How to avoid Black Swans with Point & Figure charts

Main topics

- Introduction: The daily job of technical analysts and what to expect from them.
- What is a Black Swan?
- Why are trend following tools good to deal with Extreme Events?
- Case studies on Point & Figure chart strategies

Cyril Baudrillart, CFTe, MFTA – cyril.baudrillart@gmail.com

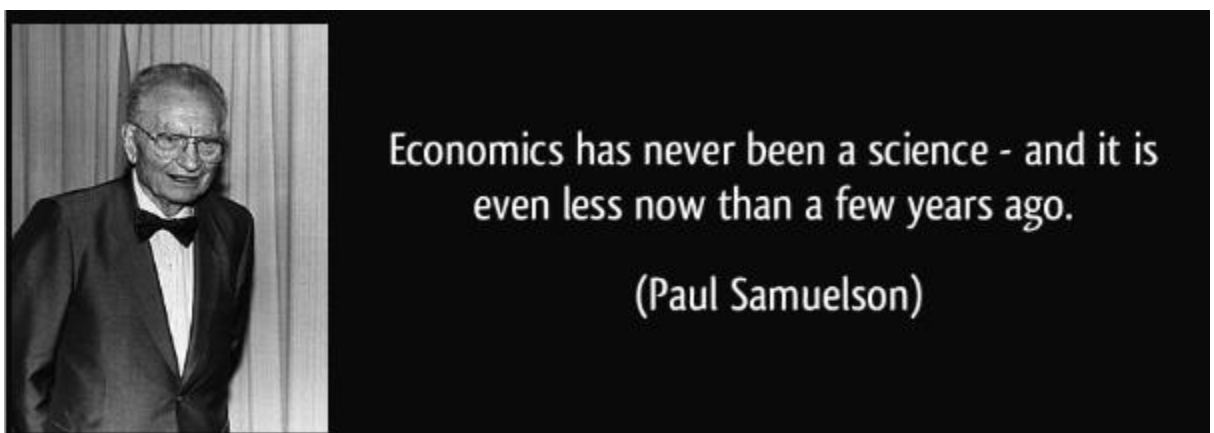
Preliminary talks about some popular market mantras

- **Financial markets “discount everything”**. Don’t try to be too smart!
- “**Most successful traders are contrarian investors**”. It may be true for aggressive traders but not for long-only asset managers.
- “**Don’t try to anticipate Black Swans**”. It is not possible to do so. It depends what you call a Black Swan!

Financial markets are great leading indicators!

"Wall Street indexes predicted nine out of the last five recessions", Paul Samuelson

- Stockmarket prices are included in most leading indicators
- Markets **DO ANTICIPATE** most economic turning points
- They are amazingly accurate to forecast bankruptcies and major market disruptions

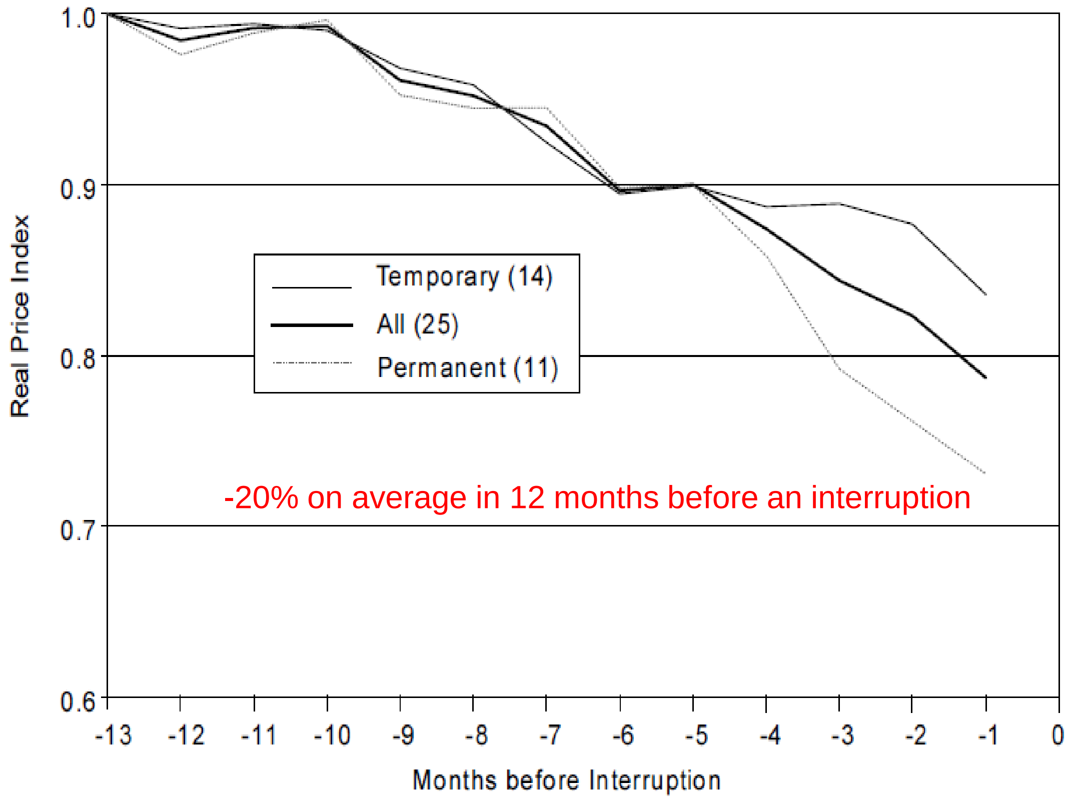


Stockmarkets even anticipate interruptions!

" Global Stock Markets in the Twentieth Century", P. Jorion and W. N. Goetzmann

- 25 interruptions mostly in the 1930s and WWII
- Only four cases since the 1960s (Egypt in 1962, Argentina in 1965, Chile in 1971 and Portugal in 1974).

Performance of real stock prices a year before interruptions



Source: Philippe Jorion, William N. Goetzmann

- **What should I recommend to my clients today?**
- We need a routine, a methodology, a roadmap!
- Typical questions from investors:
  - **In a bull trend:**
    - Do you think it is time to sell? Don't you think it is overbought?
    - How high do you think the market can go?
  - **In a downtrend**:
    - Is the market oversold?
    - Should I buy now?

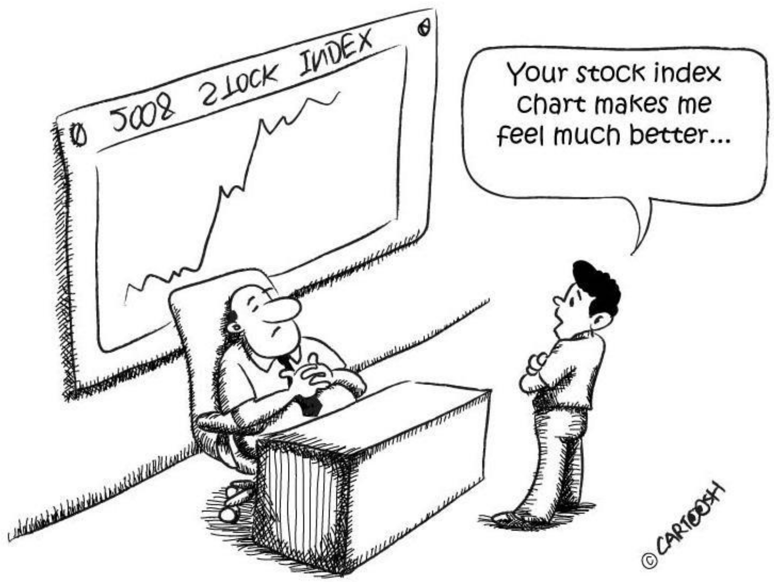
Contrarian thinking is good but ….

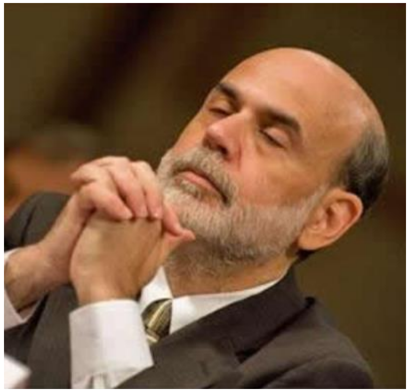
- A lot of people spend a significant amount of time trying to **anticipate inflexion points**
- Overbought markets can continue to rise and oversold markets will often continue to decline much longer than what most people think…

Don’t expect too much from technical analysts!

- They listen to the markets (what people are doing, not what they are saying)
- They help to characterize trends: up / down or sideways?

