

**DISCOUNTED CASH FLOW VALUATION OF DIAMOND
BUILDING PRODUCTS PUBLIC COMPANY LIMITED**



**A THEMATIC PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
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COLLEGE OF MANAGEMENT
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entitled
**DISCOUNTED CASH FLOW VALUATION OF DIAMOND
BUILDING PRODUCTS PUBLIC COMPANY LIMITED**

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DISCOUNTED CASH FLOW VALUATION OF DIAMOND BUILDING PRODUCTS PUBLIC COMPANY LIMITED

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ABSTRACT

This thematic paper aims to value the stock price of Diamond Building Products Public Company Limited (DRT) base on discounted cash flow valuation method which has the concept that stock price of the firm should reflect its fundamental value in term of cash flow, growth and risk. Together with upside economic conditions and rising in government expenditure enhance DRT opportunity to grow not only for domestically but throughout ASEAN especially for CLMV countries. The result as year ended 2016 target price of DRT shall approximately equal to 5.69 Baht per share while the current price settles at 5.15 Baht per share; therefore, the valuation is indicative to BUY. However, such an operation is not without risk. Various raw materials still rely on third parties as well as pending regulation on limitation uses of asbestos in Thailand can impact to company operation activities. In conclusion, the valuation study is to suggest company intrinsic value which the method still has some limitations. Therefore, the value must be looked carefully. However, the study can still provide guidance on processes of intrinsic valuation for investors and interested person in material construction companies.

KEY WORDS: DRT / Valuation / Discounted Cash Flow / Construction Material

54 pages

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LIST OF ABBREVIATIONS



CAGR	Compound Annual Growth Rate
CAPM	Capital Asset Pricing Model
CAPEX	Capital Expenditure
COGS	Cost of Goods Sold
DCF	Discounted Cash Flow
D/E	Debt/Equity
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxes and Depreciation
EPS	Earning per share
FDI	Foreign Direct Investment
FED	Federal Reserve Bank
GDP	Gross Domestic Product
IMF	International Monetary Fund
NOPAT	Net Operating Profit after Taxes
NOWC	Net Operating Working Capital
Rf	Risk free
ROA	Return on Assets
ROE	Return on Equity
SET	Stock Exchange of Thailand
SG&A	Selling, General and Administrative Expense
YOY	Year on Year

CHAPTER I VALUATION

1.1 Highlights

1.1.1 Economic fundamental and valuation are indicative to BUY

Economic gradually return result positive signal for DRT as a cyclical stock. Additional with confidential of consumption, declining in household debt and rising income in agricultural sector bring back consumer purchasing power. Government stimulation is another support factor for market demand help faster economic recovery. Follow positive correlation with SET index, huge capital inflow will benefit DRT stock movement within similar directions.

1.1.2 Rising export channels is DRT driver from domestic volatility

Strong demand for construction material from neighboring countries increases opportunity for DRT export portion from 15% in 2015 to 20% in 2016. Export sector help compensate shrinking demand in Thailand. Hence, flexible distribution channels enhance DRT more competitiveness and reduce earnings volatility. Total export value count as 35% of Thailand total construction material export value; represent good perception from international market.

1.1.3 Sustainable business model with attractive dividend yield

Focusing on high margin products with benefit from main raw materials cost reduction, stable DRT profit margin and enable capability for competitiveness. Outstanding dividend yield of 5.42 percent compare with an average industry of 3.5 percent is the attraction for DRT. Strong balance sheet with low leverage proves company financial strength.

1.1.4 Stock repurchase signal stock undervalue

Cash utilization from share repurchase announcement will enhance higher earnings per share as well as dividend per share. Giving signal of stock undervalue might boost up demand for DRT stock incentive stock movement follow law of supply and demand.

1.2 Business Description

Diamond Building Products Public Company Limited (DRT) is established in 1985 with major shareholders is Myriad Materials, who bring DRT business know-how's and expertise in construction and property development market. DRT is a manufacturer and distributor of roofing products, boards and ceiling, siding boards, and other roof accessories as well as non-roof product. DRT also acted as service provider for roof stripping and installation under Diamond, Roof, Adams, and Jearanai. Three main production bases provide total capacity of 982,000 ton per annual. The company is a top three manufacturer and distributor of roofing product in Thai market with 92 percent of DRT total revenues are derived from sale of products which mainly from roofing products considered as 51 percent, Siding boards considered as 17 percent and board and ceiling considered as 16 percent.

Distributor channels can be divided into 4 segments which are agent, projects, modern trade and export. Majority of the sale comes from agent who carries approximately 60 percent while the rest are equally divided between modern trade, projects and exports (figure 2). DRT is using sale channel distribution mix adjustment which can be variable depending on economic situation; however, management aims to reallocate the total sale portion to 20 percent from international and 80 percent from domestic. DRT international market is 80 percent within ASEAN with main trade partner are Laos, Cambodia and Myanmar. Whereas main target customers domestically are live in rural areas which the market size considered as 40percent of total construction materials market.

Through management's vision of being better choice for construction material and services, DRT has been known as a high-quality brand for nearly 30 years.

DRT is ranking number three with total market shares of 15 percent and total market capitalization approximately THB 5,554 million.

1.2.1 Strategy

The company's main strategy is to increase sustainability growth and profit from new product development and value added as well as to generate wealth maximization throughout the society.

1.2.1.1 Strengthen competition capability – DRT's sustainability growth obtained from customer base maintaining and expansion. Excellence services and strong brand awareness are key focuses. Logistic system is provided with time efficiency (delivery within 24 hours), and safety enhance perception of high trusted quality brand of DRT. Extensive distribution network under "Everything in One concept" was provided to convenience customers. Strong and aged relationship with distributors nationwide is an important key of DRT's competitive advantage.

1.2.1.2 Production and cost efficiency – Value of money and customers' needs are company primary consideration. New products development was serve to satisfy with all needs e.g. new designs, functions and colors. Furthermore, production efficiency and cost monitoring is perform to enhance profit margin and prudent financial policies with strong financial balancing and flexibilities is obtained to drive sustainability.

1.2.1.3 Human resource strategy – Building and maintaining people within DRT to adhere to honesty and transparency, caring for their quality of life and safe living by development knowledge and capability in manufacturing and marketing skills shall propel the organization toward sustainable growth in both domestic and international market.

1.2.2 Management and Corporate Governance

DRT was place in various awards according to an assessment on corporate governance. DRT has achieved excellent group with five star award for the assessment of Corporate Governance, ESG 100 for outstanding of Environment Social and Governance as well as excellent for AGM Assessment Award with 100 point range in Annual General Meeting by Thai Investor Association. Assessment guided by Thai Institute of Director (IOD) and the Stock Exchange of Thailand has been followed with

total average total score of DRT is ranging between 85.9 percent and 99.6 percent. Five Criteria of IOD has been established as DRT operating guidelines.

1.2.2.1 Rights of Shareholders – Shareholders have rights of controls through the selection of Board of Director and have rights to decide on adverse or importance events.

1.2.2.2 Equitable Treatment of Shareholders – DRT will make sure that there'll be no advantages for insiders to take their own benefits.

1.2.2.3 Role of Stakeholders – Operating was perform under the code of conduct which accountable and respect to the rights of every group of stakeholders. Direction and information are surely derived to all stakeholders through various communication channels to make sure that everyone understand and proceed in same directions.

1.2.2.4 Disclosure and Transparency – Company information both finance and non-finance according to regulations of Stock Exchange of Thailand and Securities and Exchange Commission of Thailand has been sent out accurately and punctually through many easy accessible channels.

1.2.2.5 Board Responsibilities – Company has appointed clear responsibility and duty to each Board members which each member will not in a position of the board for more than three registered company and every member will be assessment at least once a year.

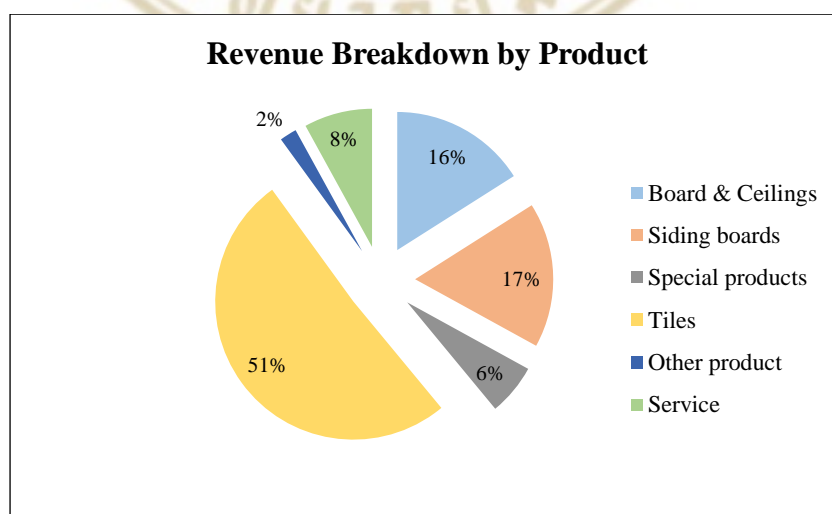


Figure 1.1 Product Revenue Classifications

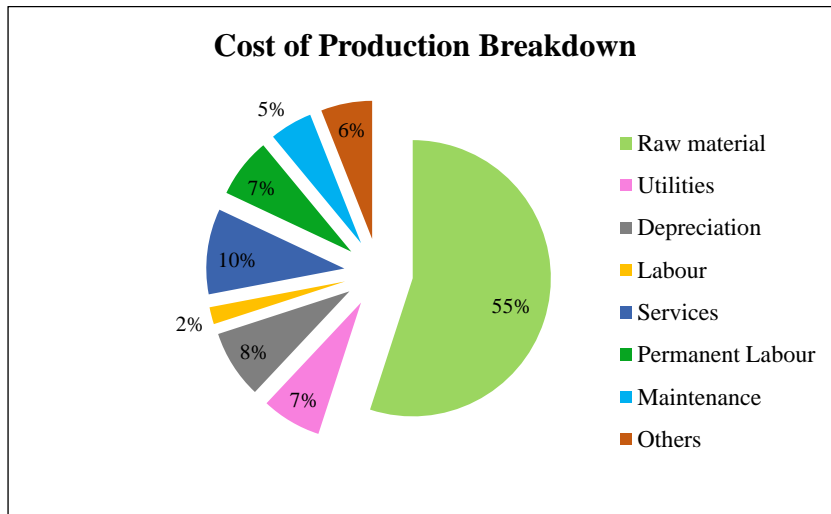


Figure 1.2 Cost of Production Breakdown

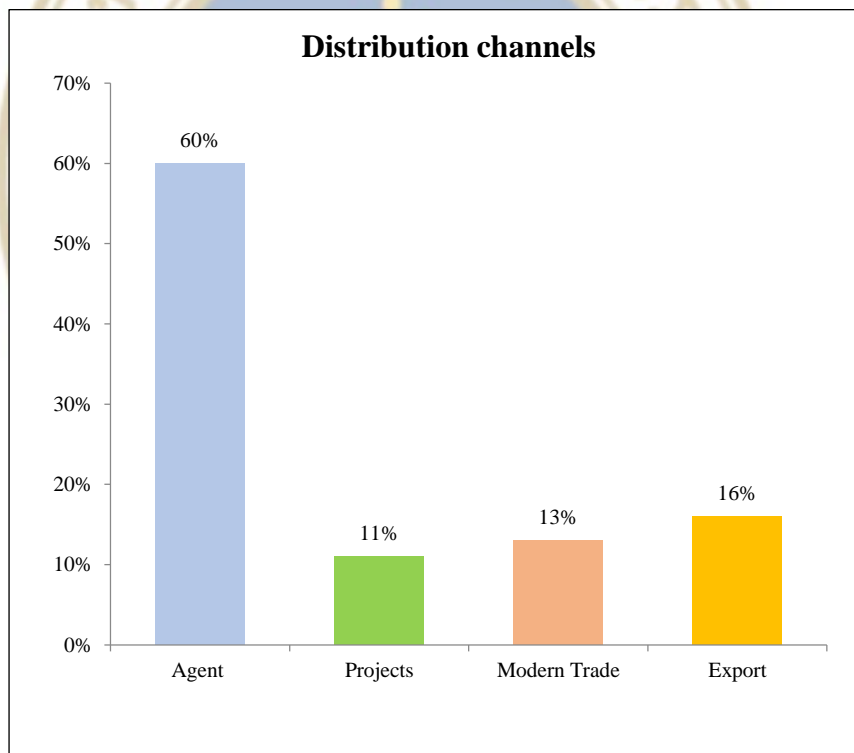


Figure 1.3 Distribution Channels

1.3 Macro-economic Analysis

Positive economic from domestic and international market shall support future growth for DRT

1.3.1 Good signal for economic recovering

Thailand economic struggles from weakened world economy, political instability and oil price declined. Private investment, household consumption and export have shrunk since 2015. Government spending as well as tourism sector has played important roles in bounced back economy. GDP has forecasted to be 3.2 percent in 2016 and 2017 from 2.8 percent with headline inflation at 0.3 and 2 percent respectively. Bank of Thailand still keep low interest rate to stimulate private investment. Recovery period shall start slowly by Q2'2016, public spending, private investment and tourism will become key drivers. Purchasing power of consumers will come back especially from agricultural sectors as drought was recovery from the second half of 2016 and debt from the first car policy will end within this year. In addition, statistic of household debt was lower than historical rate. Commercial bank's outstanding loan was in declining trend from 7.6 percent to 7 percent to 6.7percent and 6.3 percent from Q1'15, Q2,15, Q3'15 and Q4'15 respectively.

1.3.2 Improve in agricultural price and Approved measure to support farmers

Agricultural price overall focusing on 4 majors products forecasted to increase according to shrinking supply and drought recovery also raise up price of some agricultural products for instance Paddy, Jasmine Rice, and Sticky Rice. Paddy's price which considered as the major rice product in the market was rising at an average of 6.9 percent. Rubber price also increase due to demand supply mismatching, forecasted world demand for rubber is approximately 12.4 million ton, increase 1.7percent from 2015 while forecasted output is predicted to decline 1.5 percent from world total output. Palm price increase by 0.8 percent from Q2'16 and around 40 percent from 2015 forecasted price stay high around 5.50 -6.0 Baht per kg. While sugar price forecasted to continuously increase as world total production especially from India as biggest sugar production has lower output due to drought crisis while there is substantial de-

mand from food and beverage sectors. Thailand demand on sugar was 6.3percent rising from Q2 of 2016. Moreover, with market factors on price rising, Thai government also provide subsidiary to enhance farmers income especially for rice farmers. Total government subsidiary remains at total 53,252 million Baht in support rice farmers and set price floor for palm oil. Enhancing farmers income which considered as 33 percent of Thailand may also bring advantage to DRT as the main target customers come from this sectors.

