

**VALUATION OF MERGER SYNERGY**  
**(CASE STUDY: MERGER BETWEEN PT GUNAWAN**  
**DIANJAYA STEEL TBK AND PT JAYA PARI STEEL TBK)**

**FINAL PROJECT**

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**Master of Business Administration Program**

**School of Business and Management**

**Institut Teknologi Bandung**

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**ABSTRACT**

PT Gunawan Dianjaya Steel Tbk is one of the public companies engaged in manufacturing hot rolled steel plates. PT Gunawan Dianjaya Steel Tbk made a decision to merge with PT Jaya Pari Steel Tbk, which is also listed as a public company in manufacturing hot rolled steel plates. The merger of the two companies aims to improve the efficiency of the company because the two companies engaged in the same industry and owned by a majority shareholder by Gwie Gunawan. The merger of the two companies used a share conversion scheme. PT Jaya Pari Steel Tbk merger cost is Rp386.925.000.000. The stock conversion ratio between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk is 1: 1,34.

This study aims to assess whether synergy can occur in the merger of the two companies. The expected synergy is the increase in production capability, profitability and efficiency. The potential synergy is from the strategy, operations, and customers. In this study the author assessed the Discounted Free Cash Flow (DCF) when the company stood as an independent company and when the company was merged.

PT Jaya Pari Steel Tbk is combined with prices that are overvalued. Even though the price is above the company's value, the merger of the two companies can bring synergy. Synergy is produced from the two companies that are engaged in the same field and under the same majority shareholder. The impact of synergy is the efficiency in operation, economies of scale. The implication from the synergy is growth rate for the company is positive.

**Keywords:** Discounted Free Cash Flow, financial analysis, mergers, profitability, synergies

**VALUASI SINERGI PENGGABUNGAN  
(STUDI KASUS: PENGGABUNGAN ANTARA PT GUNAWAN  
DIANJAYA STEEL TBK DAN PT JAYA PARI STEEL TBK)**

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**ABSTRAK**

PT Gunawan Dianjaya Steel Tbk merupakan salah satu perusahaan terbuka yang bergerak di bidang manufaktur plat baja canai panas. PT Gunawan Dianjaya Steel Tbk membuat keputusan untuk melakukan penggabungan usaha dengan PT Jaya Pari Steel Tbk yang juga merupakan perusahaan terbuka di bidang manufaktur plat baja canai panas. Penggabungan kedua perusahaan tersebut bertujuan untuk meningkatkan efisiensi perusahaan karena kedua perusahaan tersebut bergerak di bidang industri yang sama dan mayoritas saham kedua perusahaan dimiliki oleh Gwie Gunawan. Penggabungan kedua perusahaan tersebut menggunakan skema konversi saham. PT Jaya Pari Steel Tbk memiliki nilai Rp386.925.000.000. Rasio konversi saham antara PT Gunawan Dianjaya Steel Tbk dengan PT Jaya Pari Steel Tbk yaitu 1:1,34.

Penelitian ini bertujuan untuk menilai apakah sinergi dapat terjadi pada penggabungan kedua perusahaan tersebut. Sinergi yang diharapkan yaitu kenaikan kemampuan produksi, profitabilitas dan efisiensi. Potensi sinergi berasal dari strategi, operasi, dan pelanggan. Dalam penelitian ini penulis melakukan penilaian dengan *Discounted Free Cash Flow* (DCF) saat perusahaan berdiri sebagai perusahaan independen dan saat perusahaan sudah digabung.

PT Jaya Pari Steel Tbk digabungkan dengan harga yang di atas nilai perusahaan tersebut (*overvalued*). Walaupun harga tersebut di atas nilai perusahaan, penggabungan kedua perusahaan tersebut dapat mendatangkan sinergi. Sinergi dihasilkan karena kedua perusahaan tersebut bergerak di bidang yang sama dan berada dibawah pemegang saham mayoritas yang sama. Dampak sinergi adalah efisiensi dalam operasi, skala ekonomis. Implikasi dari sinergi adalah tingkat pertumbuhan positif bagi perusahaan.

**Kata Kunci:** analisa keuangan, *Discounted Free Cash Flow*, merger, profitabilitas, sinergi

**VALIDATION PAGE**

**VALUATION OF SYNERGY MERGER**

**(CASE STUDY: MERGER BETWEEN PT GUNAWAN DIANJAYA  
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**Bandung, March 2019**

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**Deddy Priatmodjo Koesrindartoto, Ph.D.**

## FOREWORD

All praise and gratitude, the writer says to Allah SWT for all His blessings and grace so that the writer can complete this final project and my study in Master of Business Administration program. Author hope this study will be useful for anyone who's interested in the financial field of study, particularly in business merger strategy. Author personally would like to express deep gratitude to:

1. Mr. Deddy Priatmodjo Koesrindartoto, Ph.D as my final project advisor who have given time, energy, thought and enthusiasm to guide and direct me to complete this Thesis.
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Author realize that this final project is far from perfect, thus suggestions for the improvement of this study are very welcome.

Bandung, March 2019

Fitria Rahma Nur Sulistyono

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# CHAPTER I

## INTRODUCTION

### 1.1. Background

Steel has been used for many things since long time ago. It is one of material that very important in most of world development because of the extensive use of steel. Steel is used for construction, infrastructure, transportation, building. Indonesia's current condition is on infrastructure development which needs a lot of steel as the basic material. Steel industry condition starts to escalating significantly. The Ministry of Industry noted that the total national demand for national crude steel reached 14 million tons meanwhile local steel producers only have a production capacity of 8 to 9 million tons per year. The rest needed crude steel are imported from China, Japan, South Korea, Taiwan, India and others. The competition with imported steel in Indonesia still quite tight.

According to data from the Ministry of Industry's publication, in 2017 growth of regular metal industry reached 10,6% which is the highest percentage among five industrial sectors that recorded has high growth. Based on steel consumption prediction until 2025, the steel industry growth average is 6% per year. The outlook of steel industry in Indonesia is positive, due to increase of infrastructure development which effect higher demand of steel. In Indonesia there are about sixteen public steel company, some of them are PT Gunawan Dianjaya Steel Tbk (GDS), PT Jaya Pari Steel Tbk (JPS), and PT Betonjaya Manunggal Tbk (BJM).

GDS is one of the leading steel plate rolling mill industries in ASEAN region. In 2017, the company net profit is smaller than in 2016. These loss happened due to the purchase price of raw materials rose 42% meanwhile the selling price only rose 27%. There for, to anticipate more loss, GDS choose to increase the business efficiency through merger. GDS choose JPS to merge with. GDS choose JPS because the company want to simplify the corporate's structure and increase business efficiency. Both companies decided to merge since they engage in the

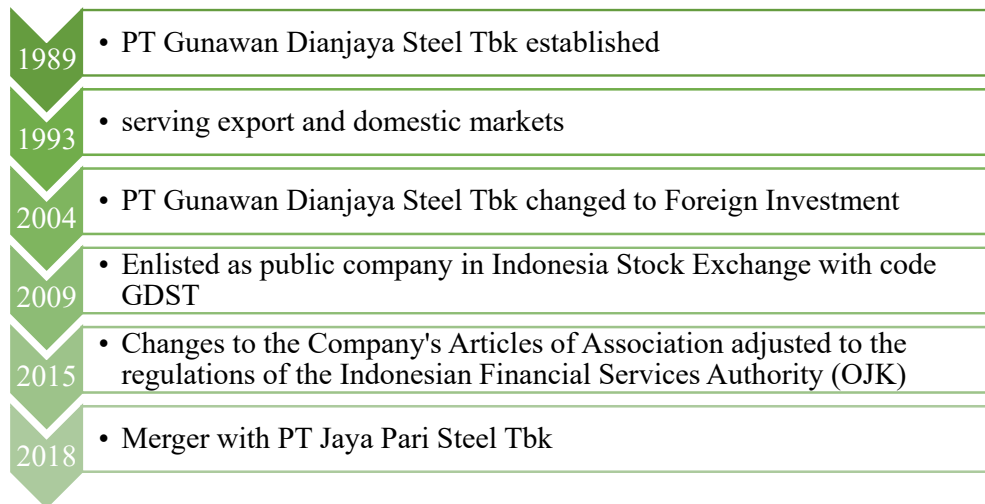
same industry and have the same major shareholder and controller namely Gwie Gunawan.

## 1.2. Company Profile

In this final project, discussed company are PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk. The company profile and background of both company are as below.

### 1.2.1. PT Gunawan Dianjaya Steel Tbk

PT Gunawan Dianjaya Steel Tbk (GDS) founded in 1989 in Surabaya. The main product of GDS is hot rolled steel plate. It offers steel plates for general use. Its products are used in the construction of steel construction, bridges, ships, shore tank, among others. The Company's customers are shipbuilders, international trading company, construction company and manufacturer of heavy equipment. The Company installed production capacities is 400,000 tons of steel plate per year with an average thickness of steel plate of 50 mm. Realization of production in 2017 amounted to 146,591 tons of steel plate or by 36.65% of the installed capacity. Figure 1.1 shows the milestones of PT Gunwan Dianjaya Steel Tbk.



**Figure 1. 1** PT Gunawan Dianjaya Stell Tbk milestones

(Source: Annual Report PT Gunawan Dianjaya Steel Tbk, 2017)

### 1.2.1.1. Vision and Mission

#### Vision

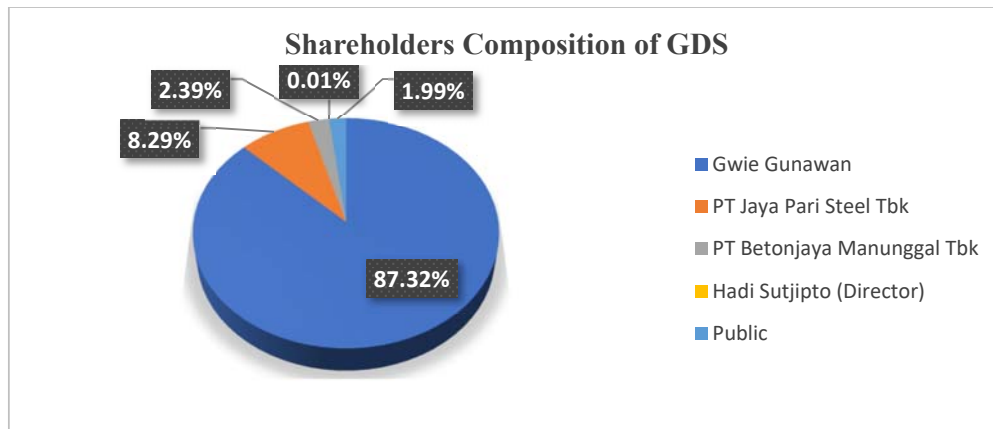
To be the most advanced hot rolled plate rolling mill in ASEAN, which consistently hold strong commitment and business ethic upon product quality and delivery time.

#### Mission

To conduct transparent and accountable Company management coupled with improvement in human resource competency, production technology, preserving the environment sustainably and efficiency.

### 1.2.1.2. Shareholders Composition

From the beginning of GDS as public company, in 2009 until 2015, the majority ownership of PT Gunawan Dianjaya Steel Tbk was held by Kellywood Holdings Limited with 51,37% and followed by Bavarian Venture Investment Ltd with 35,94%. PT Jaya Pari Steel’s ownership of Gunawan Dianjaya Steel since 2011 until 2017 is same. In 2016, stated that the entity’s shares previously owned by Bavarian Venture Investment and Kellywood Holdings Limited will be owned by Gwie Gunawan.

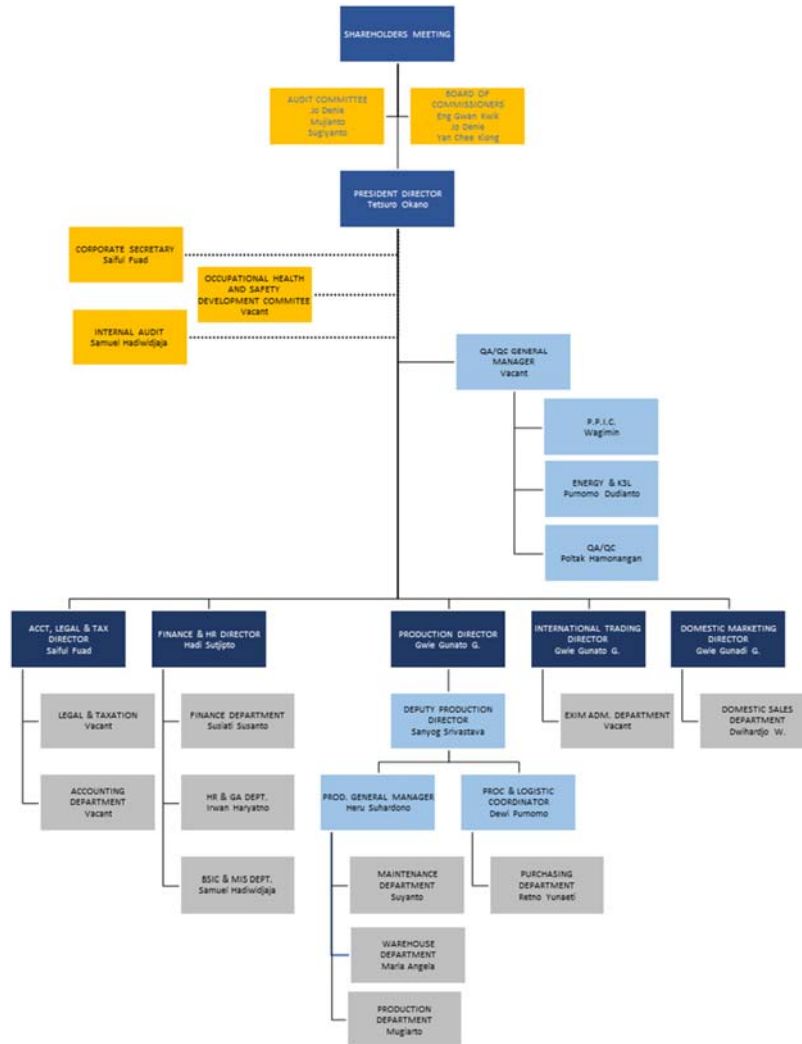


**Figure 1. 2** Shareholders Composition of PT Gunawan Dianjaya Steel Tbk  
(Source: Annual Report PT Gunawan Dianjaya Steel Tbk, 2017)

Through the transfer of share ownership PT Gunawan Dianjaya Steel so the company's majority is owned by Gwie Gunawan as much as 87,32%, followed by PT Jaya Pari Steel Tbk with 8,29%, PT Betonjaya Manunggal Tbk 2,39%, Public 1,99%, last is Hadi Sutjipto as director with 0.01%. GDS total unit shares are 8.200.000.000 shares with nominal value of Rp100 per share.

### 1.2.1.3. Organization Structure

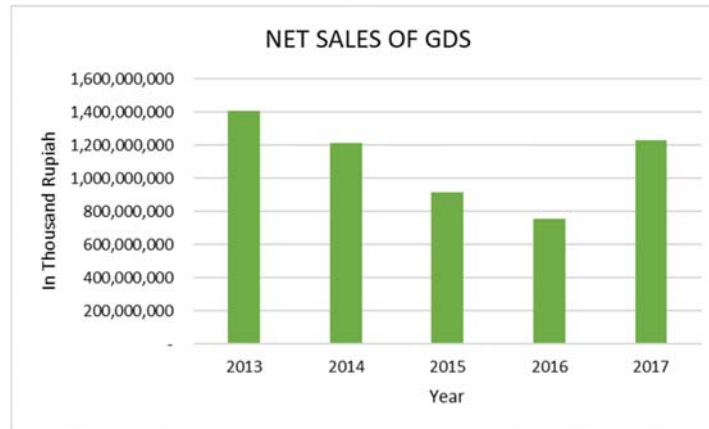
Figure 1.3 show the organization structure of PT Gunawan Dianjaya Steel Tbk.



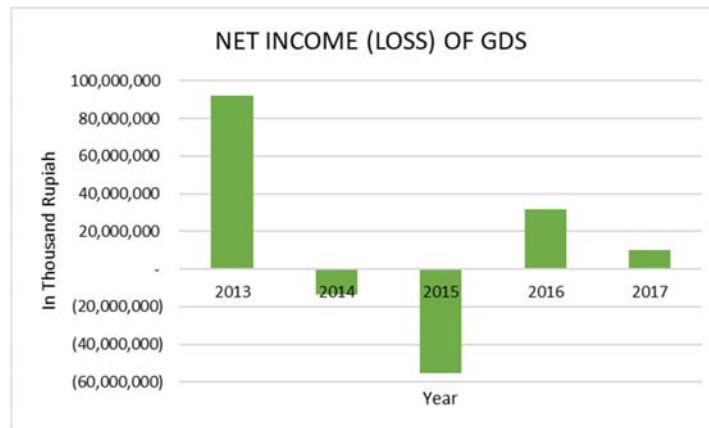
**Figure 1. 3** PT Gunawan Dianjaya Steel Tbk Organizational Chart  
(Source: Annual Report PT Gunawan Dianjaya Steel Tbk, 2017)

#### 1.2.1.4. Company Performance

Net sales of GDS from 2013 until 2017 showed in Figure 1.4 and the net profits from 2013 until 2017 showed in Figure 1.5. It shows that the sales of GDS had been decreased compared since 2013 until 2016. In 2017, the sales is increased about 62% than sales in 2016, meanwhile the net profit decreases as much as 68% compared to 2016.



