

**RELATIVE VALUATION OF VGI GLOBAL MEDIA PUBLIC
COMPANY LIMITED**



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**A THEMATIC PAPER SUBMITTED IN PARTIAL
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ABSTRACT

This thematic paper demonstrates how to value the stock price of VGI Global Media Public Company Limited (VGI); the concept of the multiple valuation models were applied to find the relative market value of the firm, valuing the indirect (or relative) price of the equity using key statistics that assumed to relate to the value.

In this paper, Price to Earnings (P/E) Ratio, Price to Book Value (PBV) Ratio, and Enterprise Value to Earnings before Interest, Taxes, Depreciation and Amortization (EV/EBITDA) Ratio were used to find the value of VGI by using both trailing and forward P/E, P/BV and EV/EBITDA, in comparison with key competitors or peers such as PLANB, AQUA, and MACO.

Among the three multiples valuation, it is shown that using P/E multiple is the most appropriate relative valuation method to find VGI's share value, not only the most widely used among stock's investors but also it is perceived by the market as a 'growth stock' despite the P/E ratio, which is on the high side.

The recommendation is 'HOLD' for VGI based on the P/E valuation method, it is recommended that investors consider a few other valuation methods, rather than one single metric, as relative valuation comes with a few important limitations. And in the case of VGI, since the peer's average P/E multiple is relatively high; we would recommend valuing the stock price based on the DCF method, which would be a more reliable and conservative approach.

KEY WORDS: VGI/ Price to Earnings Ratio/ Multiple Valuation Model

34 pages

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LIST OF ABBREVIATIONS

BV	Book Value
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
COGS	Cost of Goods Sold
D/E	Debt/ Equity
EBIT	Earnings before Interest and Taxes
EBITDA	Earnings before Interest, Taxes and Depreciation
EPS	Earning Per Share
EV	Enterprise Value
GDP	Gross Domestic Product
N/I	Net Income
NOPAT	Net Operating Profit after Taxes
NOWC	Net Operating Working Capital
P/E	Price/ Earnings
QoQ	Quarter on Quarter
Rf	Risk free
ROA	Return on Assets
ROE	Return on Equity
SET	Stock Exchange of Thailand
SG&A	Selling, General and Administrative Expense
SWOT	Strength, Weakness, Opportunity and Threats
WACC	Weighted Average Cost of Capital
YOY	Year on Year

CHAPTER I

VALUATION

1.1 Highlights

1.1.1 An important transition to new stage of growth

The company has projected itself to be the leader of nationwide integrated media platform within 2 years. The additional acquisition of MACO, the leading outdoor media in billboards and street furniture presence across the country could lift up VGI into leader of outdoor media market apart from its stronghold in transit media. In addition to existing office building media, VGI has accelerated the media capacity via its connection to cover additional numbers of office and residential building in the center of Bangkok business district within 1 year.

1.1.2 Developing an in-house digital media

The company plans for an activation capability and begun to leverage a relationship with BSS Holdings Company Limited (“BSSH”) and its subsidiaries. By building a partnership with BSSH, VGI will gain an online media inventory, access to “offline” data and “online” data sources through Rabbit online web portal and Rabbit Line Pay app – a Joint Venture with Line. The company aims to become a one-stop, integrated online and offline media platform in which enable its customers (advertising agency and product owners) to create “smarter” and targeted advertising campaign to achieve customer’s brand engagement across the nationwide.

1.1.3 Stronghold of mass transit media leadership

VGI as a sole media agent for BTS mass transit media operation, the revenue contributed by mass transit has proved to be the most resilient in terms of growth and profit margin. The extension of Bangkok sky train network of pink and green line that will start operation in year 2020 could potentially bring the revenue stream to the company incredibly.

1.1.4 VGI pursues organic growth inside and outside Thailand

Including the acquired stake in MACO and AERO media which contributing the positive organic growth out of main revenue source in other media platforms for instant LED billboard, mega LED, E-Poster, office and condo building and aviation airports across the country. Lately the joint venture with Malaysia strategic partner will open VGI into international arena and establish a footprint in transit, in-store, cinema and outdoor media in Malaysian market with exclusive concessionaires

1.2 Business Description

VGI Global Media Public Company Limited or VGI was established since 1995. The company operates as a provider of network advertising emphasizing on modern Lifestyle Out-of-Home Media (OOH) to cover the lifestyle of the new generation with the commercial area in Bangkok's CBD. In 1999, the company granted the exclusive right from Bangkok Mass Transit Public Company Limited or BTSC to manage the advertising spaces and commercial areas on BTS Sky Train stations and for all BTS trains in BTS Sky Train System. On October 2012, the company successfully listed on the Stock Exchange of Thailand (SET) under the ticker symbol "VGI".

VGI engaged in the provision of marketing and advertising services. As end of fiscal year 31 March 2016, the Company's business activities are divided into 3 main groups. On average, 84% of VGI's total revenue is earned from mass transit media and the remaining 16% consist of outdoor media and media service providing (Figure1.1)

Mass Transit Media - VGI owns the right to manage media service and merchandising areas in the BTS Sky Train System. The License to Manage Marketing Service Agreement will be terminated in 17 years, on 4 December 2029. Mass transit media consists of Bangkok mass transit system (BTS) merchandising, which refers to the shops on the BTS stations, BTS advertising, Chulalongkorn University (CU) media, which comprises bus shelter and bus body media, and airport rail link BTS Sky Train route is located within Bangkok's central business district and key

commercial and residential areas, the company gain various competitive advantages i.e. being strategically located, having increasing viewership from the number of growing passengers on the rail mass transit and from being a highly effective media that get directly to the target group.

Outdoor media - The outdoor media has covered multimedia at various location i.e. office building and residence building, the digital screen networks both in Bangkok centric business area and across the country, aviation, large billboard, networking billboard, series pole and street furniture.

Others - Apart from an advertising media, VGI also provides other services such as media production, commercial media, radio spot advertising, and events.

1.2.1 Target Customers

Advertising Agency is accounted for 77.40 percent of total customer portfolio; the high percentage of advertising agency provides more efficiency for media space management as part of strategic planning in deploying various kinds of media. Agencies act like representatives of product and service owners in contacting the Company to produce and install advertising media for them. These agencies mostly look for big media companies who own a variety of advertising media that cover broader customer base as well as outstanding innovative products and services that effectively appeal to target customer groups.

Product and Service Owner is accounted for 22.60 percent. Customers who are product and service owners are small and medium-sized enterprises (SMEs), private companies, government agencies or state enterprises. These customers directly deal with the Company without going through agencies and hire the Company to produce and install advertising media for them.

1.2.2 Company strategies

The company aims to become a “Nationwide Integrated Media Platform” (Figure 1.2) pursuing strategic alliances and acquisitions to present in diverse media segment including transit, office building, outdoor, aviation and digital. The company target MACO additional acquisition to broaden its outdoor presence across the country. Moreover, the online media segment via the Rabbit acquisition, which

expected to complete by year 2017. The two main business; BTS related transit media and office building media have been continuously expanded. This year the company expects to increase the occupancy rate in all existing media onto 7 new extension stations. In the office building media, the company expects to increase number of building to 160 buildings and 200 buildings in the next 2 years.

The company aims to offer extensive service to become a smarter media provider for product's owners and consumers. The merging of Rabbit card with 2 million users database, the company can enable into larger data analytics in order to provide the media solution for the product's owner to communicate widely to the consumers in difference dimension of advertising medium in various outstanding locations where the company presence in.

1.2.3 Shareholder structure

The major shareholders; BTSC and BTS Group Public Company Limited (BTSG) has accounted for a portion of 51% and 19.40% respectively while the free float accounted for 22.65% (Figure 1.3)

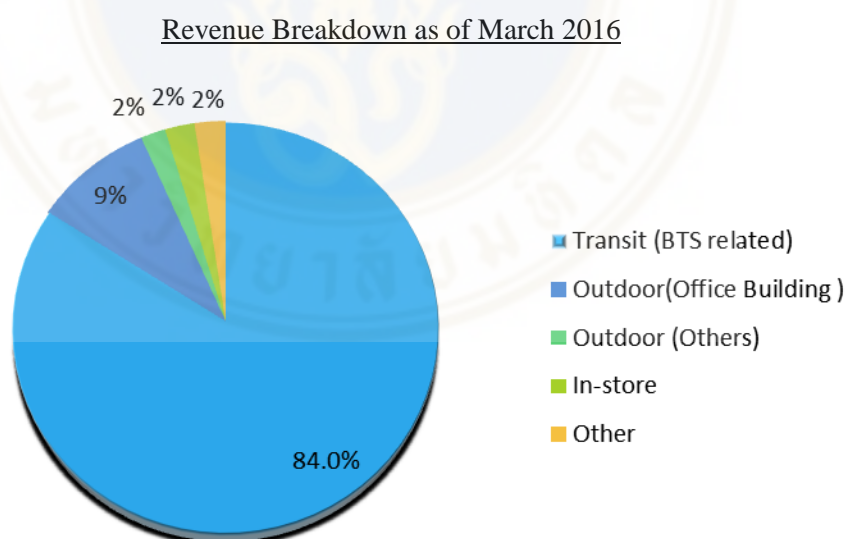


Figure 1.1 Revenue Structure

Source: Company

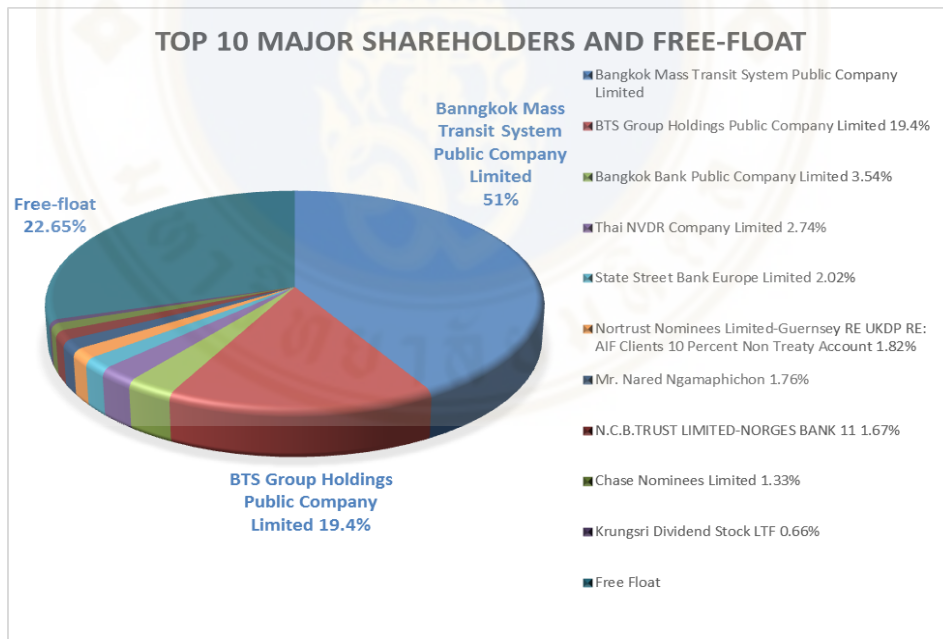
Nationwide Integrated Media Platform Strategy



Source: Company

Figure 1.2 Company’s strategy: Nationwide Integrated Media Platform within 2 years

Shareholder Structure



Source: Company

Figure 1.3 Shareholder Structure

1.3 Macro-economic Analysis

1.3.1 Thailand economic outlook

After a mild economic recovery from 2015, the country was in silence for the morning of great King Bhumiphol since October 13, 2016, the country overall economy expected to continue as smooth as before, except the weak sentiment of consumption for certain business i.e. entertainment and service industry which could temporarily drop. According to Bank of Thailand, Thailand's economy is projected to return growth 4.0-5.0% by 2018 (Figure1.4). GDP driven mainly by private consumption, public spending and export of services. Domestic demand will remain a key driver of growth of government policies after the draft constitution was approved in the referendum. In particular, new investment in transportation infrastructure such as a dual track railway and Bangkok Mass Transit projects are expected to start in the second half of the year. Private consumption has continuously strong expansion; supported by employment, farm income and government measure. The value of merchandise exports improved in many industries because of rising demand for some products, expansion into new markets, and partly a result of the consolidation of product location for some products to Thailand such as hard disk drives and solar cells.

