

Technical Analysis 101

There's a great book on Technical Analysis, by Martin J. Pring, *Technical Analysis Explained*. I have the 4th Edition, which was printed in 2002. This paper will cover some of the basics that Pring writes about in his book.

I want to know what the formula is. I don't care what I'm working on. It could be writing a book, writing a paper, a business plan, building a spreadsheet, photography, music, or what-have-you. There's a basic formula for everything and Technical Analysis (TA) is no exception.

Once TA is broken down into categories it's much easier to manage.

There are 3 categories to TA¹

- Sentiment
- Flow-of-Funds
- Market Structure indicators

Sentiment

This indicator tracks opinion. That opinion is coming from insiders, fund managers (advisory services), individual investors, and floor traders (pros).

Assumption:

- Different groups of investors are consistent in their actions at major market turning points.²
- Examples
 - insiders are usually correct at market turning points³
 - advisory services are usually wrong at market turning points⁴
 - Larry Williams created an indicator for futures trading called Pro-Go, that can be applied to a chart so you can fade these investing services.

Flow-of-Funds

This is a branch of TA used on the stock market. However, I think of this Technical Indicator (TI) as the [Commitment of Traders Report](#) (COT) released by the [CFTC](#) weekly.

- "The COT reports provide a breakdown of each Tuesday's open interest for markets in which 20 or more traders hold positions equal to or above the reporting

¹ *Technical Analysis Explained*, Pring. p3

² *ibid*, p3

³ *ibid*, p4

⁴ *ibid*, p4

levels established by the CFTC. The weekly reports for *Futures-Only Commitments of Traders* and for *Futures-and-Options-Combined Commitments of Traders* are released every Friday at 3:30 p.m. Eastern time.”⁵

- The report is broken down into type of trader. There are 2 categories by the CFTC.
 - “Commercial and Non-commercial Traders – When an individual reportable trader is identified to the Commission, the trader is classified either as "commercial" or "non-commercial." All of a trader's reported futures positions in a commodity are classified as commercial if the trader uses futures contracts in that particular commodity for hedging as defined in the Commission's regulations (1.3(z)). A trading entity generally gets classified as a "commercial" by filing a statement with the Commission (on CFTC Form 40) that it is commercially "...engaged in business activities hedged by the use of the futures or option markets." In order to ensure that traders are classified with accuracy and consistency, the Commission staff may exercise judgment in re-classifying a trader if it has additional information about the trader's use of the markets.”⁶

 - “A trader may be classified as a commercial in some commodities and as a non-commercial in other commodities. A single trading entity cannot be classified as both a commercial and non-commercial in the same commodity. Nonetheless, a multi-functional organization that has more than one trading entity may have each trading entity classified separately in a commodity. For example, a financial organization trading in financial futures may have a banking entity whose positions are classified as commercial and have a separate money-management entity whose positions are classified as non-commercial.”⁷

- However, there's a better way to categorize the traders. Breaking them down into 3 categories, not 2.
 - Visit this web site, commitmentsoftraders.com and you will see that George Slezak has broken the traders down into
 - Small Specs
 - Large Specs
 - Commercials (Hedgers)
 - There's an example of his work below