**Figure 1. 4** Net Sales of PT Gunawan Dianjaya Steel Tbk  
(Source: Annual Report Gunawan Dianjaya Steel, 2013-2017)



**Figure 1. 5** Net Income (Loss) of PT Gunawan Dianjaya Steel Tbk  
(Source: Annual Report PT Gunawan Dianjaya Steel Tbk, 2013-2017)

The gross profit of GDS is unstable but mostly decreasing. In 2014 and 2015, the company face loss due to decrease in steel prices in the international level by

approximately 20% and shrinking demand for steel plate in both the domestic and international level. The highest GDS' net income is in 2013.

#### **1.2.1.5. Business Scope**

- **Strategy**

PT Gunawan Dianjaya Steel Tbk can use cost leadership strategy, the company can use its name to pursuit of economies of scale, get cheaper price of raw material and get more efficient technology and other factors to become the low-cost producer in the iron & Steel industry.

- **Customers**

The primary target market customers of PT Gunawan Dianjaya Steel Tbk are end users or distributors. The company's target market are the domestic market and export market. The company continued to maintain and develop the domestic market, for the export market the company target market especially Southeast Asian markets. Export market intended to minimize the potential loss of foreign exchange rates. The export sales used as a natural hedging measures on foreign exchange risk.

- **Products**

PT Gunawan Dianjaya Steel Tbk only produces one type of product. Product that offered to the customers is hot rolled steel plate with thickness average of steel plate 50mm. The product does not have different characteristics both in the production process, customer group, and in distribution products.

- **Suppliers**

The supplier for steel slab procurement is Yuan Resources Pte Ltd, Singapore. The supplier company has main business as a steel trading and consultancy company.

- **Raw Material**

Raw material the company need to produce hot rolled steel plate is steel slab.

### 1.2.2. PT Jaya Pari Steel Tbk

PT Jaya Pari Steel Tbk (JPS) was established in 1973 and commence its commercial operations in 1976. JPS's business was cutting hot rolled coil and transformed it into steel plates. Until 2017, JPS is only focused on selling steel plates for the domestic market only through distributors in Jakarta and Surabaya, which then distributed their product to various regions in Indonesia. JPS installed production capacity is 70,000 tons of raw slab material or plate 60,000 tons of finished products per year. The plate production outcome in 2017 reached 20.371 tons or 34% of the production capacity. Figure 1.6 shows the milestones of PT Jaya Pari Steel Tbk.



**Figure 1. 6** PT Jaya Pari Stell Tbk milestones  
(Source: Annual Report PT Jaya Pari Steel Tbk, 2017)

#### 1.2.2.1. Vision and Mission

##### **Vision**

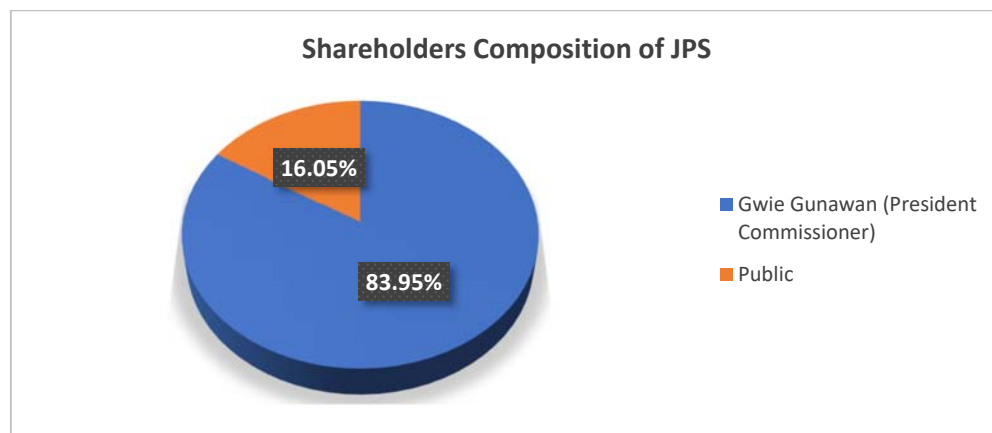
To be a re-rolling steel plate mill company to supply domestic market flexibly.

### **Mission**

- To be a company that is reliable, providing commercial quality steel plate for general construction domestic market.
- Relying on human resources development, conservative management and maintain a cooperative environment among all stakeholders to achieve the Company's objectives.

#### **1.2.2.2. Shareholders Composition**

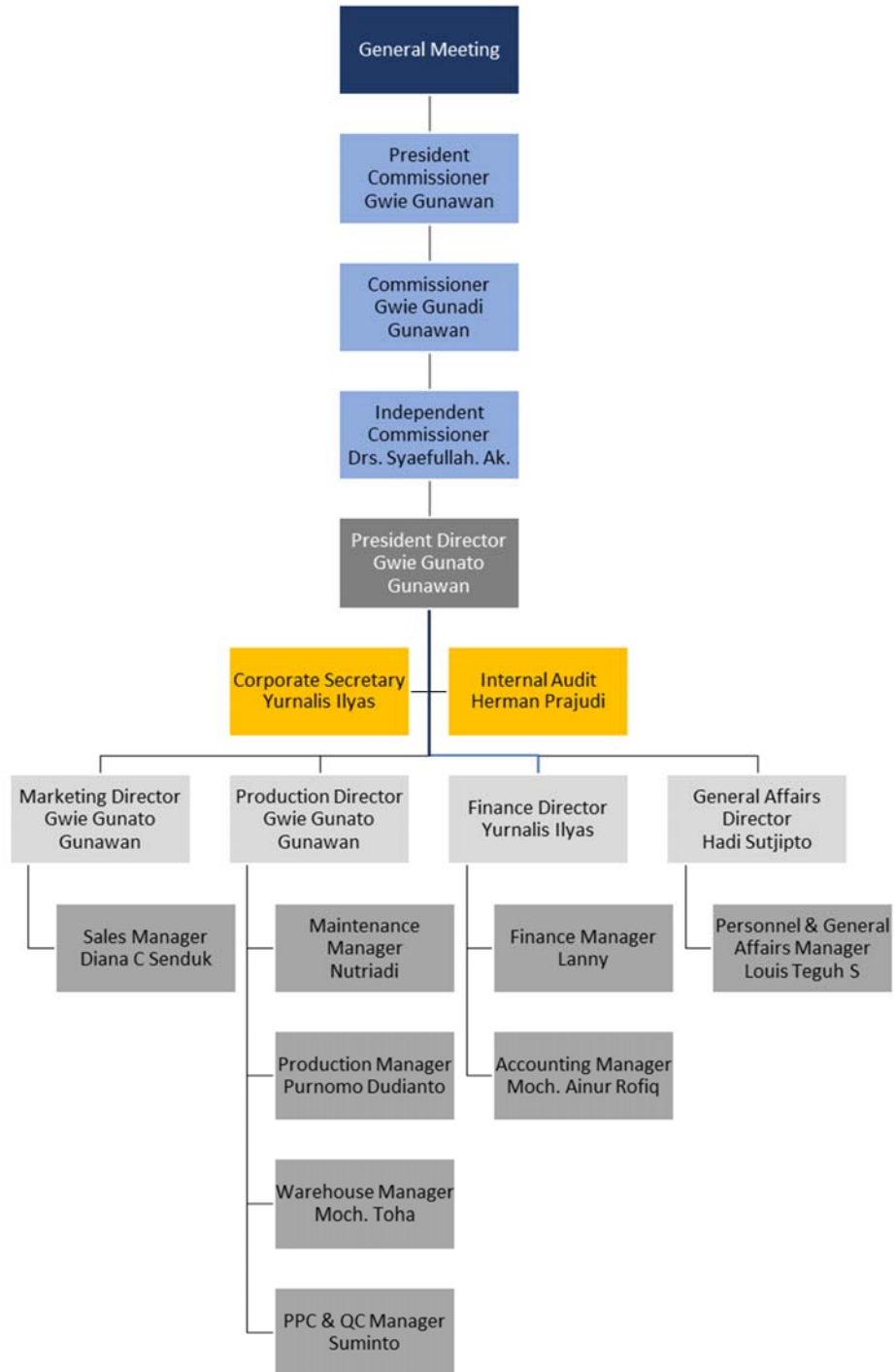
In 2009 until 2015, the majority ownership of PT Jaya Pari Steel is by International Magnificent Fortune Limited with 35,70%, followed by Vihara Limited with 32,72%, than Gwie Gunawan with 15,53%, and Public with 16,05%. In 2016, the Company's major shareholder changed. It was stated that the Company's shares previously owned by International Magnificent Fortune Limited and Vihara Limited become owned by Gwie Gunawan. Since then, Gwie Gunawan owned 83,85% of JPS' shares.



**Figure 1. 7** Shareholders Composition of PT Jaya Pari Steel Tbk  
(Source: Annual Report PT Jaya Pari Steel Tbk, 2017)

### 1.2.2.3. Organization Structure

Figure 1.8 show the organization structure of PT Jaya Pari Steel Tbk.

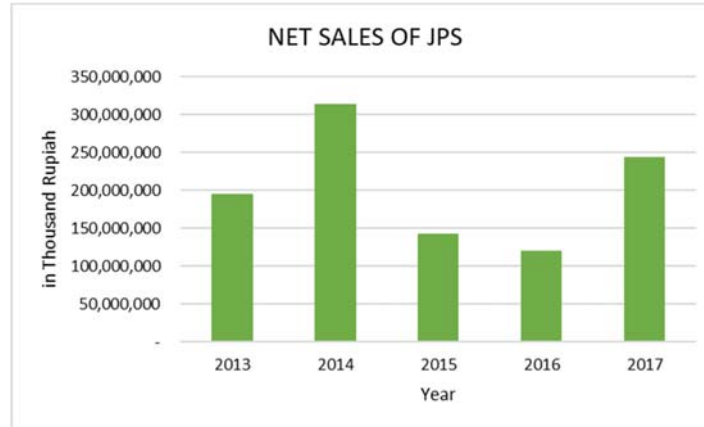


**Figure 1. 8** PT Jaya Pari Steel Tbk Organizational Chart

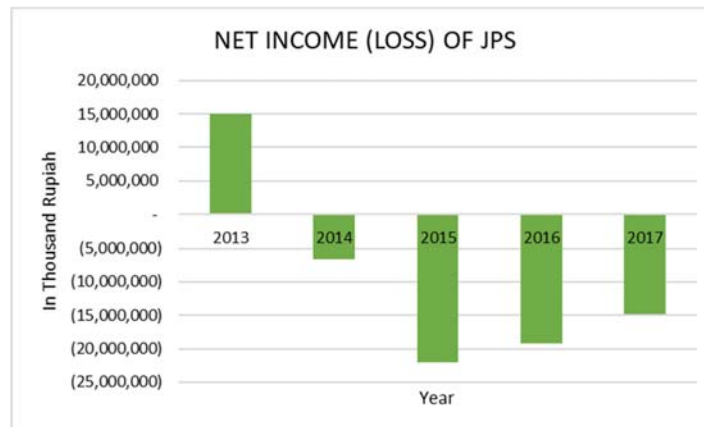
(Source: Annual Report PT Jaya Pari Steel Tbk, 2017)

### 1.2.2.4. Company Performance

Net sales of JPS from 2013 until 2017 showed in Figure 1.9 and the net profits from 2013 until 2017 showed in Figure 1.10. It shows that the sales of JPS had been decreased. In 2014 net sales increase but then it decrease again. The net sales by the company increased from Rp121 billion in 2016 to Rp244 billion in 2017.



**Figure 1. 9** Net Sales of PT Jaya Pari Steel Tbk  
(Source: Annual Report Jaya Pari Steel, 2013-2017)



**Figure 1. 10** Net Income (Loss) of PT Jaya Pari Steel Tbk  
(Source: Annual Report PT Jaya Pari Steel Tbk, 2013-2017)

In 2013 to 2017 the profit of JPS has been decrease. Then in 2014 to 2017 the company face loss, but in 2017 JPS has been able to increase in losses which previously amounted to Rp19 billion, then decreased to Rp15 billion. Loss that JPS

face is because low steel consumption and imported steel from China was still relatively massive with the unfair trade practices of low price imported steel.

#### **1.2.2.5. Business Scope**

- **Strategy**

PT Jaya Pari Steel Tbk can use cost leadership strategy. The company's experience in the industry and its name used to pursuit of economies of scale, get cheaper price of raw material and get more efficient technology and other factors to become the low-cost producer in the iron & Steel industry.

- **Customers**

The target market customers of PT Jaya Pari Steel Tbk are end users or distributors. The company's target market is domestic market. The company continued to maintain and develop the domestic market. The product is distributed through distributors in Jakarta and Surabaya, then the product is distributed to various regions in Indonesia.

- **Products**

Products that PT Jaya Pari Steel Tbk offer to the customers is hot rolled steel plate with thickness average of steel plate 8mm-25mm.

- **Suppliers**

The supplier for steel slab procurement is Yuan Resources Pte Ltd, Singapore. The supplier company has main business as a steel trading and consultancy company.

- **Raw Material**

Raw material the company need to produce hot rolled steel plate is steel slab.

### **1.3. Business Issue and Problems Identification**

Steel industry in Indonesia is facing tight competition with imported steel. It happened because currently Indonesia is focusing on the development of infrastructure which results in high demand for steel, while the ability of domestic steel production is still lower than the amount of steel needed.

On the other hand, United States of America is increasing tensions on the issue of trans-Atlantic trade and North America by imposing tariffs on steel imports by 25% and tariffs on aluminum imports by 10% for the European Union, Canada and Mexico. Several other countries that import steel to the United States are still being considered for the same tax system. This resulted in countries that imported steel looking for other countries that were targeted for steel imports, one of which was Indonesia which resulted in increased steel competition in Indonesia.

There is other problems faced by the domestic steel industry which is the increase of purchase price of steel raw materials which is greater than the increase in the selling price of processed steel. Therefore, business players must look for other strategies to deal with competition with imported steel.

One of the strategy can be done is merger. Through merger, the company aims to gain synergy from it. The acquired companies expected to give contribution on increasing revenue earned, have more efficient and effective business so they will gain the competitive ability. GDS and JPS has same majority share ownership. Both company have same product offered to customers, which is hot rolled steel plate.

### **1.4. Research Question**

Related to the merger strategy of PT Gunawan Dianjaya Steel Tbk (GDS) with PT Jaya Pari Steel Tbk (JPS), this final project try to determine:

1. What are the motive behind merger between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk?
2. What are the effects of the merger to the company performances?

3. What are the proposed strategy for PT Gunawan Dianjaya Steel Tbk that can be implemented after the merger to gain greater value?

### **1.5. Research Objectives**

The objectives of this final project are:

1. Analyze PT Gunawan Dianjaya Tbk strategic plan and how it will align with the merger with PT Jaya Pari Steel Tbk, analyze if there is synergy between both company.
2. Analyze the effect of the merger on PT Gunawan Dianjaya Tbk business performance.

### **1.6. Problem Limitation**

There are several limitations in this final project as started below:

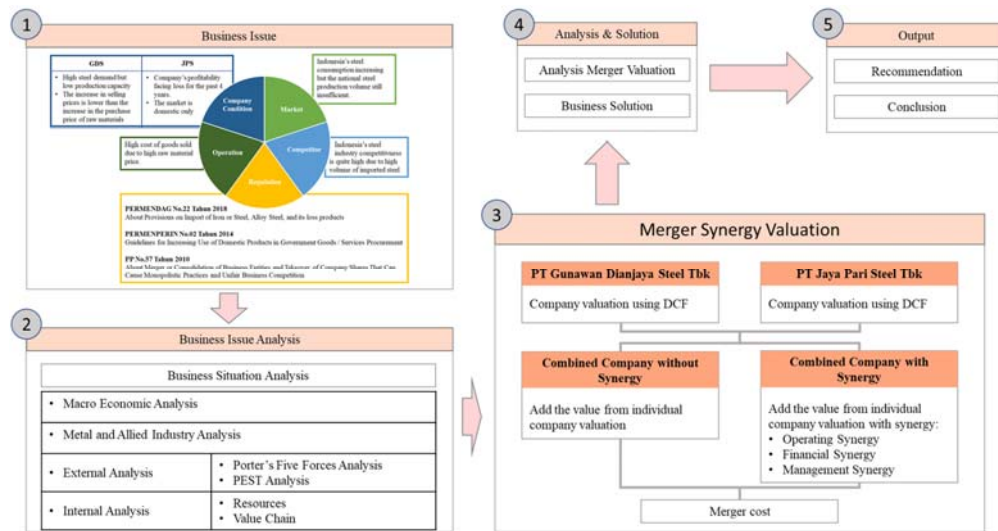
1. This final project using secondary data of the companies, which are financial reports and data assumption.
2. This final project focused on financial aspect. The other aspect such business risk, proposed for supporting this final project.
3. Analysis used data assumptions and secondary data of financial statement from 2013 – 2017, which is before the merger. The merger itself happen in 2018.

