Introduction to the dividend-channel method

Bruce D. Crawford The Investment Forum/Club Osher Lifelong Learning Institute at George Mason University

August 31, 2022

Disclaimer

- I am not licensed or qualified to provide investment advice. Consider your own situation carefully and consult with a properly licensed and accredited professional before making or disposing of any investments involving real money.
- Charts from the Member's Area of StockCharts.com are used by permission.

Disclosure

• I currently hold long positions in SO and UTMD.

Contents

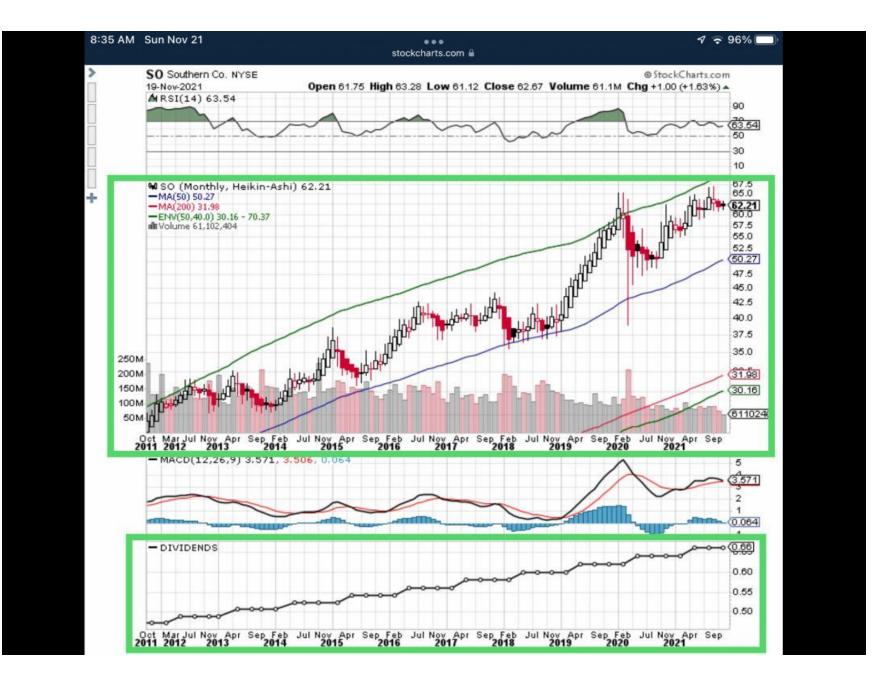
- Introduction
- Analyzing a stock: Dividend stream, price action, fundamentals
- Origins of the channel method
- Observations on selling
- Observations on buying

Contents (cont'd)

- The importance of the dividend stream
- Identifying the main trend and the sub-trend in the price action
- Sizing price trading bands
- "Sell" charting examples
- "Buy" charting examples
- Summary and conclusion



The DIA ETF displays well-behaved price action, but the dividend stream is erratic.



This stock exhibits a well-behaved dividend stream along with well-behaved price action.



Once we have established that the dividend stream is well behaved, we look to make sure that the closing price is above the 50 month simple moving average.