- When you ask advice to a technician, please DO SELECT YOUR TIME FRAME or at least your favourite investment period



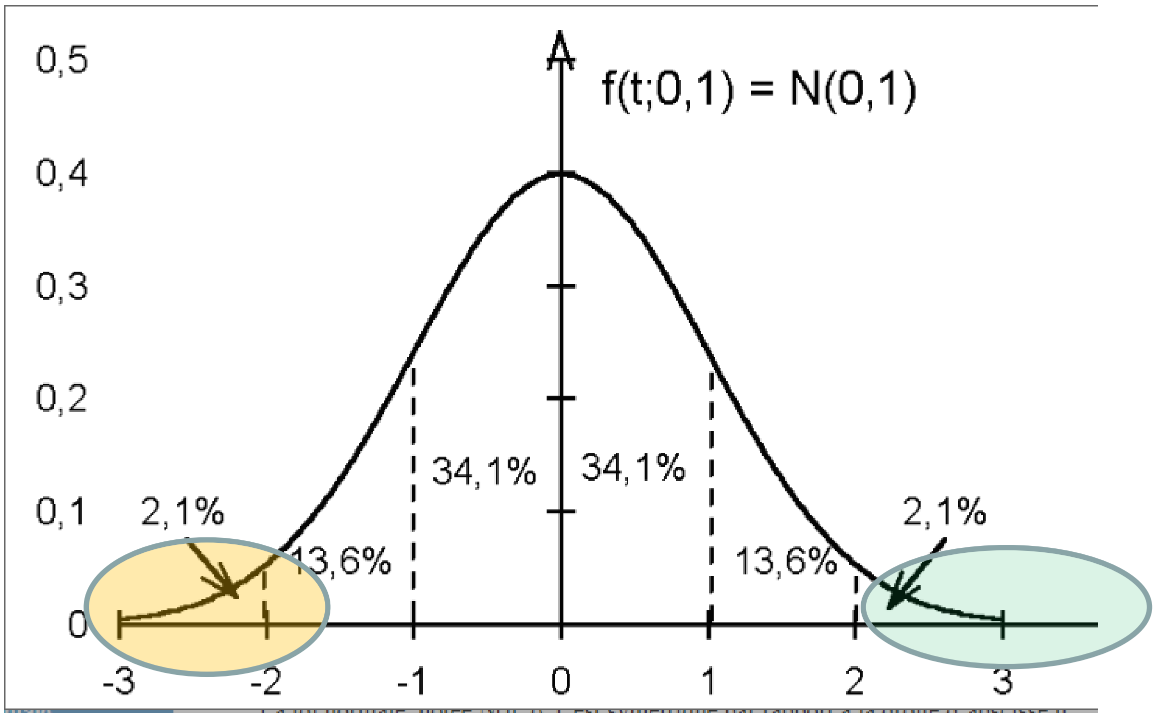


- How can you **make money** in financial markets **in the long run**?
  - Buy & Hold … and Pray
  - Be an insider
  - Be a genius (but you will also have to work hard…)
  - Be disciplined! (not so easy)

- If you are not Warren Buffet and don't want to go to jail, trend following is what you need
  - Keep losses small (and hopefully avoid Negative Black Swans)
  - Avoid taking profits too early (to benefit from Positive Black Swans)

Statistical explanation of a Black Swan

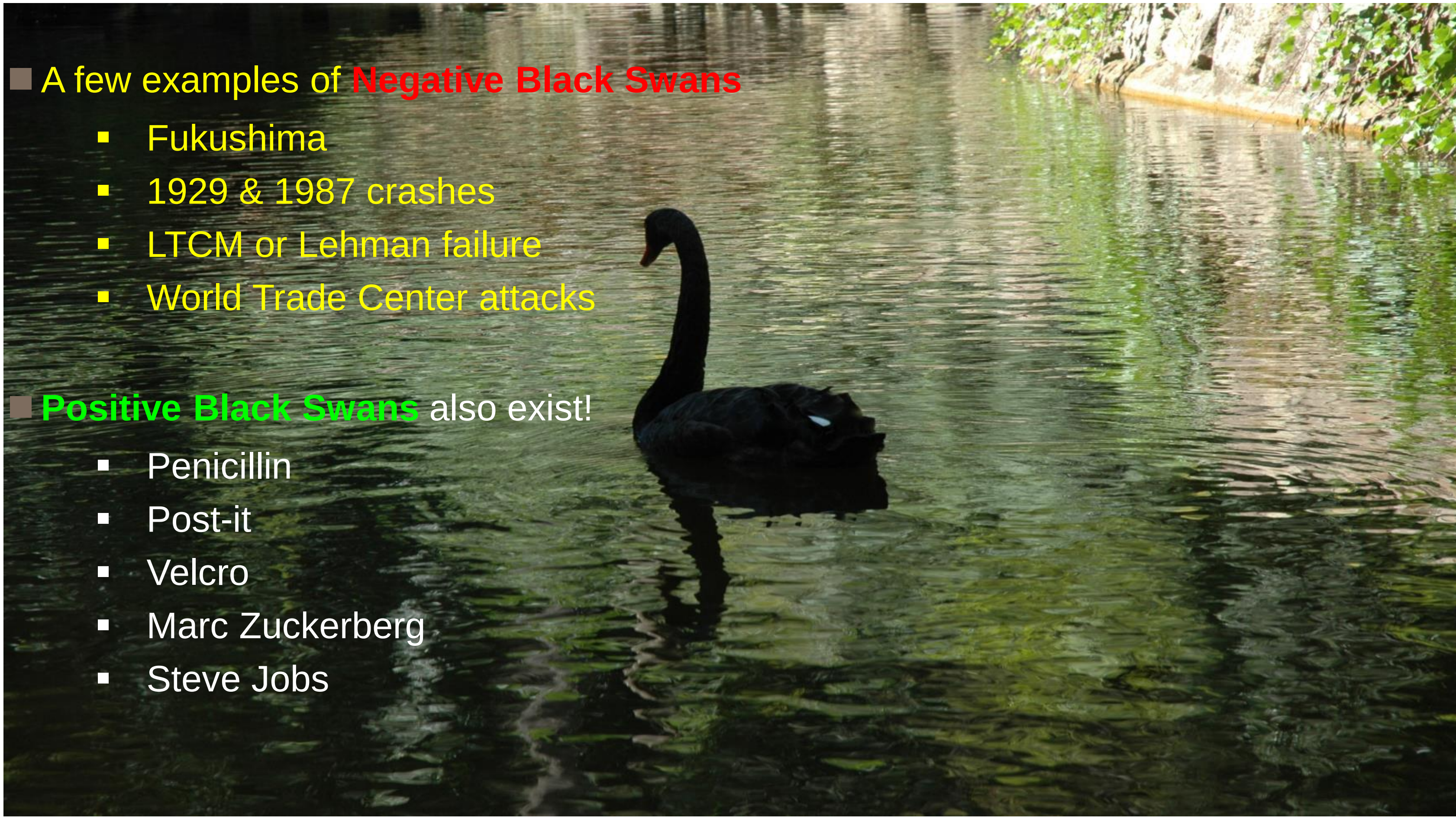
Probability curve



Trend following helps to avoid bankruptcies and abnormally low returns

Trend following helps to capture abnormally high returns

An “extreme” event that cannot be forecasted!



- A few examples of **Negative Black Swans**
  - Fukushima
  - 1929 & 1987 crashes
  - LTCM or Lehman failure
  - World Trade Center attacks

- **Positive Black Swans** also exist!
  - Penicillin
  - Post-it
  - Velcro
  - Marc Zuckerberg
  - Steve Jobs

Warning! Trend following is not Holy Grail!

- You will lose money in trading ranges
- Markets are trending around 20-30% of the time so it is <u>important not to miss strong trends</u>

Next step: which trend following tools should we choose?

There are plenty of techniques available!

- Moving averages (simple, exponential…)
- Oscillators like MACD
- Trendlines & chartist analysis
- Parabolic or other trailing stop methods
- Ichimoku charts
- Point & Figures

Why I like 3-box reversal Point & Figure charts

A lot of people criticize the subjectivity of technical analysis. **They are right!**

- Objective interpretation of patterns (unlike chartist analysis)
- Clear targets
- «Low-pass filter»
- Reduced lag compared to simple moving averages
- Automatic detection of trends with 45° trendlines (just 1 point needed!)