## CHAPTER II

### BUSINESS ISSUE EXPLORATION

#### 2.1. Conceptual Framework

To understand the way of thinking this final project from the business issue that happened and the problem solving, conceptual framework is used. Figure 2.1 shows the conceptual framework of this final project.



**Figure 2. 1** Conceptual Framework

- Business Issue

The business issues is seen from five points of view, which are:

#### 1. Company condition

Each company has their own concern before decide to merge with one another. The concern of PT Gunawan Dianjaya Steel Tbk (GDS) are the company only able to produce steel 36,65% of the installed capacity in 2017 and the Company's achievement for net profit in 2017 was still below the achievement in 2016. The production is 36,65% of the installed capacity because in that year plate with thickness of 6-25 mm dominate orders, to produce thinner size steel plates require

longer production time and more energy than a thicker steel plate. The net profit is decline than year 2016 because the increase in average selling price that lower than average raw materials purchase price.

The concern of PT Jaya Pari Steel Tbk (JPS) are the company facing loss for the past 4 years, from 2014-2017 and the company only sell the product to domestic market.

## 2. Market

In 2017, Indonesia's steel consumption volume is 13,6 million tons but Indonesia's steel production only able to fulfill 55% of consumption volume and the other 45% is imported. It shows that Indonesia's steel production is insufficient for national steel needs.

## 3. Competitor

The percentage of imported steel is quite big that impact on the competitiveness is high between local steel and imported steel. In term of price, some of imported steel is cheaper than local steel but the quality is lower also.

## 4. Regulation

### - **PERMENDAG No.22 Tahun 2018**

“About Provisions on Import of Iron or Steel, Alloy Steel, and its loss products.”

The main purpose of the regulation is to reduce dwelling time but it makes the imported steel is get easier to enter Indonesia's market.

### - **PERMENPERIN No.02 Tahun 2014**

“Guidelines for Increasing Use of Domestic Products in Government Goods / Services Procurement”

The purpose of this regulation is to increase the volume of local steel use on government projects.

- **PP No.57 Tahun 2010**

“About Merger or Consolidation of Business Entities and Takeover of Company Shares That Can Cause Monopolistic Practices and Unfair Business Competition”

From this regulation, the merger between GDS and JPS would not make any problems that can cause monopolistic practices and unfair business competition.

5. Operation

The cost of goods sold is high due to the raw material price that increase and the increase of selling price is lower than raw materials price.

- Business Issue Analysis

Business issue analysis use three approach which are Macro Economic Analysis, Metal and Allied Industry Analysis, and External Analysis. The external analysis use Porter’s Five Forces Analysis and PEST Analysis. The internal analysis use Resources and Value Chain Analysis.

- Merger Synergy Valuation

The valuation is using Discounted Cash Flow methode. The valuation is calculated for each company, then combined company without and with synergy. The synergy are operating synergy, financial synergy and management synergy.

- Analysis and Solution

Analysis and solution are based on the business issue analysis and on the previous steps and the valuation that already calculated.

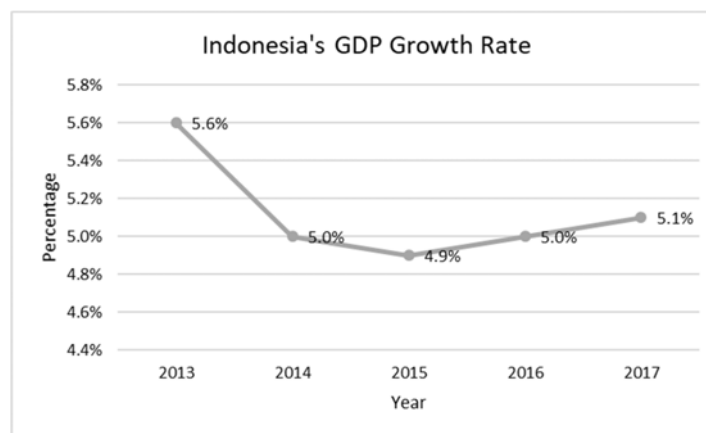
- Output

The output of this final project is to give recommendation and conclusion from issue that happened on steel industry and specifically for GDS and JPS as the company that involved in and do merger.

## 2.2. Business Situation Analysis

### 2.2.1. Macro Economic Analysis

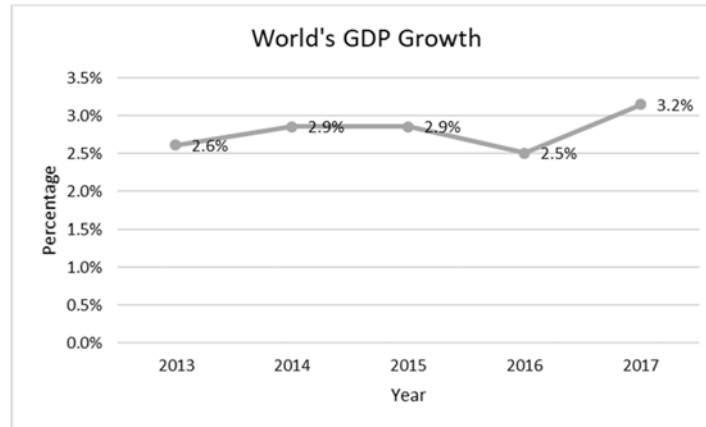
Indonesia has great economic potential also the largest economy in Southeast Asia. Indonesia contains a number of characteristics that make the position is good as a newly advanced economic development. Fixed investment on infrastructure spending and commodity prices that higher will be supporting the Indonesia's economic growth.



**Figure 2. 2** Indonesia's Annual GDP Growth Rate  
(Source: [www.indonesia-investments.com](http://www.indonesia-investments.com))

Indonesia's economic growth in 2013 is the highest growth in the last five years from 2013 until 2017 as seen in Figure 2.2. The lowest point is in 2015 with 4,9%. It happened because Indonesia's economic slowdown that occurred between 2013-2015. In 2016, the growth increase for 0,1% from the previous year. Compared to World's annual GDP growth rate on Figure 2.3, Indonesia's annual GDP growth rate still higher than World's GDP. These achievement makes Indonesian economy

to grow from 'low-income country' into the category of 'lower middle-income countries'. Role of Indonesia's government is important to curb Indonesia's reliance on raw commodity exports, but also raising the role of the manufacturing industry within the economy, it helps for Indonesia's economic growth.



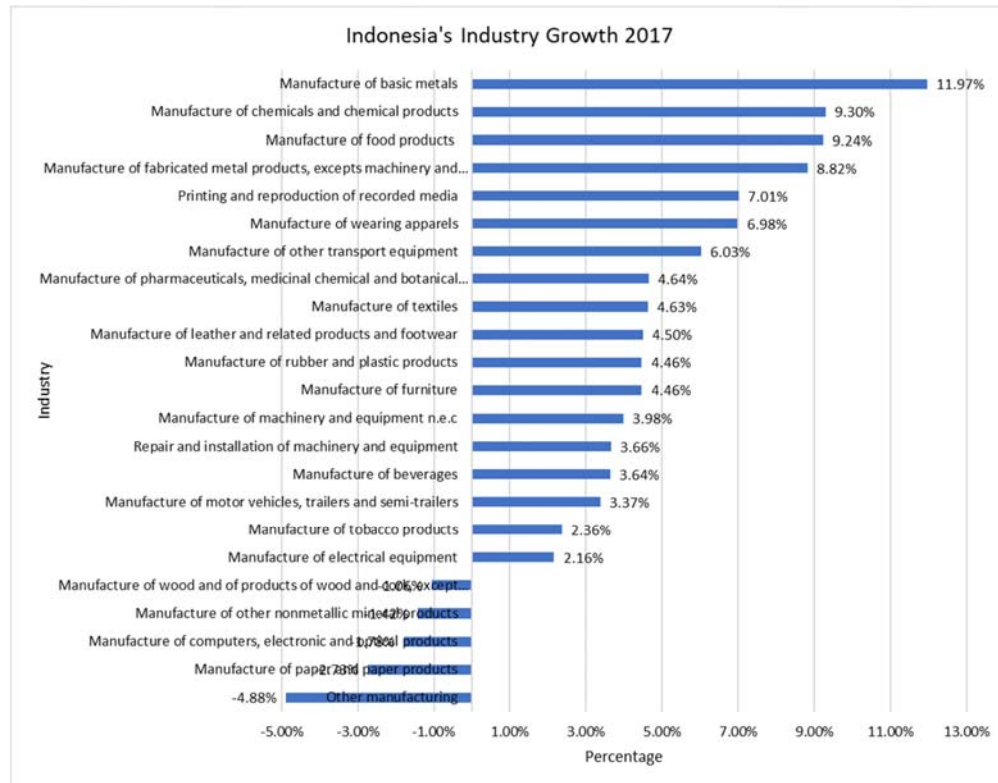
**Figure 2. 3** World's Annual GDP Growth Rate

(Source: data.worldbank.org)

Since late-2013, Indonesia has had to cope with a structural current account deficit (CAD). It makes the country highly susceptible to capital outflows in times of global economic turmoil. A major factor that causes the deficit was the country's ballooning oil import bill. Then the CAD was not used for productive investment purposes but for people's ever-increasing fuel consumption. The strategies for funding development are through optimizing the sources and schemes of existing and future development funds, and increasing the quality of development funding sources and schemes. To increase the government revenue, government develop and improve policies on tax revenues and non-tax revenues.

In 2017, Indonesia's economic growth was sourced mostly from manufacturing sector, construction, trade and agriculture. As seen on Figure 2.4, the three biggest sources of economic growth in 2017 from manufacture sector are manufacture basic metal with 11,97%, followed by manufacture of chemicals and chemical products with 9,30%, then manufacture of food products with 9,24%. In the last position is other manufacturing with -4,88%, then manufacture of paper and paper products

with -2,73%, followed by manufacture of computers, electronic and optical products with -1,78%.



**Figure 2. 4** Indonesia's Industry Growth

(Source: [www.bps.go.id](http://www.bps.go.id))

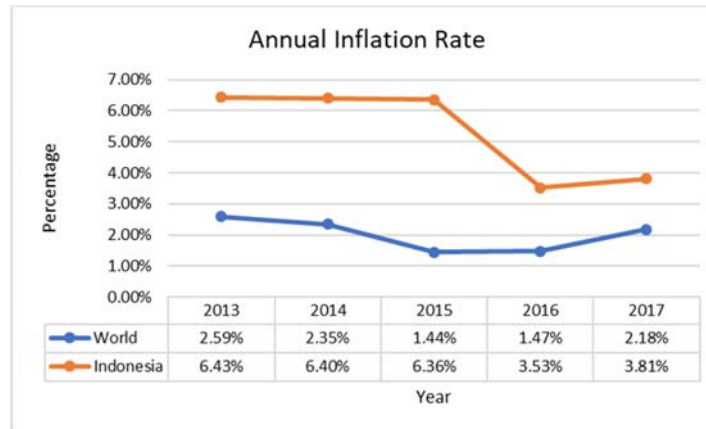
Indonesia's government vision for 2025 to focus on three main goals to help economic growth, which are:

1. Expanding the value chain for industrial production processes, and increase the efficiency of the distribution network.
2. Increase the competitiveness and strength the national economy by improve the marketing effort and encourage production efficiency.
3. Have sustainable global competitiveness towards an innovation-driven economy. Strengthening innovation system in the areas of production process and marketing.

In 2018, Indonesia's economy is expected to grow 5,2%. Recovery in commodity prices predicted to increase the investment number. On the other hands, exports

policies and ongoing imports process may drag on growth as import-intensive investment remains robust. Expectation for rupiah is it remain under pressure amid global uncertainty, including the Fed's decision to raise its reference rate and intensifying trade disputes.

Indonesia's inflation rate and volatility is higher than in World's inflation rate. While world average experienced inflation rates between 1-2 percent per year in 2013-2017, Indonesia's annual inflation rate average is around 3-6 percent in the same period. The peaks in Indonesia's inflation volatility correlate with adjustments in prices set by the government. The energy prices movement in Indonesia are not following the market price, the prices are determined by the Government. It means the deficit generated must be absorbed by the Government or Business Entity State Owned Enterprises (SOE).



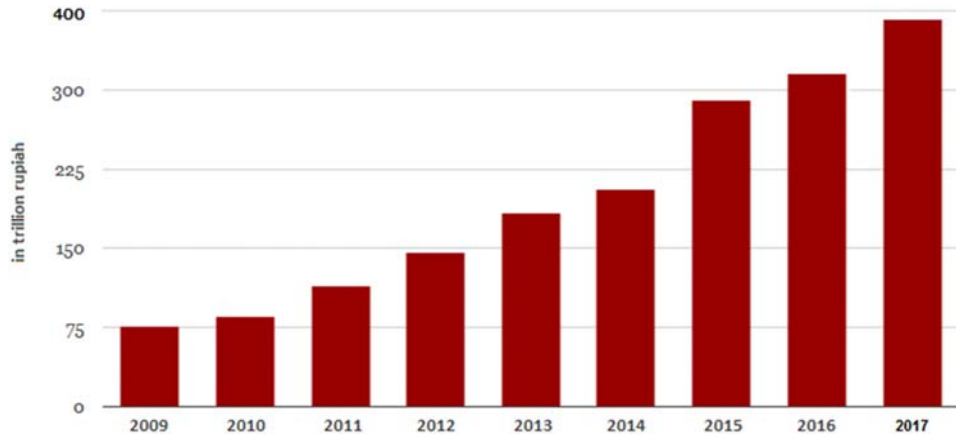
**Figure 2. 5** World's and Indonesia's Inflation Rate

(annual change in consumer price index)

(Source: <https://data.worldbank.org/>)

From 2016 to 2017 inflation in Indonesia decline from 6% to 3%. In 2015, the government made a policy to cut fuel subsidies. The fuel subsidy deduction has caused a deficit reduction in SOEs. That way economic inflation is more controlled and seen on the declining of inflation rate. The government can allocate the cost of the State Budget (APBN) which was originally used for fuel subsidies to be diverted for infrastructure development. Indonesia's government Allocation of Indonesian Government Infrastructure Expenditures. The seriousness of the Indonesian

government in infrastructure development can be seen from the allocation of infrastructure spending that increases from year to year as seen in figure 2.6.

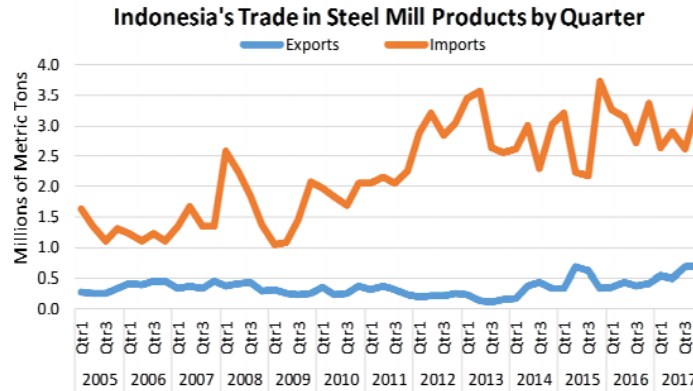


**Figure 2. 6** Allocation of Indonesian Government Infrastructure Expenditures  
(Source: [www.indonesia-investments.com](http://www.indonesia-investments.com), accessed August 2018)

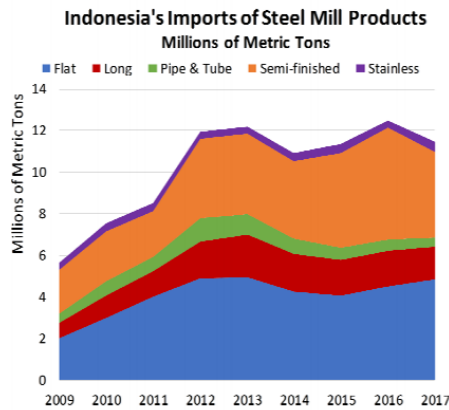
### 2.2.2. Metal and Allied Industry Analysis

Indonesia was ranked tenth as the largest steel importer in the world with 11.4 million metric tons of steel in 2017. It is 9% decrease from 12.5 million metric tons in 2016. In 2017, steel represented 5% of the total goods imported into Indonesia. In between 2009 to 2017, Indonesia's imports increased by 102%. Meanwhile the exports increased by 125%. In terms of growth, Indonesia's steel export's growth is higher than the import, even though in terms of volume, import's volume still higher than exports.