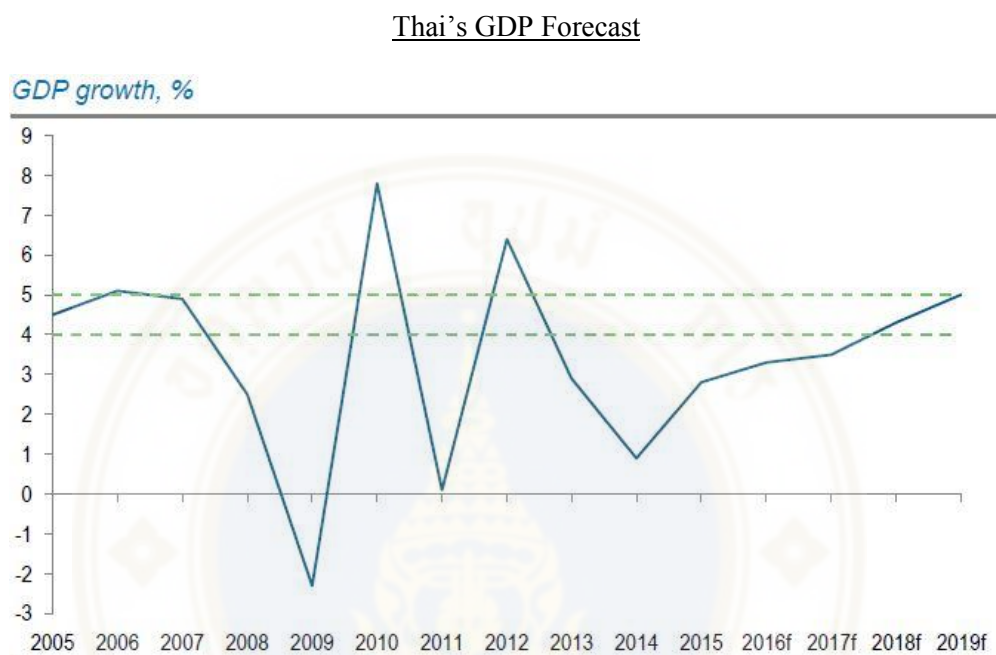
1.3.2 Expanding Infrastructure Network boost up economic growth

The execution of long-delayed transportation projects to make significant progress in 2017, as more than a dozen projects have cleared the bidding process and are now ready for construction. Sufficient transportation infrastructure is vital to putting Thailand on a higher growth trajectory, strengthening its competitiveness and improving the investment climate.

1.3.3 Thailand 4.0 is underway

To promote Digital economy, the government has earmarked THB 27.9bn of investment for 2017-21 in four areas: digital commerce, digital entrepreneurship, digital innovation and digital content. The focus will be on start-up businesses developing innovative business solutions such as e-commerce and e-payment. The government also established the Ministry of Digital Economy and Society in 2016.

Thailand has 35mn internet subscriptions and 30mn social network subscriptions, according to a Board of Investment (BoI) report. It has 96.4 Million users registered mobile phone subscriptions, of which 34.6mn are smartphone subscriptions.



Source: Bank of Thailand

Figure 1.4 Thailand's GDP forecast

1.4 Industry Analysis

Thai economic grew slower than the expected from the Bank of Thailand's original estimate. The moderate expansion in GDP was mainly supported by higher government spending. Advertising expenditure contracted by 1.24% to THB 119,810mn, reflecting the overall sluggish economy. The biggest market share of a media industry is TV sector for 46.4%. Meanwhile market share for mass transit and outdoor media are 3.9% and 3.7% respectively. The growth of TV media sector has dramatically decline by 11.4% YoY. Despite the advertising industry's high vulnerability to economic conditions, after the liberalization of TV segment, digital

TV was the best performing sector in the media industry, growing by 51.2% from THB 13,356mn to 20,462mn. The Transit Media Sector and the Outdoor Media Sector (in which the company also operates its business) grew by 18.5% and 11.6% YoY respectively (Figure 1.5).

1.4.1 Slashing Advertising spending YTD

2016 still be the looming year for Thai media industry, according to Media Agency Association of Thailand (MAAT) (Figure 1.6), the ads expenditure expecting to drop by 10 percent from previous year due to the media spending cut by top advertiser because of the mourning period for King Bhumipol. Thai media affected by the slow rate of economic expansion in the past few years. Even though Thai economy managed to expand at a rate of 2.8% in 2015 compared to 0.9% in 2014, most of the key economic drivers were still weak. Export sector experienced a stagnant growth resulted from a slowdown in demand from ASEAN countries and China. Household income was low due to significantly low agricultural prices that led to a deceleration of private consumption. Apart from the economic instability, most manufacturers and service providers slow down advertising spending and emphasized value for money under their limited budgets.

1.4.2 Out-of-home media vs. Traditional Media Thailand

Out-of-home media (OOH) includes transit, outdoor and in-store media. The OOH spending was THB 9,547mn or 8% of Thailand advertising spending (Figure 1.7), in total of THB 119,810 Million. OOH media has grown continuously at a higher rate each year compared to traditional media segment such as analog TV, radio, newspaper and magazines. Even though, the traditional media still had the highest market share at 64.4% of Thailand advertising spending, the trend expected to move towards OOH media over time. This comes from the faster growth in advertising spending in OOH media during past 5 years.

1.4.3 Entertainment and Media forecast from 2013-2017

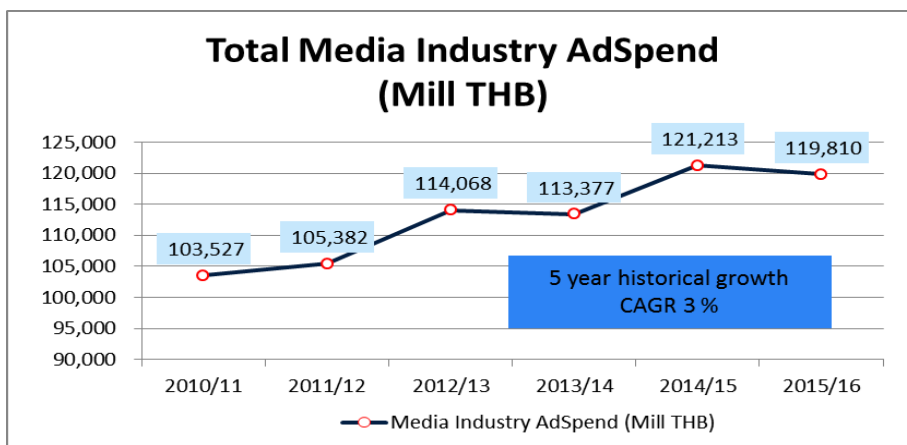
Thailand's out-of-home revenues rose 34% to \$240 million in 2012 from \$179 million in 2008. The market forecasts to grow by an annual growth rate of 7.6% over the forecast period and will see revenues of \$346 million in 2017. The OOH market has benefited from growth in the numbers of retail chains, shopping malls and hypermarkets in the country and characterized by a switch to digital out-of-home formats, which is now approaching 50% of spending, according to the local OOH advertising trade association.

1.4.4 The emerging of urbanization trend throughout the country increases the demand for OOH media

The opportunity arrives to media industry especially out of home media due to the surge of urbanization trend where people consume media in various channel. Urban lifestyle encourages the media consumption demand. The more visibility, the more advantage to the business owners who have the power of advertising spending. Following this trend, the transportation connection is foreseen to extent towards out of downtown Bangkok i.e. extension of sky train and MRT lines throughout Bangkok suburban as well as the new regional airport building and cost low airline reachability.

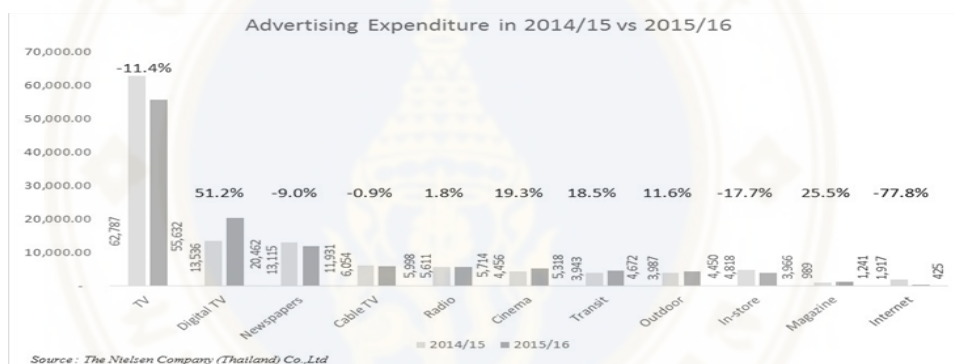
1.4.5 Transition to Multimedia

A remarkable change in the media prospect is increasing in digital media (a media in form of file or digital use). According to figures released by the Digital Advertising Association, Thailand (DAAT), Thai digital advertisement spending has grown from THB 2,006mn in 2011 to THB 9,869mn in 2015, representing CAGR of 48.9%. Moreover, the market share of digital advertisement spending out of total advertisement spending has increased significantly from 1.9% to 7.0%. The growth of digital media has supported by its flexibility and scalability for advertisers to deliver messengers to a target audience.



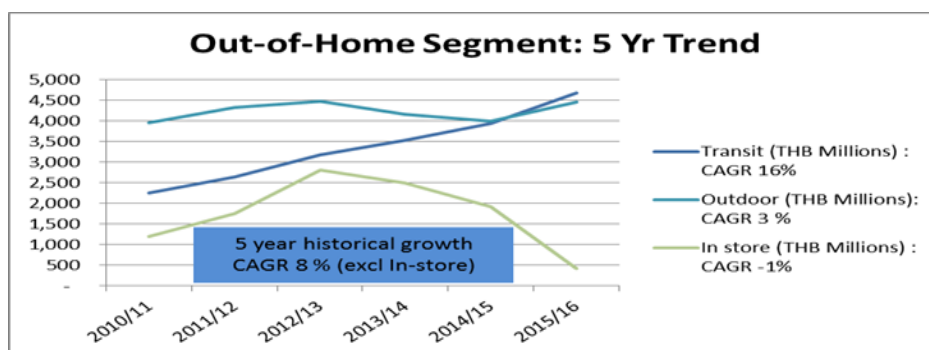
Source: Nielsen Company, Thailand

Figure 1.5 Historical data on Media Ads Spending (5 Years)



Source: Nielsen Company, Thailand

Figure 1.6 Thai Advertising growth rate by Media sector



Source: Nielsen Company, Thailand

Figure 1.7 Trend of Ads spending in Out-of-home media in past 5 years

1.5 Competition Analysis and Competitive Positioning

Currently VGI have a strong presence in Thai local OOH media, as end of Mar 2016 its total market share has accounted for 22 percent in OOH. In Thailand there are a few key players in OOH (Table 1.1) Each player has various presence in different field. For mass transit media, it can be divided into train (sky train and subway), bus and aviation. The main players are VGI, PlanB and JC Decoux. Outdoor media has number of players as the more coverage medium type i.e. signpost, billboard, street furniture, office & high-rise building, etc. By strategic acquiring MACO, VGI has moved itself to become the major player in outdoor media as MACO has its strong presence both in Bangkok and in upcountry.

1.5.1 The company has competitive advantage from being strategically located

Key players within the Thai Mass Transit media are divided according to transportation type. For example, BTS Sky Train advertising is exclusively operated by VGI, PlanB mainly operates bus advertising and MRT underground advertising is mainly operated by BMN. As the BTS Sky Train route is located within Bangkok's central business district and key commercial and residential areas, the company has competitive advantages from being strategically located, from having increasing viewership from the number of growing passengers on the rail mass transit and from being a highly effective media that get directly to the target group (Figure 1.8). Each player has various presences in different field. For mass transit media, it can be divided into train (sky train and subway), bus and aviation. The main player is VGI, PlanB and JC Decoux. Outdoor media has number of player as the more coverage medium type i.e. signpost, billboard, street furniture, office & high-rise building, etc. By strategic acquiring MACO, VGI has moved itself to become the major player in outdoor media as MACO has its strong presence both in Bangkok and in upcountry.

1.5.2 VGI owned the largest Office Building media network in Bangkok

The company receives the sole exclusive rights to install and manage LC screens in elevators in office building by entering into agreement for duration of each contract 3 – 5 years. The others competitors are only the owner of the proprietor

themselves. Moreover, the company became an exclusive sale agent for ARTISTA across 219 residential buildings to provide advertising service in office and residential buildings, covering 354 building with over 1,640 screens.

1.5.3 The more medium coverage, the more opportunity

During past few years, trend for the media budgeting has been allocated to different kinds of advertising because each type of media advertising has a different in its main features or its characteristics and different in the efficiency in communicating with consumer. The agency and the product owners will provide the advertising with the constant frequency in the different channel that has the most fit and suitable to their target group and their budgeting in order to motivate the brand awareness, understand the feature of the product, expand the consumer base to be broader, and to emphasize on the brand royalty creation.

