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GARP Investing Revisited

Growth and Value criteria combined

FBM KLCI: 1,717.42 points

2017 Year-end Target: 1,830 points

GARP Investing is... Growth at Reasonable Price (GARP) investing combines both Growth and Value criteria for stock selection. It seeks to acquire stocks that have solid growth prospects, but are available at reasonable/discounted prices; a crossover of sorts. Proponents of the GARP philosophy believe in finding stocks that have a high expected growth but yet have comparatively lower valuation multiples, and are thus 'cheaper'.

...dissimilar to blend strategy. Unlike a blend strategy, a portfolio which is constructed using GARP investing is generally made up of stocks that offer the best of both value and growth investing rather than investing in both value and growth stocks. In essence, the main objective of GARP strategy is to circumvent the extremities of either growth or value investing by selecting stocks that have both low relative valuations and high growth rates.

In our GARP strategy studies, we applied 8 fundamental parameters on each of FBM100 component stocks and they are (i) Price to Sales Ratio, (ii) Sales CAGR, (iii) Forward PEG Ratio, (iv) EPS Growth, (v) Return on Invested Capital, (vi) EV to EBITDA Ratio, (vii) Earnings Yield, and (viii) Operating Income Growth. Each of these parameters is scored and ranked. The ranking position of each parameter is then added together to arrive at a total. This total is then ranked and sorted from best to worst. Only stocks in the top quartile are selected.

Based on our empirical findings (a 5-year back testing from 1 January 2012 to 31 December 2016), most of the top quartile stocks selected using GARP strategy exhibited positive price return performance in the short term. This led us to conclude that GARP strategy can be used on individual stocks in Bursa even for short periods of not more than 3 months. On this score, when the price return objective is achieved, profit taking is recommended in order to safeguard portfolio value. Refer to APPENDIX for more details.

The latest data ranking with a start date of 1 January 2017 (refer to Table below) returned Press Metal, Air Asia, and Gas Malaysia as the top 3 stock picks. It must however be noted that in the GARP study, the momentum factor was not considered thus timing was not a part of the analysis. However, our stock recommendations would take into account the recent price behaviour as well as inputs from our analysts and economists into consideration.