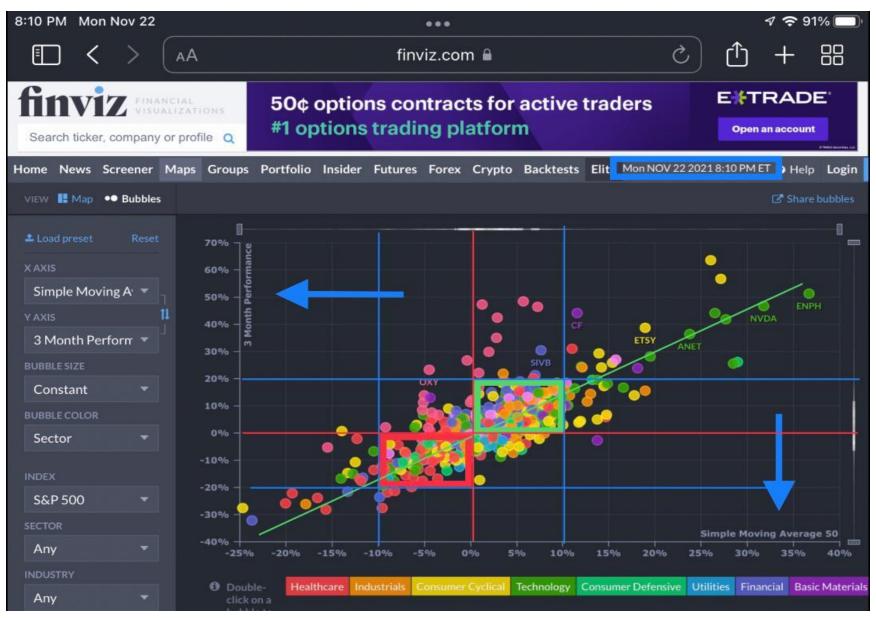
Next, we confirm that the 50 month simple moving average is above the 200 month simple moving average.



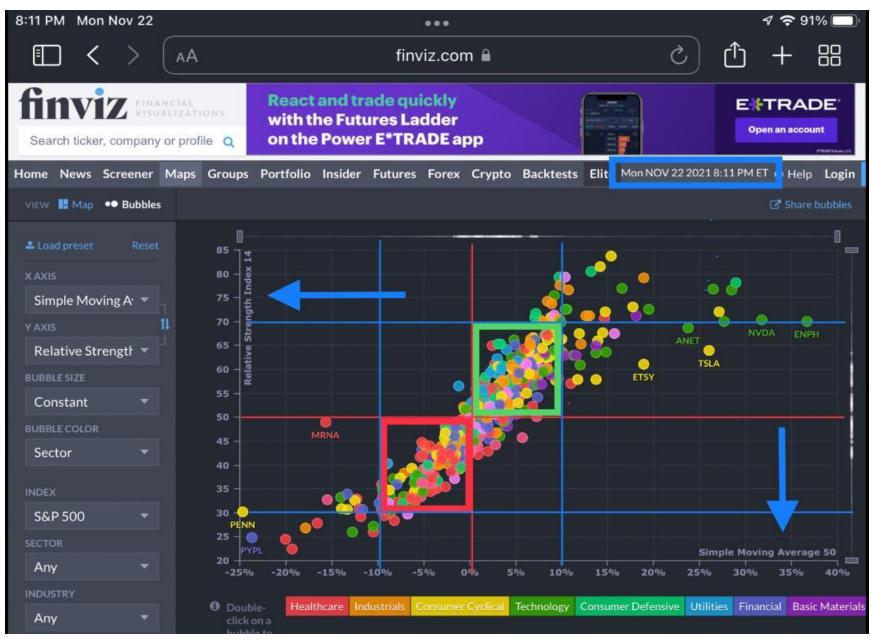
If we are looking to buy the stock, we now look to make sure that the MACD histogram is also positive.

