

QUANTVIEW

MIDF EQUITY STRATEGY | 23 NOV 2016

GARP INVESTING:

- 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'.

OUR TOP 3 PICKS

- Airasia (BUY; TP: RM3.34)
- Tenaga Nasional (BUY; RM16.80)
- Kuala Lumpur Kepong (BUY; RM29.05)

23 November 2016 | Strategy - Quant

Strategy Team | research@midf.com.my

GARP Investing

Growth and Value criteria combined

FBM KLCI: 1,629.32 points

 2016 Year-end Target: 1,750 points
(under review)

- 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 5.83-year back testing from 1 January 2012 to 31 October 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 7 November 2016 (refer to Table below) returned UOA Development, AirAsia and Press Metal 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

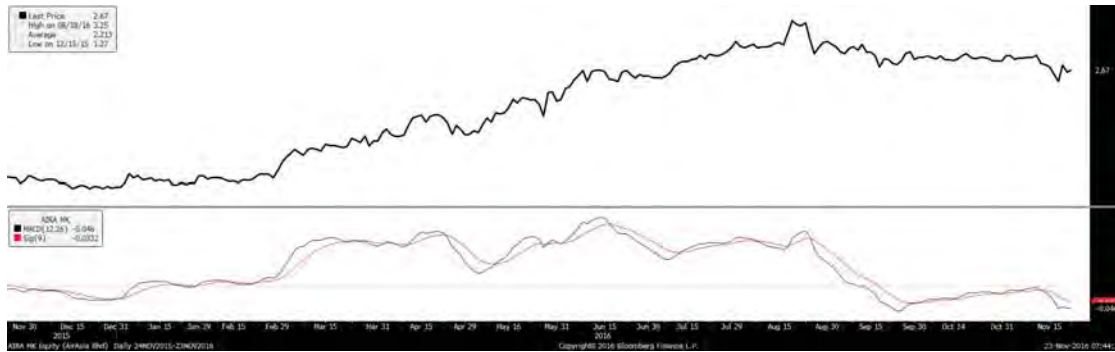
LONG_COMP_NAME	GICS_SUB_INDUSTRY_NAME	CUR_MKT_CAP	PX_TO_SA_LES_RATIO	SALES_SY_R_AVG_G R	PEG_RATIO	EPS_GRO WTH	RETURN_ON_INV_ CAP	BEST_EV_TO_BEST_EBITDA	EARN_YL D	OPER_INC_GROWTH	Scored Rank	1 Week	2 Week	3 Week	1 month	+Ve Return Count
FTSE Bursa Malaysia KLCI Index - Kuala Lumpur Field Not Applicable		995,338	2.64	-	(100.00)	-	-	-	5.84	-		(1.90)	(1.21)	-	-	0
UOA Development Bhd	Real Estate Development	4,144	2.57	15.37	0.34	69.50	16.05	4.46	12.72	80.31	1	(3.54)	(7.09)	-	-	0
AirAsia Bhd	Airlines	7,820	1.12	8.70	0.01	41.38	11.80	5.06	17.47	73.97	2	(2.85)	(6.05)	-	-	0
Press Metal Bhd	Aluminum	6,124	1.01	26.86	(0.41)	314.98	9.70	6.67	6.65	53.49	3	(1.83)	(1.22)	-	-	0
Batu Kawan Bhd	Commodity Chemicals	7,414	0.44	574.81	0.13	69.61	10.17	8.83	11.11	(18.97)	4	(0.55)	0.33	-	-	1
Carlsberg Brewery Malaysia Bhd	Brewers	4,491	2.66	3.11	8.07	62.01	66.91	10.94	5.63	53.84	5	(3.70)	(1.64)	-	-	0
Hong Leong Industries Bhd	Industrial Conglomerates	3,112	1.34	1.08	0.24	44.46	13.03	8.76	8.89	9.71	6	1.13	2.26	-	-	2
Mah Sing Group Bhd	Real Estate Development	3,638	1.20	14.39	0.54	(2.12)	8.41	9.30	9.47	2.27	6	1.32	3.31	-	-	2
Scientex BHD	Commodity Chemicals	3,074	1.38	23.84	0.23	8.68	16.94	9.23	7.94	(14.57)	8	(0.30)	4.50	-	-	1