Table 1: Data ranking with start date of 1 January 2017

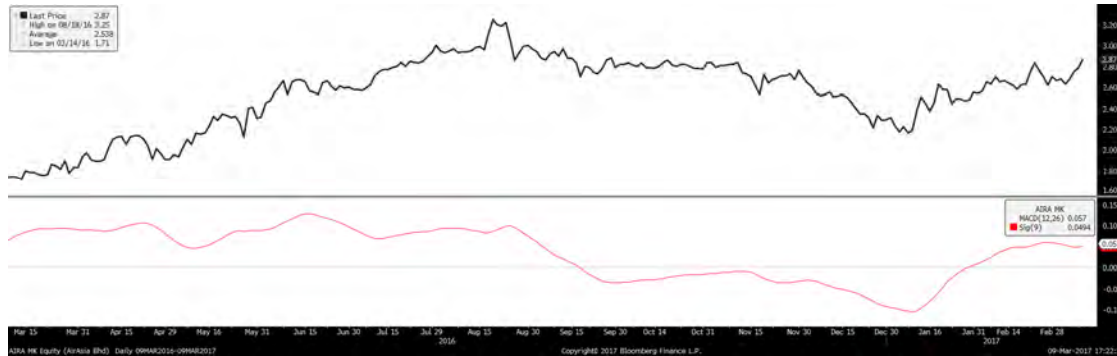
Company Name	Current Market Cap as at 1 Jan '17 (RM'm)	Price To Sales Ratio	5 Year Average Sales Growth (%)	PEG Ratio	EPS Growth (%)	Return on Invested Capital	EV to EBITDA Ratio	Earnings yield (%)	Operating Income Growth (%)	Scored Rank	Returns after 1 month (%)	Returns after 2 months (%)	Returns after 3 months (%)	Positive Return Count
FTSE Bursa Malaysia KLCI Index	996,757	2.64	-	-	-	-	-	6.05	-		1.82	3.80	-	Data Count
Press Metal Bhd	5,880	0.79	26.46	-	356.99	11.82	5.86	9.35	70.05	1	28.93	58.49	-	2
AirAsia Bhd	6,373	0.92	10.32	0.15	(16.08)	11.64	5.93	31.97	(26.53)	2	11.35	16.16	-	2
Gas Malaysia Bhd	3,171	0.78	-	1.43	402.50	12.38	12.04	5.21	315.34	3	9.72	19.84	-	2
Genting Bhd	29,790	1.62	(0.03)	5.45	236.73	4.40	7.63	7.21	102.92	4	2.50	14.00	-	2
Tenaga Nasional Bhd	78,567	1.74	5.43	1.03	(12.05)	9.35	6.41	9.09	(2.42)	5	(3.60)	(2.59)	-	0
Genting Malaysia Bhd	25,961	2.90	0.15	1.61	397.66	5.53	9.10	11.12	18.50	6	10.04	15.50	-	2
SP Setia Bhd Group	8,932	1.72	23.08	-	227.51	5.91	12.44	9.38	53.02	7	8.63	8.31	-	2
KPJ Healthcare Bhd	4,381	1.48	8.43	3.44	97.42	5.99	13.32	3.28	81.31	8	0.48	(1.91)	-	1
AFFIN Holdings Bhd	4,644	1.32	6.98	0.74	76.05	3.66	-	12.15	33.52	9	-	-	-	0
My EG Services Bhd	5,446	14.75	43.10	0.57	140.00	33.56	24.22	3.62	52.20	10	5.30	11.92	-	2
UOA Development Bhd	3,834	3.70	26.23	-	190.15	10.19	5.69	18.11	(22.82)	11	3.40	8.94	-	2
TIME dotCom Bhd	4,511	5.87	22.47	-	218.49	11.23	12.78	9.06	77.56	12	2.56	8.33	-	2
Inari Amertron Bhd	3,223	3.14	55.60	-	45.72	22.21	11.87	5.34	42.12	13	7.23	15.66	-	2
Berjaya Sports Toto Bhd	3,990	0.70	12.24	-	(12.52)	19.44	8.33	7.12	(9.55)	14	0.34	0.34	-	2
Genting Plantations Bhd	8,573	5.72	10.31	1.01	234.98	4.91	17.57	4.34	304.24	15	0.93	6.67	-	2
Scientex BHD	3,106	1.40	21.40	-	(15.96)	14.67	7.29	7.58	(19.28)	16	4.33	11.94	-	2
Malayan Banking Bhd	83,584	2.60	10.69	3.51	35.77	5.60	-	8.24	28.36	17	0.24	5.12	-	2
CIMB Group Holdings Bhd	39,996	1.57	7.62	0.66	0.00	4.83	-	9.09	16.46	18	10.20	12.86	-	2
MMC Corp Bhd	7,095	1.53	5.92	-	78.46	3.83	12.82	7.76	321.46	19	0.43	7.30	-	2
Lingkar Trans Kota Holdings Bhd	3,091	5.75	9.63	-	38.78	12.09	7.82	3.35	30.34	20	0.34	0.34	-	2
Petronas Dagangan Bhd	23,644	1.08	(0.21)	-	195.51	16.75	15.23	3.85	160.80	21	(1.09)	4.96	-	1
Kuala Lumpur Kepong Bhd	25,559	1.45	15.54	9.68	(54.62)	7.36	13.34	4.53	12.54	22	0.42	2.27	-	2
Fraser & Neave Holdings Bhd	8,606	2.07	8.09	1.65	(15.94)	14.18	12.78	4.20	(7.79)	23	1.41	0.37	-	2
Bintulu Port Holdings Bhd	2,889	2.48	45.28	14.02	2.63	7.40	-	5.19	17.75	24	(0.48)	(4.14)	-	0
Mah Sing Group Bhd	3,445	1.16	13.87	-	(24.31)	6.98	8.00	9.42	(41.91)	25	4.20	2.80	-	2