- They do help to reduce psychological biases

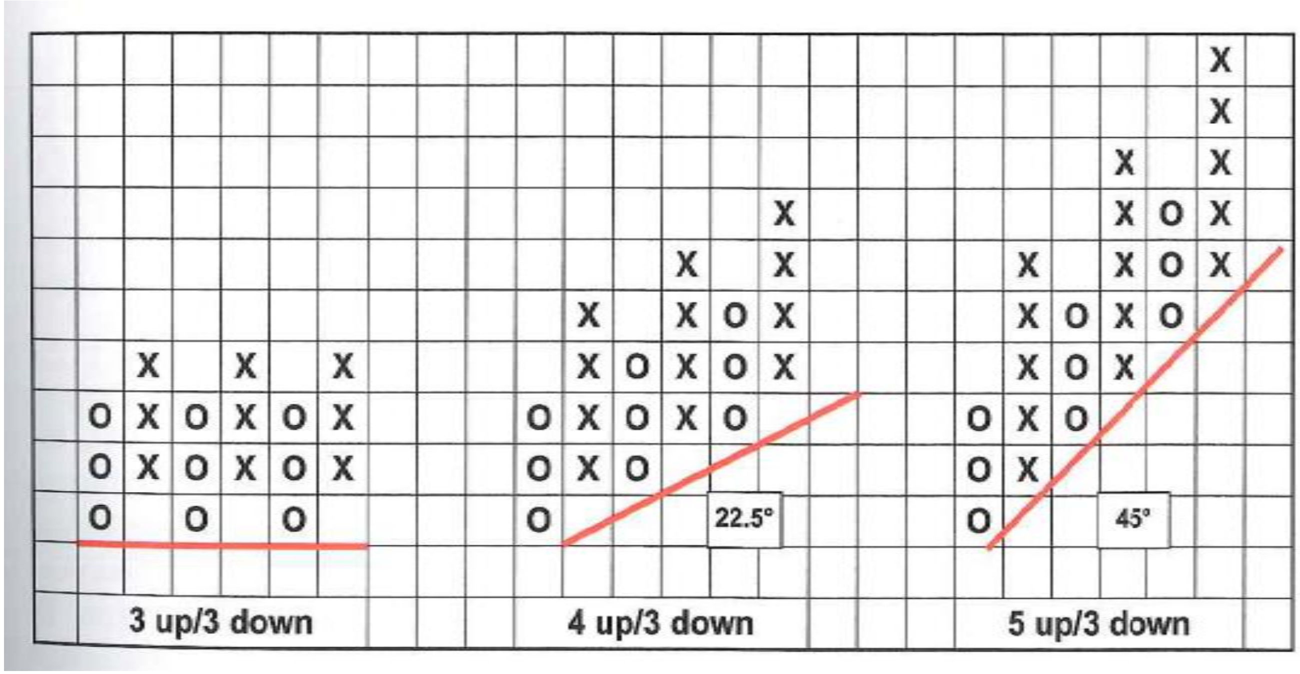
Explanation of P&F charts as an asymmetric filter

Point & Figure 1x3

15			
14			
13	X		
12	X		
11	X		
10	X		

Jeremy du Plessis: « The Definitive Guide to Point & Figure charts »

- Objective vertical & horizontal targets
- 45° trend lines define « the trend »



Source: Jeremy du Plessis

They do help to categorize your trades

- **Contrarian ideas**
  - High risk -> be reactive and use tight stop losses
  - Preferably use high reward-to-risk ratios
- **Trend-following ideas**
  - You can put loose stops
  - Trades are “less risky” so high reward-to-risk ratio not needed

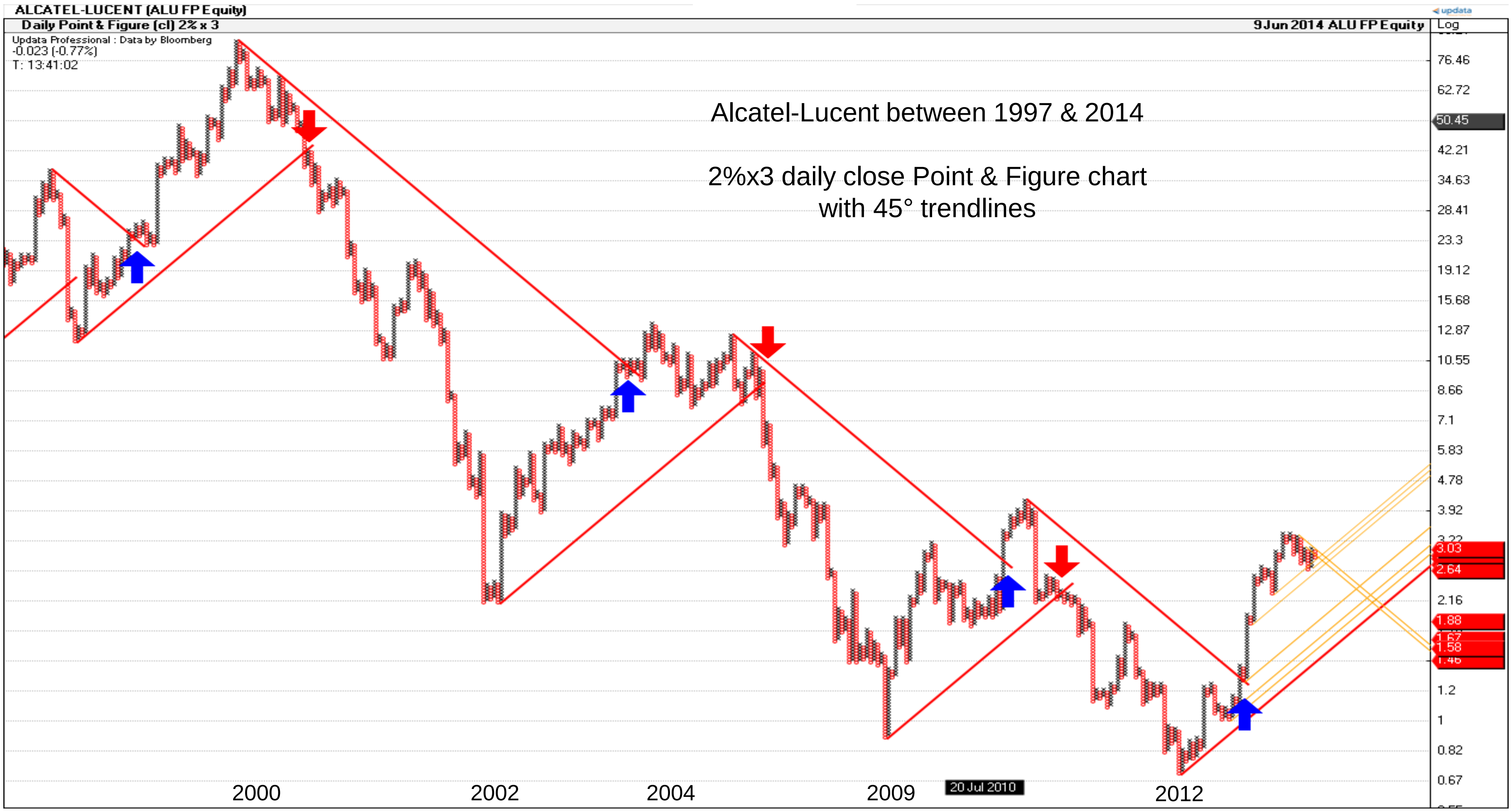
Which box size should we choose?

- Depends on the **volatility** of the asset studied
- Depends on the investment **time frame** and portfolio **turnover** allowed

- My favourite settings on equities and indices:
  - Semi-log scales for daily charts (usually 0.5% / 1% / 2%)
  - Linear scales for intraday charts
  - Don’t use weekly or monthly prices for Point & Figure charts!

Case study on Alcatel-Lucent: is this a bear trend?