Tenaga Nasional Bhd	Electric Utilities	80,817	1.81	4.60	0.55	114.57	9.33	7.26	9.12	(6.02)	9	(1.26)	(1.54)	-	-	0
Syarikat Takaful Malaysia Bhd	Multi-line Insurance	3,440	1.89	90.07	1.88	29.93	53.02	-	5.06	39.23	10	0.00	1.67	-	-	1
Lingkar Trans Kota Holdings Bhd	Highways & Railtracks	3,101	6.73	9.71	0.61	38.72	10.76	9.94	6.22	34.60	11	(0.17)	0.51	-	-	1
Berjaya Sports Toto Bhd	Casinos & Gaming	4,152	0.73	12.01	(0.94)	(18.53)	20.23	9.16	7.06	(15.23)	12	(0.65)	1.62	-	-	1
Kuala Lumpur Kepong Bhd	Agricultural Products	25,410	1.54	10.52	0.19	101.14	7.96	16.88	6.27	(18.05)	13	(1.34)	(0.50)	-	-	0
Genting Malaysia Bhd	Casinos & Gaming	26,587	3.03	3.82	3.31	106.88	4.50	16.29	4.91	118.33	14	(4.26)	(0.21)	-	-	0
Eco World Development Group Bhd	Real Estate Development	3,685	1.27	351.28	0.29	360.98	2.54	44.55	3.78	356.90	15	-	-	-	-	0
Aeon Co M Bhd	General Merchandise Stores	4,001	1.01	7.58	(0.77)	21.43	5.05	9.91	2.90	57.12	15	(1.75)	(3.51)	-	-	0
My EG Services Bhd	Data Processing & Outsourced S	5,761	20.47	41.55	0.31	121.05	36.10	28.64	2.48	125.61	17	(4.17)	(7.08)	-	-	0
Hartalega Holdings Bhd	Health Care Supplies	7,713	4.71	14.45	1.90	17.62	15.80	20.13	3.40	14.89	18	2.34	3.19	-	-	2
Petronas Gas Bhd	Gas Utilities	43,651	9.61	5.60	2.88	38.61	12.14	15.06	3.87	29.20	19	(1.54)	(3.22)	-	-	0
Hong Leong Financial Group Bhd	Diversified Banks	17,431	2.06	5.52	(0.64)	(16.64)	4.13	2.36	8.07	4.64	20	(2.10)	0.92	-	-	1
LPI Capital Bhd	Property & Casualty Insurance	5,611	4.91	7.81	1.27	2.54	27.05	-	8.16	3.13	21	(3.79)	(4.02)	-	-	0
Malaysia Building Society Bhd	Thriffs & Mortgage Finance	5,335	1.66	15.77	(0.20)	(33.00)	7.89	5.98	5.46	(42.15)	21	(2.17)	(0.54)	-	-	0
Maxis Bhd	Wireless Telecommunication Ser	43,710	5.10	(0.71)	23.99	19.64	15.76	13.51	4.52	(0.75)	23	(0.69)	(0.52)	-	-	0
Axiata Group Bhd	Wireless Telecommunication Ser	42,935	2.03	5.68	3.16	(70.42)	6.12	9.22	4.55	3.19	24	(5.61)	(5.82)	-	-	0
Oriental Holdings BHD	Automobile Manufacturers	4,324	0.88	13.54	(0.89)	(8.54)	2.60	11.05	4.53	5.43	25	0.43	(2.15)	-	-	1