Source: MIDFR, Bloomberg

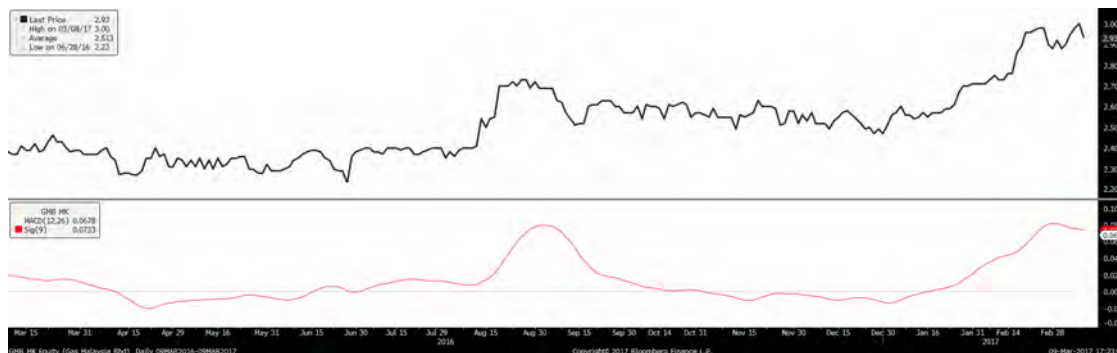
RECOMMENDATION

Top 3 picks. Based on (i) the ranked quantitative findings (refer to Table above), (ii) price behaviour of respective stocks during the past weeks, (iii) our analysts' views (i.e. positive expected share price return and BUY recommendation), and (iv) our economists' USD/MYR year-end target of 4.30, we list below our top 3 stock picks to take advantage of the GARP investing:

- AirAsia (BUY; TP: RM3.45; EPR: 20.2%)



- Gas Malaysia (BUY; TP: RM3.33; EPR:11.0%)



- Tenaga Nasional (BUY; TP: RM16.80; EPR: 22.3%)



FBM KLCI year-end target. We reaffirm our 2017 year-end target of 1,830 points.



APPENDIX

- Macro Strategy : Stock Selection
- Strategy Types : Value Investing, Growth Investing, and Growth at Reasonable Price (GARP) Investing.
- This Strategy : GARP Investing
- Strategy Concept : Using both Growth and Value criteria for stock selection seeking to acquire stocks that have solid growth prospects, but are available at reasonable/discounted prices; a crossover of sorts. Proponents of the GARP philosophy believe in finding stocks that have a high expected growth but yet have comparatively lower valuation multiples, and are thus 'cheaper'. We believe many investors today intentionally or otherwise follow the approach.
- Strategy Studies : GARP was popularized by Peter Lynch who ran Fidelity Magellan fund from 1977 to 1990. He achieved returns for the period of 29% CAGR, or a 28x return on initial investment. Mario Gabelli and David Dreman are also proponents of this strategy. GARP is an effective investment strategy for investors interested in building up a portfolio that offers characteristics of both value and growth investing. Investors following GARP seek to acquire stocks that have solid growth prospects, but are available at discounted prices. Unlike a blend strategy, a portfolio which is constructed using GARP investing is expected to have stocks that offer the best of both value and growth investing rather than investing in both value and growth stocks.

For this GARP strategy, 8 factors were chosen and they are (i) Price to Sales Ratio, (ii) Sales CAGR, (iii) Forward PEG Ratio, (iv) EPS Growth, (v) Return on Invested Capital, (vi) EV to EBITDA Ratio, (vii) Earnings Yield, and (viii) Operating Income Growth. Each of these factors is scored and ranked. The ranking position of each factor is then added together to arrive at a total. This total is then ranked and sorted from best to worst. Only the top quartile stocks are selected. Please note that in this study, the momentum factor was not considered thus timing was not a part of the implementation. The process may be repeated at any intervals (e.g. every quarter).

1. Price to Sales Ratio – This ratio helps to identify a company that may be either undervalued or overvalued when compared to its share price in the market. Investment experts may depend heavily on price to sales (P/S) ratio, because revenue data typically is more difficult to manipulate or modify than a firm's net income or book value. Investors want the truth, whether good or bad. P/S ratio identifies a company's strength without considering operating expenses, which historically can be manipulated. From an investment perspective, a low P/S ratio (1.0 or less) may indicate a good buy as the stock price is possibly undervalued. Having said that, a higher P/S ratio (such as 2.0 or more), may display a strong market price but possibly indicates an equally strong company. Depending on the goals of investors, some seek a low P/S ratio to uncover good stock buys.
2. Sales CAGR – Past Sales growth (e.g. over the past five years) is arguably the best broad metric to judge the health of a business. All other metrics will lose their importance if there is a regularly poor top-line growth. It may also be seen as a crude proxy for what the future may look like. Secondly, rate of sales growth is directly related to the value creating potential of a firm.

