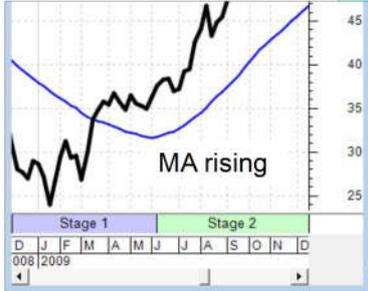




Share Market  
Toolbox

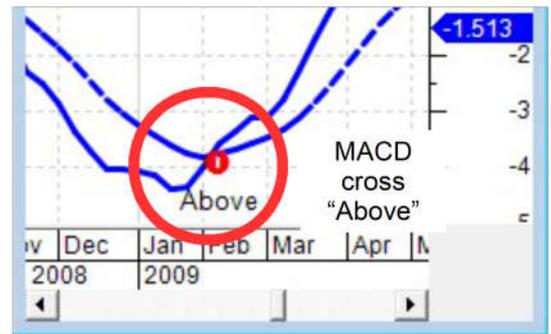
# Ranking stocks using bullish chart indicator features



**Robert Brain**  
January 2018



*Price charts summarise the underlying  
opinions and emotions of the market participants.  
Every chart tells a story.  
It pays to understand the stories in the price charts.*



© Copyright 2017-2018, Robert B. Brain, *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)

Version: 4



## Introduction

### About this presentation

Wouldn't it be good if we could take  
a **list of stocks\***, and  
sort the list with  
strongest performing stocks (ie. most bullish)  
at top of the list?

And then invest  
in these stocks in anticipation  
of the best price performance?

## BUT HOW??

\* – ie. your “stocks universe”





# Introduction

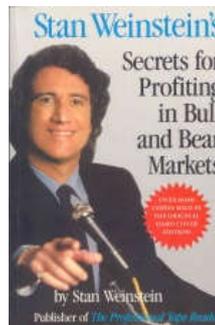
## Use bullish T.A. indicator observations

We could use observations of technical analysis (T.A.) chart indicators such as:

- “Moving Average (MA) rising for consecutive bars”, especially if it is below the share price.

We might use a 30 week SMA on weekly chart (à la Stan Weinstein).

This observation is said to be bullish, and can be readily scanned for using charting or trading software.



© Copyright 2017-18 Robert B. Brain — *Brainy's Share*



# Introduction

## Use bullish T.A. indicator observations

We could use observations of technical analysis chart indicators such as:

- “Moving Average (MA) rising for consecutive bars”, especially if it is below the share price.

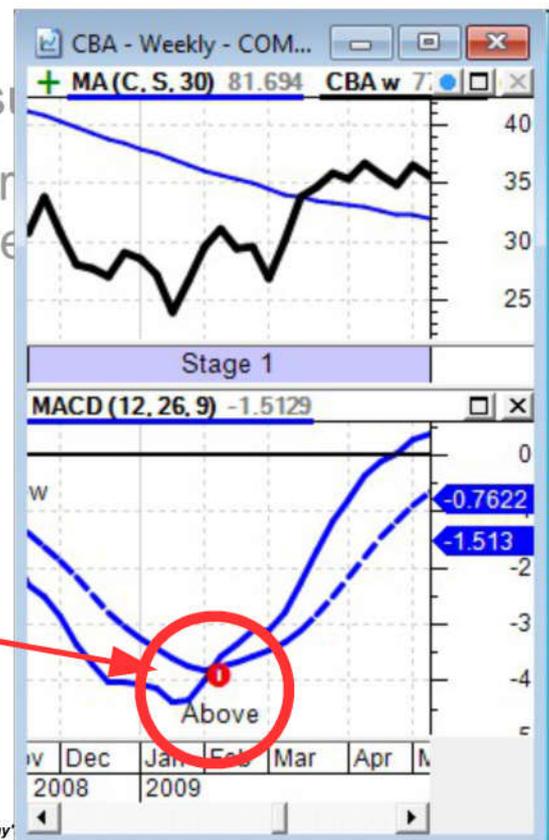
What other observations?

- MACD crosses “above” when below its own zero line?

Any others?



© Copyright 2017-18 Robert B. Brain — *Brainy's Share*





# Use bullish T.A. indicator observations

We might use bullish observations of technical analysis chart indicators such as:

- Moving Average (MA) rising for consecutive bars, especially if it is below the share price.
- MACD crosses “above” when below its own zero line.
- (and many more? )



# About this presentation

Wouldn't it be good if we could take  
a list of stocks, and

**study bullish features of chart indicators  
to allocate a ranking or score,  
then**

sort the list with  
strongest performing stocks (ie. most bullish)  
at top of the list?

(and the most bearish at the bottom)

Let's consider how to do this...



Robert's Personal Watch List table

(A) Code	(B) Stock name	(C) Score v6	(D) ROAR %	(E) Close Price	(F) Stop #1 (1.8x)	(G) Stop #2 (2.6x)	(H) Wks On	(J1) Price % Change	(J2) Price % pa	(K) % ch 1 wk
All stocks on the list this week: (new stocks + carry-over)				8 NEW stocks + 113 CARRY-OVER this week = 121 total (13 + 107 last week, 12 + 100 previous week) [7 gone off the list this week, 5 last week, 4 previous week]						
MMS	Mcmillan Shakespeare	80	34	16						3.0
REA	REA Group Ltd	78	0	77						1.2
ALU	Altium Limited	76	73	12						-0.5
CGC	Costa Group Holdings Lim	76	62	6						-5.1
IAG	Insurance Australia Group	76	0	7						2.1
ORE	Orocobre Limited	76	84	5						-3.0
AST	Ausnet Services Limite	74	0	1.8						0.8
COH	Cochlear Limited	74	32	181						1.1
DLX	Duluxgroup Limited	74	0	8.01	7.49	7.26	8	14.4%	94	7.5
NHF	Nib Holdings Limited	74	34	6.88	6.28	6.01	5	11.1%	116	1.0
NST	Northern Star Resources L	74	30	5.78	5.24	5.00	14	18.0%	67	4.9
NWS	News Corporation..	74	0	20.89	19.52	18.91	5	17.1%	178	6.0
SDA	Speedcast International Li	74	35	4.84	4.27	4.02	6	13.6%	118	1.9
BRG	Breville Group Limited	72	32	12.73	11.85	11.45	12	17.2%	75	1.0
STO	Santos Limited	72	80	5.01	4.47	4.23	11	30.1%	142	11.6
BKL	Blackmores Limited	70	100	162.13	143.41	134.66	10	41.1%	214	-0.6
IPL	Incitec Pivot Limited	70	0	3.96	3.67	3.54	9	9.1%	53	4.8
NXT	Nextdc Limited	70	32	5.45	5.01	4.81	10	17.2%	89	2.3
PTM	Platinum Asset Managemen	70	92	7.51	6.82	6.52	18	45.0%	130	0.1
SGR	The Star Entertainment Gr	70	0	5.64	5.41	5.24	4	-0.4%	-5	-2.6