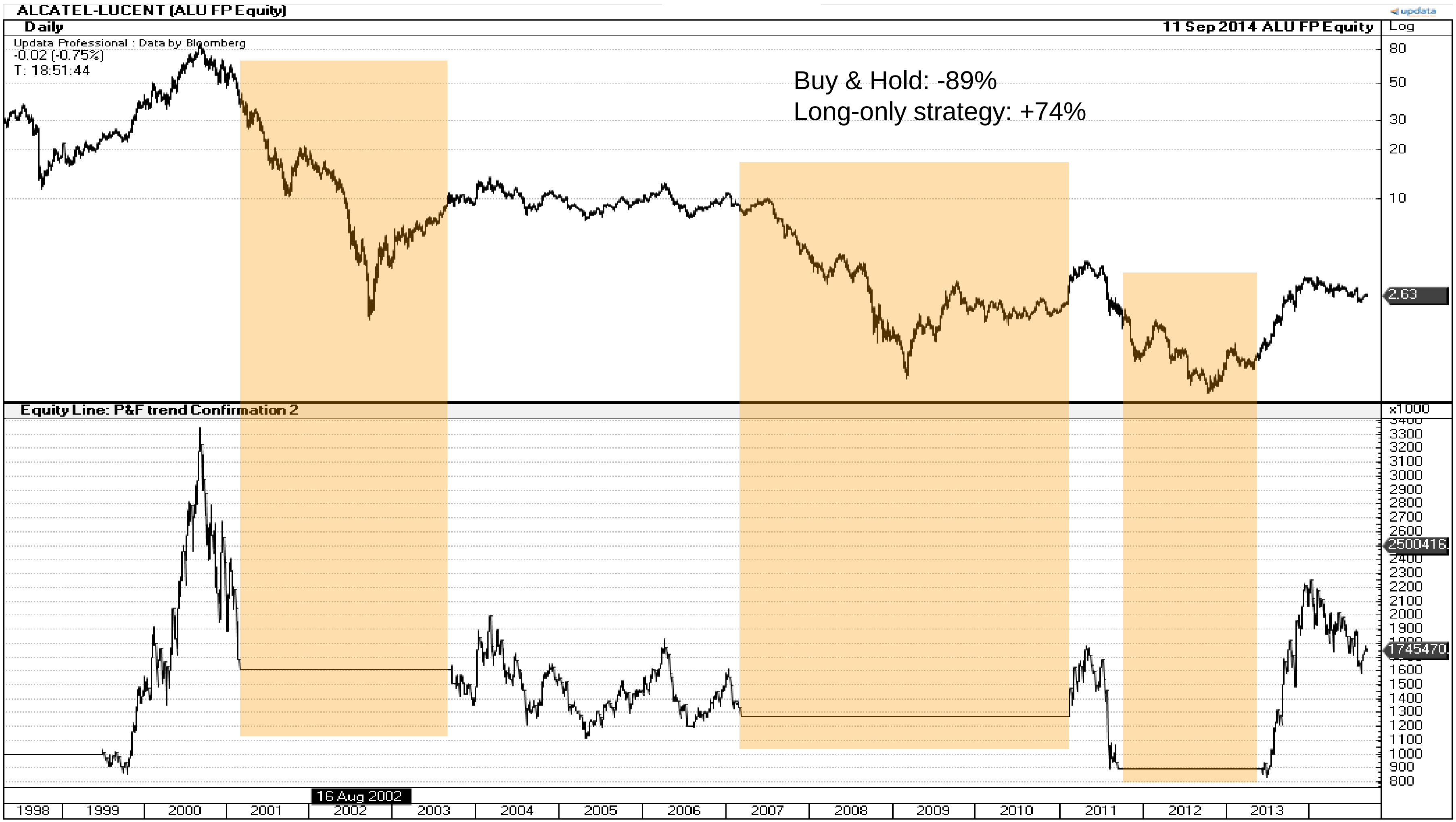
Case study on Alcatel-Lucent (2%x3): 45° lines help to define "the primary trend"



Rules of TRADING MODEL #1 :

- Favour long strategies when a market is above its ascending 45° support line
- Stay in cash when a market is below its declining 45° support line

TRADING MODEL #1 on Alcatel, 2%x3 Point & Figure chart:



Another French stock with a similar bearish chart: Alstom!

Case study on Alstom (2%x3)

Case study on Alstom (Trading model #1, 2%x3 Point & Figure chart)

Now have a look at a leading French stock!

Case study on Air Liquide(1%x3)

Case study on Air Liquide (trading model #1, 1%x3): difficult to beat buy & hold

First conclusions on Point & Figure as a trading tool

- Better results on trending markets with high volatility
- Help to be in cash during bear markets
- Help to stay long during sustained bull markets

Main risks:

- Lot of false signals when volatility is low (reduce the box size!)
- You will lose money during trading ranges
- Trend reversal signals will come too late after exponential moves

Euro STOXX 50: 1%x3 PF chart since 1987

Trading Model #1 applied to Euro STOXX 50 (1%x3)

- Buy & Hold since 1987: +257%
- Long only strategy: +298%
- Only 5 winning trades out of 20!! But…
- Average gain : +46%
- Average loss: -1.8%

Trading Model #1 with short selling allowed

Rules of TRADING MODEL #2:

- Favour long strategies when a market is above its ascending 45° support line
- Go short when a market is below its declining 45° support line

Trading Model #2 applied to Euro STOXX 50 (1%x3)

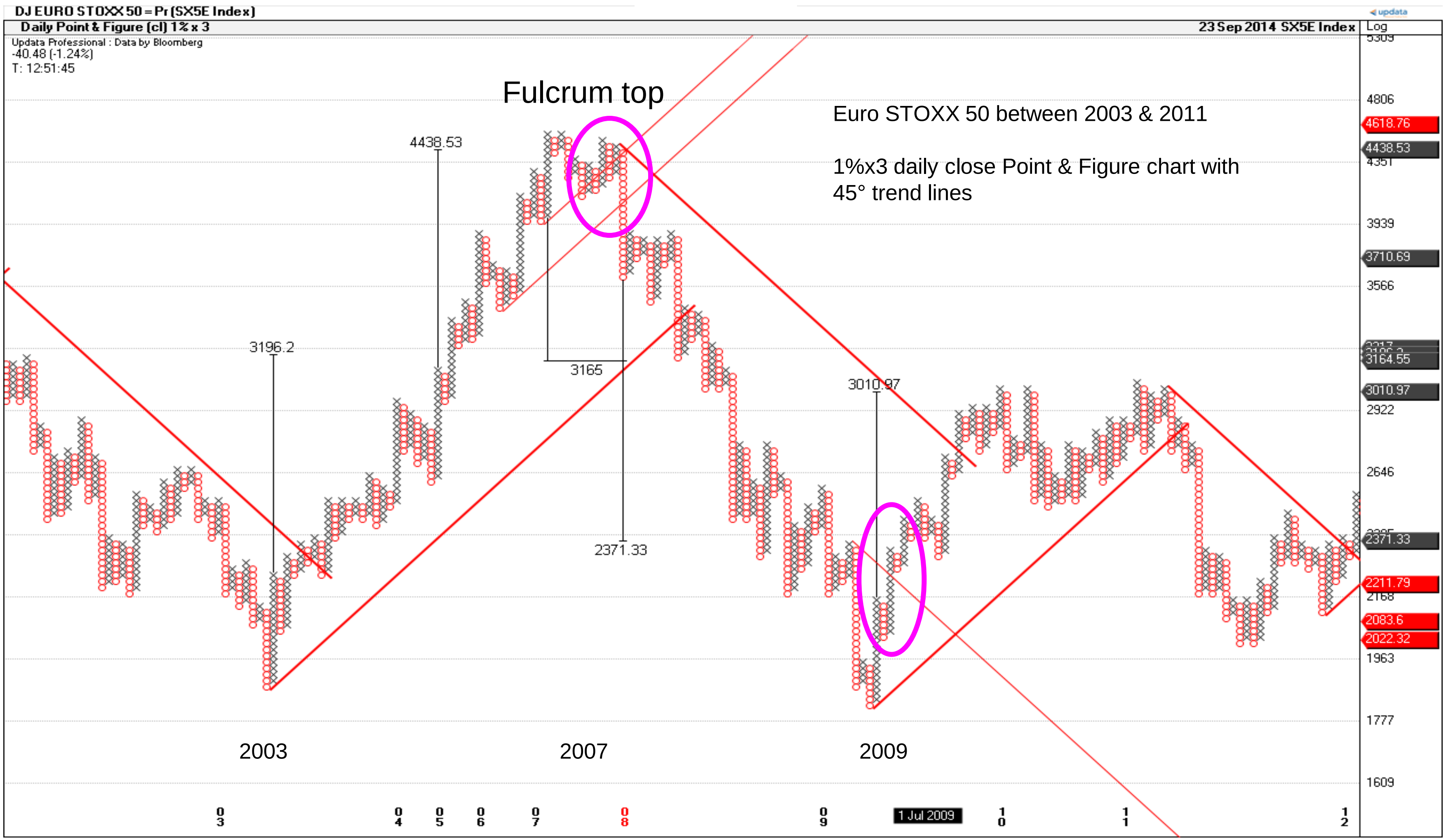
- Buy & Hold: 257%
- Long-short model: +266%
- Average gain: +30%
- Average loss: -2.5%

