 1. The RSI Top 2 has preceded the market's Top 2 with two bars. The trade's short entry signal is given only when the RSI leaves the overbought zone and penetrates downward the 80-level line. Very often, the first penetration into the overbought/oversold zones is usually just a warning. The tops are shorter in time than the bottoms and more volatile. They are harder to catch than the bottoms.*

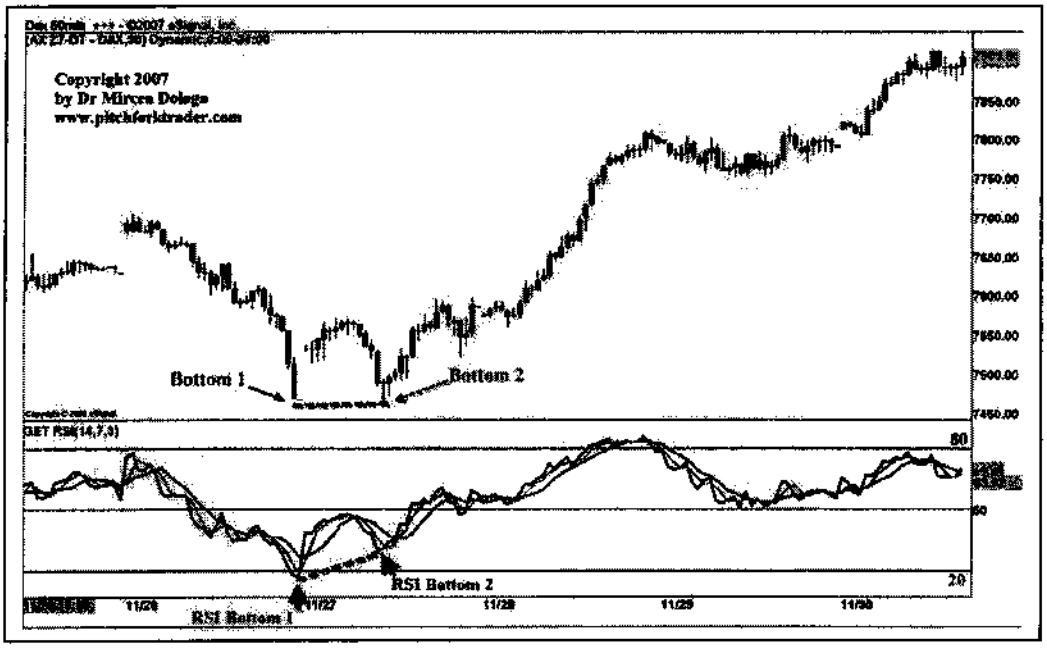


Figure 303 – *The RSI's bottoms precede, more often than not, those of the market. We can observe, on the above chart that the first RSI bottom coincides with the bar of the market's Bottom 1. The RSI Bottom 2 has preceded the market's Bottom 2 with one bar. The trade's long entry signal is given only when the RSI leaves the oversold zone and penetrates upward the 20-level line. We should remember that the double bottoms are formed on high volume, the second having lower volume. Longer in time than the tops, the bottoms have smaller ranges, thus being easier to trade. As they say "The markets fall faster than they rise!"*

3. RSI - Trend Revealing Tool

We know that an up-trend is defined by the *higher highs* and the *higher lows* and vice versa for a downtrend. The trader can easily understand the process of advancing market flow, which needs several resting pauses, in order to restore the consumed kinetic energy and accomplish its trend. Otherwise it couldn't continue its normal development. This is done through the creation of troughs (*in up-trends*) and peaks (*in down-trends*).
Think for a minute...! In an up-sloping Elliott wave pattern we have frequently, at the minimum two troughs: a bigger percentage oriented W2 (W2=0.50-0.62*W1) and a smaller percentage oriented W4 (W4=0.382-0.50*W3). That's it...? What happened if there are more than two troughs in an up-sloping trend? Well... Then we'll have to direct our careful observation towards the possibility of an extended or even an elongated W3 or... an extended W5. It's only logical to think that a stronger trend doesn't have an imperious need to recuperate its kinetic energy, as it happens with a weaker trend full of meanders, stationary energy consuming tasks. Should we mention the crawling trend, where the snail momentum hardly pushes the trend's development...?

3.1 Trough-and-Peak Analysis – Comparing Current versus Last Corrections' Lows

An up-trend is worth what the distance between its two consecutive troughs is...! The closer the troughs the weaker the trend will be...and... The wider the distance between the two consecutive troughs the stronger the up-trend will be! In a way, we can say that in order to evaluate the strength of the trend, the trader must carefully observe the size and the type of the corresponding, more or less, deeper/simpler corrections. If the necessary time for accomplishing these tasks is short and the trough/peak is less profound, it means that the trend is very strong. On the contrary, if the necessary time lasts longer with a deeper trough/peak, then the trend's strength is much weaker. The rule is not only full of common sense but also very ergonomic because it enables the trader to link these pivots (*highs with highs* and *lows with lows*), therefore creating the traditional median lines of an optimal pitchfork or of an Action/Reaction set-up. The market flow embedding is thus revealed.
I stress the fact that both, *highs and lows* must be higher than the preceding ones, respectively, so that the trend can continue. If the trend makes a lower high, the trend is still developing. If the trend makes a lower high and a lower low, *only then* we can say that trend is terminated.
As we know, a trend is momentum-dependent. The indicators will enhance the visualisation of the trend's inception, development and termination, if they are properly used. We shouldn't deprive ourselves from the use of such efficient tools, as the RSI!

3.2 Up-Trend and Down-Trend Landmarks – Description

Now that we have presented the *Trough-and-Peak Analysis* concept we will try to correlate it with the RSI's reactions. The levels of the market price chart correspond to a specific level on the RSI chart. A parallel and synchronic observation will reveal the working rules of a trend.
A common *up trend* development could start from the oversold zone (*0 to 20*) and goes, all the way, to the overbought zone (*80 to 100*). It seems logical to say that its pathway will never be travelled in a straight line. The different inflexions will signal the troughs, which in turn will witness the strength of the up-trend. On the RSI chart, the developing pattern will stay above a minimal level, usually 33 to 40; otherwise the up-trend will be negated and transformed into a sideways/reversal movement.
A common *downtrend* development may start from the overbought zone (*100 to 80*) and falls, all the way, to the oversold zone (*20 to 0*). It seems logical to say that its pathway will never be travelled in a straight line. The different inflexions will signal the peaks, which in turn will witness the strength of the trend. On the RSI chart, the developing pattern will stay below a minimal level, usually 66 to 60; otherwise the downtrend will be negated and transformed into a sideways/reversal movement. Due to the lack of space we won't go into more detail.

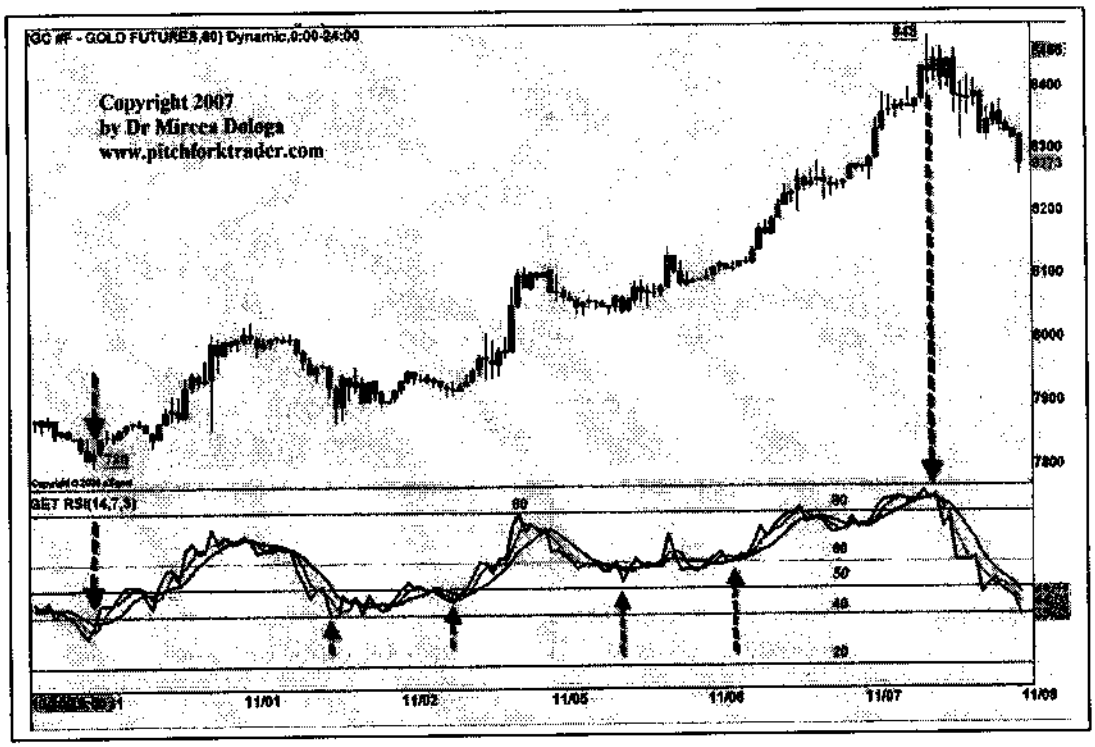


Figure 304 – *We can see, on the above chart the development of an up-sloping trend from its inception at the 780 key level corresponding to the 30 RSI level, until its termination at the 848 highest high level, corresponding to the 98 RSI level, in the overbought zone. During its development, the trend did not drop under the 40 RSI level, even if it tested it twice. Moreover, the RSI found a very strong support at the 50 and 60 RSI levels. Before entering the overbought zone, the RSI encountered strong resistance at the 80 RSI level: a bounce and a pierce move. This confirms that most of the time, these tests constitute a real warning for the trader and are usually performed just a few bars before the reversal.*

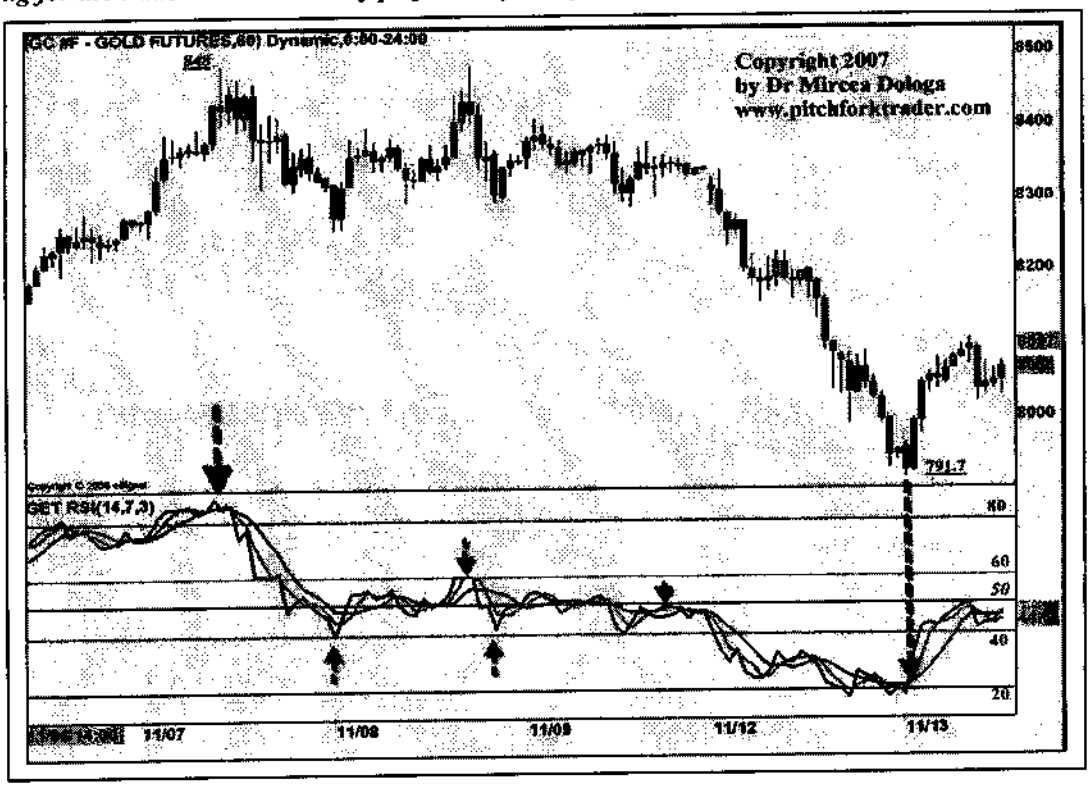


Figure 305 – *We can visualize on the above chart the development of a down-sloping trend.*

The development of the down-trend on the above chart illustrates its inception at the 848 key level corresponding to the 95 RSI level, in the overbought zone, until its termination at the 791.7 lowest low level, corresponding to the 22 RSI level, just outside the oversold zone. During its development, the trend did not climb above the 60 RSI level and it only tested it once. Moreover, the RSI has encountered a very strong resistance at the 50 RSI level, after the latter served as a symmetry axis. Before entering the oversold zone, the RSI encountered strong resistance around the 20 RSI level. At this stage of development, the RSI performed a tiny triple bottom, which signalled a definite trend reversal.

4. Divergence - Reversal Tool

The divergence is defined as a discrepancy between the price and the indicator, especially momentum-related indicators. If the market price makes a higher high, but the RSI is not able to cope with it and makes, on the contrary, a lower high, then a *bearish divergence* is formed, which is ensued frequently by a reversal. If the market price makes a lower low, but the RSI is not able to cope with it and makes, on the contrary, a higher low, then a *bullish divergence* is formed, which is ensued frequently by a reversal.

4.1 Simple Divergences

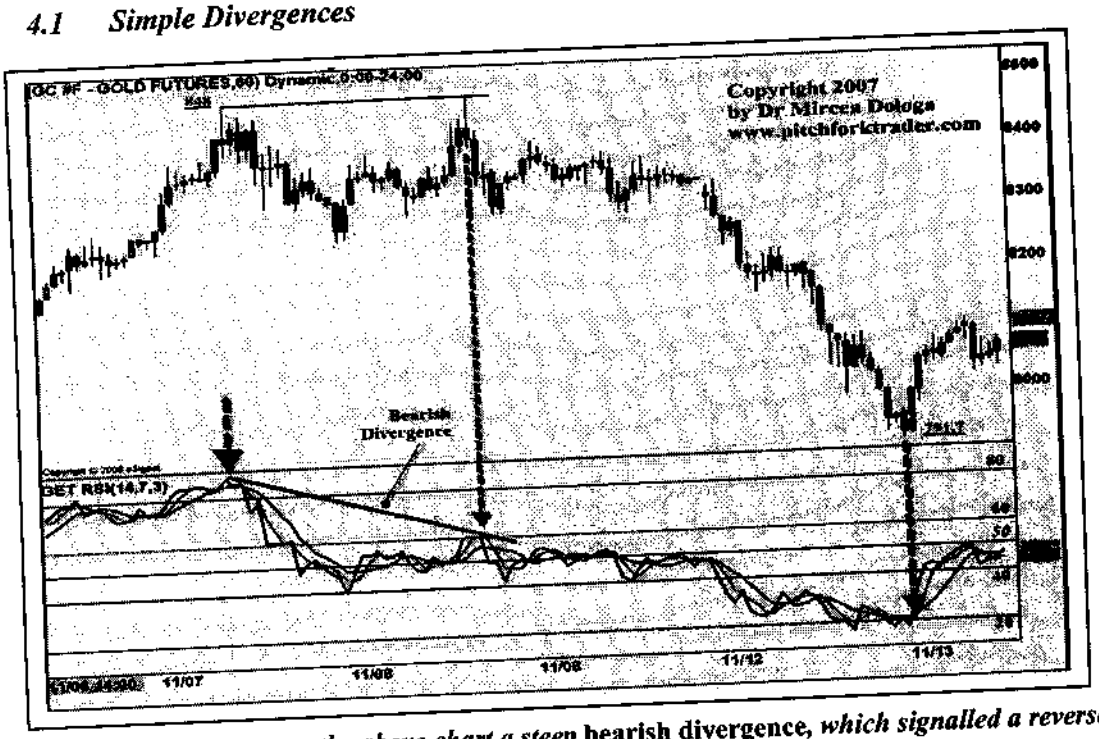


Figure 306 – *We can see on the above chart a steep* bearish divergence, *which signalled a reversal.*

It's important to note that the definition of the divergence as a price/indicator discrepancy means not only the inverse correlation - lower price versus higher indicator or higher price versus lower indicator, but also a constant price versus (vs) a lower indicator (*as in the above chart*), a constant price vs a higher indicator or a lower/higher price vs a constant indicator. We will see later in the chapter that the divergences are very useful when they signal the reversal of the RSI chart pattern, which are similar to those on the market price chart. Thus, we can have: triangles, pennants, flags, rectangles, head-and-shoulder, channels, single or multiple pitchforks. Most often than not, the main signals consist of the breakouts of the trend lines, which will occur earlier than those on the market price chart. Moreover, the trading targets can be set, whenever the RSI reaches important landmarks: the overbought/oversold zones and the support/resistance key levels. The trespassing of the zero line can be used as a signal of the commencement of a trend or its continuation, if it's already on. It will be the perfect timing for either an entry or an add-on decision.

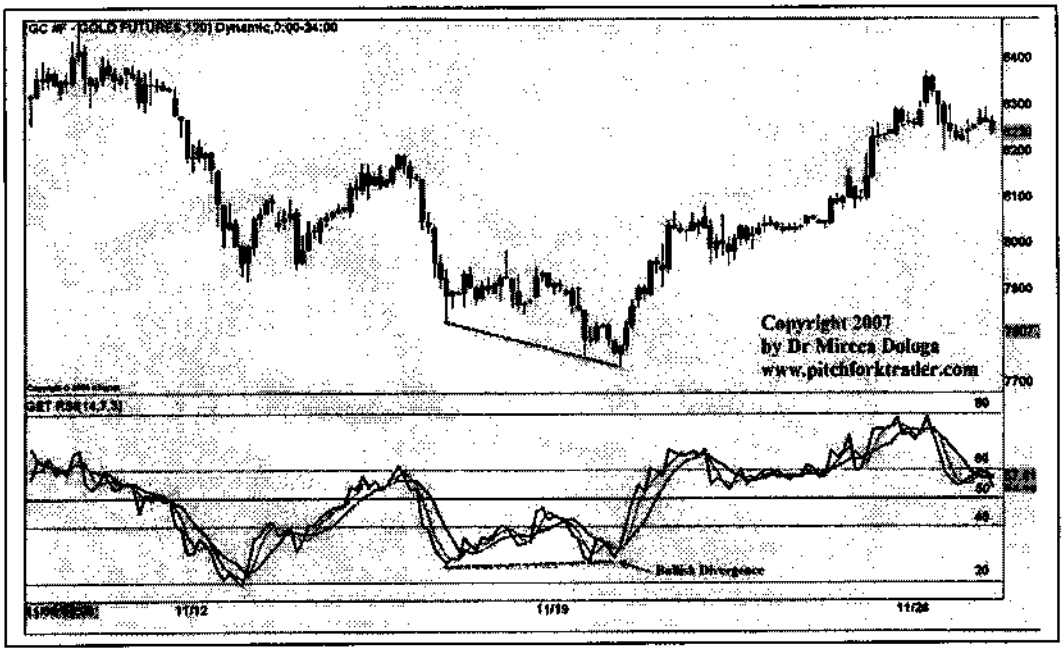


Figure 307 – *We can see on the above chart a* **bullish divergence**, *which signalled a reversal. It's important to mention that not every divergence will signal a reversal and that not every reversal has its corresponding divergence. This reversal tool has only a confirmation role.*

4.2 Hidden Divergences

The hidden divergences are not really known by most of the newcomers because of their "*hard-to-identify*" feature. Their role is very important because it gives very strong signals, even stronger than those of the common divergences. They are mostly found in the 60 to 40 RSI zone. Their specificity is not only this "*no man's land*" location but also their development at the end of the current trend, just before reversal. Thus, in an up-trend they are identified in the *last*, or *before the last up swing*, and vice versa for down trend.

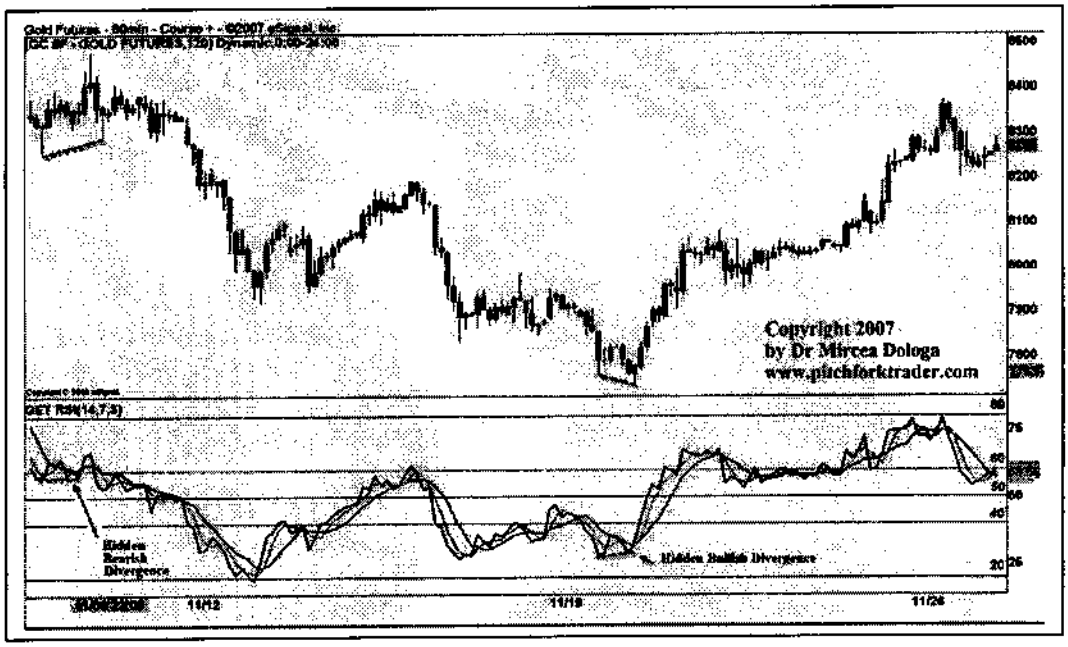


Figure 308 – *We can see on the above chart, on the left side, a* **hidden bearish divergence**, *corresponding to the 60-40 RSI zone, which signalled a down-sloping oriented reversal. On the right side of the chart, we can observe a* **hidden bullish divergence**, *corresponding rather to the 60-30 RSI zone. Both of them are located at the end of their corresponding trends.*

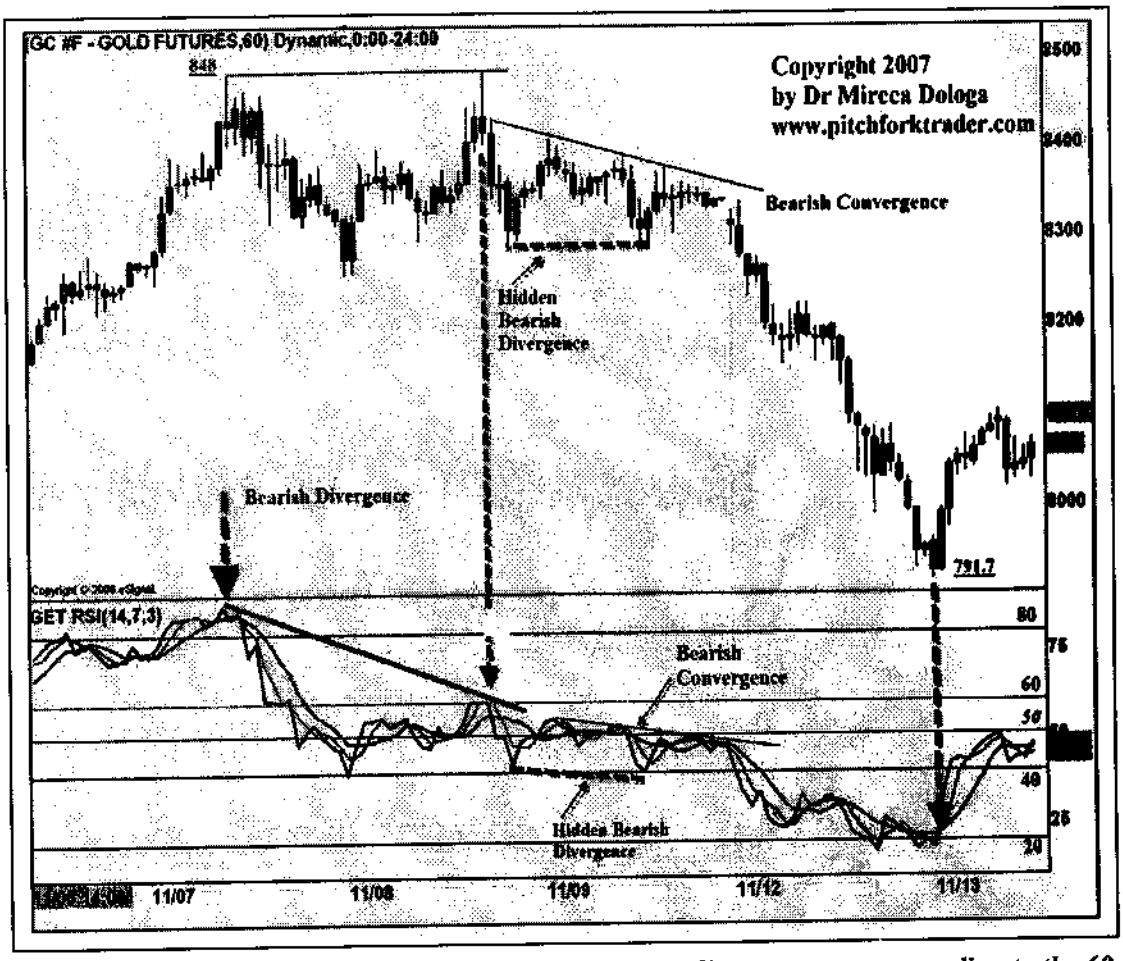


Figure 309 – ***We can see on the above chart a*** **hidden bearish divergence,** ***corresponding to the 60-40 RSI zone. It is well concealed by the*** **bearish convergence.** ***Its specificity is the location at the end of*** **a** ***sideways market, just after the double tops, which have formed the large*** **bearish divergence.**

5 RSI-derived Reversal Signals

The *Reversal Signals* were first discovered and developed by Andrew Cardwell, a great trader and teacher who immensely contributed to the development of technical analysis. In spite of this, his great contribution in the field of RSI, is mainly known only by the professional traders.

We have to sincerely be grateful to Constance Brown, an eminent mentor and astute trader, who gracefully taught many professional traders, not only Andrew Cardwell's RSI invaluable knowledge but also her favorite topics: the Gann, Elliott waves and the Fibonacci concepts. We warmly recommend her excellent book titled *Technical Analysis for the Trading Professional [1999].*

Along many years of trading experience, we have practiced the edge of the *Reversal Signals,* enhancing the trade's outcome by using their synergism with the local market flow pitchforks.

The GET Stochastics indicator replaced the RSI due to its dual characteristics – efficient use, not only in trending but also in sideways markets (refer to *Chapter 12, sub-chapter 6).*

The synergism of the *Reversal Signals* with the local market pitchforks consist mainly in using their interaction with regard to the up-sloping or down-sloping failure guided by the Hagopian rule, the magnet-like attraction of the median line and the power of the *trigger lines* in determining the enhancement of the *trend-failure* trade outcome or the level of the *entry* or the *add-on re-entry.*

6 Failure Swings - Divergence Enhancement Factor

The failure swings occur when the RSI exceeds its previous extreme level, whether that is (*top or bottom*), it corrects it and then heads straight for the old extreme level but fails to exceed it In this context, only if the market price have exceeded or equaled its prior extreme point, we would plead for a divergence. The failure swings have an important role in confirming, *in a way*, the strength of the divergence, when they occur together but as we have seen, a swing failure doesn't require a divergence. In case of a concomitant occurrence, they follow the divergence and inform about its character and also about its future influence on the reversal.

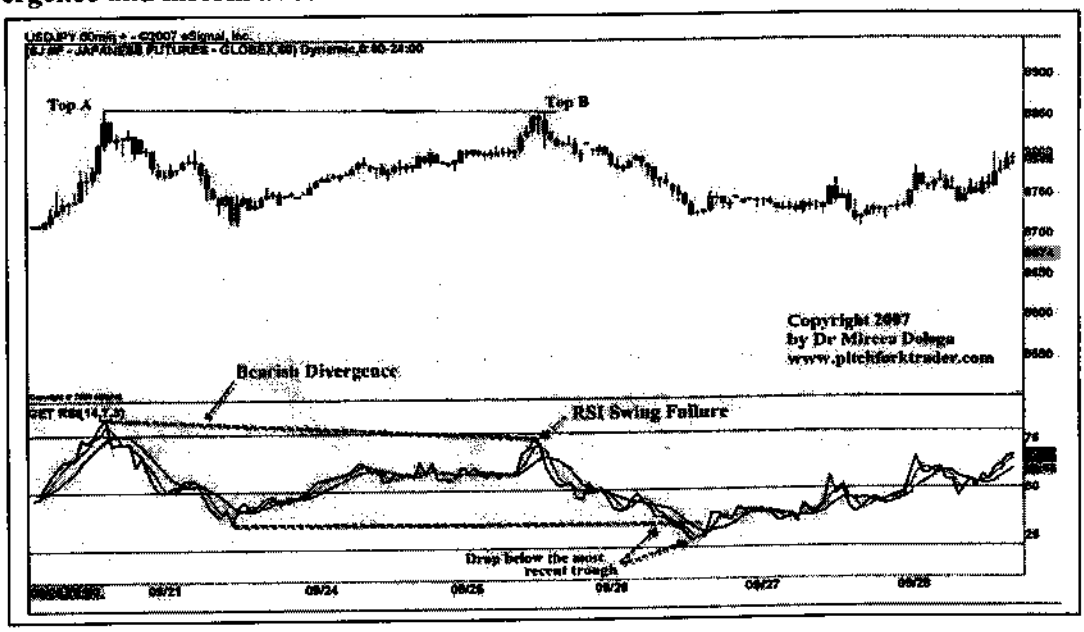


Figure 310 – *We can see on the above chart that the RSI first failed to rise to its last high, it performed a lower high level, and then it dropped below its most recent trough. The price/RSI discrepancy was here obvious and it has formed a* **bearish divergence.**

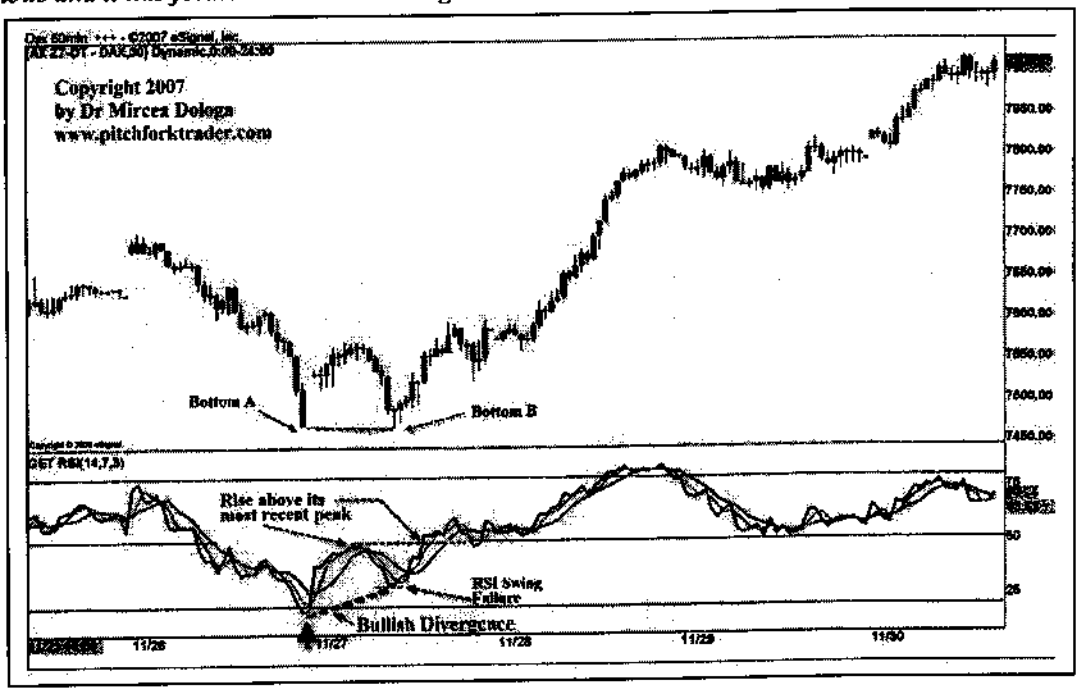


Figure 311 – *We can see on the above chart that the RSI first failed to drop to its last low, it performed a higher low level, and then it rose above its most recent peak. The price/RSI discrepancy was here obvious and it has formed a* **bullish divergence.**

7 Resistance and Support Identification

Most of the experienced traders consider the support/resistance key levels as their bread and butter. Looking at any chart the astute trader can easily draw the key levels that have recently occurred. The problem is especially the old highs and lows, which are out of the visualisation field, on that precise studied chart. For the intra-day trader, the key levels pertaining to the recent past, like yesterday's pre-close period, are of a great importance, especially when trading *Futures*. We know that the *Futures* market has closed a few hours after the close of the *Cash* market thus creating additional key levels... knowing them might make your day!

By observing the RSI chart in comparison with the market price chart, one can easily detect the corresponding key levels whether they are: resistances, supports, a new/old low or a new/old high. The occurrence of a head-and-shoulder, a cup, a double top or a double bottom greatly enhances the trader's confidence and prevents the "*gun-shy*" syndrome.

To be more explicit, the support and resistances key levels are performed not only on the market price chart but also on the RSI chart. The secret of their involvement, responsible for trader's optimal trade outcome is their degree of correlation. Thus we can have a double top on the RSI chart, which isn't (*yet*) visible on the market price chart. We remind you that the RSI's momentum is a step ahead of the chart.

On the other hand, due to its own construction, the RSI chart represents a gold mine for the astute trader...with one condition... Never forget that it gives only a confirmation signal!

It is well known that the most important key level is the zero line (*50 level*). It represents the frontier between the up and down-sloping trend movement.

The 80 and 20 levels closely guard the gate of the overbought and oversold zones, respectively. We remind you that the market flow, more often than not, will firstly test these zones giving a warning signal. Only at the second or even the third try it will penetrate them.

Even if the following common concept is still valid for some traders and call it "*the Noise Kingdom*", we can assure you that the *80-20 "no man's land"* zone is very useful for trading. Be on the watch for revealing, not only the mini-local events like hidden divergences (*40-60 zone*) but also the key levels of the up-trend's *80-40 limits* and down-trend's *60-20 boundaries*.

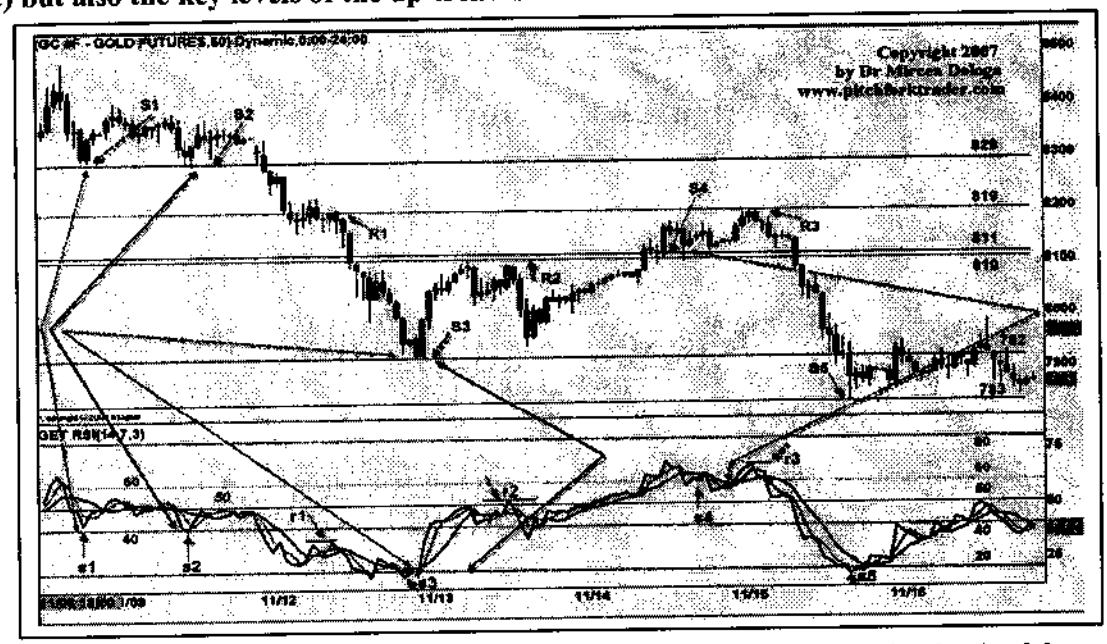


Figure 312 – *We can see on the above chart that S1 to S5 represent the support key levels of the market price chart and that the R1 to R3 represent the resistance key levels of the market price chart. By comparing the corresponding levels on the RSI chart, we obtain s1 to s5 for the support key levels and r1 to r3 for the resistance key levels. Due to the lack of chart space we have illustrated by the arrows only the correlation of supports (R1 to R5 corresponding to s1 to s5). As we can see they are strictly correlated.*

8 Patterns on RSI Chart

8.1 RSI's Rectangles

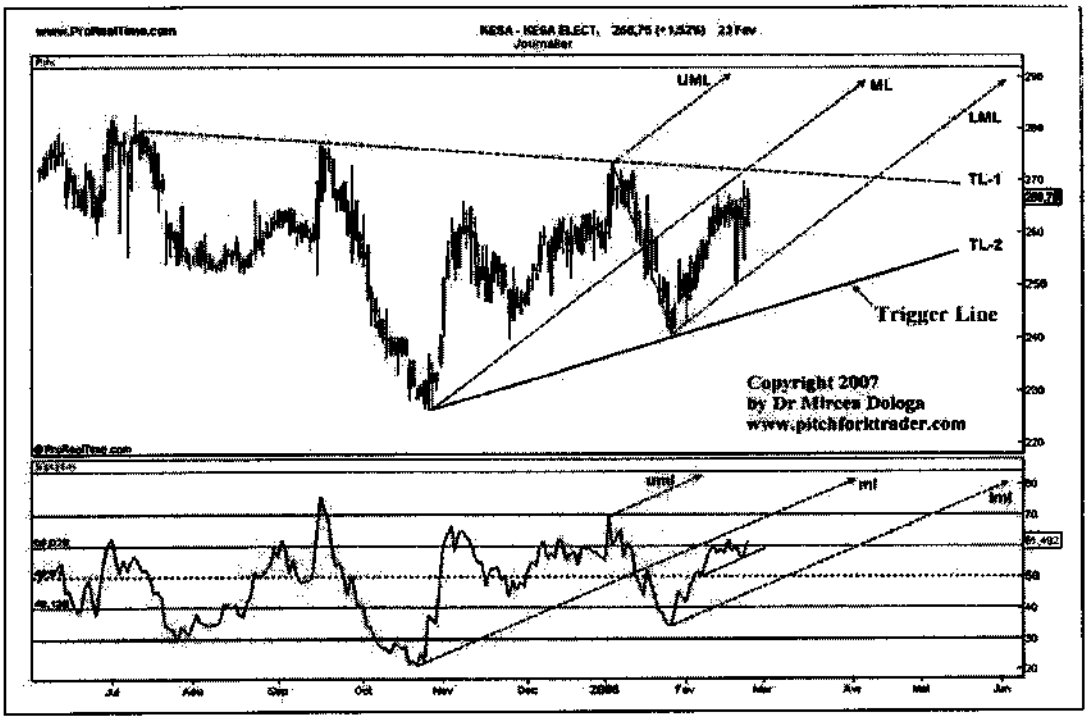


Figure 313 – *We can see on the above double pitchfork chart that we have prepared the indispensable tools for an eventual* **long trade**, *which will be entered only if the local market flow will breakout the TL-1 trend line. The RSI chart shows an ascending pitchfork, with the RSI climbing along the median line.*

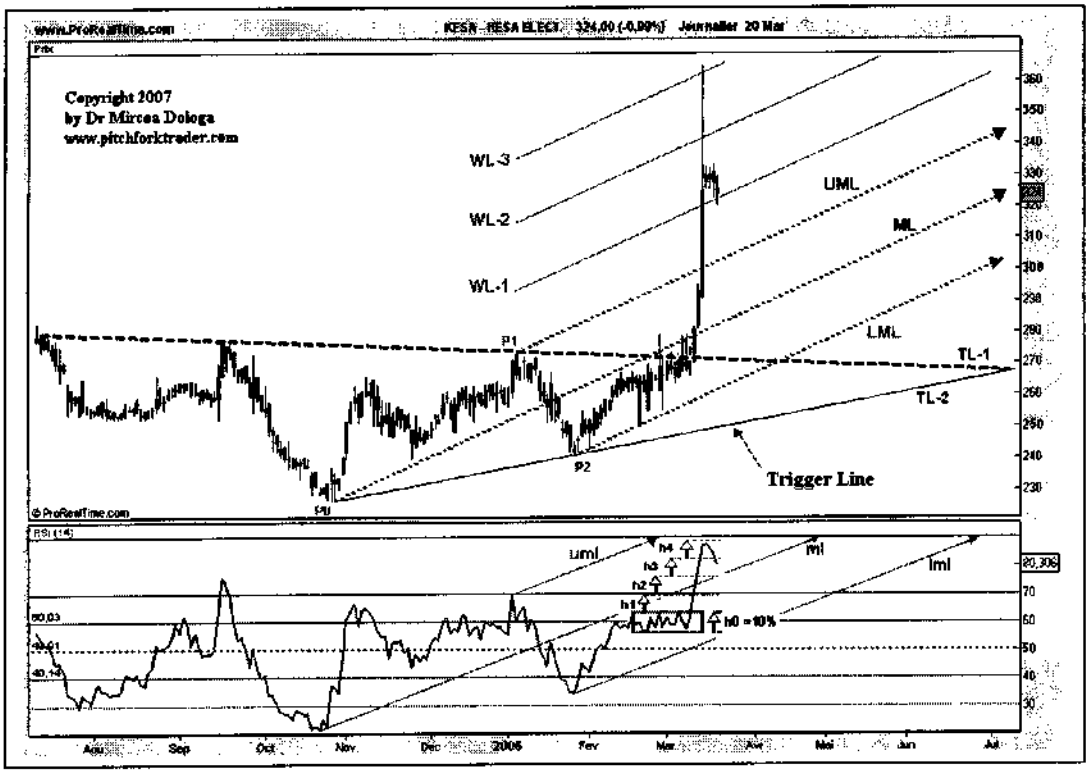


Figure 314 – *We can see on the above double pitchfork chart that the market price not only has broken up the TL-1 but it jumped all the way to the third warning line (WL-3) of the chart's ascending pitchfork. The RSI also climbed until the fourth extension of h0 inception rectangle. Now, the market seems to reverse.*

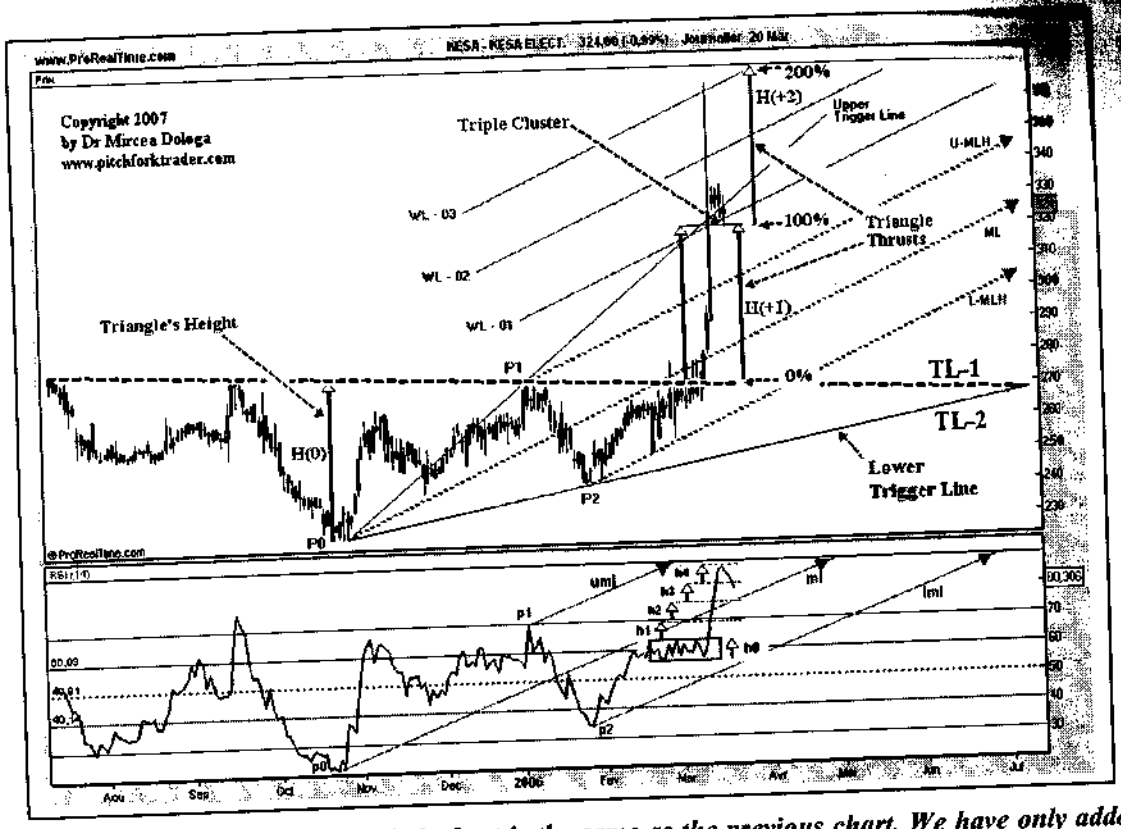


Figure 315 – ***The above double pitchfork chart is the same as the previous chart. We have only added the upper trigger line to reveal its*** **triple cluster** ***with WL-01 and the 100% thrust of the broken TL-1 & TL-2 triangle. The H1 & H2 thrusts correspond to the (h1+h2) & (h3+h4) RSI rectangle's heights, respectively.***

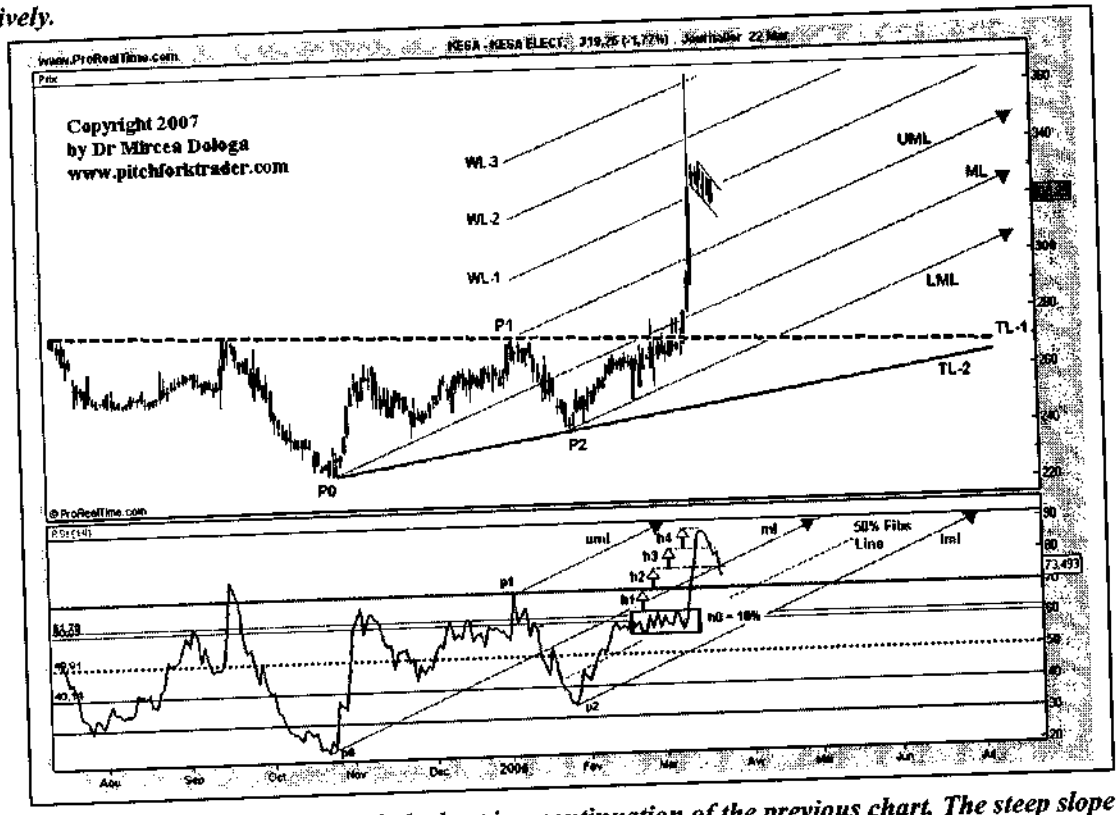


Figure 316 – ***The above double pitchfork chart is a continuation of the previous chart. The steep slope of the chart and the breakout of the median line of the RSI's ascending pitchfork efficiently divulge a strong continuation of the down-sloping correction.***