1.5.4 Competing for market share

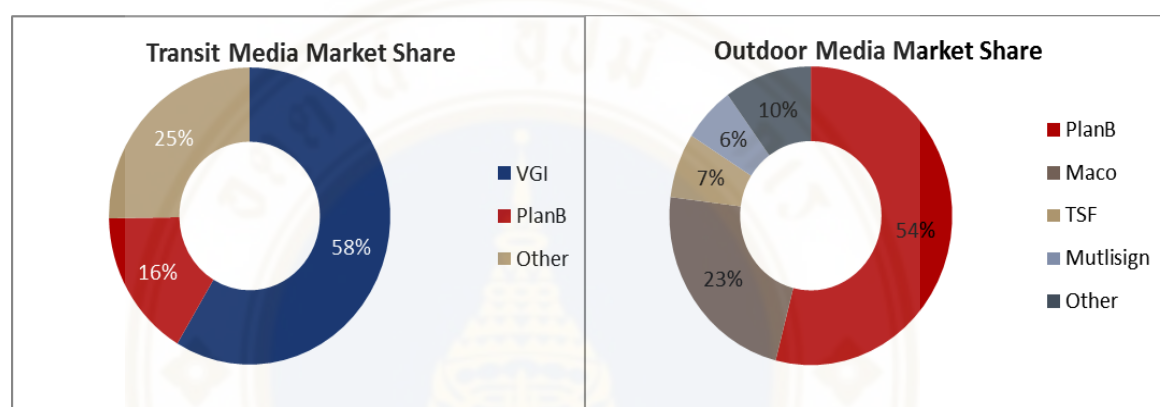
Nowadays, the competition in this industry does not to compete for the market share in the same pattern that try to get the market share in the same type of media but it is a competition to increase market share in every different kinds of advertising media. The media company, who has their network in different type of media, will have more advantage in the high competition because they can fulfill the satisfaction of the product and service owners' need which lead to the media company will earn more market share of the media market. Moreover, the consumer behavior has been changed to be a multitasking thus, using a stand-alone media will not response to the consumer behavior that changed.

Table 1.1 Out of Home's Key Market Player

Company Name	2015 Revenue (THB mn)	Net Profit (THB mn)	Market Share %	Net Profit Margin %
VGI	2,106	941	22%	45%
Plan B	2,170	400	23%	18%
Aqua	562	285	6%	51%
Three Sixty Five	430	- 730	5%	-170%
MACO	694	171	7%	25%
Total OHH Media ads (THB mn)			9,547	

Source: Company data

OOH Media Market Share



Source: Company data

Figure 1.8 Out of Home's market share by segment as of Mar 2015

Five-force Analysis

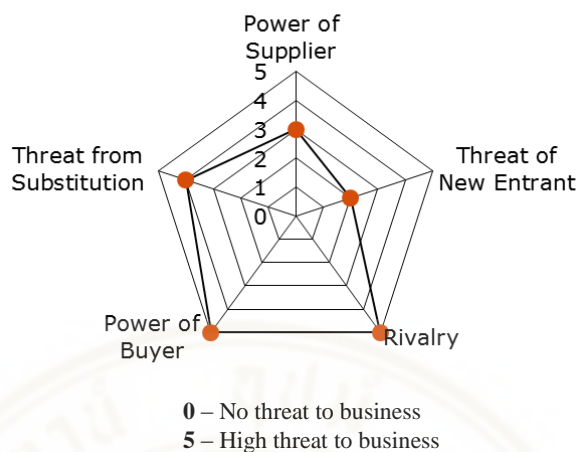


Figure 1.9 Five-Force Analysis

1.6 Investment Summary

We issue a HOLD recommendation on VGI Global Media Public Company Limited (VGI) with a target price of THB 5.41 using the Discounted Free Cash Flow to Firm method. This offers a 2.03% upside from its closing price of THB 5.30 on December 8, 2016. VGI's current valuation with PER of 35x lower than an average PER of the OOH media industry and the overall media segment. However, the current value is not bargain; we therefore maintain our HOLD rating for the stock since there is scope for upside to the firm's long-term growth potential from BTS-related media, outdoor and other media businesses. VGI's business transition will take time and require execution capability. VGI needs 2-4 quarter to restructure the organization internally and full business synergies. Thus, it is worth investors hold the stock.

1.6.1 Optimistic outlook for Transit Media and BTS related business

The positive outlook maintain for VGI position as the out-of-home media market leader in regards to the market and industry outlook in medium to long term horizon. The shift in focused business arena from Bangkok and vicinity towards the nationwide media platform is the main driving force for VGI to leverage itself in the

media market position. The idea of integrated media platform will potentially boost VGI revenue growth and having well diversified revenue contribution. The company has projected itself to be the leader of nationwide integrated media platform within two years. The additional acquisition of MACO, the leading outdoor media in billboards and street furniture presence across the country aimed to level up VGI to be the leader in outdoor media market apart from its stronghold in transit media. In addition to existing office building media, VGI has accelerated the media capacity via its connection to cover additional numbers of office and residential building in the center of Bangkok business district within one year.

VGI possess exclusive rights to manage advertising space on BTS sky train network until 2029. The new BTS extension line throughout Bangkok and suburban area expected to operate in year 2018 – 2020; there will be approx. 60 stations increasing for VGI to operate the media space (currently 30 stations). The larger sky train network will directly benefit VGI for the medium to long-term growth as transit media expecting to increase the market share in total media industry. Current market share is 4 percent. As shown the historical industry data of transit media had undergone the growth of 15.7 percent CAGR. (Table 1.2)

1.6.2 Massive investment in strategic acquisition of MACO and Rabbit

VGI new vision has been launching in 2016, several projections on media coverage expansion aiming to be the leader of nationwide integrated media platform within 2 years. VGI acquired additional stake in MACO, the leading outdoor media in billboards and street furniture presence across the country as to broaden its outdoor media sector from existing office building media and the current stronghold of transit media. In addition, the acquiring of Rabbit expected to add new growth to the company in the creation of an innovative audience-targeted ads-media service. Large borrowing need to be funded both deal which worth in total for approx. 2 billion baht. VGI's leverage expects to increase resulting the risk will be higher. The rate of return is somewhat unclear at this stage, we still be cautious and conservative on how to draw the revenue model from the new business service.

Table 1.2 OOH Media Industry compare with VGI revenue growth

OOH Media Industry		Historical					
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	5Yrs CAGR %
Transit (THB Millions) : CAGR 16%	2,262	2,650	3,189	3,533	3,943	4,672	
YoY growth %		17%	20%	11%	12%	18%	15.7%
Transit Sectoral Market Share %	2%	3%	3%	3%	3%	4%	
Outdoor (THB Millions): CAGR 3 %	3962	4319	4471	4161	3987	4450	
YoY growth %		9%	4%	-7%	-4%	12%	2.6%
Outdoor Sectoral Market Share %	4%	4%	4%	4%	3%	4%	

VGI Revenue Contribution		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	5Yrs CAGR %
Transit (BTS related)	934	1,143.00	1,422.00	1,678.79	1,805.33	1,813.17		
YoY Growth%		22%	24%	18%	8%	0.4%	15%	
Outdoor(Office Building)	76.00	79.00	143.00	146.00	163.00	201.00		
Outdoor (Others)	0	1.00	22.00	29.07	25.67	41.67		
YoY Growth %		5%	106%	6%	8%	29%	31%	

Source: Company

1.6.3 VGI pursue organic growth inside and outside Thailand

Including the acquired stake in MACO and AERO media which contributing the positive organic growth out of main revenue source in other media platforms for instant LED billboard, mega LED, E-Poster, office and condo building and aviation airports across the country. Lately the joint venture with Malaysia strategic partner will open VGI into international arena and establish a footprint in transit, in-store, cinema and outdoor media in Malaysian market with exclusive concessionaires. As a portion of MACO towards VGI revenue distribution as 25% from a fully controlling on the Board of Directors, roughly forecast in this segment by using an average revenue growth in the past 5 years historical data. The conservative growth rate is 5% (average 5 years historical growth rate).

1.6.4 Possible Investment Risks

There is a variety of risks that investors must be aware of; one operation risks is that the revenue contribution rely on few business partner (BTSC). Since core revenue contribution mainly driven by BTS business related which account of around 80 percent of total revenue. The risk is high if the company loses its right to manage

media services on BTS sky train and stations. For outdoor media, the management concession renewal with its related parties schedule every 3-5 years. The concession rights has high direct impact to the business operation, if the company fail to renew or contract being terminated. Market risk include competition with other media service providers; in OOH media has divide into few segment of transit and outdoor where number of players from both local and international play a competitive role. Location is the prime to competition in which determines the pricing power of media provider. Other competitors can overtake the company if it cannot response to the customer's requirement timely and in cost-effective manners. Regulatory risk include change in advertising law; rule and regulation on media control imposed by the government which could impact the way the company operate business i.e. more compliance require, more resource allocation to look over.

1.7 Relative Valuation: Multiple Valuation Model

The multiple valuation methods discussed below are used to find the relative market value of the firm in order to value the indirect (or relative) price of the equity using key statistics that are assumed to relate to the value. In this report, we have used Price to Earnings (P/E) Ratio, Price to Book Value (PBV) Ratio and Enterprise Value to Earnings before Interest, Taxes, Depreciation and Amortization (EV/EBITDA) Ratio to find the value of VGI comparing them with key listed competitors or peers such as PlanB, Aqua and Maco.

1.7.1 Price/ Earnings (P/E) Ratio

The Price-to-Earnings or P/E Ratio is used for valuing the company; it measures VGI's current share price relative to its earning per share (EPS). The P/E Ratio is calculated by having the market value per share divided by the EPS.

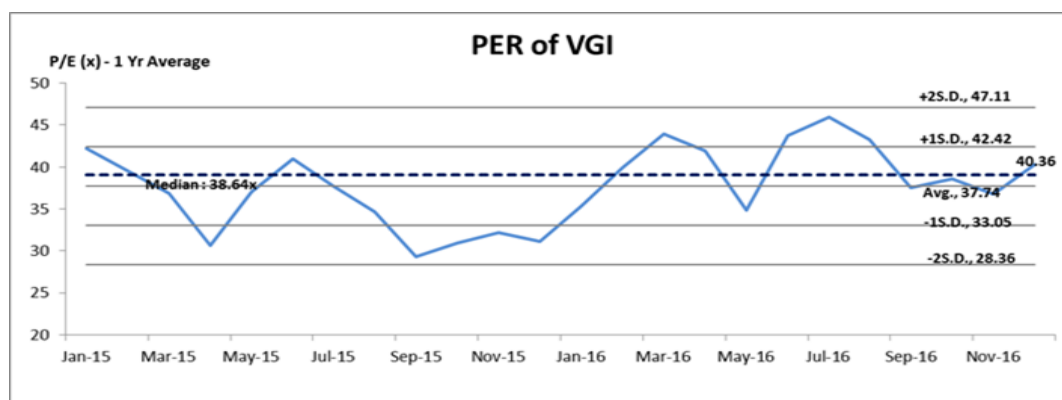
Trailing P/E of VGI is calculated by dividing its current stock price of THB 5.30 as of 8 December 2016 by the sum of trailing EPS from the last four quarters (4Q2015-3Q2016). We have calculated the trailing P/E at 40.36 times. This is

the most commonly used P/E measurement because it is based on actual earnings; therefore, it is the most accurate.

Forward P/E of VGI used in this report to calculate price-earnings, which is sometimes called projected P/E, as it estimates earnings expected during the next four quarters (1Q2016-4Q2016). Although the trailing P/E is the most accurate, stock prices are moving constantly while earnings remain fixed. Therefore, forward P/E can sometimes be more relevant when evaluating a company. For VGI, we have arrived at 36.73 times, which is derived from the whole year forecast of year 2016's net income.

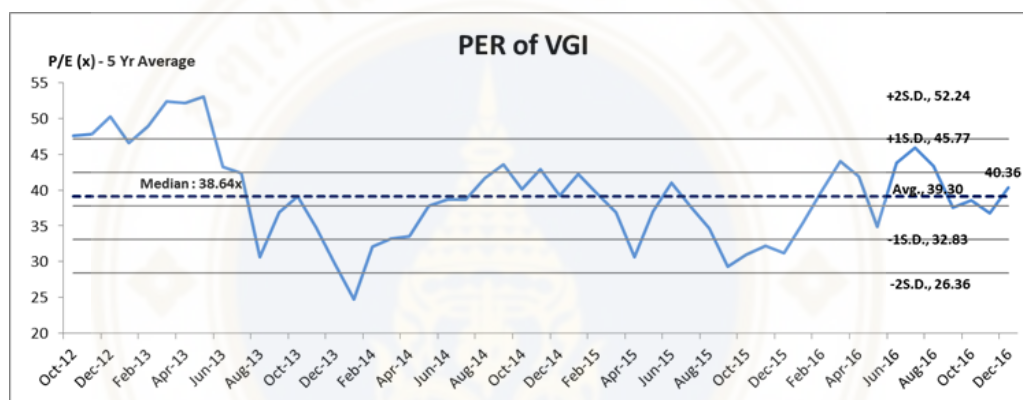
From the projected THB 0.14 EPS at end fiscal year of 2016/17F, our target price will be 5.47 THB per share based on 37.74x price to earnings ratio (PER) averaged from historical PE during Jan15 – Dec 16 (Figure 1.10). In our view, PER of VGI has fully reflected the market expectation which take into account expected future earning of the Company from major acquisitions happened during 2016 for MACO and Rabbit. As well as the upside in BTS related business from mass rail extension project launching this year ensure that VGI main revenue driver will be growing in the long run. Looking back into 5 years historical PER, VGI has the ratio averaged of 39.36x (Figure 1.11)

Moreover, in the view of the P/E ratio, the issue is how much (how many baht) investors have to pay in order to receive one baht of the firm's earnings, and the firm's forward P/E of 36.73 appears to be quite high when compare to the OOH media sector on average P/E of 34.2 times as of end December 2016 (Table 1.3). However, the forward P/E can still be considered low when compared to its main competitive peers; PlanB of PE 63.12 times.