1.3.3 Restructuring on china to prosperous society

China moving forward 2020 followed the 13th five-year plan by officially added Yuan for one of IMF's Special Drawing Rights currency basket help internationalizes Yuan as medium of international trade. Promote innovation and high technology, reform state own enterprise, and inclusive social welfare system aims to stabilize growth at average of 6.5 percent through 2016-2020. Outward investment has rose by 4 percent in 2015 and expected to increase fivefold by 2020 incentive by "One Belt, One Road" policy. Outflow investment will advantage ASEAN countries as an attractive hub of FDI. Infrastructure facilities shall be improved in preparation, promising demand for construction.

1.3.4 Best-Performing Emerging Market

India is the highest growth potential among other emerging markets, forecasted GDP growth at average of 7.7 percent and inflation of 5 percent p.a. Consuming class expected to become more than triple to 89 million household. India appeals to be another potential location for foreign investors and it's the world's ninth-largest manufacturing nation. By 2025, there will be 69 cities with population more than one million will be destination for economic concentrated with infrastructure building, more living areas, reliable utilities, etc. given vast opportunities available in infrastructure sector, tourism and retail industries. India remains an attractive market for export of goods from Thailand since 2004 after placing India-Thailand FTA, the bilateral trade has multiple eight times since 2000 to reach 7.92 billion USD in 2015.

1.3.5 AEC brighten future for ASEAN Economies

IMF forecasted to see high growth on emerging market. Top outstanding are Myanmar with GDP growth at 8.4 percent, Laos at 8 percent and Cambodia at 7.2 percent respectively. CLMV region (Myanmar, Laos, Cambodia and Vietnam) is an opportunity market for Thailand export and investment especially in retail, healthcare and real estate. CLMV is moving to urbanization, promising market with high purchasing power population expected to gather more than 660million in 2020 and more than 720million by 2030. FDI inflows continuously rose; developing Asia especially CLMV still remained the largest recipient with total amount increased approximately 40 percent in 2015. Construction for infrastructure development is demanded such as road and real estates. Tourism is one key drivers of CLMV economy. Expected future arrivals shall enhance demand for accommodations and infrastructure improvement, according to their Tourism master plan approximately 30,000-50,000 rooms for Cambodia, 5,000 rooms for Lao, 20,000 rooms for Myanmar and 500,000 rooms for Vietnam shall be increased within 2020 promising demand and opportunity for DRT export sectors.

1.3.6 Remains Bear market for Crude Oil

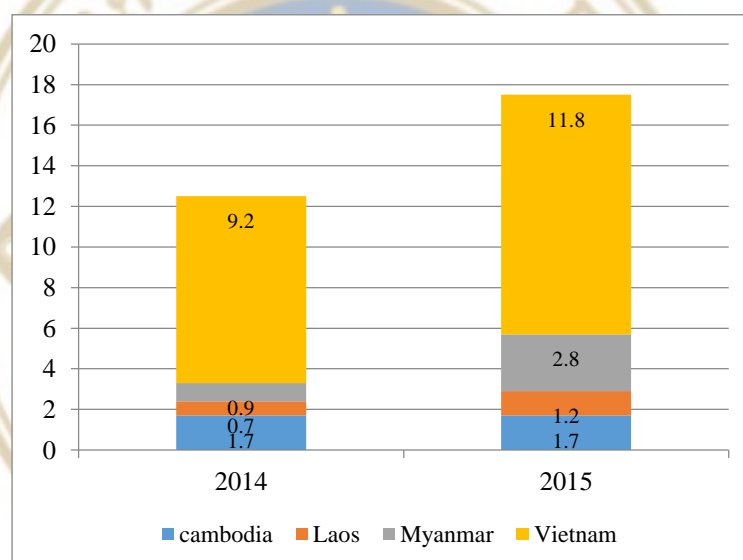
Over supply pressure down the oil prices forecasted to stay on an average of 45 – 50 USD/Barrel. OPEC still maintains production capacity at 39.66 million barrel per day make world supply of 96.74 million barrel per day. In addition, forecasted on interest rate hike from FED is another pressure for oil price which may result in lower price of gasoline.

1.3.7 Baht depreciation will boost up export

Baht forecasted on depreciation trend end 2017 at 37Baht per USD from 35.5Baht per USD in 2016 as a result from FED monetary policy resulting capital inflow to Thai market. However, depreciation will support export sectors. DRT export value of 35 percent from total Thailand construction material export value, money depreciation might move up export percentage of DRT.

Table 1.1 Nominal Farm Incomes

(%YoY)	2015	2016					
		H1	Q1	Q2	Q3	Aug	Sep
Nominal Farm Income	-9.5	-5.6	-12.3	2.3	12.5	6.8	12.4
Agricultural Production	-3.8	-5.3	-5.3	-7.4	-0.5	-7.2	4.0
Agricultural Price	-5.9	-0.3	-5.4	-5.4	13.1	15.1	8.0

**Figure 1.4 FDI Flow to CLMV Countries**

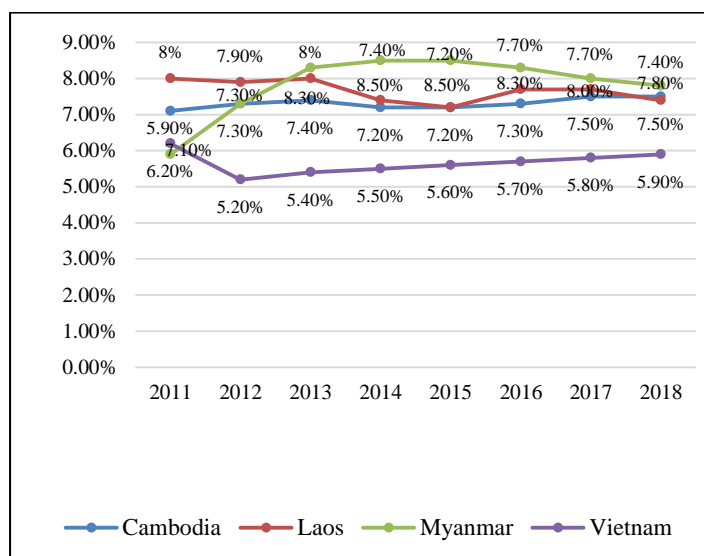


Figure 1.5 CLMV GDP Forecasted

1.4 Industry Analysis

1.4.1 Government Stimulation Incentive Demand for Construction Material

Government has approved on 20 infrastructure projects total value of 1.796 trillion Baht such as motorway, new BTS lines, 17 high-speed rails, airport terminal expansion for Suvarnabhumi, Donmuang and Phuket airports. This shall incentive private investment aligning with government expansion. K SME Analysis, forecasted that the total construction will worth around 692,600 – 708,500 million Baht in 2016 with approximately around 27.3percent increase from previous year. Government housing project as similar as private investment for residences and commercial area along the new lines of infrastructure will also boost up demand for construction material as well. In addition, with positive impact of tax exemption for first housing and mortgage fees reduction may increase demand for housing and residential. For housing project, rising land tax also provide higher bargain to acquire more land for further expansion which this are indirectly benefits to construction material company.

1.4.2 Renovation and Green Building Trend

54 percent rising in green building units per annual from 6 building in 2007 to 294 in 2016 due to benefits of energy saving and quality of living. This shall enhance more demand toward green materials e.g. timber, painting, tiles, etc.

1.4.3 Aggressive Competition on Modern Trade Bustle the Market

Various marketing campaigns from modern trade stores were launch out to attract customers, Thai Watsadu joint with Central on point reward sharing between The One Card and Thai Card while DoHome launched free shipping nationwide and invested new selling channel focusing on online market to target new generation buyers, and HomePro and Mega home launched discount campaign. Stores expansion is another key growth strategy of the modern trade stores which expected to have roughly 140 branches nationwide in 2016. New stores expansion will also increase number of selling channels for construction material products.

1.4.4 More rain than expected, prompted home renovation

More rain than expected, approximately 72percent higher than 2015 result flooding 14 provinces such as Ayuthaya, Chinat, Nakorn Sawan, etc. More than 50,000 home inundated as well as number of historical building and temple. Home renovation will go right after the flood ended, shall contribute higher demand for home construction materials.

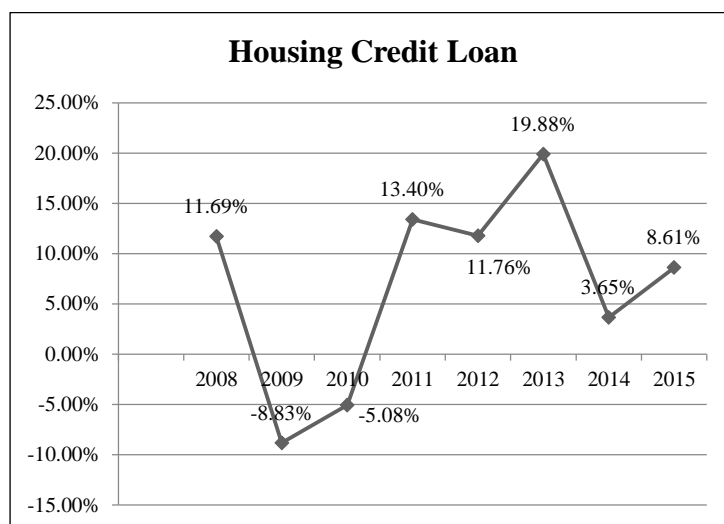


Figure 1.6 Housing Credit Loan

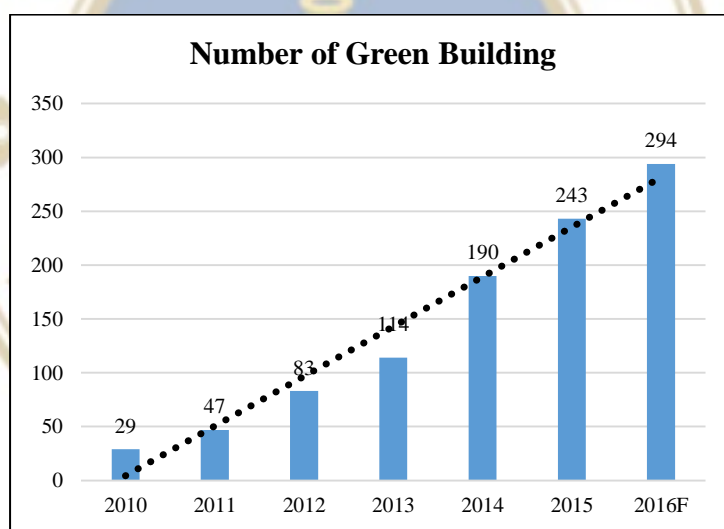


Figure 1.7 Green Building Units

1.5 Competition Positioning

Due to the nature of building construction material, Diamond Building Products (DRT) has to compete with various competitors, both in domestic and internationally. However, we have incorporated for the top 4 big players in the market; Siam Cement Group (SCC), Mahaphant Group (Ha-Huang brand), Kitemit Group (Oran

brand), and Diamond Building Products (DRT). By sales, Siam cement group is the leader, notably, competitors are seen often through modern trade, where DRT places its products through agent group (mom & pop) with over 6,000 agents which is the major distribution channel, subsequently with export channel and modern trade at Thai Watsadu, HomeWork, Siam Global House, DoHome, HomePro and MegaHome, over 90 branches and housing project group over 200 projects.

Export market is now one of DRT's growth strategies to expand sales revenue, as it distributes its core products through Asia in China, India, Taiwan, Philippines, Malaysia, and CLMV countries. Main country's exporting are Laos and Cambodia. DRT has its strong brand in Cambodia (in which it has 45% market share, the highest among Thai manufacturers' exports to the country) and Laos (20% market share), both market are familiar with construction materials produced by Thai manufacturers, especially in terms of roof tiles. By boosting these neighboring countries should help the growth in revenue for DRT. With the strong demand for construction materials resulting in an increase in trade abroad from 14.47 percent in year 2014 to 16.32 percent in year 2015. Moreover, sales to housing projects have been expanded to the provincial areas as several operators in the property sector have increasingly debuted several residential housing projects in the economic regional provinces. AEC channel is one of the distribution channels that tile businesses are looking for. This is due to its reliance on exports, which makes it less sensitive to the domestic economy.

Furthermore, DRT has organized training and development for the distribution agents to have capability and to support the stores and outlets for modern product arrangement and display to be more convenient for the consumers in choosing the products, and increase competitiveness for the domestic distribution agents Siam Cement Group is the biggest market share and it targets to all level buyers. Mahaphant group (Ha-Huang brand) is a closet peer as it targets mid-to high-income buyers. However, in modern trade, Mahaphant group (Ha-Huang brand) is channel on premium products such as tile – metallic color which offer the unique color product with high price, but in term of board/wall application in the name of Shera brand, the price is in medium range and higher than Diamond Building Products (DRT). The quality in tile products are similar based on market perception, the different among tile products

is the appearance, design and color. However, based on market survey, Diamond Building Products (DRT) is the most popular for consumers via modern trade.

1.5.1 TPI Polene rival into the market

Within the same mid-sized building material peers, Diamond Building Product (DRT) has confronted the similar difficulty in generating revenue growth among weak consumer demand but benefited from low energy cost from its costs efficiency and lower oil price in the market. The recent entering in building material sector from TPI Polene (TPIPL TB, NR) that competes in cement-related products for instant fiber cement, concrete roof tiles and AAC. TPI Polene entered to the market with lower price, however TPI offers limited ranges of products, resulted lesser options to consumers. Diamond Building Product (DRT) and also Mahaphant group (Ha-Huang brand) offer wider ranges of products. Market's perception on TPI is low price. Diamond Building Product (DRT) is aware on low price strategic; hence Diamond Building Product (DRT) protects its own market with the extension new product lines such as grooved siding board, ventilation board and fence, together with the strategic to increase for non-asbestos. These will differentiate from its competitors. Furthermore, with the strong brand, long term relationship with agents and the contribution on marketing campaigns will be able to compete with TPI Polene.