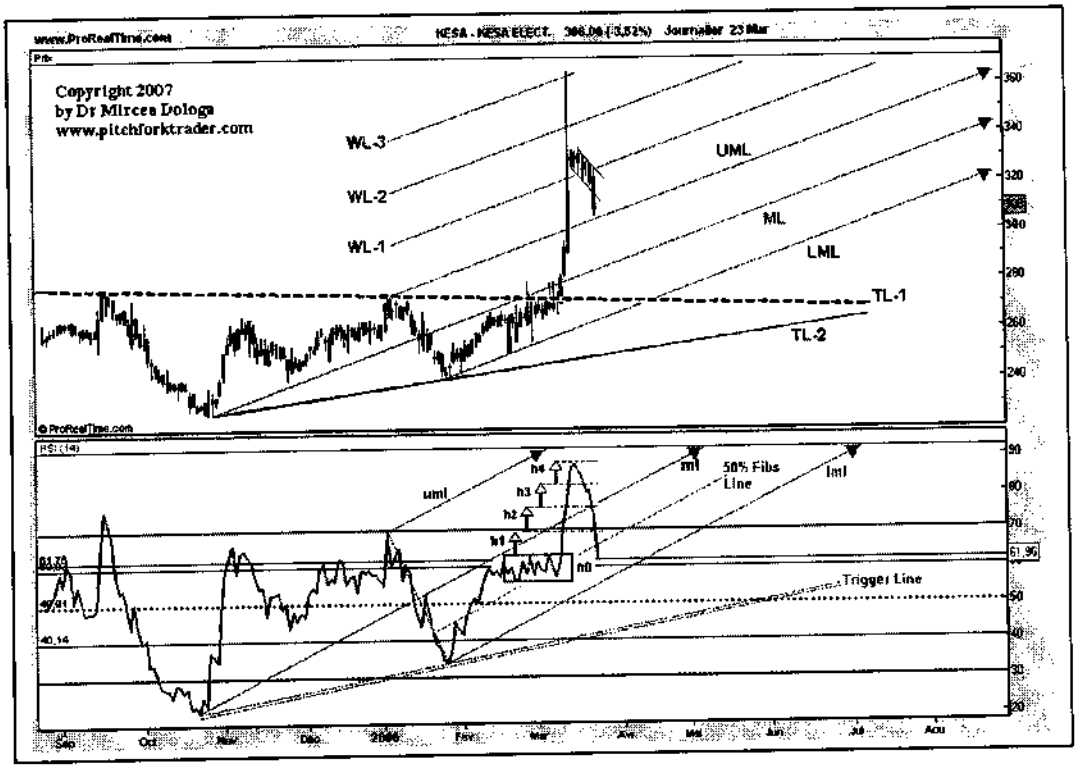


Figure 317 – *The above double pitchfork chart is a continuation of the previous chart. The steep slope the volatile bar & the test of upper median line (*UML*) of the pitchfork's chart can signal a continuation of the down-sloping correction or, on the contrary, a trading range along the* UML. *We the help of RSI we can rather plead for a sideways move because the RSI just reached the initial h0 rectangle and the 6 key level.*

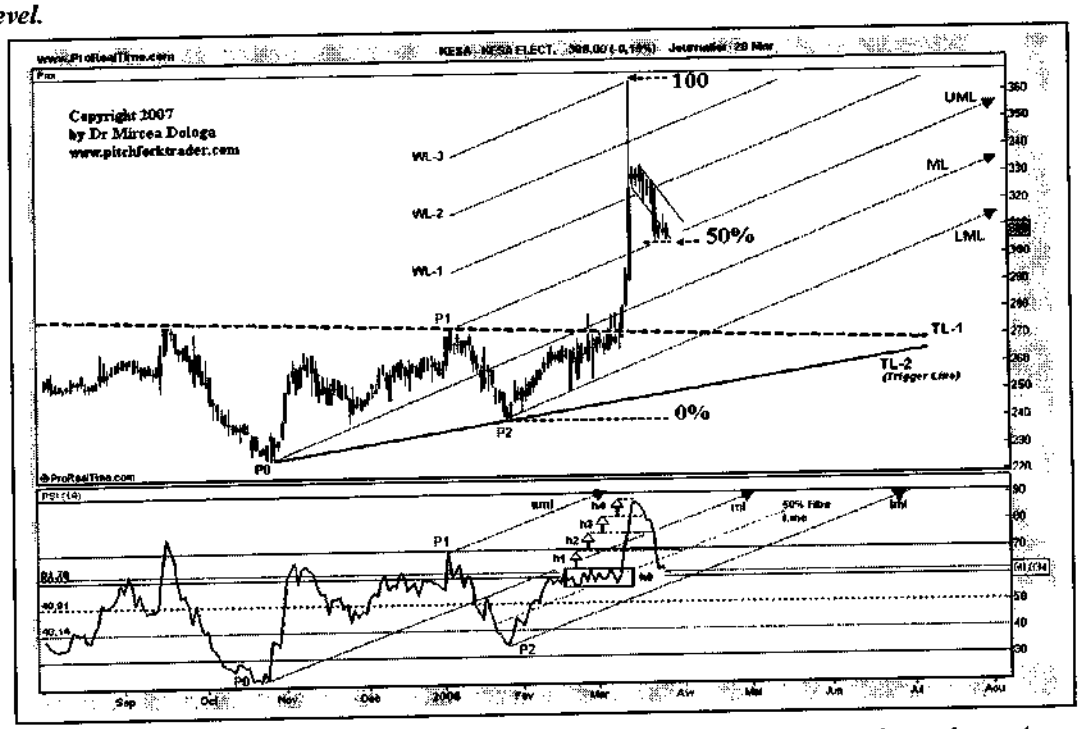


Figure 318 – *The above double pitchfork chart is a continuation of the previous chart. As we ha anticipated, the market flow has formed a tiny trading range just above the upper median line (*UML*). The RSI imitated the market price and is now cruising horizontally along the very strong 60 key leve The chart's and the RSI's sideways moves signal, with a very high probability, the end of the correctio This is a very low-risk high-probability long trade with a tiny stop loss, just underneath the Fibonac 50% ratio level.*

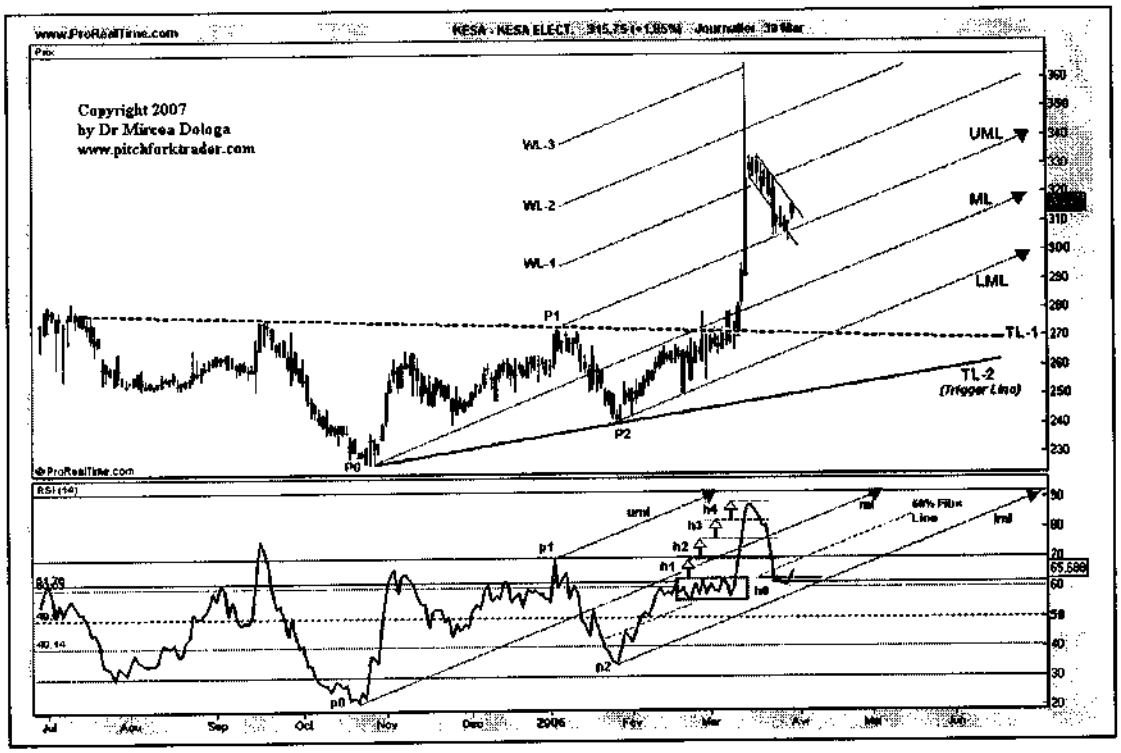


Figure 319 – ***The above double pitchfork chart is a continuation of the previous chart. As we have anticipated the market price has restored its energy during the narrow range on the upper median line, and it burst upward, all its recovered kinetic energy toward the highest high, in the making of the last Elliott wave of this very strong impulsive pattern. The RSI performed an almost perfect hook and reversed.***

8.2 RSI Channelling & Triangle Formations

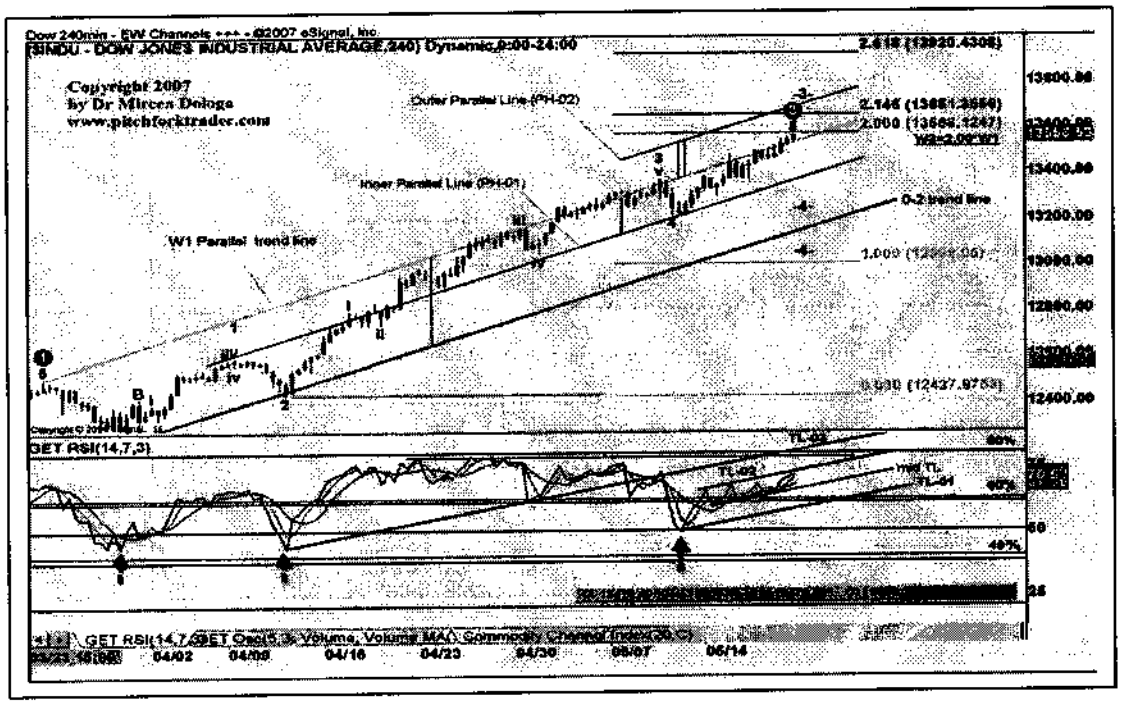


Figure 320 – ***The above chart illustrates the parallelism of the Dow Jones Industrial up-sloping trend and the drawn channelling of the RSI. The purpose of this preparation is to reveal the timing of the channelling breakout of DJI & RSI. As a momentum-related indicator, the RSI should breakout before the DJI. Thus we will be able to perform a low-risk high probability trade with a tiny stop loss.***

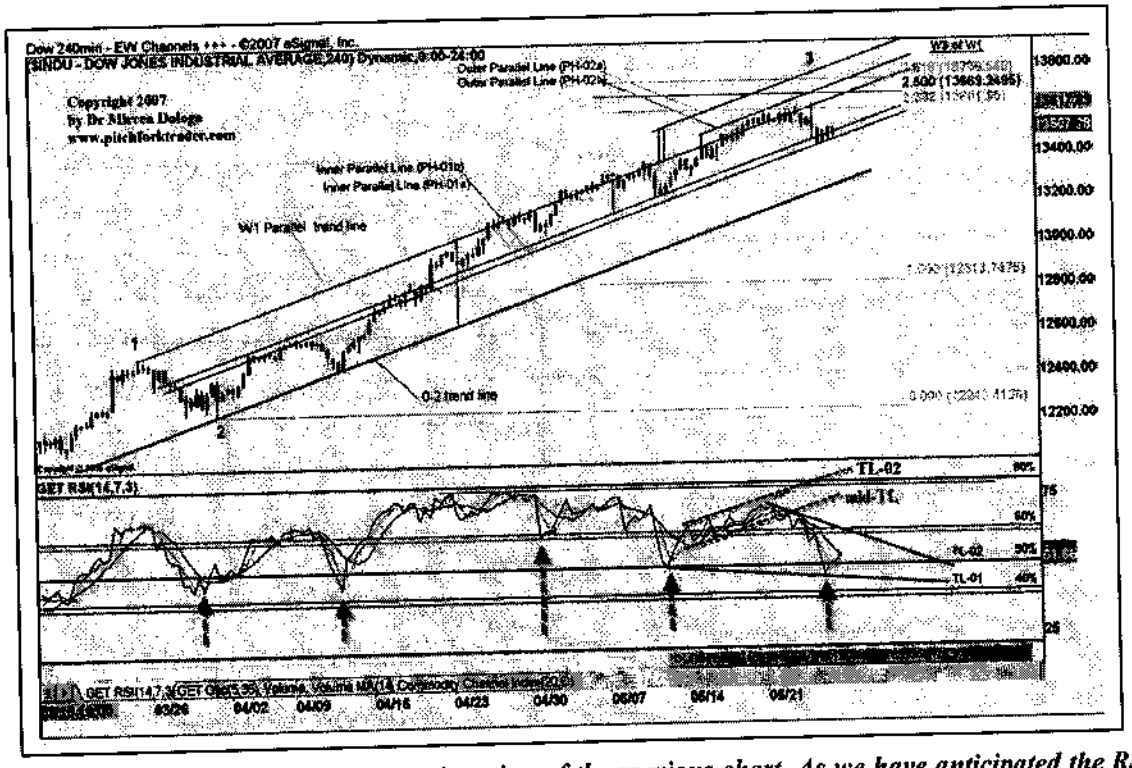


Figure 321 – *The above chart is a continuation of the previous chart. As we have anticipated the RSI's channelling has been broken first and it has performed a very steep hook without reaching the 40 level. This non-trespassing move pleads for an up-sloping W3 continuation. The breakout of the TL-01 & TL-02 down-sloping triangle will emphasize if the recent pullback is part of the W3 development or is the first corrective wave of the incoming W4.*

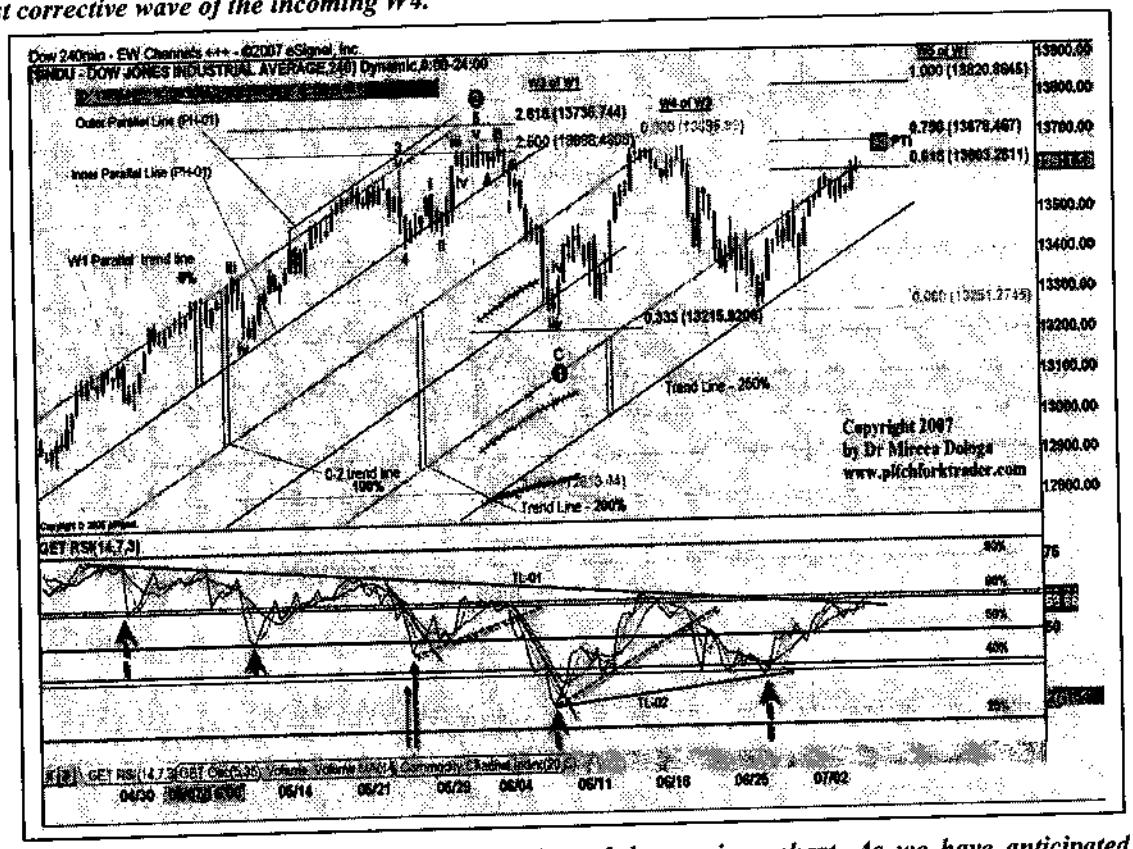


Figure 322 – *The above chart is a continuation of the previous chart. As we have anticipated the pullback of the prior chart (05/21/2007) built the w4:W3. The RSI is ready to breakout the TL-01.*

8.3 Flexibility of the RSI's Pitchforks

Figure 323 – *As we have already mentioned before, George Soros, the Hungarian born, British citizen, is one of the world greatest traders. He has said that* **flexibility** *is the most important quality of a trader. In the following four charts we will apply this flexibility in the use of pitchforks. We can observe on the right side chart a down-sloping W3, well guided by the multiple rectangles, drawn in both directions. The corresponding RSI down-sloping pitchfork is already drawn with its accompanying TL-2 trigger line. Its task is to readily signal the end of the W3 and the start of W4.*

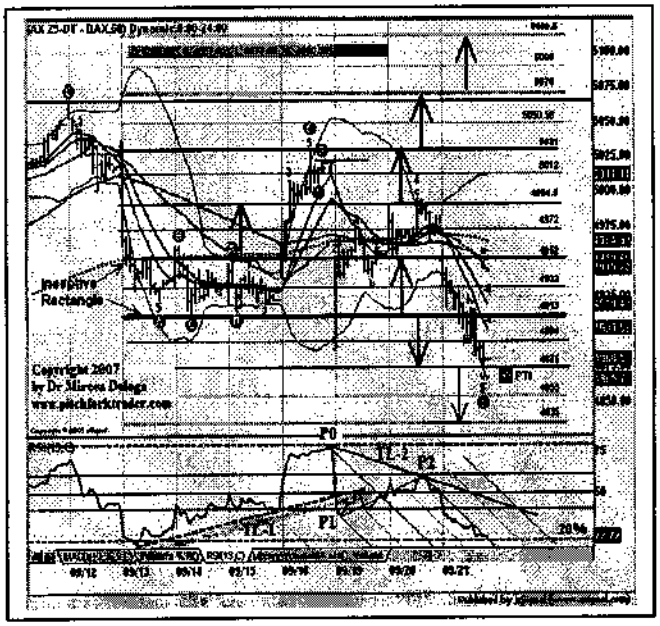


Figure 324 – *The right side chart is a continuation of the previous chart. The W3 of the prior chart was converted in a C-wave, and the market price has reversed. In order to cope with the new situation, we have constructed an* **Action-Reaction set-up,** *which will faithfully follow the development of the new up-sloping W3, across not only the inceptive rectangle's extensions but also across the h0 inceptive slant channel's extensions. Our* **declared flexibility** *allowed us to change our attitude from a pitchfork to the A/R set-up, in a blink of an eye.*

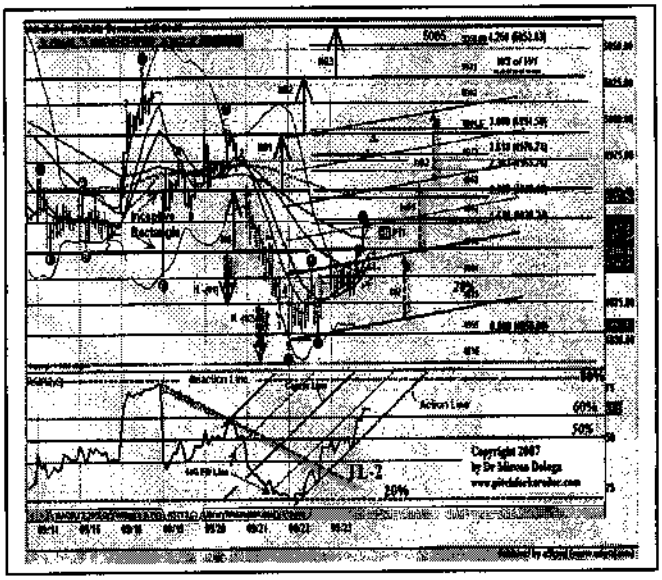
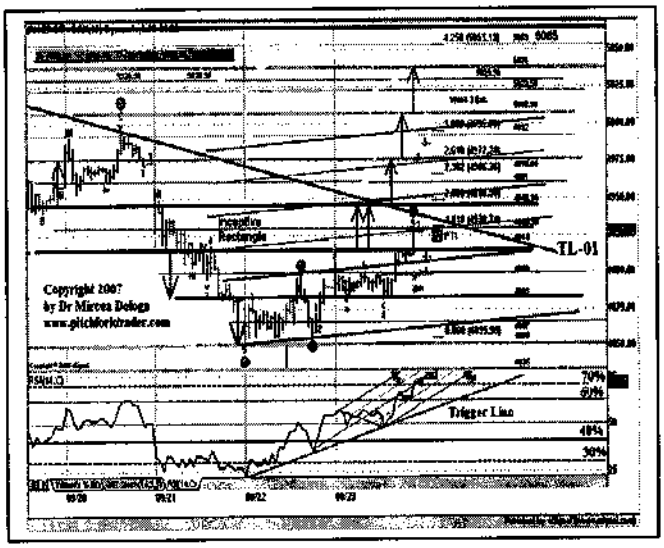


Figure 325 – *The above chart is the same as the prior chart. We have replaced the RSI Action-Reaction set-up with an ascending pitchfork and its corresponding trigger line. The RSI has just broken the 70 level directing straight up. It will certainly enter the overbought zone if the chart's TL-1 trend line will be broken.*



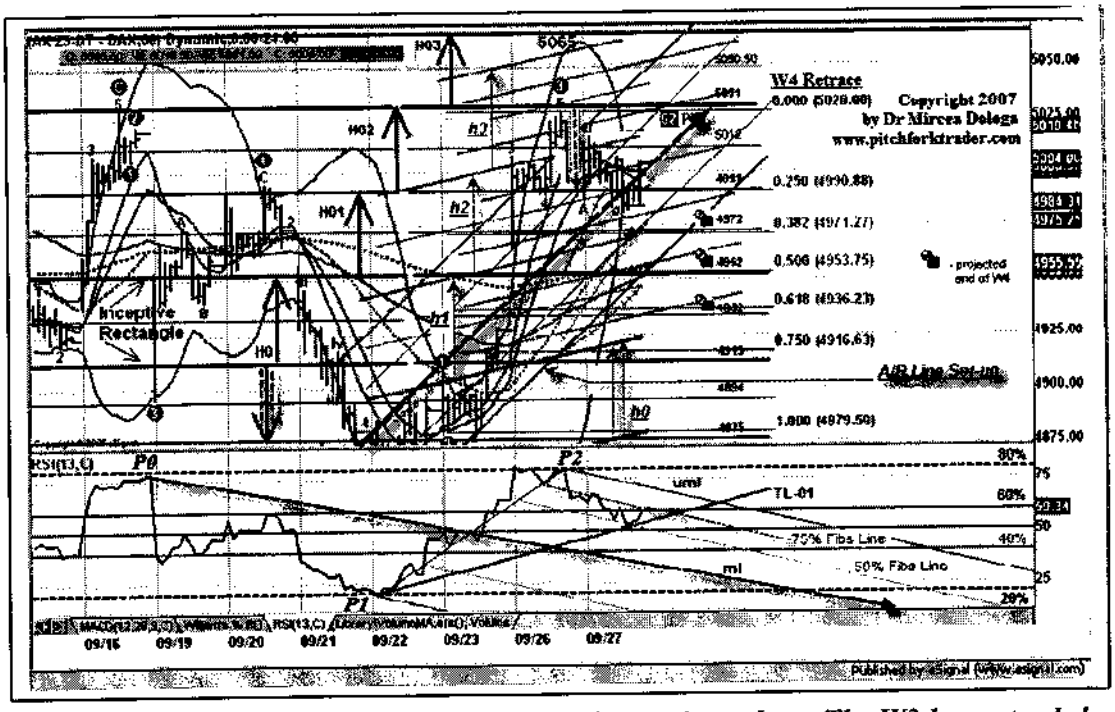


Figure 326 – *The above chart is a continuation of the previous chart. The W3 has extended and has plainly profited from the September 26th up-gap. After the RSI has signalled a first warning by testing the 80 level it has tested it a second time, thus building a double top, an excellent reversal signal. That meant, the reversal time for W3, and the beginning of the W4.*

9 Elliott Waves Labelling Confirmation by RSI

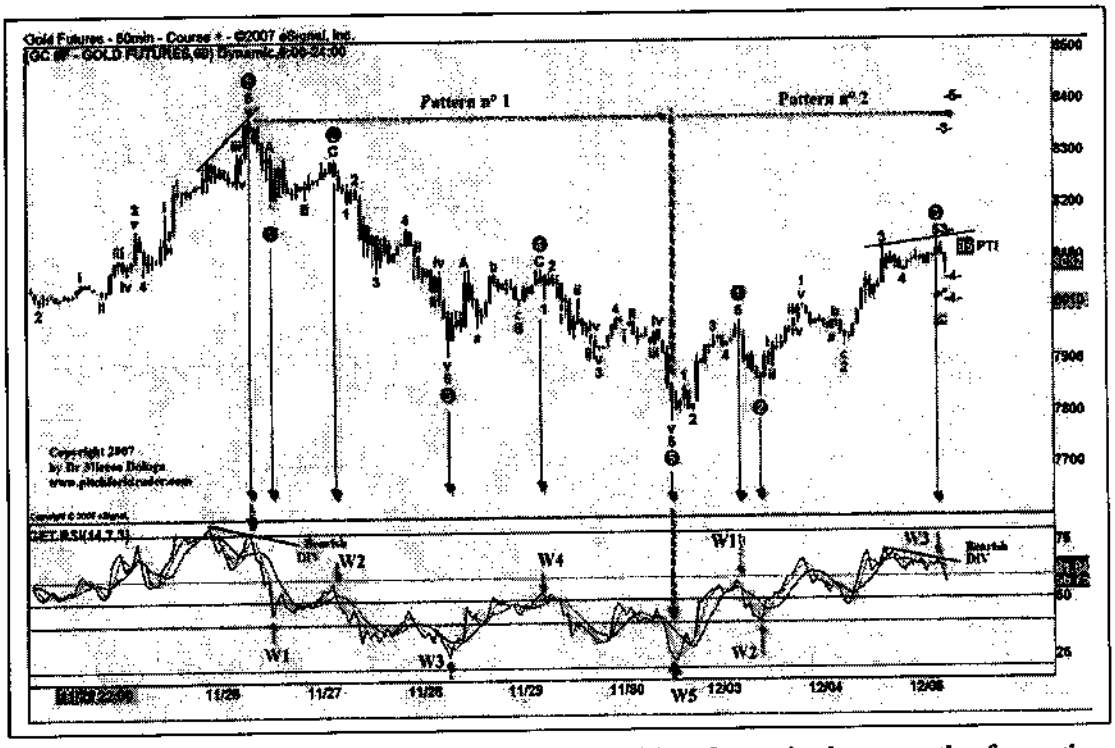


Figure 327 – *The above chart illustrates the relationships that exist between the formation of the Elliott waves and their sub-waves and the corresponding support and resistance levels developed on the RSI chart. One can observe the almost perfect synchronism that is formed. The extremities of the RSI chart are marked by the adequate divergences signalling the specific reversals.*

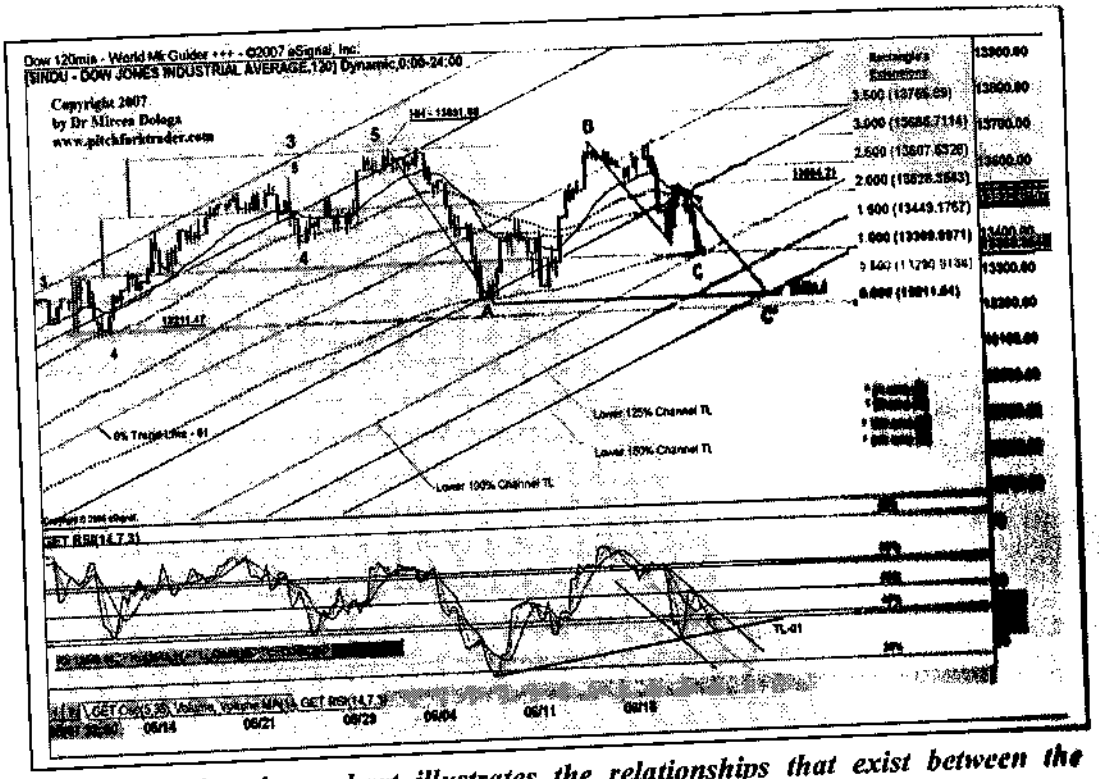


Figure 328 – *The above chart illustrates the relationships that exist between the Elliot formation of a* flat *corrective wave pattern at market's top and the corresponding patterns on the RSI chart. The RSI chart was travelling in a descending channel and it was just halted by the TL-01 trend line. Will there be a C-wave failure or the C-wave will perform its classic size (C-wave = A-wave).*

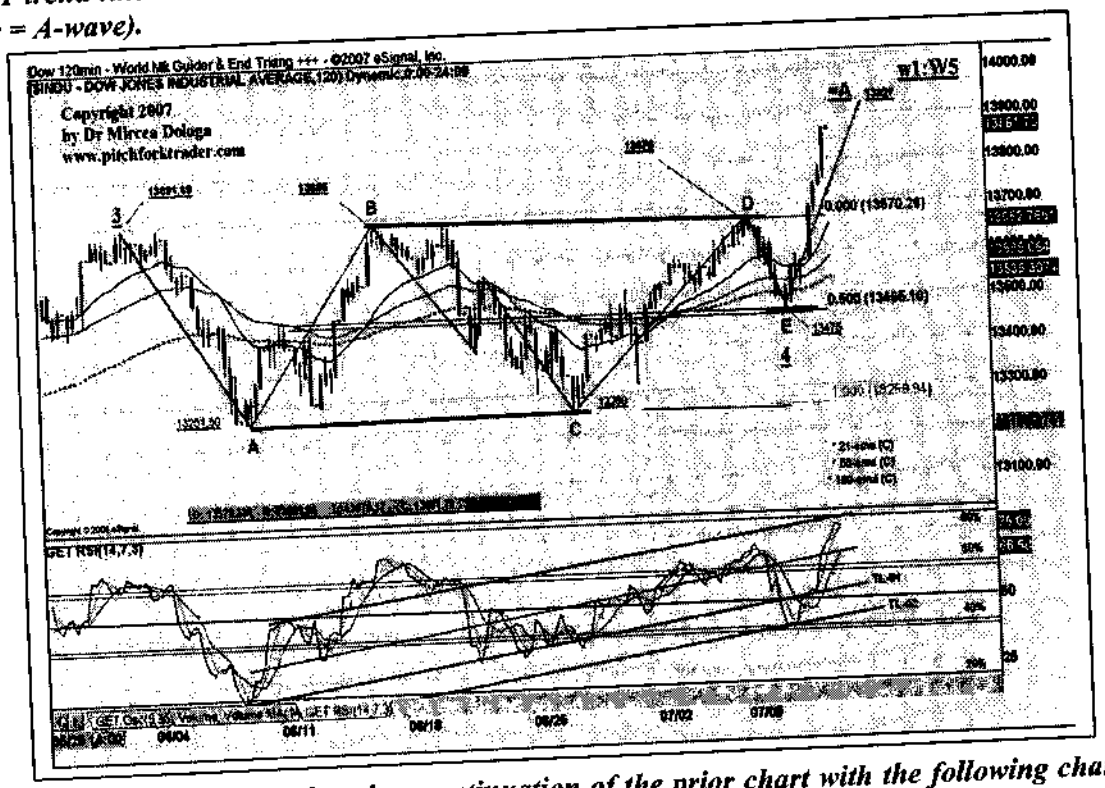


Figure 329 – *The above chart is a continuation of the prior chart with the following changes: the rectangle pattern has become a horizontal triangle, the C-wave has equalled the A-wave, the terminated triangle became a W4 and the w1:W5 is in progress. Our declared flexibility imposes a very strict RSI's channelling in order to detect the w1:W5's end and the retracement of w2:W5*

10 Real-Time Case Studies

10.1 Breaking-Up the Contextual Trend Line - a Gold Futures Chart

Figure 330 – *The right side chart shows the breakouts of the TL-1 and TL-2 after the classic test & re-test. The RSI has also broken out of its TL-03. We have here a multi-aspect situation with several possible trade entries: the breakout of RSI's TL-03 above 50 level, the breakout of 785.6 level, and the breakouts of the TL-1 & TL-2. The best trade will be the one that will comfort the degree of risk that the trader is willing to accept.*

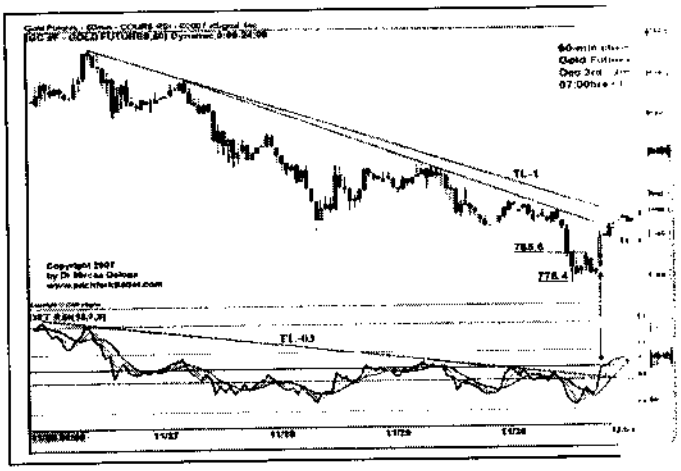
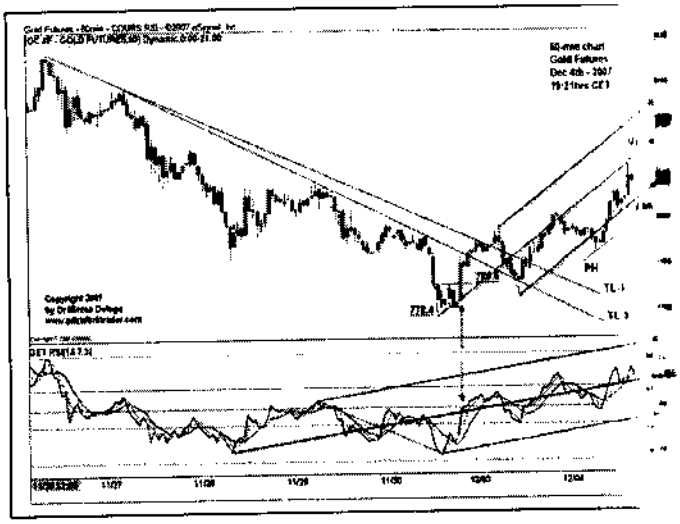
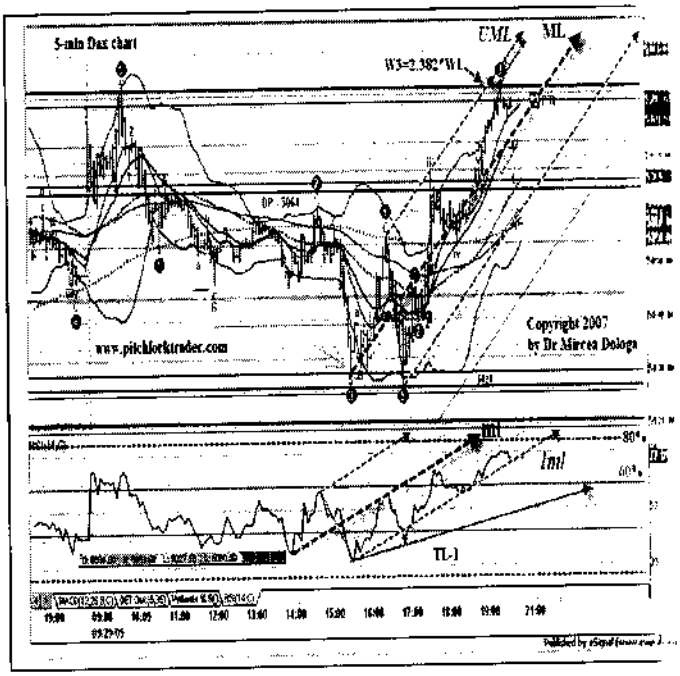


Figure 331 – *The right side chart is a continuation of the prior chart and it shows the double pitchfork set-up. It will be very useful to manage the trade further and assist the trader not only to "add on" but also to scale out or to simply exit.*



10.2 Breaking-Down the RSI Pitchfork's Median Lines – a German Dax 30 Chart

Figure 332 – *The above chart illustrates a typical pre-open trade, which is mostly based on the morning preparation. We can observe that the W3 reached today its extended size* (W3=2.38*W1). *Judging from the RSI's point of view, it seems that the W4 has just started. Even if the W3 will make another swing in order to reach the 2.62 value, the breakouts of the chart's median line* (ML) *and the RSI's lower median line* (lml) *will certainly signal the W3's end & W4's inception.*



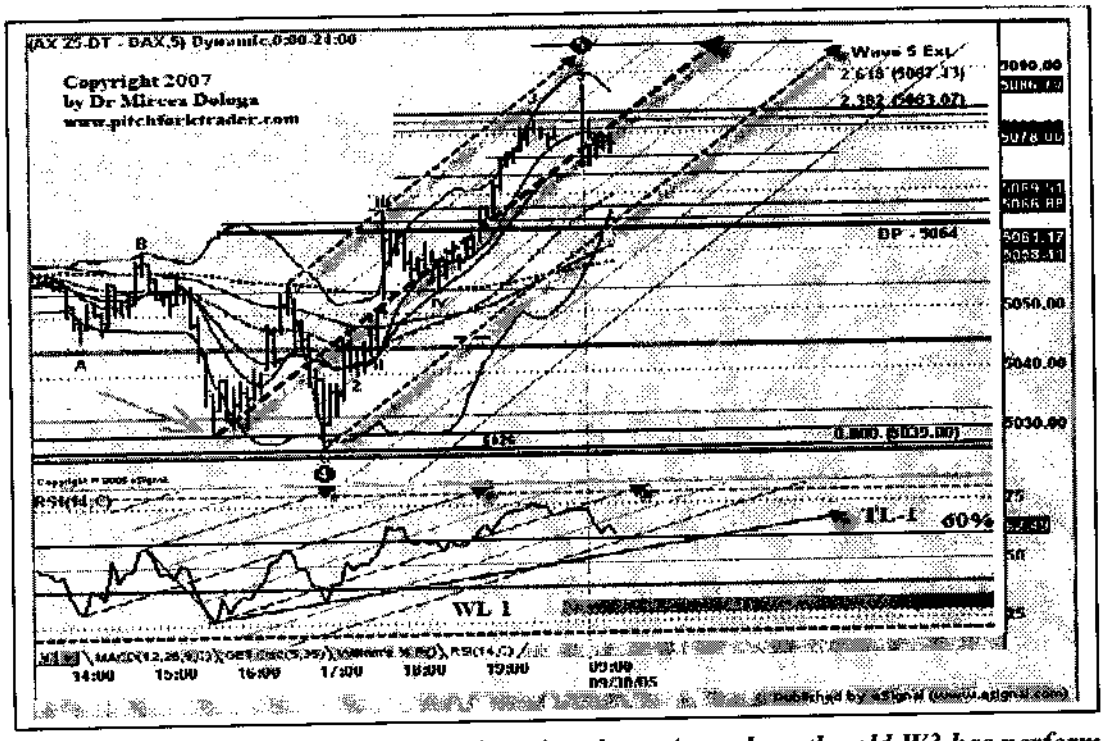


Figure 333 – *The above chart continues the prior chart. As spoken, the old W3 has performed a last swing reaching the most common value of an extended wave (2.618). The labelling has been changed, due to the new development and we have already commenced the reversal signalled by the filling of the up-gap. The RSI has broken the lower median line (*lml*) & reached the* WL-1.

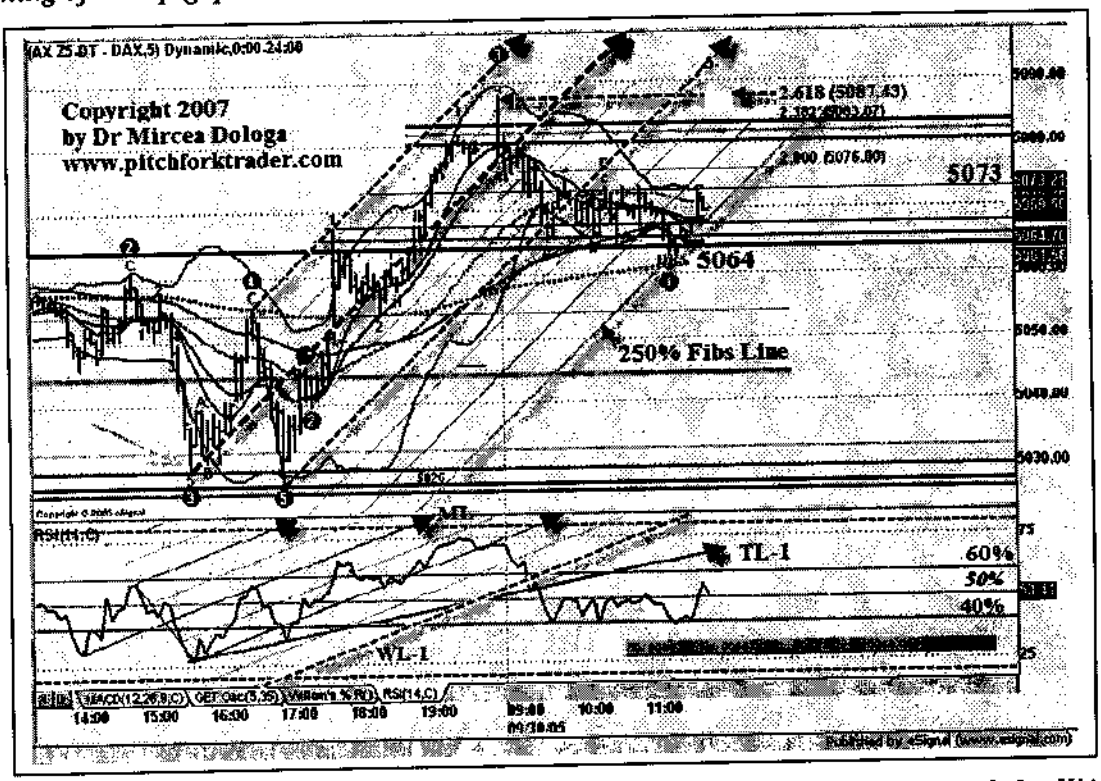


Figure 334 – *The above chart continues the prior chart. As we have anticipated the W4 has started and will probably last the midday doldrums. The RSI has exemplarily behaved first by breaking the WL-1 and then the TL-1. Halted by the strong 40 level, this signals, once more, that the trend is still up sloping. We remind you that the trend has its corresponding 80-40 RSI range.*

Key Points to Remember:

- We arrived to the conclusion that most of the newcomers or the inexperienced traders don't realize that RSI is a *true gold mine* for them. Instead of using the whole array of what RSI has to offer, they get stuck with partial topics like extreme zones and divergences.
- We always say that a well-trained trader in the use of RSI has a great chance to optimize and more efficiently find the low-risk high-probability trades.
- The RSI has the great quality of being able, if properly used, to detect the small stop loss entries, thus not only the RSI will optimize the trade but it will also prevent the "*trigger-shy*" syndrome.
- The simplest metdods always remain the best...an up-trend is worth what the distance between the two consecutive throughs is! By only looking, with the naked eye, at several time frame charts, the astute trader can readily say, which is the dominant trend and in what stage of development the trend is.
- Be on the watch to characterize the corrections. Observe their size and their time duration. They are directly correlated with the strength of the trend.
- Be aware that if the trend makes a lower high, it's only a half reversal signal. If a lower low is ensuing, only then we can say that the trend has changed.
- The *Trough-and-Peal Analysis* compares the corrections' lows. It's simple, it's efficient and is optimal for the trade's outcome!
- More often than not, the market flow will test the overbought /oversold zones before it will break in, usually a few bars in advance.
- With the risk to appear weird, we can assure the trader that the RSI plays a capital role in the inception, the develoment and the termination of the trend. Moreover, the RSI can also locate market price targets or form RSI chart patterns.
- The inception of an up-sloping trend is usually signalled by a divergence associated or not with a hidden divergence. The usual up trend's zone is between the 40-80 level zone.
- The inception of a down-sloping trend is usually signalled by a divergence associated or not with a hidden divergence. The usual downtrend's zone is between the 20-60 level zone.
- Don't take for granted that a divergence will always signal a reversal. Not every reversal is accompanied by a divergence and not every divergence has its own reversal.
- Don't neglect the very probable occurrence of a hidden divergence, just before the trend termination. The 40 to 60 zone is its predilection background.

- **Like on the market price charts, the failure swings are very frequently met on the RSI chart. They are very valuable because they constitute an enhancement divergence factor and they also occur precociously with regard to those of the price chart.**
- **The astute traders will always verify the correlation of the Elliott wave labelling with their corresponding RSI levels. Most of them consider the support & resistance key levels as their bread & butter!**
- **Be aware that *flexibility* is a high quality trait of a trader, like George Soros used to say. Be ready to replace in a blink of an eye the RSI's pitchfork with an Action-Reaction set-up if the market behaviour demands and imposes it. This is valid for any indicator.**
- **Don't get stuck on your beliefs! Just react to the market behaviour... it will do the rest for you!**
- **If the RSI layout concomitantly proposes several trade versions, from aggressive to conservative type, the best choice will be the one that will comfort the degree of risk that the trader is willing to accept.**
- **Be aware that a short-bar divergence is more efficient than a long-bar divergence. In our experience we had the following descending efficiency length scale: the 2 to 3 bar, the 2 to 6 bars and the more than 6 bars, where the former is the most efficient.**
- **Don't forget that the synergism of the *Reversal Signals* with the local market pitchforks consist mainly in using their interaction with regard to the up-sloping or down-sloping failure guided by the Hagopian rule, the magnet-like attraction of the median line and the power of the *trigger lines* in determining the enhancement of the failure or the level of the *entry* or the *add-on re-entry*. The price projections guided by the *Reversal Signals* take here, their full importance.**

Chapter 12

Stochastics and Pitchfork Synergism

This chapter will describe one of the most frequently used indicators by the *Futures* traders – the *Stochastics* indicator. Most of the traders reserve its use for the *overbought/oversold zones* and *crossovers signals* with their expected effect – the reversal. Its main task is identifying the pivotal changes within a trading range, having as direct consequence the sideways trading.
In reality, this indicator has a greater potential pertaining not only to the sideways markets but also to the trending moves. We will try to describe, as much as possible, these additional unknown aspects. This will give the traders a real edge over the crowd.

1. Stochastics Indicator - Definition

Most of the traders believe that George C. Lane is the inventor of *Stochastics,* but in reality, even if he used it since 1954, Ralph Dystant and his dentist-friend Richard Redmont have created this concept. At Ralph's death, George C. Lane has continued to develop it, and thus occurred the *Lane's Stochastics* indicator around 1978. The *Stochastics* indicator term is not to be confused with the word *stochastic,* defined in dictionary as random or probabilistic.
From the concept point of view, *the Stochastics* indicator is considered different from smoothing techniques like MACD or RSI. It is rather a short-term market *price velocity* indicator having as an immediate result its recent market price sensitivity, which will be greatly enhanced. It is defined as a comparison between the current price and the selected period's range. The reading values will be a designed percentage from 0 to 100, where the former is the lowest low of the chosen period, and the latter, the highest high. Thus, it will try to measure the levels within an up-sloping trend where the closing prices have the tendency to aggregate at the proximity of the upper end of the chosen period (*and vice versa*).
We will not go into the math details because of lack of space and also because we would like to emphasize the *Stochastics'* indicator practical aspect rather then the theoretical one.
As we have already mentioned, it is measured on a scale from 0 to 100, and it goes without saying that the lower portion (*0 to 20*) is considered as the *oversold zone*, and the upper portion (*80 to 100*) is named the *overbought zone* (*refer to Figure 336*). The midpoint of this bound range is the 50-level line. Its up-sloping trespassing is considered as a commencement (*or continuation*) of an up-trend and its drop below 50-level line will signal a weak market, ready to collapse. The 20 to 80 level zone is considered as a *"no man's land"*.
The setting we have always used is 14 - the half of the lunar cycle length. Some traders also use 9, 7 or even 5 but we consider that 14 is the ubiquitous setting for whatever time frame is chosen. The trader should be aware that the smaller the value of the settings, the greater the influence of the market noise would be! And this is valid, on any time frame chart.