Source: SET Smart

Figure 1.10 Price/ Earning (P/E) Band



Source: SET Smart

Figure 1.11 Historical 5 Year P/E

Table 1.3 OOH's P/E of Peers

OHH Media Industry	PER
VGI	37.74 x
PlanB	63.12 x
Aqua	12.61 x
Maco	23.4 x
Average PE of OHH Media	34.2 x
SET Media Industry	63.38 x

Source: SET Smart

1.7.2 Price/ Book Value Ratio (PBV)

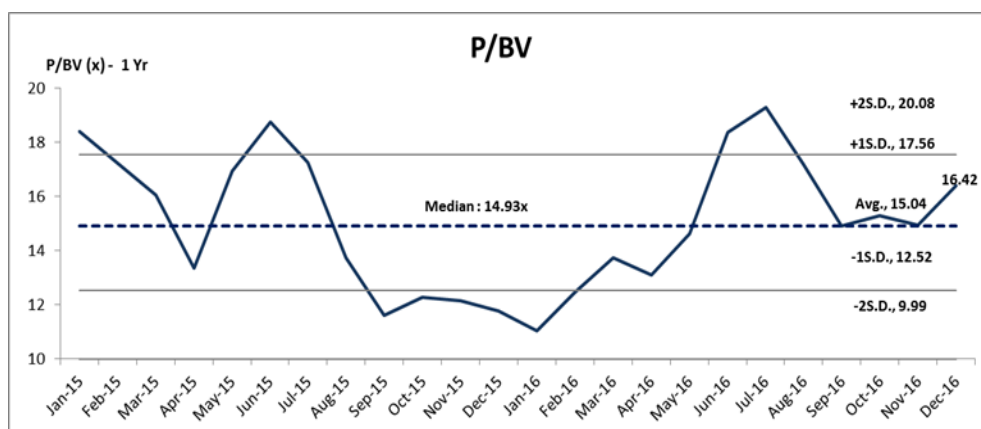
PBV is to measure the Company's book value to market value, target price derived from P/BV multiple is 5.33 THB per share . The calculation method from market value of equity divide by book value of equity (Equity BV/ # of share). We acquired historical P/BV from Jan 15 – Dec 16 (Figure 1.12), the average P/BV was 15.04x, time with forward BV 0.35 as end of 2016/17. We arrived the target price at 5.33 THB

The trailing PBV of VGI is calculated by dividing the current share price of THB 5.30 with the 3Q2016's book value per share. After computing, we see that VGI's trailing PBV is 16.29 times, which is two times higher than the peer average PBV of 6.55 times. We could infer that the company's current stock price is much too high at the moment when compared only with its current book value.

The forward PBV of VGI is calculated by dividing the estimated book-value (BV) per share at the year end of 2016 (Q42016). We arrived VGI's forward PBV of 14.96 times, which is slightly lower than with the trailing BV, but this is still much higher than the peers' average.

From this PBV method, we can imply that VGI's stock price is currently at the justified value, as the target share prices from multiplying the firm's trailing and forward PBV with the peer's average trailing and forward PBV would be the same at THB 5.30. (Figure 1.13)

PBV is a conservative way to indicate how much shareholders are paying for the net assets of a company, since it provides investors with a comparison of the market value per share to the firm's equity value per share; for this reason, we could also consider this PBV valuation of VGI as a very conservative approach, when considering the market momentum, because, on the other hand, if the company is perceived with a low market opinion (from low share price considering their growth potential), it may prove to be a stagnant investment later.



Source: SET Smart

Figure 1.12 Price/ Book Value (P/BV) Band

PVB calculation	
BV of equity Q3 2016/17	2,233.76
No. of share	6,864.00
BV per share	0.33
VGI Market price as of 7 Dec 16	5.30
PBV trailing	16.29
BV Q4 2016/17	0.35
Forward PBV (x)	14.96
Target price	5.30

Source: Team's calculation

Figure 1.13 Price/ Book Value (P/BV) Calculation

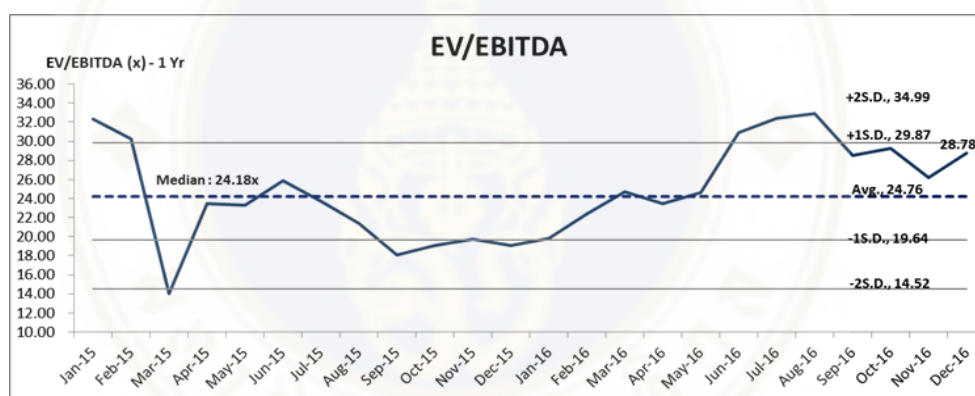
1.7.3 Enterprise Value/EBITDA Ratio (EV/ EBITDA Ratio)

This enterprise multiple valuation can be used to determine the value of VGI. In this method, EV/EBITDA is to benchmark the neutral firm value using market value of equity and market value of debt minus cash/market security to get enterprise value then divide by EBITDA (Earnings before Interest, Tax, Depre and Amort). The calculation method acquired the historical data of VGI market capitalization since Jan15 – Dec 16 plus outstanding debt in end 2016/17 total 628 Million THB (short & long term debt) divide by forward EBITDA as end of 2016/17 total 1,467 Million THB. The average EV/EBITDA from historical data until Dec16 was 24.76x.

The trailing EV/EBITDA of VGI is calculated by dividing the enterprise value (EV) with the sum of EBITDA per share from the last four quarters (3Q2015 to 3Q2016). After calculating, we obtain the trailing EV/EBITDA of 28.78 times,

The forward EV/EBITDA of VGI is calculated using the same method as trailing EV/EBITDA above but changing from the last four quarters' EBITDA to the forward four quarters of EBITDA (1Q2016-4Q2016). The forward EV/EBITDA is an estimate and the company's financial result of 4Q2016. From this method, the target EV we obtain is 25.39 times.

Target price derived from EV/EBITDA multiple will be 5.43 THB per share, calculated from averaged 24.76x EV/EBITDA multiple with 1,459 Million THB EBITDA plus cash 214 Million THB at end 2016/17. Then divide by no. of outstanding share 6,864.



Source: SET Smart

Figure 1.14 EV / EBITDA Band

EV/EBITDA calculation	
EBITDA 2016/2017	1,459
Market value (2016/17 EBITDA*Average EV/EBITDA)	36,133
Outstanding Debt as end of 2016/17	892
Cash	214
no.of share	6,864.00
Target price	5.43

Source: Team's calculation

Figure 1.15 EV / EBITDA Calculation

In conclusion, from all the above relative valuation methods, we can see that the P/E multiple is the most suitable method to find VGI's share value, as it is perceived by the market as a 'growth stock,' despite the P/E ratio, which is on the high side. Relative valuation comes with a few important limitations that investors should take into account, as they may often be led to believe that there is a single method that will provide complete insight into an investment decision, which is virtually never the case; therefore, it is recommended that investors consider a number of valuation methods, rather than just one. And in the case of VGI multiple is quite high as well, we would recommend that valuing the stock price based on the DCF method would be considered a more conservative approach.

1.8 Financial Statement Analysis

1.8.1 Key Summary from financial statements

Earnings - VGI is the market leader in out of home media sector, the forecasted revenue contribution in 2016 showing the growing part of office building revenue from 2 percent in 2015 up to 11 percent in 2016. VGI is planning to diversify the revenue contribution via the strategic investment in M&A. The revenue was little dropped in 2015 mainly from BTS-related media which faced challenges from overall media spending decline as price dumping from other media players. Nevertheless, the company was able to overcome by improve its gross profit margin year on year, reflecting the efficient cost of service management that reducing from 45 percent in FY2015 to 37 percent in 2016.

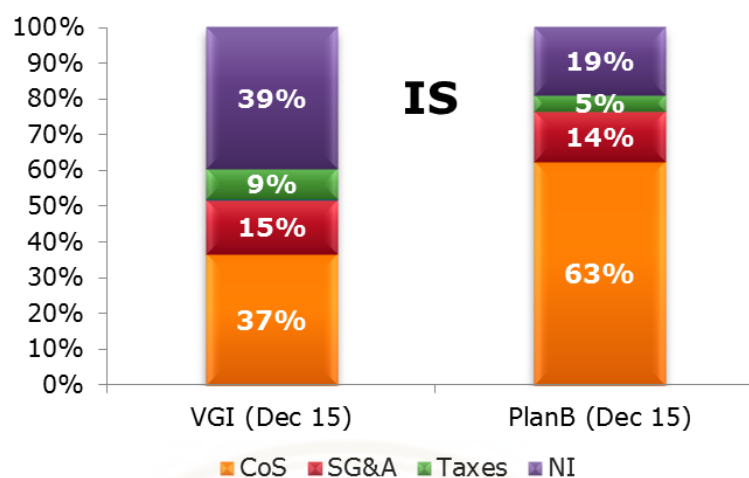
Cash Flow - The cash flow estimation indicated that the company can generate higher cash from business operating which can be covered new investment plan in year 2016 i.e. acquisition of MACO and joint venture project. The company has strictly maintained its dividend policy of not less than 50 percent of NI either in form of cash or stock. Since there was cash excess in cash flow, the company decided to pay back short term loan and paid dividend more than target of 50 percent.

Balance Sheet & Financing - The acquisition of MACO in FY2016 and 2017 have added to VGI asset and liability consolidation. The company decided to go

for borrowing to fund the deal, hence short-term debt increasing from previous year. However, the company balance sheet remains solid with sufficient liquidity. Both current ratio and quick ratio has been well-managed (current ratio approaching 1 to above) except in FY2015 that the company had loaded with the short term borrowing from acquiring new company.

1.8.2 Income statement (size analysis)

In OOH Media, the most comparable competitor in term of size and business profile is PlanB. The common size analysis to see which part is a major item in income statement; by scale each item as percentage base (100%). Cost of sales as end of 2015 accounted for 37 percent of sales reduce from 45 percent in previous year. The lower percentage cost of sale means higher gross profit margin for VGI. Compared with Plan B the major competitor in OOH arena, the cost of sale accounted double size from VGI 63 percent. This shows that VGI has competitive advantage in term of cost management over Plan B. Selling and administrative expenses accounted for 15 percent as similar to Plan B. The bottom line of net income for VGI accounted for 39 percent which 20 percent higher than Plan B given the low cost of sale making VGI outpaced its peer in term of net profit margin (Figure 1.16).



Source: Company data

Figure 1.16 Income Statement – Size Analysis

1.8.3 Balance sheet (size analysis)

In term of total asset base at end of 2015 position, Property, Plant and Equipment has accounted the major part in both VGI and Plan B 39 percent and 37 percent respectively. VGI investment in subsidiary took the significant percentage of total asset as their aim to expand business portfolio both in and outside Thailand. Cash and cash equivalent accounted only 12 percent of total asset while Plan B has larger cash holding at 29 percent. We can imply that the company loaded more on non-current asset at 73 percent, whereas current asset accounted only 27 percent. Different from Plan B, which equally weight on current and non-current 50:50 portion (Figure 1.17).

Liability and shareholder's equity, both VGI and PlanB has heavily financed with equity part that accounted for 72 percent for VGI and 88 percent for Plan B. Liability in term of debt accounted only around 10 percent (Figure 1.18).