1.5.2 Competitive rivalry poses high impact on DRT

Our Porter Five Force's analysis implies intense and unfavorable competitive environment in the market. Despite, DRT encounters fierce competition in the market from existing competitive rivalry and new rivals, this increase the higher supply in the market. In addition, there is a low barrier to enter, high bargaining power of customers and threat of substitutes, price-sensitive to consumers. However, DRT its strength in own product innovation, variation and differentiation as these groups of consumer are exposed to various choices of materials and offers. DRT can still play a competitive role with competitive price and excellent service proposition.

1.5.2.1 DRT poses its strength among SET and building construction material market

Based on the key financial ratios, we found out that DRT posted its strongest in term of ROA, meaning the excellent efficiency on its operation reflecting the high revenue over the asset utilization. Moreover, when considering ROE, DRT also has the high ROE which is 18.56% for Q1-Q3 2016, even it is slightly lower than the construction material's sector but it still represents the growth and development since it dropped in 2014 from the sluggish economy and political turmoil. Likewise on Net profit margin, DRT had the slightly lower than its industry but it was still higher than the total market. Our view, this displays the company's strong profitability improvement.

In addition, when using DuPont Analysis method (Profit Margin x Total Asset Turnover x Financial Leverage), we also found out that DRT has high value in Asset Turnover and Financial Leverage while Net Profit Margin is slightly maintain on stable growth. Hence, the key factors for high ROE-DuPont of DRT are high in Asset Turnover and high in Financial Leverage.

1.5.2.2 Anticipating good opportunity in Tile market within competitive environment

We foresee the growth opportunity for tile business; this is due to several ease factors. First, the demand for office space has grown according to National Statistical Office (NSO), the permitted construction floor area for commercial and office buildings increased from YoY. Second, Thailand is investing heavily in the development of rail infrastructure, and has launched several mass transit routes. Projects currently under construction are The Bearing-Samutprakarn Green Line extension project is expected to be completed in 2017, while the Mo Chit-KhuKhot Green Line extension project is expected to be completed in 2018-2019.

In addition, DRT aims to boost domestic sales revenue via modern trade channels, to tap younger customer's purchasing habits. These consumers typically require total-solution services and this move should help mitigate the decreasing trend of purchasing products through traditional agent outlets. Apart from tapping young generation, to focus on the low-rise housing projects channel, especially that for

single-detached and townhouse units is another way to beat up the market and growth in this sector.

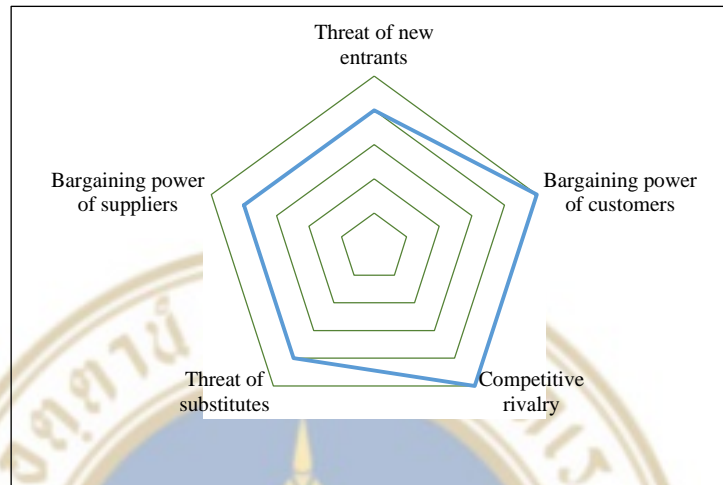


Figure 1.8 Porter's Five Forces

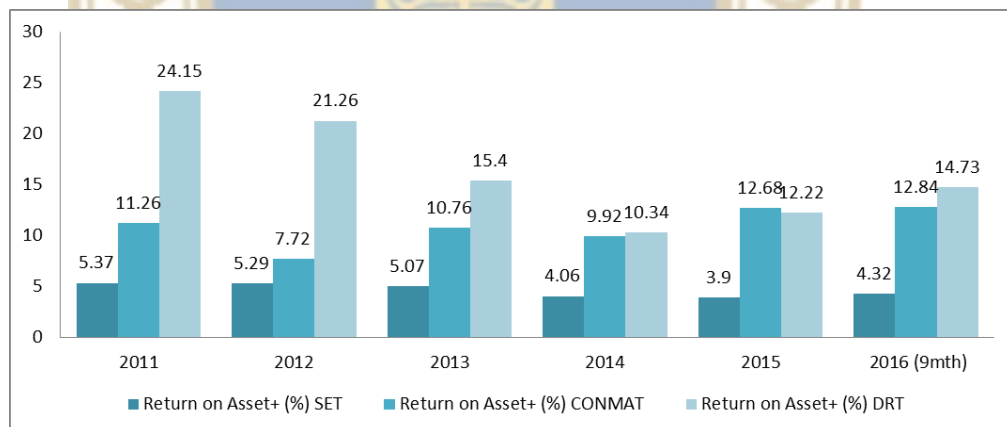


Figure 1.9 ROA Comparisons

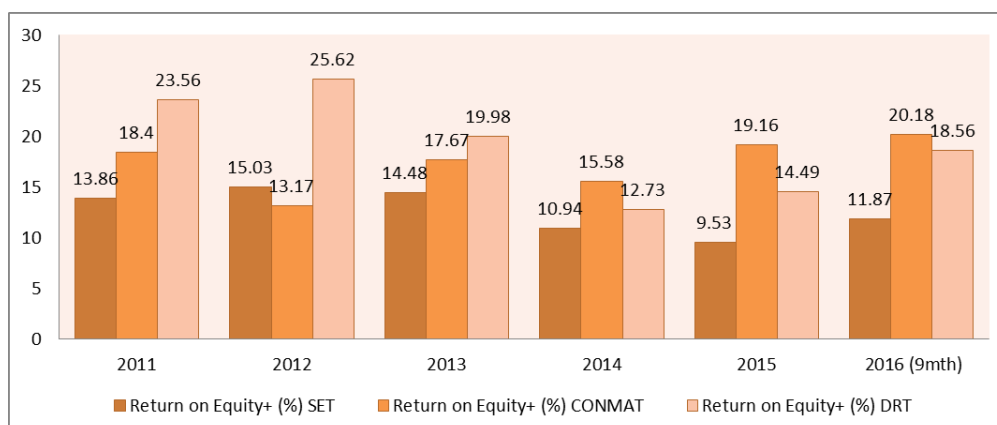


Figure 1.10 ROE Comparisons

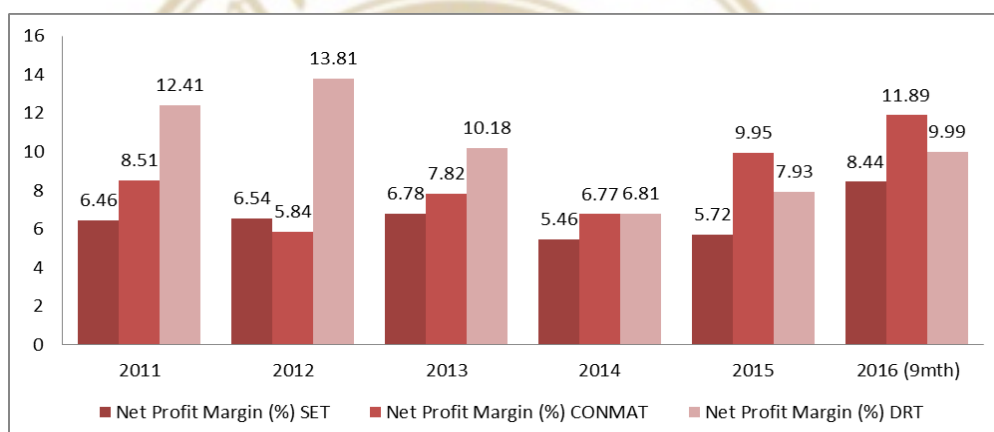


Figure 1.11 Net Profit Margin Comparisons

1.6 Investment Summary

1.6.1 Deliberate growth for 2016 but brighten future

With our analysis and assumptions, we expect an upside gain of 10.48% at the target price of 5.69 THB, under the DCF model (8.30% WACC and 1.77% terminal growth). DRT is significant worthy in dividend payout. We expect the dividend is at 0.31THB, which 2016 1st half year dividend declared at 0.15THB. In addition, we are positive in DRT position in regards to the market and economy.

1.6.2 Agent's sales through channel will remain for main revenue plus addition strong growth from export and modern trade channels for DRT's sales contributors

With our financial trend analysis, 2016 is projected to have lower revenue compare with 2015 due to the fact that slow down economy plus slump in agricultural price products which results in low-income households, however we expect to see the revenue growth in the 2017-2018 by 4.97% with the net profit 361 THB and 379THB respectively. The strong strategic growth plan by DRT's management team are continuous diversified its supply chain through export channel especially CLMV countries with targeted at 20% and correspondingly via modern trade channel to 15% growth. We consider the plan is doable due to the reputation and strong leading market share in Laos and Cambodia for export market and the yield from this sector will gain fast since the research has revealed its growth in housing sectors in these countries. With marketing strategies for push and pull through modern trade will support the growth for this channel as well. In addition, the management has seen the potential growth via siding board segment from 2016 performance, this will increase the revenue for DRT because siding board has good profit margin. Last but not least, upcoming year's performance will mainly increase by the housing projects, the passed infrastructure and transportation system from government budgetary. In addition, DRT set the strategic plan towards premium selling through wood synthetic products (floor and wall) and excellent services.

1.6.3 Cost per unit reduction and continuous improving on production process increase the margin

DRT's margin growth has been driven by lower costs of production and operation. The domestic raw materials are accounted approximately 55% which majorities are sands, cement-portland and fibrous prices have the decreasing trend YoY for 0.25 percent, 4.5 percent and 2.1 percent respectively. Though, we found out the increasing trend for asbestos in imported raw material by average of 5 percent YoY, however the portion imported products are accounted 38 percent only, but with total lower portfolio of production product using asbestos, hence this still implies for insignificant impact. In term of operation, lower price for oil and gas, it represents an op-

portunity and the ease environment which supporting the lower distribution and logistics costs. In addition, DRT has continuous reduced its operation costs with the cost reduction projects and improving the efficiency of existing operations with collaborative and initiatives from all staffs. These are the success factors for good net profit margin of DRT.

1.6.4 Strong distribution network and hub's warehouse in key regions allow the fast distribution and reach through customers

DRT has its long reputation in building construction market, long relationship through agents more than 6,000 shops which is one of DRT's competitive advantages and part of DRT's continued success, prompt production capacity & efficiency and the expansion of investment in distribution center in key region, Khonkaen, this will support the growth in demands and enhancing to reach through consumers.

1.6.5 A trusted brand among consumer's perception

Diamond Brand has been known as a high quality tile for nearly 30 years. Through its consistently seeking customer feedback and continuous product development, Diamond Brand is now one of the Thailand's most trusted brands in tile. Moreover, it has been awarded form ISO9001, Thailand Trusted Mark in 2015, the 2nd rank for the most trusted brand which improved from 13.69% in 2015 to 14.56% in 2016 (BrandAge magazine, February 2016) and the award from the Association of Siamese Architects under Royal Patronage of His Majesty the King : ASA.

1.6.6 High profitability and dividend yield

With greater ROE of approximately 19percent and ROA of above 10percent and trading at market average P/E. Consistency high EPS at average of 0.40 and attractive dividend pays out range 75-93% annually. DRT's dividend yield is rank top three from its industry at 5.47percent while average of the industry is around 3 percent.

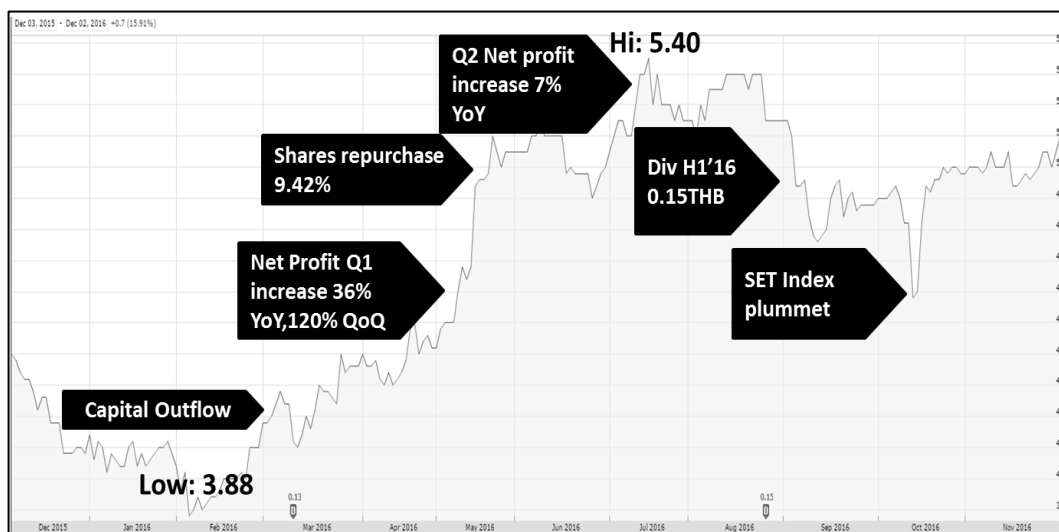


Figure 1.12 DRT's share price in last 12 months

1.7 Discounted Cash Flow Valuation

DCF is one of an appropriated valuation method as it will reflect the intrinsic value base on company foundation.

1.7.1 Three-Years Projected Cash Flow Assumptions

Thai economic recovery, rising farmer's income and reduction of household debt. Sale distribution portion expected to restructure by 20 percent from export sector, 15 percent from modern trade and project sector will wider more contribution channels and stimulate more sale to DRT. Sale growth was forecasted to grow according to 5 year historical CAGR at 4.7percent for 2017-2018 whereas the growth rate in 2016 will be slightly decline by -0.2 percent compare with year 2015.