Next step: improving reactivity of P&F model

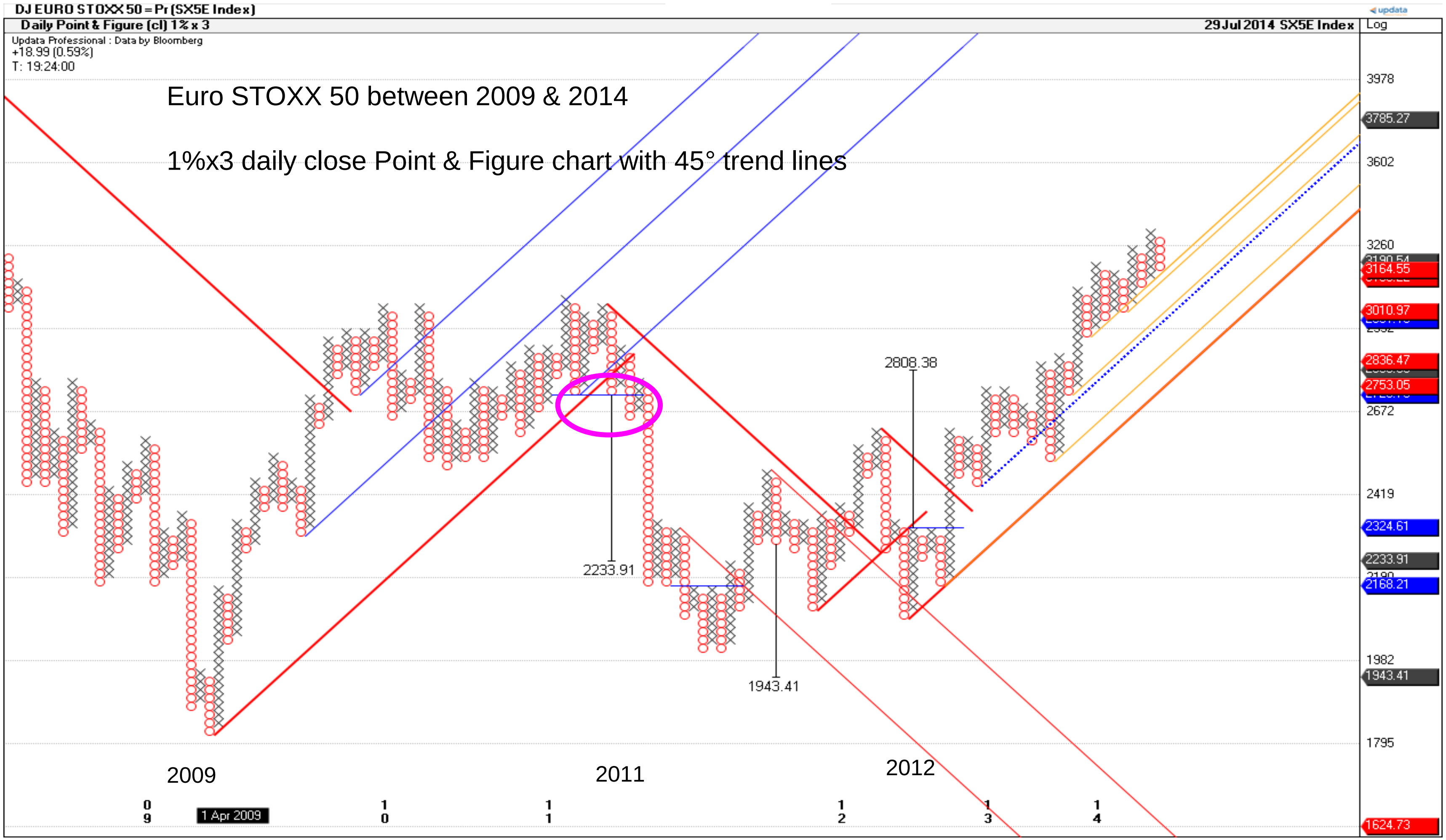
- What can we do to **reduce drawdown** after exponential moves like in 2000 and 2007?
- Several methods can help to solve this issue:
  - Internal trendlines
  - Track Point & Figure patterns
  - Use contrarian oscillators to buy the dips during bull trends / sell strength in a downtrend
  - Use moving averages or MACD on Point & Figure charts

1/ Use internal trend lines and patterns: case study on the year 2000 top

1/ Use internal trend lines and patterns: case study on the year 2007 top



1/ Use internal trend lines and patterns



Rules of TRADING MODEL #3:

- When the market is above its ascending 45° support line:
    - Buy when the index completes a double-top breakout
    - Close long on a double-bottom breakdown
- Stay in cash when the market is below its declining 45° support line

15			X	
14	X	O	X	O
13	X	O	X	O
12	X	O		O
11	X			O
10	X			

Results of a P&F strategy #3 on Euro STOXX 50 (1%x3)

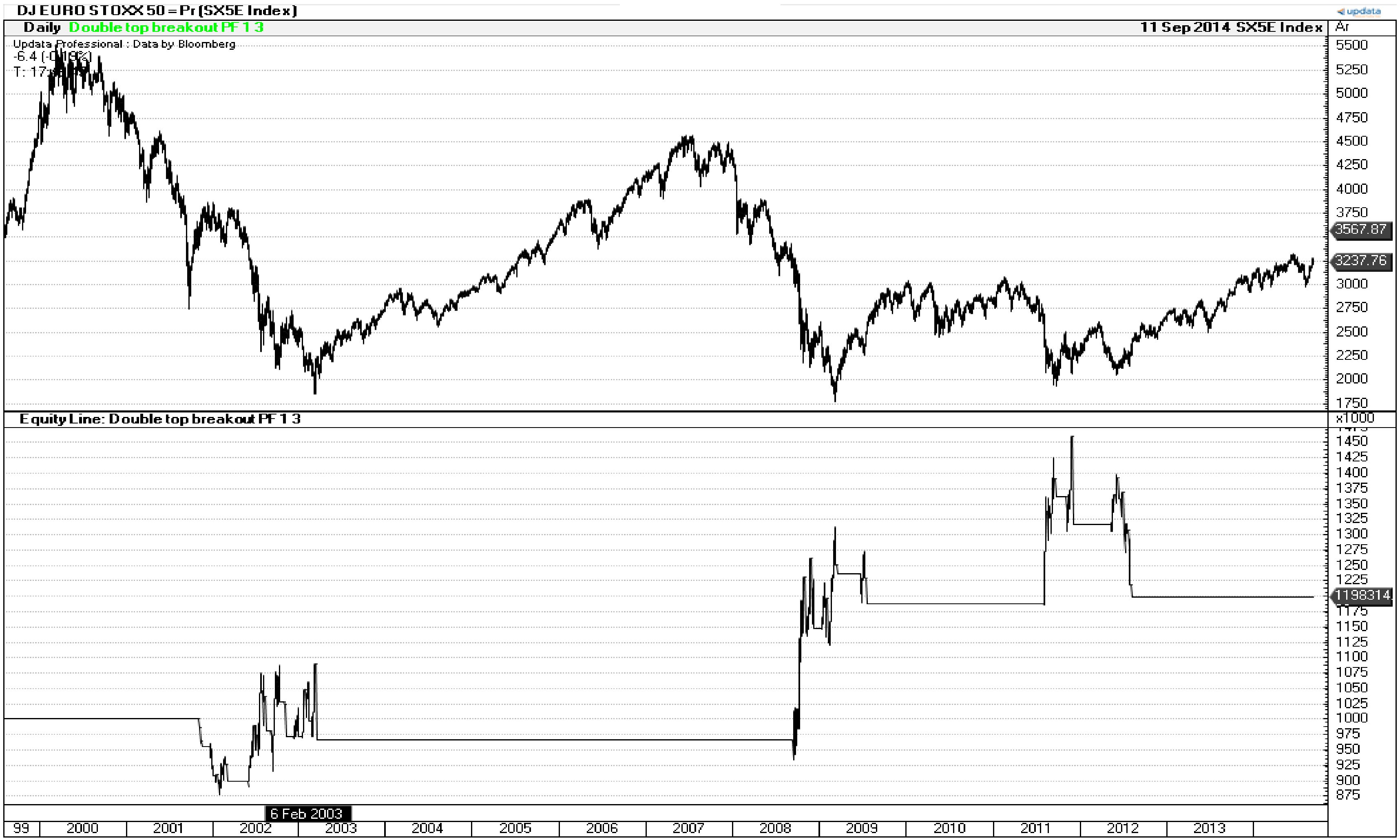
Disappointing results since 2010 because of whipsaws

Results of a P&F strategy #3 on S&P 500 (1%x3)

Much better results on the S&P 500! Model is long since December 2011

Results of a P&F strategy #3 in a bear market applied to Euro STOXX 50

Short strategies are less rewarding than bullish ones (Model #3 in bear markets)



Ideas of other trading models using Point & Figure charts

There are no limits!