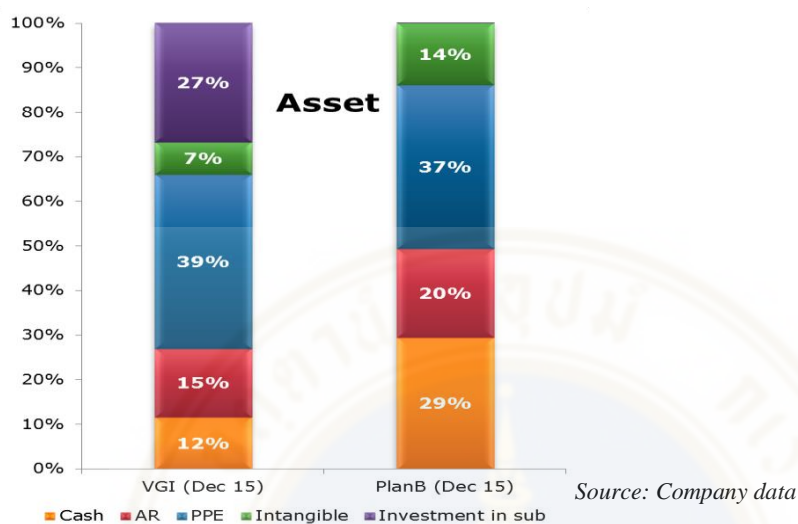


Figure 1.17 Balance Sheet (Asset) – Size Analysis

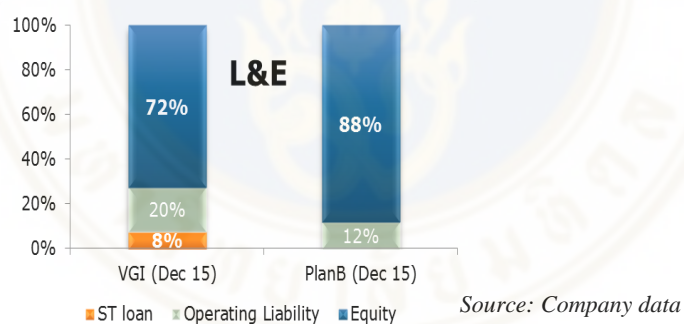
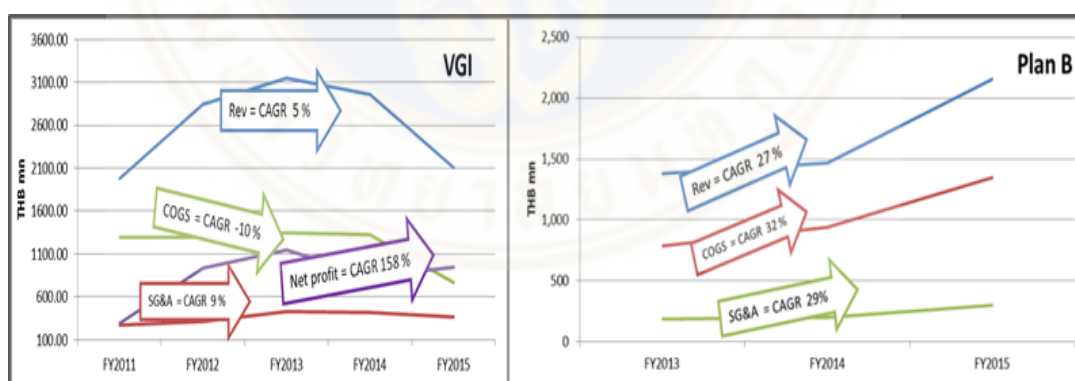


Figure 1.18 Balance Sheet (Liability) – Size Analysis

1.8.4 Trend analysis

Please take note that VGI was launched its IPO since Oct 2012, and Plan B started in SET in year 2014, therefore the information available for comparison is insufficient for Plan B to compare in same timeframe.

Income Statement – Over the 4 years period, VGI service revenue had CAGR of 5 percent growth, which considered in line with the overall Thai Media industry growth, the main contribution come from mass transit media, which generated 2-digit growth for past 5 year. The reducing in revenue trend from CY 2013 to 2015 was due to the political crisis and massive demonstration around Bangkok, which severely affected Thai OOH media. Cost of sale also had the similar trend with revenue which good for the company that sale and cost of sales moves in the same direction. SG&A somewhat tend to move closed to sale but slightly higher during the last 2 years. Compared with Plan B, its main rival which revenue on the trend up in the past 2 years. Plan B is the leading player in outdoor media, which cover around Bangkok and across country. Plan B lately has focused on the digital media, which tend to overcome traditional media. The demand for digital media has increasing, hence driving Plan B growth (Figure 1.19).



Source: Company data

Figure 1.19 Income Statement – Trend Analysis

Balance sheet - For the major trend changed in balance sheet, PPE had significant increased from around 200 mill THB to 1200 Mill THB in 5 years, more than 400 percent growth from year one. PPE including all media signpost, screens and billboard on BTS station sand office building around Bangkok. Secondly, cash and cash equivalent had reducing as those were transformed in term of investment in new

business expansion and loan to subsidiaries. Last item is equity, which had enormously increased in the past 5 years; the capital structure had changed from liability based to equity, which increased almost 600 percent. For Plan B the asset trend had remain flat in past 2 year, while cash increased a lot, similar to trend on equity (Figure 1.20).



Source: Company Data

Figure 1.20 Balance Sheet – Trend Analysis

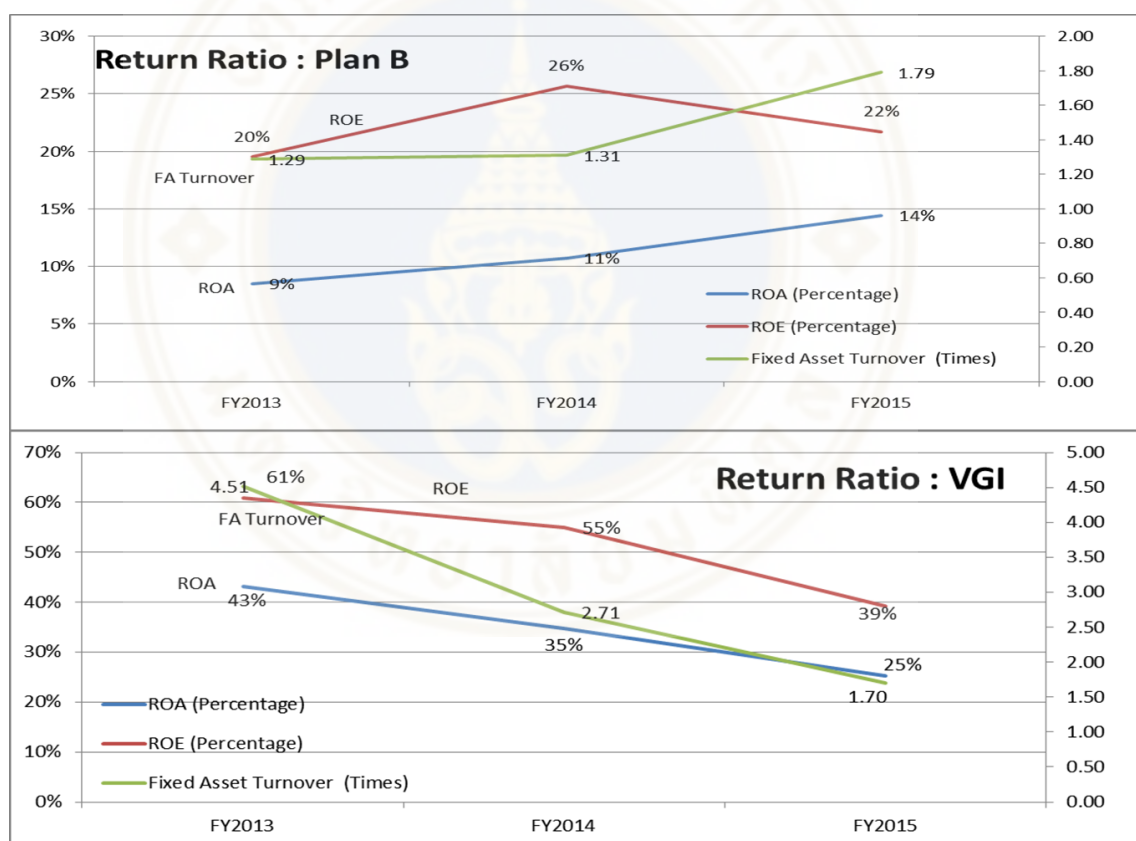
1.8.5 Financial ratios

Profitability ratio - Overall VGI return indication i.e. ROA, ROE was reduce through years, it could be the reason that the asset had not been utilized fully capacity, the large investment on PPE cannot generate the return as it should (Table 1.4). VGI had impressive ROE during CY 2013 - 2014 because of historical high revenue and lower equity value. Compared with Plan B which most ratios shown positive improvement of asset utilization (Figure 1.21).

Table 1.4 Profitability Ratios

	FY2013/14	FY2014/15	FY2015/16	2013	2014	2015
	Financial Ratios VGI			Financial Ratios PlanB		
ROA (%)	43%	35%	25%	9%	11%	14%
Profit Margin (%)	36%	34%	39%	16%	18%	19%
Tax Efficiency (x)	1.01	1.03	1.00	0.87	0.96	1.00
Total Asset Turnover (x)	1.19	0.98	0.66	0.61	0.63	0.75
ROE (%)	61%	55%	39%	20%	26%	22%
ROA (%)	43%	35%	25%	9%	11%	14%
Earnings Leverage (x)	1.00	0.99	0.99	0.86	0.83	0.98
Capital Structure Leverage (x)	1.41	1.59	1.57	2.66	2.88	1.54
Turnover Ratios						
Asset Turnover (x)	1.19	0.98	0.66	0.61	0.63	0.75
Fixed Asset Turnover (x)	4.51	2.71	1.70	1.29	1.31	1.79
AR Turnover (x)	4.93	5.26	4.59	3.28	3.28	3.77
AP Turnover (x)	8.17	8.79	5.61	1.92	2.76	4.77

Source: Company Data



Source: Company Data

Figure 1.21 Profitability Ratio Comparison with PlanB

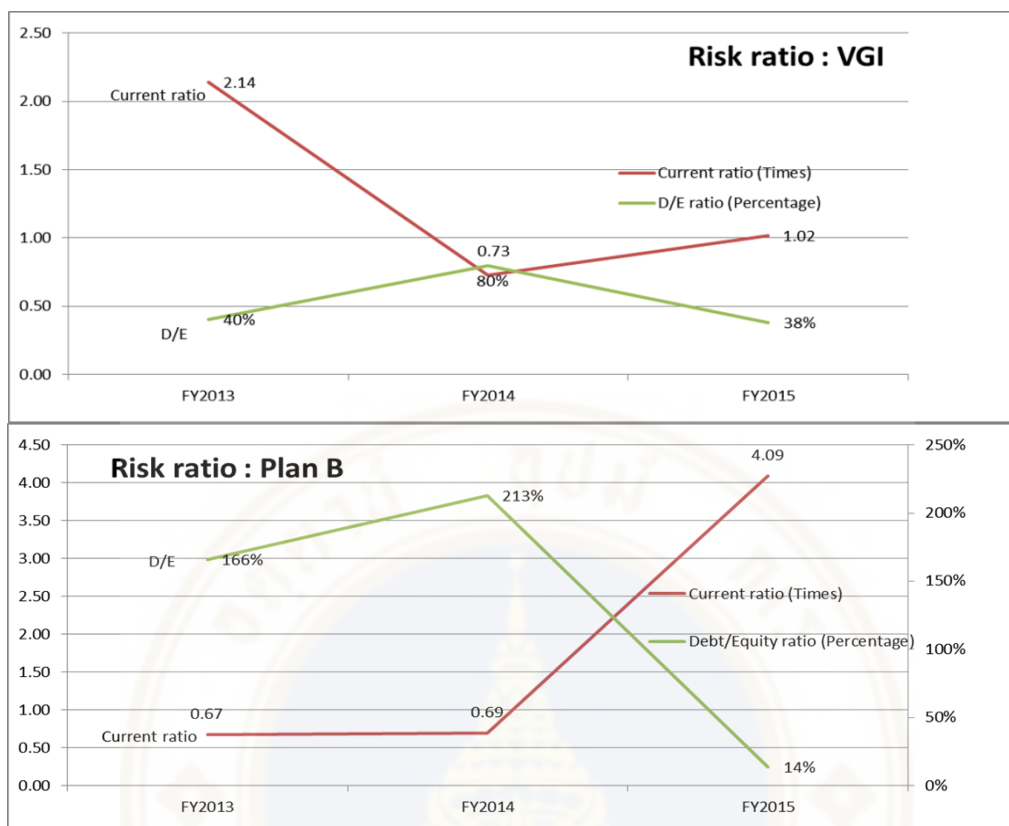
Efficiency ratio - VGI current ratio near 1 which considered fair for the company at least it had the ability to pay debt, however the trend of short term liquidity was not good as its quick ratio has under 1, meaning the amount of cash and

short-term investment and AR might not liquid enough to pay debt. Long-term solvency risk was in the very good status as it had no leverage and high TIE, which means the company had much more than enough capacity of borrowing to use (Table 1.5). Plan B short term liquidity was in good status in end of 2015, even though previous year look bad, ratio under 1. Long term solvency risk had lower capability than VGI comparing TIE rate of 41 time while VGI had 89 time. (Figure 1.22)

Table 1.5 Efficiency Ratios

	FY2013/14	FY2014/15	FY2015/16	2013	2014	2015
	Financial Ratios VGI			Financial Ratios PlanB		
Short Term Liquidity Risk						
Current Ratio (x)	2.14	0.73	1.02	0.67	0.69	4.09
Quick Ratio (x)	2.12	0.71	0.92	0.55	0.61	3.82
Inventory Conversion Period : ICP (Days)	0	0	0	0	0	0
Receivables Collection Period : RCP (Days)	74	69	80	111	111	97
Payable Deferral Period : PDP (Days)	45	42	65	190	132	77
Cash Conversion Cycle : CCC (Days)	29	28	15	-78	-21	20
Long Term Solvency Risk						
Net Debt/Equity ratio (%)	40%	80%	38%	166%	213%	14%
Time Interest Earned (x)	2,101	129	89	7	6	41

Source: Company Data



Source: Company Data

Figure 1.22 Efficiency Ratio Comparison with PlanB

1.9 Investment Risks and Downside Possibilities

Probability and consequences of various risks are presented in Table 1.6.