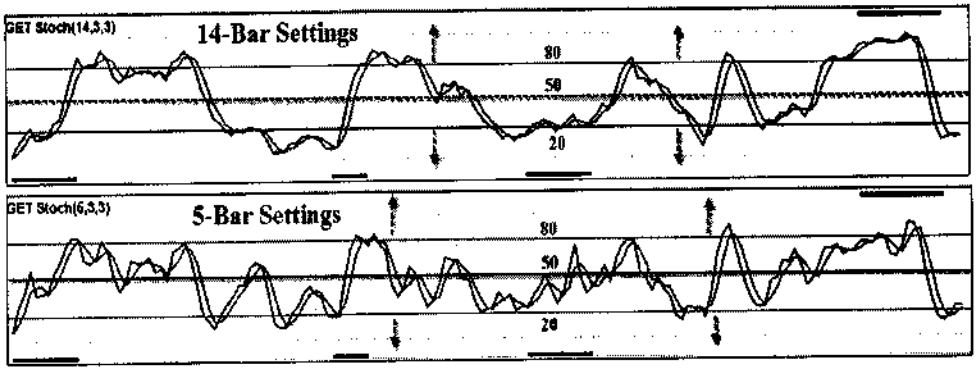


Figure 335 – *As we can see on the above chart, the 14-bar settings give less noise than the 5-bar settings.*

If we apply the formula involving the *High* and the *Low* of the last period range and the *Close* of the most recent bar price, then we will obtain the *raw Stochastics*, also named the *fast Stochastics*, expressed by the symbol *%K*. As we have mentioned, the raw expression of this indicator is very sensitive to the recent market moves, in such a way that it isn't really optimal for trading purposes. In order to get a less erratic curve the latter has been smoothed with a 3-bar simple moving average. Thus, the *fast %D* is obtained, which seems to be more ergonomically used than *%K*.
In spite of the latter smoothing, the erratic moves still occurred, even if they were less abundant. Finally, by smoothing again, with the same 3-bar simple moving average, but this time the *fast %D* not the *%K*, we will obtain the *slow %D*, which is very suitable for trading.
Let us summarize and try to make it simpler:

- *%K* is the outcome of applying the math formula involving the last bar's *Close*, the *High* and the *Low* of the 14-bar period range. It is called the *raw* or the *fast %K*.
- The smoothing of the *%K* by a 3-bar simple moving average will create the *fast %D*.
- The smoothing of the *fast %D* by another 3-bar moving average will result in a *slow %D*

We are usually working with the *fast %K* and the *slow %D Stochastics* curves. In order to reveal the low-risk high-probability trades, various situations can occur, and each of them is based on one of the following mechanisms:

- *Location* of the curves within the 0 to 100% range takes all its importance when it occurs in the *overbought* or *oversold zones*. The common concept agrees that when these extreme zones are reached, the market price chart will perform a top or a bottom. Any event that occurs in these extreme zones is far more important than any events in the "*no man's land*" zone. *A crossover* in these zones is much more important than the one occurring in the "*no man's land*" zone.
- *Crossover* of the two curves. The *%K* being faster than *%D*, it will change direction earlier. A crossover in the *overbought zone* signals a downward reversal, and if it occurs in the *oversold zone*, then the market is ready for a rally.
- *Upward Trespassing* of the *50% level* is assimilated to an up-sloping trend and if the crossing drops, then it's considered as a downward trend.
- *Divergences*, which are another probable signal of reversals, occur when there is a direction discrepancy between the market price and the *Stochastics* indicator.
- *Failure Swings* are considered as a *divergence enhancement factor* and occur when the *Stochastics* indicator exceeds its previous extreme level, whether that is (*top or bottom*), it corrects it and then heads straight for the old extreme level but fails to exceed it.
- *Hinges* are catalogued as a slow-down of both curves, kind of flattening the market *price velocity*. They usually represent the prelude of a trend reversal.
- *Charts Patterns* that occur on the market price chart can also occur on the *Stochastics* chart: triangles, pennants, flags, rectangles, head-and-shoulder, channels, single or multiple pitchforks. More often than not, the main signals consist of the breakouts of the *Stochastics* indicator trend lines, which will occur earlier than those on the market price chart patterns.

2. False Stochastics Indicator - Definition

Tom Joseph, the creator and the developer of the Advanced GET System (www.esignal.com) has extensively developed the use of the *Stochastics*, among other brilliant works. From a simple use, he allowed the *Stochastics* to become an ubiquitous indicator with dual functions: detecting the trends and signalling the various and numerous reversals of a trading range. Thus, the *False Stochastics* indicator has been created, a proprietary eSignal tool, which indicates the presence of a trend when a thick line marking occurs (*refer to Figure 336*):

- In the *overbought zone*, just above the 100% level, signalling an up-sloping trend,
- In the *oversold zone*, just below the 0% level, signalling a down-sloping trend.

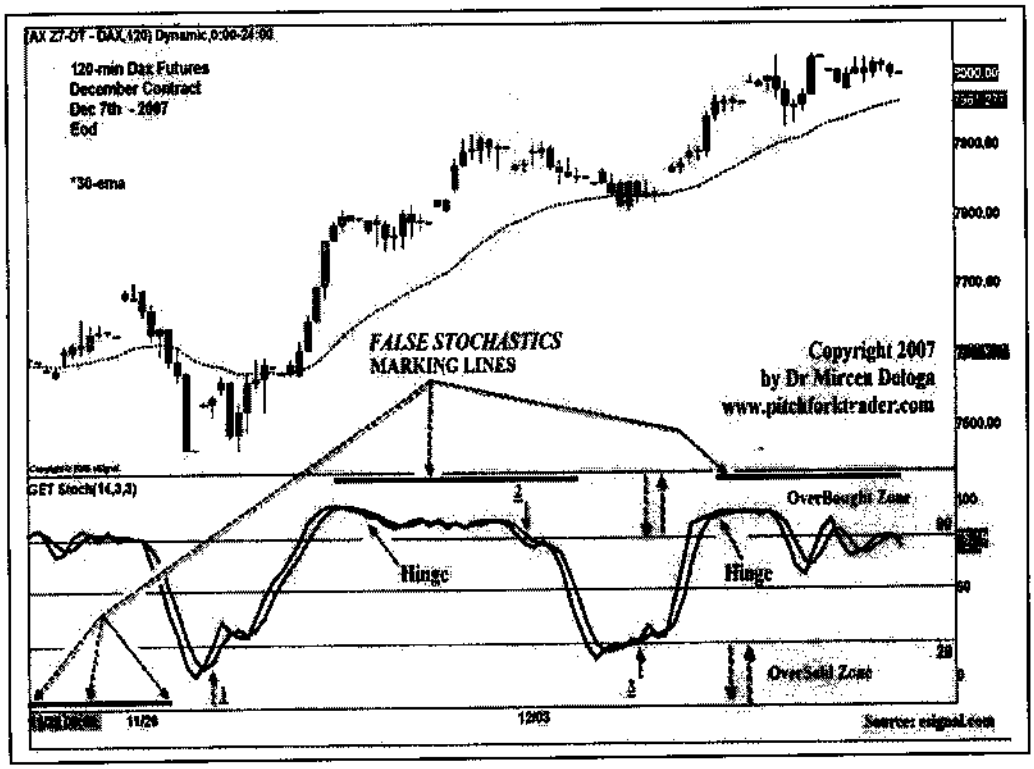


Figure 336 – *The complete picture of the Stochastics features is illustrated on the above chart: the False Stochastics marking line, the overbought & oversold zones, the 80% to 20% "no mans land" zone, the 50% level, the 80% & 20% main levels, the hinges and the crossovers into extreme zones (1, 2 & 3).*

3. False Stochastics Indicator - Trend Revealing Tool – Landmark Definition

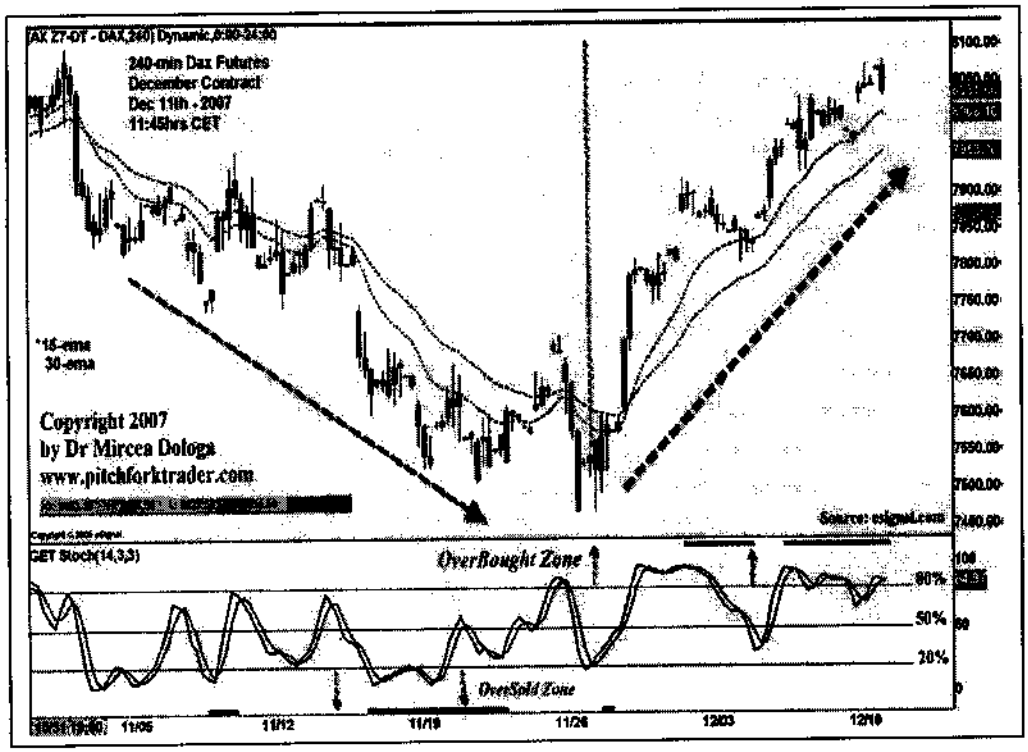


Figure 337 – *We can see, on the above chart, a downtrend on the left side and on the right side, the development of an up-sloping trend from its inception level around November 26th. The False Stochastics markings clearly show the trends' progression. The un-marked space between two marks is the pullbacks.*

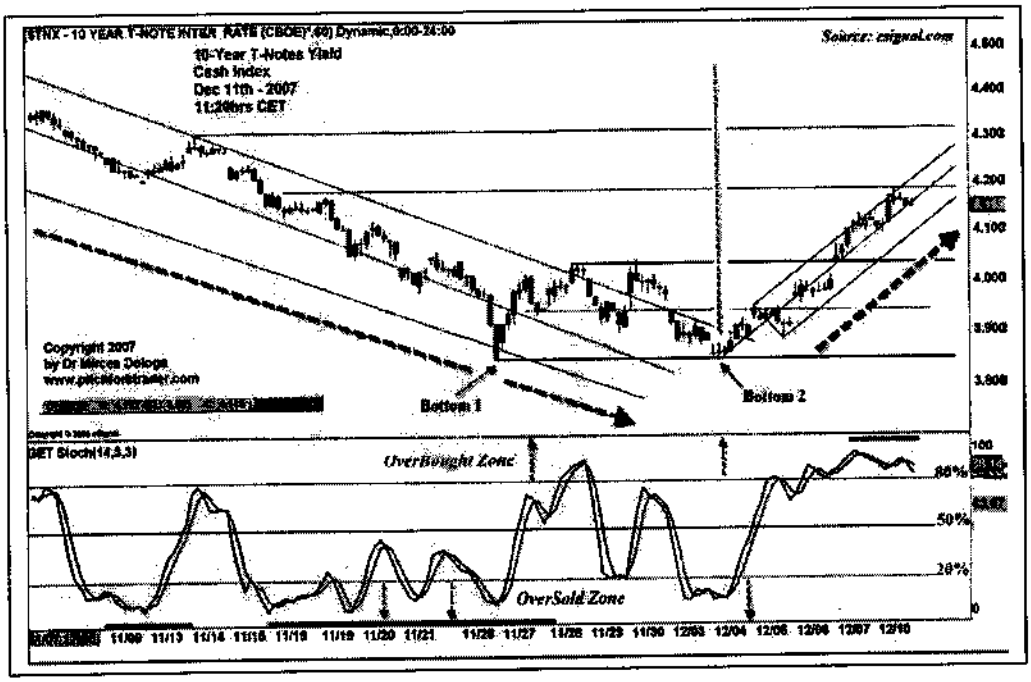


Figure 338 – ***We can see, on the above chart, a downtrend on the left side, terminated through a double bottom*** **(Bottom 1 & 2)** ***and on the right side, the ongoing development of an up-sloping trend from its inception level on December 4th. The False Stochastics indicator clearly shows the down-trend marking lines in the oversold zone, and the up-trend marking line progression of the current up-sloping trend located in the overbought zone. The un-marked space between two marks represents the pullbacks.***

4. Overbought (*OB*) and Oversold (*OS*) Zones – Tops and Bottoms Detection

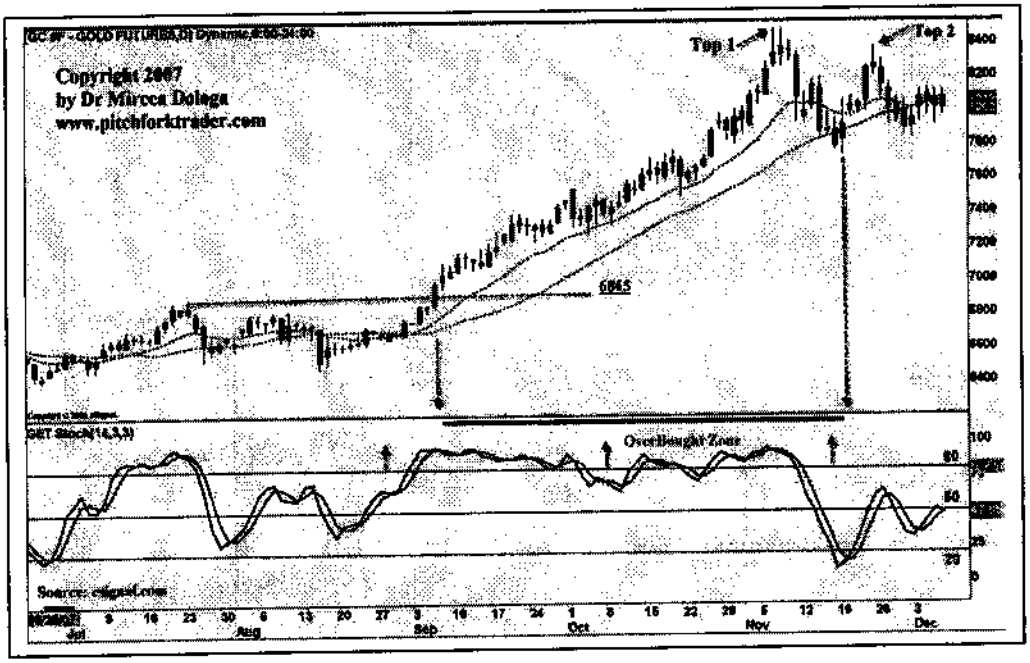


Figure 339 – ***George C. Lane considered the overbought/oversold warning signals above/below 75 and 25 respectively. In our experience we opted for 80/20 limits. The Stochastics' tops precede, more often than not, those of the market. We can observe on the above chart that the Stochastics chart entered the overbought zone, long before the price chart has made the Top 1. The aggressive short trade signal was given when the Stochastics has dropped from the overbought zone and penetrated the 80-level line. The conservative short trade entry was signalled only when the market price chart has made the Top 2 and the crossover of the Stochastics has occurred.***

Very often, the first penetration into/outside the overbought /oversold zones is usually just a warning signal. The tops are shorter in time than the bottoms and more volatile. They are harder to catch than the bottoms.

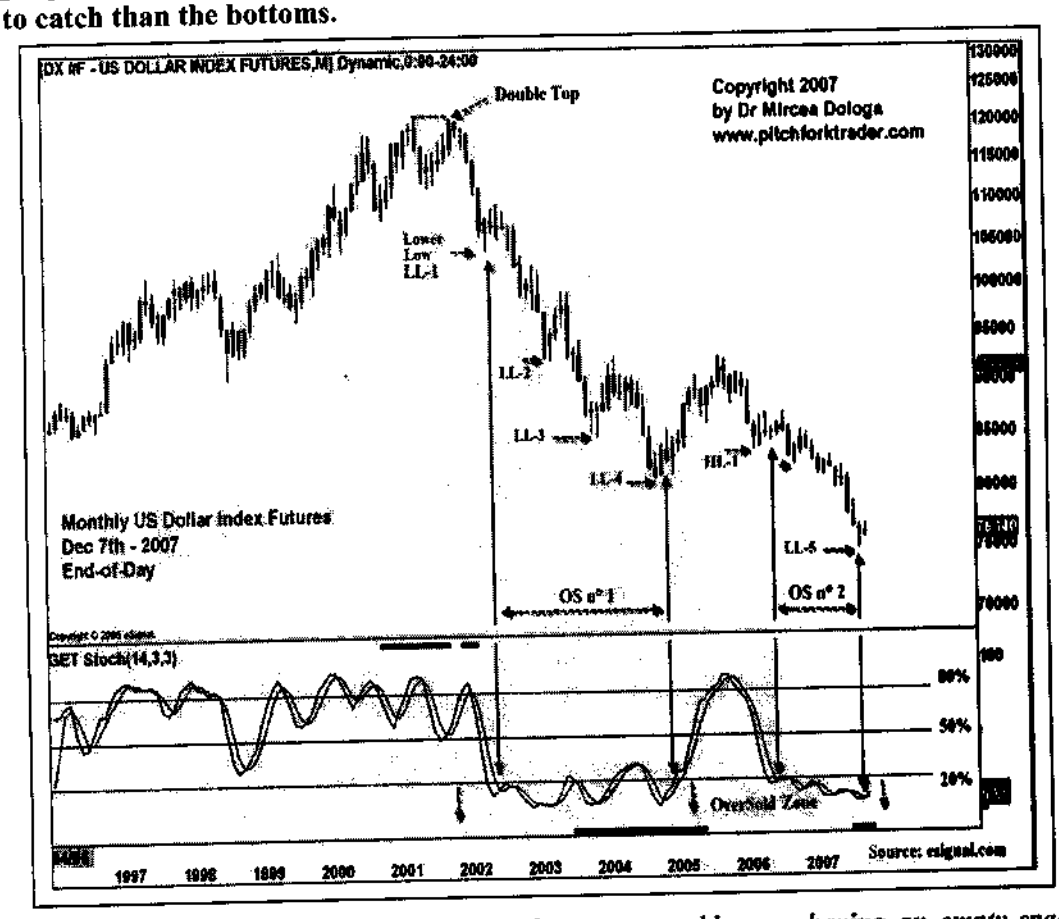


Figure 340 – *The above chart clearly illustrates the two oversold zones having an empty space in-between, which represent the corresponding correction. The Stochastics' bottoms precede, more often than not, those of the market.*

We can observe, on the above chart two oversold zones (OS n° 1 & OS n° 2). The first contains four lower lows of the price chart and the second contains just one, the LL-5. The first short entry trade was performed when the market price dropped below the LL-1 level. After that, the trader could have added contracts or perform multiple entries under each lower low (LL-2, LL-2, LL-3 and LL-4). It is very probable that the LL-5 lower low represents the bottom of this trend.

The trader can perform a long trade when the Stochastics will burst out of the 0-20 oversold zone. If this is done, the stop loss will have an optimal tiny value.

Don't neglect the possibility of a double bottom. We should remember that the double bottoms are formed on high volume, the second having a lower volume. Longer in time than the tops, the bottoms have smaller ranges, thus being easier to trade.

As they say, "The market falls under its own weight!»

5. Divergence - Reversal Tool

We remind the reader that the divergence is defined as a discrepancy between the price and the indicator, especially momentum-related indicators.

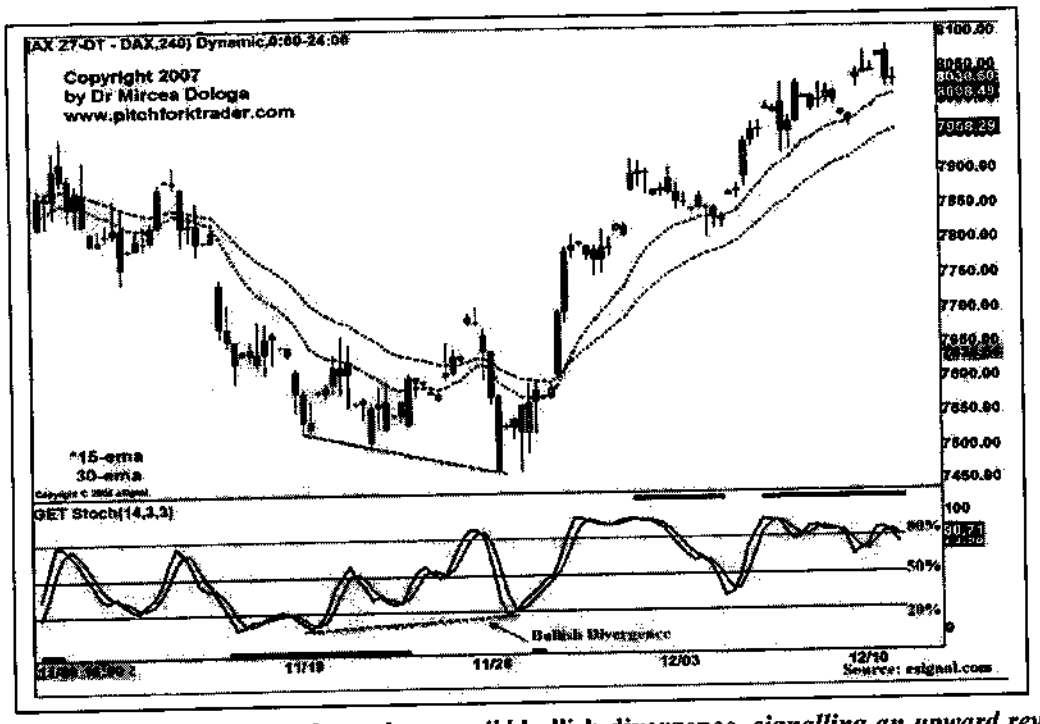


Figure 341 – *We can see on the above chart a mild* **bullish divergence**, *signalling an upward reversal. The market price has made a lower low, but the Stochastics was not able to cope with it and has made, on the contrary, a higher low. Thus, a* **bullish divergence** *is formed, which is ensued frequently by a reversal.*

Nuts-and-Bolts **concerning the** *inception* **of the up-sloping trend in chart on Figure 341: the double bottom, the upward-oriented** *Stochastics* **crossover preceding the second bottom, the bounce on the 20-level support line, the triple tests of the 30-ema, the huge volatile bar signaling the real trend's commencement, the tardy crossover of the 15- and 30-ema and finally the steep slope of the market flow associated with the 45° slope of the** *Stochastics.*

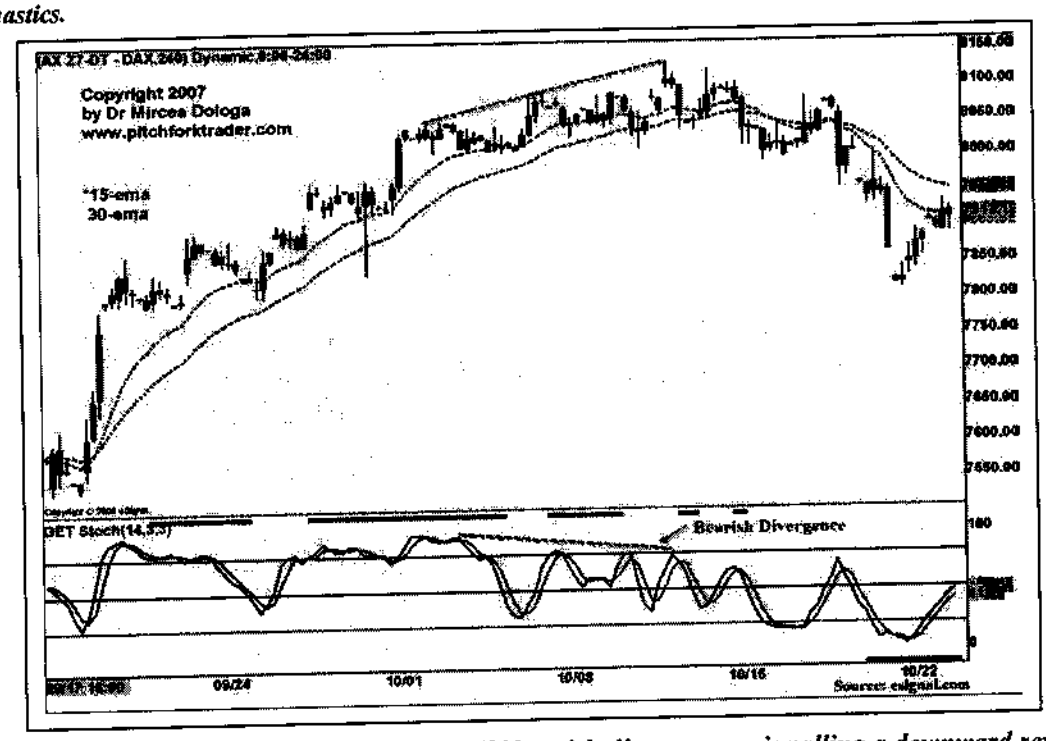


Figure 342 – *We can see on the above chart a mild* **bearish divergence**, *signalling a downward reversal. If the market price makes a higher high, but the Stochastics is not able to cope with it and makes, on the contrary, a lower high, then a bearish divergence is formed, which is ensued frequently by a reversal.*

6. GET Stochastics-Derived Reversal Signals

As we have already mentioned in *Chapter 11, sub-chapter 5*, the *Reversal Signals* were first discovered and developed by Andrew Cardwell on the RSI-derived market price charts. Constance Brown, an eminent mentor and astute trader, recently named as the *Editor of* the MTA *Journal of Technical Analysis* has gracefully taught many professional traders, not only Andrew Cardwell's RSI invaluable knowledge but also her favorite topics: the Gann, Elliott waves and the Fibonacci concepts. We warmly recommend her excellent book titled *Technical Analysis for the Trading Professional [1999].*
Along many years of trading experience, we have practiced the edge of the *Reversal Signals,* enhancing the trade's outcome by using their synergism with the local market flow pitchforks. The GET Stochastics indicator replaced the RSI due to its dual characteristics – efficient use, not only in trending but also in sideways markets. The GET Stochastics price projections guided by *Reversal Signals* take their full importance, especially in labeling the Elliott waves.

6.1 Positive Reversal Signals

We have described in the above *n° 5 sub-chapter* the *divergences* defined as a market price, which is not confirmed by the indicator. Thus between them, a discrepancy occurs.

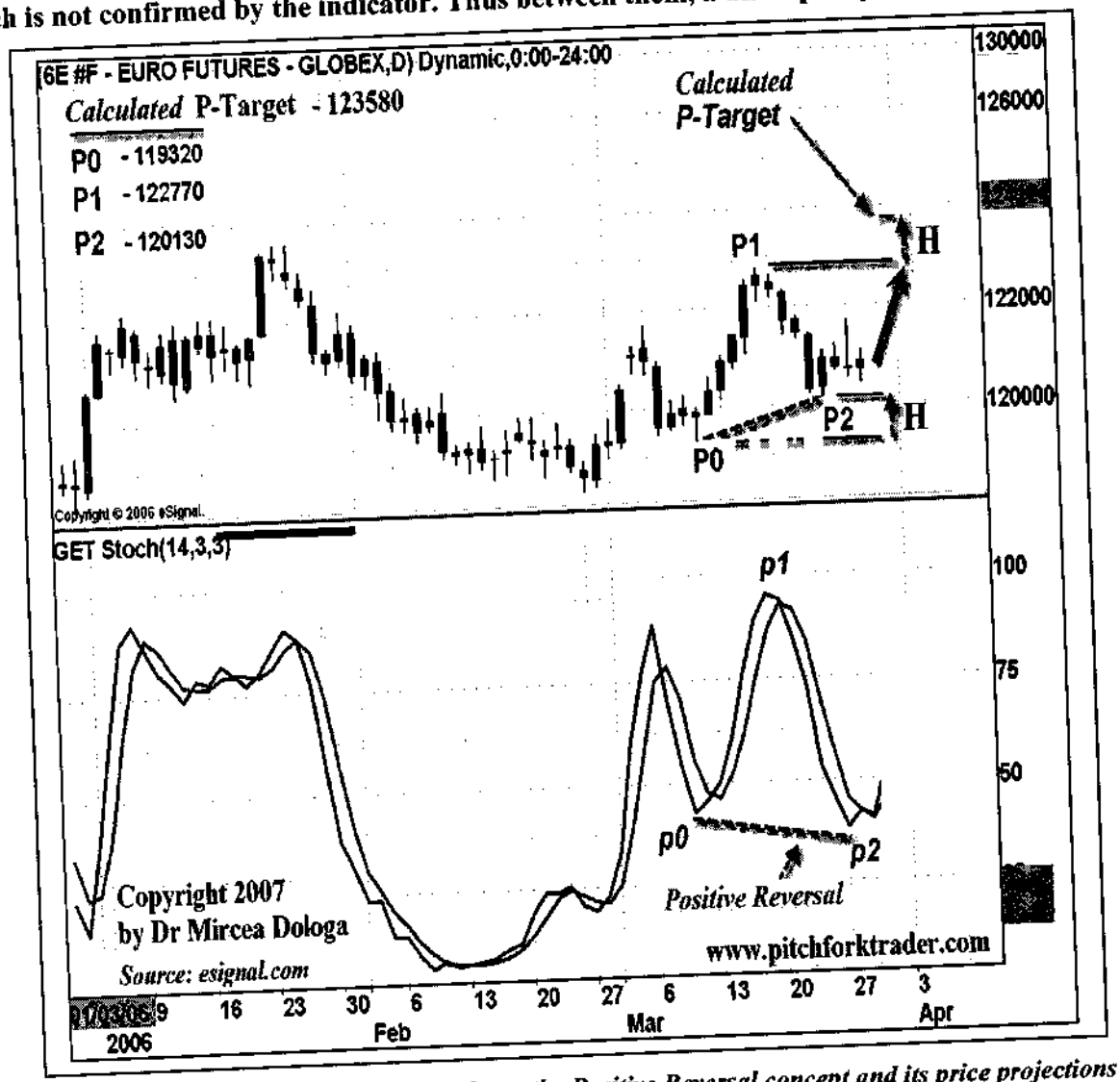


Figure 343 – *The above chart precisely shows the Positive Reversal concept and its price projections*

The Positive Reversal is formed when the indicator creates a lower low level (*p2*) while the market price evolves to a higher high level (*P2*) - refer to the *Figure 343 & 344*. The signal intensity isn't stronger if it occurs in the extreme *overbought/oversold* zones. Moreover, this visual set-up allows the trader to efficiently project the market price, which is currently elevating. For that, it suffices to subtract the value of the market price *P0* level corresponding to the *p0-indicator* level, from the *P2* level value corresponding to the *p2-indicator* level. The obtained result (H) is to be added to the *P1* market price level, corresponding to the *p1 indicator* level. Thus, there is a high probability that the market flow will climb, all the way to this projected price level (*calculated* P-Target).

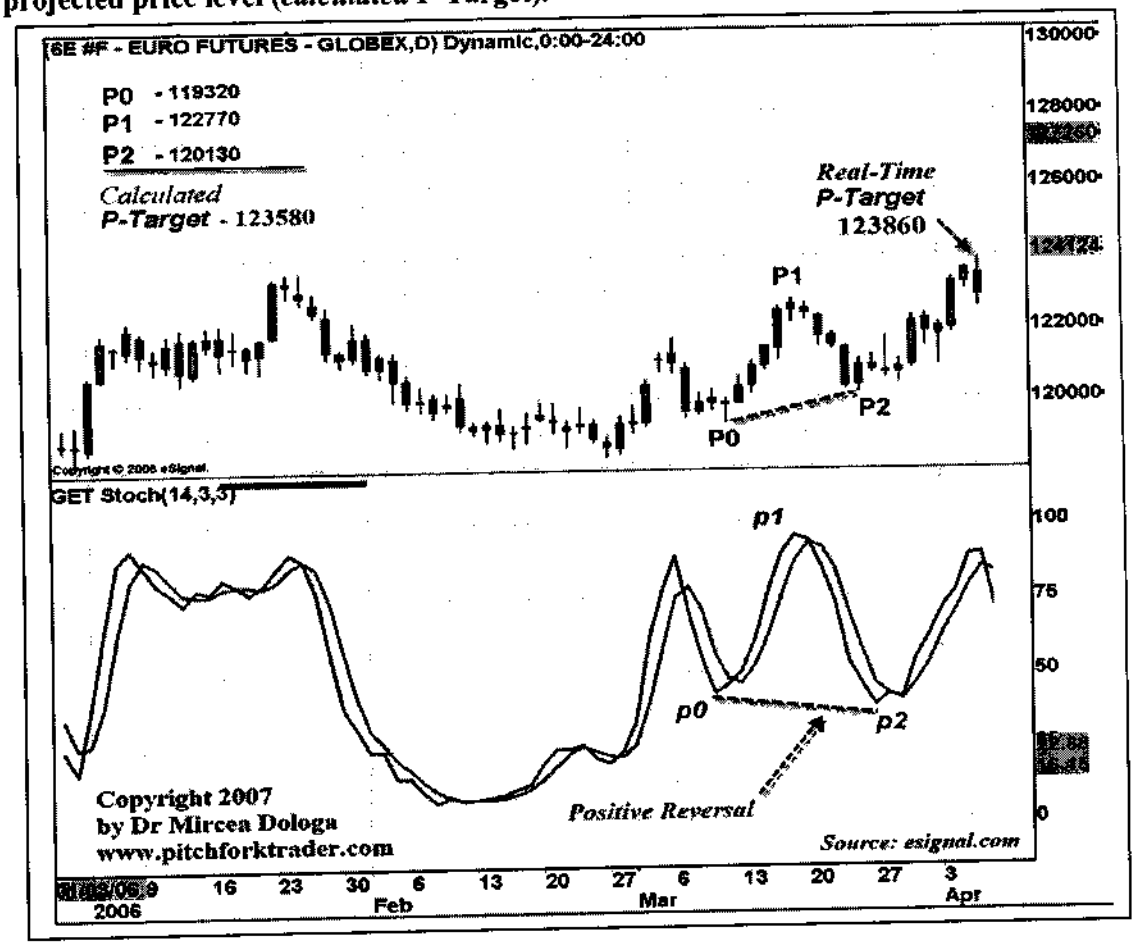


Figure 344 – *The above* Euro/US Dollar Futures *chart continued the prior chart and it precisely showed the Positive Reversal concept and its real-time projected price. The* calculated P-Target *is fully described in Appendix n°2. The Excel spreadsheet can be graciously obtained from the author at mircdologa@yahoo.com The difference between the calculated projected price* (123580) *and the real-time price* (123860) *is only 0.23%, which certainly gives the trader an edge over the crowd.*

6.2 Negative Reversal Signals

The Negative Reversal is formed when the indicator creates a higher high level (*p2*) while the market price drops to a lower high level (*P2*) - refer to the *Figure 345* and *346*. The signal intensity isn't stronger if it occurs in the extreme *overbought/oversold* zones. Moreover, this visual set-up allows the trader to efficiently project the market price, which is currently going south. For that, it suffices to subtract the value of the market price *P2* level corresponding to the *p2-indicator* level, from the *P0* level value corresponding to the *p0-indicator* level. The obtained result (H) is to be subtracted from the *P1* market price level, corresponding to the *p1-indicator* level. Thus, there is a high probability that the market flow will fall, all the way to this projected price level (*calculated* P-Target).

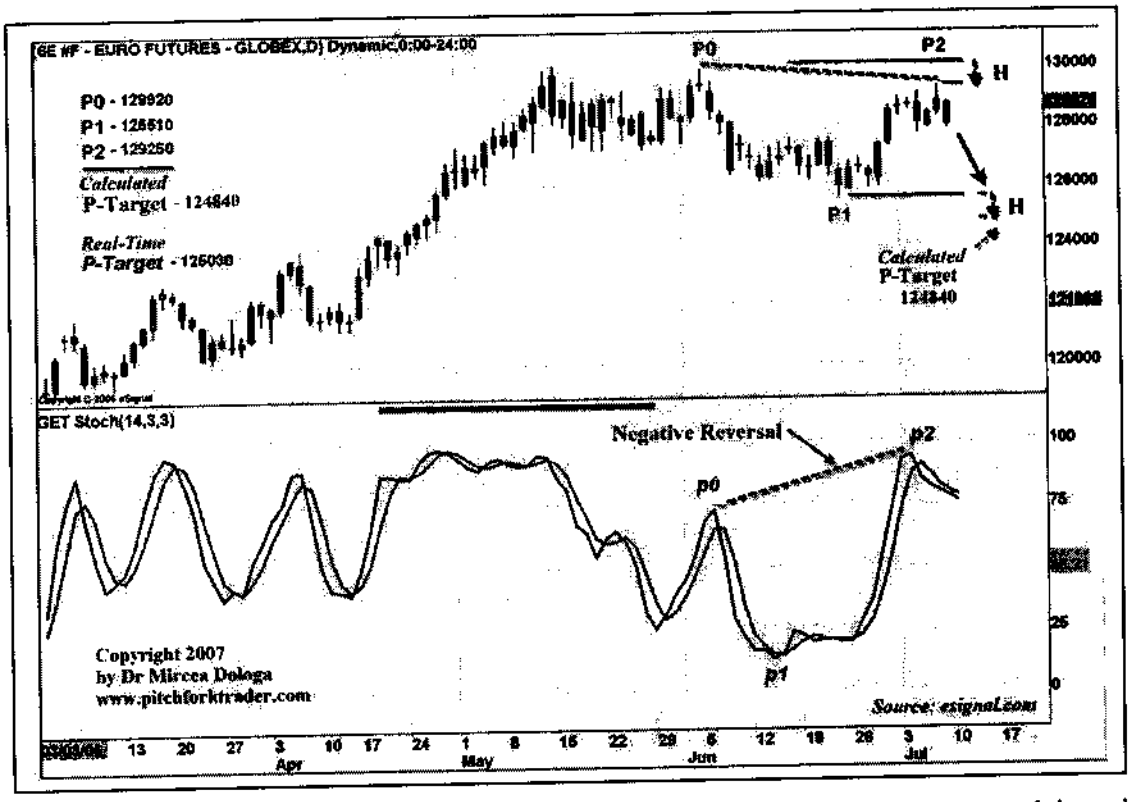


Figure 345 – *The above chart precisely shows the Negative Reversal concept and its price projections.*

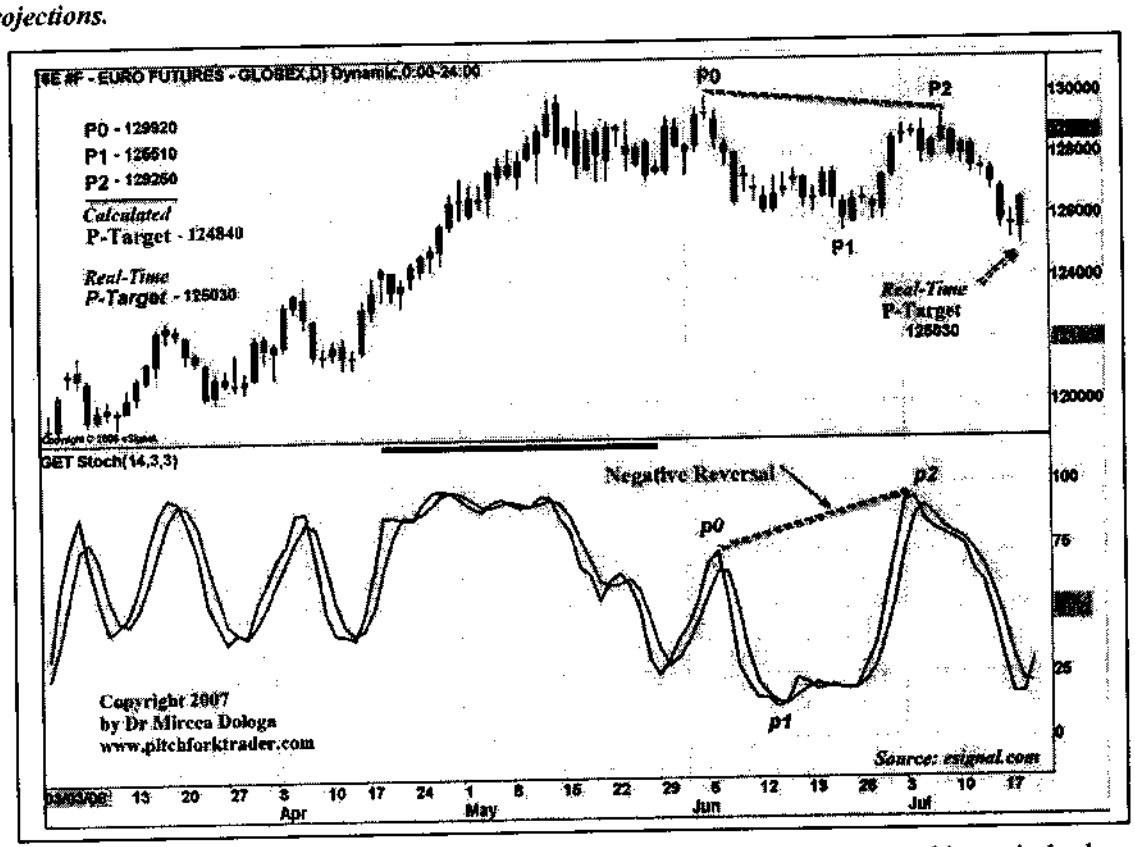


Figure 346 – *The above* **Euro/US Dollar Futures** *chart continued the prior chart and it precisely showed the Negative Reversal concept and its real-time projected price. The* **calculated P-Target** *is fully described in Appendix n°2. The difference between the calculated projected price* **(124840)** *and the real-time price* **(125030)** *is only 0.15%, which certainly gives the trader an edge over the crowd.*

6.3 *Positive Reversal Signal and Pitchfork Synergism*

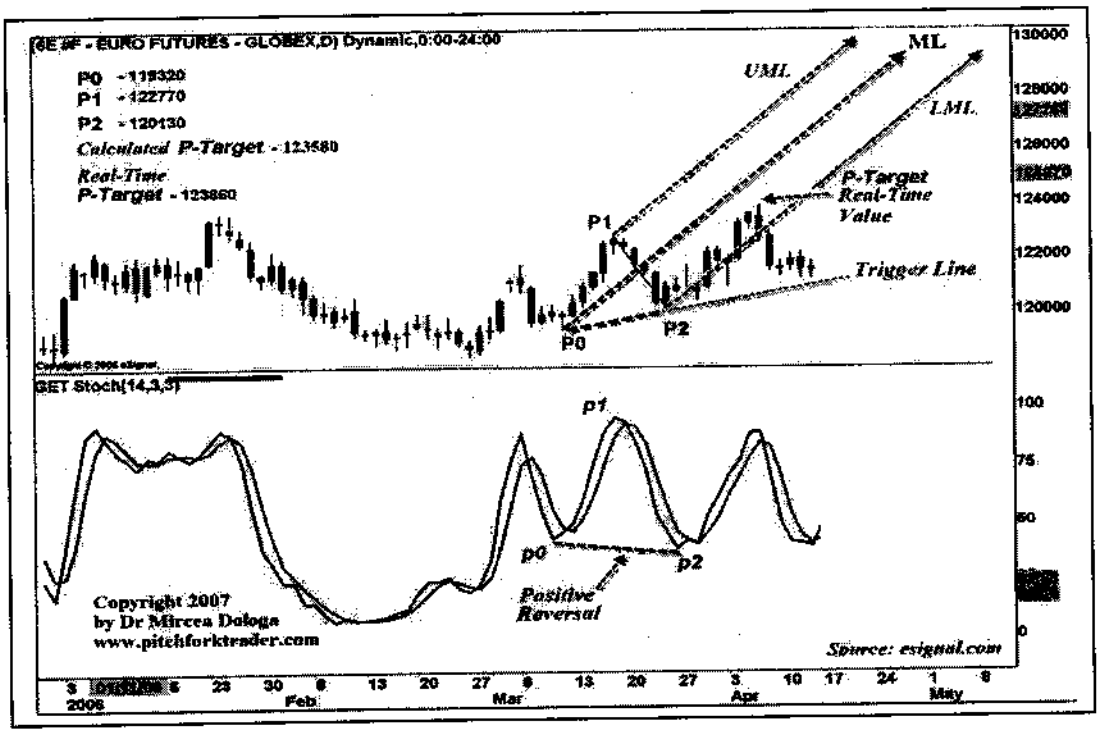


Figure 347 – *The above* **Euro/US Dollar Futures** *chart continued the chart in Figure 344 and it precisely showed the synergism between the Positive Reversal and the ascending pitchfork. We see that the market price failed its ascension because it couldn't reach the median line (ML). The trader could use this up-sloping failure to his/her advantage by using the Hagopian rule* **(refer to Chapter 8, sub-chapter 2.1).** *An eventual test and re-test of the trigger line will be an excellent hint for an* **entry.**

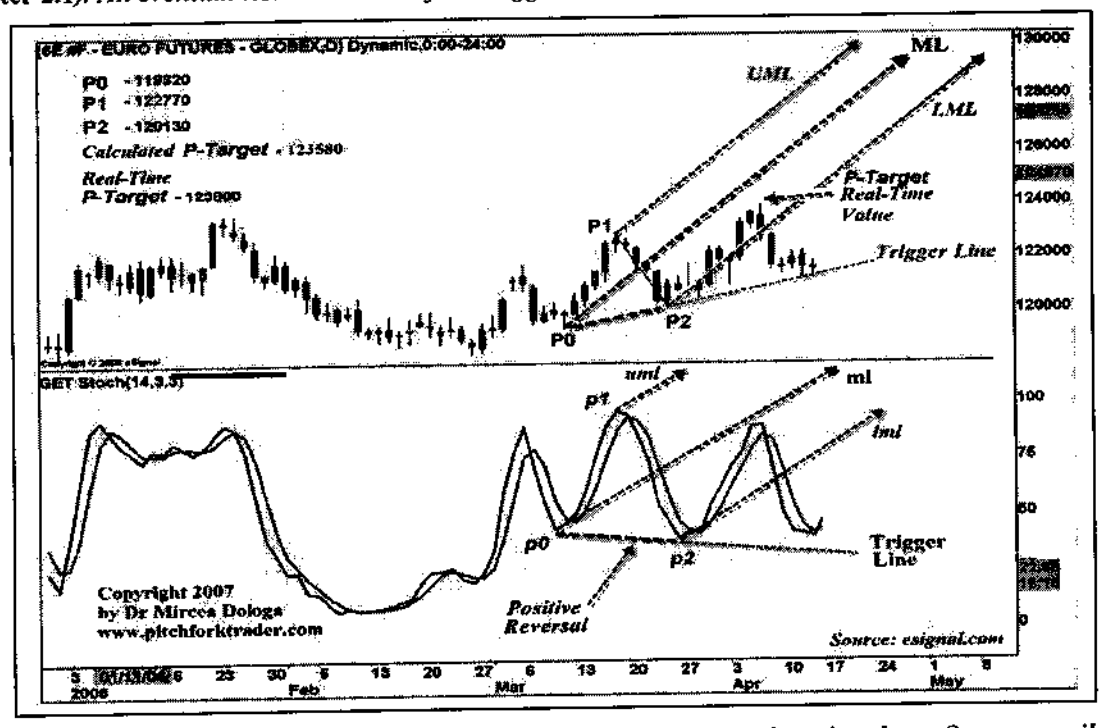


Figure 348 – *The above* **Euro/US Dollar Futures** *chart is the same as the prior chart. One can easily see that the* **added** *up-sloping pitchfork of the Positive Reversal on the indicator's chart, not only corroborates a trade entry around the LML or at the trigger line level, guided by the Hagopian rule, but also emphasizes the visualization process. The market price failure is better visualized on the GET Stochastics chart. Its last crossover signals a very probable bounce on the trigger line.*

6.4 *Negative Reversal Signal and Pitchfork Synergism*

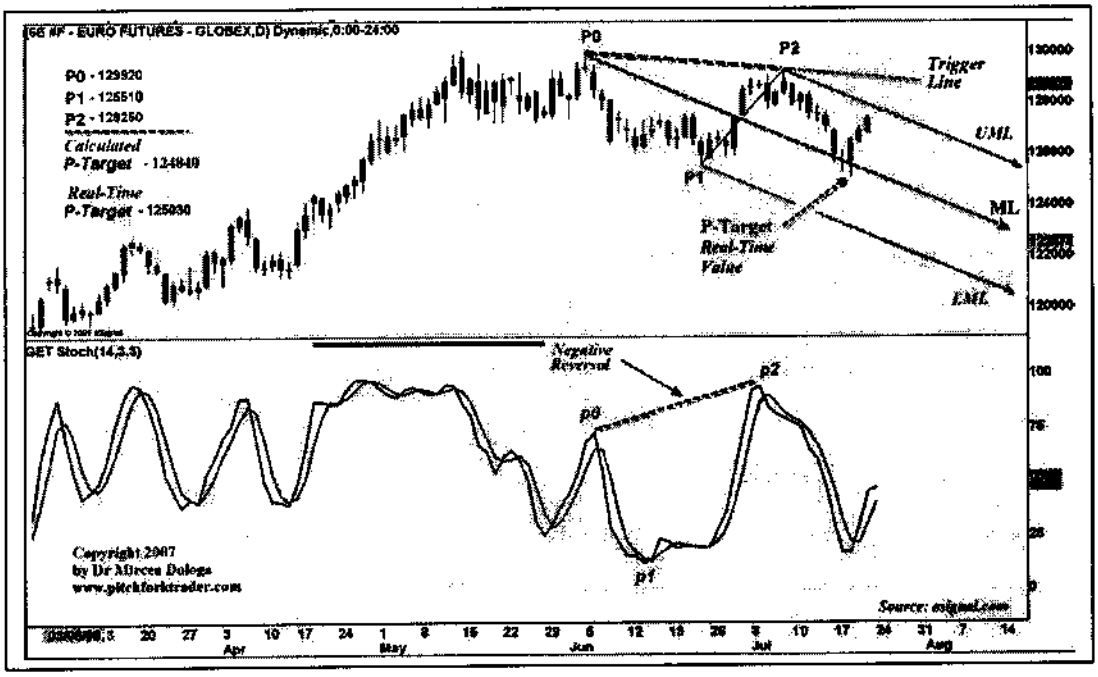


Figure 349 – *The above* **Euro/US Dollar Futures** *chart continued the chart in Figure 346 and it precisely showed the synergism between the Negative Reversal and the down-sloping pitchfork. We see that the market price has been strongly attracted by the magnet-like power of the median line (ML) and then, it bounced on it. The trader could use this test and re-test of the ML as a long entry. An eventual test and re-test of the upper median line (UML) and/or trigger line will be an excellent hint for a long add-on re-entry.*

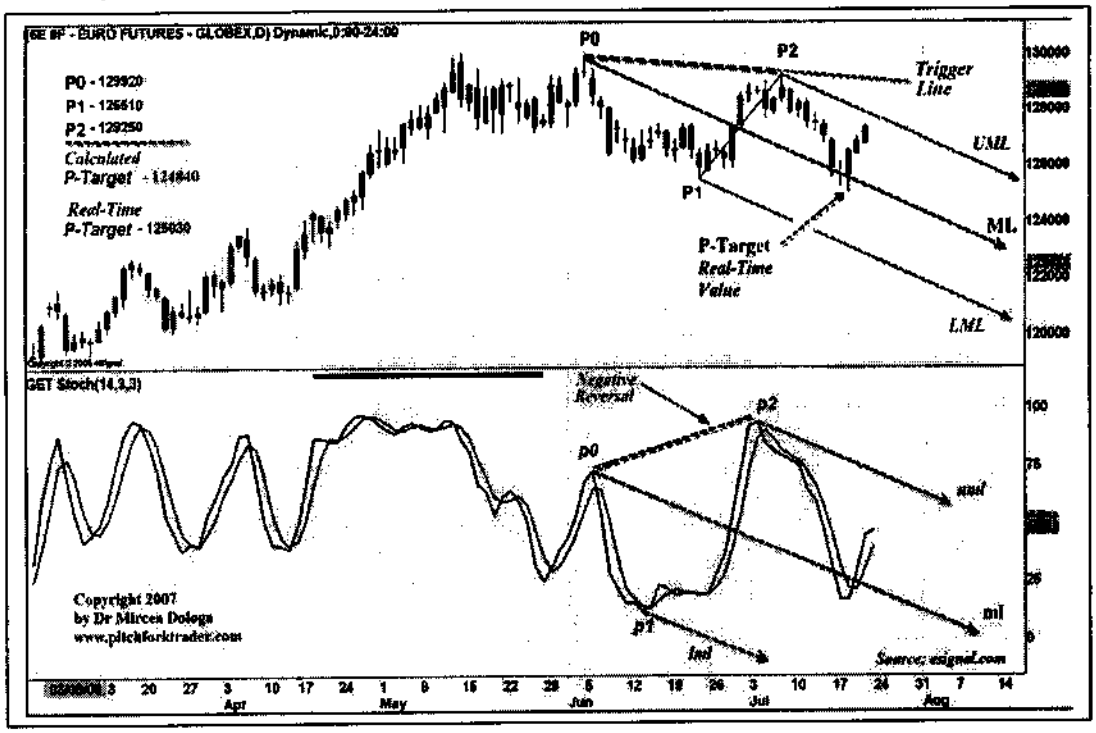


Figure 350 – *The above* **Euro/US Dollar Futures** *chart is the same as the prior chart. One can easily see that the* **added** *ascending pitchfork of the Negative Reversal on the indicator's chart not only corroborates a long entry guided by the bounce on the median line (ML) of the down-sloping pitchfork but also emphasizes the visualization process. The last crossover on the GET Stochastics chart certainly emphasizes the confirmation of the long trade.*

7 Failure Swings - Divergence Enhancement Factor

The failure swings occurring with *Stochastics* indicator are very similar to those already described with RSI indicator (*refer to Chapter 11, subchapter 5*).