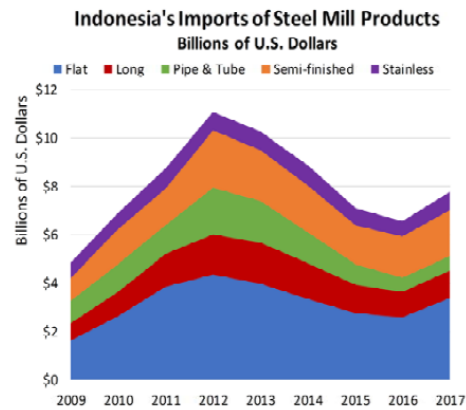
Indonesia's steel trade still deficit, but in 2017 the deficit decreased by 17% compared to 2016. It can be seen in Figure 2.7. In comparison between the volume and the value that shown in Figure 2.8 and Figure 2.9, in 2017 Indonesia's steel import volume is decreased while the value is increased. The value is increased by 19% which can be attributed to a significant increase in global steel prices.



**Figure 2. 7** Indonesia’s Trade in Steel Mill Products by Quarter  
(Source: IHS Markit Global Trade Atlas)



**Figure 2. 8** Indonesia’s Imports of Steel Mill Products in Million of Metric Tons  
(Source: IHS Markit Global Trade Atlas)

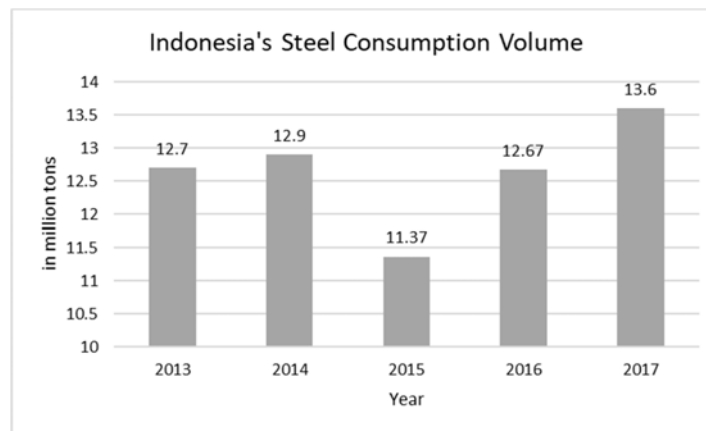


**Figure 2. 9** Indonesia’s Imports of Steel Mill Products in Billion of U.S. Dollars  
(Source: IHS Markit Global Trade Atlas)

Indonesia soon has a large steel capacity to realize an independent state from imported steel. In Cilegon there will be a steel industry cluster, from it Indonesia will produce 10 million tons of steel by 2025. The optimism is based on national economic growth that continues to improve.

National steel consumption in 2016 increased sharply by 12,67 million tons after experiencing a decline in 2015 which only reached 11,37 million tons. It means in 2016, national steel consumption increase for 11% from the previous year. In 2017

the national steel consumption increase to 13,6 million tons which means it increase for 7%. Figure 2.10 shows Indonesia's steel consumption volume from 2013 to 2017. From the graph, it shows that the steel consumption volume is increasing from 2015 until 2017. Based on Figure 2.11 that shows the steel consumption growth in Indonesia, in 2015, the growth of steel consumption was decline -11,86%. It was because in that year happened oversupply and steel industry worldwide was sluggish. In 2018, steel consumption for Indonesia targeted to grow for 7%, it means the consumption has to reach 14,5 million tons.



**Figure 2. 10** Indonesia's Steel Consumption Volume

(Source: Laporan Analisis Kebijakan Pengamanan Perdagangan Produk Besi Baja Nasional, 2015)



**Figure 2. 11** Indonesia's Steel Consumption Growth

(Source: Laporan Analisis Kebijakan Pengamanan Perdagangan Produk Besi Baja Nasional, 2015)

Current condition of steel industry for local producer in Indonesia is weak. The local steel producers still not enough to fulfill Indonesia's steel needs. In addition, the high import of steel products at lower prices with unfair trade practice resulted in low market demand for high-quality steel materials.

### 2.2.3. Internal Analysis

Resources analysis and value chain activity is used to analyze the internal situation and condition that will affects the company's performance.

#### 2.2.3.1. Resources Analysis

Company's resources are defined as tangible resources and intangible resources. Tangible resources have four primary categories which are financial, organizational, physical, and technological. Intangible resources have three primary categories which are human, innovation, and reputational. Tangible resources are resources or assets that can be measured or quantified and observed.

**Table 2. 1** Tangible resources

Financial Resources	<ul style="list-style-type: none"> <li>• The firm's capacity to borrow</li> <li>• The firm's ability to generate funds through internal operations</li> </ul>
Organizational Resources	<ul style="list-style-type: none"> <li>• Formal reporting structures</li> </ul>
Physical Resources	<ul style="list-style-type: none"> <li>• The sophistication of a firm's plant and equipment and attractiveness of its location</li> <li>• Distribution facilities</li> <li>• Product inventory</li> </ul>
Technological Resources	<ul style="list-style-type: none"> <li>• Availability of technology-related resources such as copyrights, patent, trademarks, and trade secrets</li> </ul>

(Source: Hiit, M. A., Ireland, R. D., & Hoskisson, R. E. 2016. Strategic Management: Competitiveness and Globalization 12e. Canada: Cengage Learning)

Intangible resources are resources or assets that accumulated throughout the year from company's history. It is relatively difficult to imitate and analyze.

**Table 2. 2** Intangible resources

Human Resources	<ul style="list-style-type: none"> <li>• Knowledge</li> <li>• Trust</li> <li>• Skills</li> <li>• Abilities to collaborate with others</li> </ul>
Innovation Resources	<ul style="list-style-type: none"> <li>• Ideas</li> <li>• Scientific capabilities</li> <li>• Capacity to innovate</li> </ul>
Reputational Resources	<ul style="list-style-type: none"> <li>• Brand name</li> <li>• Perceptions of product quality, durability, and reliability</li> <li>• Positive reputation with stakeholders such as suppliers and customers</li> </ul>

(Source: Hiit, M. A., Ireland, R. D., & Hoskisson, R. E. 2016. Strategic Management: Competitiveness and Globalization 12e. Canada: Cengage Learning)

## 1) PT Gunawan Dianjaya Steel Tbk

### 1. Tangible Resources

- **Financial Resources**

The company's capital management strategy is conservative and has no loans other than trade payables. The repayment capacity of accounts receivable in 2017 was 115% that means the company's liquidity is still reliable in short-term.

- **Physical Resources**

The company's installed production capacity in a year is 400.000 tons of steel plate with thickness average of steel plate 50mm. The company's target market are domestic and export markets.

- **Technological Resources**

Technology that PT Gunawan Dianjaya Steel Tbk use for hot rolled steel process is four high rolling mill technology. The production capacity of company's installed rolling mill is 400.000 tons of steel plate per year with thickness average 50 mm.

## 2. Intangible Resources

- **Human Resources**

GDS employees in 2017 reached 473 employees. From year 2016, the company had 465 employees, which means the company add eight more employees in 2017. GDS employee educational range is from elementary school to bachelor. The most educational background of GDS employees is high school. The most employee background is high school because the company need the physical than specialized skill to produce steel plate.

**Table 2. 3** PT Gunawan Dianjaya Steel Tbk Employees Educational Background

<b>Educational Level</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Bachelor	56	54	55	53	57
Diploma	8	8	6	6	5
High School	349	356	349	340	346
Junior School	48	48	48	48	48
Elementary School	20	20	19	18	17
<b>Total</b>	<b>481</b>	<b>486</b>	<b>477</b>	<b>465</b>	<b>473</b>

(Source: Annual Report Gunawan Dianjaya Steel, 2013-2017)

Coaching and training program are regularly held to maintains its human resources quality. Trainings, seminars, and socialization the company had in 2017 are as below:

- Seminar on Recent Tax Regulation
- Dissemination of FSA Regulations and IDX
- Guidance of ISO 9001:2015
- Guidance of Occupational Health and Work Safety and

### *Fire Prevention in Work Field*

- Socialization of Employment Norm
- Training Windows Server 2012
- Training Setting Gap Cutting 40

- **Innovation Resources**

PT Gunawan Dianjaya Steel Tbk is committed on sustainable growth through on-going innovation. The hot rolling mill technology is advanced with Four High Rolling Mill technology. The human resources are also an important aspect to the company. Human resources should be qualified, to maintain the qualification, the company give the employee training and seminars. Those things are done to maintain the company status as one of the leading steel plates rolling mill industries in ASEAN region.

- **Reputational Resources**

PT Gunawan Dianjaya Steel Tbk has good reputation. The company has been in in steel industry from 1989, the company has maintained the reputation for long time. The quality of steel plate is guaranteed so it can be accepted by the market. To proof the quality of the product, the company obtained certification and standardization of steel plate products, both the national standard (SNI), Indonesia Shiping Standard (BKI), and international standards (ABS, RINA, Germanischer Lloyds, DNV, TUV, Korean Standard, SIRIM, Class NK, FPC and CE).

## **2) PT Jaya Pari Steel Tbk**

### **1. Tangible Resources**

- **Financial Resources**

The company's financial resource is from equity and suppliers' business debt. The repayment period of accounts receivable in 2017 was 228 days. Total liabilities compared to total assets in 2017 is 18%. While the total liabilities compared to total equity in 2017 is 23%.

- **Physical Resources**

The company's installed production capacity in a year is 70.000 tons of raw slab material or plate 60.000 tons of finished products. The company's target market focused for domestic only through distributors in Jakarta and Surabaya, then the products distributed to various regions in Indonesia.

- **Technological Resources**

Technology that PT Jaya Pari Steel Tbk use for hot rolled steel process is three high rolling mill technology. The production capacity of company's installed rolling mill is 70.000 tons of raw slab materials or 60.000 tons of finished goods per year with thickness range 8mm-25mm.

## 2. **Intangible Resources**

- **Human Resources**

JPS employees in 2017 reached 226 employees. From year 2016, the company had 261 employees, which means the company reduce 35 employees in 2017. JPS employee educational range is from elementary school to bachelor. The most educational background of GDS employees is high school. The most employee background is high school because the company need the physical than specialized skill to produce steel plate. Until 2017, in JPS there are no employee that has diploma educational background. Number of employees that has bachelor educational are remain the same from 2013-2017 which is 20 employees.

**Table 2. 4** PT Jaya Pari Steel Tbk Employees Educational Background

<b>Educational Level</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Bachelor	20	20	20	20	20
Diploma	0	0	0	0	0
High School	197	195	191	205	171
Junior School	33	33	31	31	30
Elementary School	10	10	5	5	5
<b>Total</b>	<b>260</b>	<b>258</b>	<b>247</b>	<b>261</b>	<b>226</b>

(Source: Annual Report Jaya Pari Steel, 2013-2017)

In 2017, to develop the employee's skill, the company sent 48 employees to participate in external training program related to Occupational Health and Safety (OHS) in Danger Identification, ISO 9001, and OHS Technical Direction.

- **Innovation Resources**

PT Jaya Pari Steel Tbk used hot rolling mill technology to produce their products. The technology the company use is Three High Rolling Mill technology. Other than technology the company use, the human resources are also an important aspect to maintain the innovation. To maintain and gain the human resources qualification, the company give the employee training and seminars.

- **Reputational Resources**

PT Jaya Pari Steel Tbk has been in in steel industry from 1973, the company has maintained their reputation for long time. The quality steel products are aimed at customer satisfaction. The standardization of JPS' steel products, the company has to conform the products to Indonesian National Standard (SNI). Otherwise, when the product below the required standard or has any defect, the company provide warranty to the customers.

### 2.2.3.2. Value Chain Activities

Value chain activities are activities or tasks the firm completes in order to produce products and then sell, distribute, and service those products in ways that create

value for customers. Value chain analysis is used to identify and evaluate the competitive potential of resources and capabilities. It is used to analyze the company's internal activities. Value chain activities consist of two activities which are primary activity and primary activity. The primary activity is type of activities that involved in the physical creation of the products or service delivery, how it brought to the consumer and its after sale activities (service). It consists of five categories such as inbound logistics, operations, outbound logistics, marketing & sales, service. The support activity is activity that linked to the primary activities. It may help to improve the effectiveness and efficiency of its primary activities. It consists of four categories such as firm infrastructure, human resource management, technology procurement.

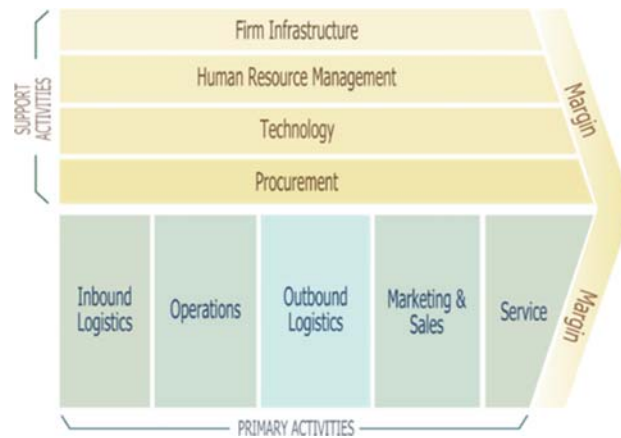
### **1. Primary Activity**

- Inbound logistics are the activities that related to the receiving, storing, and distributing the inputs to the product or service including the material handling, inventory, and transportation/logistic.
- Operations activity relate to manage processes that change inputs (in the form of raw materials, labor, and energy) into output (in the form of goods and / or services).
- Outbound logistics are process relating to the storage and movement of the final product and related information about production for the last user.
- Marketing and sales is sell products or services and processes to create, communicate, deliver, and exchange offers that have value for customers, clients, partners and society in general.
- Services includes all activities needed to keep the product / service working effectively for the customer after it is sold and delivered.

### **2. Secondary Activity**

- Firm infrastructure refers to an organization's structure and its management, planning, accounting, finance and quality-control mechanisms.
- Human resource management consists of all activities including in recruiting, hiring, training, developing, compensating and (if necessary) rejecting or laying off employees.

- Technology development deals with equipment, hardware, software, procedures and technical knowledge to bear the transformation of the company from input to output.
- Procurement is acquisition of goods, services or works from outside sources.



**Figure 2. 12** The Generic Porter's Value Chain Model

(Source: Michael E. Porter, 1985)

## 1) PT Gunawan Dianjaya Steel Tbk

### 1. Primary Activity

#### • Inbound Logistics

Inbound logistics that involved in GDS is the procurement of raw materials. The procurement of raw material of GDS is still imported from Singapore. The company most likely to get the steel slab whenever there are orders from customers, so they do not have to store the raw material for long time and do not require massive space to store.

#### • Operations

The production activity to produce steel plate are first the raw material prepared which is steel slab. Then the steel slab was cut into size that needed. The cut steel was heated through reheating furnace so the steel can be rolled to certain thickness the customer's request. After the steel reached the temperature for rolling process,

the steel is descaled then rolled use four high rolling mill plate then hot leveler. Rolled steel plate then get sampled to check the quality. The steel needs to cool down after the roll process to fix out the thickness. After the steel plate is cooled, for steel that has thickness more than 15mm, next process is side sheer, but for steel thickness less than 15mm the next process is flame cut. After that the steel is checked once again to make sure the quality before shipment to customers. The final product was storage first before it was sent to the customers or distributors.

- **Outbound Logistics**

After the product is produced, then the quality is checked. Products that fulfilled the standard quality is stored before shipped. When the products are ready to be shipped, it shipped by trucks or ships. The product is distributed to distributors or end users. The shipment can be through ships or trucks.

- **Marketing and Sales**

GDS' facilities and operation base located in Surabaya. The location is quite strategic so the company can easily ship their product through ship because Surabaya has a port. GDS marketing strategy is to sell the product directly to end users or through distributors. Export market also pursued, especially Southeast Asia. Export market is done to minimize the potential loss of foreign exchange rates.

- **Services**

The customer's satisfaction is an important aspect to sustainability of the company. High satisfaction from customers make the possibility of customers return to the company to order more steel plate is higher. To know the customers satisfaction level, the company need to record and assess the customer's satisfaction. For customers that do not satisfied with the steel plate quality, the company give guarantee to customers. This is supported by the existence of certification and standardization of steel plate products.