Table 1.6 Risk Matrix

Likelihood/Consequence	Insignificant	Negligible/Minor	Moderate	Extensive	Significant
Almost Certain					
Likely					
Possible					
Unlikely					
Rare					
Very High (VH)	Immediate action require by the Executive with detailed planning, allocation of resources and regular monitoring				
High (H)	High risk, senior management attention needed				
Medium (M)	Management responsibility must be specified				
Low (L)	Monitoring and manage by routine procedures				
Very Low (VL)	Manage by routine procedures				

1.9.1 Operational risks

1.9.1.1 Reliance on few business partner (BTSC), since core revenue contribution mainly driven by BTS business related which account of around 80 percent of total revenue. The risk is high if the company loses its right to manage media services on BTS sky train and stations.

For outdoor media, the management concession renewal with its related parties schedule every 3-5 years. The concession rights has high direct impact to the business operation, if the company fail to renew or contract being terminated.

1.9.1.2 Reliance on major media agencies, the Company has more than 20 media agencies as its customers which 10 are major media agencies. For 80% of the total advertising revenue, the revenue contributed from the top 5 media agencies for around 60% of the total advertising revenue. However, each agency has not concern more than 28% of the total advertising revenue. Therefore, this risk factor is pointed into the middle zone between yellow and dark green. The consequence of this risk shown in the negligible or minor level of consequence since this situation can

effect to the financial loss but less than 20% of the advertising revenue. The likelihood can occur in the possible level since there is always the competition the market.

1.9.2 Market and competition risks

1.9.2.1 Media business varies by the overall economic situation. An economic situation causes the slowdown in advertising spending of product and service owners. They tend to allocate their advertising budget to new media types, which can cover wider target groups and has high visibility in the daily life. This is consistent with the company's nature of business that focus on modern lifestyle media. However, with the company's locations, characteristics and types of media, the company will be less affected by the current economic situation. Moreover, the company also increase an opportunities to expand its media network to other new platforms and into oversea business.

1.9.2.2 Competition with other media service providers, at present, there are many new media service providers in the market and it is an intensified competition, especially price competition. If the company could not response to the market competition, it may cause to the effect on the market share of the business. With the advantages of the company, such as the location, characteristics and types of media, the risk factor can be pointed into the middle zone between yellow and dark green area. The consequence of risk shown in a moderate level, which means that the company can effect, by short-term losing market share and the likelihood of risk is in the likely level since the situation can occur at sometimes.

1.9.3 Regulatory risks

1.9.3.1 Change in advertising law, rule and regulation on media control imposed by the government which could impact the way the company operate business i.e. more compliance require, more resource allocation to look over.

1.9.4 Financial risks

1.9.4.1 Liquidity and interest risk from massive borrowing for M&A. VGI has relied on borrowing to fund the M&A deal total borrowing amount of 2 billion THB, as the result the liquidity risk has been increasing. The burden on interest expenses can affect the company's profit during the loan term. As the

company has projected quite large amounts of borrowing, they also need to borrow large amounts from banks. The floating interest rate is one of the main factors affecting the company's earnings, although it has entered into interest swaps to achieve fixed interest rate borrowing on its long-term loans, and a portion of permanent trust receipt loans under crude financing.

1.9.5 Drivers of volatility in earnings

We performed a sensitivity analysis on the certain elements that could potentially affect VGI's share price.

Table 1.7 Effects of Changes in Terminal Value and WACC on Target Share Price

	Price per share (THB)				
	Terminal Value				
%WACC	5.4	3%	4%	5%	6%
	6.79%	5.34	7.04	10.64	23.34
	7.64%	4.34	5.37	7.18	11.21
	8.49%	3.64	4.33	5.41	7.35
	9.34%	3.13	3.62	4.33	5.46
	10.19%	2.71	3.06	3.54	4.24

Table 1.8 Effects of Changes in EPS and P/E to share price

	THB	PER					
		-2SD	-1SD	Avg	+1SD	+2SD	
	5.30	28.37 x	33.05 x	37.74 x	42.43 x	47.12 x	
EPS	+20%	0.17	4.9	5.7	6.6	7.4	8.2
	+10%	0.16	4.5	5.3	6.0	6.8	7.5
	Base Case	0.14	4.1	4.8	5.47	6.1	6.8
	-10%	0.13	3.7	4.3	4.9	5.5	6.1
	-20%	0.12	3.3	3.8	4.4	4.9	5.5

CHAPTER II

DATA

2.1 Business Structure (VGI)

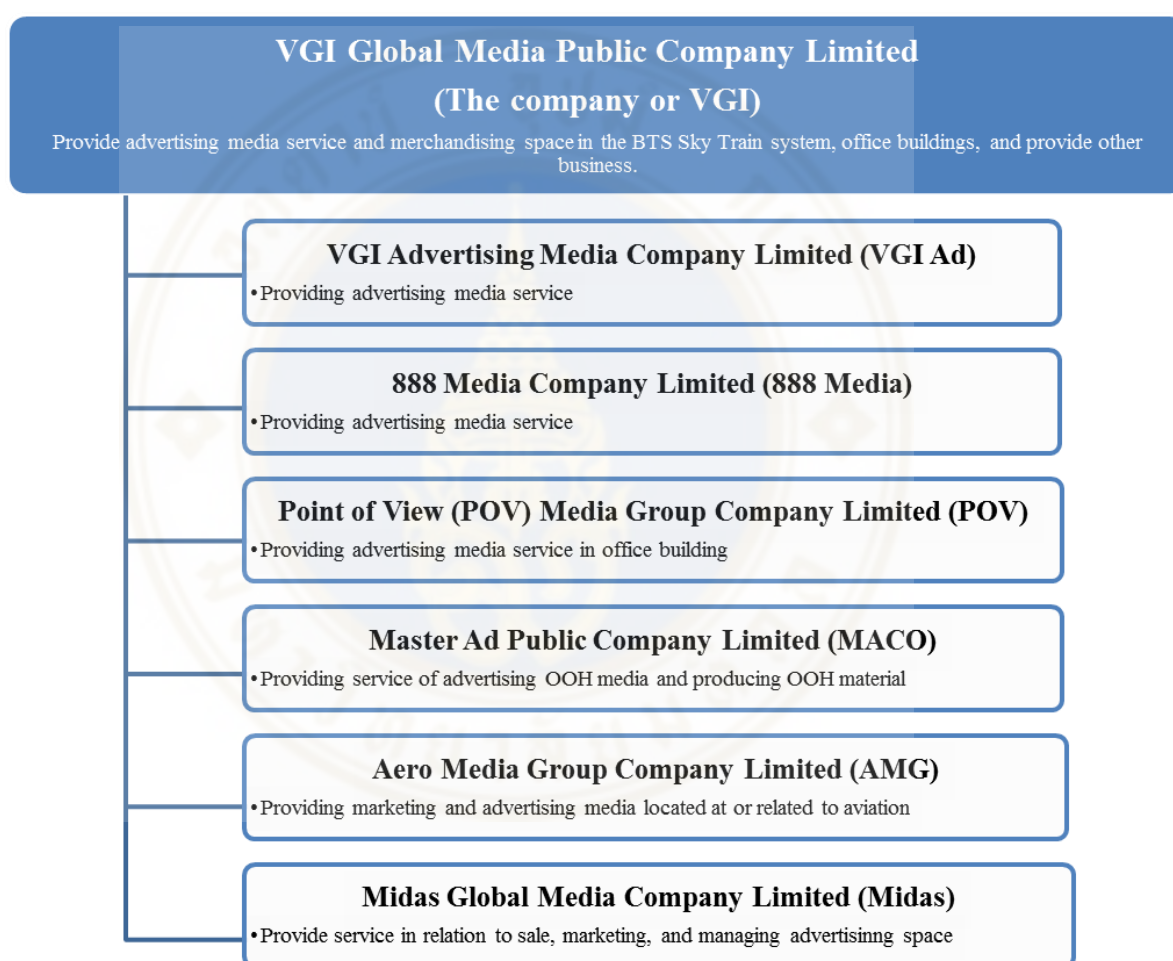


Figure 2.1 Business Structure (VGI)

Source: Company

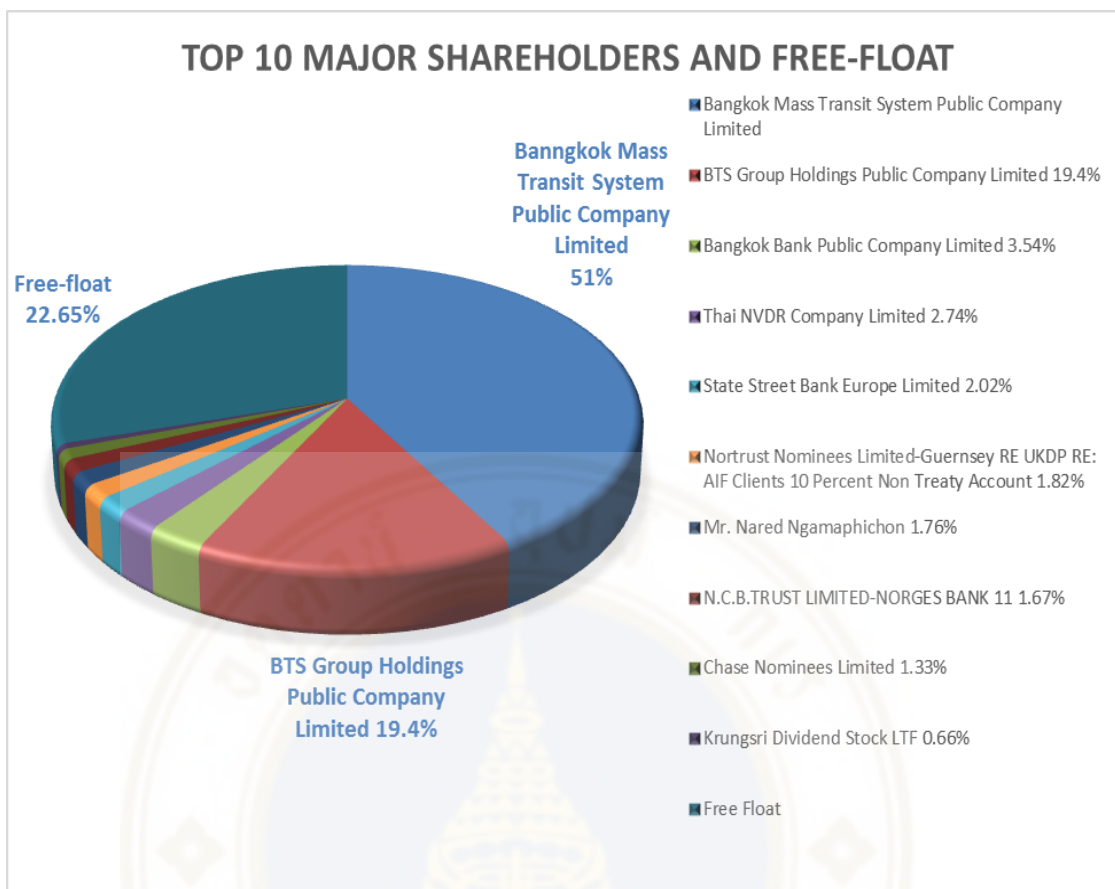
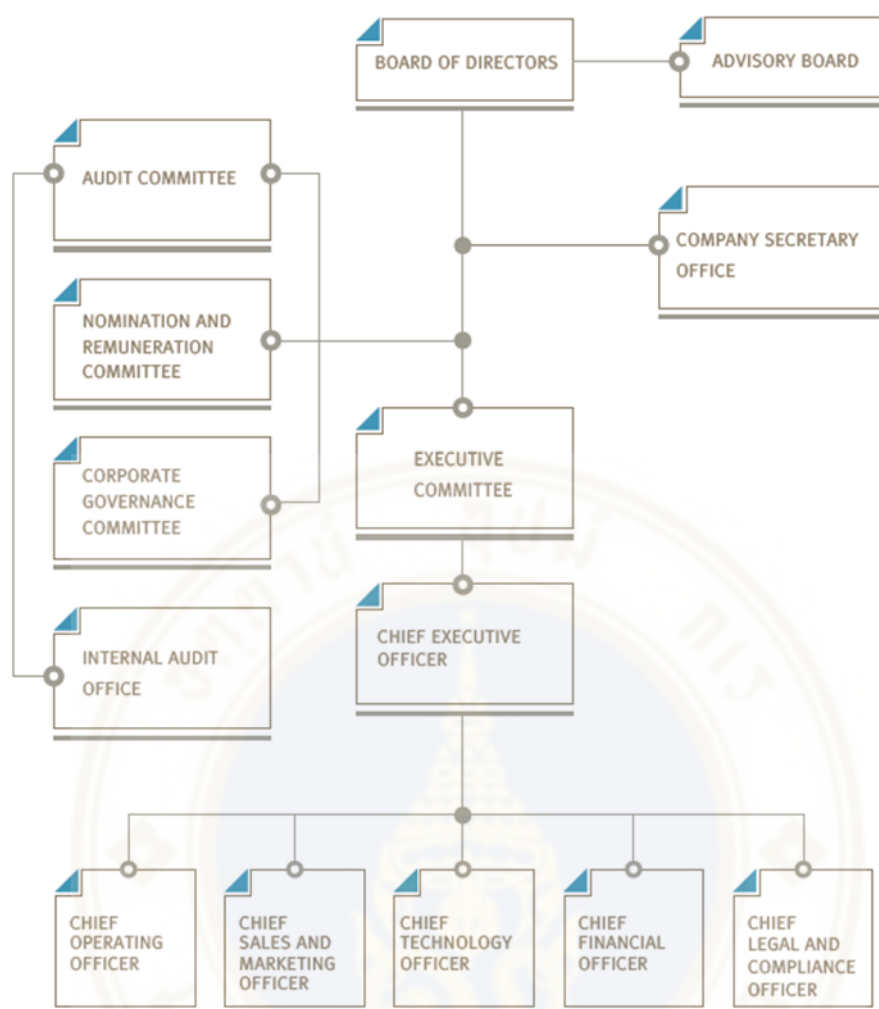


Figure 2.2 Major Shareholders and Free Float

Source: Set Smart



Source: Company

Figure 2.3 Organizational Chart

2.2 Corporate Governance (CG)

The Company's Board of Directors have established a policy on corporate governance that is in accordance with the principles and guidelines on good corporate governance of The Stock Exchange of Thailand and recommendations of the Thai Institute of Directors (IOD). The Company's corporate governance policy is divided into 5 sections as follows: (1) Right of Shareholders (2) Equitable Treatment of Shareholders (3) Awareness of the Role of Stakeholders (4) Information Disclosure and Transparency (5) Responsibilities of the Board of Directors.