The failure swings occur when the *Stochastics* indicator exceeds its previous extreme level, whether that is (*top or bottom*), it corrects it and then heads straight for the old extreme level but fails to exceed it. In this context, only if the market price has exceeded or equaled its prior extreme point, we would plead for a divergence.

The failure swings have an important role in confirming, *in a way*, the strength of the divergence, when they occur together but a swing failure doesn't require a divergence. In case of a concomitant occurrence, they follow the divergence and inform about its character and also about its future influence on the trend's reversal.

8 Resistance and Support Identification

Due to its own construction, the *Stochastics* chart represents also a gold mine for the professionally trained trader... with one condition... To use it only as a confirmation signal! It is well known that the most important key level is the 50-level line. It represents the frontier between the up and down-sloping trend movement.

The 80 and 20 levels closely guard the passage to the overbought and oversold zones, respectively. We remind you that the market flow, more often than not, it will firstly test these zones giving a warning signal. Only at the second or even the third try it will penetrate them.

Even if the following common concept is still valid for some traders and call it "*the Noise Kingdom*", we can assure you that the *80-20 "no man's land"* zone is very useful for trading.

Always be on the quest for a round bounce or a hook strongly supported by the 50-level line.

9 Patterns on Stochastics Chart

9.1 Stochastics Rectangles – EuroStoxx 50 Chart

Figure 351 – *We can see on the right side chart the pre-open preparation mainly based on the chart rectangles, their extensions and the synchronism that has occurred with the rectangle on the* Stochastics *chart.*
It's very important to notice that the two rectangle types have already lasted four hours, during the immediate past period.
The time length will not indicate the future direction of the market flow but it will certainly signal the intensity of an eventual breakout that is very probable to occur, early in the opening, or during the day.
Be on the watch for the breakout of upper or lower borders of both rectangles.

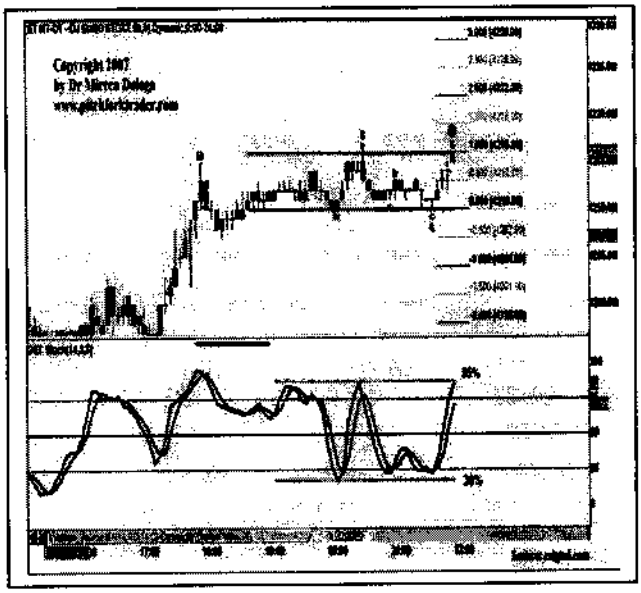


Figure 352 – *As we have anticipated the opening gap broke out the initial rectangle's lower border and bounced on the 50%-level line. During the first hour, the market flow seems to hesitate as for the direction it wants to consider.*
Even if the market price has fluctuated during this hour from the opening gap to its second lower extension [OG(-2)] the Stochastics *chart has still remained resident in the 80 to 20% zone.*
This is a textbook example, where the breakout of a chart rectangle doesn't really impose a trade entry unless the Stochastics penetrate into OB/OS zones.

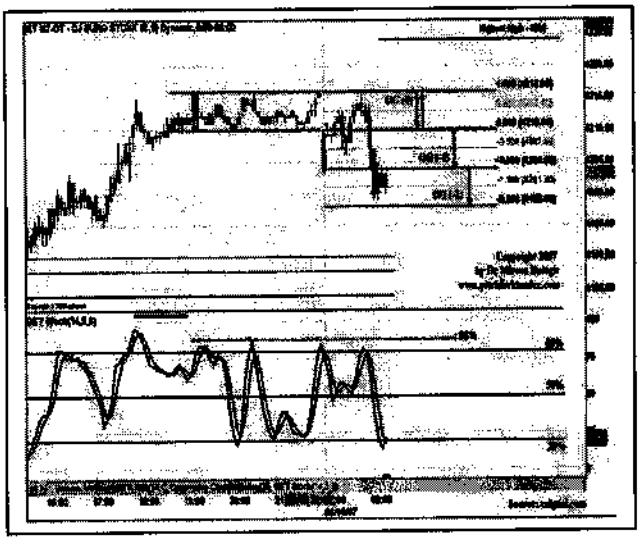


Figure 353 – *We can see on the right side that the 20-level line hook of the previous chart was a strong entry signal because it is also the fourth bottom that bounced on the 20-level line. Moreover, the zooming through the 50%-level line has comforted.*
However, the trader must work with a tight stop loss until the market flow is home free, just above the day's high at 4216 key level.
Our immediate tasks are to carefully watch: the bounce or the penetration of the TL-1a trend line and the Stochastics *behaviour in the proximity of the 80% to 85%-level line.*

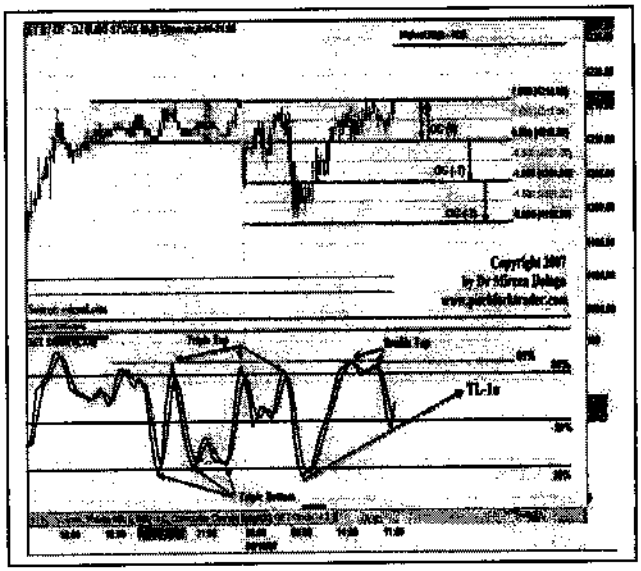


Figure 354 – *As we have anticipated the market flow has not only broken out the day's highest high at 4216 key level but has also climbed all the way to the contract's highest high at 4224 key level* **Will the trend continue?** *For the moment we are in the overbought zone. In order to be aware, as soon as possible, that there might be a change in trend, we have drawn TL-01a & TL-01b, which will serve as land markings. Their trespassing will be progressive, and we will be able to immediately react. We should have another plausible add-on level* **when & if** *the market flow will break out the contract's highest high above 4225 key level (4224+1).*

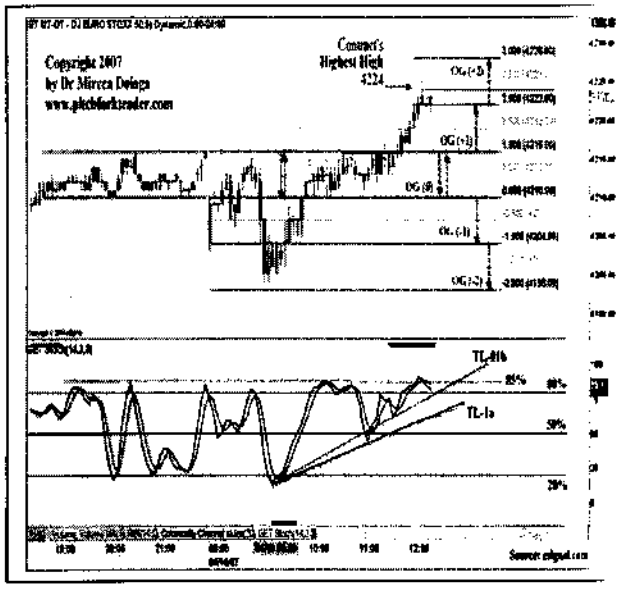


Figure 355 – *We can see on the right side that the market got stuck right on the contract's highest high at 4225 key level, and formed a 14-bar trading range. The time is now 13:00hrs, right in the middle of the midday doldrums. Be on the watch for a volatile breakout, right after 14:00hrs.*

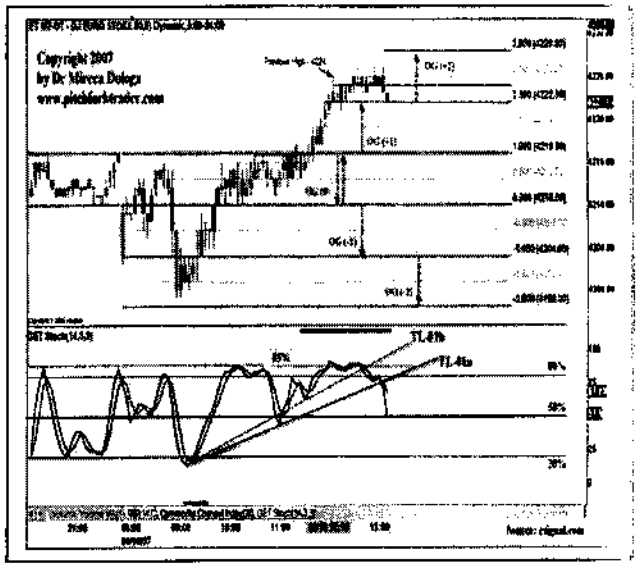
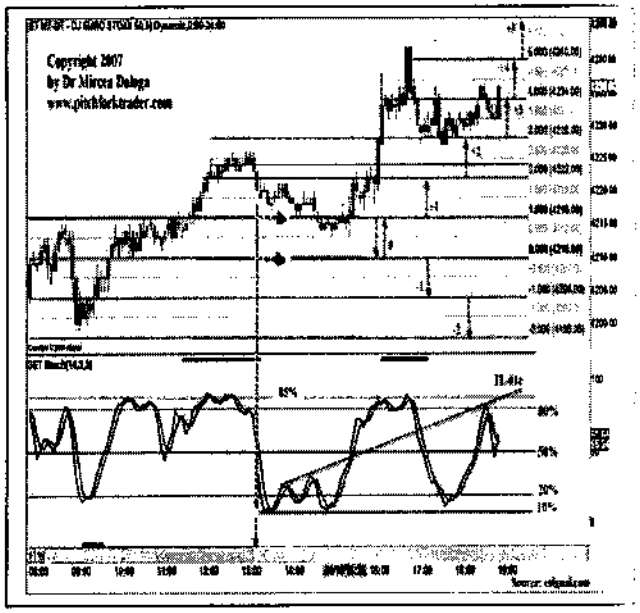


Figure 356 – *We can see on the right side that as we have anticipated the market flow dropped until the mid-line of the inception rectangle at 4213 level. The next low-risk high-probability trade has occurred at the opening of the S&P 500 market at 15:30hrs CET, the equivalent of the 09:30hrs US ET.*
The market price broke-up through the higher border of the inception rectangle at the 4216 key level. After it has made a double bottom, the **Stochastics** *left the oversold zone, breaching the 20-level line, and zooming through the 50-level line.*
Again the old contract's highest high at 4224 level could have served as an add-on opportunity.



9.2 *Stochastics Channelling & Rectangles*

Figure 357 – *We can see on the right side the* **dual channelling** *on market price's and* **Stochastics'** *charts, which will greatly assist the trader in his decision taking process.*
The pre-open preparation illustrates that the market price reached the 550% extension of the inception rectangle, terminating with a doji candle. The TL-b trend line halted the market flow.
The **Stochastics** *was cruising, right under the 100%-level line, testing it several times.*
The breakdown of the 80%-level line will certainly signal the trend's reversal with a consistent price drop.

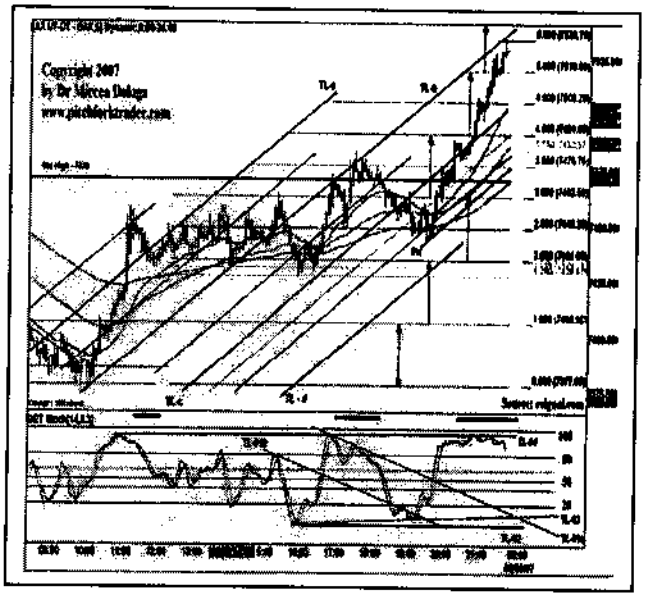


Figure 358 – *We can see on the right side that as we have anticipated the market price dropped through the mechanism of an opening down-gap.*
The TL-c trend line was breached and the **Stochastics** *indicator reached the oversold zone.*
We must be on the watch for a strong support by the Stochastics' TL-02 trend line.
The opening gap represents a breakout type gap, which has a strong potential in enhancing the downward momentum of the trend. Thus, it is very probable that the down-move will continue.

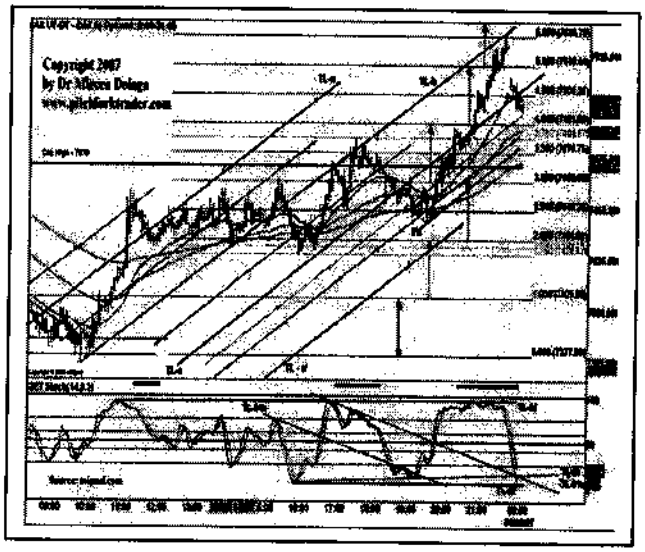
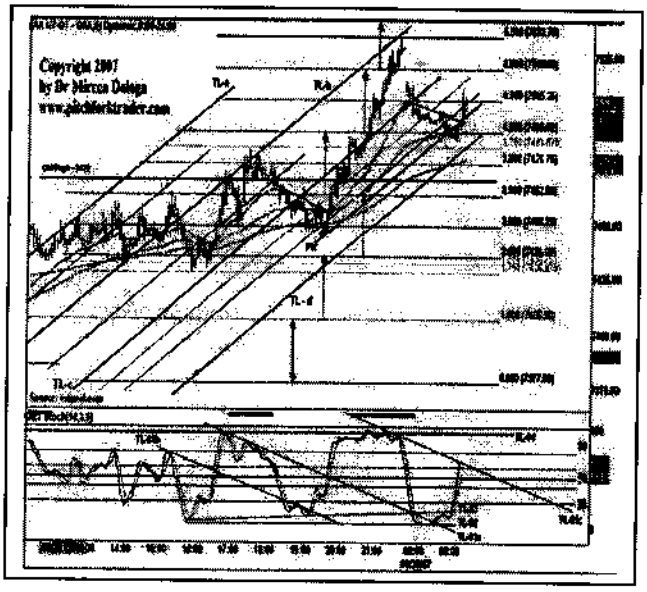


Figure 359 – *We can see on the right side that as we have anticipated the market flow has dropped farther. It was finally halted by the 400% extension of the rectangle and by the TL-02 line on the* **Stochastics** *chart.*
What will happen further?
Upwards, on the price chart, the borders of the gap are very strong resistances, especially because they coincide with the 61.8 retracement level. Downwards, the TL-d slant trend line might firstly halt the market price and then shortly followed by the old high 7470 key level.
As for the **Stochastics'** *probable future behaviour we mention upwards the 80 level, the TL-04 & down the 20 level.*



9.3 *False Stochastics Flexibility – Synchronism of Dual Pitchforks*

Figure 360 – *We can see on the right side that the construction of dual pitchforks: the P0-P1-P2 market price formation and the p0-p1-p2* **Stochastics** *formation.*
It was possible to concomitantly draw them as the P2 & p2 pivots have occurred.
So far, the market flow fully obeys the median line's (ML) resistance role.
As for the **Stochastics** *behaviour, the indicator has cruised upward until it has reached the overbought zone.*
Will the market continue its up-trend?
Be on the watch for 80%-level line breakout and for the occurrence of a drop off the ML… and you'll have the answer!
Watch also for the interruption or not of the **False Stochastics** *marking line, located just above the 100%-level line.*

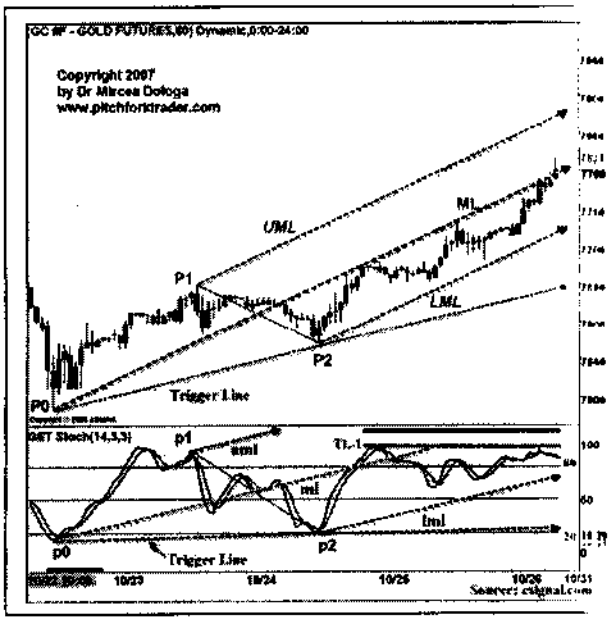


Figure 361 – *We can see on the right side that as we have anticipated the market has continued its up-sloping trend. The* **Stochastics** *marking line has continued its expansion, meaning that the up-sloping market could still continue… or isn't the rubber band too extended?*
However, the trader must be vigilant and suspect an imminent probable reversal, which could be signalled by: the extended 66-bar up trend, where 66 represents a 10 times multiple of the symbolic n° 6, the reversal pattern of the last bar, the down hook of the **Stochastics** *off the 100%-level line (also TL-1 trend line) and the breakout of the lower median line (lml) of the Stochastics' up-sloping pitchfork.*

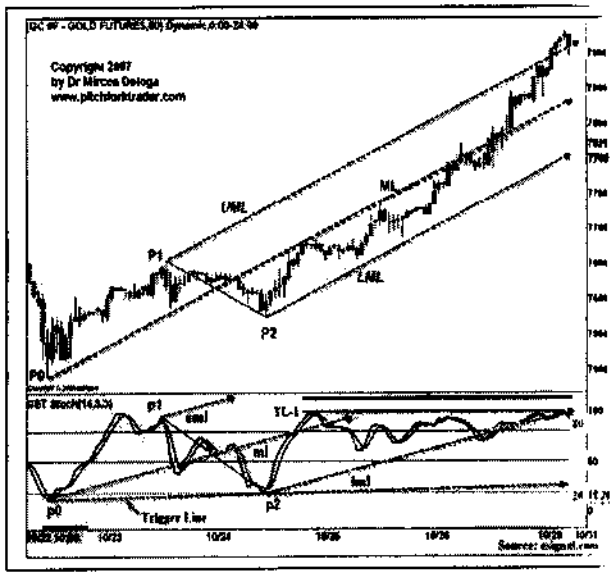
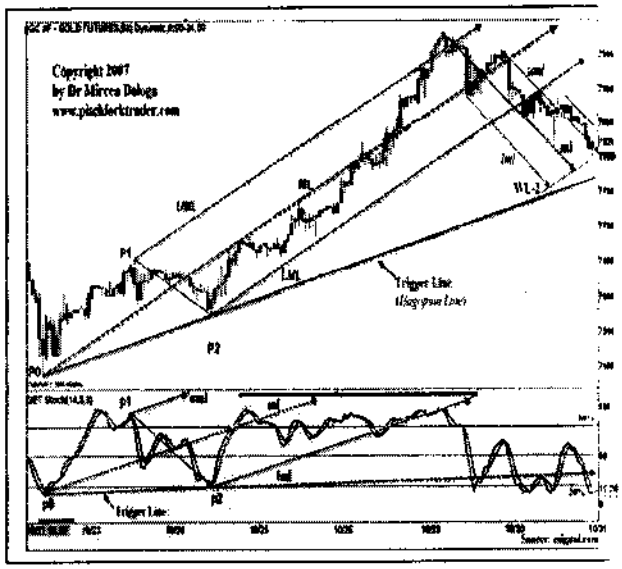


Figure 362 – *We can see on the right side that as we have anticipated the market flow has suddenly reversed and it has dropped farther. This is a textbook example of the "***rubber band***" effect with a splendid reversal. We have drawn a down-sloping minor pitchfork that will greatly assist the trader in optimally describing the local market flow.*
If the market doesn't reach in its fall the trigger line of the chart's major pitchfork, then we have a down-sloping failure obeying the Hagopian rule. The down-momentum will be suddenly cut-off and the counter move will be more powerful than the initial approach.



10 Elliott Waves Labelling Confirmation by Stochastics Indicator

10.1 Impulsive Pattern - W1 to W5

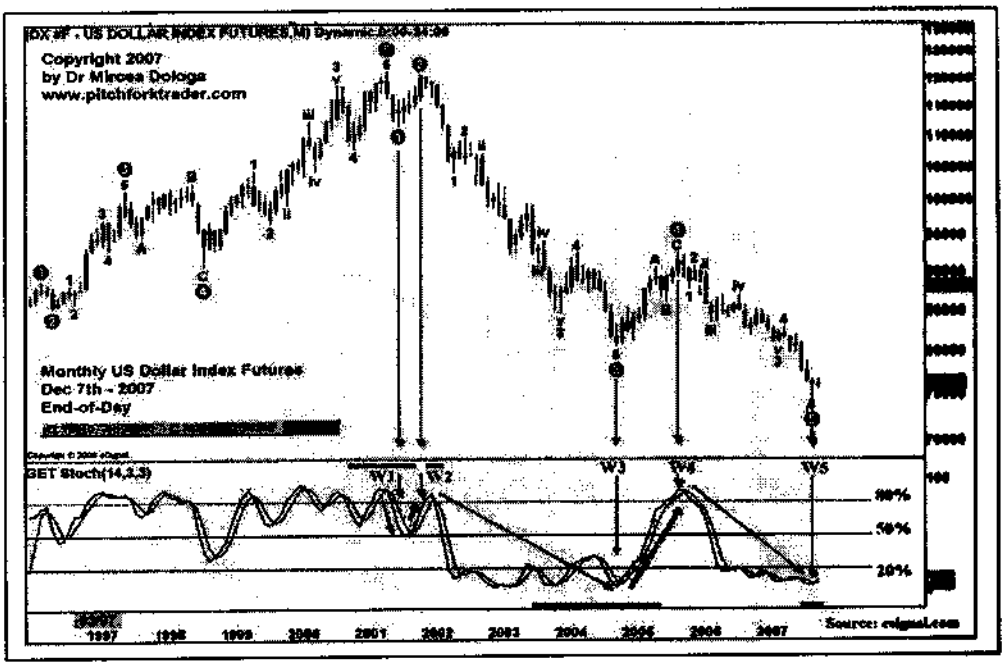


Figure 363 – ***The above chart illustrates the relationships that exist among the formation of the Elliott waves and their sub-waves and the corresponding support and resistance levels developed on the*** **Stochastics** ***chart. One can observe the almost perfect synchronism that is formed: the W1 is halted by the 50%-level line; the W2 can't retrace anymore due to the intervention of the 80%-level line, it bounces on it and starts the W3; the W3 gets exhausted in the oversold zone (***again the "rubber band" effect***); the short 33% W4 price retracement signals a very strong "would be" W5; the W5 takes off from the overbought zone and drops, all the way down to oversold zone.***

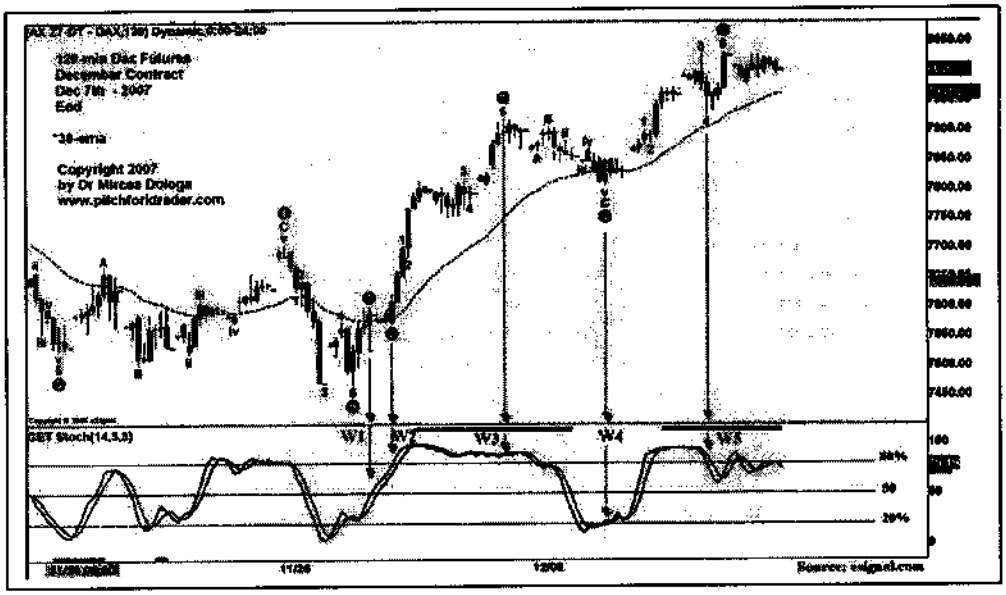


Figure 364 – ***The above chart illustrates the relationships that exist between the formation of the Elliott waves and*** **Stochastics.** ***We can observe not only the corresponding support & resistance levels but also the efficient up trend revealing by the two marking lines located above the 100%-level of the*** **False Stochastics.** ***The space between the two marking lines is consecrated to W4.***

10.2 Wave 3

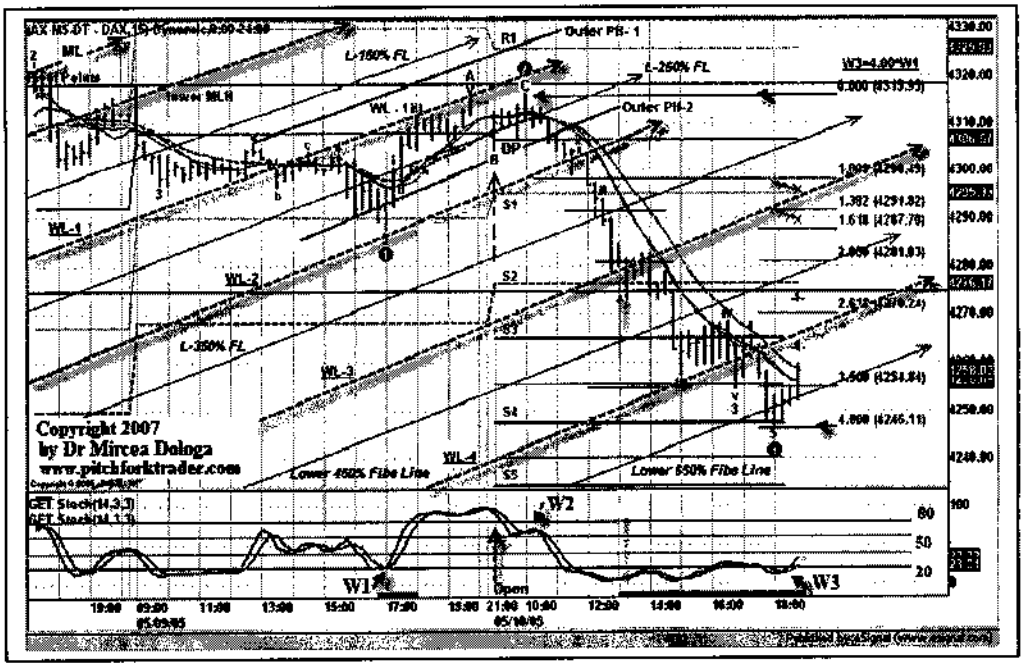


Figure 365 – ***The above chart illustrates the relationships that exist among the formation of the W1 to W3 Elliott waves and the corresponding key levels developed on the* Stochastics *chart. One can observe the almost perfect synchronism that is formed: the W1 is halted by the 20%-level line; the W2 can't retrace more due to the intervention of the 80%-level line, it fails to reach it and then drops, thus starting the downward W3; the elongated W3 (*W3=4.00*W1*) *has quickly become oversold and started to cruise within the oversold zone; a probable W4 embryo seems to be born, just after labelling the W3. The 20%-level break-up & oversold zone burst-out might help!***

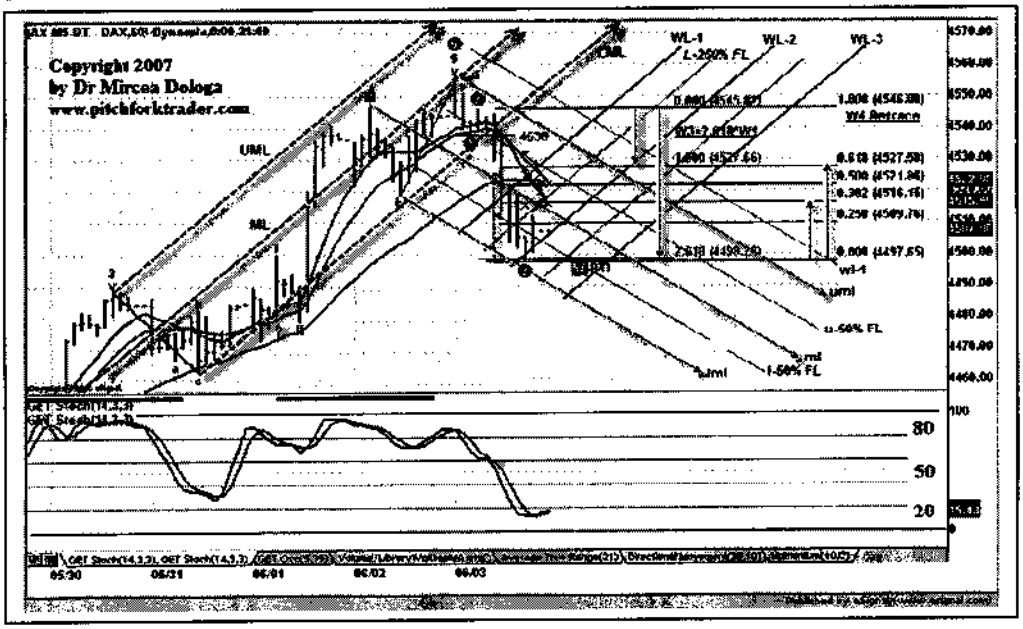


Figure 366 – ***The above chart illustrates the W3 relationship with the corresponding key levels developed on the* Stochastics *chart. At this development stage, the W3 has reached the 2.618 extension (*W3=2.618*W1*). *The overbought zone has already been reached and the down-pitchfork has optimally described the market flow, so far. The OS zone burst out signals the W4 inception.***

10.3 Market's Decision: What will it be... Wave 4 or Wave 5?

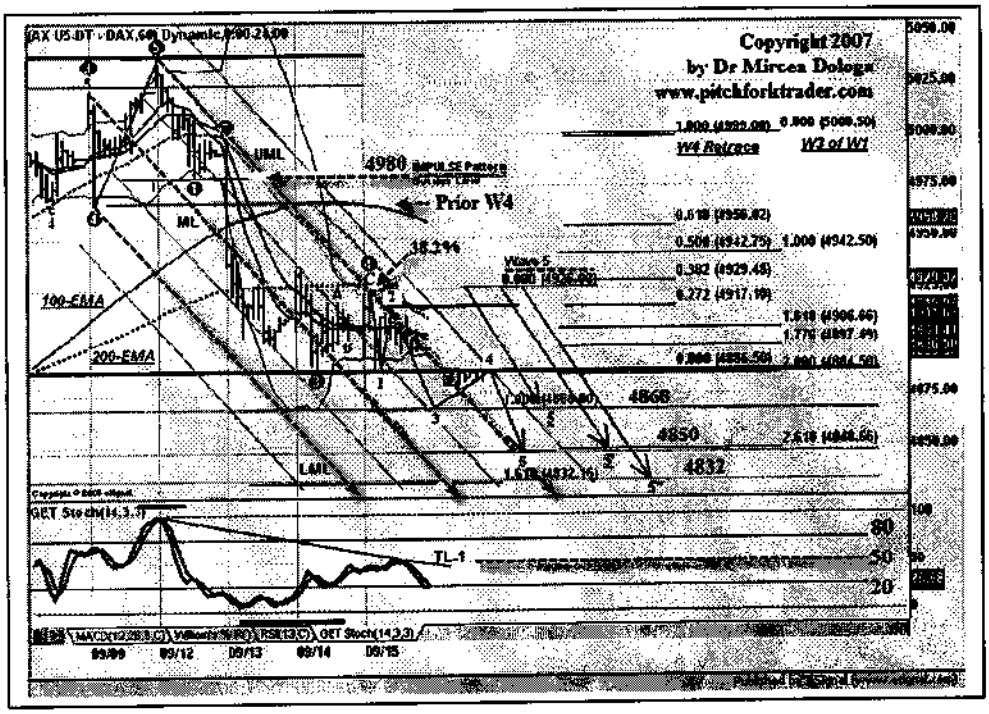


Figure 367 – *The above chart illustrates the probable occurrence of the W5, considering that the W4 correction has already terminated at the 38.2% retracement. The projections of the W5 must remain under* Stochastics' *TL-1 trend line. They could successively drop to 4868, 4850 or 4832 key levels. In case that the W4 is not terminated yet, the W4 can retrace maximum, all the way up to 4980 key level, which represents the W4/W1 overlapping border. If this retracement level is exceeded the down-sloping impulsive pattern is negated. The lower level of the prior pattern's W4 could halt this eventual correction.*

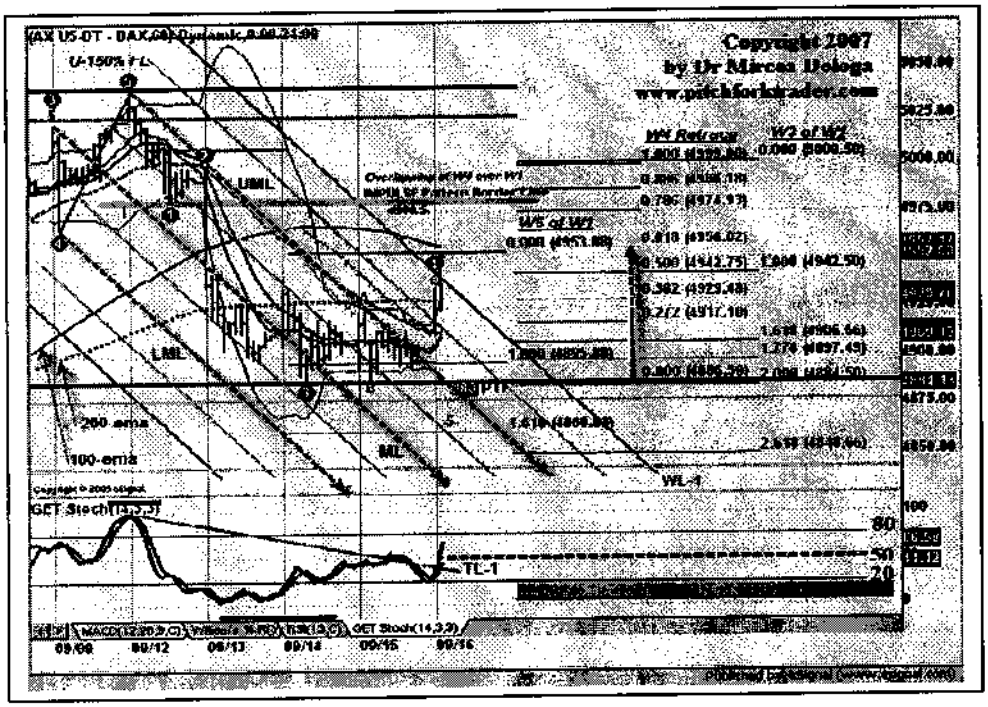


Figure 368– *The above chart illustrates the continuation of the preceding chart. The W4 decided to retrace farther than the 38.2% key level. It has attained now the 61.8% correction at 4953-4956 key level zone. The W4/W1 overlapping border is still 24 points away. The* Stochastics *indicator firstly bounced on the 20-level line and then broke up the TL-1 trend line.*

Figure 369 – *The right side chart continues the prior chart. The W4 slightly exceeded the overlapping border. The market flow just pierced the border and then quickly retraced. However, for Futures trading is commonly allowed a maximum of 17% excess. The reversal pattern is a textbook example. Moreover, an inside bar has been created signalling once more, the reversal. The C-wave of W4 became 2.382*A-wave… W5 is on its way!*

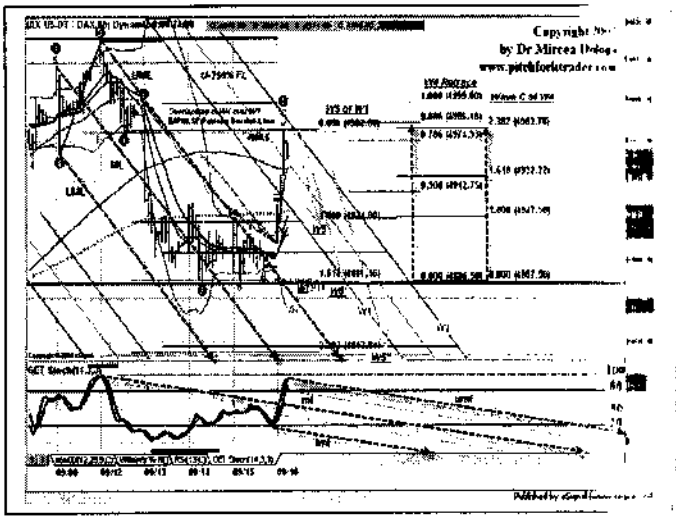
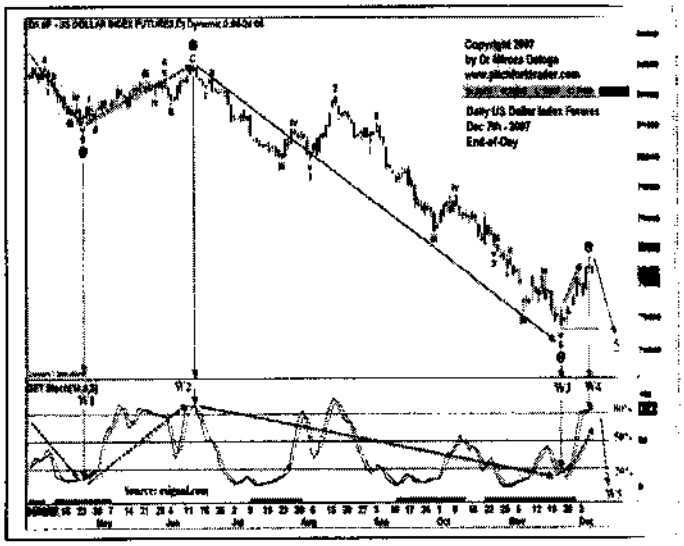


Figure 370 – *The right side chart shows a down sloping impulsive pattern with the formation of W4. The* **Stochastics** *reached the overbought zone and is currently preparing for a reversal, so that it can start the W5 formation.*
The very short 27.2% W4 price correction signalled that the trend is impatient to continue its down-sloping drop. This is an indirect way of evaluating the strength of trend's down-sloping momentum.



11 Real-Time Case Studies

11.1 Precocious Stochastics' Pitchfork & Opening Gap - German Dax 30 Chart

Figure 371 – *The right side chart unveils a strategic pre-open preparation. The* **Stochastics'** *pitchfork is drawn since yesterday's immediate past, around 19:15hrs and the market price's pitchfork was drawn, after the termination of the opening bar.*
The market is downward-oriented, the two pitchforks are set, and now… we are waiting for the filling of the down-gap, or on the contrary, a farther fall.
As long as the **Stochastics** *remains oversold, we are falling!*

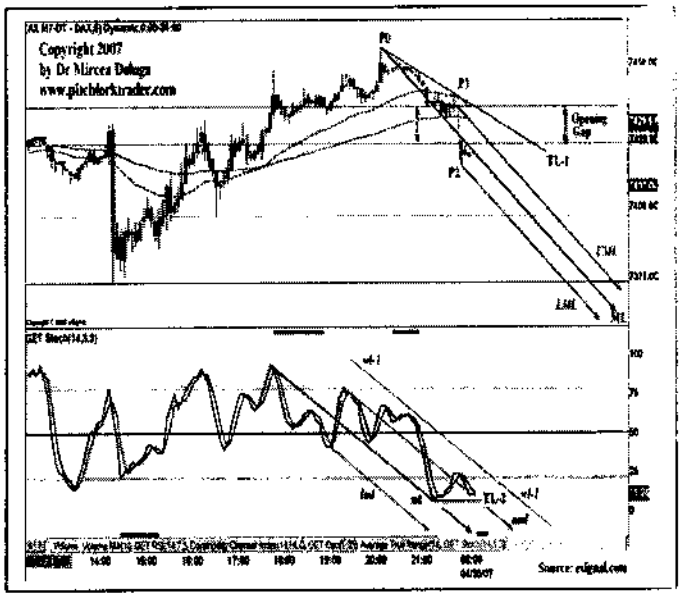


Figure 372 – *The right side chart continues the previous chart.*
The market price dropped farther, and the Stochastics *continued its horizontal oversold zone cruising.*
Always be on the watch for anticipating the market next moves... both sides! Don't bet on any of them...! Just measure the probabilities of move continuation or on the contrary, the move's reversal.
The current down market move has a high probability to continue due to the Stochastics *oversold zone location and the market flow location beneath the median line (ML).*
A last word of advice... Always be aware of the time-of-the-day... Live with it!

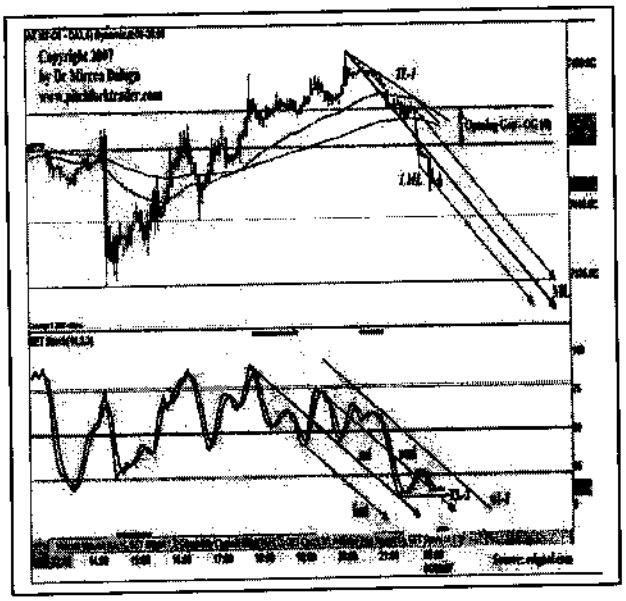


Figure 373 – *The right side chart continues the previous chart.*
At exactly 9:00hrs the market decided to reverse forced by several factors: the preceding bearish divergence, *the two-bar bottom reversal pattern, the three-bottom pattern on TL-2, the breakout of the oversold zone and the bounce on the 300% rectangle's extension. If the up-trend continues the trader should take the advantage of* three add-ons *levels: the progressive breakouts of the lower & higher gap's borders and the breakout of yesterday's high key level.*

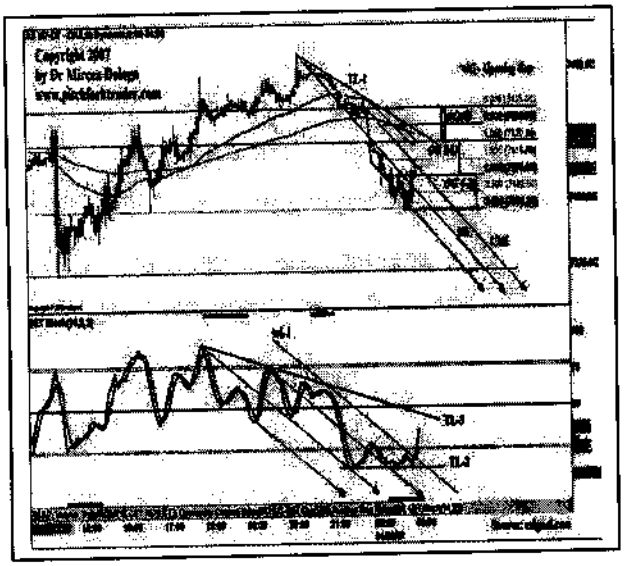
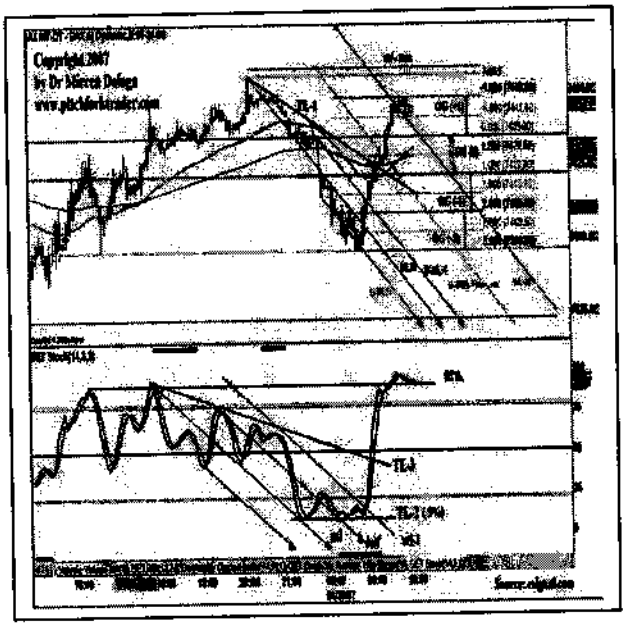


Figure 374 – *As we have anticipated the market flow continued its up-trend, on the right side chart.*
For the moment, the market flow is halted by the first up-sloping extension of the rectangle at 7448 level and the 100%-level resistance line of the Stochastics *chart.*
The strong up-sloping momentum is closing in the yesterday's high at 7455.5 key level and also the contract's highest high at 7458 key level.
Whatever the market flow does, it will have first to restore its consumed kinetic energy, and only then continue its up-sloping trend, or just drop toward the gap, located right underneath.