## **2. Support Activity**

- **Firm Infrastructure**

PT Gunawan Dianjaya Steel Tbk has installed plate mill with production capacity 400,000 tons. GDS facility can built high strength alloy steel plate with variety shipping grade that can fulfill the customer needs for constructions and equipment or tools. The company planned to have another plate mill with production capacity 1,000,000 tons in 2020. Both plate mill are located in Surabaya.

- **Human Resource Management**

High-quality human resource impact the company's performance, it is seen through the operational performance. Better qualified and talented people make the whole company to perform better. The employee quality is maintained through regular coaching and training program.

- **Technology Development**

Steel plate industry is need technology to produce the product. Steel plate was made using plate mill. Since PT Gunawan Dianjaya Steel Tbk product is only hot rolled steel plate. The steel plate average thickness is 50mm. To produce steel plate, GDS use four high rolling mills. The company has started to expand the production capacity by adding a production line with steel plates capacity of 1 million tons since 2012 and targeted to finish in 2020. The expansion total investment value approximately is USD100 million.

- **Procurement**

The procurement to get the needed resources PT Gunawan Dianjaya Steel Tbk is join force with PT Jaya Pari Steel Tbk. The steel slab procurement is sourced from supplier in Singapore. Imported raw materials which is steel slab is from Yuan Resources Pte Ltd., Singapore.

## 2) PT Jaya Pari Steel Tbk

### 1. Primary Activity

- **Inbound Logistics**

Inbound logistics that involved in JPS is the procurement of raw materials. The procurement of raw material of JPS is imported from Singapore. The company most likely to get the steel slab whenever there are orders from customers, so they do not have to store the raw material for long time and do not require massive space to store.

- **Operations**

The production activity to produce steel plate are first the raw material prepared which is steel slab. Then the steel slab was cut into size that needed. The cut steel was heated through reheating furnace so the steel can be rolled to certain thickness the customer's request. After the steel reached the temperature for rolling process, the steel is descaled then rolled use three high rolling mill plate then hot leveler. Rolled steel plate then get sampled to check the quality. The steel needs to cool down after the roll process to fix out the thickness. After the steel plate is cooled, for steel that has thickness more than 15mm, next process is side sheer, but for steel thickness less than 15mm the next process is flame cut. After that the steel is checked once again to make sure the quality before shipment to customers. The final product was storage first before it was sent to the customers or distributors.

- **Outbound Logistics**

After the product is produced, then the quality is checked. Products that fulfilled the standard quality is stored before shipped. When the products are ready to be shipped, it shipped by trucks or ships. The product is distributed to distributors or end users. The shipment can be through ships or trucks.

- **Marketing and Sales**

JPS' facilities and operation base located in Surabaya. The location is quite strategic so the company can easily ship their product through ship because Surabaya has a port. JPS marketing strategy is to sell the product directly to end users or through distributors. JPS target market is domestic market, the distribution of products is through Surabaya or Jakarta then distributed to other location.

- **Services**

To maintain the company's sustainability, customer's satisfaction is important. Customer's satisfaction makes the possibility of customers return to the company to order more steel plate is higher. The customer's satisfaction is recorded and assessed to know the customers satisfaction level. Steel plate quality maintained to keep customers satisfied.

## 2. **Support Activity**

- **Firm Infrastructure**

PT Jaya Pari Steel Tbk has installed plate with production capacity 70,000 tons of raw slab materials or 60,000 tons of finished goods per year. JPS can fulfill the customer needs for constructions and equipment or tools. Production facility of JPS is in Surabaya.

- **Human Resource Management**

High-quality human resource impact the company's performance, it is seen through the operational performance. Better qualified and talented people make the whole company to perform better. The employee quality is maintained through regular coaching and training program.

- **Technology Development**

Steel plate industry is need technology to produce the product. Steel plate was made using plate mill. Since PT Jaya Pari Steel Tbk product is only hot rolled steel plate.

JPS produce steel plate with thickness around 8mm-25mm. To produce steel plate, JDS use three high rolling mills.

- **Procurement**

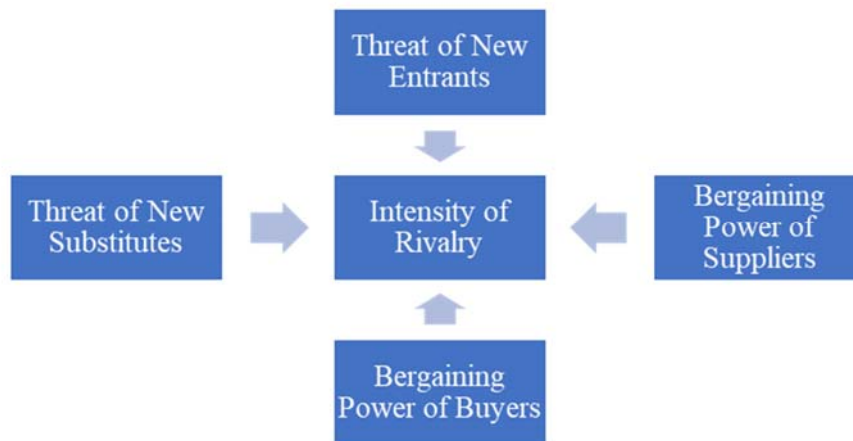
The procurement to get the needed resources PT Jaya Pari Steel Tbk is join force with PT Gunawan Dianjaya Steel Tbk. The steel slab procurement is sourced from supplier in Singapore. Imported raw materials which is steel slab is from Yuan Resources Pte Ltd., Singapore.

## 2.2.4. External Analysis

Porter's five forces analysis is used to analyze the external situation and condition that will affects the company's performance.

### 2.2.4.1. Porter's Five Forces Analysis

Porter's five forces is a tools to analyze an industry's attractiveness and likely profitability. This part discuss five forces that affect the performance of steel company in an effort to create sustainable competitiveness. This analysis is to identify the strength, avoid mistakes, and improve weaknesses.



**Figure 2. 13** Porter's Five Forces

## **1. Threats of New Entrants**

Entry barriers from local for steel industry is low, it showed from the small amount of steel company. To enter steel industry, it required a large amount of investment. It requires availability of vast land for production space, labor requirement, government permission, machines to process the steel, waste treatment. On the other hand, the entry barriers from foreign country is low due to government policy regarding steel export, but government support local steel industry with policy to use more local steel product which means the threats of new entrants from outside Indonesia is moderate.

## **2. Bargaining Power of Suppliers**

The steel supply is dominated from big companies either local or foreign country, it resulting the suppliers bargaining power is low. Some type of steel is not produced in Indonesia so for some specific type of steel, has to be imported. Imported steel's price is more competitive than domestic steel.

## **3. Bargaining Power of Buyers**

The buyers bargaining power is high because buyers has a lot of options to choose from domestic and foreign country. China is known as a country that export steel with variety type of products but also with low price.

## **4. Threats of New Substitutes**

Threats of new substitutes is high. There are a lot of substitutes for steel such as aluminium and plastics. Aluminium can be used to substitutes steel in automanufacture or automotive industry. Plastics can be used to substitute steel in packaging. Both of substitutes might have cheaper price than steel.

## **5. Intensity of Rivalry**

The intensity of rivalry in steel industry is decreasing in local region, which is Indonesia. It happened because some of big company do merger or acquisition with smaller company. From the merger or acquisition, the number of competitor is

reduced. But on the other side, imported steel are get easier to get in to Indonesia. This resulting high intensity of rivalry.

#### **2.2.4.2. PEST Analysis**

##### **1. Political**

The role of Indonesian government is important in politics for making regulations and rules that apply to suppliers and customers. Indonesia's government is supporting local steel production to improve and limit the import steel volume. The Minister of Trade Regulation No. 22 of 2018 concerning Provisions on the Import of Iron or Steel, Alloy Steel, and Derivative Products with goal to reduce the waiting time for goods in the port (dwelling time) but it turns out resulting invasion of steel imports from China. Instead open the gap for the entry of steel imports with the mode of replacing the Harmonized System (HS) from carbon steel type steel to alloy steel.

##### **2. Economic**

Indonesia has higher economic growth than world's growth. The GDP's growth is 5,6% in 2013 to 5% in 2014 shows slowing down but it is stable on around 5% until 2017. The customer purchasing power increased through the increasing GDP, it also going to make the customer demand increase. It is happen because the income of middle class Indonesia is raising. Indonesia government has a high priority in economy, social and infrastructure development. It makes the increasing of GDP happens. Government has plans to support economy, social and infrastructure development program with purpose to make Indonesia become developed country in 2025.

##### **3. Social**

Steel volume consumption in Indonesia has been growing rapidly each year. The highest growth was 11,43% in the period of time 2015 to 2016. It is believed that steel consumption will continue to increase until 2025 because the development

program that government made. Steel consumption projected to be 21,40 million tons in 2025.

#### **4. Technology**

Technology has an important role in steel industry. The improvement in production technology to increase the production efficiency. PT Gunawan Dianjaya Steel Tbk planning to have more plate mill to gain the productivity. The operations supported by advanced Four High Rolling Mill technology and qualified human resources.

##### **2.2.5. Merger and Acquisition (M&A)**

A merger is a strategy through which two firms agree to integrate their operations on a relatively coequal basis. An acquisition is a strategy through which one firm buys a controlling, or 100 percent, interest in another firm with the intent of making the acquired firm a subsidiary business within its portfolio. Somehow, there are some blurred lines for differences between merger and acquisition.

Merger is the combination of two or more firms, which the resulting firms maintains the identity of one of the firms. The aim of merger or acquisition that done by some companies to expand or strengthen their business and make synergy. By doing so, they finds it can help the company grow even more or solve some of their business problems. The merger or acquisition helps the company to have more perform than its competitors.

Merger between GDS and JPS are horizontal merger. Horizontal merger are a merger of two firms in the same line of business. Both companies have same major shareholder namely Gwie Gunawan. The economic benefit is the companies able to expand its business reach, lowering the combined overhead so the earnings of the company increase.

Based on Damodaran, the steps involved in Mergers and Acquisition valuation are:

1. Motive for the Merger and Acquisition

2. Target company to merge with
3. Value the target with the merger motive built in
4. Decide on the mode of payment.
5. Choose the accounting method for the merger or acquisition

### **Merger Motive**

The motive for merger between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk is for making a synergy. Merging between these two business companies potentially make performance more effective and efficient. The efficiency itself is from the desire of the two companies to increase competitiveness in market share.

### **Company to Merge with**

PT Gunawan Dianjaya Steel Tbk choose PT Jaya Pari Steel Tbk to merge with is because both companies has same major shareholder also has same management. From the merger, it will makes simplify corporate structures and improve business efficiency.

### **Value the Target**

Value of the targeted company is calculated using discounted cash flow analysis. To determine the company's current value is use discounted cash flow analysis according to its estimated future cash flows.

## **2.2.6. Business Strategy**

Sets of desired objectives of business can be achieve through business strategy. Business strategy of PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk are as below.

### **2.2.5.1. Business Strategy PT Gunawan Dianjaya Steel Tbk**

Business strategy constructed by GDS to support the company's development are as below:

1. Increase direct sales to end users and maintain the domestic sales, keep up a good communication with distributors, increase the added value for the business relationship of both parties.
2. Use business strategy to strengthen cash flow and market by increasing exports sales to countries that do not apply steel trade barriers to Indonesia. It can be used as a natural hedge on the exchange rate movement risk of US dollar against Rupiah.
3. Observe competitors' strategies, both domestic and importers, companies who pricing strategy, and anticipating it with the strategy of flexibility in accepting order, whether in size or quantity, ensuring timely delivery, adding variety of product standardization and flexibility on payment terms without adding any potential risks to the company.

#### **2.2.5.2. Business Strategy PT Jaya Pari Steel Tbk**

Business strategy constructed by JPS to support the company's growth while maintaining the performance are as below:

1. Sell directly to end users to maintain and increase the domestic market share and maintain the good communication with distributors and suppliers of materials.
2. Consistently attempts to sell directly to light construction companies that use steel plate as raw material.
3. Actively monitoring domestic and importers competitors' strategies to stay competitive in the market.
4. Prioritizing flexibility strategies in order quantity, timeliness transfer (delivery time).

## 2.2.7. Financial Ratio Analysis

To analyze and monitor the company's performance, financial ratio analysis is used. The basic inputs to ratio analysis are the company's income statement and balance sheet. The result of this analysis can be used to assist in investment and financial decision making. Financial ratios that will be used in this analysis consist of liquidity ratio, asset management ratio, debt ratio and profitability ratio.

### 2.2.6.1. Liquidity Ratio

Liquidity of a company is measured by its ability to satisfy its short-term obligation as they come due. It means the ability of the company to pay its bills. Liquidity ratio measured by current ratio and quick ratio. Current ratio measure the company's ability to meet its short-term obligation.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Quick ratio is similar to the current ratio except that it excludes inventory, which is generally the least liquid current asset.

$$\text{Quick Ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

### 2.2.6.2. Asset Management Ratio

Asset management ratio measure the speed with which various accounts are converted into sales or cash, or inflow or outflow. It means the ratio measure how efficiently a firm operates along a variety of dimensions. The efficiency of company ability to generate sales from its assets is indicated from total asset turnover.

$$\text{Total Asset Turnover} = \frac{\text{Net Sales}}{\text{Total assets}}$$

To measure operating performance can be seen from fixed-asset turnover ratio. It is a ratio of net sales to fixed assets. The company's ability to generate net sales from fixed-asset investments measured specifically with fixed-asset turnover ratio.

$$\text{Fixed Asset Turnover} = \frac{\text{Net Sales}}{\text{Fixed assets}}$$

### 2.2.6.3. Debt Ratio

The amount of others money that being used to generage profits in a firm is indicated by debt position. The more debt a company uses in relation to its total assets, the greater its financial leverage. It means the bigger the risk, the return through the use of fixed-cost financing is increasing. Debt to assets ratio measures the proportion of total assets financed by the company's creditors.

$$\text{Debt to Assets Ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

Debt to equity ratio measures the relative proportion of total liabilities to common stock equity used to finance the company's assets.

$$\text{Debt to Equity Ratio} = \frac{\text{Total liabilities}}{\text{Common stock equity}}$$

### 2.2.6.4. Profitability Ratio

Profitability ratio used to evaluate the company's profits with respect to a given level of sales, a certain level of assets, or the owners' investment. Gross profit margin measures the percentage of each sales rupiah remaining after the company has paid for its goods.

$$\text{Gross profit margin} = \frac{\text{Sales} - \text{Cost of goods sold}}{\text{Sales}}$$

Operating profit margin measures the percentage of each sales rupiah remaining after all costs and expenses other than interest, taxes, and preferred stock dividends.

$$\text{Operating profit margin} = \frac{\text{Operating profits}}{\text{Sales}}$$

Net profit margin measures the percentage of each sales rupiah remaining after all costs and expenses, including interest, taxes, and preferred stock dividends, have been deducted.

$$\text{Net profit margin} = \frac{\text{Earnings available for common stockholders}}{\text{Sales}}$$

Earnings per share (EPS) is interest to present or prospective stockholders and management.

$$\text{Earnings per share} = \frac{\text{Earnings available for common stockholders}}{\text{Number of shares of common stock outstanding}}$$

Return on asset (ROA) measures the overall effectiveness of management in generating profits with its available assets.

$$\text{ROA} = \frac{\text{Earnings available for common stockholders}}{\text{Total assets}}$$

Return on equity (ROE) measures the return earned on the common stockholders' investment in the company.

$$\text{ROE} = \frac{\text{Earnings available for common stockholders}}{\text{Common stock equity}}$$

#### **2.2.6.5. PT Gunawan Dianjaya Steel Tbk Financial Ratio**

Based on the calculation result on Table 2.5 of PT Gunawan Dianjaya Steel Tbk financial ratio from 2013 until 2017, here are the analysis for GDS' performance:

**Table 2. 5 PT Gunawan Dianjaya Steel Tbk Financial Ratio**

Aspect	Ratio	2013	2014	2015	2016	2017
Liquidity Ratio	Current Ratio	2.99	1.41	1.22	1.24	1.15
	Quick Ratio	2.50	0.96	0.90	0.82	0.75
Asset Management Ratio	Total Assets Turnover	1.18	0.90	0.77	0.60	0.95
	Fixed Asset Turnover	4.55	1.79	1.28	1.00	1.53
Debt Ratio	Debt to Assets Ratio	0.26	0.36	0.32	0.34	0.34
	Debt to Equity Ratio	0.35	0.56	0.47	0.51	0.52
Profitability Ratio	Gross Profit Margin	0.15	0.05	0.01	0.14	0.10
	Net Profit Margin	0.07	(0.01)	(0.06)	0.04	0.01
	Earning per Share (EPS)	11.21	(1.70)	(6.73)	3.87	1.25
	Return on Total Assets (ROA)	0.08	(0.01)	(0.05)	0.03	0.01
	Return on Total Equity (ROE)	0.10	(0.02)	(0.07)	0.04	0.01

1. Liquidity ratio of GDS shows that the company has the ability to pay every debt the company has. From the quick ratio shown that the company has more inventories than liquid asset. It will impact when the company has to pay debt, they need more time to liquid their inventories first. The liquidity ratio from 2013 to 2017 shows declining result, it happened because the cash is declining while the inventories increasing.
2. From 2013 until 2016 the asset management ratio is decline, eventhough in 2014 and 2016 the assets is increase. In 2017, the increasing of asset followed by asset management ratio. It means the company's efficiency in managing the assets are improving.
3. Debt ratio of GDS is smaller than the company's asset and company's equity. It means GDS has lower degree of indebtedness and less financial leverage it has. The debt GDS' has is almost stable from 2015 until 2017. The debt increase is not too significant.
4. Operating ratio of GDS:
  - a. The profitability ratio of GDS from 2013 until 2015 is declining. The lowest point of GDS' profitability ratio is in 2015 caused by the decline of international steel plate price which reach over 30% due to the decline of world commodity. After sustaining adversities in prior years, international steel industry are escalating gradually in 2016 and resulted the increasing of gross profit ratio. In 2017, the market is declining again but not as sharp as what happened in 2014. The company has optimistic that the steel industry

prospects in 2018 estimated to improve by the increased demand for steel and gradual price.