tabases – Unive	rsity of D	el	♥ Valu	e Lin	e - R	esea	arch	- Br	ows		rese	earc	h-va	lueli	ine-	com.u	udel.
SOUTHERN CO	MPANY N	YSE-SO	RECENT	62.4	8 PIE RATIO	18.	5 (Trailin Media	g: 17.8 n: 16.0)	RELATIVE PIE RATIO	1.0		4.3	%		E		
TIMELINESS 4 Laward 8/1521 SAFETY 2 Laward 8/1521 TECHNICAL 1 Raised 106/21 BETA 35 (1.00 - Machet)	High 38.6 Low: 30.8 LEGENDS 0.62 x Devid divided by P Helative Pre	46.7 35.7 Worest Rate to Strength	48.6 48 41.8 40	51.3 40.3	53.2 41.4	54.6 48.0	53.5 46.7	49.4 42.4	64.3 43.3	71.1 42.0	67.5 56.7					2 Range 5 2026 100 120 100	
18-Month Target Price Range Low-High Midpoint (% to Mid)	Sharled area indi	afes second			_	_	\sim	_	_		and a starting	•				- 80	
\$54-581 Sc8 (10%) 2024-25 PROJECTIONS	1. Turk	-		a huger	Souther			une fut		Toto.						- 50 - 40 - 30	
Ann'i Total Price Gain Return High 75 (+20%) 9% Low 55 (-10%) 2%					-	and the second	~~~			1	~		5 TOT	RETUR	N 10/21	20 15	
Institutional Decisions 42000 10001 32001 19 Rev 708 676 743 19 Sel 589 649 580	Percent 18 - shares 12 - traded 6 -	tu lla	ما الما الما ا	Lillie	timbia	ianna.	dist. it. i	tastin	hu h f		La mi	_	1 µt. 3 pt.	THS TOCK 13.0 56.3 50.5	NOES 55.5 64.6 104.1	Ē	
Herapos c18855 c2/954 c29680 2005 2006 2007 2008 18.28 18.24 20.12 22.04	1000 C 1000 C 200	2011	2012 2013		2015	2016	2017	2018	2019	2020	2021			E LINE P		24-26	
4.03 4.01 4.22 4.43 2.13 2.10 2.26 2.25 1.48 1.54 1.60 1.66	4.43 4.51 2.32 2.36 1.73 1.80	4.91 2.55 1.87	5.18 5.2 2.67 2.7 1.94 2.0	5.28 2.77	5.47 2.64 2.15	5.69 2.83 2.22	6.64 3.21 2.30	6.41 3.00 2.38	6.35 3.17 2.46	6.58 3.25 2.54	7.10	7.15 3.50	"Cash Fi Earnings Div/d De	ow" per		8.50 4.50 2.94	
3.20 4.01 4.66 5.10 14.42 15.24 15.23 17.08	5.70 4.85 18.15 19.21	5.23 20.32	5.54 6.1 21.09 21.4	6.58	8.22 22.59	7.38 25.00	7.37 23.96	7.74 23.92	7.17 25.11	7.04 26.48	7.65 26.75	6.35 28.45	Cap1 Sp Book Va	ending p kue per si	ersh h⊂	6.90 32.50	
741.45 745.27 763.10 777.19 15.9 16.2 16.0 16.1 .85 87 85 97	13.5 14.9 .90 .95	865.13 15.8 .99	967.27 887.0 17.0 16. 1.08 .0	16.0 .84	911.72 15.8 .80	990.39 17.8 .93	1007.6 15.5 .78	1033.8 15.1 .82	1053.3 17.6 .94	1056.5 17.9 .52	Bood figs Value catiro	res are Lina	Common Avg Ann Relative	I P/E Raik	ba a	1105.0 14.5 .50	
4.4% 4.5% 4.4% 4.6% CAPITAL STRUCTURE as of 6/3 Total Debt \$52059 mil. Due in 5	Yrs \$14647 mil.	4.6% 17857 2208.0	4.3% 4.6% 19537 1708 2415.0 2439.0	18467	4.8% 17489 2647.0	4.4% 19696 2757.0	4.6% 23031 3259.0	5.3% 23495 2096.0	4.4% 21419 3354.0	4.4% 20375 3481.0		23000	Avg Ann Revenue Net Prof	s (Smill)	leid	4.5% 26600 4925	
LT Debt \$47828 mil. LT Intere (LT interest earned: 3.3x) Leases, Uncapitalized Annual re-	et \$1882 mill. ntais \$300 mill.		35.8% 34.8% 9.4% 11.8% 49.9% 51.5%	33.8%	33.4% 13.2% 52.8%	28.5% 11.9% 61.5%		21.3% 6.8% 62.0%	15.9% 6.0% 60.1%	14.3% 6.6% 61.5%	14.0% 7.0% 62.0%	14.0%	AFUDC	ax Rate to Net I		14.0% 4.0% 51.5%	
Pfd Stock \$291 mill, Pfd Div'd incl. 10 mill, site, 5,82% curr. ofd.	1916 \$16646 mill. 1915 mill. 1925 stated	47,1% 37307 45010	47.3% 45.8% 38653 4148 48390 \$120	47.3% 42142	44,0% 45758 61114	35.7% 69359 79446	35.0% 68963 79872	37.8% 65750 80797	39.5% 665.94 630.60	38.1% 73385 87654	37.0% 77800 41875	38.0% 82875	Commor Total Ca Net Plan	Equity I sital (Smi	Ratio	38.5% \$3300 102290	
value): 475.115 ste. 4.2%-6.44% (par): Common Stock 1.058.825.814 st		7.2%	7.3% 6.8%	7.1%	6.6%	4.9%	5.9% 13.3%	5.9%	6.0% 12.1%	5.9%	5.5%	5.5% 12.0%	Return o	n Total C n Shr. Ec	uity	6.5% 13.5%	
MARKET CAP: \$66 billion (Large ELECTRIC OPERATING STATIST	nics.	12.5% 3.4% 73%	12.8% 12.5% 3.6% 3.2% 73% 73%	3.2% 75%	12.6% 3.1% 78%	11.0% 2.5% 78%	3.9% 72%	12.5% 2.8% 79%	12.1% 2.8% 77%	12.4% 2.8% 76%	12.5% 2.0% 78%	3.0% 77%	Retained All Divid	to Com s to Net I	Eq Prof	14.5% 4.5% 68%	
* Dange Retal Sales (WHY: 4.3.6 Arg. India: Lise (MHY) 3048 Arg. India: Lise (MHY) 3048 Arg. India: San XMY) 3048 (Dight: is "come (Ma) 45824 Area: Land Summe (Ma) 736429 Area: Land Summe (M	2019 2020 -8.5 -5.3 2947 NA 6.03 NA 41940 NA 34209 NA 80.3 NA	competit Southern	SS: The Sout y to 4.3 mill. ive generation i Company Ga 5. Sold Gulf Pr	business s, 4.3 mill	In GA, A Acqid AG custome	L, and I L Resources in GA	MS. Also iroes (ren , NJ, IL,	has a lamed VA, &	rews. by gas, 47 ⁴ Fuel cos Has 27,7 Inc.: DE	is: coal, ts: 23% 100 emp	20%; nu of revs. 1 s. Chaim	iclear, 1 20 report tan, Pres	5%; othe ted depr. s. and CS	r, 9%;) rates (u 30: Thor	fil): 2.6 nas A	ied, 9%. Ni-3.7%. Farning.	