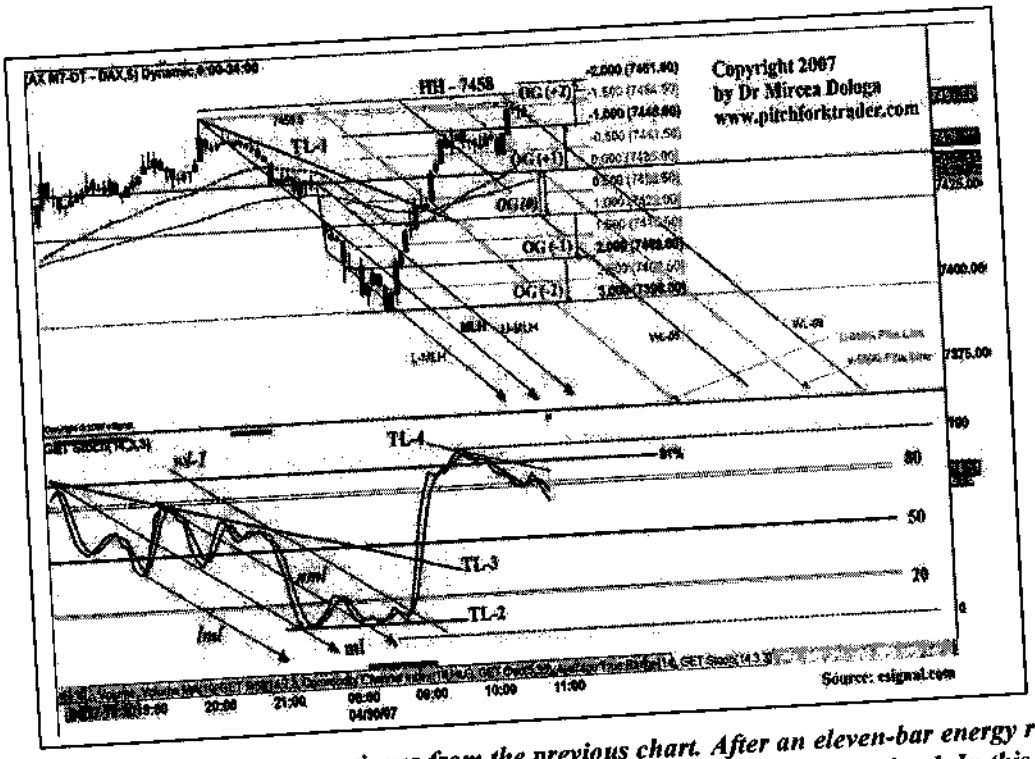


Figure 375 – *The above chart continues from the previous chart. After an eleven-bar energy restoring trading range, the market flow has finally reached yesterday's high at the 7455 key level. In this process, the market flow has created a bearish divergence (refer to TL-4 trend line on the* Stochastics *chart) and broke down the 80%-level line. It seems like the market price is ready for a correction. Even if the market flow didn't reach yet the contract's highest high at 7458 key level, keep in mind the market's magnet-like attraction for it. Sooner or later it will be conquered... It will surely be this afternoon or tomorrow, if the market flow doesn't collapse beneath the down-gap's lower boundary.*

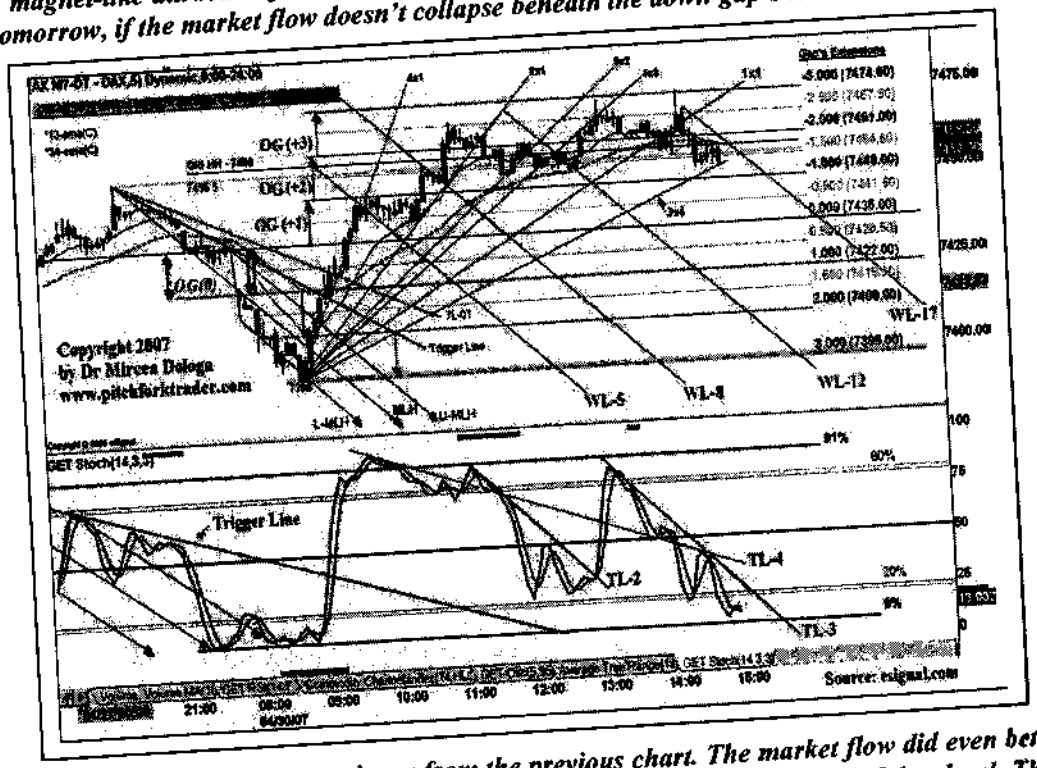


Figure 376 – *The above chart continues from the previous chart. The market flow did even better than we have anticipate. It didn't wait for the afternoon to reach the highest high 7458 key level. The high was attained at 11:00hrs CET. Not only that, but the market flow climbed even higher to 7475 key level. The decisional power of the trend lines, including Gann's angle lines, is brilliantly illustrated above.*

11.2 Pre-Open Preparation & Contextual TL Breakout – German Dax 30 Chart

Figure 377 – *The right side chart unveils a strategic pre-open preparation. We have laid out the graphical factors that will influence our trading decisions. The up-trend scenario has very little probability due to the very strong 7360-7358 monthly & weekly pivot cluster.*
The downtrend scenario has a greater probability, if the daily pivot 7336 key level is broken down. The Stochastics *has already reached the oversold zone, which pleads in favour of the downtrend farther development. In this case, the TL-1 and TL-3 trend lines of the price chart will be progressively broken down, concomitantly or successively with the* Stochastics' *TL-02 trend line.*

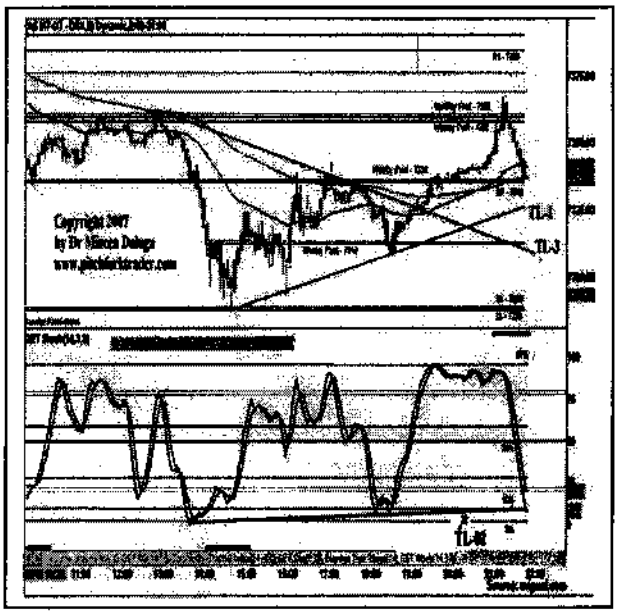


Figure 378 – *The right side chart* continues *the previous chart. The down trend scenario was preferred by the market, through the down-gap mechanism. Both chart's TL-1 & TL-3 trend lines were broken down and the* Stochastics *dropped so low that only the 5%-level line could halt it. The huge 50-point gap, representing half of the daily ATR will take a while to be filled. As it looks, the down-sloping momentum is very strong, and the trend's destiny is even a farther down development. The break-up of the 20%-level line and of the* Stochastics' TL-02 *trend line will signal the beginning of a reversal.*

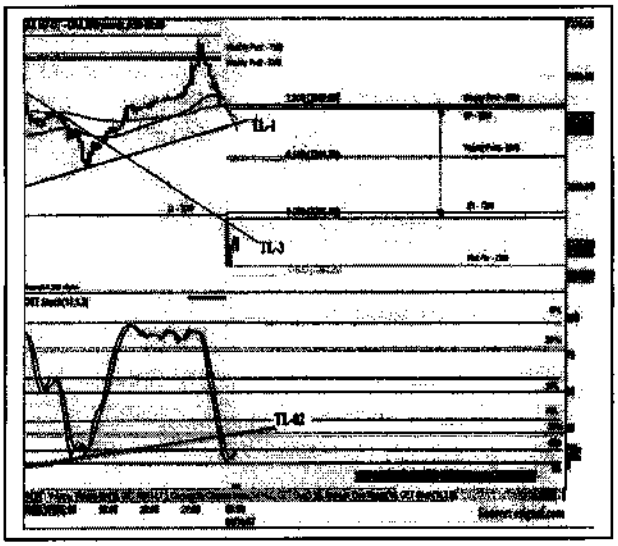


Figure 379 – *The right side chart, which continues the prior chart confirmed the farther down destiny of the trend.*
However, the trader must continuously suspect a probable reversal, even if the Stochastics *is still in the oversold zone. This way of thinking is due to: the market price reaching the 100% lower extension of the down-gap and its bounce, the textbook reversal pattern, with a volatile up-bar and the slight upwardly-oriented* Stochastics *hook.*
Be on the watch for the breakout of the TL-3 trend line on the chart and the breakout of the 20%-level line and TL-02 line, on the Stochastics *chart.*

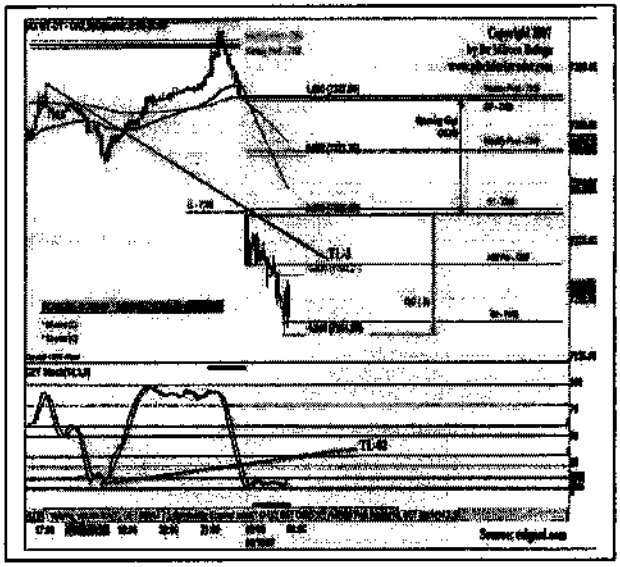


Figure 380 – *The right side chart, which continues the prior one confirmed the farther down attitude of the trend.*
The market flow constantly remained under the market price chart's TL-3 trend line, and at the same time under the 15- & 30-emas.
We have built a descending channel having the TL-3 trend line, as the upper border. Its trespassing will confirm the change of the trend. The latter choice is very probable due to the bullish divergence of the Stochastics.
The TL-02a & TL-02b ascending channel drawn on the Stochastics *chart together with the reaching of the overbought zone already vouches for the ongoing reversal.*

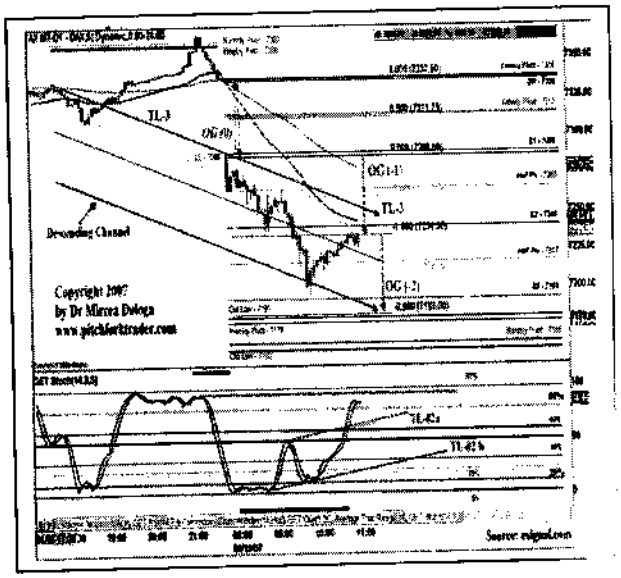


Figure 381 – *The right side chart illustrating the midday doldrums continues from the previous chart. It's a textbook example of a crawling market flow, during the low liquidity periods.*
In spite of this, the up-sloping trend is still sustained, the TL-3 was broken-up, the market flow climbed between the two emas and the Stochastics *is cruising inside the TL-02a & TL-02b ascending channel. The 80%-level line was just penetrated.*
The last two bounces on the 50%-level line and the very narrow two hours crawling market signal a very probable up-trend continuation.

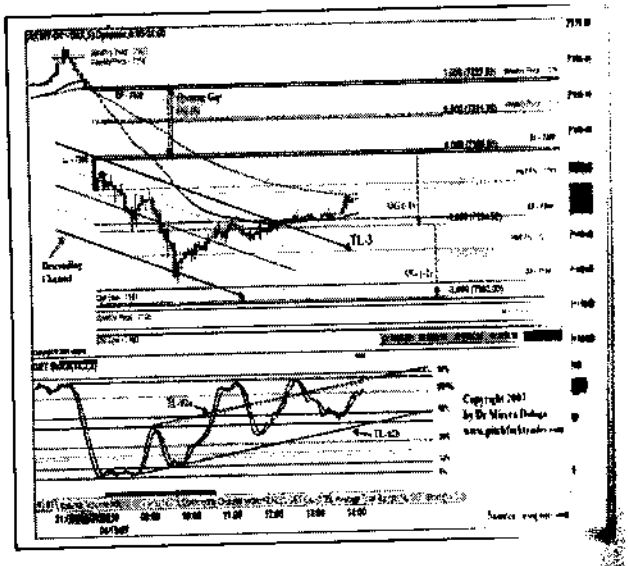
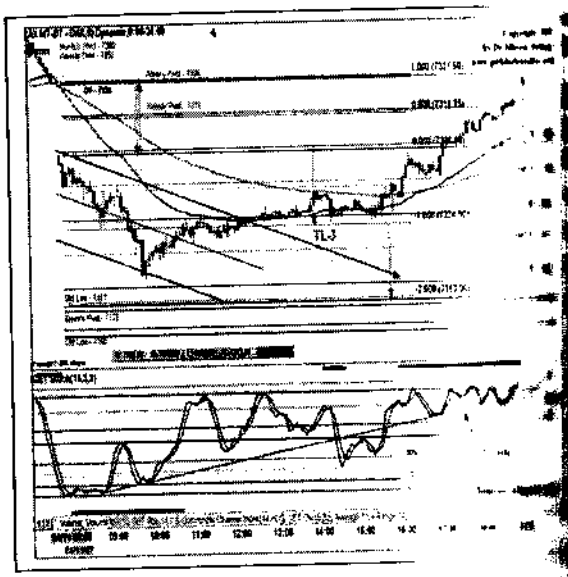


Figure 382 – *The right side chart continues from the previous chart. The market flow escaped the midday doldrums and accentuated its up-sloping momentum. Its up-slope has increased at exactly 16:00hrs, jumping above both emas. The ascending channel on the Stochastics chart is still intact, and its curve mainly stayed above the TL-02b line. The reaching of the overbought zone and the proximity of the upper boundary of the down-gap might incite the trader to expect a reversal.*
This six-chart case study has clearly shown the importance of the synchronism between the elements of the market price and those of the Stochastics chart. Always react... never try to act ahead of the market!



11.3 Fan Line Breakout – OverBought Trade - German Dax 30 Chart

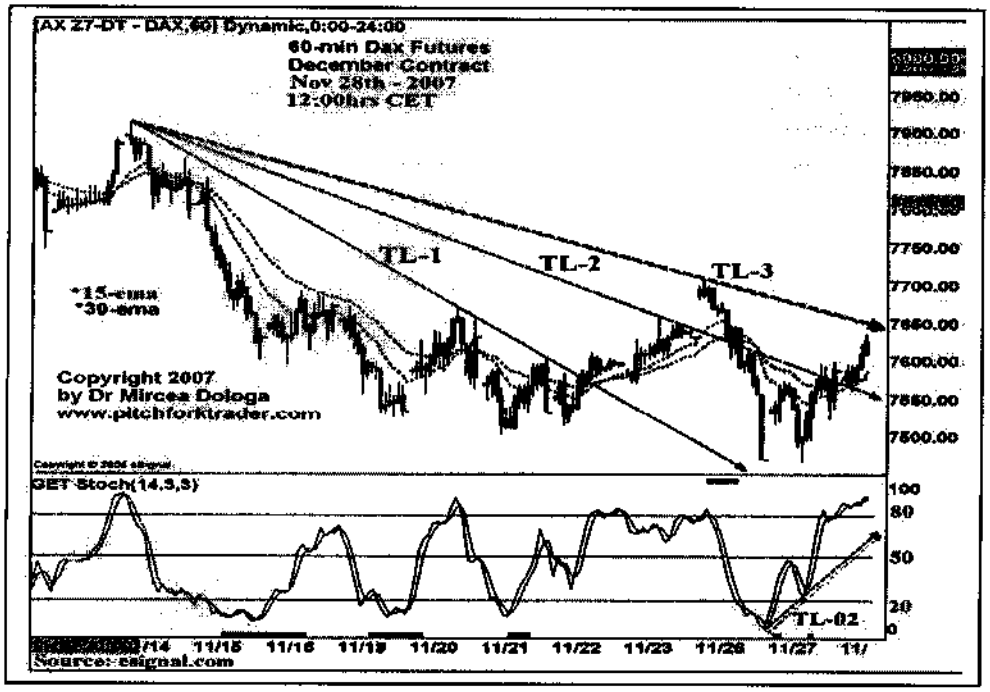


Figure 383 – *The above chart illustrates the trading of the fan lines. As most of the traders know, the third fan line is more often than not, capable of bluntly halting the trend and provoke a reversal. In case of negating this rule, the trader should expect an "out busted pattern" meaning that the market flow will just zoom through the third fan line.*
There are a few factors revealing this "expected" failed rule process: a preceding aggregation of volatile bars, a breakout or runaway gap, an ascending volume culminating with a huge volume, a zooming through mechanism with or without a test & re-test and finally a steep Stochastics *slope with a preferable location within the overbought or oversold zones.*
We can see on the above chart a few of these "out busted pattern" favouring factors: a preceding aggregation of volatile bars and a steep Stochastics *slope with a preferable overbought zone location.*

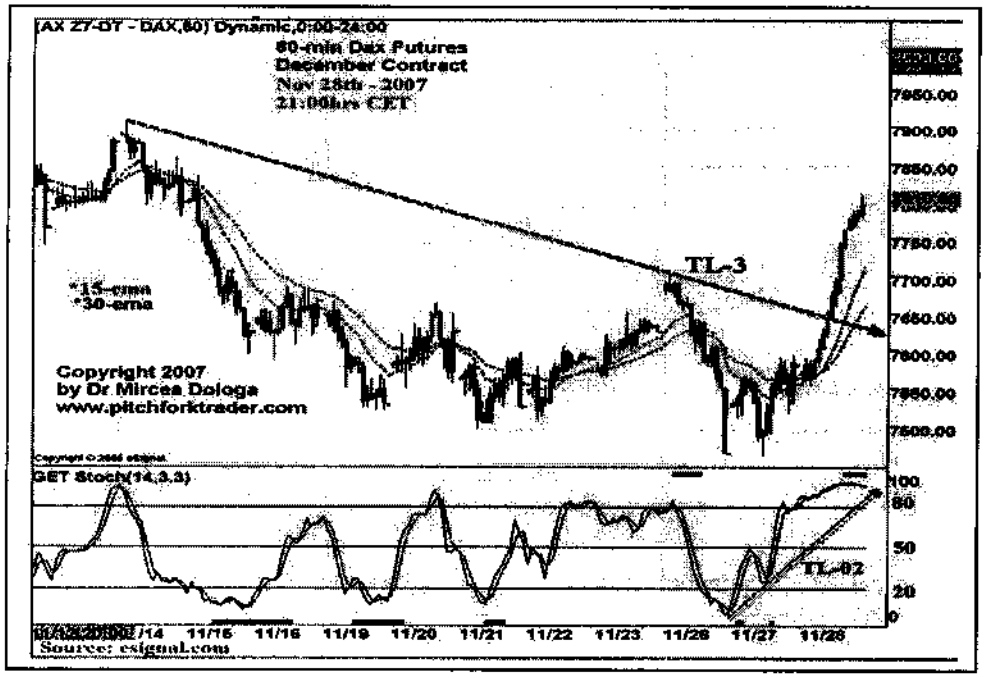


Figure 384 – *As expected, we can see on the above chart an illustration of the "out busted pattern".*

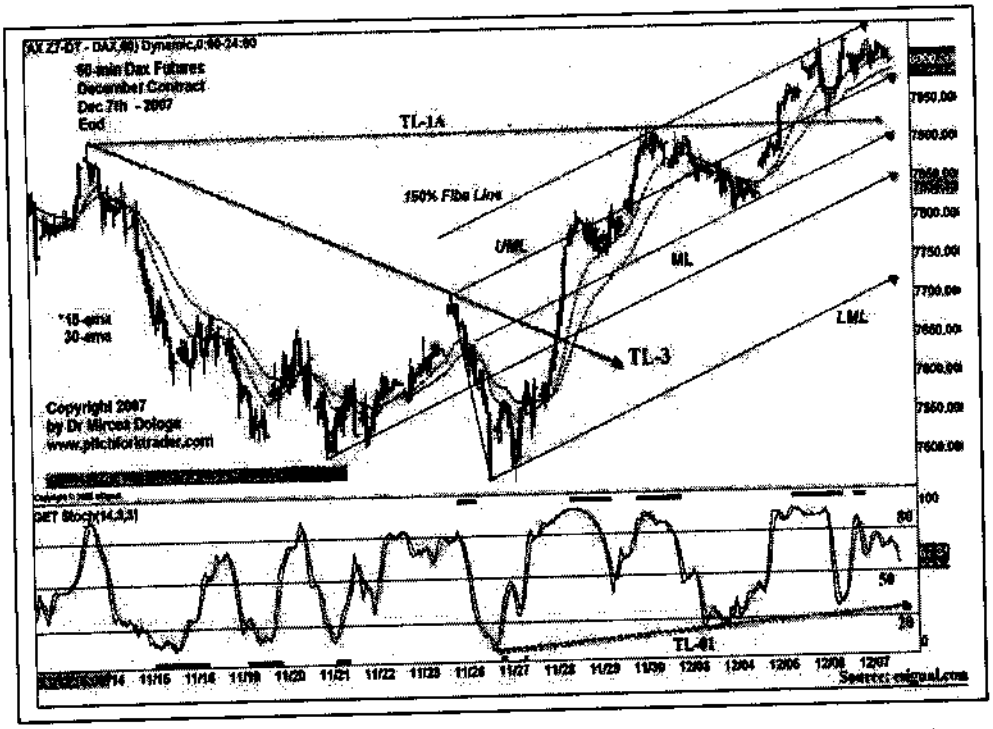


Figure 385 – Always expect the unexpected! *The above chart illustrates the "out busted pattern" behind our wildest expectations! In order to better take our trading decisions we have constructed on the market price chart, an ascending pitchfork and a TL-01 line on the* Stochastics *chart. In this manner, we can not only closely follow the trend but also detect the first signs of the weight of evidence responsible for a reversal.*
I let the reader admire the great-unexpected behaviour of the market. Our role is only to react and lay down the tools necessary to decision taking!

Key Points to Remember:

- **Be aware that the Stochastics indicator is different from the MACD & RSI smoothing technique concept. It is rather a short-term market price velocity indicator having as immediate result its recent market price sensitivity.**
- **The trader should be aware that the smaller the value of the settings, the greater the influence of the market noise would be!**
  As for us, we have chosen the ubiquitous 14-bar settings, the half lunar cycle length.
- **The comprehension and the use of the Stochastics indicator is based on multiple parameters: location of the chart in regard to "landmarks", crossover of the %K & %D, price/indicator divergences, failure swings, hinges and chart patterns. By "landmarks" we understand the 0%-, 20%-, 50%-, 80%- and 100%-level lines. They have their own priorities concerning the outcome of the trade. The best approach of their use would be to understand & practice their interdependence with the reciprocal advantages.**

- Try to get familiar with the False Stochastics indicator. As a dual function indicator, it could assist you in saving space on the trading screen and also in taking the best trading decisions whether the market is trending or is sideways.
- Be aware and use the price/indicator divergences. They can really indicate the end of the trend. But act with caution... Not every divergence has a reversal and not every reversal has a divergence. It must be used only as a confirmation.
- As a newcomer or as an inexperienced trader, try to practice daily on the operational time frame the nuts-and-bolts of a trend mechanism. Study its inception, and try to find the factors that could have warned you of its development, especially the precursors events (*refer to the last paragraph of sub-chapter 5*).
- One should be aware that the failure swings aren't only the apanage of the charts; they are also frequently met on the Stochastics charts. Valuable because they constitute an enhancement divergence factor, they precociously occur with regard to those of the price chart.
- The astute traders will always verify the correlation of the Elliott wave labelling with their corresponding Stochastics levels. Most of them consider the support & resistance key levels as their bread & butter!
- Be aware that the chart pattern can also be drawn on the Stochastics chart whether they are: triangles, pennants, flags, rectangles, head-and-shoulder, channels or single & multiple pitchforks. The ultimate act on each of them is trespassing an important trend line. The point is to know when this is for real or not. The weight of evidence takes here all its importance.
- One of the secrets in using the Stochastics is to draw an identical shaped layout, which will emphasize the synchronism or the asynchronism (if divergences exist) between the indicator and the market price. Whenever is possible look to reveal the same pattern on both charts even if they are disproportionate to one another. The most useful common patterns are trend lines, channels taking the form of an Action/Reaction set-up or a simple channel and pitchforks.
- Once again... The trader must be aware that in case of a price- & time-wise shortened correction, mostly under 33%, this represents an indirect way of evaluating the strong power of the trend's momentum. Keep it in mind... It could make your day!
- You've probably already noticed in this chapter, the importance of the time-of-the-day. Buy a clock, so you won't forget it...! The best would be to own two of them... one for every half of the hour, especially in the morning. When one rings you set the other!

- **Get to know and to practice the "*third fan line*" trading! It will greatly enhance your profitability whether there is, or not an "*out busted*" pattern!**
- **Be aware that a short-bar divergence is more efficient than a long-bar divergence. The 2 to 3 bar length, is the most efficient.**
- **Don't forget that the synergism of the *Reversal Signals* with the local market pitchforks consist mainly in using their interaction with regard to the up-sloping or down-sloping failure guided by the Hagopian rule, the magnet-like attraction of the median line and the power of the *trigger lines* in determining the enhancement of the failure or the level of the *entry* or the *add-on re-entry*. The price projections guided by the *Reversal Signals* take here, their full importance.**

Chapter 13

OSC (5, 35) and Pitchfork Synergism

Even if the Moving Average Convergence-Divergence (MACD) is one of the most frequently used indicators, its use is seldom optimally performed. Singularly catalogued as a trend-following indicator, our experience showed a much more variety of usage.
In reality, this indicator has a greater potential pertaining not only to the trending markets but also to the reversal moves. The *Integrated Pitchfork Analysis* allows here an almost perfect synergism with the MACD oscillator. We will try to describe, as much as possible, these additional little known aspects to the newcomers and inexperienced traders. This will give them a real edge over the crowd in the process of trading.

1. MACD Indicator - Definition

Developed by Gerald Appel, the MACD indicator is nothing else but a derivate of a dual exponential moving average (*ema*) system. It represents the continuous spread between two moving averages: a faster one having the 12-bar ema and a longer one, the 26-bar ema. The former uses a 0.075 smoothing constant and the latter a 0.150 smoothing constant. Most of the traders use these settings but a few try to optimally cope with the behaviour of the individual traded vehicles. They took into consideration the immediate and the far away past statistical behaviour of that financial vehicle, and they arrived at the conclusion that some different setting choices can be used, depending on the vehicle's specific behaviour, the trader's objectives and the time frame used. The calculations engender a final indicator, which oscillates around the zero line.
If we go even further in understanding this concept and smooth the MACD by a 9-bar exponential moving average we will obtain the *signal line*. Some traders are used to practice the *histogram* form of the MACD, which is nothing else but its differential with the *signal line*. We think that whichever form is used the practical results are the same. It's only a question of being fully proficient with the MACD use. Let us summarize & make it simpler:

- **The use of 12- and 26-bar exponential moving averages is for the differential's calculation**
- **The differential between the above two *emas* forms the MACD,**
- **The smoothing of the MACD with a 9-bar *ema*, gives the *signal line*, and**
- **The differential between the MACD and the *signal line* forms the *histogram*.**

We will see in this chapter the various types of MACD strategies. The list below is not exhaustive:

- ***The crossover* of the *zero line* signalling an up trend (*crossing from below*) & vice versa,**
- ***The crossover* of the slower ema by the faster (*shorter*) from underneath performing the birthing of an up trend and vice versa,**
- ***The divergence analysis* use when there is a price/MACD indicator discrepancy.**

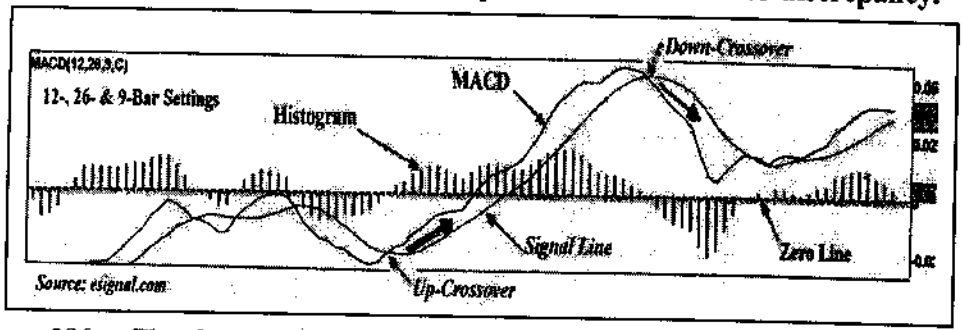


Figure 386 - ***The above illustration almost perfectly shows the various MACD parameters.***

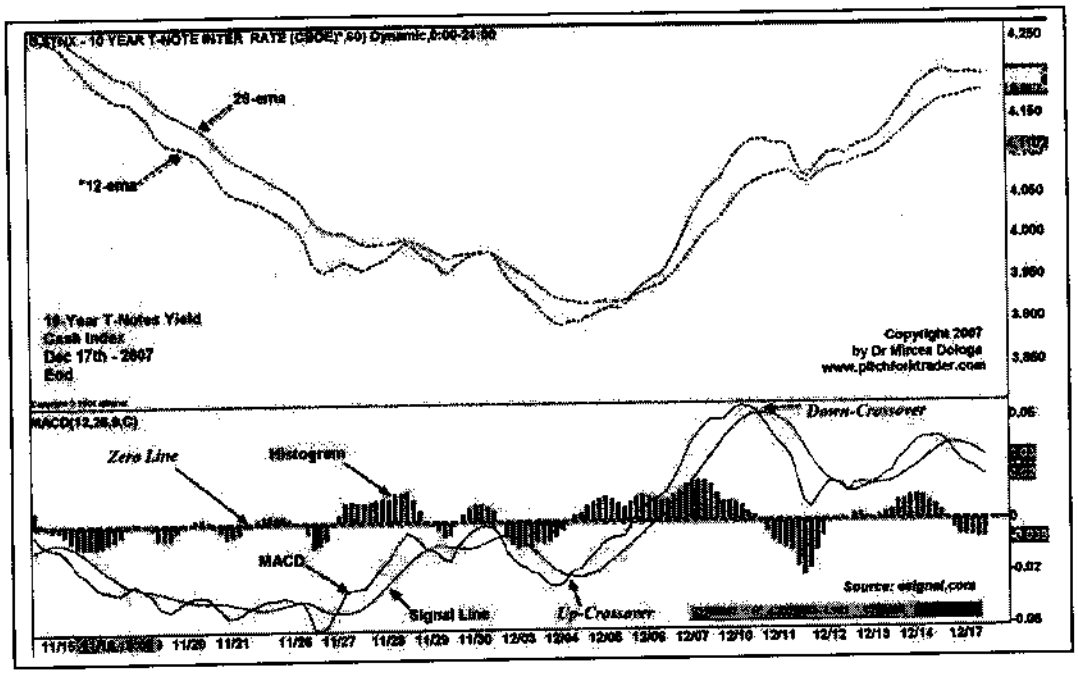


Figure 387 - *The complete picture of the MACD features is illustrated on the above chart: the zero line, the MACD line, the signal line, the histogram and the crossovers in extreme zones. The faster exponential moving average (12-ema) and the slower exponential moving average (26-bar) on the above chart serve as primary factors in the calculation of MACD, signal line and histogram. The market price chart is omitted.*

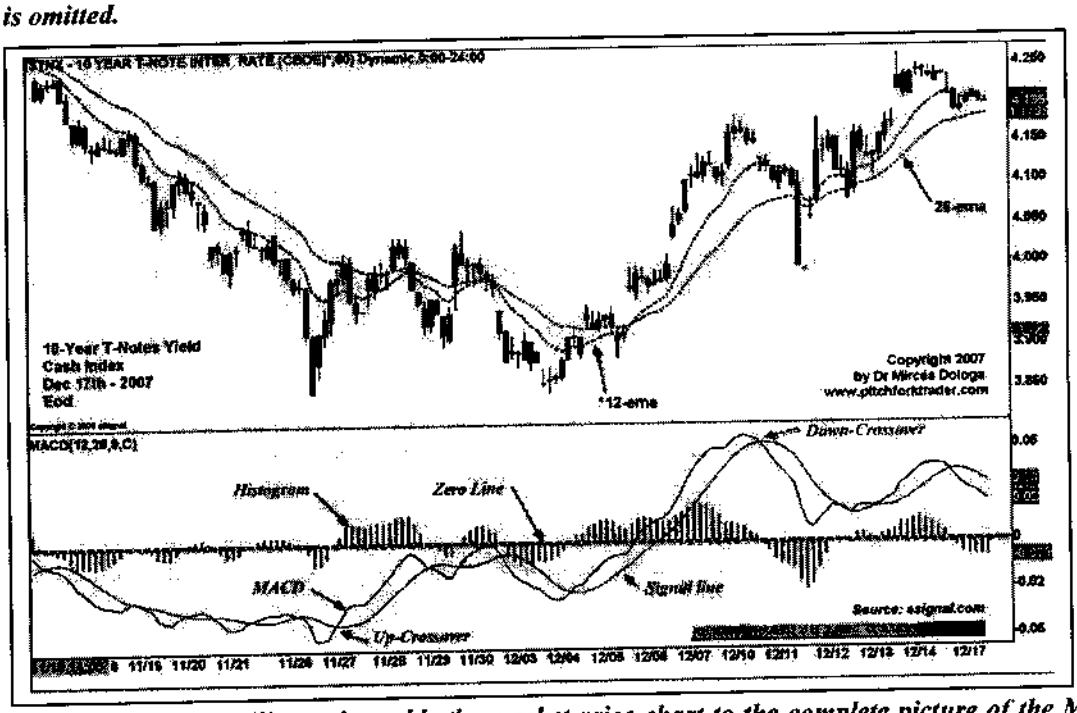


Figure 388 - *The above illustration adds the market price chart to the complete picture of the MACD features in order to better describe their intricacies. The trader can see that most of the far-away-from-the-zero-line crossovers signal the market price reversals.*

2. OSC (5, 35) Indicator - Definition

Tom Joseph, the creator and the developer of the Advanced GET System (www.esignal.com) has extensively developed the use of the *MACD*, among other outstanding works. From a simple use, he transformed the *MACD* oscillator into a very performing indicator with

multiple functions ergonomically designed: detecting not only the trends but also the signalling of the numerous reversals. Thus, the *MACD* became the *OSC (5, 35)*, the mainly used oscillator, a proprietary *eSignal* tool. Its various features enhance the MACD's properties:

- **The 5- and 35-ema replaced the common 12- and 26-ema, which appear to be much more adaptive to most of the time frames.**
- **In spite of this, Tom Joseph, developed the OSC (5, 17) for the short-term use, whose 5- and the 17-emas, will earlier signal, the incoming correction of current trend. We call these two oscillators the *dual couple* because while the OSC (5, 35) shows the trend's continuation through its *convergence* (*refer for details in sub-chapter 5*) and the OSC (5, 17) industriously signals the *2* to 5-bar *divergence* of an incoming correction.**
- **Developed as part of the proprietary indicator, after extensive statistical testing, the *Breakout Bands* on the OSC (5, 35) chart show the starting of the overbought (OB) and oversold (OS) zones. This is performed through the usage of two thick curvilinear support/resistances. As we will see further, they are excellent key levels not only for delineating the OB/OS zones but also for trading decisions: entries, re-entries, exits, scale in & scale out levels or labelling a strong momentum Elliott wave like W3.**

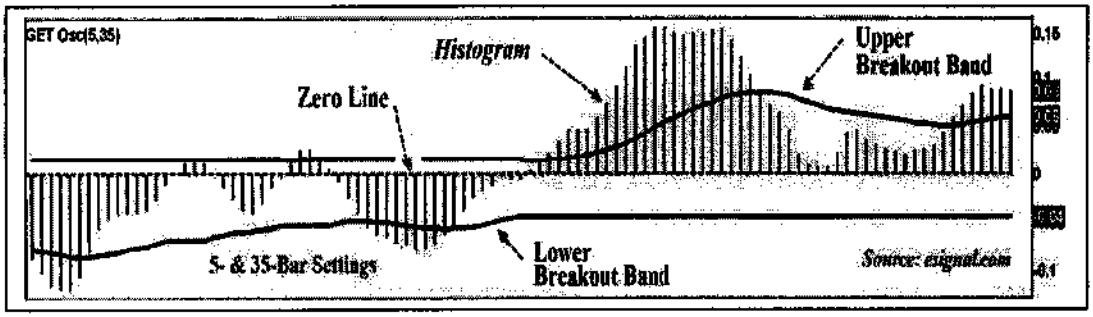


Figure 389 - *The above illustration adds value to the evaluation of the market flow thus enhancing the picture given by the common MACD features.*

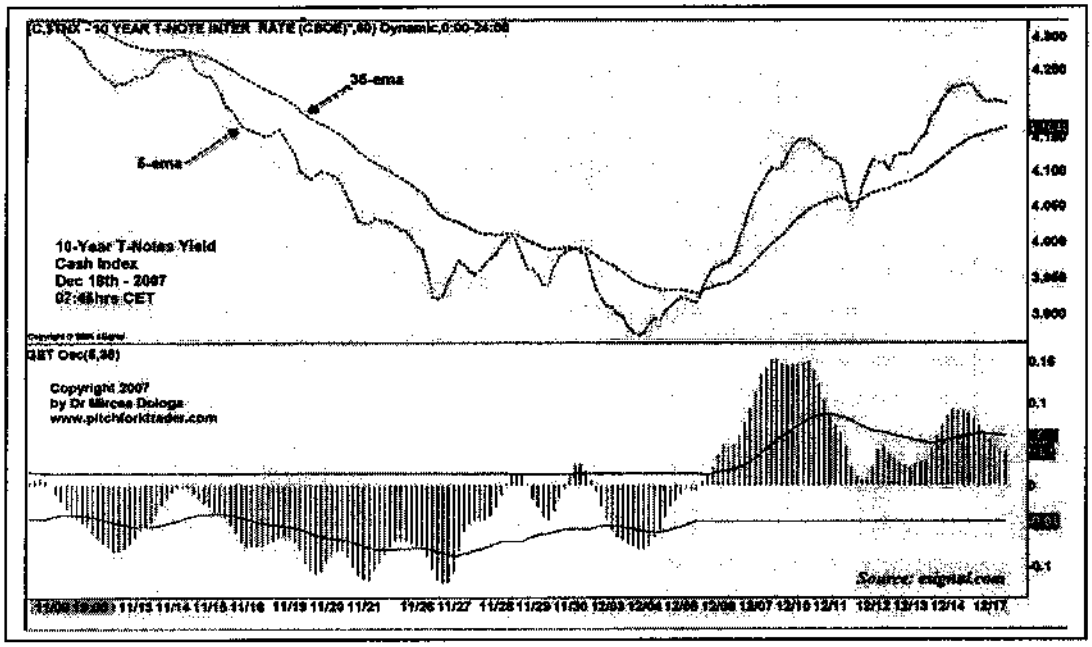


Figure 390 - *The above illustration adds to the value of the comprehension level of the OSC (5, 35) construction. The faster exponential moving average* (5-ema) *and the slower exponential moving average* (35-bar) *serve as primary factors in the calculation of the OSC* (5, 35). *The market price chart is omitted here. The 1 over 7 ratio of the two exponential moving averages greatly enhances the OSC* (5, 35)'s *ubiquitous time frame use. And remember, 7 is an universal Lucas number.*

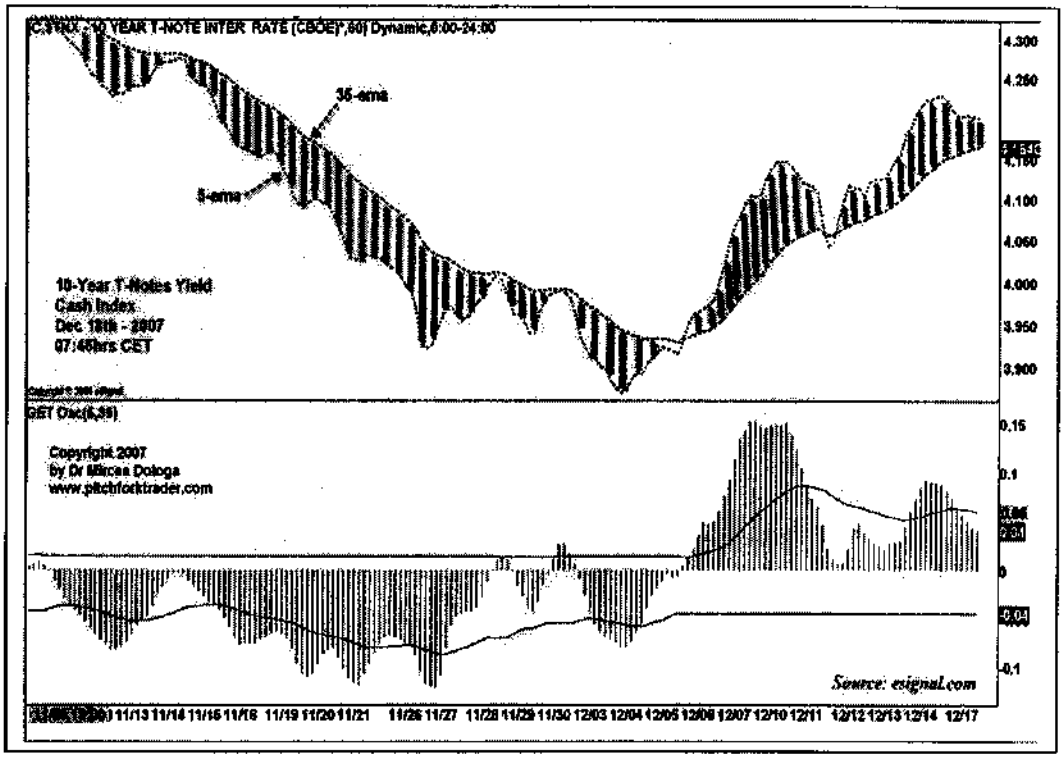


Figure 391 - *The above illustration shows the first steps of the making of the OSC* (5, 35). *The differential between the two exponential moving averages (5- and 35-ema) formed the shadowed area, which constitutes the foundation of the OSC* (5, 35) *construction. The corresponding histogram at the bottom of the chart optimally describes the meanders of the market flow.*

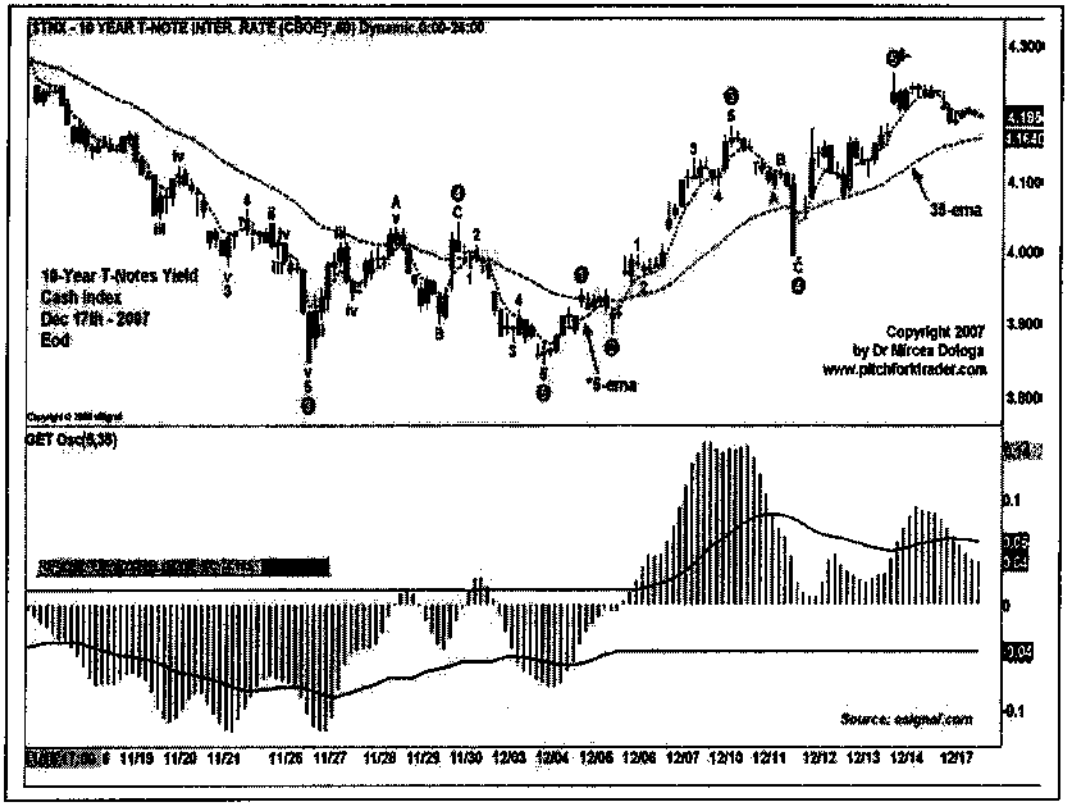


Figure 392 - *The above illustration adds the market price chart to the complete picture of the OSC* (5, 35) *features in order to better describe their intricacies. The trader can see that most of the far-away-from-the-zero-line crossovers signal the market price reversals*

In order to better reveal the low-risk high-probability trades, various decisional situations can occur and each of them is based on one of the following features of the OSC (5, 35) or OSC (5, 17) indicator:

- *Location* of the histogram curve above or below the zero line. When it is situated far away from the zero line, at the extreme zones, the market price will certainly be extended or over-extended.
- *Upper & Lower Breakout Bands* delineate the extreme locations of the *overbought* or *oversold* zones. The common concept agrees that when these extreme zones are reached, the market price chart will perform a top or a bottom. Any event that occurs in these extreme zones is far more important than in any other zones.
- *Upward Trespassing* of the *zero line level* is assimilated to an up-sloping trend and if the crossing drops, then it's considered as a downward trend.
- *Divergences*, which are other probable reversal signals, occur when there is a direction discrepancy between the market price and the *OSC (5, 35)* indicator.
- *Failure Swings* are considered as a *divergence enhancement factor* and occur when the *OSC (5, 35)* indicator exceeds its previous extreme level, whether that is (*top or bottom*), it corrects it and then heads straight for the old extreme level but fails to exceed it.
- *Charts Patterns* that occur on the market price chart can also occur on the *OSC (5, 35)* chart: triangles, pennants, flags, rectangles, head-and-shoulder, channels, single or multiple pitchforks. More often than not, the main signal consists of the breakouts of the *OSC (5, 35)* indicator *drawn* trend lines, which will occur earlier than those on the market price chart patterns.

3. Comparison of OSC (5, 35), OSC (5, 17) and MACD (12, 26, 9)

We are usually working with the OSC (5, 35) indicator associated with the OSC (5, 17) indicators. However, for a better comprehension of the market flow an also of their advantages with regard to MACD (12, 26, 9) we will compare all three of them.