3. **Forward PEG Ratio** – Forward PEG is a ratio of the current Price-Earnings (P/E) to the expected forward earnings growth (e.g. for the next 1 year). So, forward PEG is kind of a one-man band for GARP. A forward PEG of 1.0 suggests that the stock is perfectly priced based on either its projected or past growth. A forward PEG of less than 1.0 suggests that the stock is inexpensive given its future growth profile. By providing a forward-looking perspective, the forward PEG is a valuable evaluative tool for investors attempting to discern a stock's future prospects.
4. **EPS Growth** – Earnings per share (EPS) growth gives a good picture of the rate at which a company has grown its profitability. Stocks with higher EPS growth rates are generally more desired by investors than those with slower growth rates although, in general, high growth stocks have a tendency to revert to more stable growth rates over the longer term.
5. **Return on Invested Capital** – Return on Invested Capital (ROIC) measures the operational efficiency of a firm. As opposed to Return on Capital Employed (ROCE), ROIC measures operational return generated by operational assets. In other words, ROIC measures the profitability of a company's core operations. This is a relatively more stable metric when compared to ROCE.
6. **EV to EBITDA Ratio** – It is referred to as the enterprise multiple and is often considered a better ratio than P/E as it gives a truer picture of a company's valuation and earning potential. It is essentially the enterprise value (EV) of a company divided by its earnings before interest, taxes, depreciation and amortization (EBITDA). EV is a summation of the company's market capitalization (i.e. market value of its equity) plus the market value of its debt plus the market value of its preferred equity minus total cash. EBITDA gives a clearer picture of the company's profitability as it eliminates non-cash expenses like depreciation and amortization that depress net earnings. It is also often used as a proxy for cash flows. The lower the EV/EBITDA ratio, the more appealing it is. Just like P/E, a low EV/EBITDA ratio indicates that a stock is potentially undervalued and vice versa. A drawback of P/E is that it cannot be used to value a loss-making company. Moreover, a firm's earnings are subject to accounting estimates and management manipulation. On the other hand, EV/EBITDA is more difficult to manipulate and also can be used to value entities that have negative net earnings but are positive on the EBITDA level.
7. **Earnings Yield** – It is the inverse of P/E. An earnings yield of 5% means companies that have earned 5% of each dollar invested over the past year. So, in this case, it would be the same as searching for a stock with a P/E ratio of 20x (i.e. $1/0.05$).
8. **Operating Income Growth** – Since "growth" is the primary part of GARP, this factor tilts firmly toward growth stocks by requiring fairly high historical average annual increases in earnings and operating income (e.g. over the past five years). This factor will help identify companies that have a proven track record of growth.

This Study Rationale	: Based on the abundance of studies available, the idea behind the GARP methodology is to find companies that have been ignored by financial analysts or the public. These stocks are usually the antithesis of high-momentum stocks. The GARP strategy incorporates philosophies of both growth and value investing, seeking a balance between companies that have had consistently strong earnings growth and those trading at attractive price valuations. Companies selected by the strategy also typically have strong overall fundamentals. The strategy's main objective is to circumvent the extremities of either growth or value investing by selecting stocks that have both low relative P/E ratios and high EPS growth rates. In bear markets, these stocks will traditionally outperform pure growth plays but may underperform pure value plays.
Findings Overview	: GARP strategy can be used on individual stocks in Bursa for short periods of not more than 3 months. When the price return objective is achieved, profits need to be taken to enhance portfolio value.
Back Test Period	: 5 Years
Rebalanced	: Every quarter
Results Tabled	: Summary based on 5 Years data
Period Start	: 01-Jan-2012
Period End	: 31-Dec-2016
Index Observed	: 1 – FBM KLCI Index
Stocks Observed	: 100 – FBM100 Components
No. of observations	: 36,000
Ave. observation/stock	: 360

Table 2: GARP Selection Performance (January 2012 – December 2016)