Source: MIDFR, Bloomberg

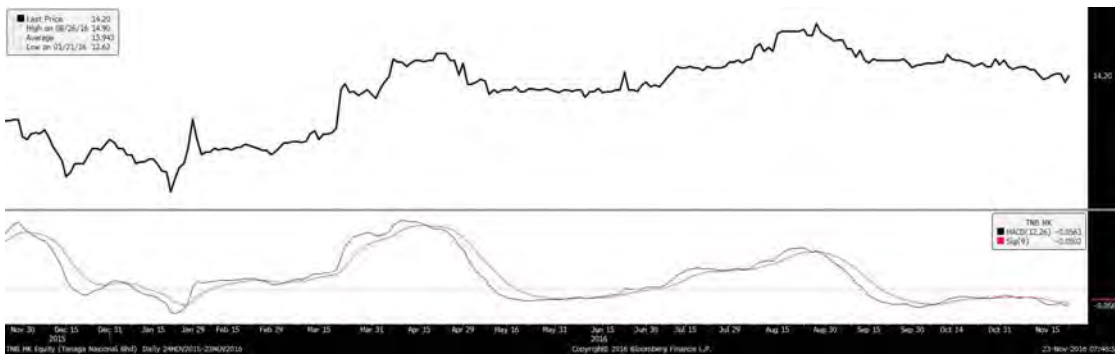
RECOMMENDATION

- **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 4.35, we list below our top 3 stock picks to take advantage of the GARP investing:

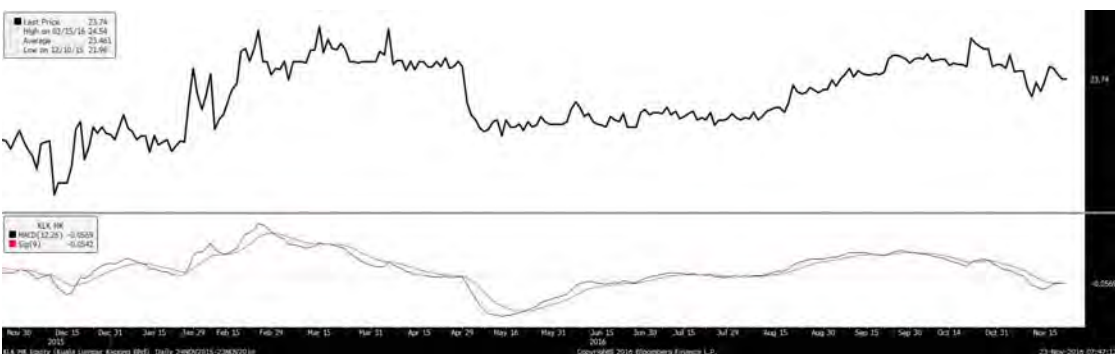
» AirAsia (BUY; TP: RM3.34)



» Tenaga Nasional (BUY; TP: RM16.80)



» Kuala Lumpur Kepong (BUY; TP: RM29.05)



- **FBM KLCI year-end targets.** In view of the recent market volatilities, we put under review (downward bias) our FBM KLCI 2016 year-end target of 1,750 points which equates to PER16 of 17.5x. However, we reaffirm our 2017 year-end target of 1,830 points which equates to PER17 of 17.0x.



- 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).

» 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.

» 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.

» 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.

» 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.

» 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.

» 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.

» 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. $1/0.05$).

» 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	:	5.83 Years
Rebalanced	:	Every quarter
Results Tabled	:	Summary based on 5.83 Years data
Period Start	:	01-Jan-2012
Period End	:	31-Oct-2016
Index Observed	:	1 - FBM KLCI Index
Stocks Observed	:	100 - FBM100 Components
No. of observations	:	41,814
Ave. obs/stock	:	414

Table 2: GARP Selection Performance (January 2011 - October 2016)