1.7.2 Strong and maintain margin

Gross profit margin remains high at more than 25 percent from its historical and forecasted to stay approximately at same level. Throughout economic recession and sale downturn, DRT still be able to keep the satisfy net income as cost efficiency is one major consideration of the company, environment pollution reduction and paint production line improvement are helping the cost saving up to 10 percent

annually. Together with positive signal from lower price of the main raw materials, this shall wider future profit margin of DRT.

1.7.3 Reduction on SG&A expenses

SG&A expenses decrease from lower cost of goods claim and as an advantage from oil price reduction results in lower cost of logistic. However, we foresee that SG&A shall remain stable at similar level compare to sale as represented from historical trend.

1.7.4 Terminal Value Component Assumption

Since DRT performance much depending on economic factors for instance, purchasing power of consumer, GDP, Seasonal, etc. Therefore, we use the perpetual growth rate at 1.77 percent derived from average CAGR of household number from frequently flooding areas in Thailand which the sample provinces will have flooding frequency at least three times out of ten years. Hence, if there is no any construction expansion in the future, DRT shall still be able to obtain its sale from renovation sectors.

1.7.5 CAPEX

Projected CAPEX to be maintained at low level as total production capacity of 982,000 ton still be able to capture market demand. Therefore, instead of construct new manufacturing, DRT has focus more on machine and equipment development as well as research and development on cost efficiency. Two mains focus for DRT improvement are paint production line and improvement of manufacturing efficiency of existing machine to reduce environmental impacts.

1.7.6 Weighted Average Cost of Capital

The cost was calculated by the CAPM model, using the 10-years government bond risk-free rate of 2.6 percent, the expected market premium of 8.7 percent, and beta 0.8 calculated by Hamada equation. Then we shall get cost of equity at 9.56 percent while average cost of debt is 3.30 percent and tax rate 20 percent. Debt and

equity is weighted as 18.2 percent and 81.8 percent respectively. Therefore, the WACC is at approximately 8.30 percent.

Table 1.2 Cost of Equity

Cost of Equity	9.56%
Rf	2.60%
Risk Premium	8.70%
Beta	0.80

Table 1.3 Weighted Average Cost of Capital

WACC	8.30%
Kd (1-tax)	2.64%
Ke	9.56%
Weight of Debt	18.2%
Weight of Equity	81.8%

Table 1.4 Discounted Cash Flow Valuations

PV of FCFF	9,708
Less: Net Debt	(4,316)
Equity Value	<u>5,392</u>
# Shares outstanding	948
Value per share	5.69

1.8 Financial Statement Analysis

1.8.1 Strong cost efficiency, maintains high profit margin

DRT enjoys impressive profit margin every years and its EPS remain steady strong and projected at an average of 0.40 per annual.

1.8.2 Economic recovery signal positive growth on sale

Small decline in revenue from sales and services from 2,317million THB in first half of 2015 compare with 2,224million THB in first half of 2016 as a result of economic slowdown and downturn of agricultural sector. Nature of the revenue have a seasonal trend which mostly will generate higher on the first half of the year. However, we are expected base on macro-economic forecasting that sale will pick up in 2017 due to Thailand GDP growth, rising price of main agricultural products, real estate expansion, higher number of modern trade stores, prosperous CLMV economy, etc. Forecasted that sale will continue growth at approximately 4 percent per annual throughout 2017-2018 according to five years historical CAGR growth rate.

1.8.3 Net Profit Remains Stable

Goods expansion of export market and higher sale proportion of siding board products which contains high profit margin incentive DRT to remains satisfied net profit although there is a strong price competition on construction material market. Better management of production cost and inventory also lowering cost of production enhance higher gross profit which five year historical gross profit ratio is around 28 percent and net profit margin is at 10 percent.

1.8.4 Balance Sheet and Financing

DRT has consistency cash on hand and strong liquidity profile with the current ratio consistently exceeding 1.20. Inventory turnover was slightly rising by 1.4 percent along with movement from higher sale. In addition, diminishing decline of PPE rate by average of 3 percent as there is no mega expenditure of operation asset or manufacturing. Bank overdrafts and short term loans projected to increase especially in 2016 as DRT will need cash amount of THB 520 million for 100millions shares re-

purchase. Funding structure of DRT will be mainly based on Short-term debt of 85 percent and Long term debt around 15 percent. To lower leverage and ensure on financial flexibility, management has strategy of keeping debt per equity ratio at below 1.0x.

1.8.5 Well Balancing of Capital Structure

DRT has low D/E ratio indicating that the company has taken on relatively low debt and financing by its equity. It also implies the financially stable business and lower risky business. The company has low debt leveraging which result in low volatile earnings as a result of low interest expense. When looking into the same business in building construction, we found out that DRT has lower D/E ratio when comparing SET and Construction Material, hence DRT is considered as lower risky business in term of leveraging.

1.8.6 Cash Flow: High efficiency of operation

Cash conversion cycle has stable at 98 days with inventory turnover at approximately 80 days. DRT has credit term of approximately 30 days payable periods and 45 days of collection periods. DRT has maintains a level of cash and cash equivalents deemed adequate by management to finance the operations. Risk mitigations were also use to reduce effects of fluctuation in cash flows.

1.8.7 Common Size Analysis

Common size analysis will be focused on the latest published financial statement as of year ended 2015. The selected comparison companies are DCC, Q-Con and TGCI which these companies are in the same industry with similar size and business operation structure of DRT.

1.8.7.1 Statement of Income - Comparing DRT Income statement year ended 2015 with DCC, Q-Con, and TGCI. DRT performance was not very appreciated but if look more on historical (appendix 21) DRT operating performance on generating net income is quite satisfy compare with the competitor at around 10 percent.

1.8.7.2 Statement of Financial Position - With 100 percent of total asset, DRT hold huge percentage of account receivable compare with other competitors as most of DRT customers are retailers so providing them a credit term will rising DRT account receivable; however, its means that as higher as the AR, company can generate more sale. For inventory, it still pretty much as an average with the industry as DRT has good policy on inventory management. The company has low portion of cash and cash equivalent similar to others as excess cash will be used for products and operation development or generate to shareholders in form of dividend payment.

With 100 percent of total liability and equity, DRT capital structure is based mainly on equity with total of 65 percent compare with other companies like DCC and Q-Con, they are rely more on debt. Therefore, this enhances DRT competitiveness on lower risk as well as more capital flexibility. Proportion of short term and long term debt of DRT is similar to others which rely more on the short term rather than the long term loan.

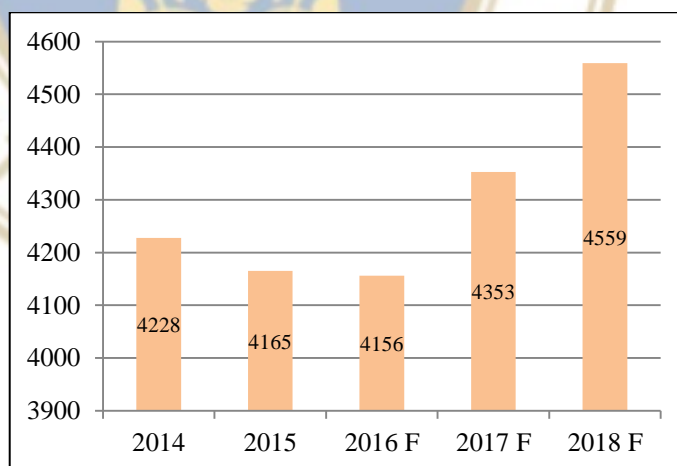


Figure 1.13 Sale Growths

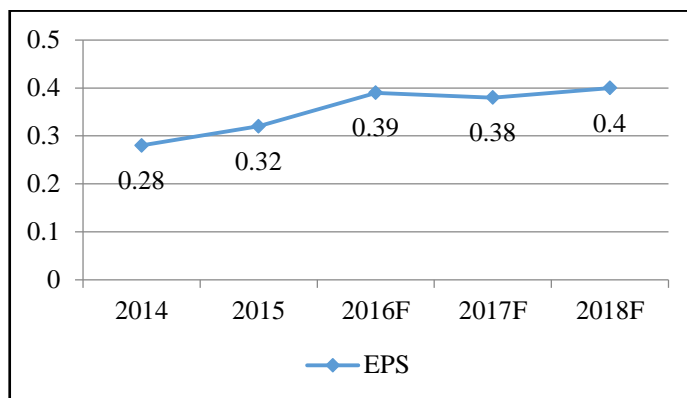


Figure 1.14 EPS Trend

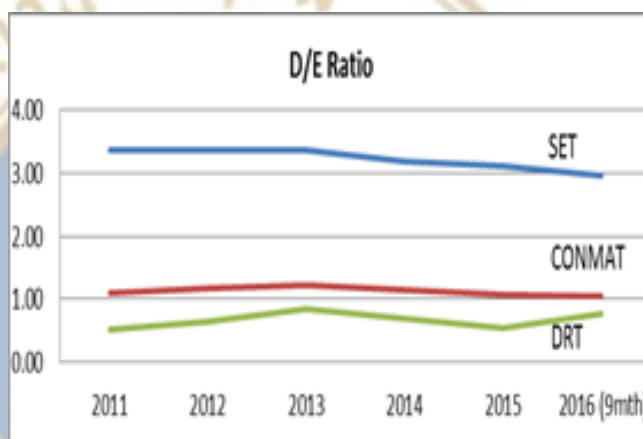


Figure 1.15 D/E Ratio Trend

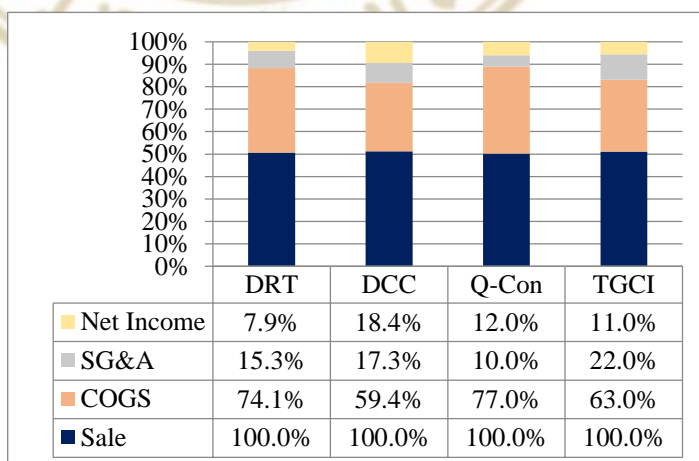


Figure 1.16 Income Statements

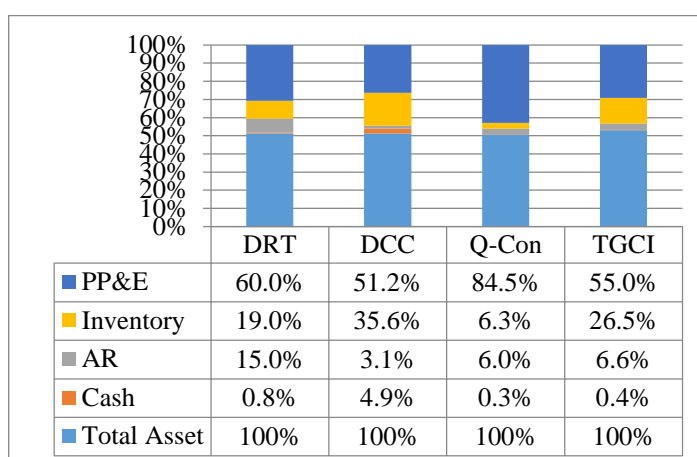


Figure 1.17 Statement of Financial Position (Asset)

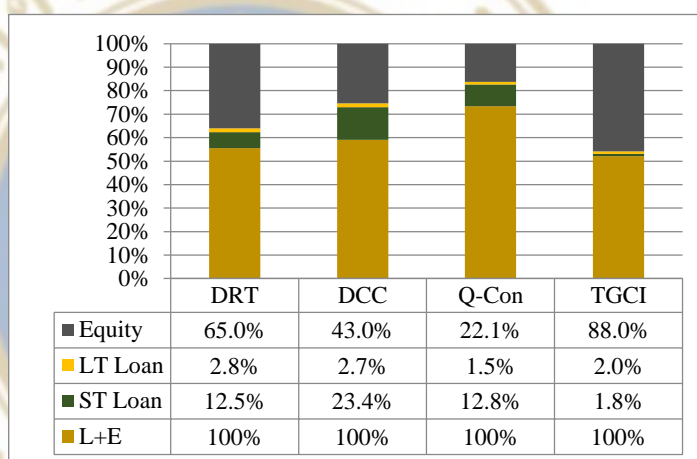


Figure 1.18 Statement of Financial Position (Liability and Equity)

1.9 Additional Upside Possibilities

1.9.1 Rising capital inflow to Thai market

Uncertainty on foreign economy, Fed still stable its interest rate and investor still curious on BREXIT and Europe's economy resulting in rising capital inflow to SET index with accumulated amount of 78,308.60 Million since January 2016.

1.9.2 Share repurchasing increase per share outstanding value

DRT decided for share repurchase program in June 2016, approximately 100 million shares or around 9.5% was being brought back as management believed that the current stock price was undervalued, this will enhance value of each share outstanding for instance, higher earnings per share and dividend per share.



Figure 1.19 SET Index Movements

1.10 Investment Risks

1.10.1 Macro-economic risks

1.10.1.1 Increasing minimum wages - Starting in 2017, The Central Wage Committee has agreed to increase the daily minimum wages throughout 69 provinces including where DRT manufacturing are located. This shall incur higher cost to DRT.

1.10.1.2 Thailand Political Transition - Election for Thailand prime minister shall be held in 2017 under a new constitution. This shall not guarantee on political instability situations. Therefore, if the situation continuously happens, it would lower investor confident as well as economic expansion.

1.10.2 Industry risks

1.10.2.1 Raw material shortage - DRT sources of raw material are rely more on third parties both domestic and international market. This arise incident which may affect DRT production such as natural disaster like flood or company strike. However, DRT has mitigate the risk by sources various distributor for similar

products and plan it ahead as well as maintain good relationship with strong credit reliability to the supplier.

1.10.2.2 Price competition - Price cutting is one competition strategy use to acquire some market shares from new enters which might shrink DRT profit margin. However, the company has prepared to capture more shares from neighboring countries which shall increase revenue allocation from international market.