Sector 2810 Amounal, Anter Bay Part Amounal, Anter Bay Part Chamber Strate Chamber Strate Data Strate Chamber Strate Strate Strate Dock Value Strate Strate Strate Dock Value Strate Strate Strate <tr< th=""><th>-8.0 +1.3 280 +1.3 281 270 at Earld 716-30 16 28 38 5% 2.5% 5% 2.5%</th><th>ind 37 Once the South subsi and 4 to me dates of 20 this back rent servit unit quart comm will a the p lion o prude the c charg project third after Once</th><th>again, in nuclear hern Co dilary, A i of the X i or of 202 iission a see the u lant, incli if the X i on the y the y i the X i on the y i on</th><th>30% ind here h constitution ogtle s gulator niber of tively: schedu months n is th third - e in se 3. In s proved tility, v ude in i 8 billic regula as take it do e think esults v t went he mat The sto nnce out for the sto nnce out for the sto</th><th>stni. 11 has be ruction?'s Ge 's Ge tation y-approved 2021 for til le has , this as this rvice didition as so which ta rat no pre so vice didition as so which ta rat no pre to y re to y re to to y re to y re to y re to y to y to to y to to to y to to y to to y to to to to to to to to to to to to t</th><th>Pic observations of the second second</th><th>n. 14% delag roject a Pov expecta expective</th><th>Petal y in of of ver ts 3 teted wice bad vice in and crution of the rogia that is of the bad rogia that is bal- med arrise the bal- rogia that the bad vice vice wice in and vice in and vice vice vice wice in a star that is of the the the the the the the the the the</th><th>Street were 2016 We c ings ny's u and h utiliti Note mans tion o A mas limois mans 10.35 54.5% Small in oth This yield This yield This good. quota get P unap Paul</th><th>t is origin and 2 continues in 20 tillitic igher es' set that geme es' set that geme s. Nice game er st untit that the ects that the continues s. Nice set statut the continues set that the continues set set that the continues set set that the continues set set that the continues set set set set set set set set set s</th><th>used anally 2017. aue t 21 an 221 </th><th>to the expect of expect and 202 uld be ence, and area anclude cludes cludes cludes cludes cludes is file in a commission store over 1 flects are c the r hithin , tota CCFA</th><th>ted to pect 22. So mefit is the is is from ings. se is d for mon-e pected lication k ha the w the r the 3 l retu</th><th>ays. ' go ' go ' high uther from econo ain in r penda a hik penda a hik penda a hik non quity d in 1 nns ar s a tillity isks : netion 8 m * to 5 m rm po ambe</th><th>The on li er e rate my i od sl tems pres ing te of equi rati Dece e per divid avec associ on the the r -year ottent the r 12,</th><th>ne in sarn- impa- relief n the hape. that enta- in II- \$293 ity of io of mber. nding dend rage. iated oject. s are ecent</th><th></th></tr<>	-8.0 +1.3 280 +1.3 281 270 at Earld 716-30 16 28 38 5% 2.5% 5% 2.5%	ind 37 Once the South subsi and 4 to me dates of 20 this back rent servit unit quart comm will a the p lion o prude the c charg project third after Once	again, in nuclear hern Co dilary, A i of the X i or of 202 iission a see the u lant, incli if the X i on the y the y i the X i on the y i on	30% ind here h constitution ogtle s gulator niber of tively: schedu months n is th third - e in se 3. In s proved tility, v ude in i 8 billic regula as take it do e think esults v t went he mat The sto nnce out for the sto nnce out for the sto	stni. 11 has be ruction?'s Ge 's Ge tation y-approved 2021 for til le has , this as this rvice didition as so which ta rat no pre so vice didition as so which ta rat no pre to y re to y re to to y re to y re to y re to y to y to to y to to to y to to y to to y to to to to to to to to to to to to t	Pic observations of the second	n. 14% delag roject a Pov expecta expective	Petal y in of of ver ts 3 teted wice bad vice in and crution of the rogia that is of the bad rogia that is bal- med arrise the bal- rogia that the bad vice vice wice in and vice in and vice vice vice wice in a star that is of the the the the the the the the the the	Street were 2016 We c ings ny's u and h utiliti Note mans tion o A mas limois mans 10.35 54.5% Small in oth This yield This yield This good. quota get P unap Paul	t is origin and 2 continues in 20 tillitic igher es' set that geme es' set that geme s. Nice game er st untit that the ects that the continues s. Nice set statut the continues set that the continues set set that the continues set set that the continues set set that the continues set set set set set set set set set s	used anally 2017. aue t 21 an 221 	to the expect of expect and 202 uld be ence, and area anclude cludes cludes cludes cludes cludes is file in a commission store over 1 flects are c the r hithin , tota CCFA	ted to pect 22. So mefit is the is is from ings. se is d for mon-e pected lication k ha the w the r the 3 l retu	ays. ' go ' go ' high uther from econo ain in r penda a hik penda a hik penda a hik non quity d in 1 nns ar s a tillity isks : netion 8 m * to 5 m rm po ambe	The on li er e rate my i od sl tems pres ing te of equi rati Dece e per divid avec associ on the the r -year ottent the r 12,	ne in sarn- impa- relief n the hape. that enta- in II- \$293 ity of io of mber. nding dend rage. iated oject. s are ecent	