The resulting list might look like this one.



## Introduction

### Questions?

- Please ask questions.
- Let's discuss details.
- Any price charts prepared with BullCharts software.



**Every chart tells a story.  
It pays to understand the stories in the charts.**



[www.bullcharts.com.au](http://www.bullcharts.com.au)





## About... Robert Brain

### Nimble Short term Investor

consultant, educator and part-time\* share trader  
web-based sharemarket-support business

- Many years experience as trainer, presenter, conference facilitator (*Scouts*)
- Share Market – active 15++ years\* (slowly at first)
- Chartist ie. technical analyst (ATAA member and national director)
- Provide support and tuition to traders and investors  
[Brainy's Share Market Toolbox](#)
- Member Mensa
- Engineering Degree (structured thinking with an eye for charts and diagrams)
- 30+ years – professional experience (IT and management)
- **No AFS license!**  
**(Can't give advice)**
- **BullCharts software**  
**(convenor Australian BullCharts User Group and authorised reseller with special pricing)**



**Conflict of interest?**

\* - Not yet enough capital to live off the proceeds of trading (after trading as a hobby until a career change in 2008).

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



9



## Important Notice — No Advice!

- This presentation does not include any advice.
- For proper advice, your personal financial situation needs to be considered.
- This presentation is pure education, only for your general awareness.
- There are no recommendations to take any action, or to invest any money in any way.
- Always consult a properly licensed advisor before making investment decisions.



© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



10

# IMPORTANT NOTICE - AUSTRALIAN TECHNICAL ANALYSTS ASSOCIATION

Please note that the views expressed at this meeting are the view of the speakers and members only. They do not represent or reflect the views of the ATAA. The ATAA conducts this meeting as a forum to provide an opportunity for its members to hear the view of speakers and other members.

**Under no circumstances are attendees at this meeting to infer that by allowing speakers and members to speak at this meeting that the ATAA endorses, approves, agrees or promotes the views of such speakers or members.** The ATAA does not provide any advice whatsoever regarding any investment in any financial products within the meaning of Section 766B of the Corporations Act or otherwise.

It is further essential to note that speakers prepare their presentations without taking into account or giving any consideration to the objectives, financial situation or needs of any attendee at this meeting. **Therefore, the views and opinions expressed by the speakers must not be considered personal advice relevant to any specific person's financial position or situation.**

Speakers and members present their views for purposes of education and exchange of views and discussions only. **Therefore it follows that the views expressed must not be acted upon as investment or financial advice or as any advice.**

Attendees must consider the appropriateness of the views expressed in the light of their own objectives financial situation, needs, position and seek professional advice from person(s) who are licensed to give financial, legal and tax advice only.

By attending this meeting you release and discharge the ATAA from all liability loss or damage that you may suffer or sustain (the Loss) and indemnify the ATAA against the loss.



## Introduction

# Important Notice





# NOTE...

In this presentation  
we focus on a  
***trend-following*** approach,  
so the indicator observations  
are relevant to that approach.



# Today's Agenda

1. Identify some technical analysis indicators;
2. Identify bullish observations of the chart indicators — and prepare a list;
3. Consider how to quantify these bullish observations to produce a ranking or score;
4. Consider how to automate this;
5. In a group presentation — encourage discussion and sharing of knowledge.





# T/A indicator observations

## Study these bullish features...

We might use BULLISH observations of technical analysis chart indicators such as:

- (a) **Moving Average (MA)** rising for consecutive bars, especially if it is below the share price
- (b) **MACD** crosses “above” when below its own zero line
- (c) **Momentum** indicator is trending higher (ie. higher peaks and troughs)
- (d) **Moving Average of Momentum** is above the Momentum and rising
- (e) **ActVest Range+** — indicator cord is rising
- (f) **Hull ROAR** is rising
- (g) **Volume** is above a Moving Average of Volume.

(see details on next slides...)