2.2.1 Right of Shareholders

The Company places emphasis on the rights of shareholders as the true owner of the Company. The shareholders are encouraged to exercise their fundamental rights, e.g. sale, purchase or transfer of shares, profit sharing, receipt of the adequate information either via the Company's or the SET's websites or other channels, attendance at shareholders' meetings to acknowledge the Company's annual business performance, and voting rights at the shareholders' meetings to approve significant matters as specified by law, such as the appointment or removal of directors, directors' remuneration, the appointment of the auditor and determination of the auditor's fee, dividend payment or suspension of dividend payment, any capital increase and issuance of new shares, and making enquires or comments on the matters that the Board of Directors presents or requests for approval at the shareholders' meeting.

2.2.2 Shareholders' Meeting

The Board of Directors must hold the Annual General Meeting of Shareholders within 4 months from the end of the Company's fiscal year. Other shareholders' meetings shall be called Extraordinary General Meetings and are to be held when deemed necessary and appropriate. The Company has appointed a Company Secretary to ensure that shareholders' meetings are called and held as required by law and in accordance with the guidelines for shareholders' meetings as stipulated by the SET. In the shareholders' meeting, the Company arranges for its legal advisor to provide legal advice and act as a moderator in the inspection and vote counting, as well as the financial advisor to provide an explanation or answer to enquiries in the complicated matters proposed to the meeting. The Company also arranges the Company's Auditors to present at the Annual General Meeting of Shareholders on the agenda of the approval of the Company's financial statements.

2.2.3 Invitation Letter and Shareholders Facilitation

The Company assigned Thailand Securities Depository Company Limited, its securities registrar, to deliver the invitation, stating the place, date and time of the meeting together with the meeting's agenda and sufficient supporting documents for each agenda item to shareholders no less than 7 days before the shareholders' meeting as required by law in order to allow shareholders sufficient time to study the

documents. The documents must include detailed objectives and the reason for each proposed agenda item, as well as the comments of the Board of Directors on each agenda item. There shall be no hidden agenda or other agenda item not stated in the invitation to the shareholders' meeting for the consideration and approval of the shareholders, except for urgent matters that arise after the invitation is sent. The Company will send an English version of the invitation and supporting documents to foreign shareholders. The Company also publishes the invitation together with the supporting documents on the Company's website in advance. In addition, the invitation shall be announced through a Thai newspaper for 3 consecutive days prior to the meeting date.

2.2.4 On and After the Meeting Date

Before the each meeting, the Company Secretary introduces to the meeting the Board of Directors, executives, the Company's auditor and legal advisor who acts as a moderator. The Company Secretary shall also inform the meeting about the voting procedures and vote counting in the meeting. After the information has been provided for each agenda, the Chairman of the Meeting shall give floor to all attendants to express opinions or enquiries relevant to the agenda. The enquiries shall be answered clearly and precisely and given adequate time for debate. For the agenda on the appointment of directors, the shareholders will vote for each director individually and separately. Also, the minutes of meetings shall be completely recorded and can be reviewed by shareholders. The resolutions of the meeting are also to be clearly recorded with details of approved, non-approved, and abstention votes for all agenda items which require a vote, as well as recording opinions, suggestions and answers to the material questions relating to each agenda item. The Company shall summarize the significant resolutions to the SET's website within the same day as the meeting, or at least no later than 9.00 a.m. of the following business day. The minutes of the shareholders' meeting shall be submitted to the SET within 14 days, as well as published on the Company's website.

2.2.5 Equitable Treatment of Shareholders

In advance of the Annual General Meeting of Shareholders, the Company shall allow minority shareholders to propose agenda items and nominate candidates to be elected as directors. The objective is to promote the equitable treatment of shareholders. Shareholders with a combined holding of at least 5% of the Company's total issued shares who have continually held such shares for at least 6 months prior to the nomination, are entitled to propose agenda items and nominate candidates to be elected as directors. The Company will publish such criteria on the Company's website as well as publish an announcement on the SET's website. The Company will give shareholders the opportunity to propose meeting agenda items and nominate candidates within the period set forth by the Company.

2.3 SWOT Analysis



Figure 2.4 SWOT Analysis

2.4 Five-Force Analysis

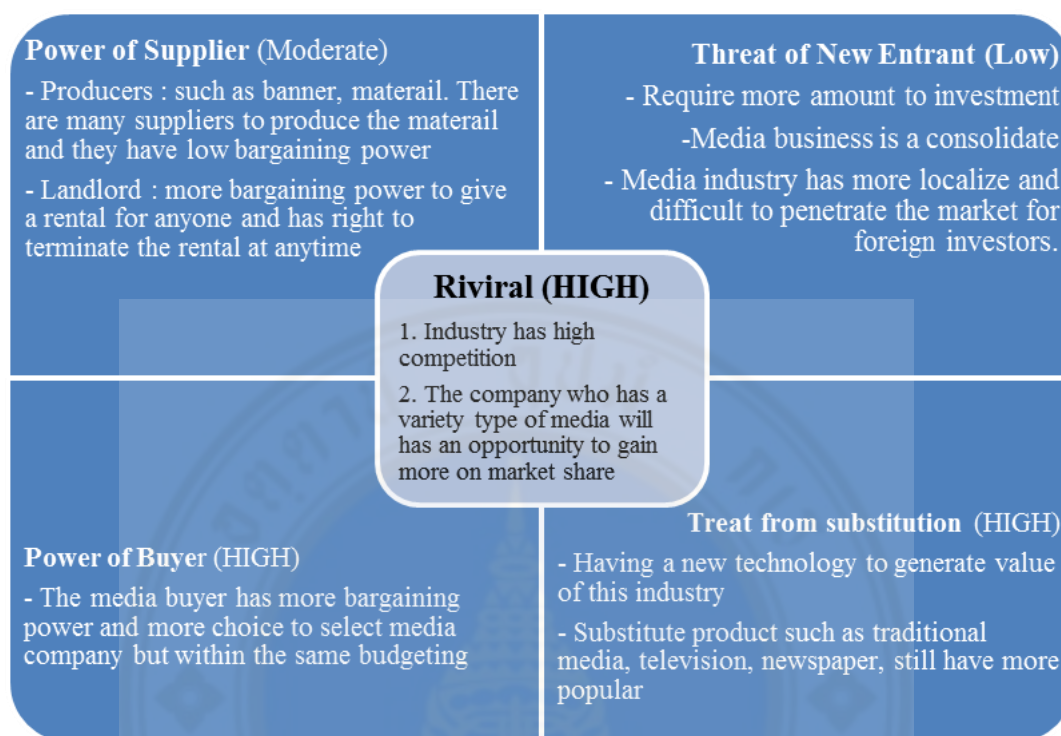


Figure 2.5 Five Force Analysis

Bargaining Power of buyer (High) - The media buyer has more bargaining power and has more choice with the same budgeting. There are many kind of media provided to the purchaser. They can select the most suitable media in order to meet with their target market. Then, an existing media or the traditional media needs to improve itself to maintain the ability in competition.

Bargaining Power of Supplier (Moderate) - The first supplier is a producer such as banner, structure that does not have too much bargaining power due to many of producers. Another supplier group are the landlord, owner of rental space. They has more bargaining power than the first group because they can select to give a rental to the one who is interested in while every company need to have the best location for the advertising.

Threat of New Entrance (Low) - It is difficult for the new entrance to run business in this industry because this business requires the high investment. The Out-Of-Home media is considered as consolidate. There must be a few media company to cover a half of a market share. In Thailand, there are only 2 companies but gain a half market share of media. Once, VGI invested in stock of Maco Master Ad. It shows that even a big company still need to have partner to be more strong especially, advertising media

in mass transit also has a monopolized trade which different upon the type of transportation. However, there is an advantage to keep more localize from the foreign investor.

Threat of Substitute Product or Service (High) - A direct substitute product is not found yet but there will be the technology that will have more important role due to the limited arear and scarce resource. It is a result in having a new technology to generate value of this industry for example, a LED broad can provide more than one advertising in only one screen

An indirect substitute product such as traditional media, television, newspaper, still have more popular but declining growth and less expansion than the Out-Of-Home media.

Rivalry among Existing competitors (High) - Media industry has high competition due to variety of media provide to the media purchasers. The competition of media in nowadays is not only competing for a market share in the same sector but it is a competitive to gain on every sector of media. A media company who has variety types of media and cover all the target groups will have high advantage in competition, which lead to gain more market share.

2.5 Macro-economic Analysis



Figure 2.6 Thailand GDP Forecast

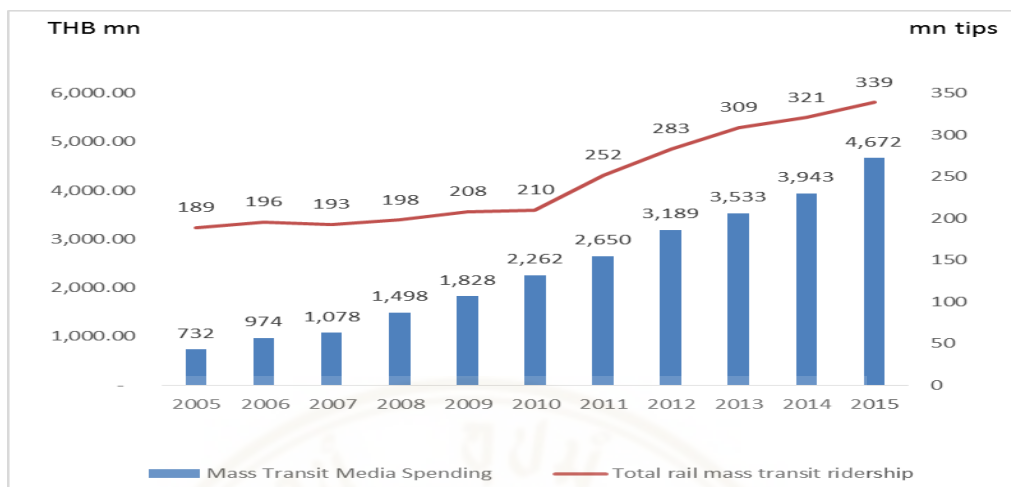
BOT expect the annual average core inflation and headline inflation target of 1.0 and 2.0 percent as the target. The core inflation rate was expected to be unchanged from the previous estimate at 0.8% and 1.0% in 2016 and 2017 (Table 2.1). An economic recovery with an increased demand is offset by a decline in costs, especially the lower oil price. The headline inflation forecast in 2016 and 2017 was also expected to remain unchanged from the previous estimation at 0.3% and 2% . It revises down in line with a downward revision in the crude oil price forecast.