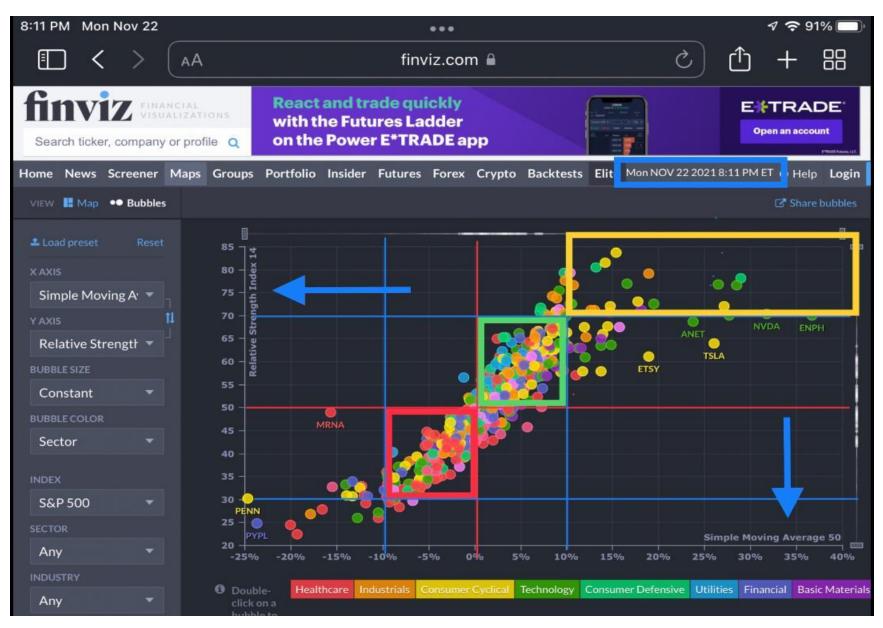
Finally, we check Value Line to see if there is any reason for us to not buy the stock (veto power).