1.10.2.3 Limitation use of Asbestos in Thailand - Termination of Asbestos used is being reviewed by the Ministry of Public Health shall impact company productivity especially for 4mm roofing tile. Although the company is developing new products without asbestos using, this still shall impact company cash flow. As the cost of operation will become higher and investing in new product and technology require huge capital.

1.10.3 Operation risks

1.10.3.1 Interest rate risk - Short term borrowing outstanding amount of approximately THB 323 million accounted for 59 percent are in floating interest rate. Therefore, it would incur higher cost to DRT if the interest rate was increase or weakening company financial position as incur higher leverage.

1.10.3.2 Liquidity risk - Shallow cash on hand might give the company difficult time if it's facing temporary cash flow problem. Higher cost of financing shall occur from higher debt issues. Company may have to sell out it owns asset which lowering company financial certainty.

1.10.4 Scenario Analysis

Assumption is based on the different rate of the terminal growth of DRT.

1.10.4.1 Best case assumption is making upon an accumulated average of domestic house units growth in flooding areas with average domestic and international inflation in proportion of 80:20 according to the portion of revenue earned which bring terminal growth rate of DRT approximately 3.78 percent. Therefore, keeping other factor constant stock price of DRT will equal to THB 9.47 per share.

1.10.4.2 Normal case assumption is based on the same assumption of the model which is the average CAGR of house units in flooding sample of 12 provinces giving the terminal rate of 1.77 percent and DRT stock price can be derived at THB 5.69 per share.

1.10.4.3 Worse case is assume there is no growth at all which means that in every year sale will be generate at the same level without any additional price increase from inflation. This is because currently there is an aggressive competition in construction material industry which rising price is very difficult for the company to do. In addition, due to difficulties of economy, many constructions were postpone and if look back on previous year growth rate is declining for last few years so for the terminal growth rate of 0 percent, this is possible to happen. Therefore, the stock price for DRT will be equal to THB 3.87 per share.

1.10.5 Sensitivity Analysis

Sensitivity analysis assume on the sensitivity of two variables which are weighted average cost of capital and terminal growth rate. The result shows that stock price has positive relationship with terminal growth rate which if the terminal growth rate increase then stock price will tend to increase. On the other hand, for WACC represent negative relationship with stock price where if WACC increase, stock price will be decreased. At current point where WACC is approximately 8.30 percent and terminal growth at 1.77 percent DRT stock price is equal to THB 5.69 per share. However, if WACC decline to 5.81 percent with terminal growth rate at 3.78 percent, DRT stock price will rise up to THB 26.6 per share.

Table 1.5 Risk Diagram

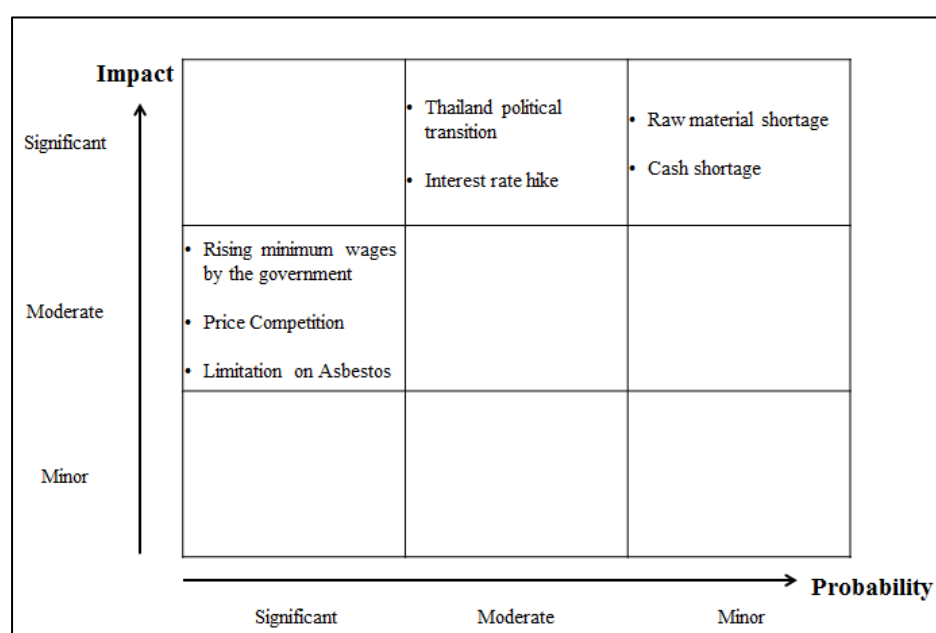


Table 1.6 Scenarios Analysis

Scenario Summary				
	Current Values:	Best Case	Normal	Worse Case
Changing Cells:				
Constant_Growth	1.77%	3.78%	1.77%	0.00%
Result Cells:				
Stock_Price	5.69	9.47	5.69	3.87

Table 1.7 Sensitivities Analysis

Sensitivity Analysis		Terminal Growth						
		1.73%	1.77%	1.95%	2.12%	2.30%	3.50%	3.78%
WACC	10.79%	2.83	2.86	2.97	3.09	3.22	4.22	4.51
	9.96%	3.58	3.61	3.75	3.90	4.06	5.35	5.72
	9.13%	4.49	4.53	4.71	4.90	5.11	6.80	7.30
	8.30%	5.64	5.69	5.92	6.18	6.44	8.75	9.47
	7.47%	7.11	7.18	7.50	7.84	8.20	11.52	12.61
	6.64%	9.08	9.18	9.63	10.12	10.64	15.76	17.58
	5.81%	11.86	12.00	12.68	13.42	14.23	23.04	26.60

CHAPTER II

DATA

2.1 DRT Business Structure

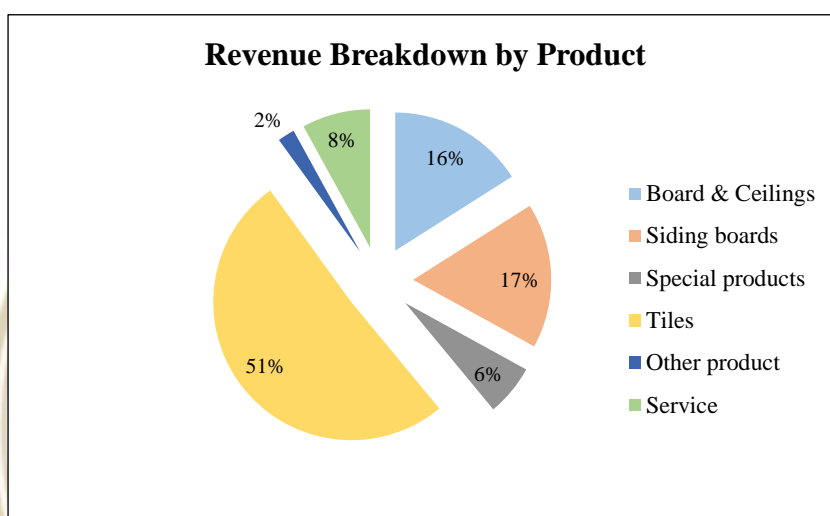


Figure 2.1 Revenue Structure

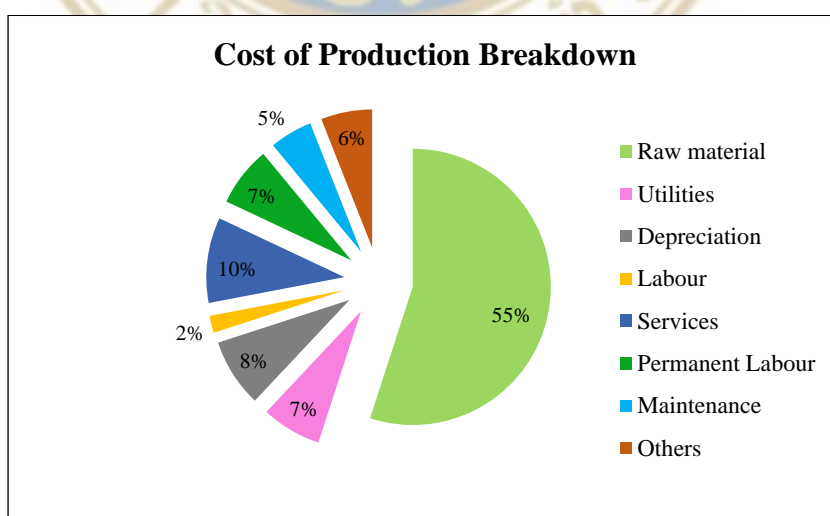


Figure 2.2 Cost Structure

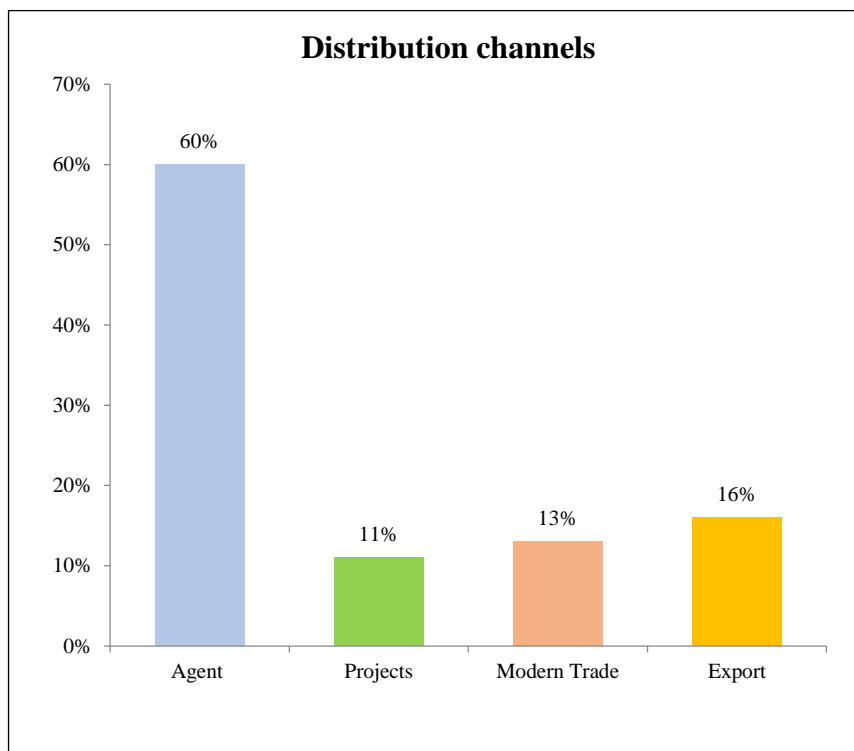


Figure 2.3 Distribution Structure

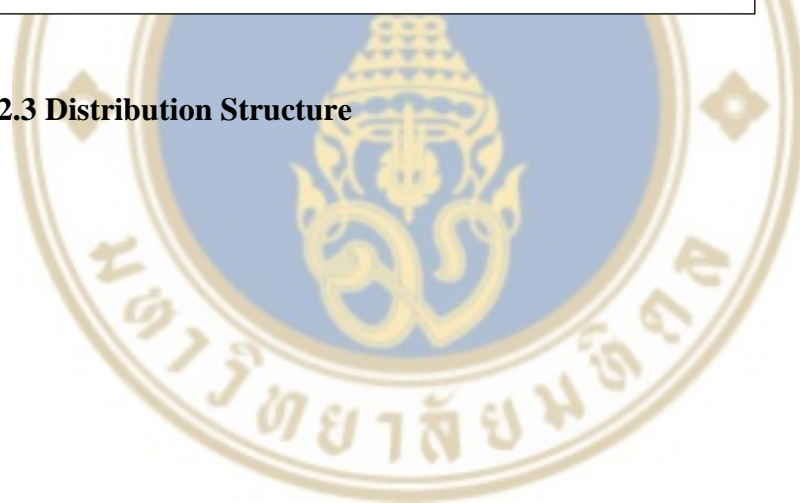


Table 2.1 Major Shareholders

Top 10 Major Shareholders(@30 Aug 2016)	Share	%
1.บริษัท มายเรียด วัสดุ จำกัด	557,847,900	53.23
2.บริษัท ผลิตภัณฑ์ตราเพชร จำกัด (มหาชน)	99,996,200	9.54
3.กองทุนเปิด บัณฑิตลงทุนระยะยาว	23,947,600	2.29
4.กองทุนเปิด บัณฑิตลงทุนระยะยาว 75/25	17,113,100	1.63
5.นาย ประกิต ประทีปเสนา	12,119,500	1.16
6.กองทุนเปิด บัณฑิตลงทุนระยะยาว	10,616,200	1.01
7.นาง ศิริวรรณ จึงธีรพานิช	10,000,000	0.95
8.กองทุนเปิด บัณฑิตลงทุนระยะยาวเพื่อการเลี้ยงชีพ	9,761,400	0.93
9.กองทุนเปิด บัณฑิตลงทุนระยะยาวเพื่อการเลี้ยงชีพ	9,370,200	0.89
10.กองทุนเปิด บัณฑิตลงทุนระยะยาวเพื่อการเลี้ยงชีพ	7,416,700	0.71