- b. The other effect of decline steel plate price in 2014 and 2015 is the company facing loss.
- c. Return on assets and return on equity of GDS has same pattern with the gross profit margin and net profit margin. The return in 2015 is the lowest with negative result. It shows that the return has dependency with steel market condition.

#### 2.2.6.6. PT Jaya Pari Steel Tbk Financial Ratio

Based on the calculation result on Table 2.6 of PT Jaya Pari Steel Tbk financial ratio from 2013 until 2017, here are the analysis for JPS' performance:

**Table 2. 6** PT Jaya Pari Steel Tbk Financial Ratio

Aspect	Ratio	2013	2014	2015	2016	2017
Liquidity Ratio	Current Ratio	247.44	464.98	13.35	10.40	5.46
	Quick Ratio	208.24	372.87	10.48	8.07	4.27
Asset Management Ratio	Total Assets Turnover	0.52	0.85	0.39	0.34	0.68
	Fixed Asset Turnover	13.80	23.94	11.73	10.73	23.57
Debt Ratio	Debt to Assets Ratio	0.04	0.04	0.08	0.12	0.19
	Debt to Equity Ratio	0.04	0.04	0.09	0.14	0.23
Profitability Ratio	Gross Profit Margin	(0.01)	0.02	(0.16)	0.00	0.03
	Net Profit Margin	0.08	(0.02)	(0.15)	(0.16)	(0.06)
	Earning per Share (EPS)	20.06	(8.91)	(29.32)	(25.69)	(19.86)
	Return on Total Assets (ROA)	0.04	(0.02)	(0.06)	(0.05)	(0.04)
	Return on Total Equity (ROE)	0.04	(0.02)	(0.07)	(0.06)	(0.05)

1. In 2014 eventhough the assets was decrease, but the efficiency is increasing. Meanwhile in 2015 and 2016 the asset management ratio of JPS is decline. In 2017, the asset was increase also followed by the asset management ratio. It means the company's efficiency in managing the assets are improving. Fixed asset turnover is quite high. It indicates the company used its fixed assets to generate sales well.
2. Debt ratio of JPS is way smaller than the company's asset and company's equity. It means JPS has lower degree of indebtedness and less financial

leverage it has. From 2013 until 2017 the JPS' debt is increase but the asset and the equity is decrease resulted the debt ratio increase.

3. Operating ratio of JPS:
  - a. The profitability ratio of JPS from 2013 until 2015 is declining. The lowest point of JPS' profitability ratio is in 2015 caused by the decline of international steel plate price which reach over 30% due to the decline of world commodity. In 2017, the market is increase resulted increase of profitability ratio in 2017. Eventhough the sales in 2017 has increase, JPS still facing loss but not as much as the previous years. JPS' management has optimism based on the national need for steel which still continued to increase.
  - b. The gross profit of JPS in 2016 and 2017 has recovered from loss in 2015. Eventhough the gross profit increase, it is still not enough to cover other expenses and resulted loss in net profit.
  - c. Return on assets and return on equity of JPS has same pattern with the net profit margin. It shows that the return has depanyency with steel market condition. The return on asset and equity in 2014 until 2017 is negative eventhough in 2016 and 2017 the return has increase.

### **2.3. Potential Synergy**

Synergy is the benefit that results when two or more agents work together to achieve something either one couldn't have achieved on its own. Through merger between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk, there are potential synergy from four aspects which are the strategy, operations, and customers.

#### **2.3.1. Strategy**

Strategy synergy for the merged company is low-cost strategy. Through the merger, the low-cost strategy became stronger. The bargaining power of supplier for the company is higher because the volume of required steel slab is increase from one company, so the company can bargain to the supplier to give lower price. Since the

raw material or steel slab price is lower, the company can give lower price to customers so it can attract more customer to purchase the product.

### **2.3.2. Operations**

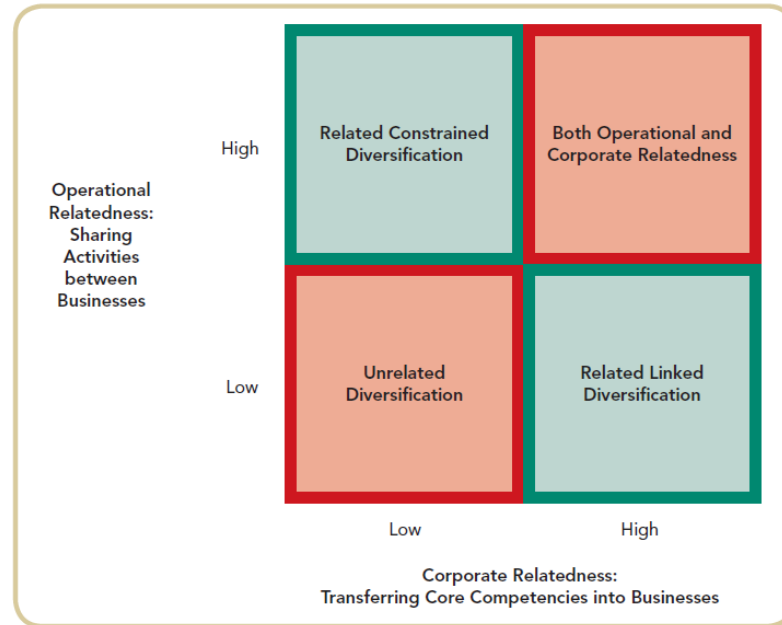
Operation synergy between both companies are the technology that the company use, same industry, and has same production flow. From the technology to produce steel plate, the production machine is divided into two category, one mill to produce thicker steel plate and the other one to produce thinner steel plate. From it, the company can produce more steel plate and more efficient production.

### **2.3.3. Customers**

Customers synergy when PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk merge is the company can widen up their customer market. JPS is only sell their product to domestic market, meanwhile GDS is sell their product for domestic and export, especially Southeast Asia. The synergy can strengthen the domestic market and gain the export market customers.

## **2.4. Relatedness of Operational and Corporate**

Company can have their value for customers through related diversification corporate-level strategy. The value can be used to builds a competitive advantage by build upon or extends its resources and capabilities. The related diversification strategy is used for company who wants to develop and exploit economies of scope between its businesses.



**Figure 2. 14** Value-Creating Diversification Strategies: Operational and Corporate Relatedness

(Source: Hiit, M. A., Ireland, R. D., & Hoskisson, R. E. 2016. *Strategic Management: Competitiveness and Globalization 12e*. Canada: Cengage Learning)

Operational relatedness is created by sharing either primary activity or support activity. Operational relatedness between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk is high. Both companies have same supplier and distributors. Share businesses activities can be used to gain economies of scope, from it the risk might be reduced, and value is created.

Corporate-level core competencies are complex sets of resources and capabilities that link different businesses, primarily through managerial and technological knowledge, experience, and expertise. The corporate relatedness between both companies are high. The economies of scope are created through merger, it makes the production activity more cost-effective than on their own. Market power also created through merger. The merged company can increase competitiveness in the industry. The company can reduce the cost of its primary and support activities. The price of raw material can be reduced due to the increase of bargaining power of supplier. It happened because the volume of raw material that company buy is

bigger and through the merger it created economic of scale for the company. Based on that, the relatedness of operational and corporate between GDS and JPS are related constrained diversification.

## **2.5. Effect of Merger**

Anti-competitive effects of a merger could be compensated with internal efficiencies. The merged company is unilaterally created or increase substantial market power. Through merger the competition between the merged entities is loss. The benefit of merger is not seen right away from beginning. After merger, both companies still have a certain level of fixed costs but has possibility to increase the production output. Essential tasks the company has such as the purchasing of materials, billing of customers, marketing, and human resources. These costs are called indivisible. These costs might reduce the efficiency in the first place. For the long-run, through combined and integration asset between companies, the economies of scale can be achieved.

## **CHAPTER III**

### **BUSINESS SOLUTION**

#### **3.1. Companies Financial Condition**

Merger of PT Gunawan Dianjaya Steel Tbk (GDS) and PT Jaya Pari Steel Tbk (JPS) is expected resulting benefit, better performance, and synergy. To analyze whether the expected result will be achieved or not, the value of firm is analyzed. The methods that used are Discounted Cash Flow (DCF) by doing Free Cash Flow of the Firm (FCFF). The methods is applied for both companies.

Two scenarios is used to make valuation of the merger. The first scenario is each company's performance before merger. The second scenario is combined company's financial condition after merger.

##### **3.1.1. Individual Company's Financial Condition**

The company's performance as an individual company was analysed using Discounted Cash Flow (DCF) Method. The result from DCF Method are the company's value and profitability growth for certain period.

##### **3.1.2. Combined Company's Financial Condition**

The financial condition and performance were analysed after the merger taken. Strategy for the company analysed whether the strategy can gain profitability and company's value.

### 3.2. Company's Valuation using Discounted Cash Flow

Discounted Cash Flow (DCF) is used approach the company's valuation by discounting Free Cash Flow of Firm (FCFF) at Weighted Average Cost of Capital (WACC) from calculation. Three inputs are required to value any asset in DCF model, the inputs are expected cash flow, discount rate and expected growth.

#### A. Expected Cash Flow

Definition of cash flows to equity is the cash flow remaining after the cash flow claims of non-equity investors in the firm have been met and reinvested into the firm for the projected growth in cash flows to remain the firm sustain.

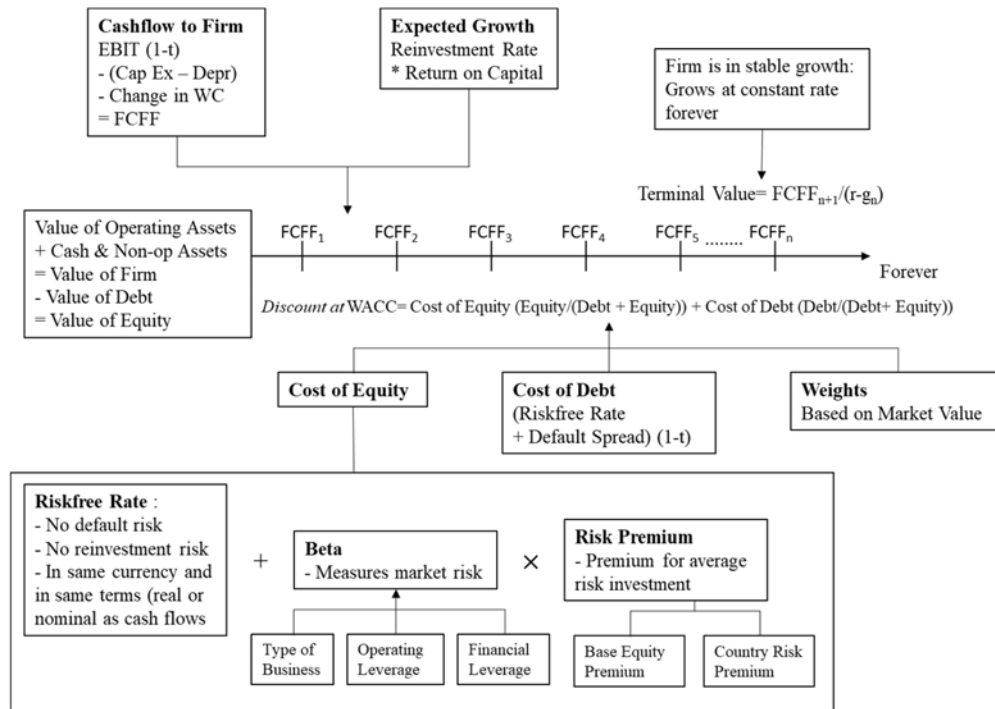
The cashflow to the firm is the cumulated cash flow to all claimholders in the firm. Way to obtain the cashflow is estimate the cash flows prior to debt and preferred dividend payments, by subtracting from the after-tax operating income the net investment needs to sustain growth. These cash flows are called free cash flow to the firm (FCFF) models.

#### B. Discount Rate

Discount rate used on a cash flow reflect its riskiness, the higher discount rates means higher risk cash flows. There are two ways of viewing risk. The first is purely in terms of the likelihood that an entity will default on a commitment to make a payment. Second is in terms of the variation of actual returns around expected returns.

#### C. Expected Growth

To estimate company's growth. First is to look the company's historical growth from previous year report. Second is to obtain estimates of growth from other person or more informed sources. The third is expected growth rate calculated by using two variables which are hoe much the reinvested rate of the firm and how well those earnings are reinvested..



**Figure 3. 1** Valuing a Firm

(Source: Aswath Damodaran)

### 3.2.1. Discount Rates

Discount rate used in the valuation is Weighted Average Cost of Capital (WACC). To calculate WACC, Cost of Equity and Cost of Debt is needed. WACC equation are as below:

$$WACC = (Re(E/V)) + (Rd(1 - Tax) * (D/V))$$

Where:

E = market value of the firm's equity (market cap)

D = market value of the firm's debt

V = total value of capital (equity plus debt)

E/V = percentage of capital that is equity

$D/V$  = percentage of capital that is debt

$R_e$  = cost of equity (required rate of return)

$R_d$  = cost of debt (yield to maturity on existing debt)

### 3.2.1.1. Cost of Debt

The cost of debt is the rate at which you can borrow at currently, It also reflect the level of interest rates in the market. After-tax cost of debt formula is:

$$\text{After - tax cost of debt} = \text{Interest Expense}(1 - \text{Tax})$$

The cost of debt calculation of PT Gunawan Dianjaya Steel Tbk are as below:

**Table 3. 1** PT Gunawan Dianjaya Steel Tbk Cost of Debt

Interest Rate	10.50%
Tax rate	25.00%
<b>After-tax cost of debt (Rd)</b>	<b>7.88%</b>

The cost of debt calculation of PT Jaya Pari Steel Tbk are as below:

**Table 3. 2** PT Jaya Pari Steel Tbk Cost of Debt

Interest Rate	10.00%
Tax rate	25.00%
<b>After-tax cost of debt (Rd)</b>	<b>7.50%</b>

Cost of debt of JPS is smaller than GDS because the JPS' interest rate is smaller than GDS'. The interest rate is depend on the bank that the company choose. The interest rate that is used to calculate the cost of debt is the highest interest rate between the company's bank.

### 3.2.1.2. Cost of Equity

Cost of equity is calculated using Capital Asset Pricing Mode (CAPM). It consist of three variable, which are beta, risk market, risk free rate and risk premium. Cost of equity formula is:

$$Re = Risk\ free\ rate + \beta s(Market\ Return - Risk\ free\ rate)$$

Beta for the cost of equity calculation obtained from regrestion the monthly adjust close price of PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk. From the calculation, beta of GDS is 0,46 and beta of JPS is 0,38. Risk market obtained from calculation the monthly adjust close price of Jakarta Composite Index (JKSE) from January 1<sup>st</sup>, 2013 until December 31<sup>st</sup>, 2017. The risk free rate using Indonesia Government Bond (SUN) which is 6.30%.

The cost of equity calculation of PT Gunawan Dianjaya Steel Tbk are as below:

**Table 3. 3** PT Gunawan Dianjaya Steel Tbk Cost of Equity

Risk Free Rate (Rf)	6.30%
Market Return (Rm)	13.41%
Equity Risk Premium (Rp)	7.12%
Beta	0.46
<b>Cost of Equity (Re)</b>	<b>9.54%</b>

The cost of equity calculation of PT Jaya Pari Steel Tbk are as below:

**Table 3. 4** PT Jaya Pari Steel Tbk Cost of Equity

Risk Free Rate (Rf)	6.30%
Market Return (Rm)	13.41%
Equity Risk Premium (Rp)	7.12%
Beta	0.38
<b>Cost of Equity (Re)</b>	<b>8.99%</b>

### 3.2.1.3. Weighted Average Cost of Capital

Weighted average cost of capital (WACC) is a discounted rate used in company valuations that rely on entity based discounted cash flow methods.