Year	Quarter	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Average %	Average for total % of Stks with positive returns for 2 & 3 months
		Number of Months Positive Returns	Number of Stks in Top Quartile	%	Total % of Stks with Positive returns for 2 & 3 Months	Number of Stks in Top Quartile	%	Total % of Stks with Positive returns for 2 & 3 Months	Number of Stks in Top Quartile	%	Total % of Stks with Positive returns for 2 & 3 Months	Number of Stks in Top Quartile	%		
2012	3	17	68.0%		7	28.0%		13	52.0%		14	56.0%		51%	
	2	3	12.0%	80.0%	2	8.0%	36.0%	3	12.0%	64.0%	5	20.0%	76.0%	13%	64.0%
	1	2	8.0%		8	32.0%		5	20.0%		2	8.0%		17%	
	0	3	12.0%		8	32.0%		4	16.0%		4	16.0%		19%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2013	3	9	36.0%		20	80.0%		12	48.0%		12	48.0%		53%	
	2	5	20.0%	56.0%	3	12.0%	92.0%	3	12.0%	60.0%	5	20.0%	68.0%	16%	69.0%
	1	5	20.0%		1	4.0%		3	12.0%		3	12.0%		12%	
	0	6	24.0%		1	4.0%		7	28.0%		5	20.0%		19%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2014	3	2	8.0%		13	52.0%		12	48.0%		8	32.0%		35%	
	2	12	48.0%	56.0%	3	12.0%	64.0%	3	12.0%	60.0%	1	4.0%	36.0%	19%	54.0%
	1	2	8.0%		4	16.0%		3	12.0%		5	20.0%		14%	
	0	9	36.0%		5	20.0%		7	28.0%		11	44.0%		32%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2015	3	17	68.0%		6	24.0%		5	20.0%		15	60.0%		43%	
	2	2	8.0%	76.0%	4	16.0%	40.0%	2	8.0%	28.0%	2	8.0%	68.0%	10%	53.0%
	1	0	0.0%		6	24.0%		6	24.0%		6	24.0%		18%	
	0	6	24.0%		9	36.0%		12	48.0%		2	8.0%		29%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2016	3	7	28.0%		9	36.0%		16	64.0%		6	24.0%		38%	
	2	7	28.0%	56.0%	2	8.0%	44.0%	3	12.0%	76.0%	5	20.0%	44.0%	17%	55.0%
	1	2	8.0%		4	16.0%		3	12.0%		8	32.0%		17%	
	0	9	36.0%		10	40.0%		3	12.0%		6	24.0%		28%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
Average				64.8%			55.2%			57.6%			58.4%		59.0%

Findings

Overall : Most of the top quartile stocks selected using GARP strategy exhibited positive price return performance in the short term.

Stock returns

- From the table above, for the periods back tested, it can be observed that on average, 64.8% of the top quartile-ranked stocks selected using GARP stock selection strategy exhibited positive price return performance in the 1st quarter for the past 5 years. This was the highest among all quarters. From the 2nd quarter onwards, the average percentage of top-quartile ranked stocks with positive performance was in the range of 55.2%-58.4%.
- Based on at least 2 and 3 months that had positive price returns after implementation of the strategy, the percentage of top quartile-ranked stocks with 2 and 3 months positive returns was 59.0% for the period tested.
- The average of the total percentage of top quartile-ranked stocks with positive returns in 2 and 3 months in all quarters was consistently above 53.0% from 2012-2016. The year 2013 recorded the highest average of 69.0% while 2015 recorded the lowest.
- The best quarter for top quartile-ranked stocks performing based on GARP strategy was the 2nd quarter in 2013 with 23 stocks performing of which 20 stocks came in with 3 months of consecutive positive price returns and 3 stocks with 2 months consecutive positive returns.
- Out of the 20 quarters for the period from Jan 2012 to Dec 2016, only 3 quarters recorded dismal percentage of top quartile-ranked stocks with 2 and 3 months of positive returns. This was during the 2nd quarter of 2012 at 36%, 4th quarter of 2014 also at 36% and 3rd quarter of 2015 at 28%.

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MIDF AMANAH INVESTMENT BANK : GUIDE TO RECOMMENDATIONS

STOCK RECOMMENDATIONS

BUY	Total return is expected to be >15% over the next 12 months.
TRADING BUY	Stock price is expected to <i>rise</i> by >15% within 3-months after a Trading Buy rating has been assigned due to positive newsflow.
NEUTRAL	Total return is expected to be between -15% and +15% over the next 12 months.
SELL	Total return is expected to be <-15% over the next 12 months.
TRADING SELL	Stock price is expected to <i>fall</i> by >15% within 3-months after a Trading Sell rating has been assigned due to negative newsflow.

SECTOR RECOMMENDATIONS

POSITIVE	The sector is expected to outperform the overall market over the next 12 months.
NEUTRAL	The sector is to perform in line with the overall market over the next 12 months.
NEGATIVE	The sector is expected to underperform the overall market over the next 12 months.