

# Technical Analysis 101

Carey Wong

23 Sep 2009



Ask OCBC  
[www.ocbc.com](http://www.ocbc.com)



# Disclaimer

**This presentation by OCBC Investment Research Pte Ltd is solely for information and general circulation only and may not be published, circulated, reproduced or distributed in whole or in part to any other person without our written consent. This report should not be construed as an offer or solicitation for the subscription, purchase or sale of the securities in general or the securities mentioned herein. Whilst we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee its accuracy or completeness, and you should not act on it without first independently verifying its contents. Any opinion or estimate contained in this report is subject to change without notice. We have not given any consideration to and we have not made any investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate. You may wish to seek advice from a financial adviser regarding the suitability of the securities mentioned herein, taking into consideration your investment objectives, financial situation or particular needs, before making a commitment to invest in securities. OCBC Investment Research Pte Ltd, OCBC Securities Pte Ltd and their respective related and affiliated corporations together with their respective directors and officers may have or take positions in the securities mentioned in this report and may also perform or seek to perform broking and other investment or securities related services for the corporations whose securities are mentioned in this report as well as other parties generally.**

# **What is Technical Analysis?**

**Forecast FUTURE price movements based on PAST price movements**

**NOT absolute predictions about the future**

**Anticipate what is “LIKELY” to happen to prices over time**

**Applicable to ANY TRADABLE instruments where price is influenced by demand and supply**

# Basis of Technical Analysis

Price Discounts Everything

Price Movements Are Not Totally Random