Year	Quarter	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Average %	Average Total Positive returns for 2 & 3 Months
	Number of Months Positive Returns	Number of Stks in Top Quartile	%	Total Positive returns for 2 & 3 Months	Number of Stks in Top Quartile	%	Total Positive returns for 2 & 3 Months	Number of Stks in Top Quartile	%	Total Positive returns for 2 & 3 Months	Number of Stks in Top Quartile	%	Total Positive returns for 2 & 3 Months		
2011	3	8	32.0%		10	40.0%		1	4.0%		21	84.0%		40.00%	
	2	4	16.0%	48.0%	6	24.0%	64.0%	4	16.0%	20.0%	2	8.0%	92.0%	16.0%	56.0%
	1	5	20.0%		2	8.0%		5	20.0%		0	0.0%		12.00%	
	0	8	32.0%		7	28.0%		15	60.0%		2	8.0%		32.00%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2012	3	15	60.0%	80.0%	10	40.0%		13	52.0%		16	64.0%		54.00%	
	2	5	20.0%		2	8.0%	48.0%	3	12.0%	64.0%	3	12.0%	76.0%	13.0%	67.0%
	1	2	8.0%		7	28.0%		4	16.0%		2	8.0%		15.00%	
	0	3	12.0%		6	24.0%		5	20.0%		4	16.0%		18.00%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2013	3	7	28.0%		19	76.0%		10	40.0%		9	36.0%		45.00%	
	2	5	20.0%	48.0%	4	16.0%	92.0%	3	12.0%	52.0%	6	24.0%	60.0%	18.0%	63.0%
	1	6	24.0%		1	4.0%		5	20.0%		3	12.0%		15.00%	
	0	7	28.0%		1	4.0%		7	28.0%		7	28.0%		22.00%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2014	3	4	16.0%		12	48.0%		15	60.0%		3	12.0%		34.00%	
	2	11	44.0%	60.0%	5	20.0%	68.0%	4	16.0%	76.0%	4	16.0%	28.0%	24.0%	58.0%
	1	2	8.0%		4	16.0%		2	8.0%		7	28.0%		15.00%	
	0	8	32.0%		4	16.0%		4	16.0%		11	44.0%		27.00%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2015	3	13	52.0%		10	40.0%		6	24.0%		17	68.0%		46.00%	
	2	4	16.0%	68.0%	6	24.0%	64.0%	1	4.0%	28.0%	3	12.0%	80.0%	14.0%	60.0%
	1	2	8.0%		2	8.0%		7	28.0%		4	16.0%		15.00%	
	0	6	24.0%		7	28.0%		11	44.0%		1	4.0%		25.00%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
2016	3	9	36.0%		9	36.0%		20	80.0%		N/A	0.0%		38.00%	
	2	6	24.0%	60.0%	2	8.0%	44.0%	1	4.0%	84.0%	N/A	0.0%	0.0%	9.0%	47.0%
	1	1	4.0%		5	20.0%		3	12.0%		17	68.0%		26.00%	
	0	9	36.0%		9	36.0%		1	4.0%		8	32.0%		27.00%	
		25	100.0%		25	100.0%		25	100.0%		25	100.0%			
		Average	60.7%				63.3%			54.0%			56.0%		58.5%

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, 60.7% of the top quartile-ranked stocks selected using GARP stock selection strategy exhibited positive price return performance in the 1st quarter. In the 2nd quarter, the percentage of stocks with positive performance increased to 63.3%, whereas in the 3rd and 4th quarter the percentages were consistently above 54%.
 - Based on at least 2 and 3 months positive price return after implementation of strategy, the percentage of top quartile-ranked stocks with positive return was 58.5% for the period tested.
 - The average percentage among the top quartile-ranked stocks with positive price return for all quarters in each year was consistently above 56% from 2011 to 2015. In 2016, the percentage was lower at 47% but this was up to 3rd quarter only. The 4th quarter percentage for one month was quite high with 68% (i.e. 17 stocks) having positive returns out of the 25 stocks in the 1st quartile.
 - The best quarter for top quartile-ranked stocks performing based on GARP strategy was 2nd quarter in 2013 with 23 stocks performing of which 19 stocks came in with 3 months of consecutive positive price returns and 4 stocks with 2 months consecutive positive returns.
 - Out of the 23 quarters for the period from Jan 2011 to Sep 2016, only 3 quarters recorded dismal percentage of top quartile-ranked stocks with positive return. This was during 3rd quarter 2011 at 20%, 3rd quarter 2015 at 28%, and 4th quarter 2014 also at 28%.

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(Bank Pelaburan)
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Business Address:
11 & 12 th Floor, Menara MIDF,
82, Jalan Raja Chulan, 50200
Kuala Lumpur.
Tel: 2173 8888
Fax: 2173 8380