**Table 3. 5** WACC PT Gunawan Dianjaya Steel Tbk

Proportion of Equity (We)	65.68%
Proportion of Debt (Wd)	34.32%
Cost of Equity (Ke)	9.54%
After-tax cost of debt (Kd)	7.88%
<b>WACC</b>	<b>8.97%</b>

**Table 3. 6** WACC of PT Jaya Pari Steel Tbk

Proportion of Equity (We)	81.47%
Proportion of Debt (Wd)	11.03%
Cost of Equity (Ke)	8.99%
After-tax cost of debt (Kd)	7.50%
<b>WACC</b>	<b>8.15%</b>

Based on the calculation above, the weighted average cost of capital (WACC) of PT Gunawan Dianjaya Steel Tbk is 8,97% and PT Jaya Pari Steel Tbk is 8,15%.

### 3.2.2. Individual Company's Free Cash Flow Projection

The projections are using fundamental growth, it is based on how much the company reinvest from their earnings. The calculation is as below:

$$\text{Growth rate} = \text{Reinvestment rate} \times \text{Return on Capital}$$

Where the formula for reinvestment rate and return on capital are as below:

$$\text{Reinvestment rate} = \frac{\text{Net Cap Ex} + \text{Change in WC}}{\text{EBIT}(1 + t)}$$

$$\text{Return on Capital} = \frac{\text{EBIT}(1 + t)}{\text{BV of Equity} + \text{Debt} - \text{Cash}}$$

**Table 3. 7** Individual Company's Growth Rate Calculation

	<b>GDS</b>	<b>JPS</b>
Reinvestment Rate	-400%	135%
Return on Capital	1%	-2%
<b>Growth Rate</b>	<b>-6%</b>	<b>-2%</b>

### 3.2.2.1. Income Statement Projection

Forecasted growth of PT Gunawan Dianjaya Steel Tbk is -6% from 2018 until 2020. Forecasted growth of PT Jaya Pari Steel Tbk is -2% from 2018 until 2020. The growth is expected to be negative because the trend is negative where it was resulted because Indonesia still not able to produce the raw material. So the procurement to produce steel plate, most of materials are imported. It impact the materials price are following the global price. Indonesia still needs to import steel because Indonesia's steel production capacity is below the requirement.

**Table 3. 8** Individual Company's Income Statement Projection

Year	PT Gunawan Dianjaya Steel Tbk			PT Jaya Pari Steel Tbk		
	EBIT	Taxes	EBIT(1-t)	EBIT	Taxes	EBIT(1-t)
2018F	20,619,125.28	5,154,781.32	15,464,343.96	(7,902,888.82)	(1,975,722.20)	(5,927,166.61)
2019F	19,408,135.68	4,852,033.92	14,556,101.76	(7,761,306.98)	(1,940,326.75)	(5,820,980.24)
2020F	18,268,269.17	4,567,067.29	13,701,201.88	(7,575,607.62)	(1,893,901.90)	(5,681,705.71)

### 3.2.2.2. Balance Sheet Projection

**Table 3. 9** Individual Company's Balance Sheet Projection

PT Gunawan Dianjaya Steel Tbk					
Year	Fixed Assets	CAPEX	Depreciation	Working Capital	Change in WC
2013	309,819,503	(311,189,220)	14,311,600	576,142,589	107,140,014
2014	677,473,284	(216,824,103)	24,519,313	219,767,334	(356,375,255)
2015	711,868,979	(34,925,962)	13,576,980	73,679,129	(146,088,205)
2016	753,802,085	(63,295,743)	13,593,606	90,624,607	16,945,479
2017	803,665,227	(61,096,082)	13,101,536	59,386,311	(31,238,297)
2018F	857,362,997	(59,874,160)	13,315,120	11,529,055	(47,857,255)
2019F	903,373,294	(58,676,677)	13,521,908	(29,561,871)	(41,090,926)
2020F	956,124,708	(57,503,143)	13,724,307	(76,493,144)	(46,931,273)

PT Jaya Pari Steel Tbk					
Year	Fixed Assets	CAPEX	Depreciation	Working Capital	Change in WC
2013	14,145,731	4,269,280	1,309,226	234,947,415	9,987,627
2014	13,100,716	(1,580,867)	1,155,255	223,587,733	(11,359,682)
2015	12,216,588	(91,192)	1,058,320	198,187,787	(25,399,947)
2016	11,249,057	(24,888)	992,419	189,831,277	(8,356,509)
2017	10,365,541	(1,480,371)	883,516	175,704,779	(14,126,498)
2018F	9,551,418	3,500,000	905,812	156,381,590	(19,323,189)
2019F	8,801,238	3,780,000	810,552	140,901,400	(15,480,190)
2020F	8,109,977	4,082,400	763,618	120,353,081	(20,548,319)

Capital Expenditure (CAPEX) is calculated by subtracting the gross fixed assets at current year with gross fixed assets of previous year. Depreciation is calculated by the change of accumulated depreciation current year with the previous year. Change in working capital is calculated by subtracting the working capital at current year with working capital of previous year.

Projected free cashflow of firm (FCFF) from projection company's financial statements from 2018 to 2020 of PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk is shown in Table 3.11.

**Table 3. 10** Individual Company's Free Cash Flow

<b>PT Gunawan Dianjaya Steel Tbk</b>				
	<b>12/31/18</b>	<b>12/31/19</b>	<b>12/31/20</b>	<b>Perpetuity Growth</b>
<b>EBIT Growth</b>	-6%	-6%	-6%	-6%
<b>FCFF</b>	136,510,879	127,845,613	131,859,926	
<b>Terminal Value</b>				836,391,535

<b>PT Jaya Pari Steel Tbk</b>				
	<b>12/31/18</b>	<b>12/31/19</b>	<b>12/31/20</b>	<b>Perpetuity Growth</b>
<b>EBIT Growth</b>	-41%	-2%	-2%	-2%
<b>FCFF</b>	(7,902,889)	(7,761,307)	(7,575,608)	
<b>Terminal Value</b>				84,541,920

### 3.2.3. Equity Valuation

Equity valuation is a method to get the value of share price. To calculate the value of firm is Present Value of Terminal Value added by Present Value of FCFF then add the value of cash and non-operating assets. The non-operating assets commonly is cash and marketable securities and value of minority holdings in other companies. To get the value of equity in common stock, the value of firm is added to value of outstanding debt.

$$Enterprise\ Value = \sum_{i=1}^n \frac{FCFF_i}{(1 + WACC)^i} + TV$$

Table 3. 12 shows the value of equity of individual company.

**Table 3. 11** Valuation of Individual Company

<b>The Valuation</b>	<b>GDST</b>	<b>JPRS</b>
PV of 3 years FCFF	334,864,424	24,837,268
PV of Terminal Value	836,391,535	66,837,338
PV of FCFF	1,171,255,959	91,674,606
Value of Cash & Non-operating assets	159,461,199	2,411,714
Value of the Firm	1,330,717,157	94,086,320
Value of Outstanding Debt	441,675,308	66,219,548
Value of Equity in Common Stock	1,772,392,465	160,305,867
Weighted common shares outstanding	8,200,000	750,000
<b>Value of Equity per share</b>	<b>216</b>	<b>214</b>
Current Price (as of Dec 29, 2017)	82	129

### 3.3. Synergy Value

Synergy is the additional value that is generated by combining two firms, creating opportunities that would not been available to these firms operating independently. The categorize and sources of synergy are divided into two, which are operating synergy and financial synergy.

Operating synergies affect the operations of the combined firm and include economies of scale, increasing pricing power and higher growth potential. Financial synergies, on the other hand, are more focused and include tax benefits, diversification, a higher debt capacity and uses for excess cash.

#### 3.3.1. Valuing Operating Synergy

In merger and acquisition, there is a potential for operating synergy, in one form or the other. Steps in valuing operating synergy:

1. Value the firm involved in the merger independently.  
Discounting the expected cash flows of each company at the weighted average cost of capital.

2. Value of the combined firm, with no synergy.

Adding the values that calculated of each firm from the individual company's valuation.

3. Combined firm with synergy.

Adding the effects of expected growth rates and cash flow. After the addition, the combined firms are revalued with synergy. The difference between the value of the combined firm that had been revalued and the value of the combined firm without synergy provides a value for synergy.

### 3.3.1.1. Individual Company's Value

First step is calculate the value of each firm independently. To calculate the value of combined firms, the estimated terminal value from each firm is added. The cash flows in the terminal year, cost of capital and growth rate is used to estimate the company's terminal value.

**Table 3. 12** Terminal Value Individual and Combined Firm

	<b>GDST</b>	<b>JPRS</b>	<b>Combined Firm</b>
<b>Terminal Value</b>	836,391,535	84,541,920	920,933,454

Calculate the present value of terminal value by discounted the free cash flows at the weighted average cost of capital.

**Table 3. 13** Present Value of Terminal Value Individual and Combined Firm

	<b>GDST</b>	<b>JPRS</b>	<b>Combined Firm</b>
<b>PV of Terminal Value</b>	646,447,537	66,837,338	713,284,874

The combined value is the sum value of GDS and JPS. Both Table 3.13 and Table 3.14 shows the value of the company before the acquisition happened. The value has not added with the synergy.

### 3.3.1.2. Combined Company's Value through Operating Synergy

To calculate the value of combine firm with synergy, the synergy's growth has to be calculated too. The calculation involve assumption wheather it would affect the cash flows and discount rates for the combined firm. The beta of combined firm calculated using formula below.

*Beta combined firm*

$$= \left( \beta_{GDS} \times \left( \frac{Value Firm_{GDS}}{Combined Firm Value} \right) \right) + \left( \beta_{JPS} \times \left( \frac{Value Firm_{JPS}}{Combined Firm Value} \right) \right)$$

Beta of GDS is 0,46 with value Rp1.751.973.633.000 and beta of JPS is 0,38 with value Rp148.833.707.000. From the calculation, the beta for combined firm is 0,45. Beta is used to calculate the cost of capital combined firm. Calculation cost of equity shown on Table 3.15, cost of debt on Table 3.16, and cost of capital on Table 3.17.

**Table 3. 14** Combined Firm Cost of Equity Calculation

Risk Free Rate (Rf)	6.30%
Market Return (Rm)	13.41%
Equity Risk Premium (Rp)	7.12%
Beta	0.45
<b>Cost of Equity (Ke)</b>	<b>9.49%</b>

**Table 3. 15** Combined Firm After-tax Cost of Debt Calculation

Interest Rate	10.50%
Tax rate	25.00%
<b>After-tax cost of debt (Kd)</b>	<b>7.88%</b>

**Table 3. 16** Combined Firm Cost of Capital Calculation

Proportion of Equity (We)	69.11%
Proportion of Debt (Wd)	30.89%
Cost of Equity (Ke)	9.49%
After-tax cost of debt (Kd)	7.88%
<b>WACC</b>	<b>8.99%</b>

**Table 3. 17.** Combined Company's Valuation

<b>Valuation</b>	
PV of 3 years FCFF	497,838,164
PV of Terminal Value	2,100,689,340
PV of FCFF	2,598,527,504
Value of Cash & Non-operating assets	161,872,912
Value of the Firm	2,760,400,416
Value of Outstanding Debt	507,894,856
Value of Equity in Common Stock	3,268,295,272
Weighted common shares outstanding	9,242,500
<b>Value of Equity per share (Rp)</b>	<b>353.62</b>

**Table 3. 18** Value Synergy Combined Firm

	In Thousand Rupiah
Value Combined Firms with Synergy	2,760,400,416
Value Combined Firms	1,443,401,707
Value Synergy	1,316,998,709
Present Value of Synergy	556,641,881

The individual company's values were the values before the merger. The terminal value and the value of the combined firms is the sum of the firms valued independently. The combined company's value with synergy is Rp2.760.400.416.000 meanwhile the combined value without synergy is Rp1.443.401.707.000. From that, the value of synergy is Rp1.316.998.709.000 or for the present value of synergy is Rp556.641.881.000.

- **Synergy Implication to Growth**

The implication of synergy to merged company's growth are the growth is positive. The cost of goods sold is decrease due to increase of bargaining power of suppliers so the raw material price can be reduced. It can gain the sales because the price can be lower, so it attracts more customers.

### 3.4. Enterprise Value

The Enterprise Value is a measure of a company's total value or equity market capitalization. Enterprise value is calculated as the market capitalization plus debt, minority interest and preferred shares, minus total cash and cash equivalents or written as formula below

$$\begin{aligned}
 EV &= \text{market value of common stock} \\
 &+ \text{market value of preferred equity} \\
 &+ \text{market value of debt} + \text{minority interest} \\
 &- \text{cash and investments}
 \end{aligned}$$

The enterprise value calculation of PT Jaya Pari Steel Tbk before the merger in 2017 is as below.

**Table 3. 19** Enterprise Value of PT Jaya Pari Steel Tbk

2017 (in Thousand Rupiah)	
Share Price (in Full Rupiah)	100
Outstanding Share	750.000
Market Capitalization	75.000
Debt	66.219.548
Cash and Investment	2.411.714
Enterprise Value	63.882.834

PT Jaya Pari Steel Tbk merger value is Rp386.925.000.000 which means it is overvalued. Although the merger is overvalued, the merger gain a synergy value that valued more than the merger value. The synergy value is Rp4.229.221.857.000. or the present synergy value is Rp1.480.577.861.000.

### 3.5. Risk-Adjusted Performance

The risk-adjusted performance calculated using Sharpe ratio and Treynor ratio. The risk is comparing the difference between average return and risk free rate to the standard deviation or beta.

#### 3.5.1. Sharpe Ratio and Treynor Ratio

The Sharpe ratio can be used to evaluate a portfolio's past performance. The higher Sharpe ratio result, the better the company to be invested. The Treynor ratio is a metric for determining how much excess return was generated for each unit of risk taken on by a portfolio. The equation of Sharpe ratio and Treynor ratio are as below:

$$\text{Sharpe Ratio} = \frac{\text{Average Return} - \text{Risk Free Rate}}{\text{Standard Deviation}}$$

$$\text{Treynor Ratio} = \frac{\text{Average Return} - \text{Risk Free Rate}}{\text{Beta}}$$

The average return calculation using arithmetic formula. The risk free rate is the Indonesian Government Bond from 2013 until 2017. The lower variance result, the better risk company has. Variance is square roots of standard deviation, it results when the variation is low, the standard deviation going to be lower. Table 3.20 shows the result of risk-adjusted performance for PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk.

Based on the calculation result on Table 9.13, the average return for GDS and JPS is negative within 5 years. GDS has less loss than JPS. The Sharpe ratio and Treynor ratio of GDS is higher than JPS means GDS has less risk than JPS. Eventhough GDS has less risk, both company has higher risk compared to market.

**Table 3. 20** Risk-adjusted Performance

<b>Performance Measurement</b>	<b>Average Return (Annual)</b>	<b>Standard Deviation</b>	<b>Beta</b>	<b>Sharpe Ratio</b>	<b>Treynor Ratio</b>	<b>Variance</b>
PT Gunawan Dianjaya Steel Tbk	-4,82%	0,0949	0,46	-0,072	-0,015	0,009
PT Jaya Pari Steel Tbk	-19,54%	0,0865	0,38	-0,220	-0,050	0,008
Jakarta Compisite Index	13,41%	0,0353	1,00	2,017	0,071	0,043
Indonesia Gov. Bond	6,30%					

### 3.6. Business Solution

PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk has same majority shareholder and same management. The merger intention is to increase efficiency and competitiveness, through it expected the revenue will increase and strengthen the financial and operational performance. Merger between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk is horizontal merger which both company has same industry and product.

Current condition of steel industry in Indonesia is distracted by the trade war that happened between United States and China causing China has to export their product to other country besides United States. Indonesia is one of the countries to be exported. To fight back the effect of China's export, PT Gunawan Dianjaya Steel Tbk is doing the right thing to merge with PT Jaya Pari Steel Tbk. Through the merger, the company can strengthen their business to combat the business competition.

Indonesia's industry growth for steel in 2017 is the highest which means steel industry has an opportunity to grow in Indonesia. This is a good opportunity for PT

Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk to grow and strengthen the business.

PT Gunawan Dianjaya Steel Tbk has plan to build new plate mill to increase the production of hot rolled steel plate. Through the merger, PT Gunawan Dianjaya Steel Tbk has another plate mill in shorter time than build a new one. The plate mill is needed to increase the production capacity of PT Gunawan Dianjaya Steel Tbk. After the merger, the plate mill project that was planed to be build from previous will be continued.