I got the idea for the channel method back in 2015 by looking at S&P 500 scatterplots. On daily charts, the bulk of S&P 500 firms trade +/- 10% around their 50 day SMA. The green box is the upper channel; the red box the lower. Each dot is a stock and its current price is plotted relative to its own SMA50.



With the same group of stocks you see that the RSI for the group is constrained between 30 and 70 on the RSI for those +/- 10% daily trading bands. Since the RSI is relatively scale independent, this allows us to compute appropriately sized trading bands for monthly charts (+/- 40% around the 50 month SMA).



So where is the speculative space? The green box is the upper channel (here on daily charts), the red box is the lower channel and the yellow box is speculative space where the RSI exceeds 70 and the price action is occurring above the top of the upper channel!



Translating to monthly charts, we have re-sized our trading bands to +/- 40% around the 50 month SMA. This methodology was discussed in another presentation. Analysis of the dividend stream was another innovation that was added later on to improve results.



Now let's look at the price action. Attractive stocks with rising prices tend to travel in the upper channel (around the 50 month simple moving average). Stocks with falling prices stay in the lower channel.



The first sign of trouble is that the dividend flat-lines. It is still being paid but it is no longer incremented up as a step function. Also recall that rising stocks flow in the upper channel; falling stocks flow in the lower one.



Previously, the dividend stream was well behaved with an increasing step function with four equally-spaced payments per step. In the last step when the fifth payment is made at the same level, the stream flat-lines.



An even earlier signal that something is wrong occurs when the 50 month simple moving average is penetrated and the stock price enters the lower channel.



Another sign of further troubles occur when the 50 month simple moving average drops below the 200 month simple moving average; a condition known as the "death cross"