# T/A indicator observations

## (a) Moving Average rising...

**Moving Average (MA)** rising for consecutive bars, especially if it is below the share price.

Indicative of a rising trend



15 and 30 week MA on a weekly chart





## BTW — A note about *trends*

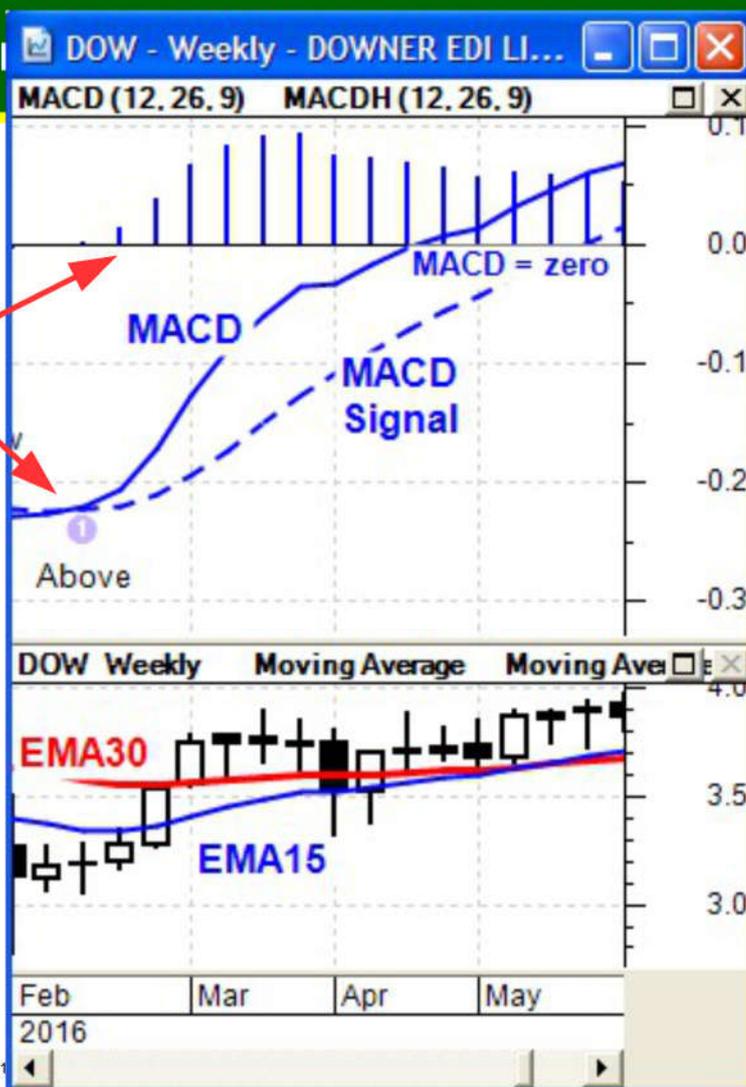
About price trends — uptrends and downtrends

- The classical technical analysis definition of a price **trend** is a sequence of *higher highs* and *higher lows* (or *higher peaks* and *higher troughs*).
- This can be difficult to scan for in charting software, so instead we can look for a hint that the share price is “tending” to rise — such as a Moving Average.



## (b) MACD...

**MACD** crosses “above” especially when below its own zero line.





### (c) Momentum...

Momentum indicator is trending higher (ie. higher peaks and higher troughs),

AND

(d) MA of MOM is rising.



### (e) ActVest Range+ ...

The Range+ indicator cord is rising.

Either the Upper cord, and/or the Central cord.

Refer Alan Hull's trading notes for more details.





T/



### (f) Hull ROAR ...

The Hull **ROAR\*** indicator is rising.

Could use ActVest or ActTrade!!

\* — Alan Hull's Rate Of Annual Return



T/A indic

### (g) Volume ...

**Volume** is above a **Moving Average** of Volume (MA-V) and MA-V is rising.

But which MA-V?

Is this useful?

(MA-V = VMA)





### EXAMPLES

Consider the following  
sample charts  
and the T.A. indicators ...

Could we have “predicted”  
the bullish uptrends?



### WARNING!!!

In the following slides,  
there are many examples  
of “bullish observations”  
of technical analysis  
chart indicators!!

Get ready to make notes!!