⁵ <http://www.cftc.gov/opa/background/opa0596.htm>

⁶ ibid

⁷ ibid

OPEN INTEREST SUMMARY-WITH OPTIONS 11 - 30 - 04

www.CommitmentsOfTraders.com

Commodity	Small Speculator			Large Speculator			Commercials(Hedgers)			Open	
	Long	Short	Net	Long	Short	Net	Long	Short	Net	Interest	
Copper	14410	7558	6852	37189	8190	28999	34721	70572	-35851	10116	HG
Gold	69239	25880	43359	202731	39602	163129	106555	313043	-206488	486214	GC
Platinum	2178	822	1356	4135	370	3765	2079	7199	-5120	8391	PL
Silver	32863	11458	21405	71930	2575	69355	15279	106040	-90761	136084	SI
Metal Subtotal	118690	45718	72972	315985	50737	265248	158634	496854	-338220	731805	Sub
Eurodollars	617009	882234	-265225	622646	605693	16953	6022942	5774670	248272		ED
5Yr TreasNotes	126705	228555	-101850	418007	245185	172822	771704	842676	-70972	1700591	FY
10YrTreasNotes	214290	420856	-206566	433169	367493	65676	1344985	1204095	140890	2278220	TY
TreasuryBonds	126504	159976	-33472	160221	121219	39002	419597	425127	-5530	807589	US
5/10/30Subtotal	467499	809387	-341888	1011397	733897	277500	2536286	2471898	64388	4786400	Sub
Crude Oil	60131	79103	-18972	88023	43245	44778	686263	712069	-25806	1075162	CL
Heating Oil	33402	27129	6273	21268	28711	-7443	116900	115730	1170	220164	HO
Unleaded Gas	12554	13742	-1188	19338	8006	11332	100721	110865	-10144	153905	HU
Natural Gas	62965	30311	32654	26321	41227	-14906	31610	333858	-17748	633621	NG
Energy Subtotal	169052	150285	18767	154950	121189	33761	1219994	1272522	-52528	2082852	Sub
DJ Industrials	6421	9219	-2798	20403	14991	5412	23287	25901	-2614	51188	DJ
DJ Industrials \$5	16845	13673	3172	16276	15985	291	35804	39268	-3464	72479	D5
SP 500	189385	163240	26145	71351	69172	2179	480167	508491	-28324	764321	SP
E-Mini SP 500	388070	69520	318550	249612	150655	98957	446830	864338	-417508	1105142	ES
S&P Sub (E/5)	266999	177144	89855	121273	99303	21970	569533	681358	-111826	985349	Sub
NASDAQ 100	10111	45064	-34953	19519	10439	9080	56753	30879	25874	86540	ND
E-Mini ND 100	197919	16858	181061	129188	60702	68486	78684	328231	-249547	411014	NQ
ND Sub (E/5)	49694	48435	1259	45356	22579	22777	72489	96525	-24036	168742	Sub
Stock Indx Sub	326508	237568	88938	190368	140129	50238	672562	811740	-139180	1219978	Sub
Br Pound	32126	16402	15724	44302	11524	32778	14567	63070	-48503	91355	BP
Canadian \$	38818	18497	20321	36072	12260	23812	36792	80926	-44134	113495	CD
Australian \$	31309	14567	16742	33194	2543	30651	11118	58511	-47393	75821	AD
Euro FX	98662	71296	27366	64517	42169	22348	94334	144048	-49714	274543	EU
Japanese Yen	48821	25869	22952	58670	22373	36297	105961	165210	-59249	220029	JY
Swiss Franc	25783	13061	12722	43221	3823	39398	8476	60596	-52120	77649	SF
Mexican Peso	11270	9429	1841	63456	10883	52573	21454	75867	-54413	96719	MQ
FX Subtotal	286789	169121	117668	343432	105575	237857	292702	648228	-355526	949611	Sub
US Dollar Index	2060	5885	-3825	6824	21474	-14650	19463	988	18475	32029	DX
Corn	107579	151022	-43443	77843	165995	-88152	419429	287834	131595	693230	C
Oats	3209	1886	1323	904	1614	-710	2891	3503	-612	7409	O
Soybeans	55226	67761	-12535	39315	46361	-7046	155755	136174	19581	318519	S
Soybean Meal	32023	27675	4348	6442	27638	-21196	89262	72414	16848	163162	SM
Soybean Oil	26276	23093	3183	15122	33979	-18857	96620	80946	15674	165172	BO
Wheat	30211	25882	4329	34506	69191	-34685	101300	70944	30356	187016	W
Kansas Wheat	12177	13202	-1025	10413	19140	-8727	40696	30944	9752	69736	KV
Grain Subtotal	266701	310521	-43820	184545	363918	-179373	905953	682759	223194	1604244	Sub
Cocoa	10194	4148	6046	17280	2670	14610	91666	112322	-20656	127087	CO
Coffee	14206	7745	6461	46169	8529	37640	42055	86157	-44102	137269	KC
Orange Juice	6312	2296	4016	7265	3358	3907	24330	32253	-7923	54941	OJ
Sugar #11	60493	22271	38222	111213	15497	95716	201615	335553	-133938	482783	SB
Cotton	9802	7610	2192	13609	30923	-17314	62777	47655	15122	109118	CT
Lumber	1785	1171	614	1021	733	288	651	1553	-902	3710	LB
Live Cattle	16683	32623	-15940	28368	12795	15573	67584	67217	367	137822	LC
Feeders	4603	8951	-4348	2196	2447	-251	7995	3396	4599	17925	FC
Lean Hogs	20753	35899	-15146	26346	4186	22160	39936	46950	-7014	112778	LH
Pork Bellies	753	1117	-364	804	450	354	166	156	10	1760	PB
Meat Subtotal	42792	78590	-35798	57714	19878	37836	115681	117719	-2038	270285	Sub

- The idea is to fade small specs and go with large specs. This is arguable. There's been much written about this formula. However, the COT is a powerful tool. I'll be writing a separate paper on this specific subject, shortly.

Market Structure Indicators

This is the main theme in Pring's book and the main concern for us, commodity traders.

- “These indicators monitor the trend of various price indexes [anything you can chart],...cycles, volume, and so on in order to evaluate the health of the prevailing trend.”⁸
- Indicators include
 - Moving averages
 - Peak and trough analysis
 - Price patterns
 - Trendlines etc...⁹
- “Most of the time, price and internal measures, such as market breadth, momentum, and volume, rise and fall together, but towards the end of the market movements, the paths of many of these indicators *diverge* from the price. Such divergences offer signs of technical deterioration during advances and technical strength following declines.”¹⁰
- “Since the technical approach is based on the theory that the price is a reflection of mass psychology, or crowd in action, it attempts to forecast future price movements on the assumption that crowd psychology moves between panic, fear, and pessimism on one hand and confidence, excessive optimism, and greed on the other.”¹¹
- “...the art of technical analysis is concerned with identifying these changes at an early phase...”¹²

⁸ *Technical Analysis Explained*, Pring. p5

⁹ *ibid* p5

¹⁰ *ibid* p5

¹¹ *Technical Analysis Explained*, Pring. p5

¹² *Technical Analysis Explained*, Pring. p5