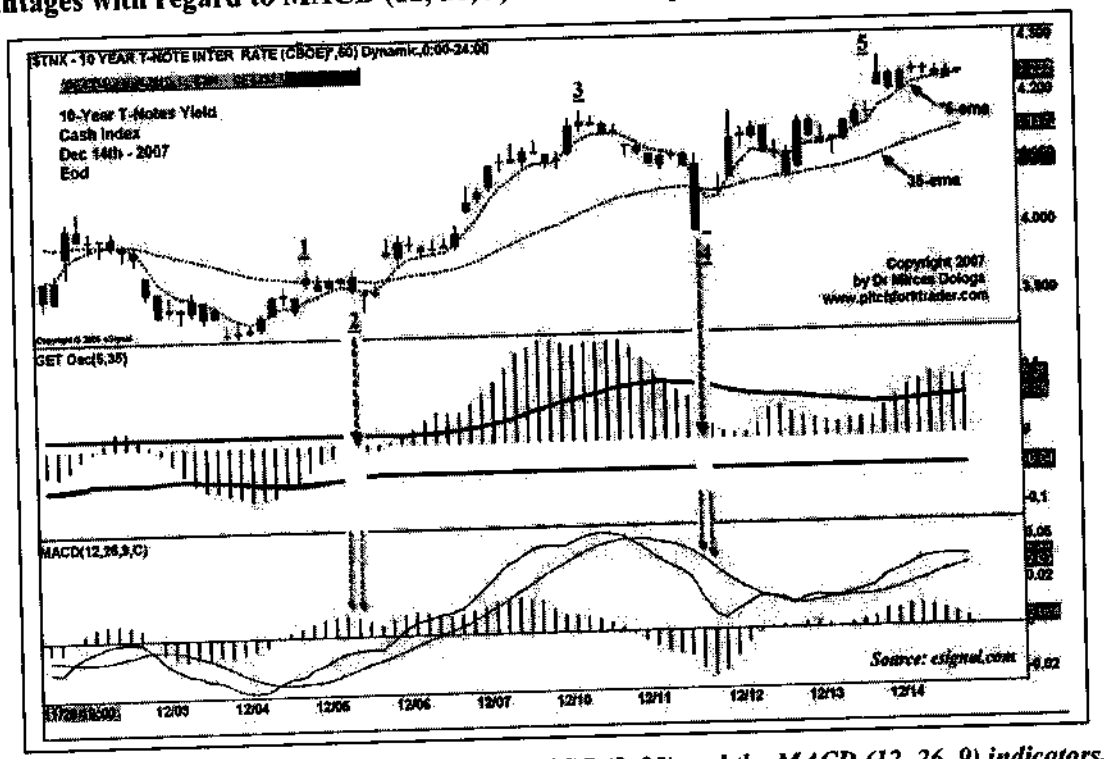


Figure 393 - *The above illustration compares the OSC (5, 35) and the MACD (12, 26, 9) indicators. The trader can observe right away that there is an asynchronism between the two indicators and that the former copes much better with the inception process of the W1 and W3.*

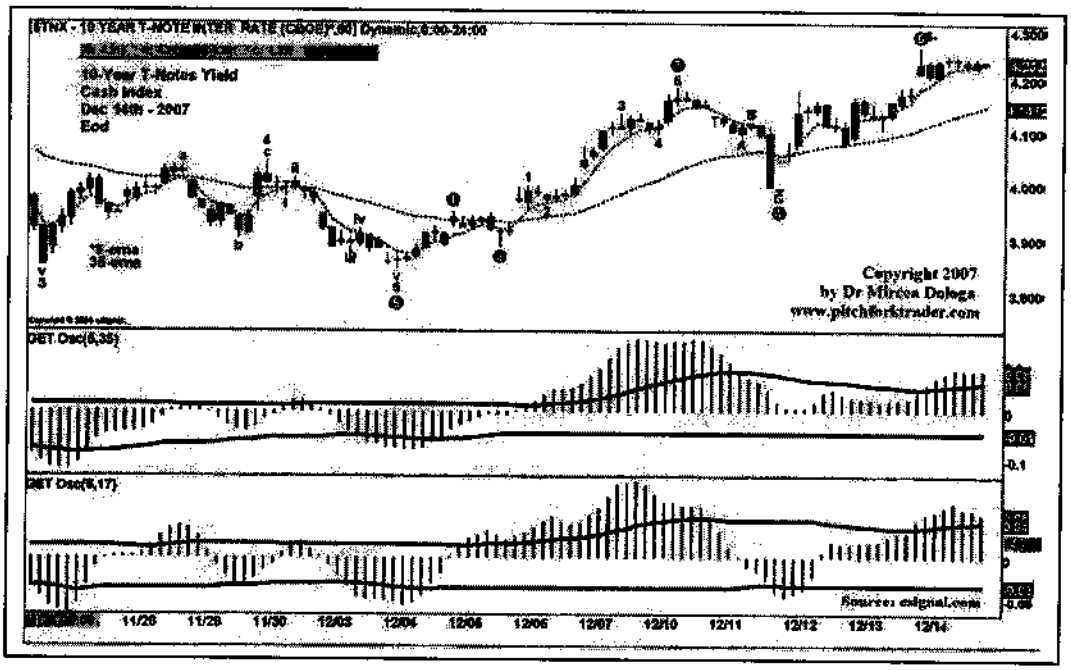


Figure 394 - *The above illustration compares the OSC (5, 35) and the OSC (5, 17) indicators. The trader can observe right away that the OSC (5, 17) better describes the short-term periods, thus giving an earlier signal of the incoming correction of an ongoing trend. The OSC (5, 35) reacts much better on the intermediate & long-term showing the trend's continuation.*

4. OSC (5, 35) Indicator - Trend Revealing Tool – Overbought/Oversold Level

The trend-revealing feature of the OSC (5, 35) is based on the power of its up-sloping momentum to trespass the zero line, *from below* and then to build OSC's dome well above the *upper breakout band*, into the *overbought* zone.

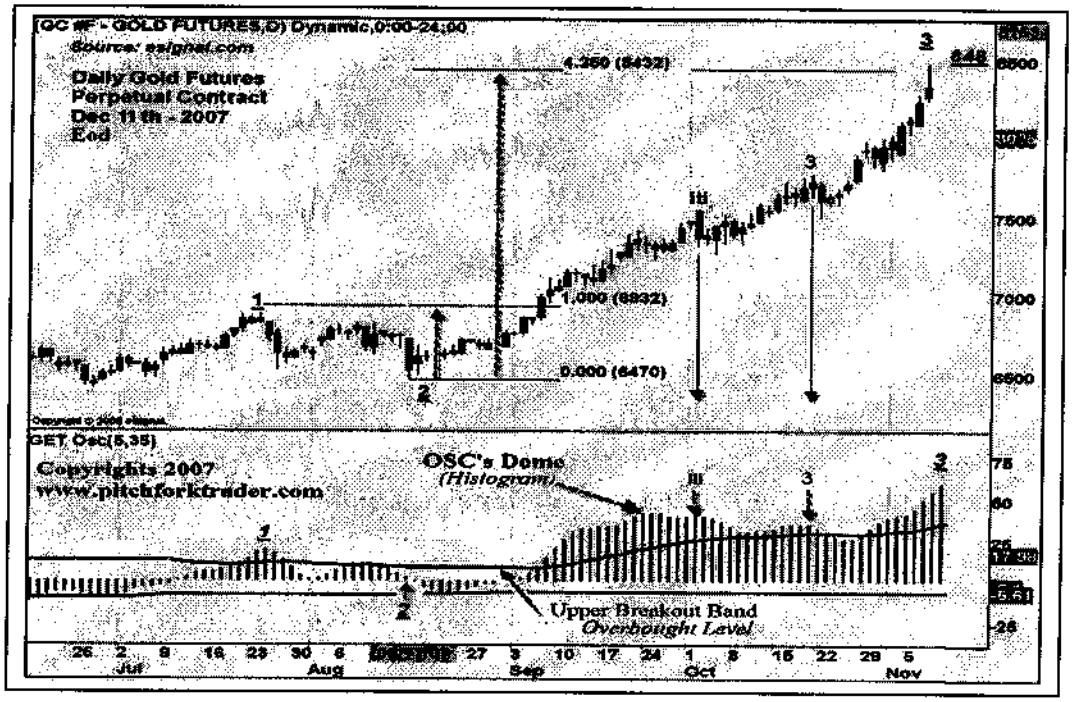


Figure 395 - *The above chart illustrates the* **build-up** *of the W3, until W3 equals 4.25*W1, with its wiii:W3 and w3:W3 sub-waves. One can easily see that after the market flow has broken-up the upper border of the trading range where W3=1.00*W1 at 6932 key level, the OSC (5, 35) rapidly built its first dome and then it stayed mostly overbought, above the upper Breakout Band.*

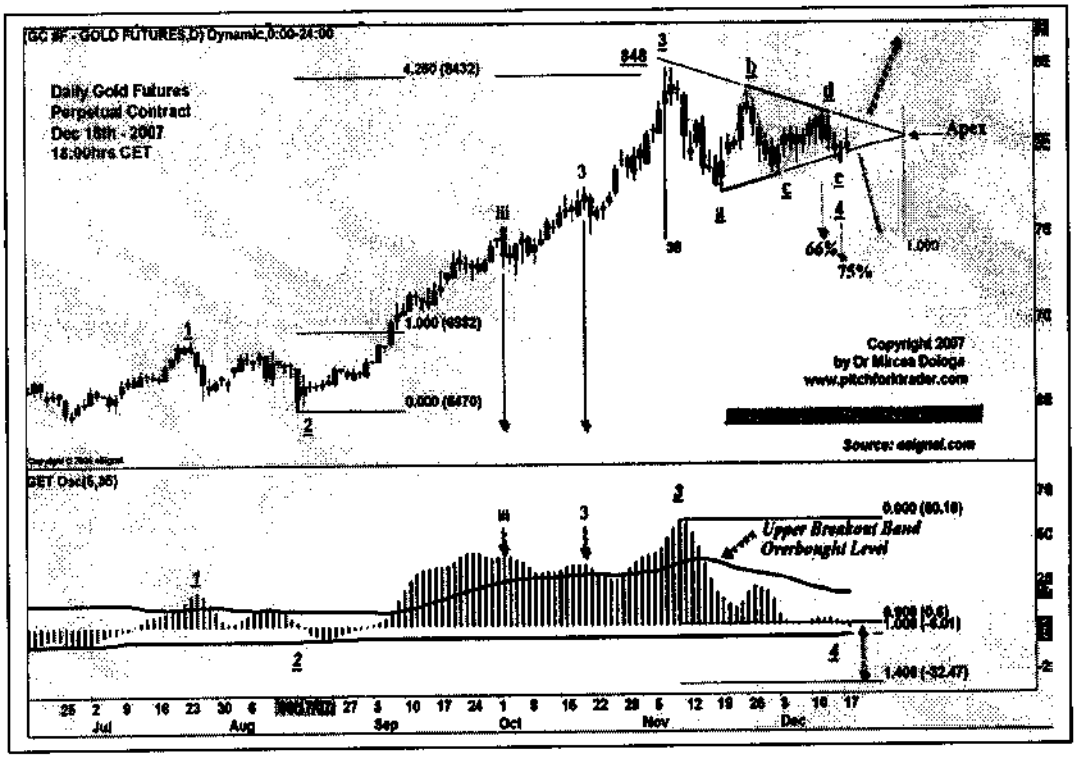


Figure 396 - *The above chart is a continuation of the prior chart. The wave W3 has been terminated. The market flow is currently engaged in a horizontal triangle correction (W4). We can observe that after the highest oscillator's dome has been performed, the W3 has been terminated. Three bars later, the upper Breakout Band has been penetrated, from above and the overbought zone has been left behind. We are now expecting, the last wave of the impulsive pattern – the W5, if the upper border of the triangle will be broken-up, otherwise the W4 will continue its development.*

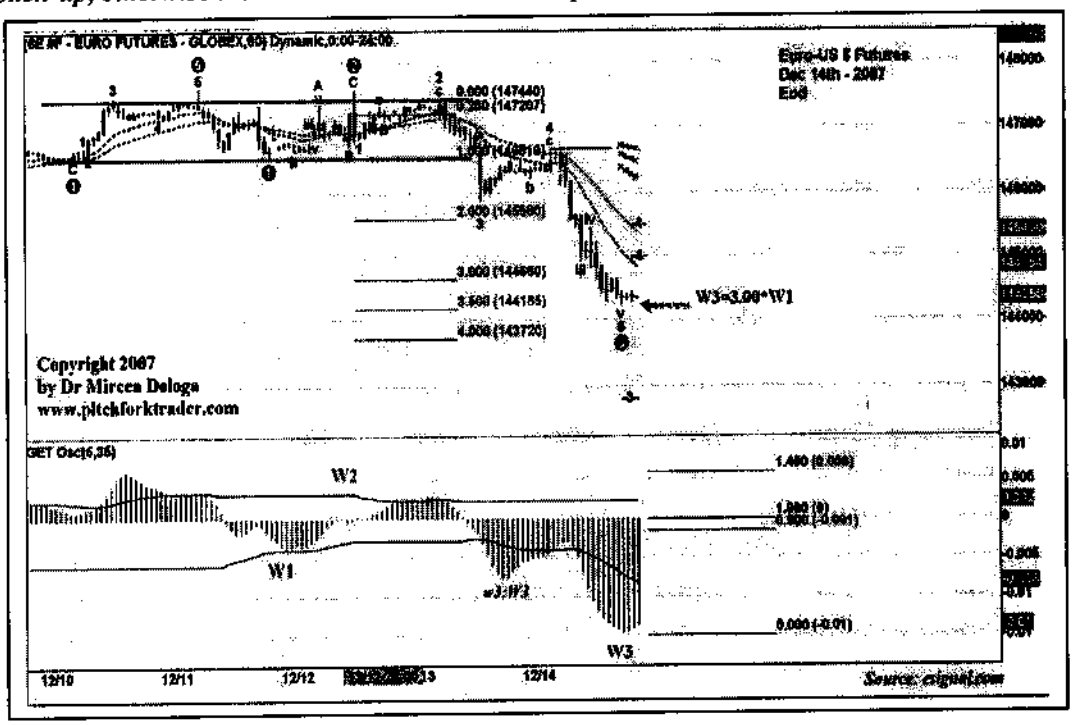


Figure 397 - *The above chart is a textbook example of building the W3's OSC dome in a down-sloping trend. The double-humped camel-like dome illustrates the momentum mechanism of the W3's w3:W3 sub-wave. The W3=3.00*W1 size coincides with the 350% rectangle's extension & the peak of W3's OSC dome.*

5. Divergence - Reversal Tool

The divergence is defined as a discrepancy between the price and the indicator. If the market price makes a higher high, but the OSC (5, 35) is not able to cope with it and makes, on the contrary, a lower high, then a *bearish divergence* is formed, which is ensued frequently by a reversal. If the market price makes a lower low, but the OSC (5, 35) indicator is not able to cope with it and makes, on the contrary, a higher low, then a *bullish divergence* is formed, which is frequently ensued by a reversal.

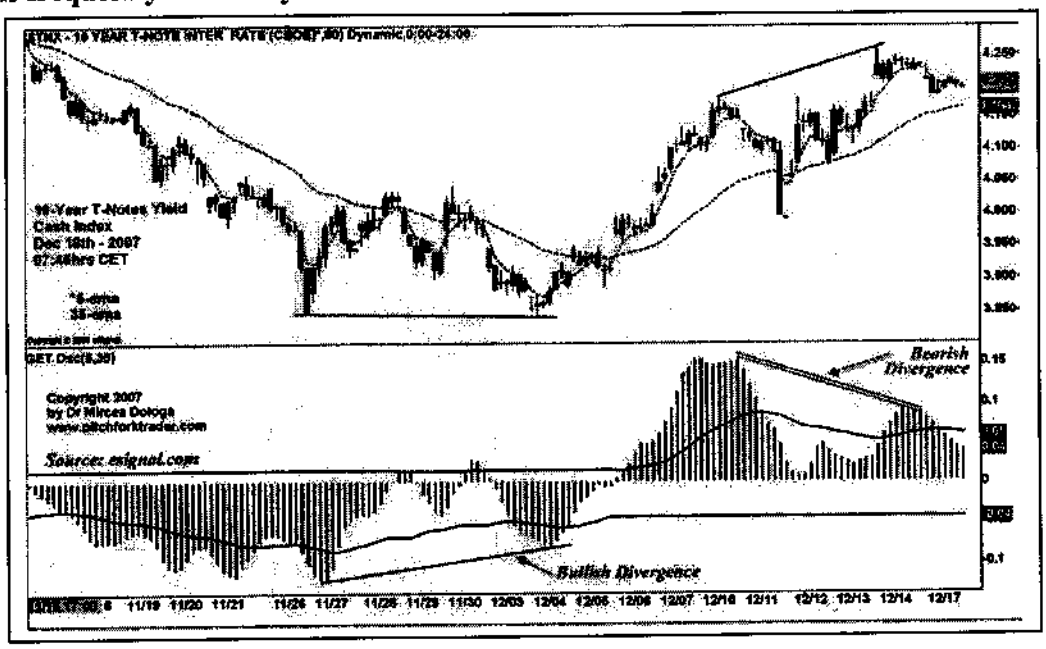


Figure 398 - *The above chart illustrates first a* **bullish divergence** *when the market price is slightly in* **"plateau"** *and the indicator makes a higher high. On the right side of the chart we can observe a* **bearish divergence** *when the price makes a higher high and the indicator a makes a lower high.*

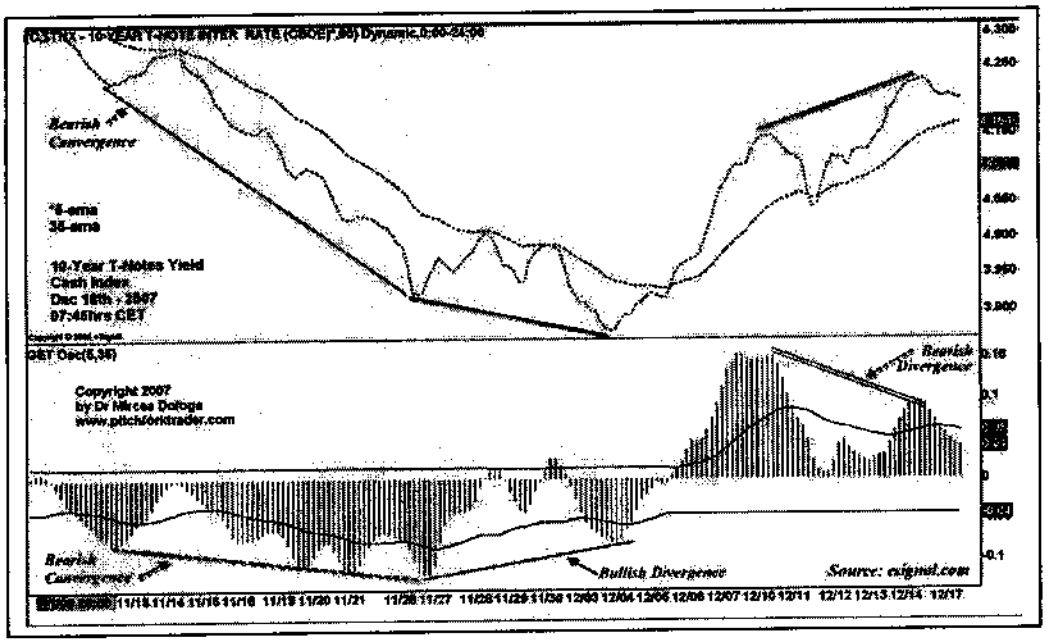


Figure 399 - *The above chart first introduces the* **"convergence"** *notion. A bearish convergence (seen on the left side of the chart) means that there is no discrepancy between the market price's down trend and the lower low (s) of the indicator. They both progress in the same direction. This is very useful when a high-powered momentum is observed, thus avoiding the confusion with a corresponding divergence. It plainly signals the continuation of the trend.*

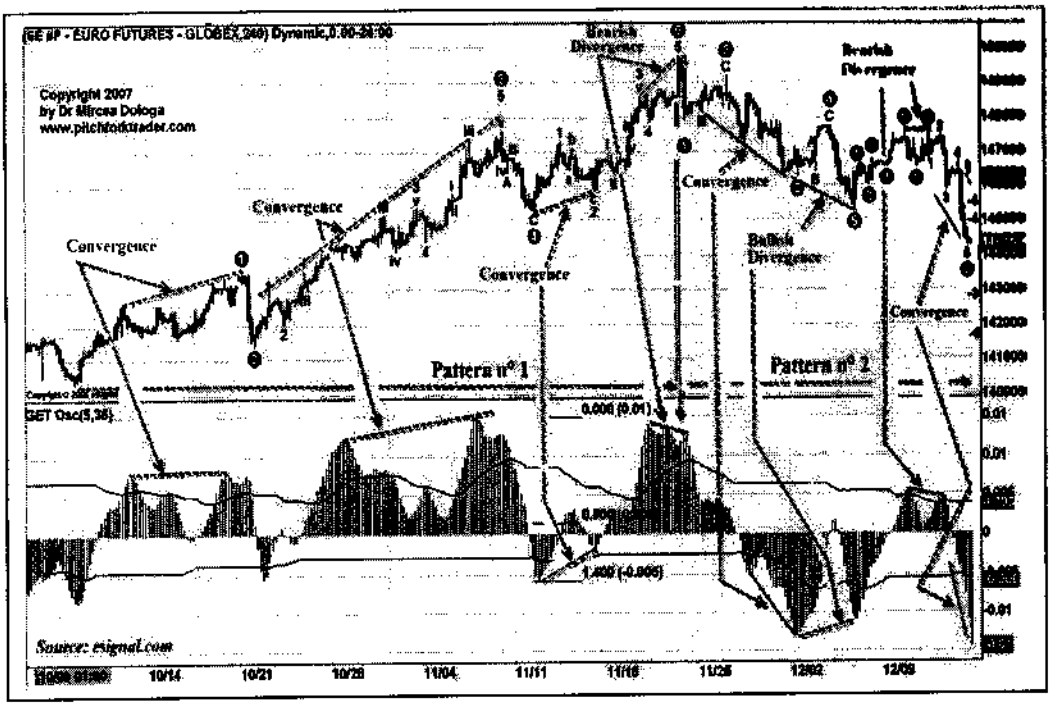


Figure 400 - *One can see on the above chart the integration of multiple* convergence *and* divergence *portions of the contextual and local market flow.*

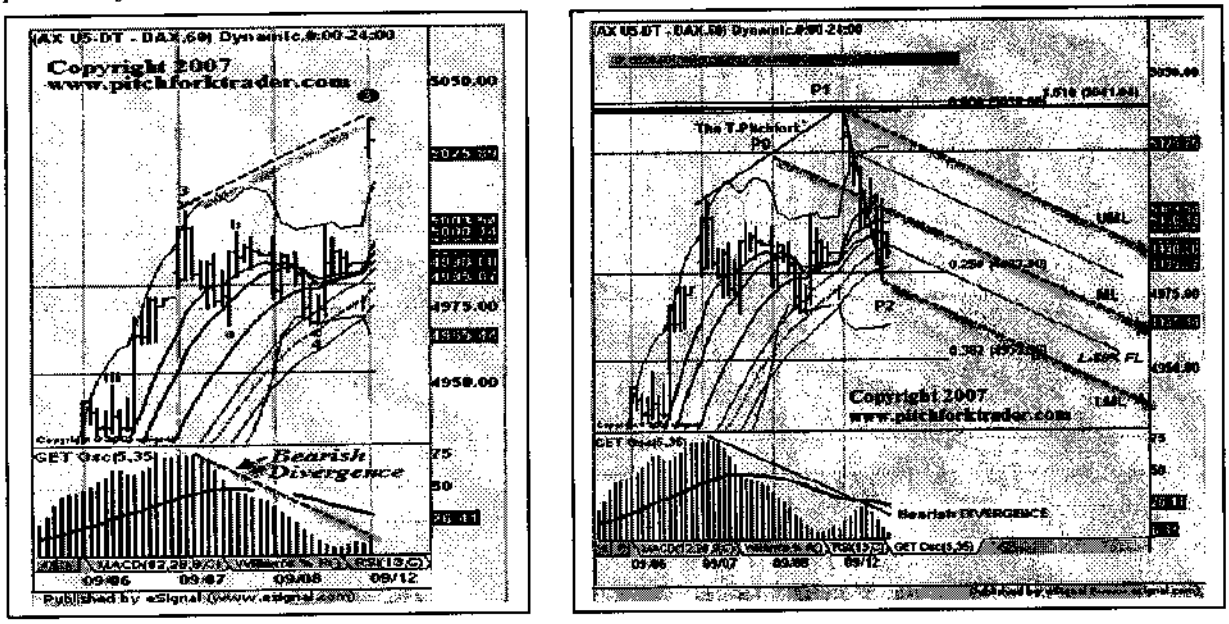


Figure 401 - *The above two charts show the impact of a* bearish divergence *on the local market flow with its characteristic but not obligatory reversal. The T-pitchfork on the second chart is an efficient guide.*

6. Failure Swings - Divergence Enhancement Factor

The failure swings occur when the OSC (5, 35) exceeds its previous extreme level, whether that is (*top or bottom*), it corrects it and then heads straight for the old extreme level but fails to exceed it. In this context, only if the market price have exceeded or equaled its prior extreme point, we would plead for a divergence. The failure swings have an important role in confirming, *in a way*, the strength of the divergence, when they occur together but as we have seen, a swing failure doesn't require a divergence. In case of a concomitant occurrence, they follow the divergence and inform about its character and also about its future influence on the trend's reversal.

Figure 402 - *The right side chart firstly shows on the left, a* **down-sloping OSC failure swing** *where the indicator first failed to drop to its last low, it performed a higher low and then it rose above its most recent peak. Finally broke-up the lower Breakout Band, from beneath.*
On the left side of the chart, one can easily see **an up-sloping OSC failure swing** *where the indicator failed to rise to its last high, it performed a lower high and then it dropped below its most recent low. On the same token, it penetrated into the upper Breakout Band, from above, thus leaving the overbought zone.*

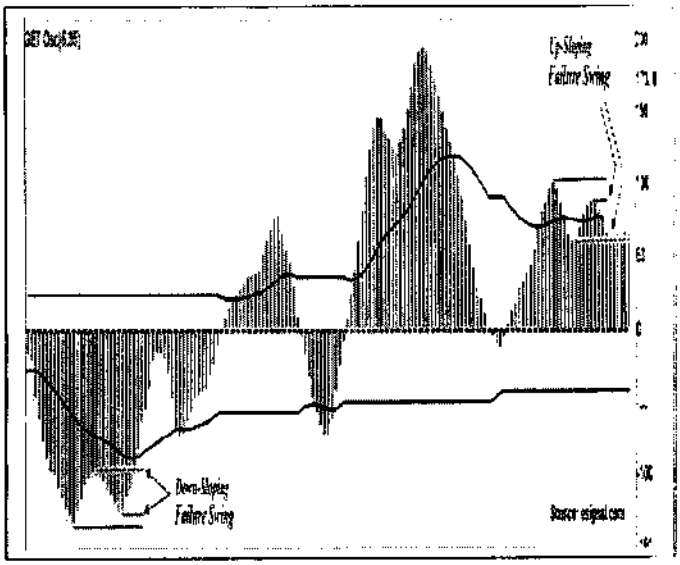
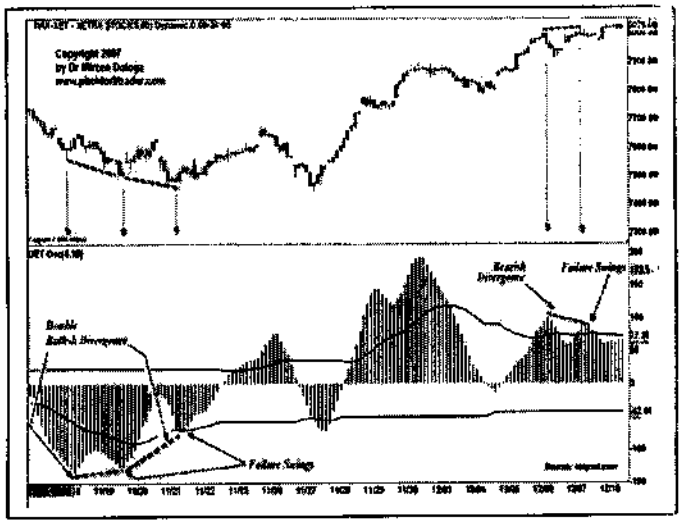


Figure 403 - *The right side chart shows the market flow of the two OSC failure swings already described on the above chart.*
Thus, we can firstly observe on the left side of the chart a double bullish divergence corresponding to two down-sloping failure swings, even if only the first has been described.
On the right side of the chart, we can easily observe a bearish divergence corresponding to the up-sloping failure swing already described.



7. Pitchforks' Flexibility Revealed by OSC (5, 35)

Figure 404 - *The right side chart tries to illustrate the extremely close relationship, which exists between the pitchforks and the OSC (5, 35).*
The up-sloping pitchfork is almost perfectly synchronic with the making of the OSC's overbought dome. Its high coincides with the pitchforks P1 pivot and also with the W3's end.
The W4 formation is complete when the market flow reached the P2 pivot.
Currently the local market flow is on its way to build the W5. The first sub-wave – w1:W5 – has already been halted at the median line of the pitchfork. The W5's OSC is currently prepared to enter the overbought zone, once the upper Breakout Band will be penetrated, a second time.

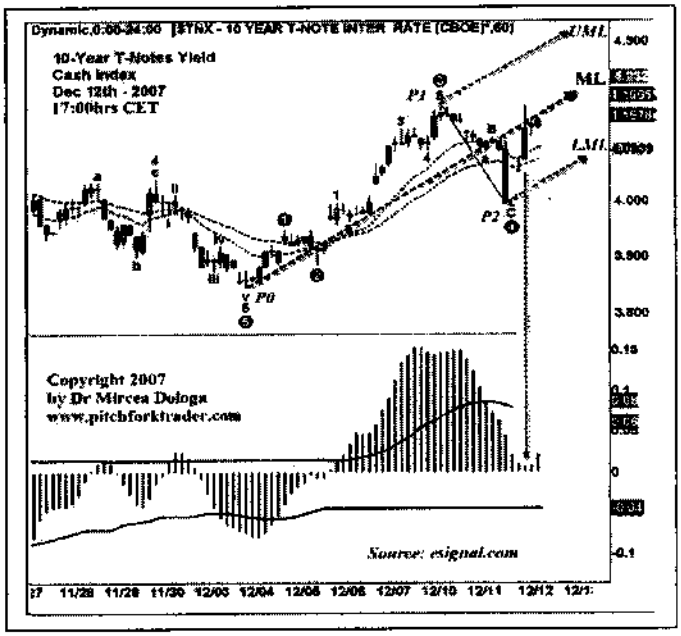


Figure 405 - *The right side chart continued the prior chart.*
As we anticipated the market flow developed the W5 right under the median line of the up-sloping pitchfork. Its corresponding OSC dome has exceeded into the overbought zone, but with more diminished momentum power than that of the W3. A bearish divergence is ensuing thus projecting the end of W5 and the imminent reversal.

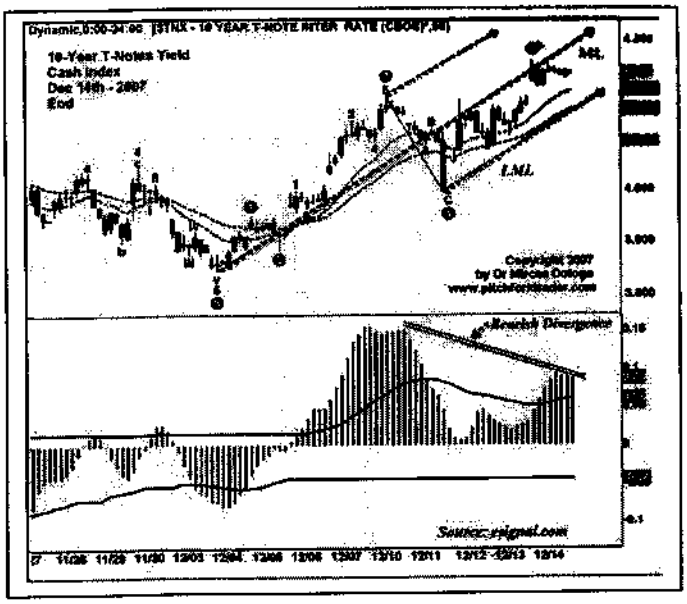


Figure 406 - *The right side chart ideally expresses the* flexibility *as the most important quality of a trader. Applied to this chart, the flexibility guides the optimal use of the two pitchforks, thus creating two scenarios. Even if the steep bearish divergence associated with the W5 implies that the contextual trend of the market flow is almost terminated, the flexibility gives us the cautious choice of preparing the dual scenarios. The up-scenario is valid when the high-powered momentum will develop even farther, and W5 will become an extended or even an elongated W3. This will be signalled if the upper Breakout Band is penetrated upward, thus entering the OB zone.*

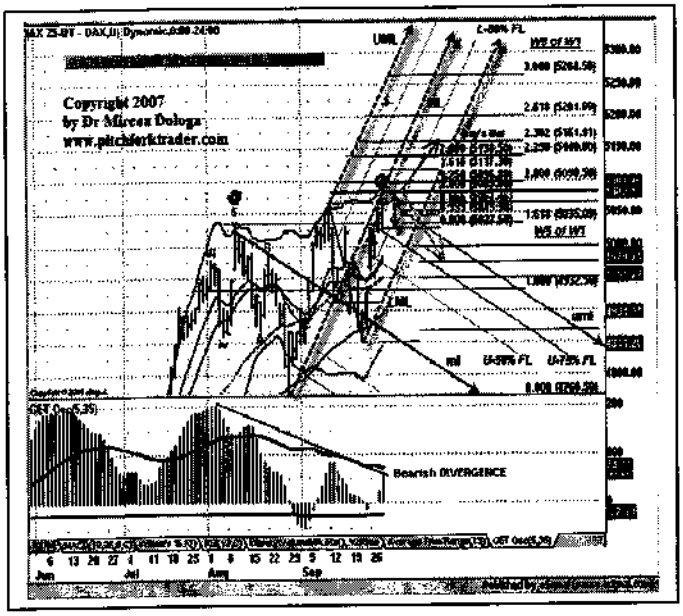
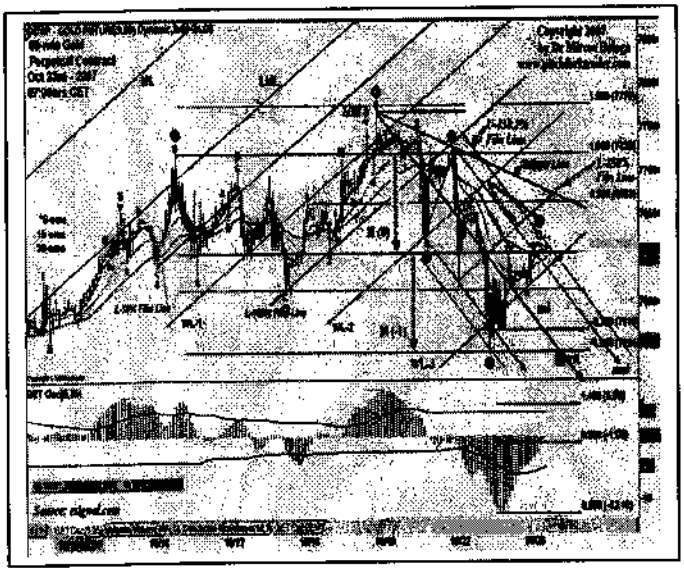


Figure 407 - *The right side chart illustrates further the pitchfork's flexibility. The local market flow (W4) has just been halted by the upper 138.2% Fibonacci line at 7605 key level. The vicinity of the overlapping border line, where W4 could enter the W1's developing zone around 7622 key level might disable the current Elliott wave labelling. It will mean that the market will burst upward. The corresponding OSC (5, 35) should remain under the upper Breakout Band; otherwise it will corroborate the eventual overlapping move.*



8. Fibonacci Arcs and OSC (5, 35)

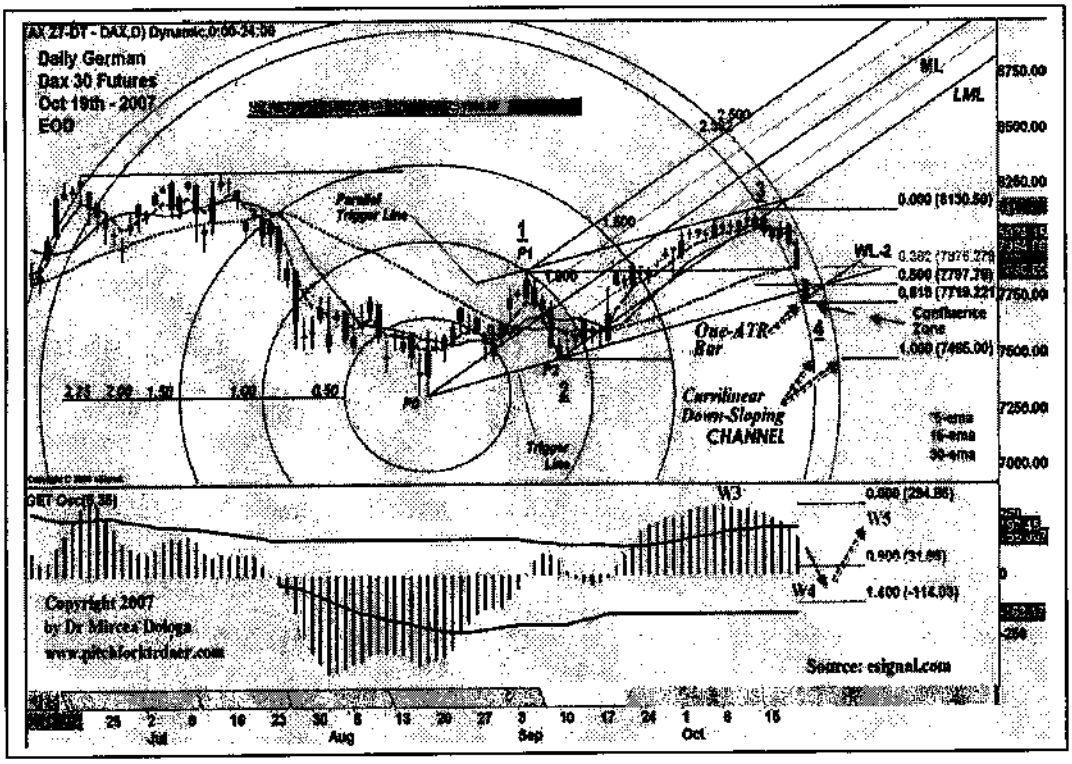


Figure 408 - *The above chart illustrated the Fibonacci ratio arc tool associated with the OSC (5, 35). Its contribution to enhancement of the OSC's efficiency is important because it introduces the* **curvilinear channels**, *which can pinpoint not only the pathway of the ascending or descending market flow but also its reversal. The current market price shows that the W4 is in progress, the OSC (5, 35), just left the overbought zone, being now, right under the upper breakout band. We have projected as the next move a one-ATR bar which will be normally halted inside the curvilinear channel, at the 7800 confluence zone, formed by the trigger line, the 50% Fibonacci W4 retracement, WL-2 warning line and 7800 hundred n°.*

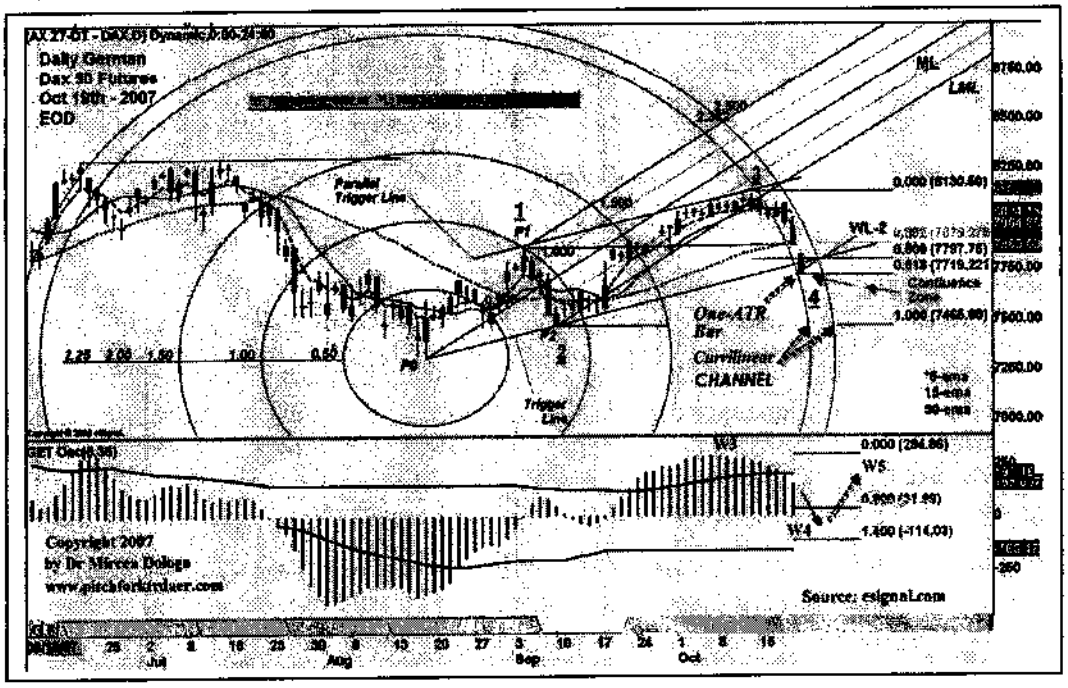


Figure 409 - *As we anticipated the above chart continued the direction of our one-ATR bar from the previous chart, right in the middle of the* **curvilinear channel**. *The OSC (5, 35) retraced to 0.09-1.40 zone.*

9. OSC (5, 35) and Chart Patterns

9.1 Overbought Triangle – German Dax 30 Chart

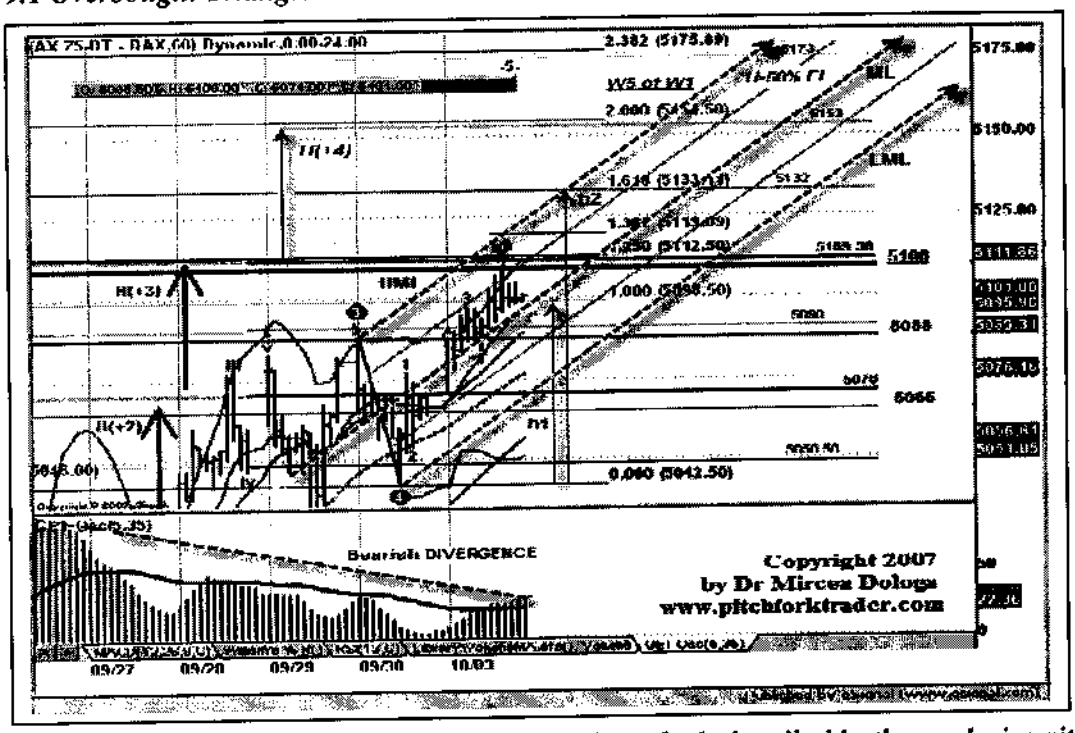


Figure 410 - *The local market flow on the above chart is perfectly described by the up-sloping pitchfork with its median lines. One can easily see the bearish divergence, which signals an imminent reversal. The steep slope of the market flow implies a triangle as an intuitive foreknowledge. Be ready for a reversal!*

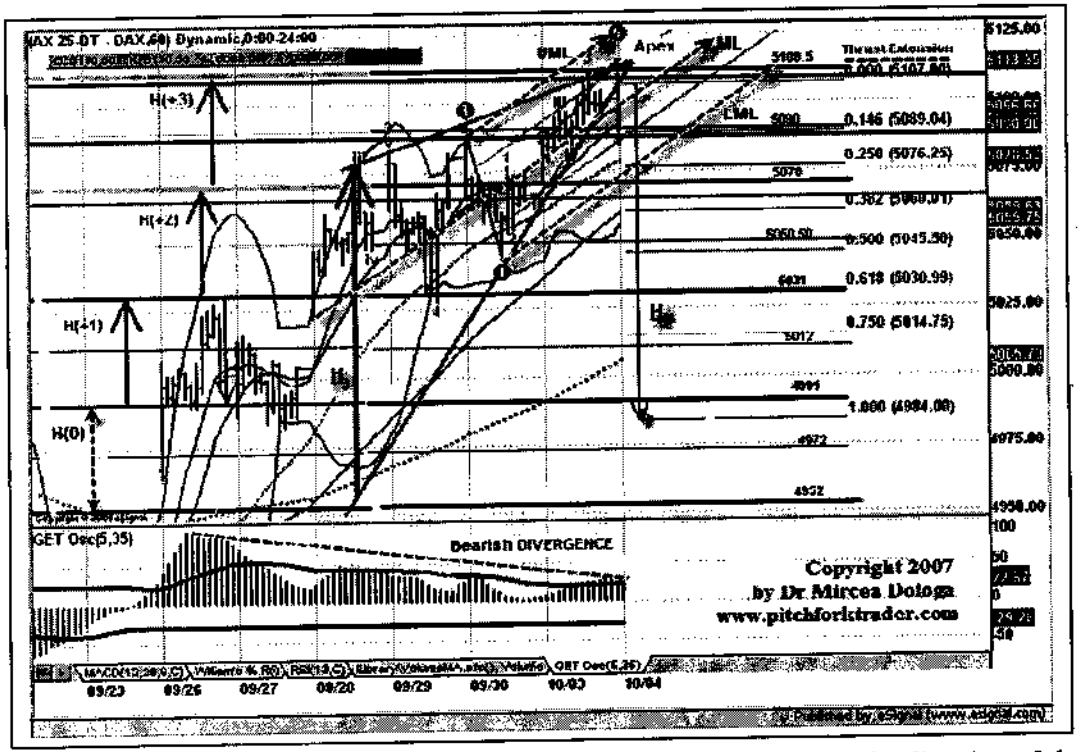
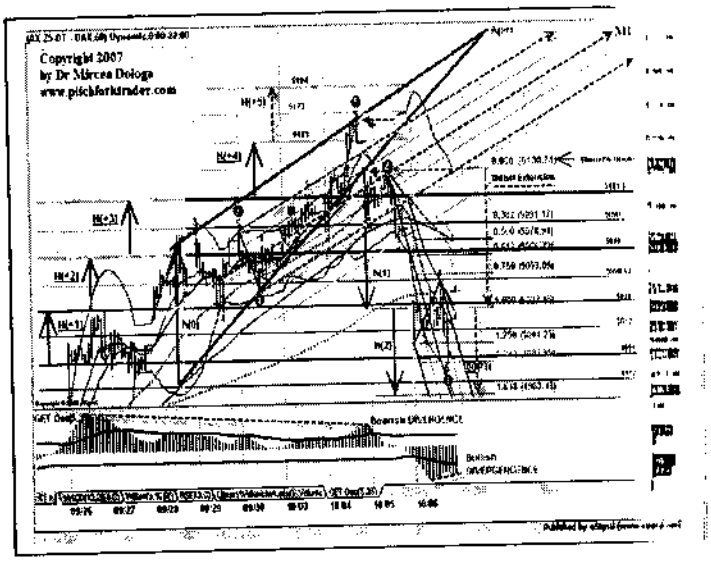


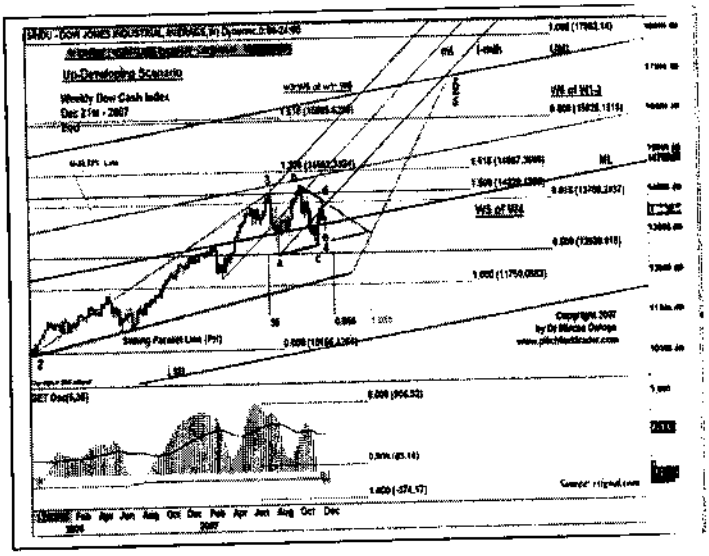
Figure 411 - *As we anticipated the market price in the above chart reversed the direction of the prior chart, penetrating the median line (ML) of the up-sloping pitchfork. It formed an abrupt triangle performing a down-sloping breakout. Due to the steepness of the wedge, expect an abyssal drop from its high, with the passage of the OSC (5, 35) from the overbought into the oversold zone!*

Figure 412 - *As we anticipated the market flow on the right side chart, which continued the prior chart, has dropped all the way to 4987 key level, thus performing a 1.382 ratio extension of the triangle's thrust. The OSC (5, 35) has also dropped, all the way to the oversold zone, behind the lower Breakout Band.*
The local market flow implemented a bullish divergence of the most recent bars, thus preparing the imminent W4 corrective move.



9.2 Oversold Triangle – Dow Jones Industrial Chart

Figure 413 - *The right side chart shows the OSC (5, 35) indicator in the oversold zone, just below the Breakout Band, signalling the termination of the horizontal a-b-c-d-e triangle forming the W4.*
The big lower tail of the last bar and its above-the-median-line location implies that the e-wave *has been already terminated and an up-sloping move associated with a breakout is imminent, in order to form the last wave of the current impulsive pattern – the W5.*



9.3 OSC (5,35) Fan Lines - Gold Futures Chart

Figure 414 - *The right side chart shows the OSC (5, 35)'s fan lines, constructed from the high of the common dome* (Dome 0), *which joints the successive highs of the next domes* (Dome 1 & Dome 2).
The purpose of these fan lines is identical with that of the chart's fan lines, previously described (refer to Chapter 7 – sub-chapter 5).
Most of the professional traders consider that after three fan lines the trader should expect a reversal, more often than not or at least a small correction or a testing.

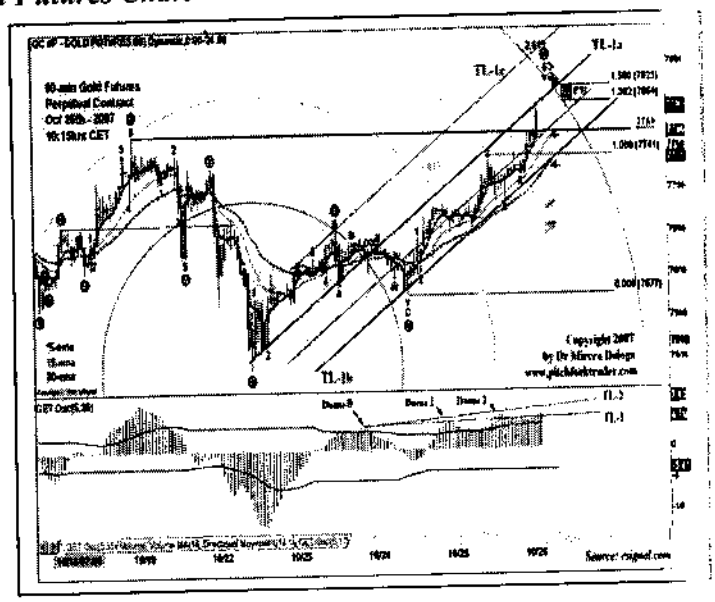
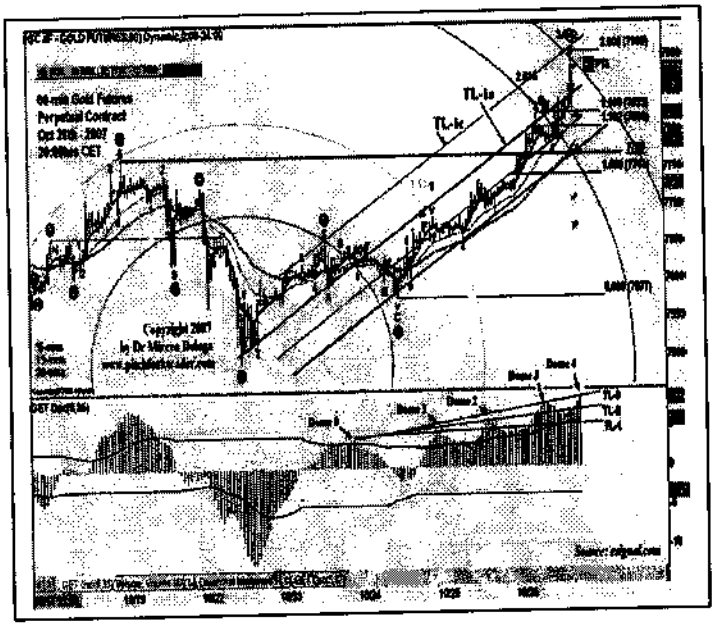


Figure 415 - *The right side chart is a continuation of the prior chart. As we anticipated the oscillator slightly retraced at the third fan line and then it swung up forming the fourth dome, exactly at the Dome 3's TL-3 trend line. The market flow is now over-extended.*
As for the market price, it has just finished the W3, being halted by the 3.00 Fibonacci ratio arc.