# T/A indicator observations



# T/A indicator observations





# T/A indicator observations



\* TMF = Twigg's Money Flow

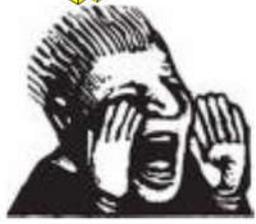


# T/A indicator observations





# T/A indicator observations



**QUESTION:**  
Could we have  
“anticipated”  
this rally?



# T/A indicator observations

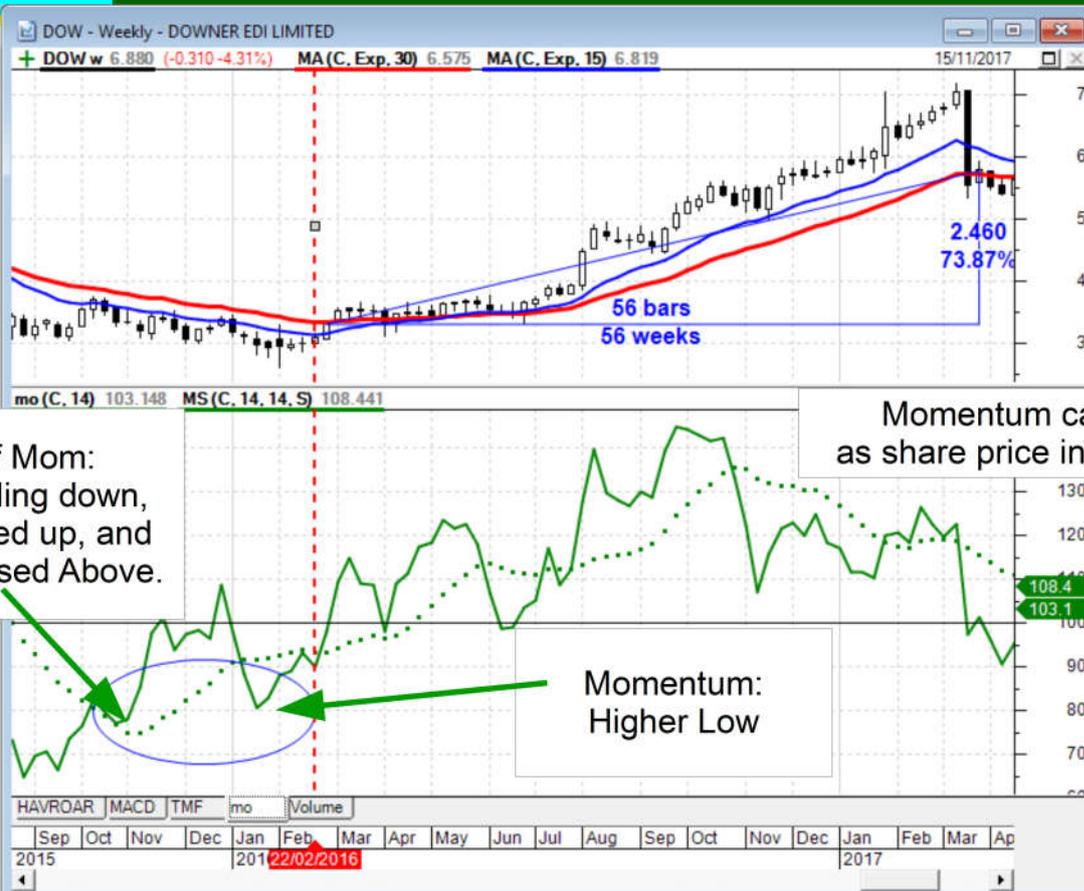




# T/A indicator observations



# T/A indicator observations





# T/A indicator observations



# T/A indicator observations



# T/A indicator observations

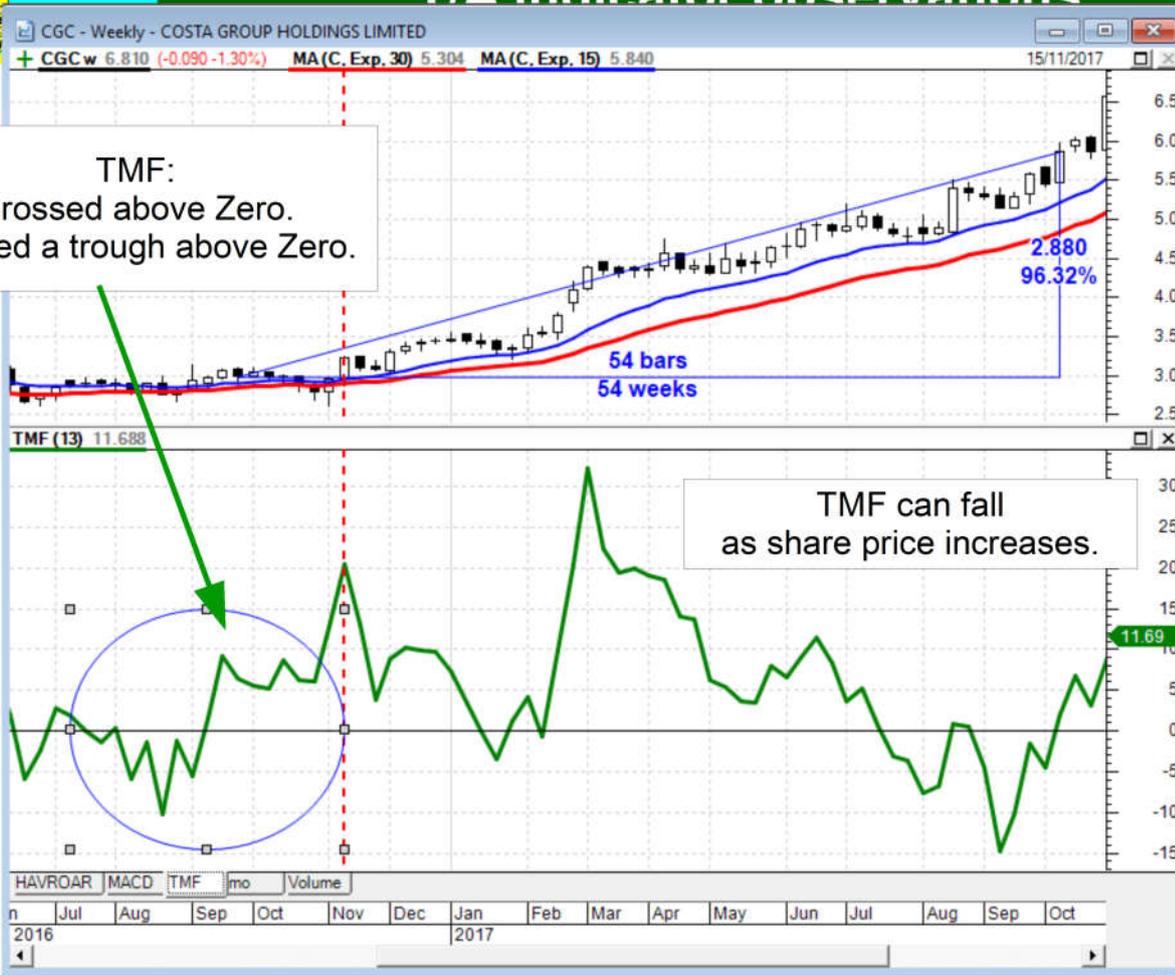


# T/A indicator observations





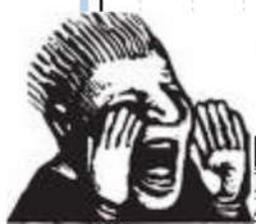
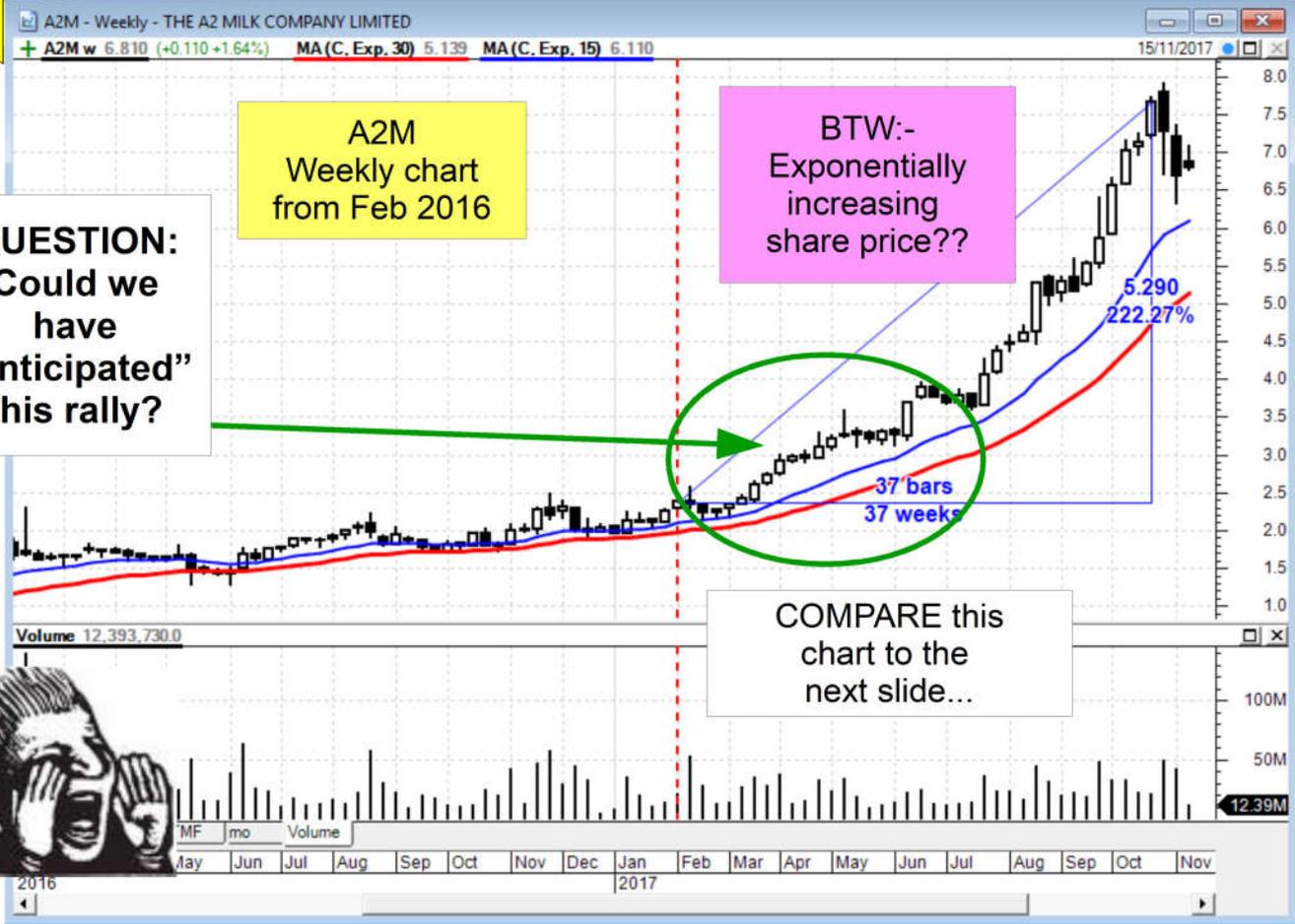
# T/A indicator observations



# T/A indicator observations



# T/A indicator observations



# T/A indicator observations





# T/A indicator observations

MA of Mom:  
Was heading down,  
then turned up, and  
Mom crossed Above.



# T/A indicator observations

MACD:  
Crossed "Above"





# T/A indicator observations



# T/A indicator observations





## Summary of these bullish features...

We might use observations of technical analysis chart indicators such as these:

- (a) Moving Average (MA) rising for consecutive bars, especially if it is below the share price
- (b) MACD crosses “above” when below its own zero line
- (c) Momentum indicator is trending higher (ie. higher peaks and troughs)
- (d) Moving Average of Momentum is above the Momentum and rising
- (e) ActVest Range+ — indicator cord is rising