Table 2.1 Inflation rate

Percentage	2016	2017
Headline Inflation	0.3%	2.0%
Core Inflation	0.8%	1.0%

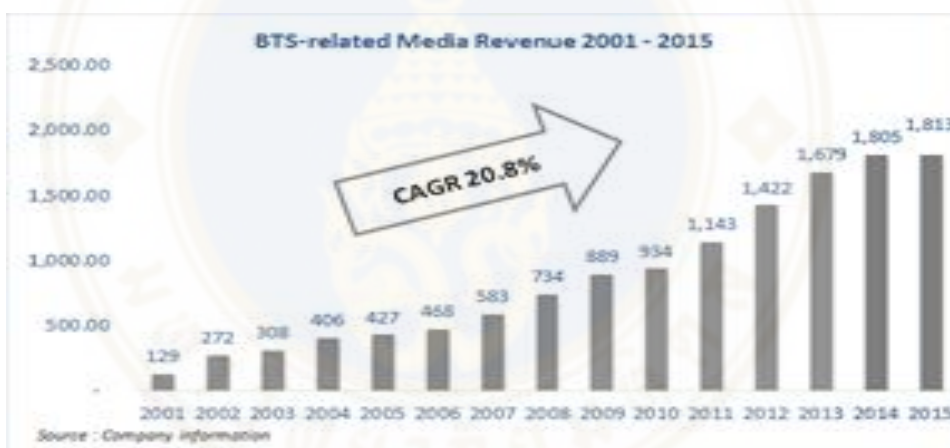
Source : BOT's MPR Dec 2016

2.6 DCF Assumptions



Source: Nielsen, Thailand

Figure 2.7 Growth in Mass Transit Ridership and the OOH media spending



Source: Company

Figure 2.8 VGI's Historical Revenue Growth (2001-2015)

Five-Year Projected Cash Flow Assumptions

Sales Forecast - the five-year projected cash flows are derived from increasing sales, from an increase of the BTS's passengers which is considered as an output of the company, an increase in the same media network and an aggressive in business expansion.

BTS-related revenue: A strong growth in ridership, new train capacity, expansion of the rail mass transit network and new advertising technologies are the main contributing factors to the growth of BTS-related revenue. The BTS's total ridership growth in past 5 years and past 10 years were on average was 10.14% and 6.06% respectively. There are also a mega projects and route extension of mass transit which will feed more on the passengers. Under BTS-related revenue, it can be divided into 2 source of income, BTS mass transit revenue and merchandising revenue. The growth of BTS-related revenue mainly drive from continuously increasing on the number of ridership while the selling price is expected to slightly increase.

Office Building revenue: VGI will continue to grow its footprint in major office building throughout Bangkok. The revenue growth is driven by the expansion of the network to 160 buildings in 2016 and reaching 200 units in next 2 years, as well as an increase in selling prices by 7% according to the growth from the previous year rate. As a portion of MACO towards VGI revenue distribution as 25% from a fully controlling on the Board of Directors, we do roughly forecast in this segment by using an average revenue growth in the past 5 years historical data. The conservative growth rate is 5% (average 5 years historical growth rate).

Strong and increasing margins - Gross profit exhibits an increasing and stable strong fundamental. For an increasing in gross profit to around 67% in the next 5 year forecasting, the overall cost of services are decreased due to the termination of a modern trade segment which its cost was 75% of the total revenue. This effect to the margin improves. In addition, the company obtains the sole rights to manage advertising on the BTS Sky Train with a specific rate on concession fee. Thus, we are confident that the company will maintain a high margin level.

SG&A grows in line with sales revenue - The percentage of SG&A has been constant for over 5 years. With the trend and the company, historical data shows the percentage in 2% and 11% in selling expense and administrative expense respectively. However, since the company needs to consolidate the financial statement with MACO, starting this year, the average growth rate of SG&A will slightly increase by 1% from 9% to 10%. Trend and historical data suggest us to convince that the company has ability to strictly control the SG&A in line of company expenditure.

CAPEX - In the year 2016, the company announced to acquire an additional 12.46% of MACO from an existing shareholders and others acquisition. The estimated investments are THB 412.5mn and THB 439mn for MACO and its subsidiary. Moreover, there will be CAPEX on the company management with an approximately THB 150mn each year during 5 years projected.

Terminal Value - The perpetual growth of 5% is an organic growth of the company only in the BTS-related revenue. The growth rate based on 5% projected growth rate in ridership for only core line BTS Sky Train. According to the 3.0% projected in GDP of Thailand in the next 5 years by International Monetary Fund (IMF), we are certain that the selling price will not be in negative and the company will able to attain 5% perpetual growth rate.

Weight average cost of capital, WACC - The Cost of Equity was calculated by the CAPM model, using the 10-year government bond risk-free rate of 2.74%, the expected market return of 7.96% from Page Stern (Aswath Damodaran) and adjusted beta of 0.752 (Bloomberg) to reflect the Cost of Equity of 8.73%. Meanwhile, the cost of debt after tax is 3.0% from an interest rate of 3.75% (company data). The WACC is 8.49% by the weight between debt of 4% and market value of equity at 96%

Table 2.2 WACC calculation

Cost of Equity		Cost of Debt	
10-Yr Risk Free Rate	2.74%	Int. Rate	3.75%
MRP (Page Stern)	7.96%	Tax Rate	20%
Beta	0.75		
Ke	8.73%	Kd	3.00%
We	96%	Wd	4%
Weight Average Cost of Capital			8.49%

Source: Team's calculation

Table 2.3 DCF - Free Cash Flow to Firm (2016-2020)

FCFF	FY16/17F	FY17/18F	FY18/19F	FY19/20F	FY20/21F
	0Y	1Y	2Y	3Y	4Y
EBIT	1,373	1,499	1,599	1,696	1,799
Income Tax (20%)	(275)	(300)	(320)	(339)	(360)
EBIT(1-T)	1,099	1,200	1,279	1,357	1,439
Plus: Depreciation	174	135	132	132	134
Less: Capital Expenditures	(135)	(142)	(150)	(158)	(166)
Less: Increase in Net Working Capital	(216)	(536)	189	65	132
FCFF	1,624	2,013	1,371	1,581	1,608
Terminal Value					46,080
PVCF	1,624	1,856	1,165	1,238	34,424
Total Value of Firm	38,682.66				
Value of Debt	1,563.16				
Value of Equity	37,119.50				
# of shares	6,864.00				
Expected Share Price	5.41				
Current Price	5.30				
Upside	2.03%				

2.7 Income Statement

Table 2.4 Income Statement, Including Projections

Key Assumption	Method	Assumption	FY14/15A	FY15/16A	FY16/17F	FY17/18F	FY18/19F	FY19/20F	FY20/21F
					Y0	Y1	Y2	Y3	Y4
Total Operating Revenue			2,962.69	2,105.73	2,894.39	3,175.63	3,385.45	3,582.77	3,792.32
Interest Income		13.74%	47.23	42.11	49.00	67.98	67.98	67.98	118.00
Total Operating Revenue			3,009.92	2,147.84	2,943.39	3,243.61	3,453.43	3,650.75	3,910.31
Cost of Service									
BTS-related	% of Sale	-24%			(448)	(478)	(506)	(536)	(568)
Office Building and other	% of Sale	-54%			(160)	(219)	(248)	(266)	(284)
Outdoor Media (MACO)	% of Sale	-47%			(352)	(373)	(392)	(411)	(432)
Total Cost of Service			(1,325)	(769)	(959)	(1,070)	(1,146)	(1,213)	(1,284)
SG&A									
VGI									
%SG&A to sales	% of Sale	-2%	(72.95)	(52.62)	(47)	(52)	(56)	(59)	(63)
%Admin to sales	% of Sale	-11%	(344.07)	(309.81)	(324)	(355)	(378)	(401)	(424)
MACO									
%SG&A to sales	% of Sale	-9%	(62.68)	(22.60)	(64)	(68)	(71)	(75)	(79)
%Admin to sales	% of Sale	-17%	(131.32)	(68.47)	(128)	(135)	(142)	(149)	(157)
Total SG&A					(562)	(610)	(648)	(684)	(722)
Earnings before Interest and Tax (EBIT)			1,065	1,156	1,373.38	1,495.32	1,591.98	1,686.38	1,786.78
Interest Expense	% of total Int bearing debt	2.15%	(9.85)	(11.42)	(18)	27	6	1	0
Earnings before Tax (EBT)			1,055	1,145	1,355.32	1,521.94	1,598.14	1,687.12	1,786.78
Tax Expense	% of EBT	-20%	(217.70)	(204.05)	(271)	(304)	(320)	(337)	(357)
Net Income before MI			838	722	1,084.25	1,217.55	1,278.51	1,349.69	1,429.42
Minority Interest		37%			(679)	(762)	(800)	(845)	(895)
Net Profit after MI					405.73	455.61	478.42	505.06	534.89
Dividends	Company Policy	50%	(965)	(515)	542.13	608.78	639.26	674.85	714.71

2.9 Financial Ratios

Table 2.6 Summary of Key Financial Ratios

Financial Ratios VGI	Formular	2011/FY 2012 (A)	2012/FY 2013 (A)	2013/FY 2014 (A)	2014/FY 2015 (A)	2015/FY 2016(A)
ROA (Percentage)	Profit Margin*Tax efficiency*Total asset turnover	21%	47%	43%	28%	30%
Profit Margin (Percentage)	EBIT*(1-Ts)/Sales	15%	32%	36%	29%	44%
Tax Efficiency (Times)	EBIT*(1-Ta)/EBIT*(1-Ts)	0.93	0.99	1.01	0.99	1.03
Total Asset Turnover (Times)	Sale s/Avg.Total Asset	1.50	1.46	1.19	0.98	0.66
ROE (Percentage)	ROA*Earning Leverage*Capital Structure Leverage	95%	86%	61%	44%	46%
ROA (Percentage)	NOPAT/Avg.Total Asset	21%	47%	43%	28%	30%
Earning Leverage (Times)	NI/NOPAT	1.00	1.00	1.00	0.99	0.99
Capital Structure Leverage (Times)	Avg.Total Asset/Avg.Equity	4.48	1.84	1.41	1.59	1.57
Turnover Ratios						
Asset Turnover (Times)	Sale s/Avg.Total Asset	1.50	1.46	1.19	0.98	0.66
Fixed Asset Turnover (Times)	Sale s/Avg.Fix ed Asset	8.68	8.09	4.51	2.71	1.70
Inventory Turnover (Times)	Sale s/Avg.Total Asset	0.00	0.00	0.00	0.00	0.00
AR Turnover (Times)	Sale s/Avg.AR	4.08	4.92	4.93	5.3	4.6
AP Turnover (Times)	COGS/Avg.AP	2.77	3.99	8.17	8.79	5.61
Short Term Liquidity Risk						
Current ratio (Times)	Current Asset/Current Liabilities	0.96	2.71	2.14	0.73	1.02
Quick ratio (Times)	Cash+ST invest+AR/Current Liabilities	0.85	2.54	2.05	0.69	0.89
Receivable s Collection Period : RCP (DAY)	365/AR Turnover	89	74	74	69	80
Payable s Deferral Period : PDP (DAY)	365/AP Turnover	132	91	45	42	65
Cash Conversion Cycle : CCC (DAY)	ICP+RCP-PDP	-43	-17	29	28	15
Long Term Solvency Risk						
Debt ratio (Percentage)	TL/TA	78%	29%	29%	44%	28%
D/E ratio (Percentage)	TL/TE	3.48	0.42	40%	80%	38%
Time Interest Earned (Times)	EBIT/Interest Expense	839	551	2101	108	101
Valuation Ratio						
EPS	NI/No. of share	0.28	0.30	0.33	0.12	0.14

2.10 VGI 's share prices performance vs. SET and Media

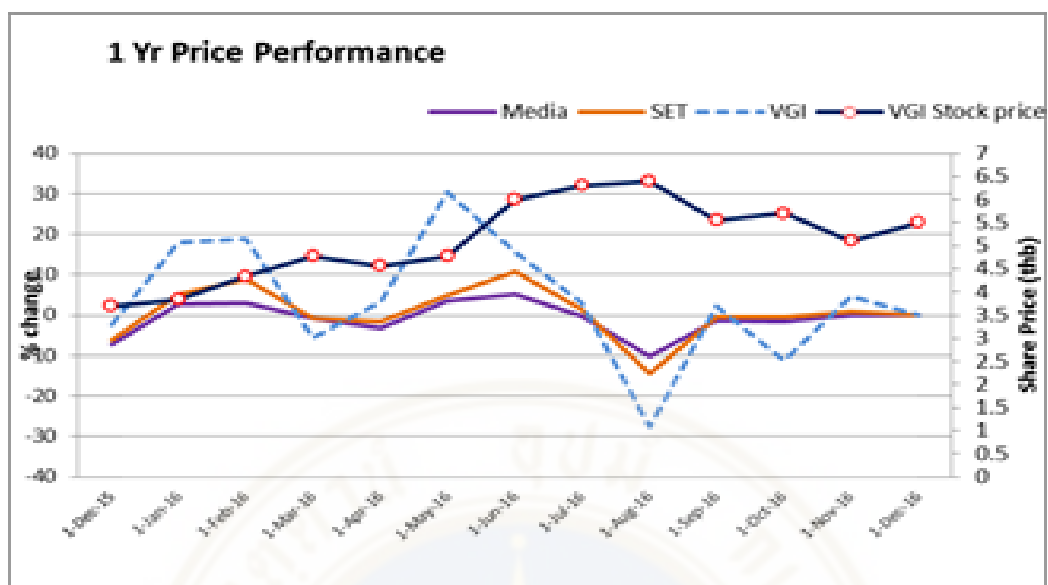


Figure 2.9 Share Price Performances

Source: SET

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