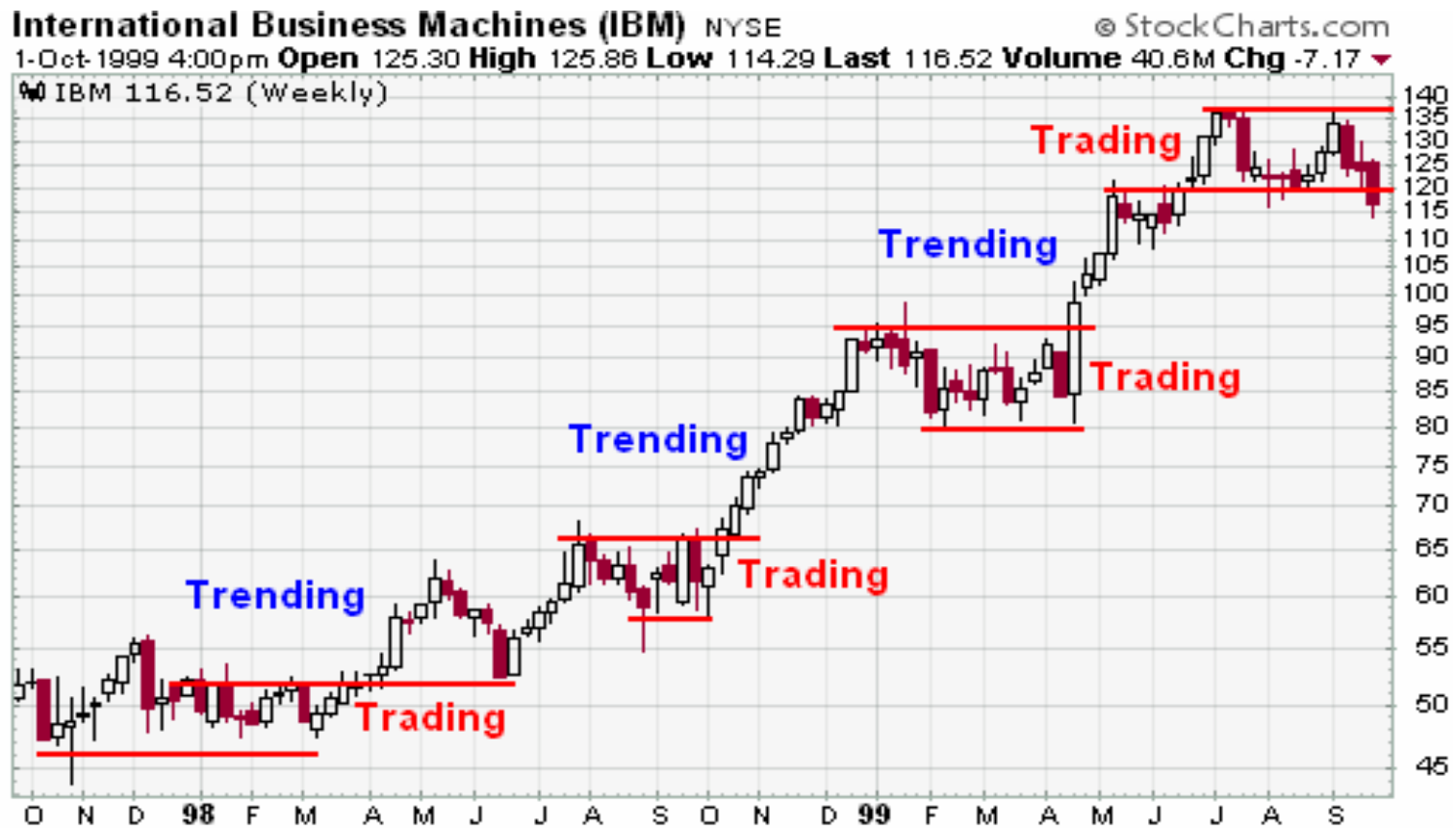
What is More Important than Why

→ We are concerned about TRENDS

# What is Price?



# Non-Random Price Movements



# **Trend Spotting**

## **Trend Lines**

- **Drawing lines to show direction**

## **Moving Averages**

- **Smoothens out price fluctuations**

## **Technical Overlays**

- **Bollinger Bands etc**

# Trend Lines 1

**Straight line that connects 2 or more price points**

## Uptrend Line

- **Positive slope (join the low points)**

## Downtrend Line

- **Negative slope (join the high points)**

**More points on the trend line, the stronger support/resistance**

# Uptrend Line



# Uptrend Line



# Trend Lines 1

**Straight line that connects 2 or more price points**

## Uptrend Line

- **Positive slope (join the low points)**

## Downtrend Line

- **Negative slope (join the high points)**

**The more points on the trend line, the stronger support/resistance**

# Downtrend Line



## **Trend Lines 2**

**Ignore one or two points if it gives a better fit**

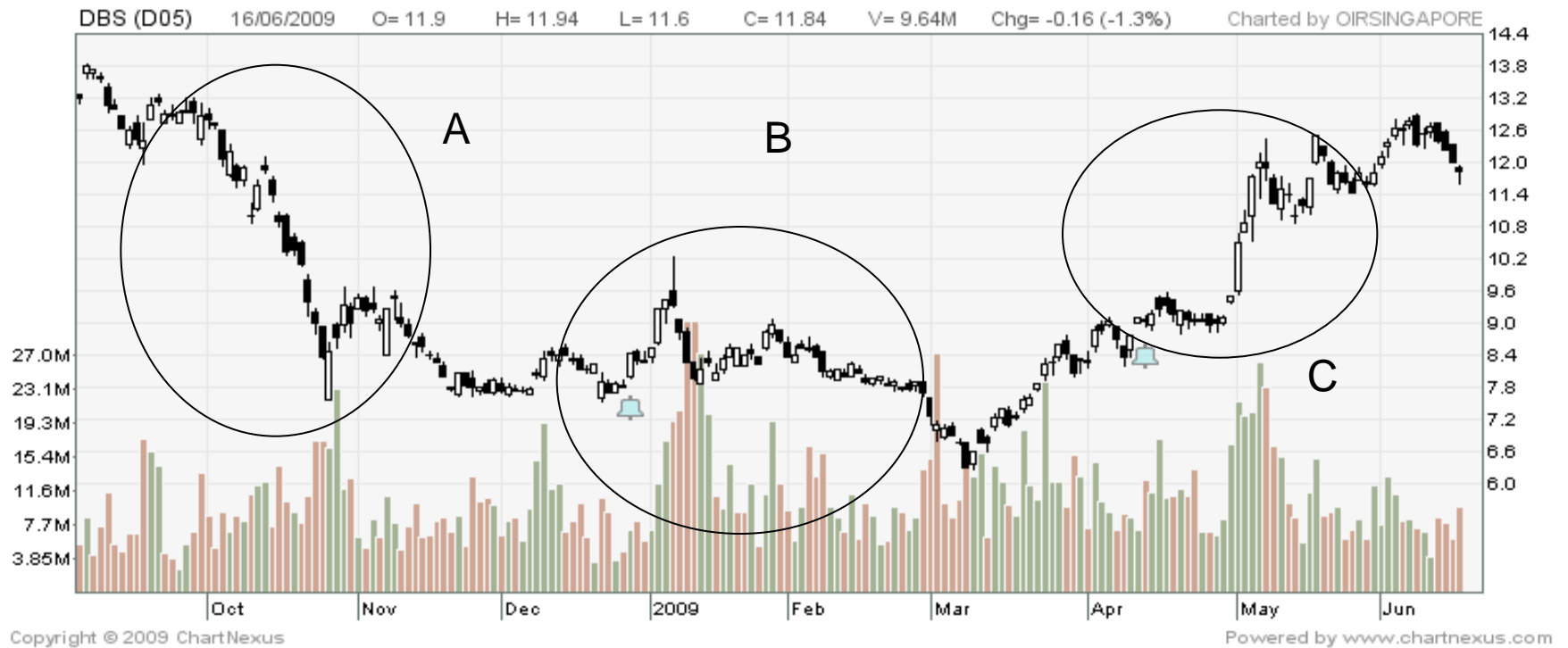
**Beware of overly steep trend lines**

- Steepness increases, validity decreases**
- Unsustainable**

**Mere guide**

- It is NOT the final arbiter**

# Spot the Not



# Not Sustainable Trends



# **Recap of Trend Lines**

**Joining the dots**

**More points = better**

**But okay to ignore 1 or 2 points**

**Too steep = unsustainable**

**Act as support or resistance**

# **Support/Resistance**

**Key junctures where the forces of supply and demand meet**

**Prices are driven by excessive supply (down) and demand (up)**

**As demand (buyers) increases, prices advance**

**As supply (sellers) increases, prices decline**

# Supports

Formed at price points where demand is expected to come in

Typically at previous lows

But they doesn't always hold

Once broken, another support will have to be established at a lower level

Not considered broken if price closes  $\frac{1}{8}$  below the established support level