- (f) Hull ROAR is rising
- (g) Volume is above a Moving Average of Volume.

See summary price chart on next slide.



Identify the bullish observations in this weekly price chart.

- HAVROAR
- MACD
- TMF
- Momentum (and its MA)
- MA of price
- Volume (and VMA)





Any other useful ones?

**Are there even more  
bullish observations  
and indicators  
that could be useful?**



### What Other Indicators??

What other chart indicators could we use?

1. Stochastic?
2. OBV?
3. RSI?
4. Bollinger Bands?
5. ...





## So how to rank the stocks?

Let's allocate a "Score value" for each bullish indicator observation that is true.



## (a) Moving Average rising...

Moving Average (MA) rising for consecutive bars, especially if it is below the share price.

We could allocate a "score" ...

Ref.	Technical analysis indicator observation	Score Value
1	15-week EMA has increased every week for 3 weeks	1
2	30-week EMA has increased every week for 3 weeks	1
3	If EMA (30) has risen every bar for 5 bars	1
4	If EMA (30) has risen every bar for 8 bars	1





# Allocating a Score value

## (b) MACD...

MACD crosses "above" when below its own zero line.

We could allocate a "score"...



Ref.	Technical analysis indicator observation	Score Value
8	MACD indicator value is less than zero, any bar in the last 8 bars	1
9	MACD has crossed "Above" the signal line, any bar in last 8 bars	1
10	MACD value has increased every bar for 3 bars	1



# Allocating a Score value

## (c)-(d) Momentum...

Mom is trending higher, AND MA of MOM is rising.