9.4 OSC (5, 35) & Head-and-Shoulder - Euro/US Dollar Futures Chart

Figure 416 - *The right side chart shows the* **head-and-shoulder (H&S)** *chart formation. The right shoulder has been constituted and the last bar is right on the four month long TL-01 trend line. Its breakout will certainly emphasize the H&S probability.*
As for the OSC (5, 35), which performed a bearish divergence, it is currently retraced almost to the zero line. Its penetration into the negative territory, under the zero line and the breakout of the lower Breakout Band will certainly validate the H&S thrust from the neckline to the 140755 key level.

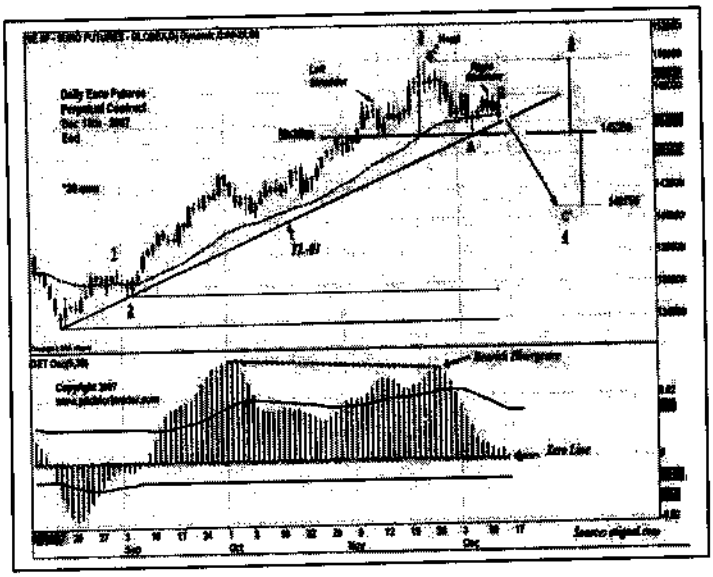


Figure 417 - *As anticipated the right side chart illustrates the H&S continuation of the prior chart. After a test and a pullback, the last bar penetrated not only the TL-01 trend line but also the neckline of the H&S. The OSC (5, 35) indicator retrace all the way to the zero line, penetrating the 0.90-1.40 zone of the W4. One can easily see that the next target is the 100% thrust level of the H&S, which coincides with the 61.8% W4 correction at 140755-141056 cluster zone. The passage of the OSC (5, 35) in the oversold zone will confirm the market price's drop to 140755 level.*

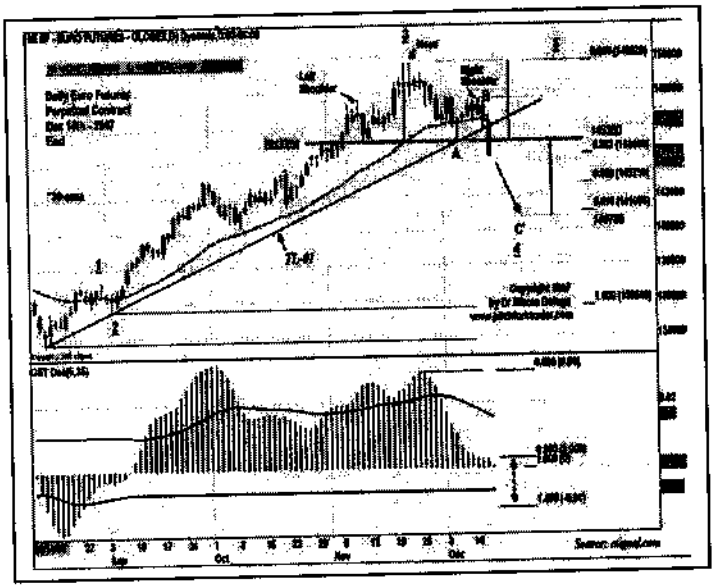
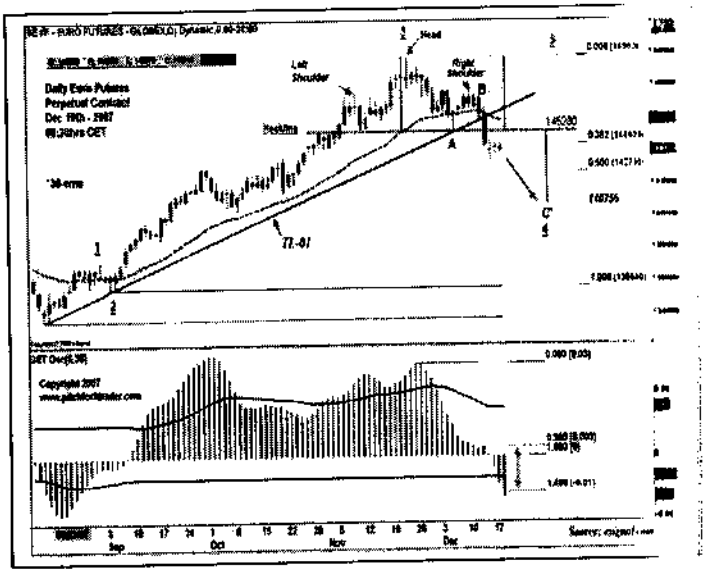


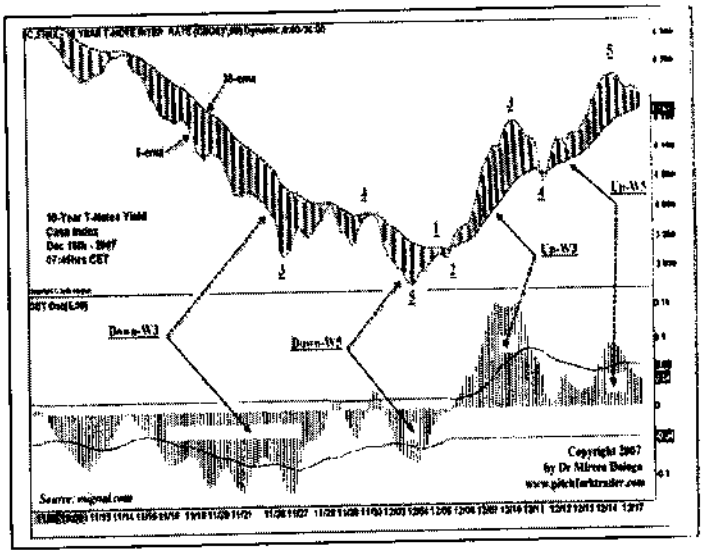
Figure 418 - *As anticipated the right side chart illustrates the H&S continuation of the prior chart.*
Even if the market flow is currently immobilized into a narrow range the OSC (5, 35) has already reached the oversold zone. The last three narrow bars form a trading range where the market flow will efficiently restore its kinetic energy for a more profound down-sloping continuation of the H&S thrust.



10. Elliott Waves Labelling Confirmation by OSC (5, 35) Indicator

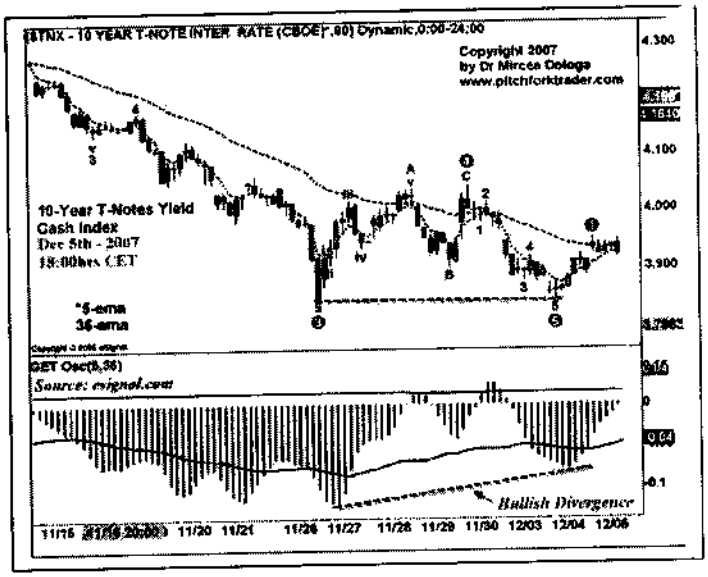
10.1 Elliott Wave and OSC (5, 35)

Figure 419 - *The right side chart illustrates the differential between the two emas (5- and 35-bar), which formed the shadowed area, constituting the foundation of the OSC (5, 35) construction.*
The constituted histogram shows:
- The well developed W3's dome, down or up, signals the high-powered momentum indicating a convergence of the price/OSC move
- The last & the least developed W5's dome signals the waning of initial power (W3), prelude of a very steep bearish divergence.



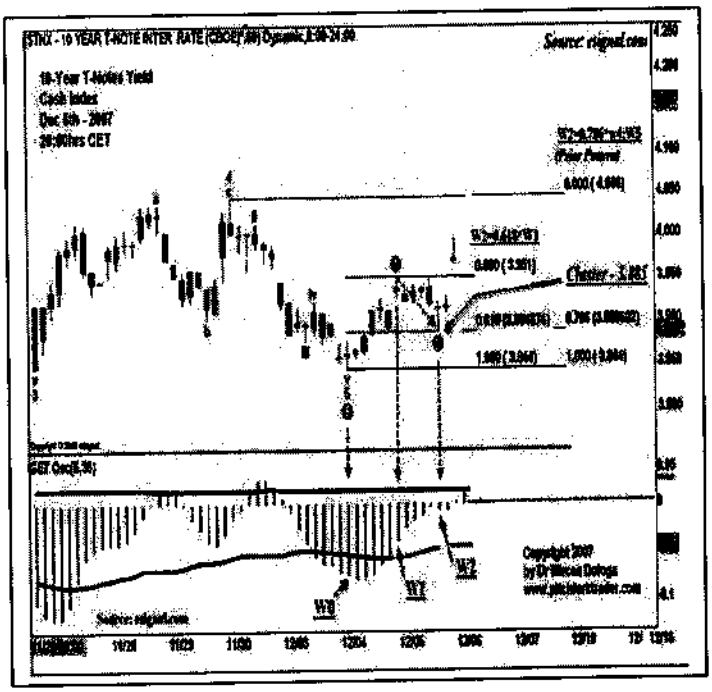
10.2 Wave 1

Figure 420 - *The right side chart illustrates a bullish divergence, which is the precursor of the down-sloping trend reversal.*
The retracement of the OSC (5, 35) under the lower Breakout Band signals the development of a new up-sloping chart pattern.
The W1 inception was announced by the breakout of the lower Breakout Band, from below, indicating the passage from the oversold status of the down-sloping impulsive pattern to the neutral status of the W1. A small-retraced W2 will indicate an extended W3.



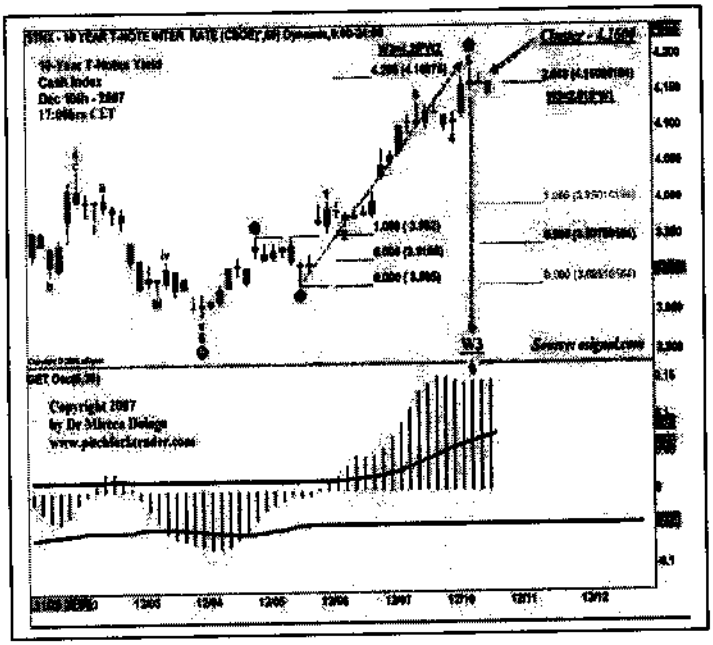
10.3 Wave 2

Figure 421 - *As anticipated the right side chart illustrates the termination of the W2, which retraced to its common 50% to 61.8% value, thus reaching the 3.885 key level cluster.*
The corresponding OSC (5, 35) has hardly retraced under the zero line.
Now, the market flow is prepared to commence the build-up of the W3 after it has broke-up the W1 highest high at 3.951 key level.
The current OSC just tested the upper Breakout Band.



10.4 Wave 3

Figure 422 - *As anticipated the right side chart continued the prior chart, illustrating the development of the W3. The convergence of the price & OSC (5, 35) is mimetic and the last dome has a double humped camel-like form foretelling a* "plateau" divergence, *downward oriented.*
*The symbiotic synergy between price and oscillator is almost perfect: the W3 is extended (W3=2.618*W1 and W3= 4.25*W2). The OSC (5, 35) is overbought, well above the upper Breakout Band.*



10.5 Wave W4

Figure 423 - *The right side chart shows the variation limits of the OSC (5, 35) while forming the W4. A minimum of 90% retracement is indispensable with a maximum of 140% value. Outside of this zone, will invalidate the W4: less than 90%, it means a pullback rather than retrace, and above 140%, will be the W4/W1 overlapping with Elliott wave re-labelling.*

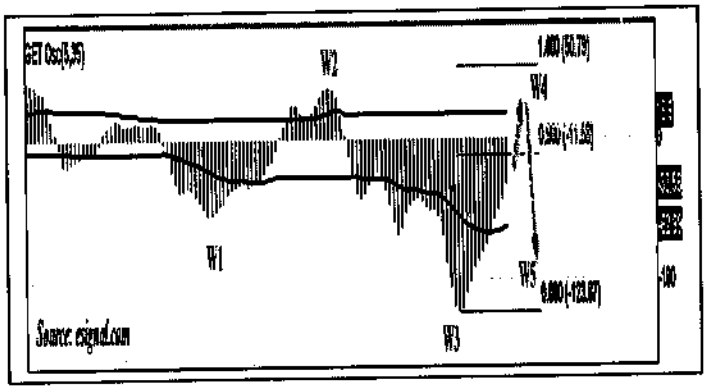
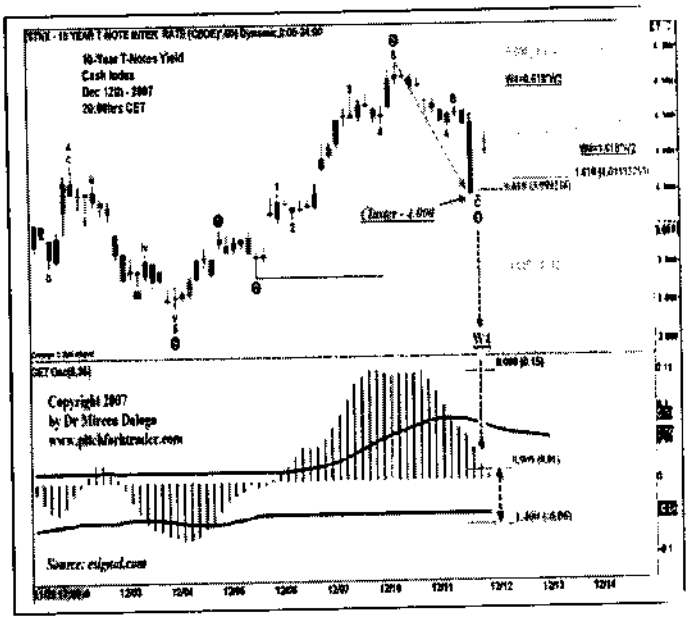
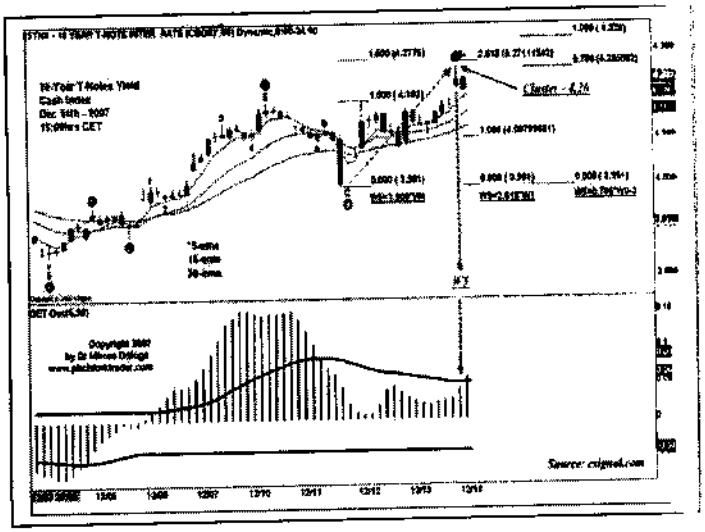


Figure 424 - *The right side chart continues the prior chart illustrating the development of W4, if not its termination. Its most common retracement values are 38.2 to 50%. In our case, the last huge volatile bar has been probably attracted, like a magnet by the 4.000 cluster key level. The OSC (5, 35) is currently located right below the 0.90 level. Even if this is eventuality less probable, there is still space to retrace till 1.40, before the W4/W1 overlapping will eventually occur.*



10.6 Wave 5

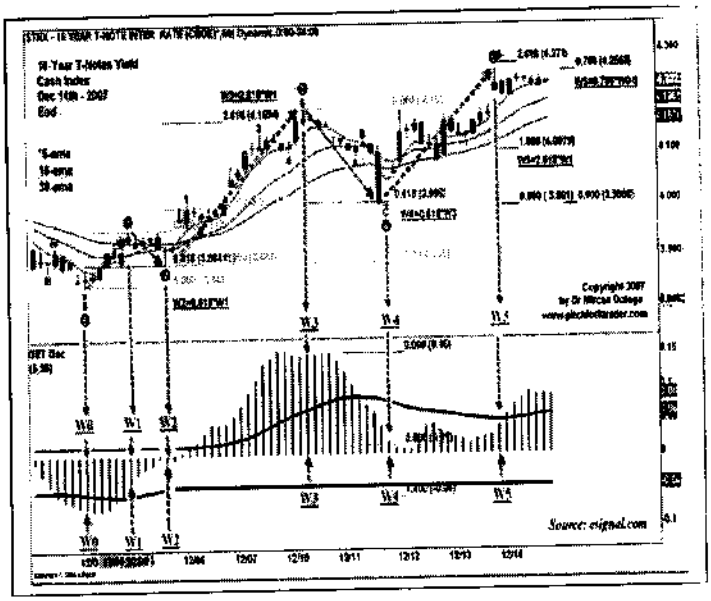
Figure 425 - *The right side chart continued the prior chart showing the development of W5, if not its end. The W4 remained at the same level as it was in the prior chart and the W5 became extended equalling 2.618*W1 and 1.50*W4 key levels. The current OSC (5, 35) indicator reached the upper Breakout Band, and even pierced it. Thus, W5 became overbought with a third of the height of the W3's high-powered momentum dome. The ongoing bearish divergence signals a very probable reversal.*



10.7 Impulsive Wave Pattern - W1 to W5

Figure 426 - *The right side chart continued the prior chart illustrating the completion of the up-sloping impulsive pattern thus correlating:*

- *W1=0.5*w4:W5 of the prior pattern, with a corresponding OSC up-trend move from W0 level to the zero line,*
- *W2=0.618*W1 & tiny OSC retrace,*
- *W3=2.618*W1 & W3=4.25*W2 and double* **OB** *OSC convergence,*
- *W4=0.618*W3 & OSC under 0.9,*
- *W5=2.618*W1 & W5=0.786*W0-3, with overbought OSC & bearish divergence.*



10.8 Corrective Wave Pattern – A-wave, B-wave and C-wave

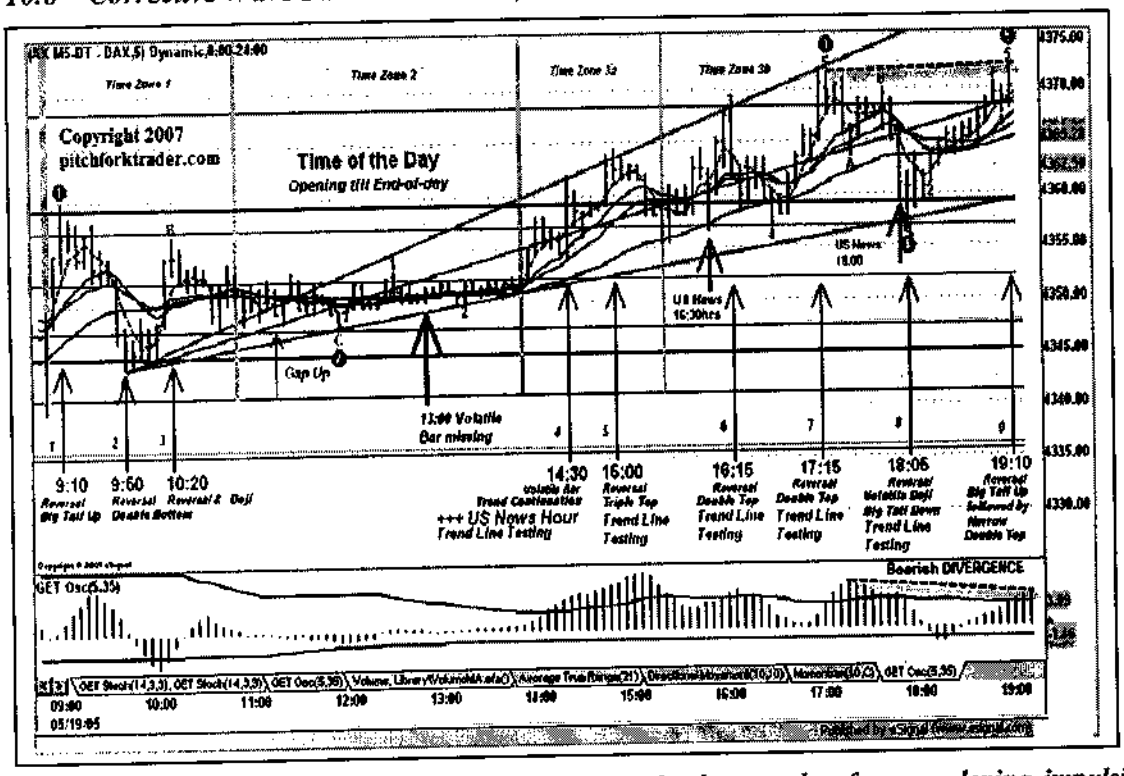


Figure 427 - *The above* **time-of-the-day** *chart is a textbook example of an up-sloping impulsive pattern, in its termination phase signalled by the steep bearish divergence. A common ABC corrective pattern – mostly a zigzag - will probably ensue having as immediate target the W4 level of the prior pattern and/ar the lower border of the* **broadening chart formation.**

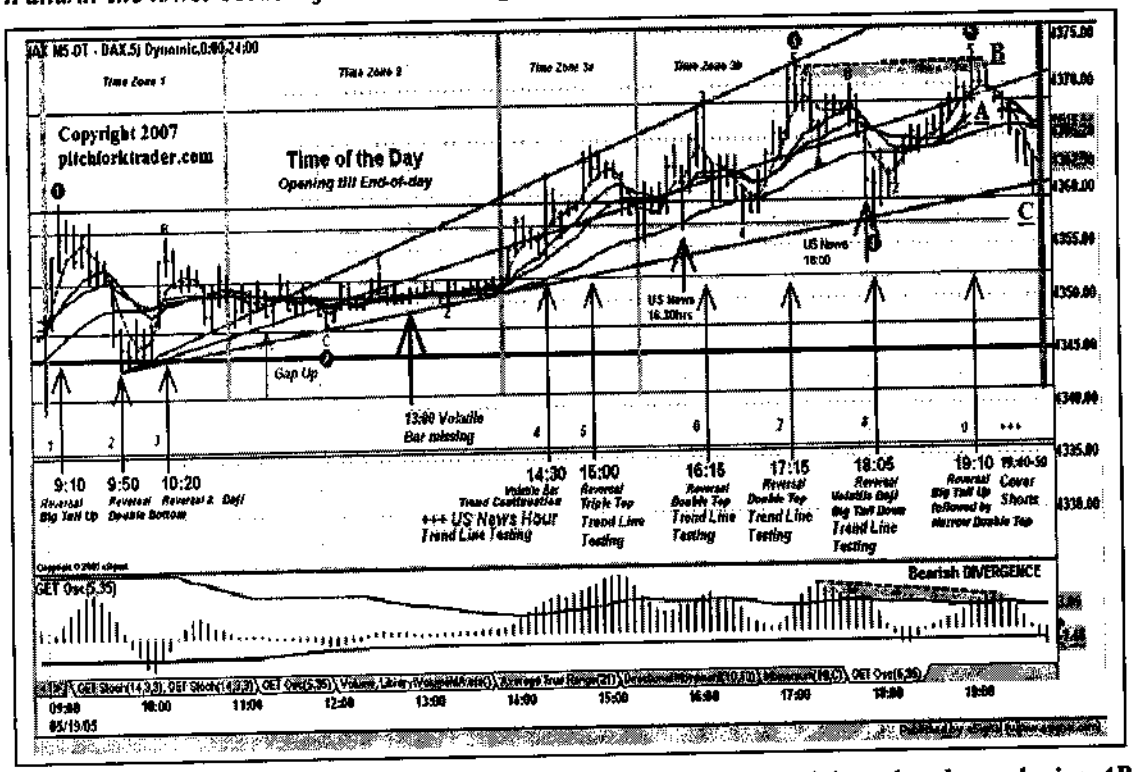


Figure 428 - *The above chart is a continuation of the prior chart. As anticipated, a down-sloping ABC zigzag pattern has been formed, being only halted by the lower border of the* **broadening chart formation** *almost reaching the W4 of the prior pattern. The bearish divergence fulfilled its function and the OSC (5, 35) passed from overbought stage into oversold stage.*

11 Real-Time Case Studies

11.1 Trading OSC (5, 35) Dome Breakout - Euro/US Dollar Futures Chart

Figure 429 - *The right side chart illustrates the development of an ABC corrective pattern, which could transform itself in an impulsive pattern, when the C-wave is bigger than A-wave. This move should probably be confirmed if the market flow will break down the thick lower Breakout Band. By comparing the "would be" dome with the last dome we will closely follow an eventual W3 development. The most optimal entry of this trade is 1-3 ticks under the lower border of the initial rectangle at 146500 level. The targets are the median line (ML), the lower median line (LML) and the WL-1 warning line.*

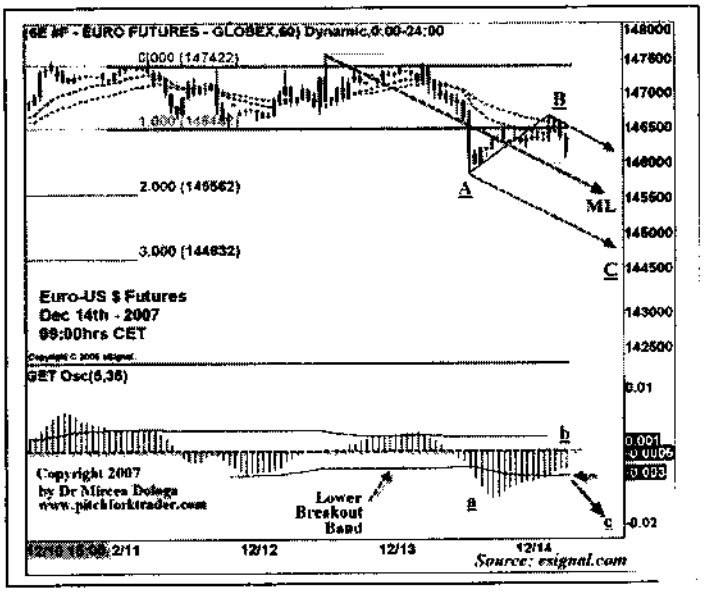


Figure 430 - *The right side chart continued the previous chart, illustrating the build-up of the W3, which reached the lower median line (LML) and the W3=2.382*W1 at 145000 key level. As for the OSC (5, 35) it has broken-down the lower Breakout Band, as anticipated and slightly exceeded the last dome at –0.008 level.*
The market flow is on its way to reach the WL-2 warning line, thus forming an over-extended OSC (5, 35) dome, far into the oversold zone.

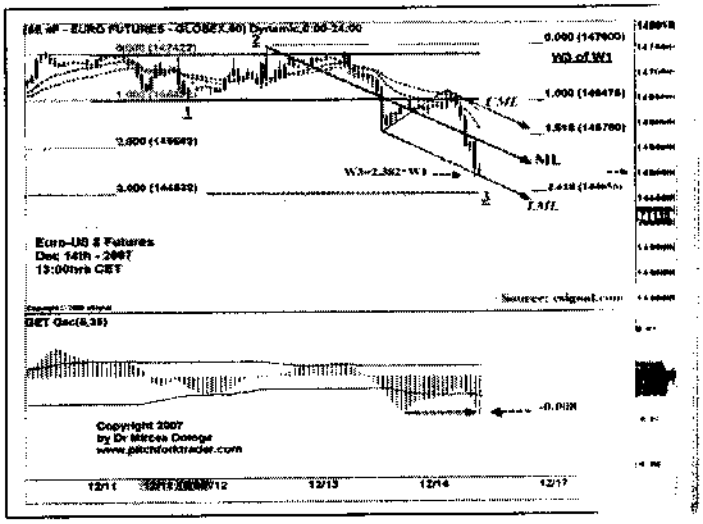
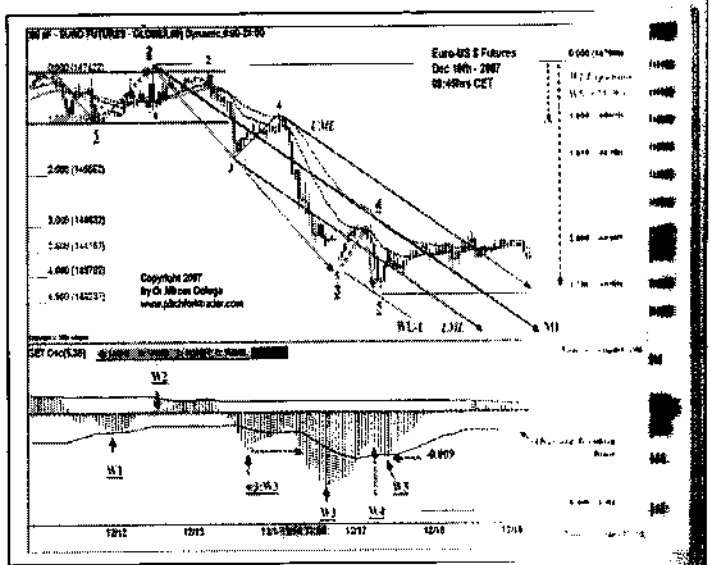
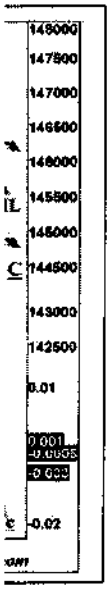
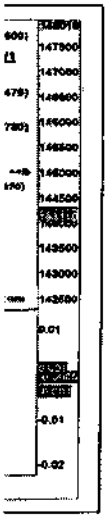


Figure 431 - *The right side chart continued the previous chart, rapidly illustrating not only the development of the* studied dome *pertaining to the W3, but also the termination of the W5, which signalled the end of the whole down-sloping impulsive pattern. Thus, we conclude by saying that:*
- The market flow reached the maximum level, the confluence zone of rectangle's 450% extension, the WL-1 and 375% W1 expansion.
- The OSC (5, 35) dome pertaining to the W3 is twice its corresponding value belonging to the W5's dome.



11.2 Trading Horizontal Triangle & OSC (5, 35) - German Dax 30 Futures Chart





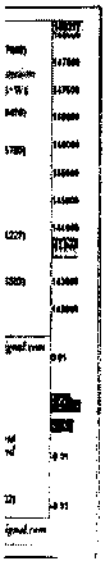


Figure 432 - *The right side chart shows a textbook example of a W4 horizontal triangle. The completed* e-wave *projects the market price's move, firstly to target n° 1 – the 8000-confluence level – where Tl-1 intersects the 61.8% Fib ratio retrace of the* a-wave *& LML. The target n° 2 will probably be the highest high at 8135 key level.*
As for the OSC (5, 35) indicator, it will probably closely follow these two targets, by breaking-up the upper Breakout Band and building an extremely overbought dome.

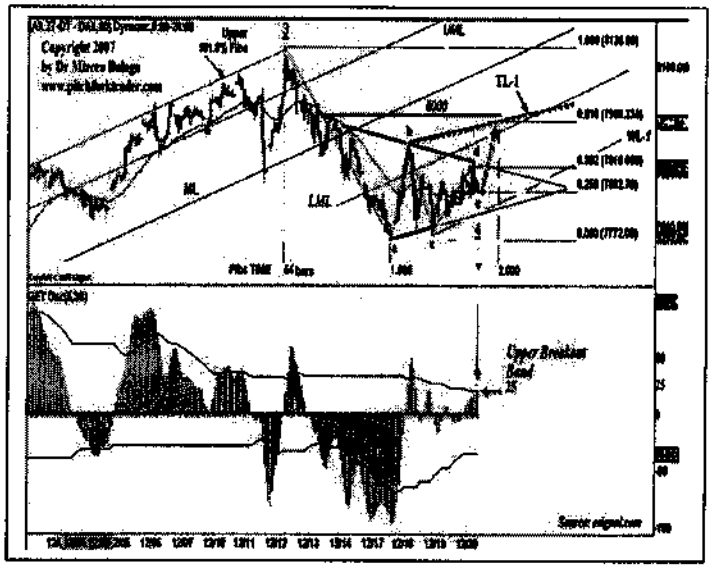


Figure 433 - *The right side chart continued the previous chart, illustrating not only the reaching of the* **bd-trend line** *by the market flow but also the breaking up of the upper Breakout Band by the OSC (5, 35).*
The first target, the 8000-confluence zone is within reach and the OSC (5, 35) is just above the 25 level.

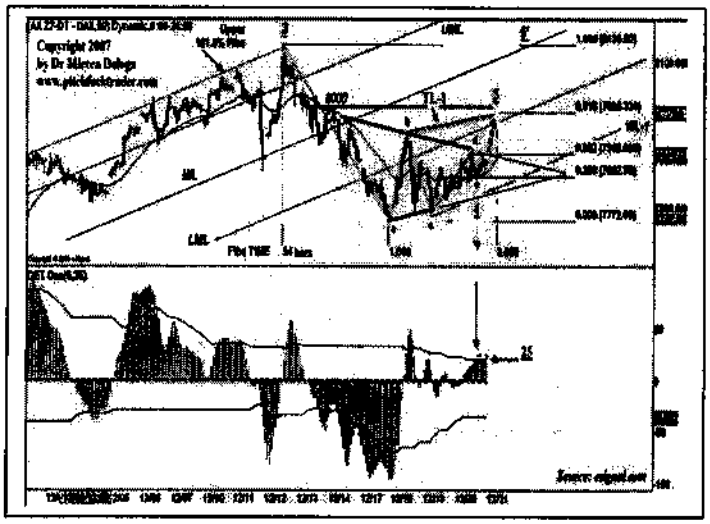
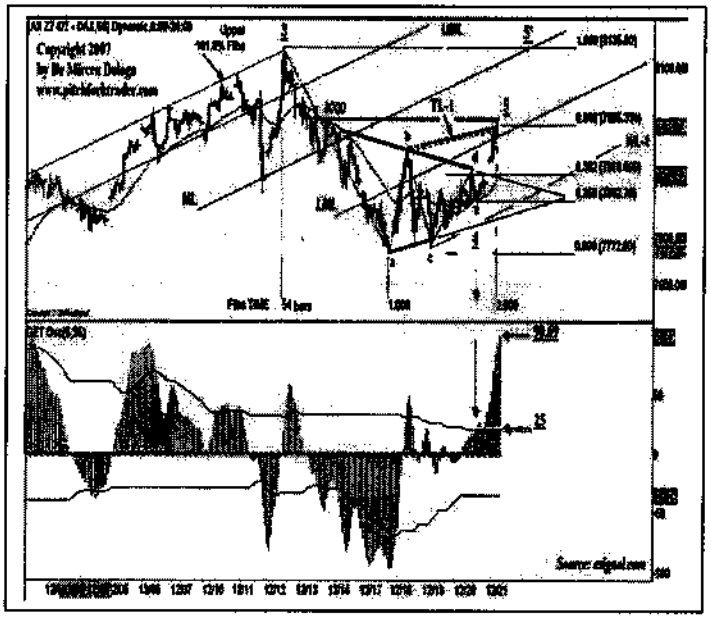


Figure 434 - *The right side chart continues the previous chart, shows the testing of the first target at 8000-confluence zone by the market flow. The last up-gap certainly enhanced and restored the exhausted price momentum in such a way that other gaps could be expected. It seems that the currently developed W5 will be an extended wave.*
The OSC (5, 35) became elongated, reaching the 98.69 level. A quick comparison with the W3's OSC (5, 35) revealed that both domes are equal, thus an imminent Elliott wave re-labelling must be performed.



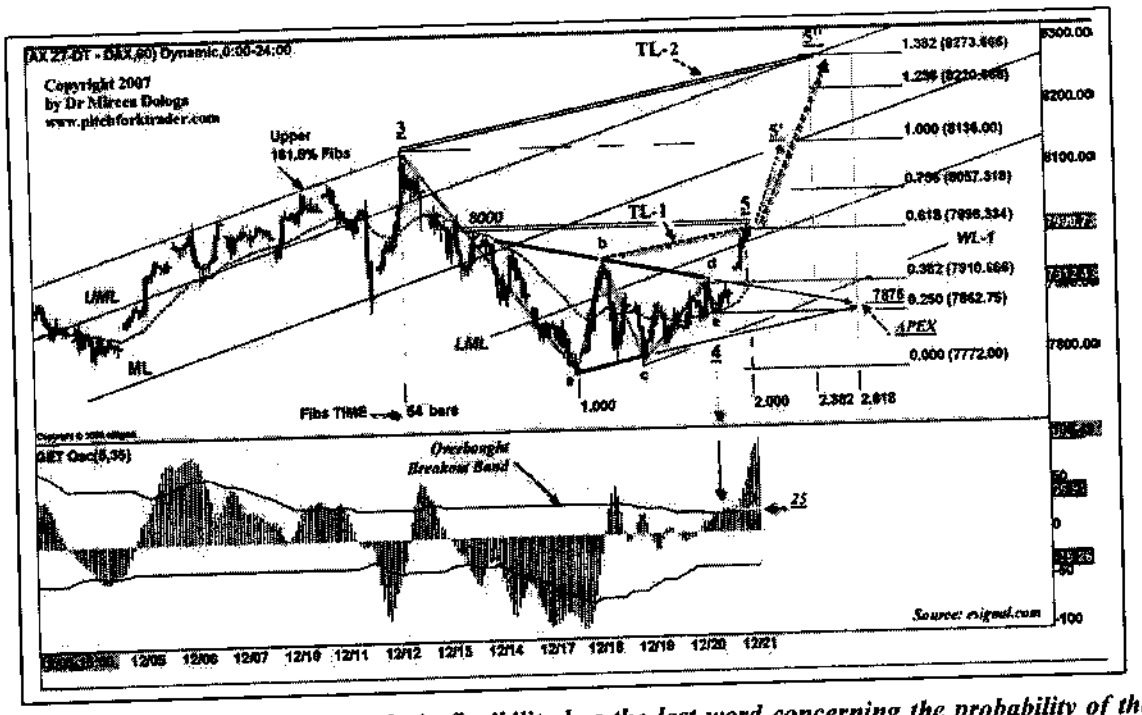


Figure 435 - *Once again, the trader's flexibility has the last word concerning the probability of the trade's outcome. One should always be able to preserve his/hers trading capital. On the above chart we can easily see that the market flow has already reached the first target – the 8000-confluence zone – and it might continue its up-sloping momentum, in spite of the overbought OSC (5, 35). We seriously consider the next target the 8135 key level – the highest high – and also the 8273 key level target, which constitutes a triple level confluence: the TL-2 parallel to* ac-trend line, *the 1.382 Fib level and the upper median line.*

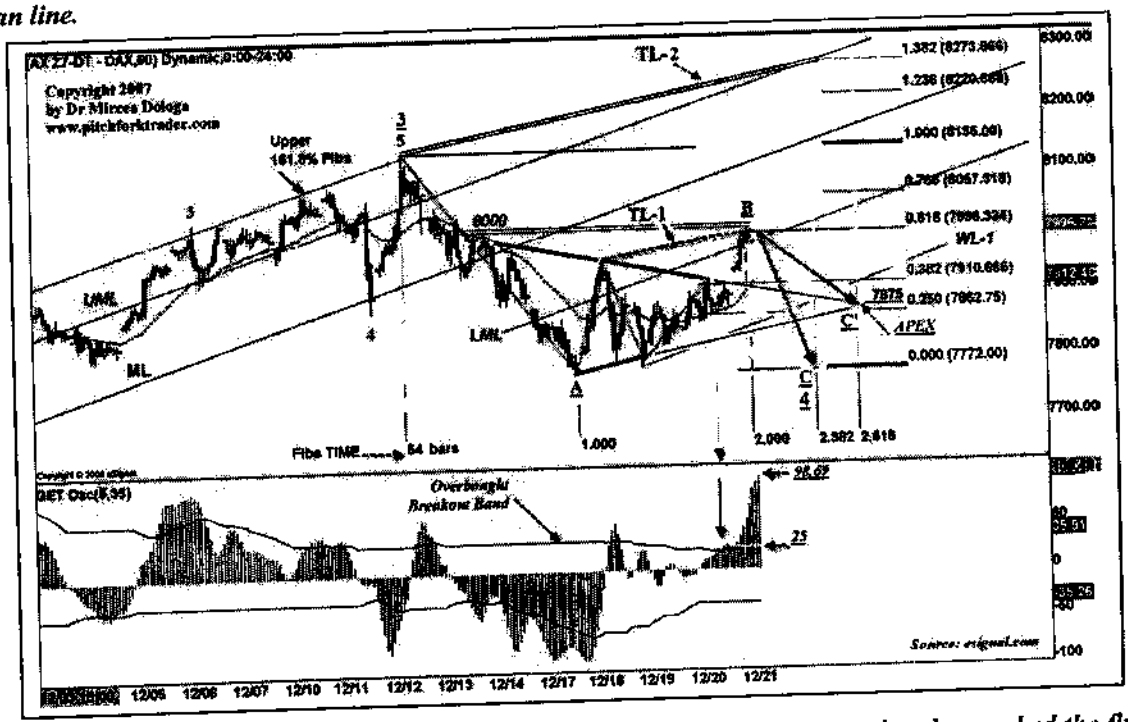


Figure 436 - *On the above chart we can easily see that the market flow has already reached the first target – the 8000-confluence zone – at exactly 2.00 Fibonacci time ratio. This could incite the market flow to drop, more or less, giving the trader multiple down targets: the 38.2 Fib ratio retrace at 7910 level, the triangle's apex at 7875 level and the last low – beginning of A-wave – at 7772 level. Besides these low momentum targets, we can also have the following deeper two levels, where C-wave = A-wave or even lower where C-wave = 1.618*A-wave.*

11.3 Trading W3 & OSC (5, 35) - German Dax 30 Chart

Figure 437 - *We have on the right side chart the prepared conditions for the up sloping W3 trade: the bullish divergence, the probable breakout of the 30-ema, the exact number in hundreds (7600 key level) and the formation of the double storey narrow rectangle.*
The breakout of the zero line by the OSC (5, 35) with tendency towards the upper Breakout Band associated with the breakout of the upper border - the **Breaking Line** *- of the narrow rectangle signals the trade entry at the 7601.50 level, with a stop loss just under the low of the last bar. Be prepared for a pullback and re-entry!*

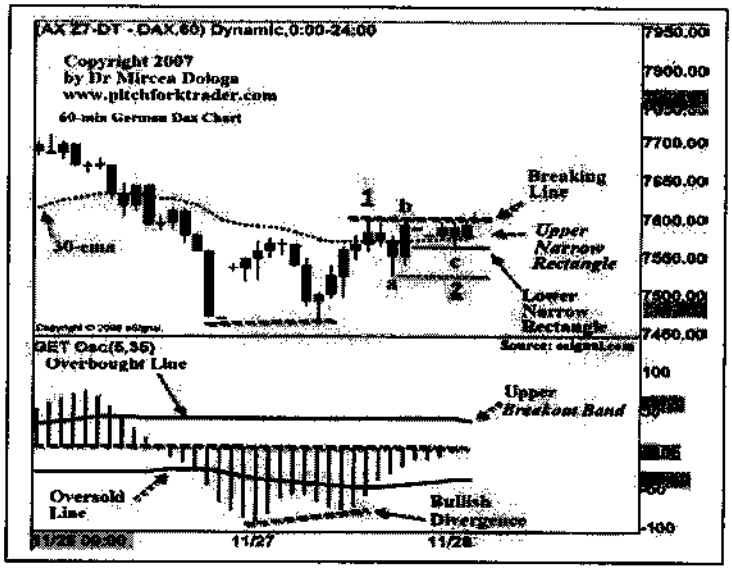


Figure 438 - *As we anticipated the trade took off strongly, being only halted by another exact number in hundreds (7800 key level). The OSC (5, 35) vehemently broke-up the upper Breakout Band, thus becoming over-extended in the overbought zone. Its very tall dome could represent either the complete W3 or its sub-wave, the w3:W3 –* **the third of the third.** *After reaching the very high 181 level it started to retrace, in order to form either the W4 or if elongated, the definitive W3 of the pattern.*
We have settled the stop loss at the intersection of the price & 30-ema.

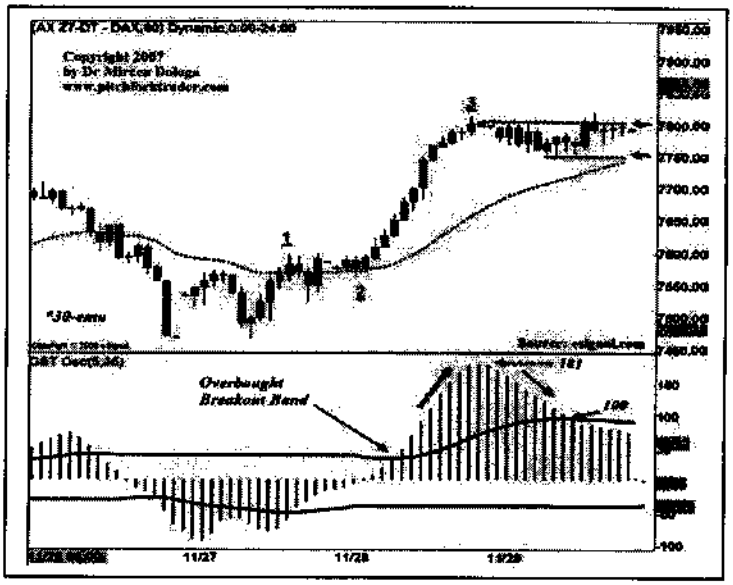
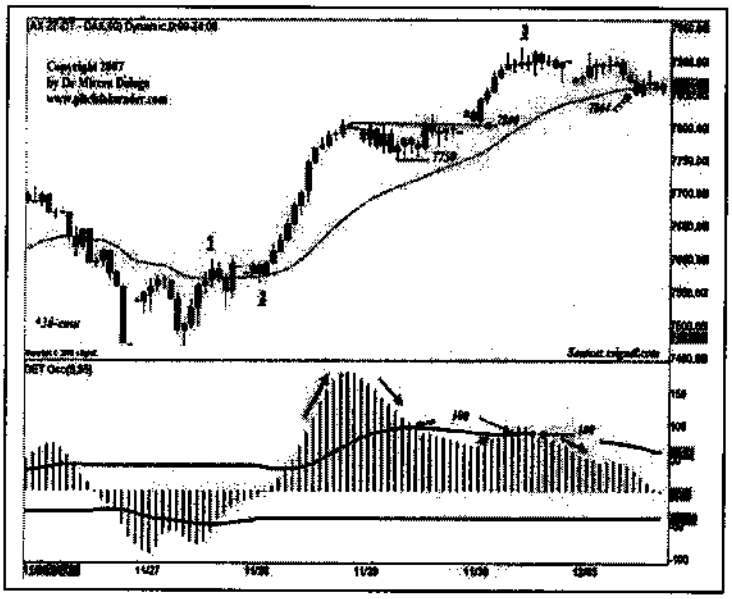


Figure 439 - *As we anticipated the trade performed not only the w3:W3 but also the final W3 and started to build the W4. The market flow formed a perfect* **add-on** *level at exact 7800 number in hundreds. The stop loss has been attained 64 points farther, at 7864 level at the intersection of the price and the 30-ema. Be ready to re-entry and trade the W5, at W4's end.*
As for the OSC (5, 35) it shows a textbook example of the w3:W3 dome, twice that of the W3. The formed bullish divergence associated with the OSC's retrace under the lower Breakout Band, more than signal the making of the W4.