- Filtering RSI signals with 45° trend lines
- Applying MACD to Point & Figure charts
- Using moving averages on Point & Figure chart to filter double-top and double-bottom signals

A smart model combining RSI and P&F trendlines!

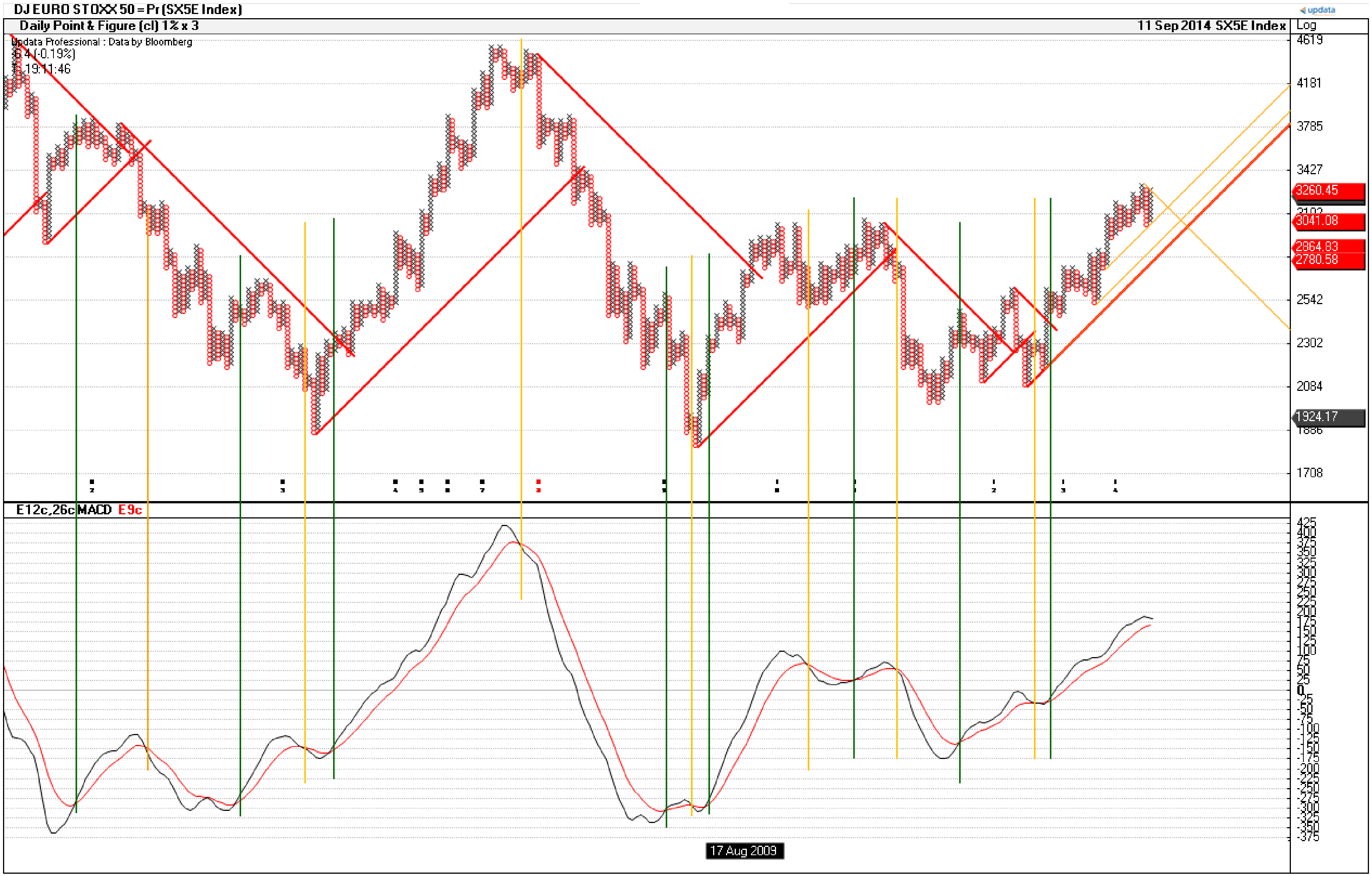
Rules in a bull trend:

- RSI is overbought when >80
- RSI is oversold when <40

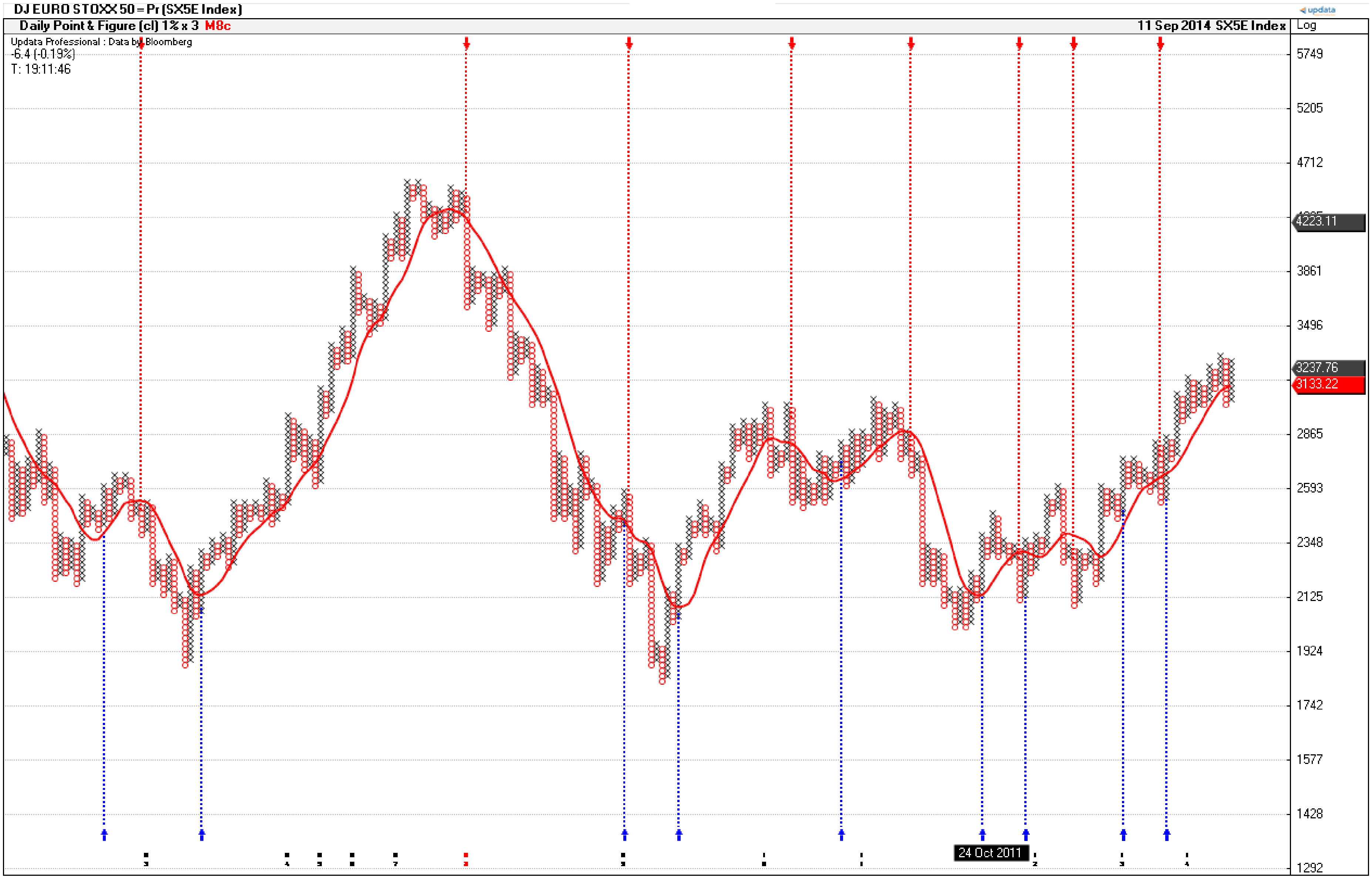
Rules in a bear trend:

- RSI is overbought when >60
- RSI is oversold when <20

MACD applied to Point & Figure charts



Moving average applied to Point & Figure charts (8 periods)