Ref.	Technical analysis indicator observation	Score Value
11	Mom(14) is > Mom of any of the last 5 bars	1
12	Mom(14) has "crossed above" the MA of Mom for any of the last 5 bars	1
13	Mom(14) is > MA of Mom for every bar in the last 3 bars	1
14	The MA(14) of Mom has increased every bar for the last 5 bars	1



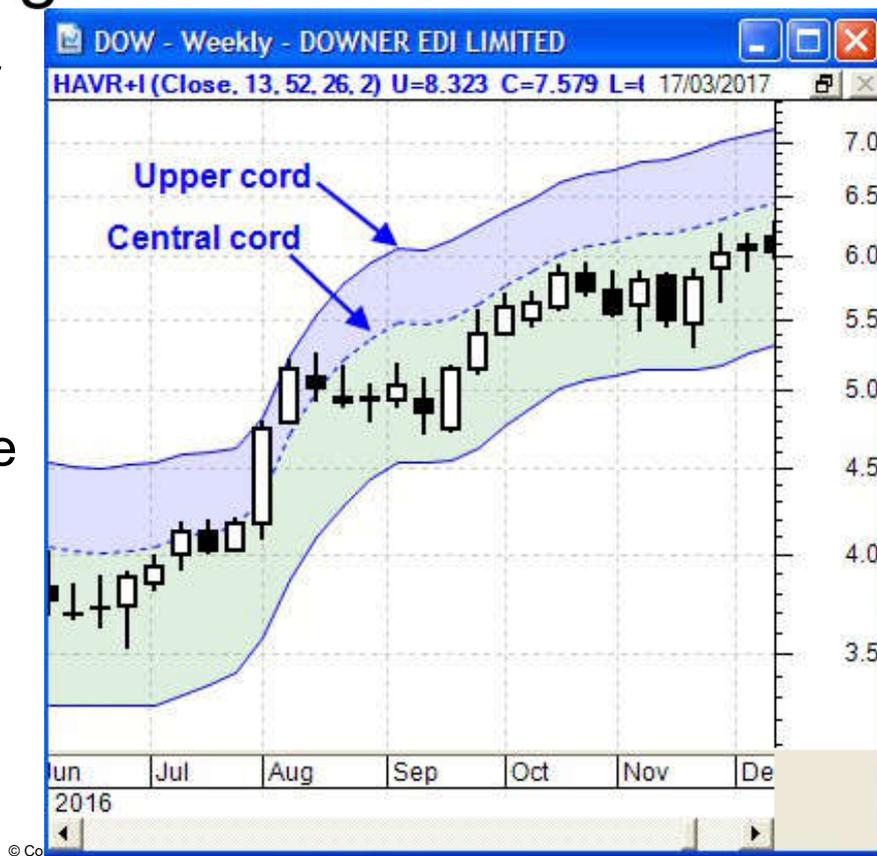
# Allocating a Score value

## (e) ActVest Range+ ...

The Range+ indicator cord is rising

Not yet included; but exactly what might the score criteria be?

“... cord is rising...?”



# Alloc

## (f) Hull ROAR ...

The Hull ActVest ROAR (Rate of Annual Return) indicator is rising

Ref.	Technical analysis indicator observation	Score Value
5	ActVest ROAR > 20	1
6	ROAR >= previous ROAR	1





## (g) Volume ...

Volume is above VMA and VMA is rising.

This condition occurs on this sample chart in some weeks, and not others.

Ref.	Technical analysis indicator observation	Score Value
18	If Vol > 5-period VMA	1
19	If Vol > 15-period VMA	1
20	If 8-period VMA has increased every bar for 3 bars	1

© Copyright 2017-18 Robert B. Brain



## Allocating a Score value

### What about price?

Might it be useful to include an observation of the pure share price?

Ought this sequence of candles be recognised, and classed as bullish?

ie. a sequence of Higher Highs, and/or Higher Closes, and/or Higher Lows, etc...





## The Total Score

- Take the individual Scores in the previous slides and examples, and simply tally them up to arrive at the “Total Score” value for each stock.



## Tally up the scores for this stock

Ref.	Technical analysis indicator observation	Score Value
1	15-week EMA has increased every week for 3 weeks	1
2	30-week EMA has increased every week for 3 weeks	1
3	If EMA (30) has risen every bar for 5 bars	1
4	If EMA (30) has risen every bar for 8 bars	1
5	ActVest ROAR (Rate of Annual Return) greater than 20	(N/A)
6	ActVest ROAR >= previous ActVest ROAR	(N/A)
7	Latest Close >= Previous Close	(N/A)
8	MACD indicator value is less than zero, any bar in the last 8 bars	1
9	MACD has crossed "Above" the signal line, any bar in last 8 bars	1
10	MACD value has increased every bar for 3 bars	1
<b>TOTAL score (this page):</b>		<b>7</b>





# Allocating a Score value

Ref.	Technical analysis indicator observation	Score Value
11	Momentum (14) > the Momentum of any of the last 5 bars	1
12	Momentum(14) has "crossed above" the Moving Average of Momentum for any of the last 5 bars	1
13	Momentum(14) is greater than the Moving Average of Momentum for every bar in the last 3 bars	1
14	The MA of Momentum(14) has increased every bar for the 5 bars	1
15	If Twiggs Money Flow (TMF - 13 period) is now the highest it has been in the last 5 bars	(N/A)
16	If TMF(13) is greater than zero	(N/A)
17	If TMF(13) is greater than TMF(13) for any bar in the last 5 bars	(N/A)
18	If Volume > 5-period Moving Average of Volume	1
19	If Volume > 15-period Moving Average of Volume	1
20	If 8-period MA of Volume has increased every bar for 3 bars	1
<b>TOTAL score (this page):</b>		<b>7</b>
<b>TOTAL score (previous page):</b>		<b>7</b>
<b>TOTAL score:</b>		<b>14</b>



# Allocating a Score value

## The Total Score

- Take the individual Scores in the previous slides and examples, and simply tally them up to arrive at the “Total Score” value for each stock.
- For the list of stocks and their own Score values, sort the list with the highest scoring stock at the top of the list.