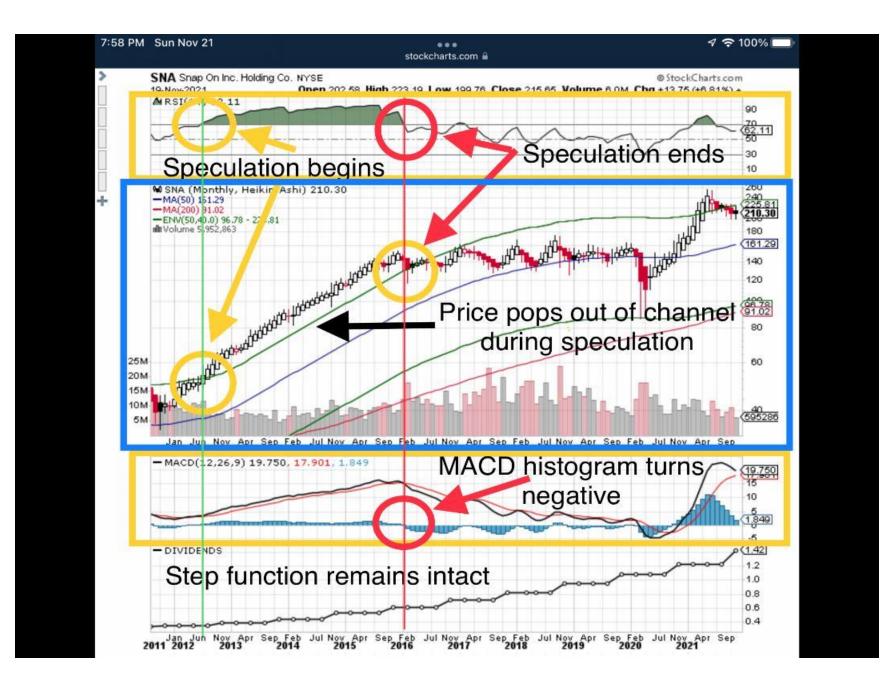
Here's another example of a stock headed for trouble after a long period of successful speculation suddenly ends. If the RSI is greater than 70 (the stock price is above the top of the upper channel) and the MACD histogram turns negative, we sell. Later the price falls through the 50 month SMA.



Here's another example of a stock running into difficulty after a long period of speculation. The sell signal occurs well before the company decides to no longer support dividend increases.



Shorter speculative periods (when the price action is above the top of the upper channel and the RSI is above 70) are very common and serve to give regular boosts to the stock price. We may still sell here out of caution as we don't know how far the price will drop at the red line.



Even if the price doesn't fall after a long period of speculation, it may go sideways for a very long time as the next base is being built.



In our analysis, it is important to differentiate between the main trend and the sub-trend within the price action. Recall that rising stocks live in the upper channel. The main trend is marked by the green arrow,



Here the main trend is represented by the black line. Note that the price oscillates around the main trend but that the pattern is much easier to read in the green box than in the black one. That's why we love to use the MACD histogram to keep an eye on the sub-trend!



You can also easily see levels of price support and price resistance from the charts. Here we see strong price support at the 50 month SMA.



An example of price resistance at the 50 month SMA. We would not ordinarily look at this stock because the dividend stream is so lousy. Note that the price action lives in the lower channel and the monthly SMA50 is below the SMA200.

Observations on selling

Sell when *any* of the following conditions are true:

The main trend is a downtrend.

The current price is below its 50 month simple moving average (SMA).

The stock is overbought and the sub-trend is a downtrend.

```
// SELL SCAN USING MONTHLY CHARTS
```

```
[
[FAVORITES LIST IS 45]
AND
[
 [MONTHLY SMA(50) < MONTHLY SMA(100)]
 OR
 [CLOSE < MONTHLY SMA(50)]
 OR
 [[MONTHLY MACD LINE(12,26,9) < MONTHLY MACD SIGNAL(12,26,9)]
 AND
 [MONTHLY RSI(14) > 70]]
]
```

Observations on buying

Buy when *all* of the following conditions are true.

The main trend is an uptrend.

The sub-trend is an uptrend.

The current price is above its 50 month

simple moving average (SMA).

// BUY SCAN USING MONTHLY CHARTS

[FAVORITES LIST IS 45]

AND

[

[MONTHLY SMA(50) > MONTHLY SMA(100)]

AND

[MONTHLY MACD LINE(12,26,9) > MONTHLY MACD SIGNAL(12,26,9)]

AND

```
[CLOSE > MONTHLY SMA(50)]
```

]

Questions?