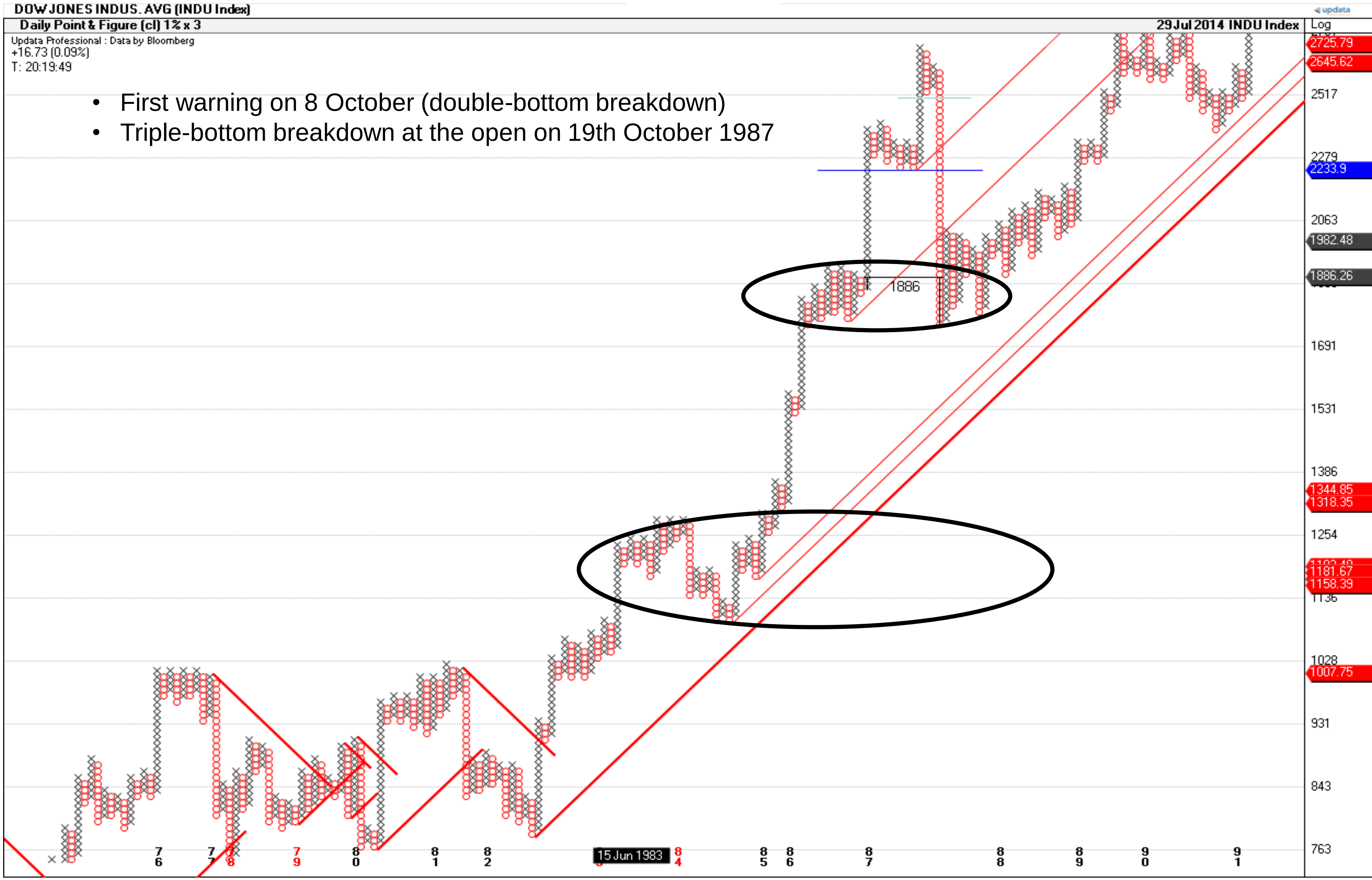


Point & Figure charts applied to

Negative Black-Swan Events

Point & Figure charts and Extreme Events: 1987 CRASH

- First warning on 8 October (double-bottom breakdown)
- Triple-bottom breakdown at the open on 19th October 1987



Strategy #3 applied to Dow Jones index in 1987-1990 (1%x3)

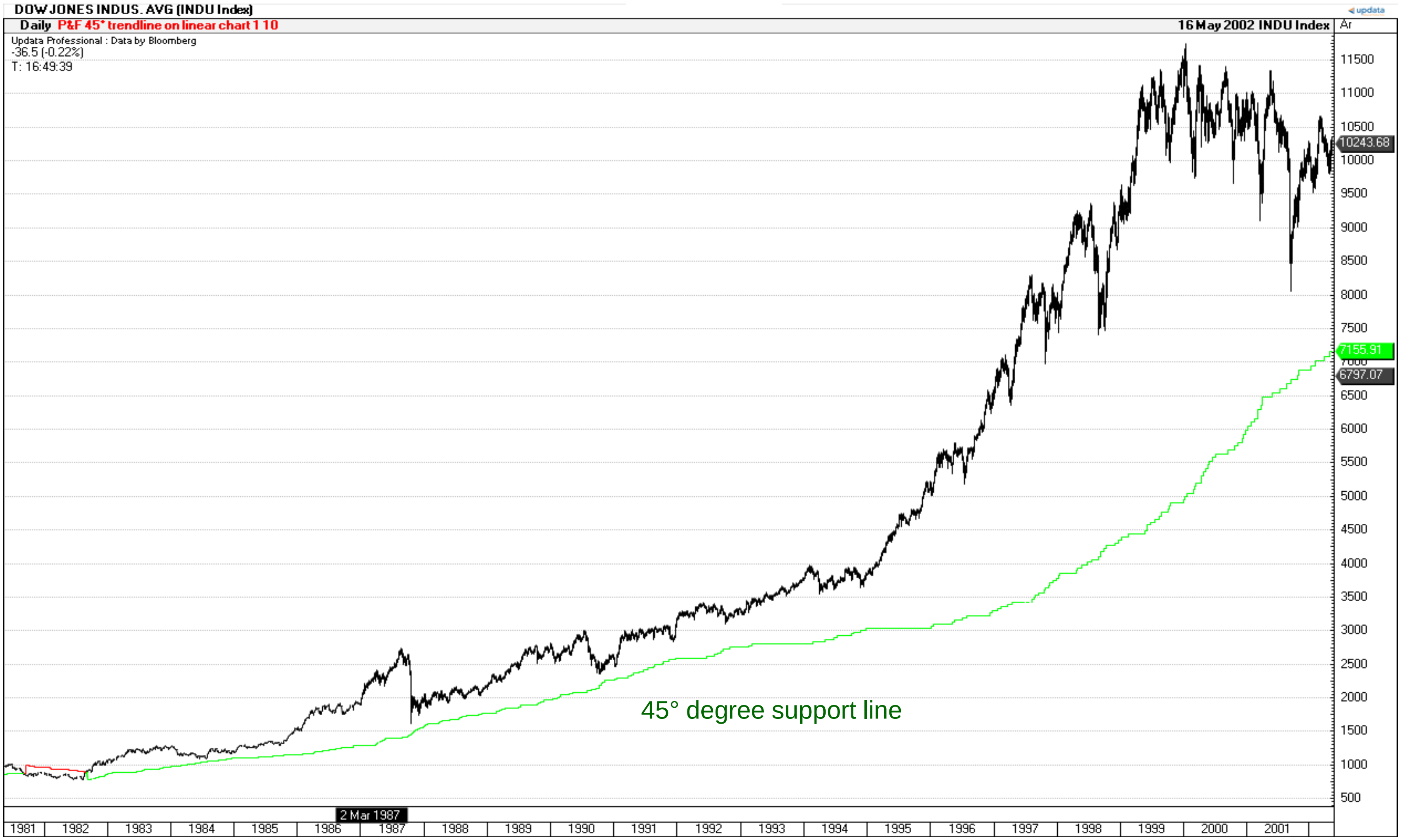
Fine-tuning with 0.5%x3 box size on Dow Jones Industrials

- First double bottom breakdown on 16 September
- Second bottom breakdown on 9 October, 6 sessions before the crash!

Strategy #3 on Dow with a 0.5%x3 box size in 1987-1990

The 1987 crash was a non event on Point & Figure charts!