# **Resistances**

**Formed at price points where supply will emerge**

**Typically at previous highs**

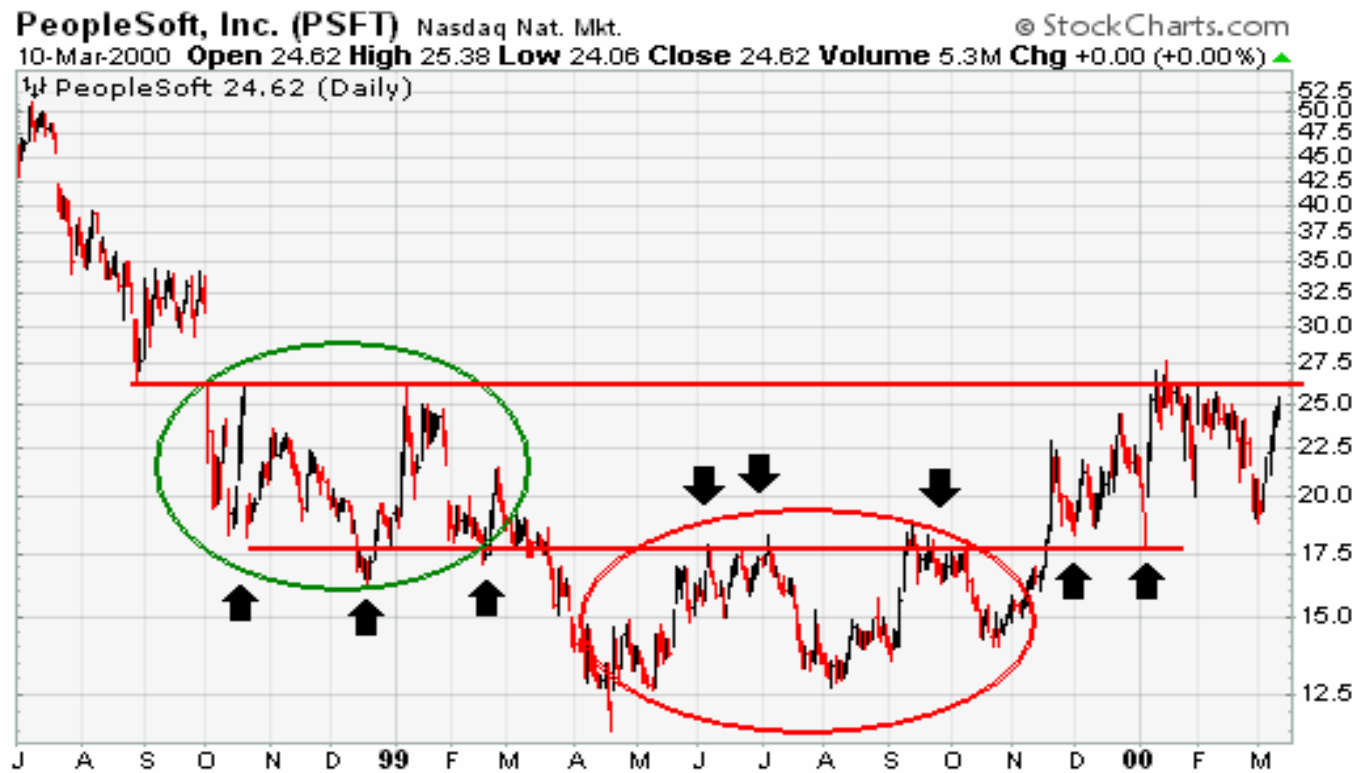
**Again, they do not always hold**

**Once broken, another resistance will have to be established at a higher level**

**Not considered broken if price closes  $1/8$  above the established resistance level**

# Support = Resistance

Support can turn into resistance and vice versa once broken



# SingTel



# Moving Averages

Unweighted mean of the previous n data points

Eg: 7-day MA is the average of the previous 7 data points

It will keep updating itself as we move forward

Typically used to spot trends as they will smoothen out the price fluctuations

In up market, MAs are used as support

In down market, MAs are used as resistance

Moving average cross-overs are also used as indicators

# 30-Day Moving Average



# MA Cross-Overs



# Other Trend Tools

**Bollinger Bands**

**OBV Indicator**

**ADX**

# Bollinger Band

Identify periods of high/low volatility

Identify periods when prices at extreme – often unsustainable – levels



# Timing Is Everything

Technical indicators - the next piece of the puzzle

Common indicators

- MACD (Moving Average Convergence/Divergence)
- RSI (Relative Strength Index)
- Stochastic oscillator

# MACD Indicator 1

Difference between 26-day and 12-day EMAs

Positive MACD = 12D EMA trading above 26D EMA, vice versa

Generates 3 types of signals

- Positive/negative divergences
- Moving average crossovers
- Centreline crossovers

# MACD Indicator 2



# **RSI Indicator 1**

**Compares the magnitude of recent gains to recent losses**

**Expresses this as a number between 0 and 100**

**Generates 3 types of signals**

- Overbought (>70)/Oversold (<30) signals**
- Positive/negative divergences**
- Centreline crossovers (50 is centre)**

# RSI Indicator 2



# Stochastic Indicator 1

Shows location of current close relative to high/low range over a certain period (typically 14 days)