### Robert's Personal Watch List table

(A) Code	(B) Stock name	(C) Score v6	(D) ROAR %	(E) Close Price	(F) Stop #1 (1.8x)	(G) Stop #2 (2.6x)	(H) Wks On	(J1) Price % Change	(J2) Price % pa	(K) % ch 1 wk
All stocks on the list this week: (new stocks + carry-over)				8 NEW stocks + 113 CARRY-OVER this week = 121 total (13 + 107 last week, 12 + 100 previous week) [7 gone off]						
MMS	Mcmillan Shakespeare	80	34	16.88						3.0
REA	REA Group Ltd	78	0	77.05						1.2
ALU	Altium Limited	76	73	12.96						-0.5
CGC	Costa Group Holdings	76	62	6.55						-5.1
IAG	Insurance Australia Group	76	0	7.17						2.1
ORE	Orocobre Limited	76	84	5.80						-3.0
AST	Ausnet Services Limited	74	0	1.845						0.8
COH	Cochlear Limited	74	32	181.13	170.62	165.94	12	15.6%	68	1.1
DLX	Duluxgroup Limited	74	0	8.01	7.49	7.26	8	14.4%	94	7.5
NHF	Nib Holdings Limited	74	34	6.88	6.28	6.01	5	11.1%	116	1.0
NST	Northern Star Resources	74	30	5.78	5.24	5.00	14	18.0%	67	4.9
NWS	News Corporation	74	0	20.89	19.52	18.91	5	17.1%	178	6.0
SDA	Speedcast International	74	35	4.84	4.27	4.02	6	13.6%	118	1.9
BRG	Breville Group Limited	72	32	12.73	11.85	11.45	12	17.2%	75	1.0
STO	Santos Limited	72	80	5.01	4.47					
BKL	Blackmores Limited	70	100	162.13	143.41	138.00	10	15.0%	100	1.0
IPL	Incitec Pivot Limited	70	0	3.96	3.67					
NXT	Nextdc Limited	70	32	5.45	5.01					
PTM	Platinum Asset Management	70	92	7.51	6.82					
SGR	The Star Entertainment Group	70	0	5.64	5.41	5.24	4	-0.4%	-5	-2.6

Robert's personal Weekly Watch List. Stocks selected from the XJO, if they are "uptrending".

This is updated weekly and available to all subscribing Share Market Toolbox members each weekend.

© Copyright 2017-18 Robert B. Brain — Brainy's Share Market Toolbox — [www.robertbrain.com](http://www.robertbrain.com)

61

## Allocating a Score value

### Bullish observations of indicators

This could be very useful!

- With careful use of specific chart indicators, this approach could be very useful
- **BUT** which chart indicators to use?
- **And,**  
**Can we foresee any issues?**



© Copyright 2017-18 Robert B. Brain — Brainy's Share Market Toolbox — [www.robertbrain.com](http://www.robertbrain.com)

62



## One possible PROBLEM!

What if we choose several indicators that are all Trend indicators, or all Momentum indicators?

It is likely that all indicators of a particular type will be bullish together.

### Momentum indicators

Momentum  
On Balance Volume  
RSI

### Trend indicators

MA  
MACD  
ADX

### Volume indicators

Volume MA (VMA)  
Money Flow  
Volume Oscillator

### Volatility indicators

Bollinger Bands  
ATR

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



63



## Another Problem!

In our case study we have listed about 20 criteria. What if:

- If each criteria is allocated one point, and
- Ten of these criteria are all based on observations of **trend indicators**, and
- Five are based on **momentum indicators**, &
- Five are based on **volume observations**.

**Won't this result in a bias towards the trend observations?**

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



64



### A solution to this bias...

- Instead of allocating one point to each observation, we can allocate different amounts (eg. 2 points or 3 points) [we refer to this as the “criteria importance”]
- For example, allocate a percentage of the total score to each category (20% each?):
  - Trend
  - Momentum
  - Price
  - Volatility
  - Volume



### Some tips

In the examples shown, we have used indicator **parameters** that could be tweaked:

1. “period” for MOM, MA, etc. (we used the default value of 14);
2. Scan criteria:- “... if the condition has occurred any time in the last X number of bars”;
3. Change the “importance” of each scan criteria.





## How to automate?



Once we decide which indicators to use, and which observations of these indicators to use, how can we automate the process of calculating the score for each stock?



## My favourite...

In BullCharts software...

- Set up a scan with “Match All Criteria” turned off;
- Create the required scan criteria;
- Then set “Importance” and “Required” options for each scan criteria.

Scan Criteria:  Match All Criteria

Criteria	Importance	Required
<input checked="" type="checkbox"/> Open is greater than or equal to previous Open every bar for the last 3 bars.	1 █	No
<input checked="" type="checkbox"/> Close is greater than or equal to previous Close every bar for the last 3 bars.	1 █	No
<input checked="" type="checkbox"/> 30 bar exponential MA of Close has increased every bar for the last 5 bars.	2 █	No
<input checked="" type="checkbox"/> 30 bar exponential MA of Close has increased every bar for the last 8 bars.	2 █	No
<input checked="" type="checkbox"/> MACD (12, 26, 9) is less than 0 any bar in the last 8 bars.	2 █	No
<input checked="" type="checkbox"/> MACD (12, 26, 9) Above is true any bar in the last 8 bars.	2 █	No



# Questions — for how many bars?

In a scan, we could say that each condition must have been in place, “...For ANY bar in the last X bars”, or “...For EVERY bar...”:

- (a) Moving Average (MA) rising for consecutive bars (**For HOW MANY bars?**), especially if it is below the share price
- (b) MACD crosses “above” when below its own zero line  
(**Any time in the last X bars**)
- (c) Momentum indicator is trending higher  
(ie. higher peaks and troughs) — (**For HOW MANY bars?**)
- (d) Moving Average of Momentum is above (**For HOW MANY bars?**) the Momentum and rising
- (e) ActVest Range+ — indicator cord is rising
- (f) Hull ROAR is rising (**For HOW MANY bars?**)
- (g) Volume is above a Moving Average of Volume.



# If using BullCharts ...

- If using BullCharts, then view the following slides (and do a demonstration);
- If NOT using BullCharts, then maybe skip the next few slides.