11.4 Trading W5 & OSC (5, 35) - German Dax 30 Chart

Figure 440 - *We have on the right side chart the prepared conditions of the up-sloping W5 trade: the location of W4 in 0.90 to 1.40 OSC zone, the price location on the upper median line (UML) of the down-sloping pitchfork ready to breakout and the vicinity of the 30-ema, ready to be broken out.*
The entry point is located, just above, the 30-ema with a stop loss under the low of the last bar. Be prepared for an **add-on** *entry, just above the trigger line of the pitchfork. This shouldn't exceed the entry's trading unit.*

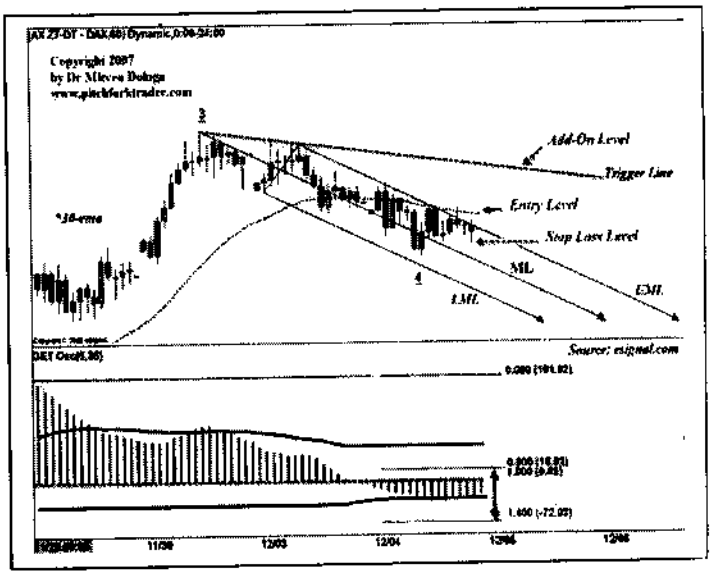


Figure 441 - *As anticipated, the market flow took off, certainly helped by the vehement up-gap. The trade was performed right at the opening at 7865 key level with a stop loss at the up-gap's 50% Fibs level, just under the 30-ema. The already defined* **add-on level** *has been attained, above the trigger line at 7905 key level. After the last huge bar, the stop loss has been established at the intersection of price and 30-ema. All the factors indicate an extended W5: the breakout gap - probably one of the series, the huge volatile bar and the breakout of the last high – the W3 level.*

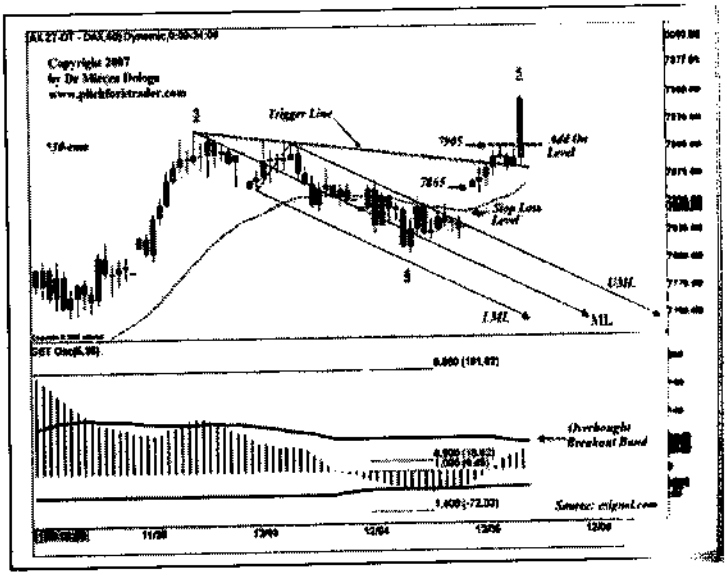
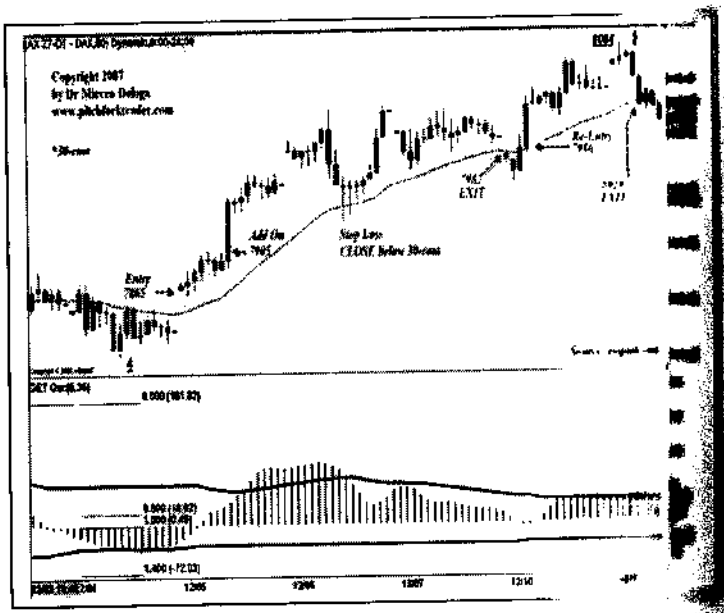


Figure 442 - *The market continued its up-trend forming an elongated W5. The initial 7865 entry trade has been very well protected by the trailing stop-loss dependent on the price/30-ema intersection. Always wait for the bar's close to be* **under** *the 30-ema. In this way we have avoided to be exited by the two ema pierces around 7940 level. In exchange, we got exited at 7982 key level. Don't ever be afraid of nibbling, and re-enter if the trade conditions are propitious. Thus we re-entered at 7986 key level, due to the pierce and test of the 30-ema & OSC above zero line. We rode the 30-ema, all the way to 8029 exit key level.*



Key Points to Remember:

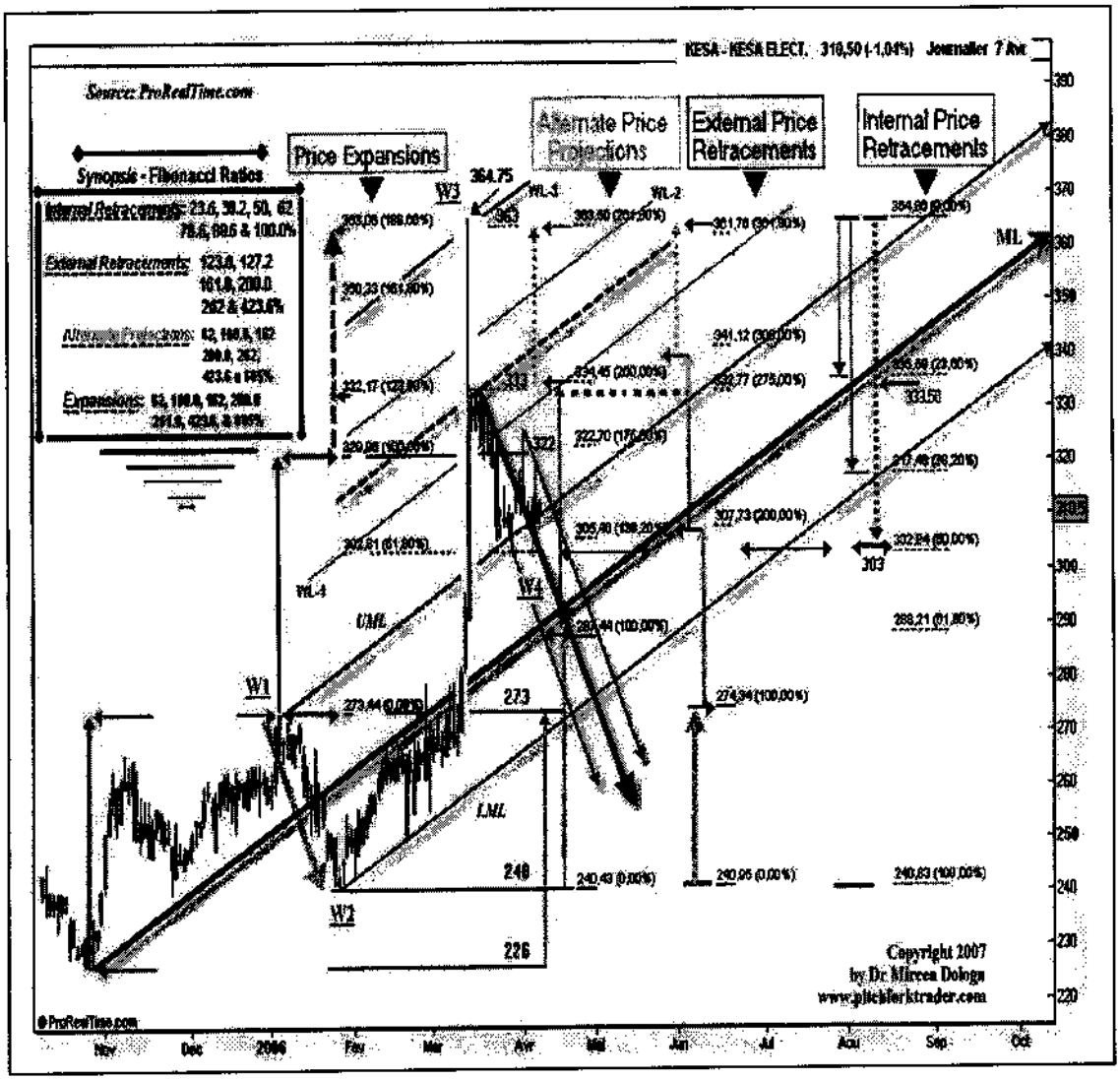
- Be aware that the MACD oscillator is not only an excellent indicator for trending but also for identifying a reversal.
- The OSC (5, 35) indicator, a proprietary tool of *eSignal.com* is by far more efficient that the MACD - the OB/OS concept is introduced. Its single use or in tandem with the shorter version – the OSC (5, 17) indicator - gives the trader the freedom to see the duration of a correction within a trend. The choice of the OSC (5, 35) exponential moving average seems to be ideal because their 7 ratio, is an universal Lucas number and 17 is the half of 35.
- Be aware and use the price/indicator divergences. They can really indicate the end of the trend. But act with caution...! Not every divergence has a reversal and not every reversal has a divergence. It must be used only as a confirmation tool.
- Don't neglect the use of the convergence. Its importance equals that of the divergence. It is defined as no discrepancy between the price and the indicator. It signals the trend's continuation.
- Be aware that a short-bar divergence is more efficient than a long-bar divergence. In our experience we had the following descending efficiency length scale: the 2 to 3 bar, the 2 to 6 bars and the more than 6 bars, where the former is the most efficient.
- One should be aware that the failure swings aren't only the apanage of the charts; they are also frequently met on the OSC (5, 35) charts. Valuable because they constitute an enhancement divergence factor, they precociously occur with regard to those of the price chart.
- Don't hesitate to prepare a trade by using the OSC (5, 35) associated with any tool of the *Integrated Pitchfork Analysis*: the chart patterns like rectangles, triangles, channels or trend lines, whatever they are, on the market price chart or on the OSC chart. Keep in mind, that most of the time the breakout of a trend line is the prominent entry!
- The flexibility fully expresses one of the most important qualities of a trader. It always guides the trader to obtain the most optimal probability of the trade's outcome & preserves the capital
- Make a full use of the 30-ema as a trailing stop loss when the price intersects the ema. However learn and respect the best usage; be patient until the last bar's price closes *under* the ema, so you avoid the market noise as pierce with especially long tails and always use the re-entry (*nibbling*) with a tight stop loss!

- **Just for the record, be aware that statistics imply the moving average use in trading as one of the most efficient, if properly used. One can obtain a much better trading result than just the annual buy-and-hold strategy. Now imagine, how well, all this can be improved if the *Integrated Pitchfork Analysis* is associated with this exponential moving average strategy.**

Appendixes

Appendix n° 1

Price FIBONACCI Ratios Technique Applied to ELLIOTT Waves



W1	W2		W3		W4	W5	
INT RET applied on Prior Pattern 100% W4 & w4:W5	INT RET applied on Prior Pattern 100% w4:W5	INT RET applied on W1	INT RET applied on Prior Pattern 100%	ALT PROJ - W1 EXPANS - W1 EXT RET - W2	INT RET W3 & ALT PROJ W2	ALT PROJ - W1 ALT PROJ - W0-3 ALT PROJ - W4 EXPAN - W1	INT RET of 100% Prior Pattern

*Abbreviations - INT RET (Internal Retracement), EXT RET (External Retracement), ALT PROJ (Alternate P. Projections) & EXPAN (P. Expansion).

Appendix n° 2a

This Excel file can be obtained from the Author at:
mircdologa@yahoo.com

Positive Reversals

Calculations of Upward Price Projections

December 2007

P0 (*Low*)	119320	level
P1 (High)	122700	level
P2 (*Low*)	120130	level
P2-P0	810	pts

Upward Price Projections

Calculated Projection P1 + (P2-P0) Value	123580	level
Real-Time Value	123860	*level*
Difference (pts)	280	pts
[Real-Time Value - Calculated Value] Difference (%)	0,23%	

Appendix n° 2b

This Excel file can be obtained from the Author at:

mircdologa@yahoo.com

Negative Reversals

Calculations of Downward Price Projections

December 2007

P0 (High)	129920	level
P1 (Low)	125610	level
P2 (High)	129250	level
P0-P2	670	pts

Downward Price Projections

Calculated Projection **P1 - (P0-P2)** Value	124840	level
Real-Time Value	125030	*level*
Difference (pts) *[Real-Time Value - Calculated Value]*	190	pts
Difference (%)	0,15%	

Appendix n° 3

Key Level Mapping of the Operational Time–Frame Chart

R2 +++	6,664		
Half Pivot +++	6,636	to 6638	Pivotal Cluster (x3) and Gann Dn 45°
++			0.382*W4 on 60min chart & 0.50 of prior w2:W5
+	6618		0.618*W4 on 60min chart
R1 +++	6,608		
+	6604		0.50*W4 on 60min chart
+++	6600		Upper Wedge Trend Line on 240min & 100's level & W5 Starting Signal
+++	6590-94		Pivotal Cluster (x3) and Gann Dn 90°, Main Wkly Pivot
Half Pivot ++	6,592		
Pivot Range High	6587	++	
Daily Pivot	6,576	+++	
++	6572-74		Fibs Cluster
+	6568		Prior W3 Termination
Pivot Range Low	6564	++	
++	6552-53		Close & Gann Dn 135°
Half Pivot ++	6,548		also Pivotal Cluster (x2)
++	6545.5		50% W5 Retrace on 240min chart
+++	6543		Day's Low & Apex Wedge on 240min & 100% Down Thrust on 60min
	6537		Up-Trust Breaking-Up Level on daily chart
+++	6524		W3=2.618*W1 on 5min chart & W3=1.618*W1 on 60min chart
S1 +++	6,520	to 6519	W3=3.00*W1 on 15min chart & 0.382 of prior W4 & 0.382 daily correction
++	6515-14		0.618 of prior W4 on 240min chart & Old wkly support
++	6513		Gann Dn 180°
++	6511.5		w2:W5 of prior pattern
Half Pivot ++	6,501	to 6505	Pivotal Cluster (x2) & W4/W1 Overlap Border on 240min chart
	6501		21-EMA level on daily
S2 +++	6,487		W3=1.618xW1 on 60min chart & 34-EMA leve on daily chart
	6471		50% Fibs of prior W4 retracement
Half Pivot ++	6,459		

Appendix n° 4

Pre-Open Main Points

Main Data

High	6631.50
Low	6543.00
Close	6552.50
Daily Pivot	6575.7

I. Market Direction

1	**Rule 80% to 20%**		
	Higher Border	89%	
	Lower Border	11%	
2	**Close versus DP**	-23	
3	**Close vs Pivot Range**		
	Higher Border	-35	
	Lower Border	-12	

II. Market Volatility

4	**Pivot Range Value < 3**	23	
5	**Opening Gap** - pts	7.5	Up/Dn
6	**Daily Range over ATR**	133%	Expansion / Contraction
7	**Bollinger Bands & Price**		
	7.1 - Daily 21-MA Level	6561	
	7.2 - Close versus daily 21-MA	-52	
	7.3 - % Bollinger Bands	61%	Upper / Lower Half % Price Location *within Boundaries*
	7.4 - Bollinger Bands Width		
	Hyper-Expansion Value	7.51%	Sideways Market
	Blow Out Value	2.61%	Imminent Price Blow Out Count the Narrow Bars (NR4 or NR7)
	50% Value	5.22	
	Current Value	6.74%	Un-Defined Opportunity

III. Market Trends

8	**Long Term Trend**	Monthly & Weekly Up-Sloping
9	**Intermediate Trend**	Daily & 240min Up-Sloping
10	**Short Term**	60-min & 15-min & 5-min Down Corrections

IV. Main Points *to watch closely* on Charts

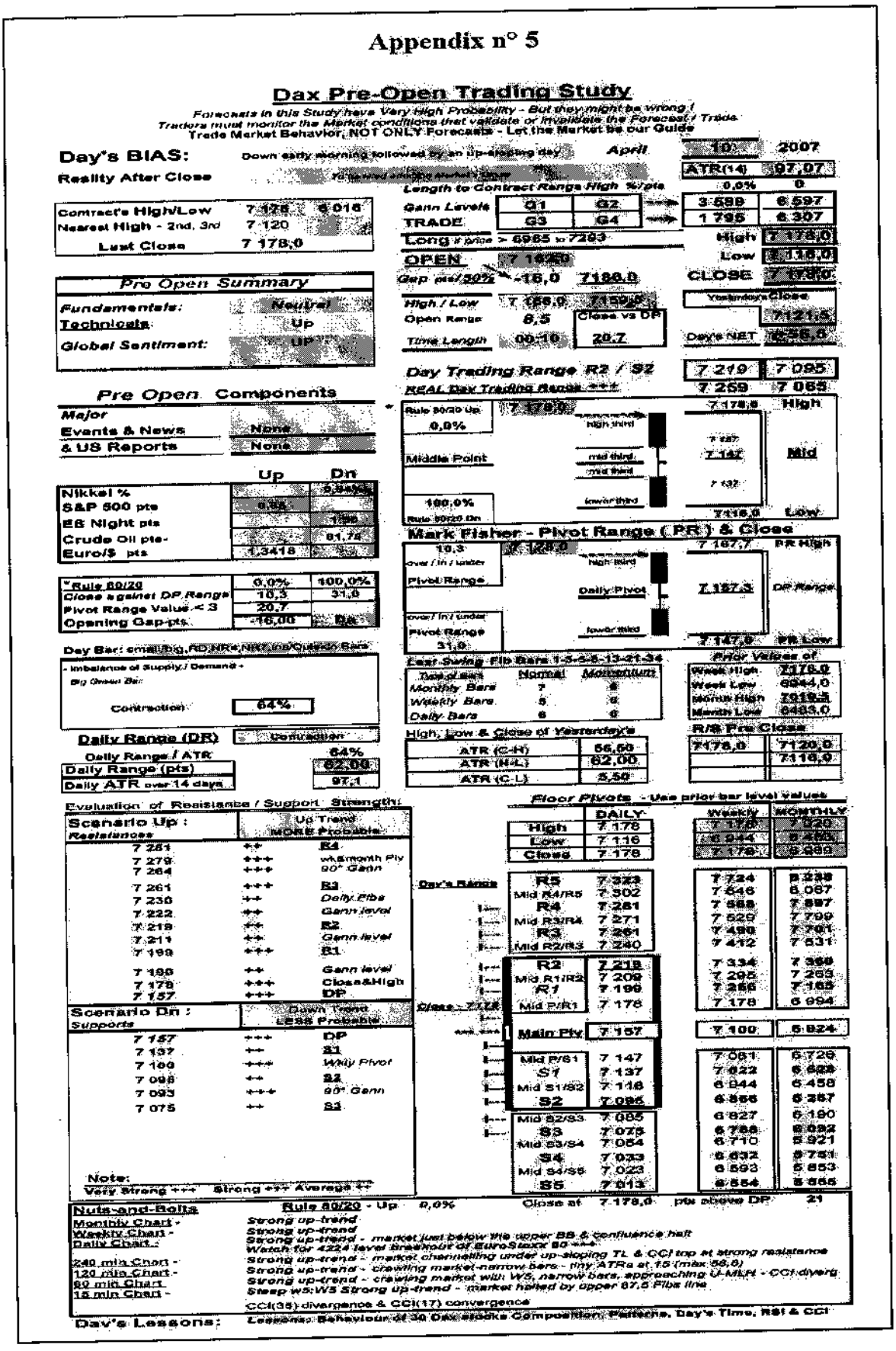
11	**Monthly Charts**	***Up-Close monthly bar between 66% & 75% - Previous 5 bars are Up***
12	**Weekly Charts**	**Down-Close wkly bar in lower 10% above the low of prior huge up-bar** W3=2.786*W1 trending strong - already 3 pullbacks - w5:W3 in progress w5 next to 1.38*w4:W3 & Bar's low halted by lower boundary of up-channel
13	**Daily Charts**	***Down-Close daily bar in its lower 10% below the low of prior bar*** Prior impulsive pattern correction in progress, next to 0.382 of prior W4 Price halted at lower border of current Pattern: down Broadening Formation Price above EMAs & prior W5 at 0.786*W1 & 0.382*W1-3 RSI Divergence even if Close location within Up-Trend at 64.2 (>40)
14	**240-min Charts**	***Close bar forming a doji & price in down-sloping channel*** Price halted by: LML & Triangle's Apex at 6543 just above Breaking point Down W4 in progress at 50% approaching W4/W1 overlap border at 6504.5 CCI in down-sloping channel forming Divergence deep in OS zone (-187)
15	**60-min Charts**	***Close bar forming a mini-consolidation & price in dn-sloping channel*** Down W3=1.382*W1 in progress & 100% Thrust - Price Halt at Half Pivot CCI down channelling - Halt under Trend Line
16	**15-min Charts**	***Close bar forming a mini-consolidation & price in dn-sloping channel*** Price testing 3 times the ML, closing underneath within consolidation Down W3=2.5*W1 in progress - Price Halt at Half Pivot RSI Divergence - Close location within a narrow range between 60 & 80
17	**5-min Charts**	***Close bar forming a mini-consolidation & price in dn-sloping channel*** Down W3=2.236*W1 in progress forming a 5hrs narrow consolidation Price closed right under down-sloping ML W3 Time Fibs at 2.272*W1 & Close right under ML on 50% Consolidation CCI just bounced on 300 level - steep upward move in OS zone (-162)

V. Inter-Market Analysis — Short-Term charts of Bund, EurUsd, S&P 500 and Dow Jones Industrial are all downwards oriented.
Double Top on weekly chart of S&P 500 Cash Index.

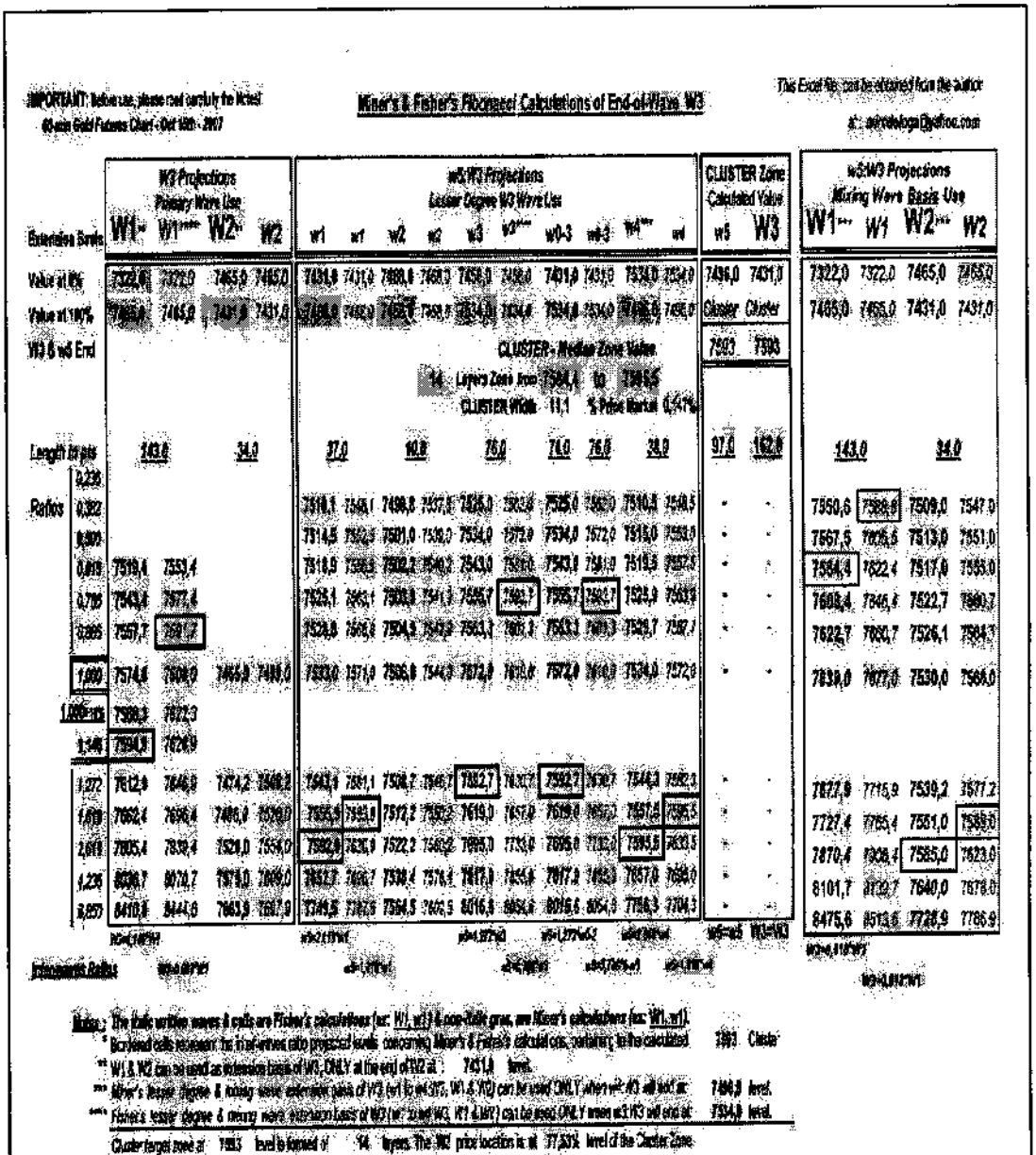
VI. General Conclusion

Morning Bias	Continuation of the down-sloping dominant trend if no Positive Fundamentals Small counter move if Positive Morning News
Day's Bias	Very Probable continuation of the down-sloping dominant trend Hypo-Volatile day - market moves in smaller range, under daily ATR = 40 pts.

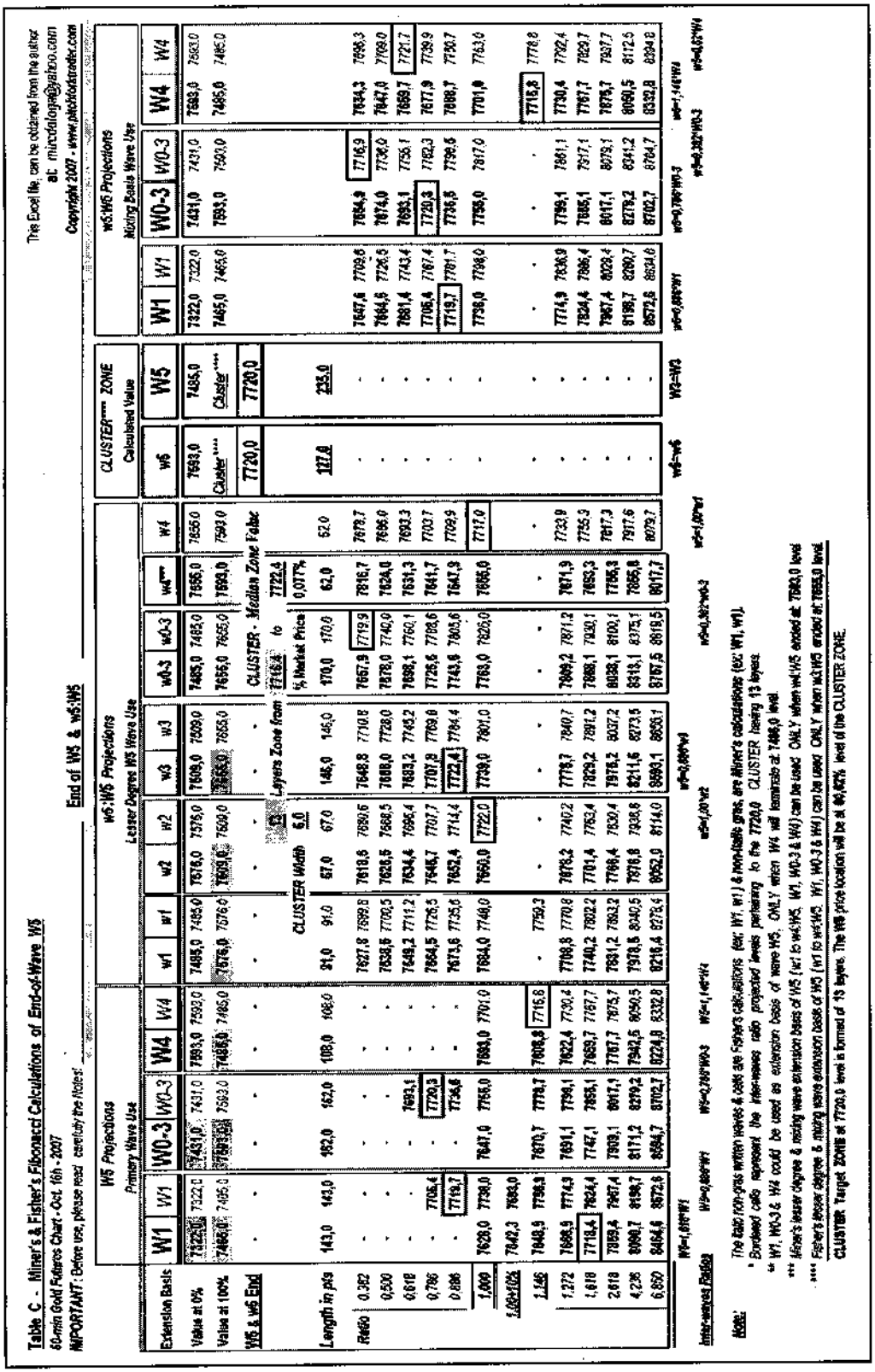
Appendix n° 5



Appendix n° 6



Appendix n° 7



Appendix n° 8

Pivotal Bar Count Table

Table compiled by Dr Mircea Dologa www.pitchforktrader.com

Pivotal Bar Count Table

Fibonacci Ratios	Fibonacci Ratios x 100	Fibonacci Ratios x 1000	Fibonacci Numbers n°
.146	15	146	5
.236	24	236	8
.382	38	382	13
.618	62	618	21
.786	79	786	34
.886	89	886	55
1.272	127	1272	89
1.618	162	1618	144
2.618	262	2618	233
4.236	424	4236	377
6.854	685	6854	610

Lucas Numbers n°
7
11
18
29
47
76
123
199
322
521
843

Square Root	Square Root x 100	Square Root x 1000
.382	38	382
.485	48	485
.618	62	618
.786	79	786
.886	89	886
1.120	112	1120
1.272	127	1272
1.618	162	1618
2.058	206	2058
2.618	262	2618

Squares of Numbers
4
9
25
36
49
64
81
100
121
144
169
196

Cubes of Numbers
8
27
64
125
216
343
512
729
1000

Symbolic Number Six and its Multiples

6	66	126	186	246	306	366	426	486
12	72	132	192	252	312	372	432	492
18	78	138	198	258	318	378	438	498
24	84	144	204	264	324	384	444	504
30	90	150	210	270	330	390	450	510
36	96	156	216	276	336	396	456	516
42	102	162	222	282	342	402	462	522
48	108	168	228	288	348	408	468	528
54	114	174	234	294	354	414	474	534
60	120	180	240	300	360	420	480	540

Symbolic Number 144 Divisors & Multiples

144	
3	216
9	288
18	324
36	360
72	432

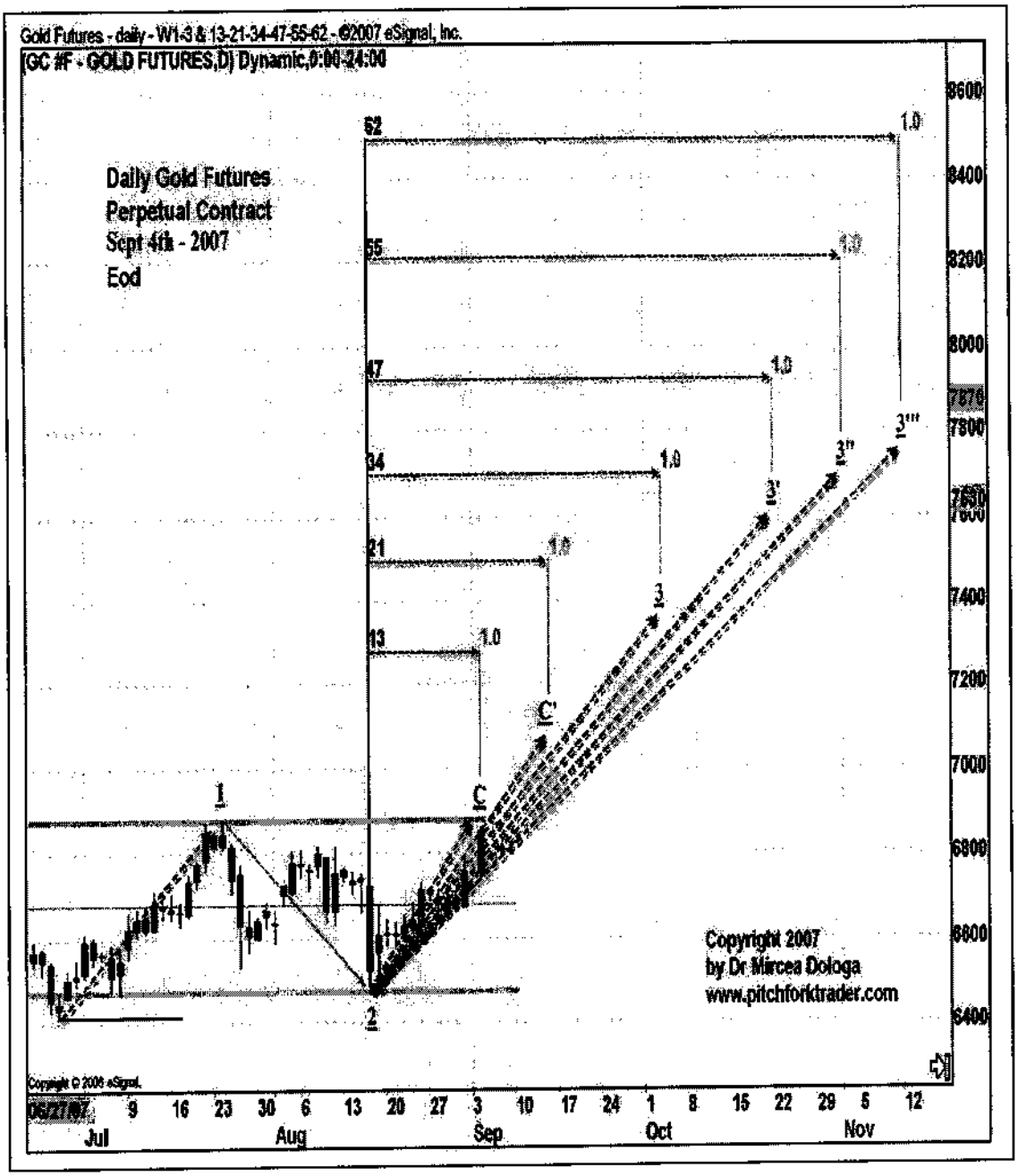
Appendix n° 9

Types of Bar Count Numbers from 5 to 206

5	Fib n°	
6	Nb Six	
7	Lucas n°	
8	Fib n°	
9	144 Number	& *Square*
11	Lucas n°	
12	Nb Six	
13	Fib n°	
18	Lucas n°	& Nb Six & 144 Number
21	Fib n°	
24	Nb Six	
25	*Square*	
27	***Cube***	
29	Lucas n°	
30	Nb Six	
34	Fib n°	
36	Nb Six	& 144 Number & *Square*
38	Square Root	
42	Nb Six	
45	*1/8 Circle*	
47	Lucas n°	
48	Nb Six	& Square Root
49	*Square*	
50	*HALF*	
54	Nb Six	
55	Fib n°	
60	Nb Six	
62	Square Root	
64	*Square*	& **Cube**
66	Nb Six	
72	Nb Six	& 144 Number
76	Lucas n°	
78	Nb Six	
79	Square Root	
81	Square	
84	Nb Six	
89	Fib n°	& Square Root
90	Nb Six	& 1/4 Circle
96	Nb Six	
100	Square	
102	Nb Six	
108	Nb Six	
112	Square Root	
114	Nb Six	
120	Nb Six	
121	*Square*	
123	Lucas n°	& Nb Six & 144 Number
125	**Cube**	
126	Nb Six	
127	Square Root	
132	Nb Six	
135	*3/8 Circle*	
138	Nb Six	
144	Fib n°	& Nb Six
150	Nb Six	
156	Nb Six	
162	Square Root	& Nb Six
168	Nb Six	
169	Square	
174	Nb Six	
180	Nb Six	
186	Nb Six	
192	Nb Six	
196	Square	
198	Nb Six	
199	Lucas n°	
204	Nb Six	
206	Square Root	

Appendix n° 10

Bar Count Grid



Appendix n° 11

Three Pawns Technique

Trade MANAGEMENT
Three Pawn Technique – Triple Order Preparation and Trade Execution

We have reached the stage of evaluating precisely the trade, with the help of the *Three-Pawn Technique*. It is a "*to be or not to be*" situation or a "*to make or not*" entry decision. This progressive order technique consists of three steps:

- ***Step 1* - Find the most *optimal entry* and place the *first order*,**
- ***Step 2* - Scrutinize for the best *stop loss location* – and then enter immediately a *stop order*, right after the *entry order* was executed. This will be the *second order*.**
- ***Step 3* - Find the most appropriate *logical profit objective* and then calculate the optimal *reward/risk ratio* (*R/R ratio*) which should not be under 2.5 value; if that is the case, place the *third order*, right after the stop loss order is working on broker's waiting list.**
  We take 2 to 2.5 *R/R ratio* trades seldom and only if they have a high probability. Do not forget that our main purpose is *capital preservation*. There is always another opportunity, but only if you are still in possession of your capital. Our purpose is not to make any *home runs*.
  We are only looking for low-risk high-probability trades.

Most of the time, these three progressive trading orders, labelled the *three-pawn technique*, are *pre-arranged*, at the moment when the trade decision is made. It is vital for the capital preservation sake, that once they are established, they should *never* be changed. Due to the reliability and the automatism of this technique, we named it the *automatic trading mode*. It is, one of the best remedies for the "*trigger-shy*" syndrome.
If only two orders are pre-arranged, we are in a *semi-automatic mode*. If all three orders are not pre-arranged, we are simply in a *manual mode*.

The *three pawns technique* must be understood, learned and practiced everyday, with no exceptions. This requires discipline and patience:

- ***Discipline*, in respecting 100% of the three rules, and**
- ***Patience*, in waiting for the entry order to be executed. Once this done, the second and the third rule will automatically ensue, almost flawlessly. The trader must reach a high level of routine, continuously checking and double checking his/hers well meditated decisions and actions, in such a way that the main task is preserved from every day's noise.**

We have to insist by saying that the precise follow-up of the *Three-Pawn Technique*, dominates the trading life span of a novice trader, who usually does not exceed the three-month period, because his main objective was not the capital preservation.

Fortunately, for those traders who have completely assimilated this technique, it will represent the warranty of consistent profits.

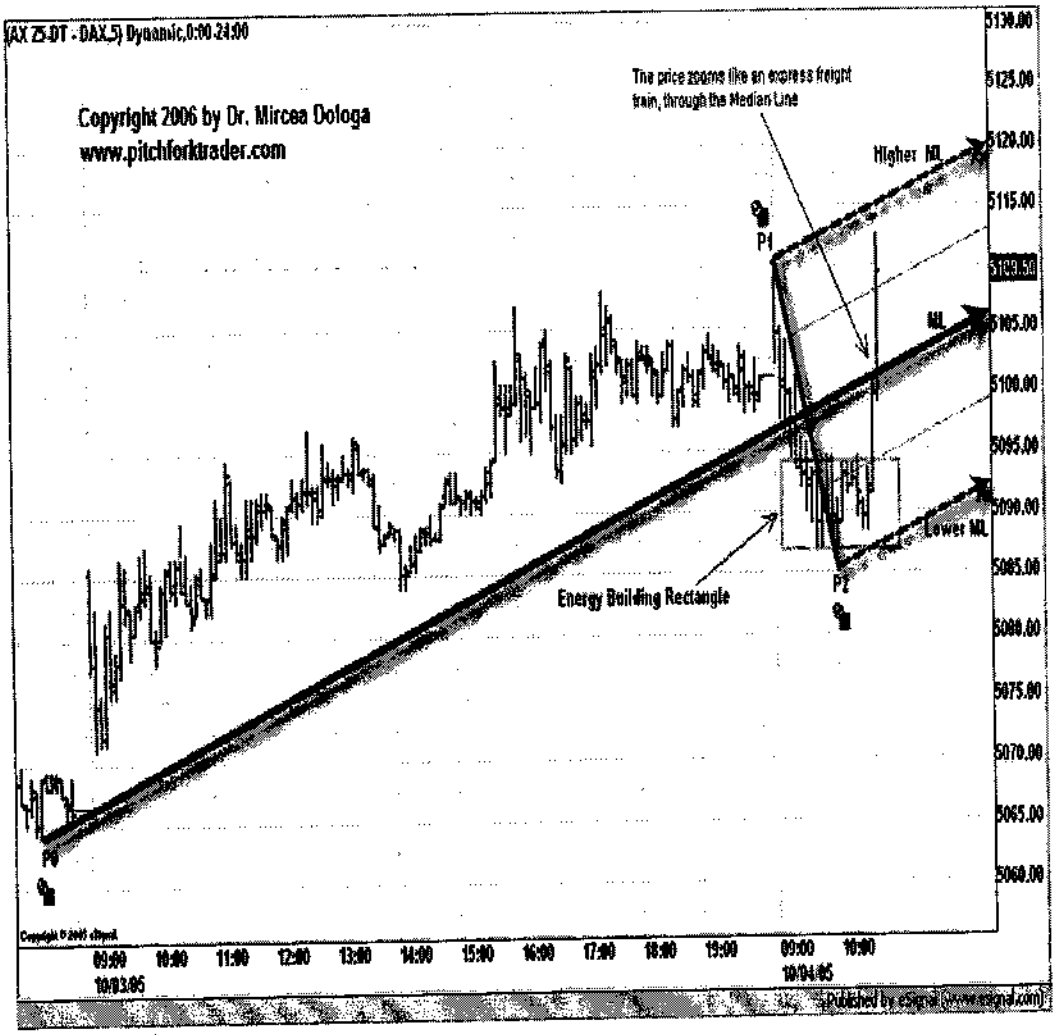


Figure 350

As we have anticipated, the market price zoomed at the speed of an express freight train, through the median line (*refer to the Figure 350 – Volume I*). As we have already mentioned, we have no choice but to wait for our set-up to come along. Patience has here the last word. The first step, the zooming of the median line, has been accomplished.
Let us see if there will be any testing or retesting of the median line. If it does, we will enter and target the upper median line.

For a novice trader, the up-steaming momentum is a real blessing signal to get right on the freight train's wagon, and enter long right away.
But like they say... *Never run after the market! Let the market come to you*!

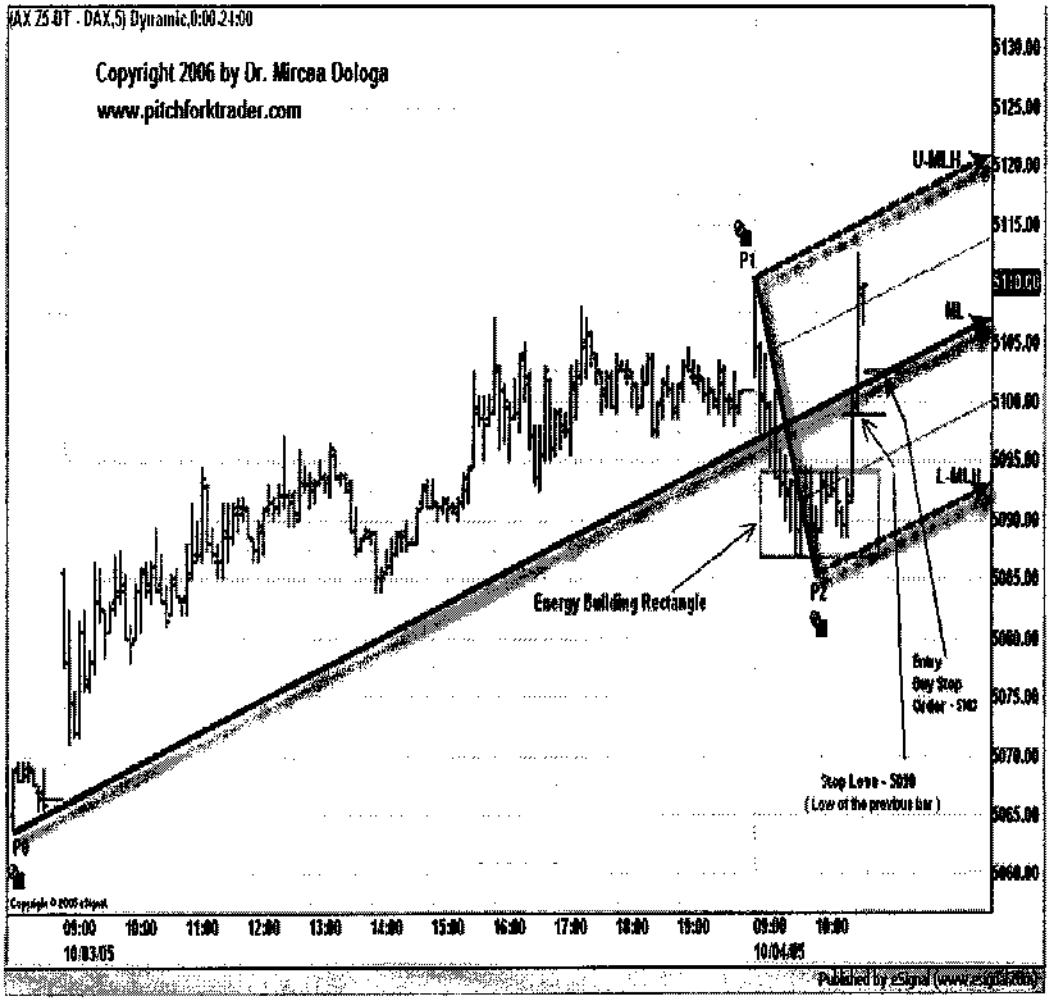


Figure 351

The last bar, on the above chart, is called an *inside bar*, because it is contained within the previous bar. It has a highly predictable reversing power.

At this point we should prepare our trade (*refer to Figure 351 – Volume I*), in case the market will test or retest the median line. If it does, *firstly*, we will use a pre-arranged *buy stop entry* order at 5103 level. As soon as this order is executed, we will make a *second order*, this time, *a sell stop* order at 5098 level, therefore establishing the *stop loss* at the *low* of the *previous bar*.

As we know, the *third order* of this technique is placing a pre-arranged exit for the *logical profit objective*. But before placing any orders, we will have to establish the *reward/risk ratio*. For that, we need the exact location of the exit level, which will be calculated through the ATR technique (*refer to Figure 352 – Volume I*).

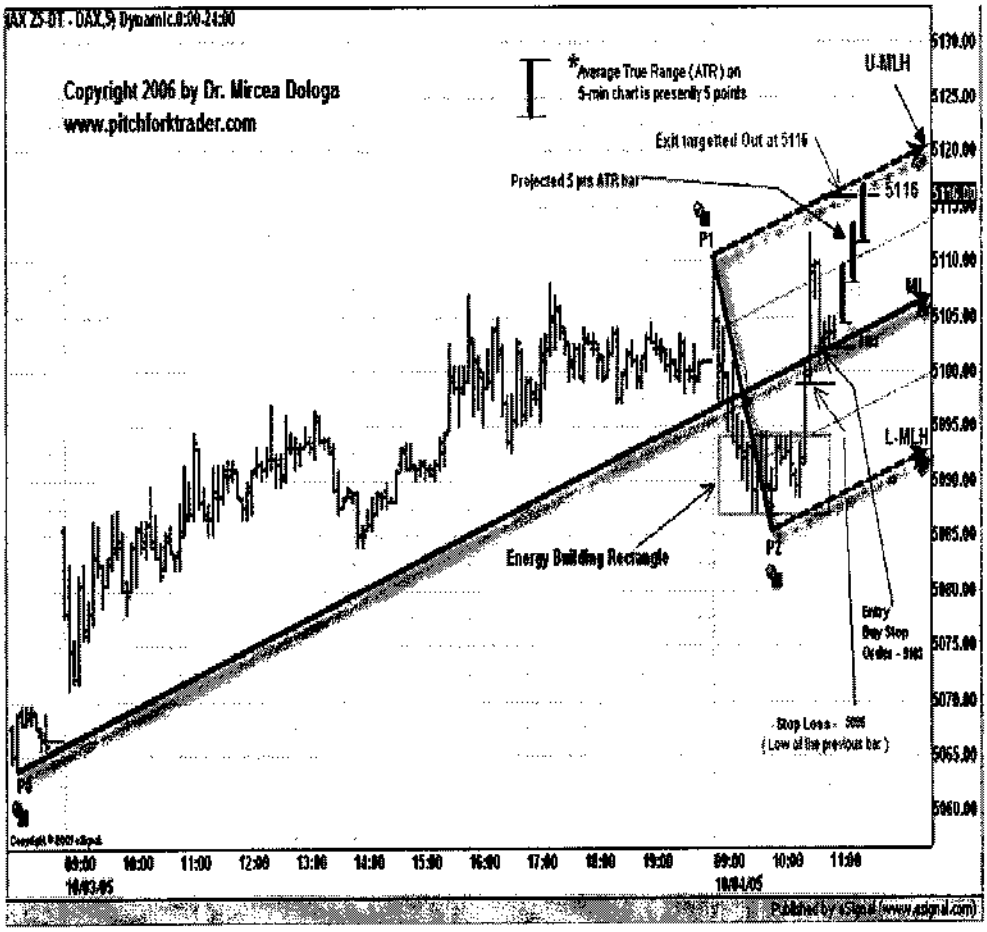


Figure 352

The *reward* is calculated by projecting the Average True Range – ATR(21), toward our defined *logical profit target*, the U-MLH. The ATR(21) for our time frame is 5 points. We will start to pile-up ATR bars, taking as first building reference the highest third of the last market bar, followed by the upper thirds of each consecutive ATR bar, until we have progressively reached our target, the upper median line (*refer to Figure 352 – Volume I*). We note the intersecting value and subtract 2-3 ticks, in order to ensure any *short of breath momentum* risky situation. Otherwise, we could risk a reversal, created by an up-sloping failure, just in front of the upper median line. We should know by now, that greed does not have a place in trading. Thus, we have finally reached our *logical profit objective* at 5116 level.

But before placing any orders, we will have to establish the *reward/risk ratio,* and see if the *R/R ratio* value is above the 2.5 usual limits.

Now we are able to calculate the *reward/risk ratio (R/R ratio):*

- ***Reward* is 13 points - [*exit level* (5116) minus *entry level* (5103)],**
- ***Risk* is 5 points - [*entry level* (5103) minus *stop loss level* (5098)],**
- ***Reward/Risk ratio* is 2.6 – (13 divided by 5) – our usual value.**

<u>Conclusion</u> – the R/R ratio being acceptable, we may place our 3 pre-arranged orders.