Table 2.2 Free-float

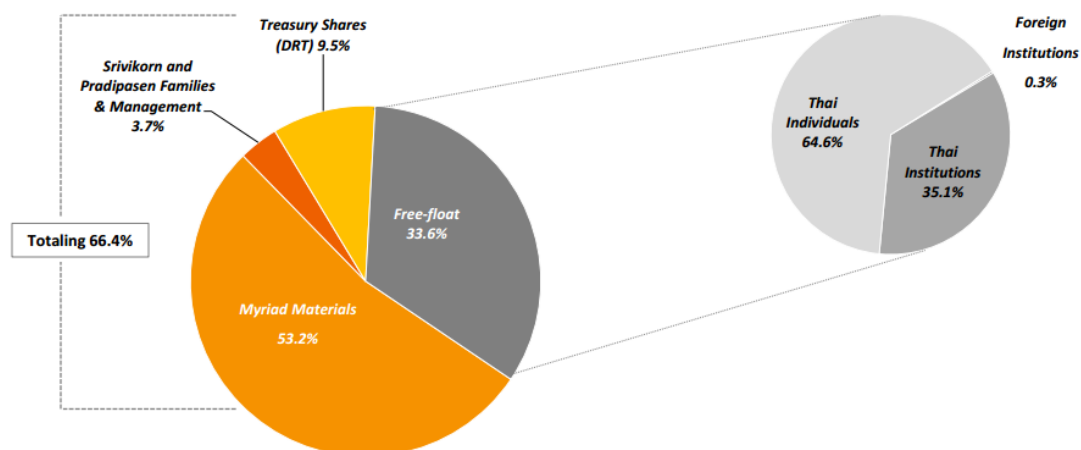
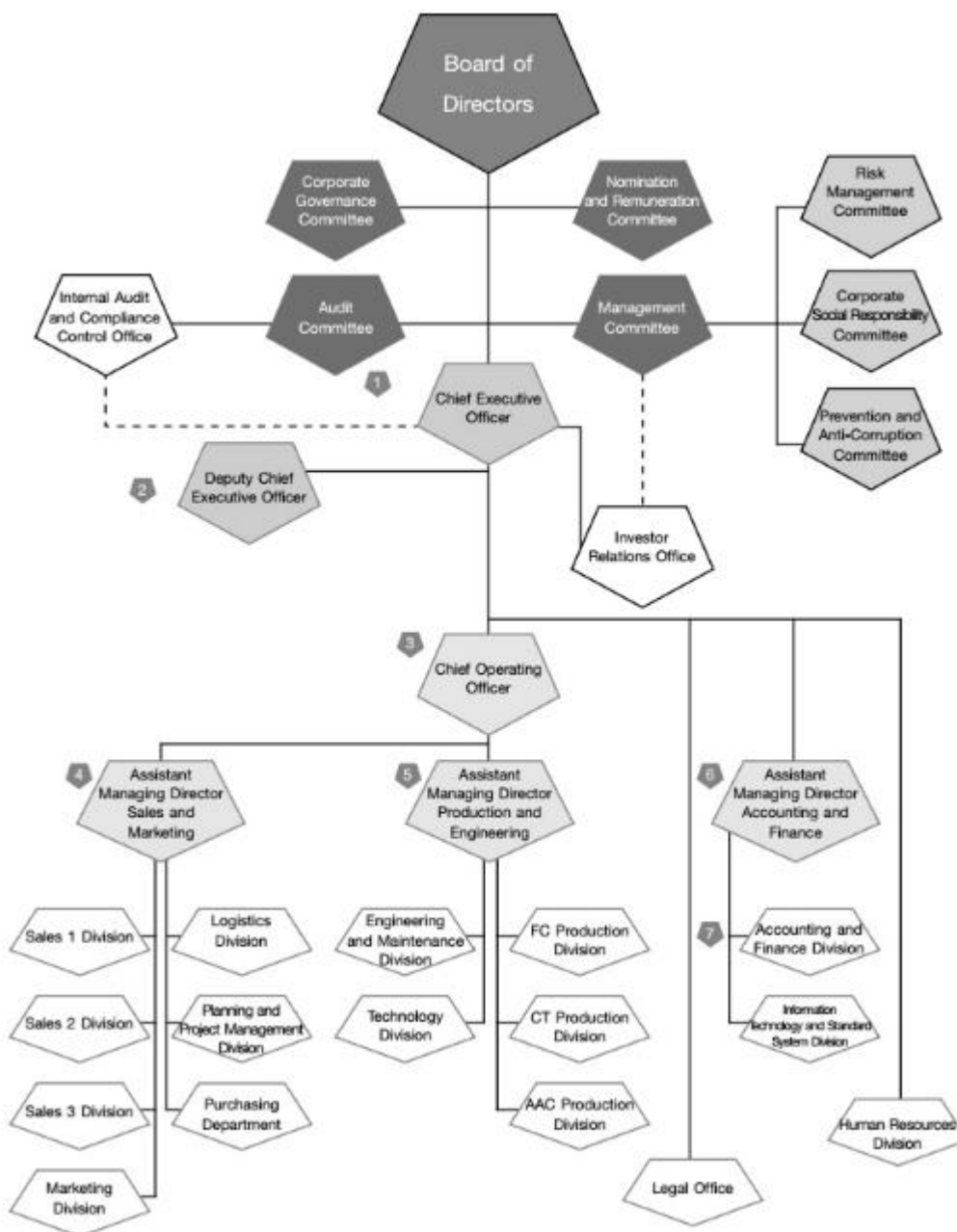


Table 2.3 Organization Chart



2.2 SWOT Analysis

Table 2.4 DRT SWOT Analysis

<p>Strengths:</p> <ul style="list-style-type: none"> • The 3rd largest roof tile manufacturer and distribution in Thailand • Strong brand awareness • Strong relationship with distributors • Reliable product delivery within 24 hours • Continuous improvement on products development 	<p>Weaknesses:</p> <ul style="list-style-type: none"> • Low production capacity from low customers' demand • Risk from interest rate volatility and unstable exchange rate
<p>Opportunities:</p> <ul style="list-style-type: none"> • Expansion to AEC and China • To capture the high growth of provincial market • Special incentive and Tax exemption for investing • Grow in construction nearby sky train and rapid transportation • Low oil price helps lower cost in business operation • Weaker THB supports export growth 	<p>Threats:</p> <ul style="list-style-type: none"> • High competition in the market for promotion and pricing • Substitute products for tile such metal • New rivals • Low agricultural price may result in slow demand for consumer goods

Strength:

1. DRT is one of the largest roof tile manufacturer and distributor. DRT has continued to grow through product improvement and development and gradual production expansion over decades. DRT has invested in many areas such as owned distribution center (DC), located in KhonKean with capacity of 40,000 ton/year, acquired an autoclaved aerated concrete (AAC) plant in Chiangmai with capacity 50,000 ton/year and launched a new production line of autoclaved aerated concrete (AAC) in

Saraburi with higher capacity of 892,000 ton/year and planning to open the new production line in Chonburi to support the growth journey, total capacity for 2016 is at 982,000 ton/year.

2. Strong brand awareness: Diamond Brand has been known as a high quality tile for nearly 30 years. Through its consistently seeking customer feedback, strong media & communication and continuous product development, the firm adds value to its products and brand. Diamond Brand is now one of the Thailand's most trusted brands in tile.

3. Strong relationship with distributors: DRT has marketed its products through traditional dealers (mom and pop shops). Its strong and aged relationship with these distributors nationwide is one of DRT's competitive advantages and part of DRT's continued success.

4. DRT values customer's satisfaction, this includes with great customer service through reliable product delivery with 24 hours with regular training on product handling and safety. Integrated system linking through production, inventory, purchase order and logistic. Free trainings for contractor's employees on product handling & safety pre-cautious.

5. DRT main focuses in consumer's needs and satisfaction, product variety and differentiation are the key to retain and enhance market base.

Opportunity:

1. To support the growth of AEC, government engages in and approves of massive projects, which pulls off a turn for construction industries. Well progression on infrastructure and sky train extension in different areas. Housing will be attracted to nearby space for transportation convenience.

2. One of DRT plans is to expand and capture key provincial area, especially the supported project from government's construction and housing.

3. With the incentives to invest in Thailand, supported by government for double depreciation expense for 2015-2016 for all companies that acquire new assets

during November 3, 2015 to December 31, 2016, the qualified assets are machinery, equipment, tools, computers, software, vehicles, and buildings (excluding land and buildings for residential purposes), this supports the growth journey of company to expand its business. In addition, triple R&D Tax Expense Deduction, a tax deduction up to 3 times will be granted for expense relating to R&D of technology and innovation. The incentive is effective for eligible R&D expenditures incurred from 2015 to 2019. (Royal Decree No. 598)

4. With the positive sign from government engages in and approves of massive projects, this pulls off a turn for construction industries. Well progression on infrastructure and sky train extension in different areas. Housing will be attracted to nearby space for transportation convenience and good opportunities for DRT to capture new demands via this sector.

5. With regards the on hold oil & gas price in the market, this helps the DRT business in logistic for the lower costs of transportation and distribution.

6. The weaker forex of THB will enable to support DRT to export more in AEC, China and Indonesia and the positive result for the increase in revenue.

Weakness:

1. Due to the slow demands in the market which has resulted from sluggish economy growth, this causes DRT has its production capacity approximately 72% and unfulfilled to utilize and maximize its assets and warehouses.

2. DRT has the risk from the exchange rate from its operation purchasing raw materials and selling its products through other countries, however DRT has managed the risk by foreign currencies exchange forward contract within one year, and by derivatives to manage the volatile of interest rate from long term loan, however, we foresee the potential risks from high fixed interest rate of long term loan at 2.49 - 3.67%

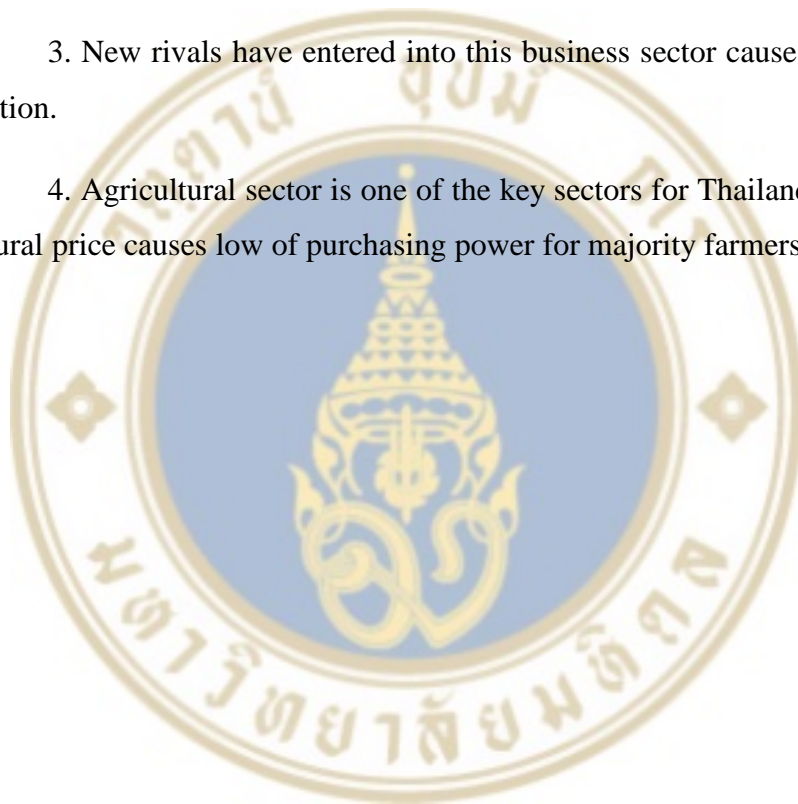
Threat:

1. DRT has faced the lower revenue from recent year due to the low demands within the market and high competition among sellers to capture the existing through intensive promotion and pricing campaigns.

2. DRT has its lower income from main core products, tile, and as a result of consumer's behavior has changed from tile to substitute products such as metal sheet which are lower price.

3. New rivals have entered into this business sector causes DRT has more competition.

4. Agricultural sector is one of the key sectors for Thailand economy. Low agricultural price causes low of purchasing power for majority farmers.



2.3 Five-force Analysis

Table 2.5 DRT Five-force Analysis

<p>Bargaining power of buyers (High) – Least favorable to DRT</p> <p>Due to the slowdown in economy and low agriculture price impact, it has reflected to the slow demands consuming in the building construction. Consumers are more secure with their purchase and postpone the purchase until it is necessary. They consider low price of products which are very competitive in the building construction market. A few price drops can cause the change in selling or easily change their decisions. Based on the sampling survey through the sellers in modern trades, consumers do not see the different of quality of Tile’s product; but price and appearance are matter. Consumers have more power to select products and it causes the pressure and intense to producers for price set up whether to follow the market or leading the market.</p>
<p>Competitive rivalry among existing competitors (High) - Least favorable to DRT</p> <p>Recent new rival entered to the market, TPI Polene who offers the lower price. TPI Polene is the existing producer in construction material but just extended their product lines to Tile’s segment. As mentioned, people are more careful on their purchase and sensitive to the pricing in the building construction market, this poses the high impact to DRT.</p>
<p>Bargaining power of suppliers (Moderate) – Favorable to DRT</p> <p>DRT has entered and stayed in building construction business for long, and it has the good relationship with suppliers. Supplier’s contract for fixed pricing and services are in place to avoid the fluctuation costs and the unexpected operation. Supplier has moderate to bargain due to DRT has high bargaining power due to its large volume purchase within the top 3 in building material construction.</p>
<p>Threat of new entrants (Moderate) – Favorable to DRT</p> <p>With supporting policies and regulations from the government such as Tax exemption for AEC producer who uses Thailand as a hub, it has encouraged more new entrance as well as strengthening the existing one. However, the new entrants in the construction materials would require the high capital investments such as land, factory, warehouse, distribution center and machines, we foresee that the new rivals are hard to enter in this sector but once they are in, it causes the high impact to DRT.</p>
<p>Threat of substitute products or services (Moderate) – Favorable to DRT</p> <p>With recent trend of consumers, they prefer to use zinc or metal tile as the substitute products than normal concrete tile because the price is much lower. However, the product life for metal tile is shorter. People who buy this metal tile product, they will use as the short-medium term building or temporary construction, but new housing, new building construction or housing construction project, concrete tile material is the most preferable.</p>

2.4 Income Statement

Table 2.6 Income Statement including projections

	2010A	2011A	2012A	2013A	2014A	2015A	2016F	2017F	2018F	2019F	2020F
Income Statement (Million THB)											
Revenue											
Sales of goods and rendering of services	3,304	3,693	3,884	4,402	4,228	4,165	4,156	4,353	4,559	4,640	4,722
Cost of goods sold	2,247	2,546	2,711	3,231	3,213	3,088	3,072	3,265	3,420	3,480	3,542
Gross profit	1,057	1,147	1,173	1,171	1,015	1,077	1,084	1,088	1,140	1,160	1,181
Other Income	21	14	70	27	22	9	9	10	10	10	10
Profit Before Expense	1078	1161	1243	1198	1037	1086	1,093	1,098	1,150	1,170	1,191
Selling expense	176	159	144	153	180	201	195	183	192	196	199
General and admin expense	294	338	382	438	442	434	414	434	454	462	471
SG&A Expenses	470	497	526	591	622	636	609	617	646	658	670
EBIDA	782	864	924	900	744	762	796	784	801	804	808
Depreciation and Amortisation	174	201	208	293	329	311	312	304	298	292	287
EBIT	608	663	716	607	415	450	484	481	503	512	521
Interest expenses	9	13	8	43	51	34	24	29	29	28	27
EBT	600	651	708	564	365	416	460	452	474	484	494
Tax	146	191	163	113	75	86	92	90	95	97	99
NET INCOME	454	460	546	451	289	330	368	361	379	387	395
EARNINGS PER SHARE	0.46	0.46	0.52	0.43	0.28	0.32	0.39	0.38	0.40	0.41	0.42