# How to automate

Example criteria:  
 MA(E,C,15)  
 increased  
 every bar  
 for last 3 bars  
 (on weekly period)

**BullScan Criteria Properties**

**1. First Value to Compare**  
 Category: Is an indicator  
 Name:   
 Moving Average  
 Parameters  
 of 0 bars ago Unchanged 0 %

**Type of Comparison**  
 Type: Has increased  
 Every bar in the last 3 bar(s)

**2. Second Value to Compare**  
 Category: Is a number  
 0  
 of 0 bars ago Unchanged 0 %

**Description**  
 15 bar exponential MA of Close has increased every bar for the last 3 bars.

Importance: 1 5 9  
 Required



# How to automate

Example criteria:  
 Close is  
 greater than or =  
 Previous Close  
 every bar  
 for last 3 bars.

**BullScan Criteria Properties**

**1. First Value to Compare**  
 Category: Is a price or chart field  
 Close  
 of 0 bars ago Unchanged 0 %

**Type of Comparison**  
 Type: Is greater or equal to  
 Every bar in the last 3 bar(s)

**2. Second Value to Compare**  
 Category: Is a price or chart field  
 Close  
 of 1 bar ago Unchanged 0 %

**Description**  
 Close is greater than or equal to previous Close every bar for the last 3 bars.

Importance: 1 5 9  
 Required





# How to automate

Example criteria:

MACD

has crossed "Above"

the Signal line

Any bar

in the last 8 bars

**BullScan Criteria Properties**

**1. First Value to Compare**  
Category: Is an indicator signal Name:   
MACD Parameters  
of 0 bars ago Unchanged 0 %

**Type of Comparison**  
Type: Is true  
Any bar in the last 8 bar(s)

**2. Second Value to Compare**  
Category: Is a number  
0  
of 0 bars ago Unchanged 0 %

**Description**  
MACD (12, 26, 9) Above is true any bar in the last 8 bars.

Importance: 1 5 9  
 Required



# How to automate

Example criteria:

Momentum is

the highest it's been

ie. Trending higher.

**BullScan Criteria Properties**

**1. First Value to Compare**  
Category: Is an indicator Name:   
Momentum Parameters  
of 0 bars ago Unchanged 0 %

**Type of Comparison**  
Type: Is the highest it's been  
over the last 5 bar(s)

**2. Second Value to Compare**  
Category: Is a number  
0  
of 0 bars ago Unchanged 0 %

**Description**  
Momentum (Close, 14) is the highest it's been in 5 bars.

Importance: 1 5 9  
 Required



# How to automate

Example criteria:

Volume  
is > than  
5-bar SMA  
of Volume  
(ie. the VMA)

**BullScan Criteria Properties**

**1. First Value to Compare**  
 Category: Is a price or chart field  
 Volume  
 of 0 bars ago Unchanged 0 %

**Type of Comparison**  
 Type: Is greater than  
 Any bar in the last 1 bar(s)

**2. Second Value to Compare**  
 Category: Is an indicator Name:  
 Moving Average Parameters  
 of 0 bars ago Unchanged 0 %

**Description**  
 Volume is greater than 5 bar simple MA of Volume

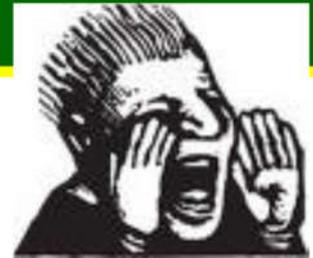
Importance: 1 5 9  
 Required

OK  
Cancel



# How to automate

## Other methods?



**Are there other methods  
for doing a scan across your  
stock universe?  
and allocating a Score value?  
to produce a sorted list of stocks?**





# SUMMARY

We've looked at bullish observations of several chart indicators, and allocated a "Score" value and considered a "weighting", and considered how to automate.



# Useful?

**Might this approach be useful to rank a list of stocks in order of bullishness? and likelihood to perform?**





# Ranking stocks — chart indicators

Bullish observations  
of chart indicators  
can be used to  
produce a ranked  
list of stocks.

*Every chart tells a story.  
It pays to understand the stories in the charts.*

rtbrain.com



79



# BTW

- I send occasional email to interested people
- My **Share Market Toolbox** web site:
  - Toolbox Members receive weekly email with (charts) analysis of our market
  - And there's lots more (stop loss, trends, etc...)
- Register for free and not miss out.
- Send me an email request:  
[robert@robertbrain.com](mailto:robert@robertbrain.com)



80

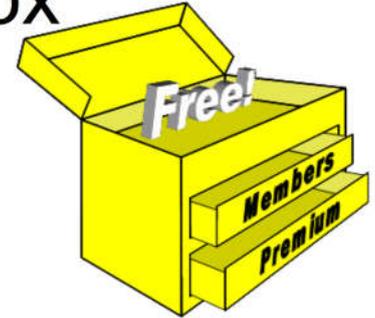


## Summary & Wrap up

### Don't forget my Toolbox

- Brainy's **Share Market Toolbox**

- [www.robertbrain.com](http://www.robertbrain.com)
- Loads of eBook (PDF) Articles
- Info: share market, charting, BullCharts
- Weekly Market Updates and Watch List
- monthly e-Newsletters



- Good software – BullCharts

[www.robertbrain.com/bullcharts/](http://www.robertbrain.com/bullcharts/)

- My contact details:

web site above, or phone: 0438 355 910

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



81



## Summary & Wrap up

### ATAA — networking, etc.

For totally unbiased and broad support:



Australian  
Technical Analysts  
Association

- Eight locations around Australia
- Monthly meetings
- Lots of resources — [www.ataa.asn.au](http://www.ataa.asn.au)

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



82



## Summary & Wrap up

Q & A ?

Any  
questions?

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



83



## Summary & Wrap up

THE END

See free stuff here:  
[www.robertbrain.com/free](http://www.robertbrain.com/free)

Thank you.

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

or phone: 0438 355 910

© Copyright 2017-18 Robert B. Brain — *Brainy's Share Market Toolbox* — [www.robertbrain.com](http://www.robertbrain.com)



84