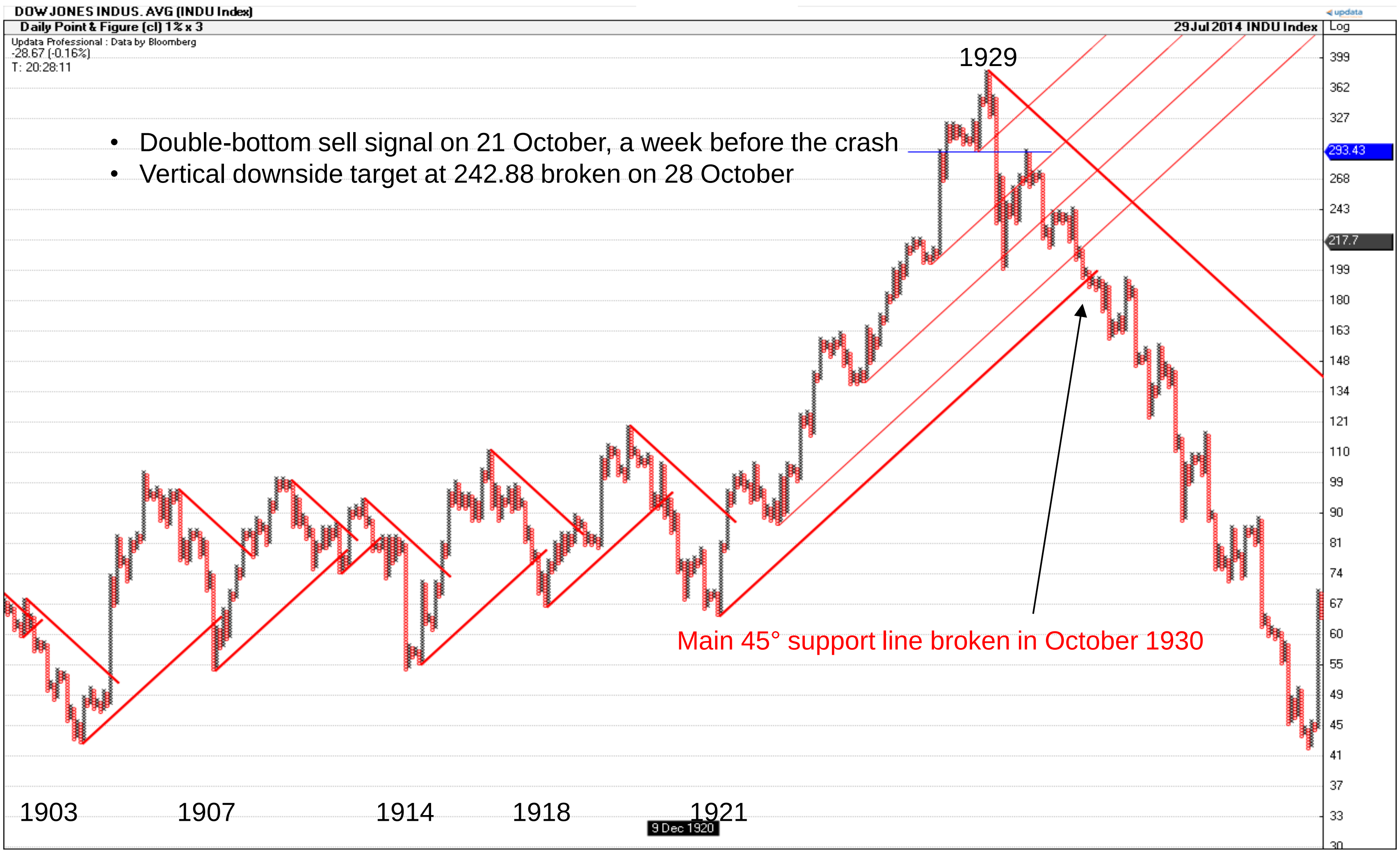
No "trend reversal" in 1987 (1%x3 box size)!



The main ascending 45°support line was support during 20 years (1%x3)!

What about 1929?

The crash was not a “major event”. What happened a year later was more bearish…



The 1931-13932 bear market could have been avoided

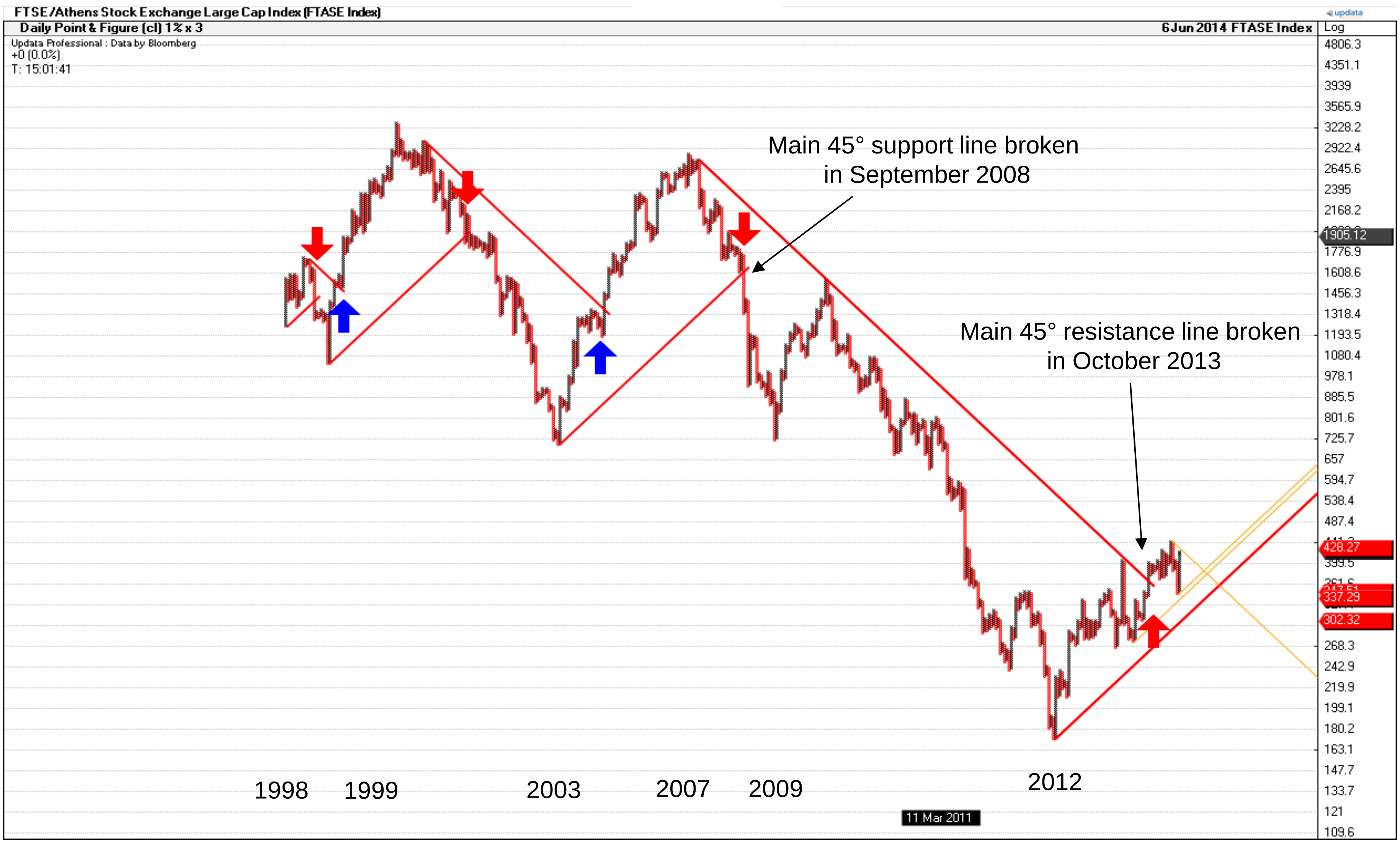
The exit signal was the break below the main 45° support line (strategy #1)

Strategy #3 applied to Dow between 2012 and 1946 (1%x3)

The 0.5%x3 Point & Figure was even clearer

Now let's have a look at Greece!

The 2008-2013 bear market could have been avoided



Flat on Greek stocks since 2000!

Trading model #1 applied to Greek stocks(1%x3)

Double top/bottom bottom strategy on Greek stocks

2014 is worst performance in 14 years on trading model #3!

What about Russian stocks?

Lot of whipsaws over the last three years!

Not so bad given difficult market conditions on trading model #3

Thank you for your attention!

Why I like 3-box reversal Point & Figure charts

- Objectivity
- Improve discipline and reduce the disastrous psychological bias on your trading
- You will spend less time trying to anticipate turning points and **will sleep much better**!