2.5 Balance Sheet

Table 2.7 Balance Sheet including projections

	2011A	2012A	2013A	2014A	2015A	2016F	2017F	2018F	2019F	2020F
Balance Sheet										
Asset										
Cash and cash equivalence	22	57	59	14	28	42	44	46	47	48
Marketable security	-	-	-	-	-	-	-	-	-	-
Account receivable	438	499	570	523	551	524	549	575	585	595
INVENTORY	692	632	796	675	682	703	736	771	785	799
Others	47	6	36	41	74	41	43	45	46	47
Total current asset	1,199	1,193	1,461	1,252	1,336	1,310	1,372	1,437	1,463	1,489
Plant, Property and Equipment (PPE)	1,582	2,288	2,638	2,404	2,143	1,951	1,899	1,862	1,826	1,791
LT investment	-	-	-	-	-	-	-	-	-	-
Others	312	163	141	135	114	112	109	107	105	103
Total non-current asset	1,894	2,451	2,779	2,539	2,257	2,063	2,008	1,969	1,931	1,894
Total Asset	3,093	3,644	4,240	3,791	3,593	3,373	3,380	3,406	3,394	3,383
Liabilities										
Bank overdrafts and short term loan	177	111	420	394	450	823	788	678	549	477
Current Portion of L/T Loan	75	170	250	400	288	100	48	98	143	135
Current Portion of finance lease liabilities	4	6	6	6	6	4	4	4	4	-
Account Payable	245	281	314	215	272	256	268	281	286	291
Other current liabilities	112	140	60	32	54	107	112	118	120	122
Total Current Liability	614	708	1,050	1,048	1,069	1,291	1,221	1,178	1,102	1,025
Long-term debts	358	649	816	418	100	145	147	137	122	108
Finance lease liabilities	13	13	8	8	18	13	9	4	-	-
Others	62	61	66	74	82	60	63	66	67	68
Total Non-Current Liabilities	433	723	890	499	200	205	210	203	189	176
Total Liabilities	1,047	1,431	1,940	1,547	1,269	1,496	1,431	1,381	1,291	1,201
Shareholder's Equity										
Paid-up Capital	1,027	1,038	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048
Premium on ordinary shares	138	153	166	167	167	167	167	167	167	167
Premium on treasury shares	159	165	165	165	165	165	165	165	165	165
Retain earning	725	857	921	865	944	1,018	1,090	1,166	1,243	1,322
Treasury shares	-	2	-	-	-	-	520	520	520	520
Total Equity	2,046	2,213	2,300	2,244	2,324	1,877	1,949	2,025	2,103	2,182
Total Liability and Equity	3,093	3,644	4,240	3,791	3,593	3,373	3,380	3,406	3,394	3,383

2.6 Statement of Cash Flow

Table 2.8 Statement of Cash Flow including projections

	2011A	2012A	2013A	2014A	2015A	2016F	2017F	2018F	2019F	2020F
Cash Flow Statement										
Net income	460	546	451	289	330	368	361	379	387	395
Depreciation and Amortization	201	208	293	329	311	312	304	298	292	287
Change in A/R	(71)	(61)	(72)	47	(28)	28	(25)	(26)	(10)	(10)
Change in Inventory	(285)	60	(164)	121	(7)	(21)	(33)	(35)	(14)	(14)
Change in A/P	102	36	33	(100)	57	(16)	12	13	5	5
Change in Other Current Assets	(14)	41	(31)	(4)	(34)	33	(2)	(2)	(1)	(1)
Change in Other Current Liabilities	(68)	28	(80)	(27)	21	53	5	5	2	2
Change in Other Non-Current Liabilities	55	(1)	5	8	8	(22)	3	3	1	1
Others	(65)	(137)	22	25	41	(613)	(231)	(240)	(235)	(235)
Operating Cash flow	315	720	458	688	700	123	394	395	428	430
Net CAPEX	(350)	(663)	(521)	(58)	(19)	(17.49)	(17.03)	(16.70)	(16.37)	(16.06)
Others	(190)	39	(49)	0	0	-	-	-	-	-
Investment Cash Flow	(540)	(623)	(570)	(57)	(19)	(17.49)	(17.03)	(16.70)	(16.37)	(16.06)
Free Cash Flow	(225)	97	(112)	631	681	105	377	379	412	414
Change in Share Capital	13	11	10	-	-	-	-	-	-	-
Change in Bank overdrafts and S/T	167	(66)	309	(26)	56	373	(35)	(110)	(129)	(72)
Change in Current Portion L/T	(24)	95	80	150	(113)	(188)	(52)	49	46	(8)
Change in Current Portion Financial lease	0	1	0	0	(0)	(1)	-	-	-	(4)
Change in L/T	275	291	167	(398)	(318)	45	2	(11)	(15)	(14)
Change in Financial lease	(4)	0	(5)	(1)	10	(4)	(4)	(4)	(4)	-
Change in Other L/T	55	(1)	5	8	8	(22)	3	3	1	1
Change in Premium on Ordinary Share	17	15	13	1	-	-	-	-	-	-
Change in Premium on Treasury Share	80	6	-	-	-	-	-	-	-	-
Dividend paid	(363)	(412)	(416)	(346)	(252)	(294)	(289)	(304)	(310)	(316)
Others	(27)	(4)	(49)	(64)	(58)	-	-	-	-	-
Financing Cash Flow	190	(62)	115	(675)	(666)	(91)	(375)	(377)	(411)	(413)
Net Cash flow	(35)	35	2	(45)	14	14	2	2	1	1

2.7 Financial Ratios

Table 2.9 Summary of key financial ratios

Financial Ratio	2011A	2012A	2013A	2014A	2015A	2016F	2017F	2018F	2019F	2020F
Short-term Liquidity Risk										
Current Ratio	1.95	1.69	1.39	1.19	1.25	1.01	1.12	1.22	1.33	1.45
Quick Ratio	0.75	0.78	0.60	0.51	0.54	0.44	0.49	0.53	0.57	0.63
Cash Conversion Cycle	107.31	94.13	101.69	97.45	96.79	99.11	98.34	98.34	98.34	98.34
Interest Coverage Ratio	52.77	93.61	13.99	8.20	13.12	19.82	16.72	17.43	18.06	19.30
Turnover Ratio										
Sale to Asset	1.19	1.07	1.04	1.12	1.16	1.23	1.29	1.34	1.37	1.40
Account Receivable Turnover	9.18	8.30	8.24	7.74	7.75	7.73	8.12	8.12	8.01	8.01
Account Payable Turnover	13.11	10.31	10.86	12.15	12.70	11.64	12.46	12.46	12.29	12.29
Inventory Turnover	4.63	4.10	4.53	4.37	4.55	4.44	4.54	4.54	4.47	4.47
ROA	14.9%	15.0%	10.6%	7.6%	9.2%	10.9%	10.7%	11.1%	11.4%	11.7%
Net Profit Margin	12.5%	14.0%	10.2%	6.8%	7.9%	8.9%	8.3%	8.3%	8.3%	8.4%
Asset Turnover	1.19	1.07	1.04	1.12	1.16	1.23	1.29	1.34	1.37	1.40
ROE	22.5%	24.7%	19.6%	12.9%	14.2%	19.6%	18.5%	18.7%	18.4%	18.1%
Dividend Yield	5.5%	5.3%	5.0%	6.5%	5.8%	6.1%	6.0%	6.3%	6.4%	6.5%

2.8 Assumptions

2.8.1 Terminal Growth Rate Assumptions

We base on the growth rate of housing unit in most flooding areas of Thailand which the sample provinces including Nakhornsawan, Sukhothai, Uttaradit, Phetchabun, Phisanulok, Pichit, Chainat, Singburi, Ang-Thong, Lopburi, Suphaburi and Ayutthaya. In this case, we assume that if there are none of any new construction at all, DRT shall be able to sale its products through building and housing improvement. Therefore, according to number of houses from The Bureau of Registration Administration, we shall compute the compounding annual growth rate which equal to 1.77 percent.

Table 2.10 Housing units trend

Year	2010	2011	2012	2013	2014	2015	CAGR
Number of House (Units)							
Nakhornsawan	362,499	368,737	376,391	383,867	390,771	396,323	1.80%
Sukhothai	192,669	196,052	199,359	202,791	205,789	204,173	1.17%
Uttaradit	153,413	155,686	157,937	160,077	162,042	164,179	1.37%
Phetchabun	309,206	315,547	322,166	328,410	332,641	338,356	1.82%
Phisanulok	296,807	302,934	309,602	316,448	322,221	328,517	2.05%
Pichit	172,913	176,236	178,119	181,980	184,895	187,595	1.64%
Chainat	110,438	112,618	115,328	117,840	118,401	119,742	1.63%
Singburi	69,040	70,306	71,590	72,712	73,718	74,359	1.50%
Ang-Thong	87,503	89,282	90,876	92,520	93,823	95,267	1.71%
Lopburi	257,115	262,446	267,673	273,039	277,071	281,004	1.79%
Suphanburi	261,992	268,094	272,653	278,254	283,486	287,985	1.91%
Ayutthaya	266,483	274,707	283,567	291,925	298,727	306,128	2.81%
Average Growth Rate							1.77%

2.9 Weighted Average Cost of Capital

2.9.1 Beta

DRT's beta was calculated by using hamada equation. Unleveraged beta represents market beta can be calculated from sample companies in the same industry of DRT which is material construction. The sample companies are Q-Con, DCC and TGCI because these companies have similar business operation and facing similar risk. Therefore, using DRT debt to equity of 0.22 and tax rate of 20 percent DRT leverage beta is approximately to 0.8.

Table 2.11 Beta Calculation

	2015	2014	2013	Average
Q-Con	0.61	0.41	0.94	
DCC	0.29	0.41	0.38	
TGCI	1.36	0.90	1.49	
Q-Con DE	0.11	0.16	0.21	
DCC DE	0.66	0.86	0.88	
TGCI DE	0.13	0.15	0.2	
Q-Con BU	0.56	0.36	0.80	0.50
DCC BU	0.19	0.24	0.22	0.22
TGCI BU	1.23	0.80	1.28	1.11
Average BU				0.61
DRT Beta estimation				0.80

2.9.2 WACC

The cost was calculated by the CAPM model, using the 10-years government bond risk-free rate of 2.6 percent, the expected market premium of 8.7 percent, and beta 0.8 calculated by Hamada equation. Then we shall get cost of equity at 9.56 percent while average cost of debt is 3.30 percent calculated from 5 years data average obtain by DRT actual interest expenses and interest bearing debt. Tax rate is 20 percent. Debt and equity is weighted as 18.2 percent and 81.8 percent respectively base on market value. Therefore, WACC of DRT is at approximately 8.30 percent.

Table 2.12 Calculation of WACC

Market Value of debt	1,086
Market Value of Equity	4,877
D/E	0.22
Wd	18.2%
We	81.8%
Rf	2.6%
Rm-RF	8.7%
Beta	0.80
Ke	9.56%
Kd	3.3%
Tax	20.0%
Kd(1-t)	2.64%
# shares	948
WACC	8.30%
g constant	1.77%

2.10 Appendix

Table 2.13 DCF Calculation

	0	1	2	3	4
	2016F	2017F	2018F	2019F	2020F
EBIT	484	481	503	512	521
Tax (20%)	97	96	101	102	104
EBIT(1-T)	387	384	403	410	417
D&A	312	304	298	292	287
Capital expenditure	(17.49)	(17.03)	(16.70)	(16.37)	(16.06)
Change in net working capital	63	(45)	(47)	(18)	(19)
Free cash flow	745	626	637	668	669
Terminal Value					10,421
Total		626	637	668	11,090
PV of FCFF		578	543	526	8,061
Total	9,708				
Net Debt	4,544				
Add: Cash	228				
Value of Equity	5,392				
Value per share	5.69				

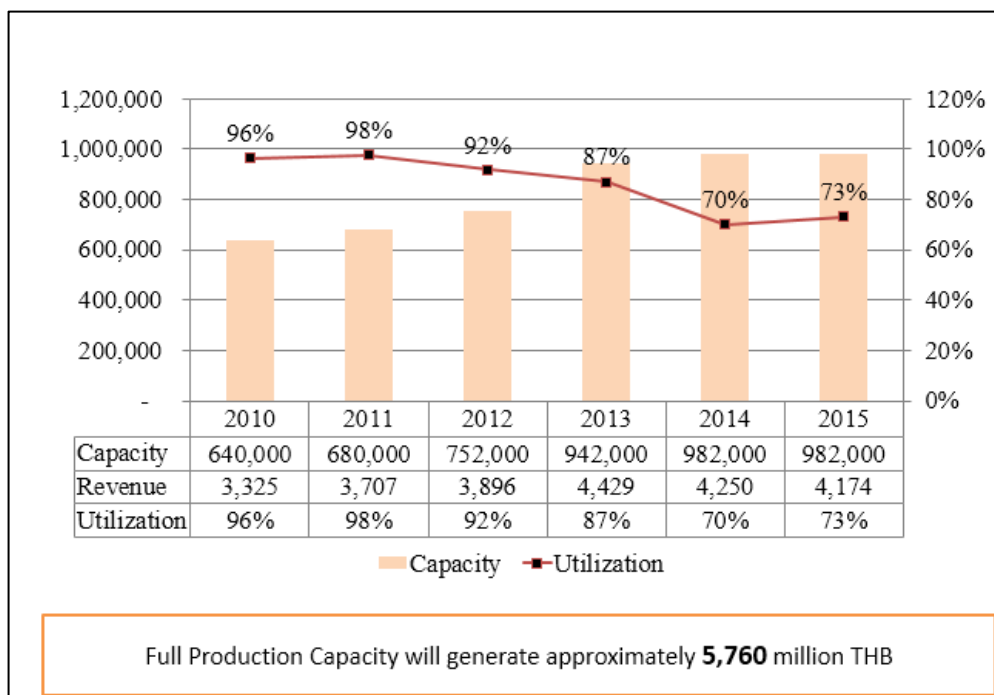
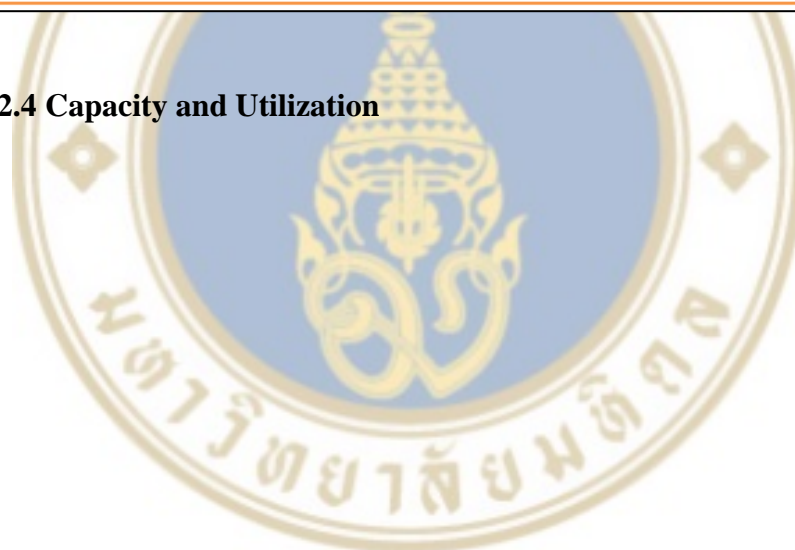