Expresses this as a number between 0 and 100

Generates 2 types of signals

- Overbought ( $>80$ )/Oversold ( $<20$ ) signals
- Positive/negative divergences

Divergences are more reliable

# Stochastic Indicator 2



Copyright © 2009 ChartNexus

Powered by [www.chartnexus.com](http://www.chartnexus.com)



# **Recap of Indicators**

**Different perspective to analyse price action**

**Serve to alert, to confirm, and to predict**

**Analysis of both price action and indicators**

**Different indicators work differently with different stocks**

**Best to be very familiar with two or three indicators**

# **Chart Analysis**

**Overall Trend**

**Support/Resistance Levels**

**Momentum**

**Synthesize Everything to Ascertain:**

- Strength of Current Trend**
- Maturity or Stage of Current Trend**
- Reward to Risk Ratio of New Position**
- Potential Entry Levels for New Long Positions**

# Steps to Take

## Top-down Approach

- Broad market analysis of major indices
- Sector analysis of strongest/weakness groups
- Individual stock analysis within select groups

## Important points to note

- Sufficient trading history
- Sufficient trading volume

# **Basic TA Mantra**

**The Trend is your Friend**

**Never Fight the Trend**

## **So What's Next?**

**Learning to spot potential trend reversals/continuations**

**We can use chart patterns**

**Patterns usually have price objectives**

# **What Are Chart Patterns?**

**More complex versions of trend lines**

**Put all buying and selling into perspective**

**Often seen as a pictorial form**

**Can be used to make short-term and long-term forecasts**

# **Some Chart Patterns**

**Double Tops**

**Double Bottoms**

**Head and Shoulders**

**Inverse Head and Shoulders**

**Flags and Pennants**

**Japanese Candlesticks**

## Some Reference Materials

[www.stockcharts.com](http://www.stockcharts.com)

- Look under Chart School

**Steve Nison**

- “Father” of Japanese Candlestick

**Thank You!**



**Ask OCBC**  
[www.ocbc.com](http://www.ocbc.com)