Figure 2.4 Capacity and Utilization



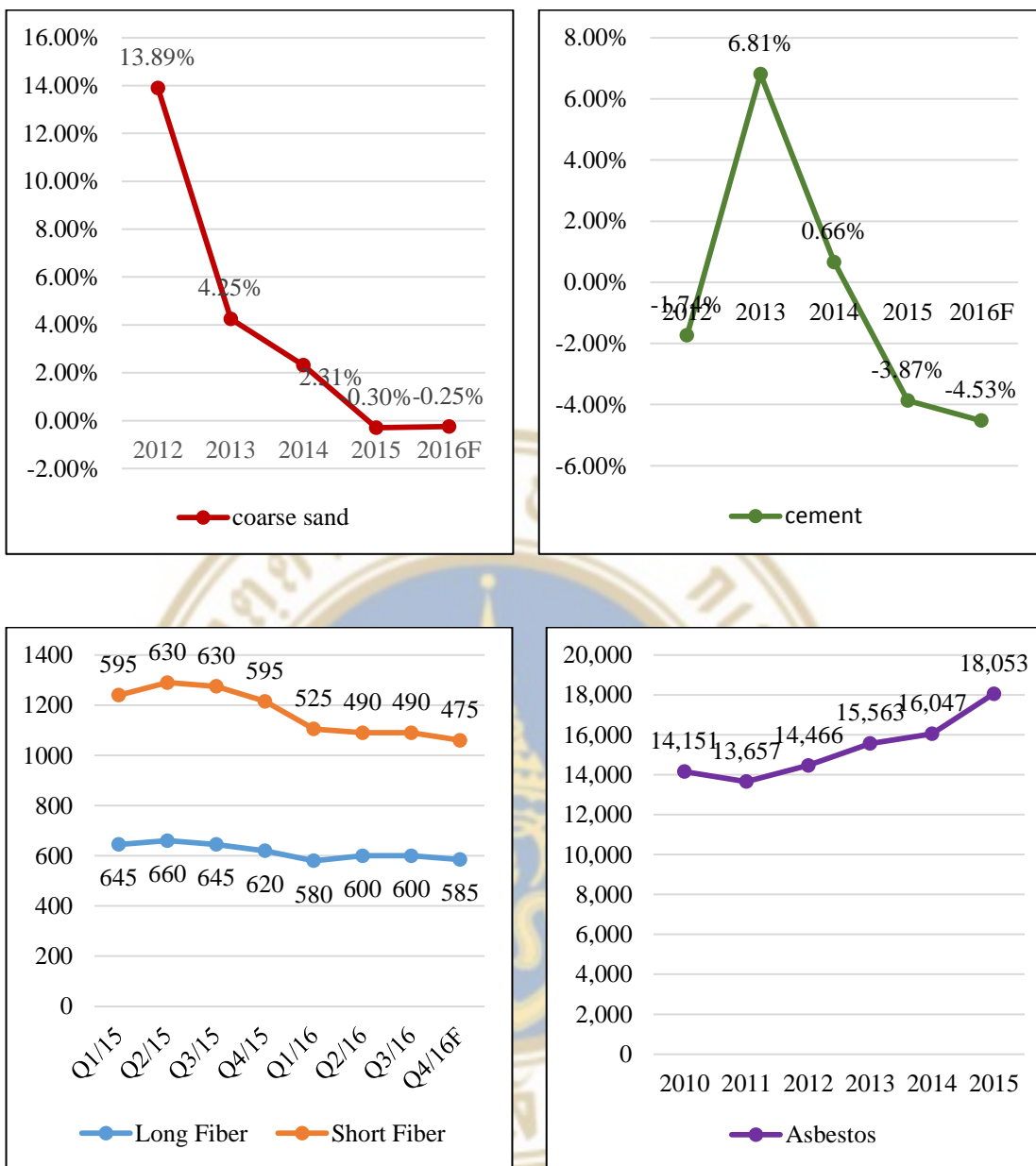
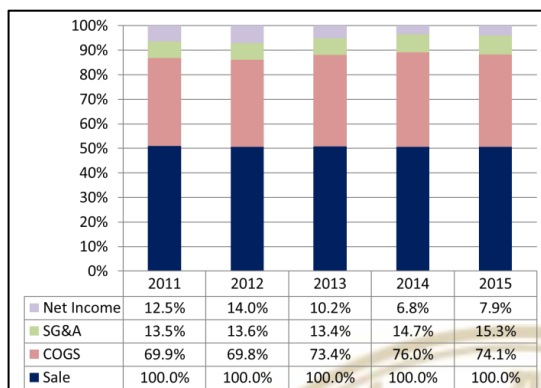
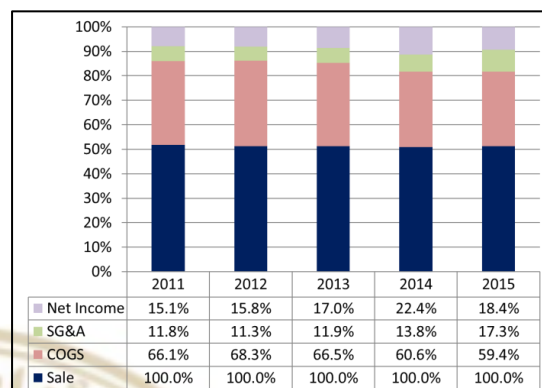


Figure 2.5 Cost of Raw Material Trend

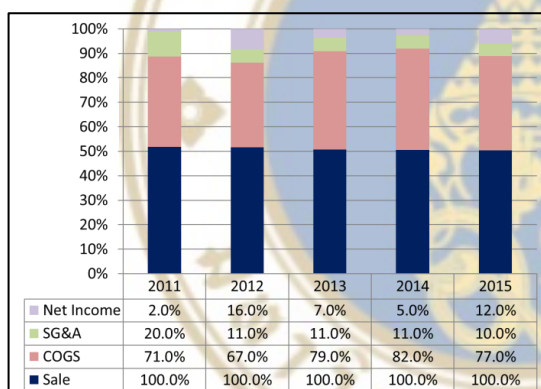
DRT



DCC



Q-Con



TGCI

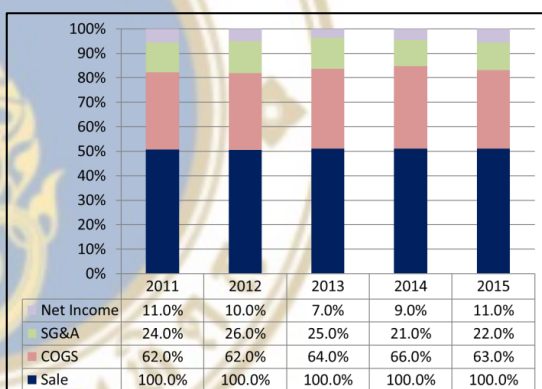
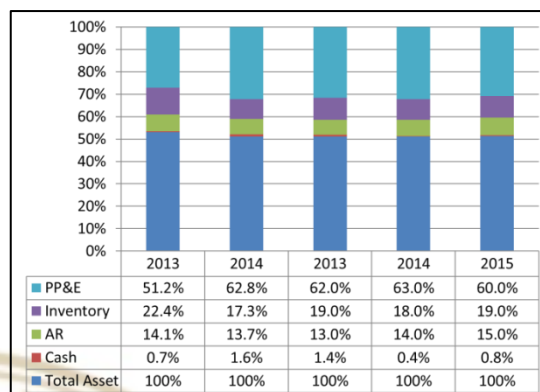
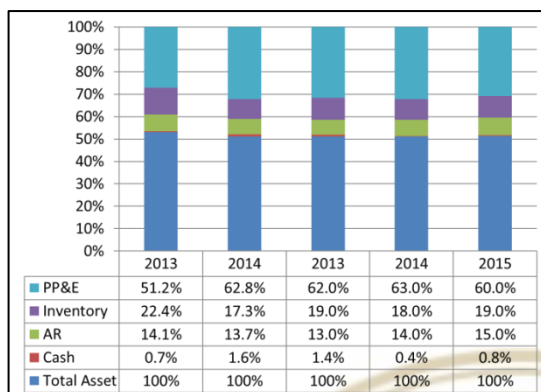


Figure 2.6 Common Size (Income Statement)

DRT

DCC



Q-Con

TGCI

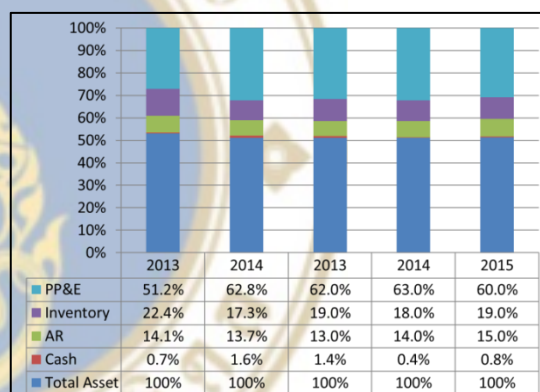
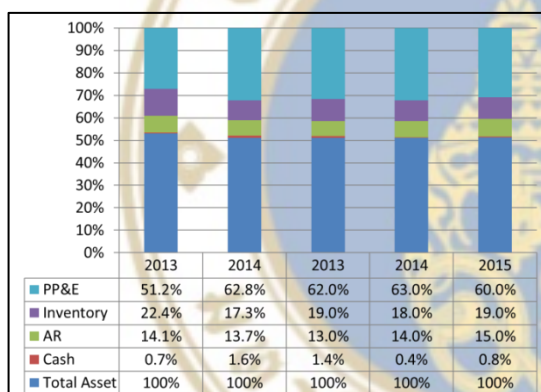


Figure 2.7 Common Size (Balance Sheet: Asset)

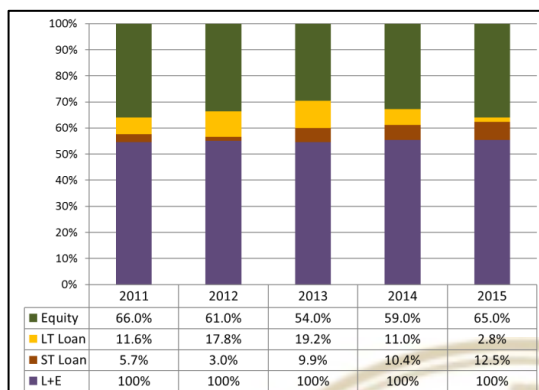
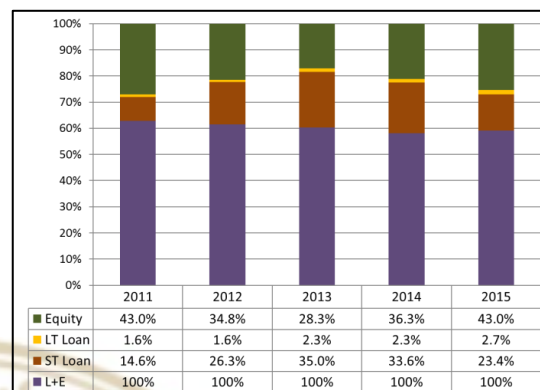
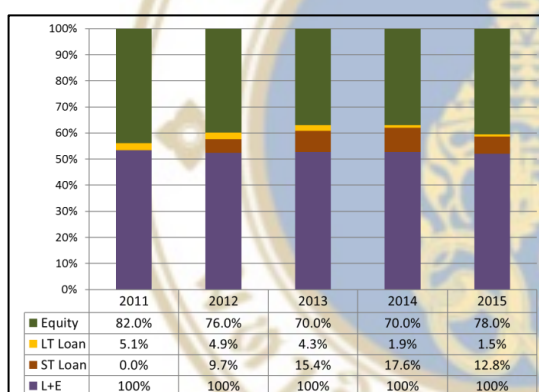
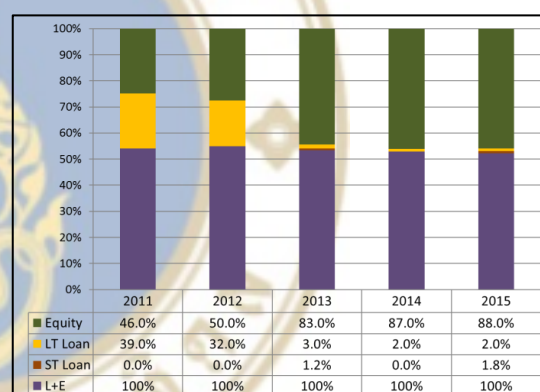
DRT**DCC****Q-Con****TGCI**

Figure 2.8 Common Size (Balance Sheet: Liability and Equity)

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