## CHAPTER IV

### CONCLUSION AND IMPLEMENTATION PLAN

#### 4.1. Conclusion

Based on the calculation on Chapter 3, the valuation shows that the merger between PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk will give synergy. To maintain PT Gunawan Dianjaya Steel Tbk sustainable and has long term benefit, the company need to develop the production capacity.

PT Gunawan Dianjaya Steel Tbk strategy to survive in the business industry is by improving the company's performance. This strategy is more focusing on have more efficient operational performance, increase product competitiveness, cost efficiency. The strategy that PT Gunawan Dianjaya Steel Tbk use is merger with PT Jaya Pari Steel Tbk to have synergy and increase the production volume. Due to increasing demand of steel plate in the middle of infrastructure construction and trade war between United State and China that affect Indonesia's steel industry competition, merger is the right decision to strengthen the company.

Both company, PT Gunawan Dianjaya Steel Tbk and PT Jaya Pari Steel Tbk are public listed company at Indonesia Stock Exchange (IDX). After the merger, PT Jaya Pari Steel Tbk delisted from the market and stock number of PT Gunawan Dianjaya Steel Tbk is added by 1,34 times of PT Jaya Pari Steel Tbk previous stock. From business strategy, the improvement will resulted from implementation such as:

1. Operational synergy from both companies
2. Cost efficiency
3. Operational efficiency

PT Gunawan Dianjaya Steel Tbk installed production capacity is 400,000 tons of steel plate per year with an average thickness of steel plate of 50 mm. The production realization in 2017 amount is 146,591 tons of steel plate or by 36.65%

of the installed capacity. PT Jaya Pari Steel Tbk installed production capacity is 70,000 tons of raw slab material or plate 60,000 tons of finished products per year. The plate production outcome in 2017 reached 20.371 tons or 34% of the production capacity.

Based on valuation calculation in Chapter 3, the enterprise value (EV) of PT Jaya Pari Steel Tbk is Rp63.882.834.000 and the company's merger valued for Rp386.925.000.000. The merger is overvalued but the synergy value is greater than the merger value. The synergy value from merger process is Rp1.316.998.709.000. From the merger, the production capacity is increase. The merger process is by through buy all the stocks that PT Jaya Pari Steel Tbk has times by 1,34.

Along with the development of infrastructure projects by the Government and other domestic products resulted pushed demand for steel products. The condition is an opportunity for steel industry in Indonesia. The synergy between both company has possibility for the company to improved. Synergy is sometimes has difficulties to implement but still has possibilities to create. To create synergy, the company has to have discipline, focus, and consistent to implement the business strategy.

#### **4.2. Implementation Plan**

Based on the business solution, PT Gunawan Dianjaya Steel Tbk should considering to expanse the production capacity throughout build another plate mill. By build another plate mill the company could gain potential revenue from the steel industry. Table 4.1 shows the implementation plan for expantion strategy.

To win the competition in steel industry, PT Gunawan Dianjaya Steel Tbk should deliver the strategy on the right time. The strategy is to control production line so the product quality is maintained. From the new steel mill, expected the product quality is better and more efficient. The revenue will be maximized if it helped out with great marketing.

**Table 4. 1** Implementation Plan

Strategy	Action to be Takken	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Capacity Expansion	Due diligence	■							
	Fund preparation		■	■					
	Construction preparation			■					
	Building new plant			■	■	■	■		
	Finishing and installment							■	■
Market Expansion	Finding and valuing steel mill potential	■							
	Funding Preparation		■						
	Due diligence			■	■	■	■		

### 4.3. Implementation Risk

By the time PT Gunawan Dianjaya Steel Tbk make a decision to merger with PT Jaya Pari Steel Tbk, some risk might occure and resulting something unexpected from plan. From identifying risk that might occur from the merger to the company can minimized risk and prepare the mitigation.

**Table 4. 2** Risk Identification and Mitigation

Strategy	Possible Risk	Mitigation
Market	Human Capital Risk	Held training, workshops, conculting and conseling
	Competition Risk	Implement pricing strategy for customers
	Financial Risk	Calculate and make financial investment on other platform else than the company itself
Capacity Expansion	Competition Risk	Research and develop effective plan for the market
	Financial Risk	Financial management, expenses control
	Operational Risk	Manage and improve technology and system that is used in the operational line
Raw Material Procurement	Currency Risk	Hedging the price
	Political Risk	Macro political risk analysis Micro political risk analysis
	Shipping Risk	Time arrival estimation

For the company sustainability, PT Gunawan Dianjaya Steel Tbk should implementing comprehensive risk management system. The policies, systems and

procedures, and risk management strategy should be based on regulators and risk management best practices in similar industries.

#### **4.4. Recommendation**

When PT Gunawan Dianjaya Steel Tbk plan to have another merger or acquisition, the company has to choose the right target company. Things to consider before buy the targeted company are the feasibility study, fair price, synergy. Both company, buyer and target company has to agree with terms and conditions that applied on the agreement. Both company also should get the beneficial from the collaboration.

Along with the acquisition that happened, PT Gunawan Dianjaya Steel Tbk has future plan to build plate mill. The plate mill expected to increase the production capacity to fulfill demand of steel plate in Indonesia. The company believes that increasing the production capacity will also increasing company's revenue.

PT Gunawan Dianjaya Steel Tbk can consider to have vertical merger or acquisition distributor company or raw material company. From the merger or acquisition expected to give operational efficiency, synergy, cost efficiency, company's performance become more effective and efficient.

## BIBLIOGRAPHY

- Accounting Tools. [www.accountingtools.com](http://www.accountingtools.com). Accessed September, 2018.
- Badan Statistik Nasional. [www.bps.go.id](http://www.bps.go.id). Accessed September, 2018.
- Bank Sentral Republik Indonesia (BI). [www.bi.go.id](http://www.bi.go.id). Accessed September, 2018.
- Bloomberg Business. [www.bloomberg.com](http://www.bloomberg.com). Accessed September, 2018.
- Damodaran, A. 2006. *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, 2nd edition*. New Jersey: John Wiley & Sons, Inc.
- Damodaran, A. 2005. *The Value of Synergy*. New York. Stern School of Business.
- Gitman and Lawrence, 2014. *Principles of Managerial Finance, 14th Edition*. United Kingdom: Pearson Education Limited.
- Hiit, M. A., Ireland, R. D., & Hoskisson, R. E. 2016. *Strategic Management: Competitiveness and Globalization 12e*. Canada: Cengage Learning.
- Indonesia Investments. [www.indonesia-investments.com](http://www.indonesia-investments.com). Accessed August, 2018.
- Kamerbeek, Sjoerd. 2010. *Merger Performance and Efficiencies in Horizontal Merger Policy in the United States and The European Union*. Journal of Advanced Research in Law and Economics; Craiova Vol. 1, Iss. 1 page 16-41.
- Kementerian Perindustrian Republik Indonesia. <http://www.kemenperin.go.id/>. Accessed August, 2018.
- PT Gunawan Dianjaya Steel Tbk. Annual Report 2013-2017. Accessed August, 2018.
- PT Jaya PariSteel Tbk. Annual Report 2013-2017. Accessed August, 2018.
- The World Bank. <https://data.worldbank.org>. Accessed August, 2018.
- Yahoo Finance. [finance.yahoo.com](http://finance.yahoo.com). Accessed August, 2018.

**APPENDIX A**  
**FINANCIAL STATEMENT – BALANCE SHEET**

**A. PT Gunawan Dianajaya Steel Tbk (in Thousand Rp)**

	2013	2014	2015	2016	2017
<b>ASSETS</b>					
<b>CURRENT ASSETS</b>					
Cash	222,544,224	270,344,148	162,331,954	194,256,147	159,461,199
Short-term investments	98,881,627	18,670,187	7,956,234	8,961,123	8,825,175
<i>Trade receivables</i>					
Third parties	110,642,066	99,921,275	77,734,724	60,047,972	65,593,139
Related party	31,337,354	23,805,865	40,865,302	29,405,574	23,305,523
<i>Other receivables</i>					
Third parties	-	790,000	161,738	306,588	273,507
Related party	-	-	-	-	-
Inventories	140,464,144	208,434,322	108,193,613	157,354,193	159,301,168
Prepaid taxes	-	8,117,820	15,857,041	8,924,410	3,086,161
Prepaid expenses	397,275	285,817	578,582	513,108	505,024
Advance to suppliers	258,639,560	17,162,655	1,082,727	5,181,343	28,958,750
Other current assets	2,925,360	2,985,600	-	2,687,200	2,709,600
<b>TOTAL CURRENT ASSETS</b>	<b>865,831,611</b>	<b>650,517,690</b>	<b>414,761,914</b>	<b>467,637,658</b>	<b>452,019,244</b>
<b>NON-CURRENT ASSETS</b>					

Estimated claims for tax refunds	13,629,259	19,426,674	28,356,637	19,702,521	18,919,666
Deffered tax assets	1,234,935	6,223,611	27,965,343	15,486,294	11,369,271
Investment properties	981,311	981,311	981,311	981,311	981,311
<i>Fixed assets</i>					
Net fixed assets	309,819,503	677,473,284	711,868,979	753,802,085	803,665,227
Other assets - net	-	-	-	-	-
<b>TOTAL NON-CURRENT ASSETS</b>	<b>325,665,008</b>	<b>704,104,880</b>	<b>769,172,269</b>	<b>789,972,212</b>	<b>834,935,476</b>
<b>TOTAL ASSETS</b>	<b>1,191,496,619</b>	<b>1,354,622,570</b>	<b>1,183,934,183</b>	<b>1,257,609,870</b>	<b>1,286,954,720</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>					
<b>CURRENT LIABILITIES</b>					
Bank loan	-	32,095,200	-	-	-
<i>Trade payables</i>					
Third parties	179,209,313	236,584,700	158,375,888	169,027,290	190,292,488
Related party	73,134,000	140,578,971	137,950,000	134,920,561	143,105,559
<i>Other payables</i>					
Third parties	219,402	1,065,482	5,393,879	1,877,004	930,929
Related party	-	-	-	13,570,360	9,111,030
Taxes payable	2,844,841	1,129,854	1,137,516	926,898	1,481,750
Accrued expenses	13,868,556	19,152,775	24,270,279	14,476,107	22,957,177
Interest payables	-	-	-	-	-
Advance from customers	20,412,909	32,238,575	13,955,223	42,214,831	24,754,001
<b>TOTAL CURRENT LIABILITIES</b>	<b>289,689,021</b>	<b>462,845,556</b>	<b>341,082,785</b>	<b>377,013,051</b>	<b>392,632,934</b>

<b>NON-CURRENT LIABILITIES</b>					
Estimated liabilities for employee benefits	17,395,079	21,329,298	38,441,398	48,473,859	49,042,375
<b>TOTAL LIABILITIES</b>	<b>307,084,100</b>	<b>484,174,855</b>	<b>379,524,183</b>	<b>425,486,910</b>	<b>441,675,308</b>
<b>STOCKHOLDERS' EQUITY</b>					
<i>Capital stock</i>					
Issued and fully paid	820,000,000	820,000,000	820,000,000	820,000,000	820,000,000
Additional paid - in capital	56,413,555	56,413,555	56,413,555	56,413,555	56,413,555
Deficit	7,451,412	(6,486,883)	(60,505,940)	(28,801,383)	(18,516,686)
<i>Other component of equity</i>					
Unrealized gain (loss) on available for sale securities	547,552	521,043	(11,497,615)	(15,489,212)	(12,617,457)
<b>TOTAL STOCKHOLDERS' EQUITY</b>	<b>884,412,519</b>	<b>870,447,715</b>	<b>804,410,000</b>	<b>832,122,960</b>	<b>845,279,412</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>1,191,496,619</b>	<b>1,354,622,570</b>	<b>1,183,934,183</b>	<b>1,257,609,870</b>	<b>1,286,954,720</b>

**B. PT Jaya Pari Steel Tbk (in Thousand Rp)**

	2013	2014	2015	2016	2017
<b>ASSETS</b>					
<b>CURRENT ASSETS</b>					
Cash	85,416,629	6,778,104	2,159,871	2,556,696	2,411,714
<i>Trade receivables</i>					
Third parties	11,732,827	18,832,902	20,551,933	17,386,712	9,457,479
Related party	73,134,000	140,578,971	137,950,000	134,724,510	143,106,680
Other current financial assets	2,407,185	2,177,566	2,358,194	2,253,644	2,285,647
Accrued interest income	359,234	2,630,380	2,739,857	2,334,878	6,757,089
Inventories	37,379,730	44,389,798	46,034,291	47,026,880	46,781,300
Purchase advances	17,473,364	8,617,607	924	-	1,466,389
Prepaid taxes	15,914	-	2,412,287	-	-
Tax receivable	7,941,016	-	-	3,708,999	2,804,852
Prepaid expenses	40,865	64,292	29,116	42,021	40,709
<b>TOTAL CURRENT ASSETS</b>	<b>235,900,765</b>	<b>224,069,620</b>	<b>214,236,472</b>	<b>210,034,340</b>	<b>215,111,859</b>
<b>NON-CURRENT ASSETS</b>					
Current tax assets - noncurrent	-	-	-	-	-
Tax receivable	-	7,286,422	10,995,421	2,804,852	4,388,607
Deffered tax assets	2,982,872	4,163,583	8,965,677	8,081,773	7,299,182
Investment in associate	122,667,865	121,510,183	116,018,119	118,315,524	119,406,194
Investment properties	823,440	817,117	812,696	812,696	812,696
Property, plant and equipment	14,145,731	13,100,716	-	-	-
Fixed assets - net	-	-	12,216,588	11,249,057	10,365,541

Other noncurrent assets	20,068	20,068	20,068	20,068	20,068
<b>TOTAL NON-CURRENT ASSETS</b>	<b>140,639,977</b>	<b>146,898,089</b>	<b>149,028,570</b>	<b>141,283,970</b>	<b>142,292,289</b>
<b>TOTAL ASSETS</b>	<b>376,540,742</b>	<b>370,967,709</b>	<b>363,265,042</b>	<b>351,318,310</b>	<b>357,404,148</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>					
<b>CURRENT LIABILITIES</b>					
<i>Trade accounts payables</i>					
Third parties	248,231	184,555	213,537	17,280,558	35,951,829
Related party	-	-	10,500,000	-	-
Other accounts payables	359,407	24,909	24,909	24,909	79,448
Taxes payable	119,441	71,709	312,988	569,030	291,968
Accrued expenses	226,271	200,714	1,203,420	2,328,566	1,027,631
Sales advance	-	-	3,793,833	-	2,056,204
<b>TOTAL CURRENT LIABILITIES</b>	<b>953,350</b>	<b>481,886</b>	<b>16,048,686</b>	<b>20,203,062</b>	<b>39,407,080</b>
<b>NON-CURRENT LIABILITIES</b>					
Employment benefits obligation	13,065,858	14,852,958	14,757,326	22,903,318	26,812,468
<b>TOTAL LIABILITIES</b>	<b>14,019,208</b>	<b>15,334,844</b>	<b>30,806,012</b>	<b>43,106,381</b>	<b>66,219,548</b>
<b>STOCKHOLDERS' EQUITY</b>					
Capital stock	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000
Additional paid - in capital	348,000	348,000	348,000	348,000	348,000
Retained earnings	287,128,142	280,241,670	257,090,910	232,828,646	215,812,744

Other component of equity Gain (Loss) from Associate	45,392	43,195	20,120	35,283	23,856
<b>TOTAL STOCKHOLDERS' EQUITY</b>	<b>362,521,534</b>	<b>355,632,864</b>	<b>332,459,030</b>	<b>308,211,929</b>	<b>291,184,600</b>
<b>TOTAL LIABILITIES AND STOCHOLDERS' EQUITY</b>	<b>376,540,742</b>	<b>370,967,709</b>	<b>363,265,042</b>	<b>351,318,310</b>	<b>357,404,148</b>

## APPENDIX B

### FINANCIAL STATEMENT – INCOME STATEMENT

#### A. PT Gunawan Dianajaya Steel Tbk (in Thousand Rp)

	2013	2014	2015	2016	2017
Net Sales	1,410,117,393	1,215,611,782	913,792,627	757,282,528	1,228,528,695
Costs of Goods Sold	(1,195,084,144)	(1,153,721,252)	(904,111,212)	(647,653,123)	(1,101,594,364)
<b>GROSS PROFIT</b>	<b>215,033,249</b>	<b>61,890,530</b>	<b>9,681,414</b>	<b>109,629,405</b>	<b>126,934,331</b>
Other Income	14,319,252	11,088,827	17,801,309	9,871,554	4,296,695
Selling Expenses	(30,031,388)	(29,863,091)	(37,619,643)	(21,784,556)	(29,848,674)
General and Administrative Expenses	(32,872,762)	(35,545,059)	(38,871,313)	(41,959,591)	(52,834,802)
Other Expenses	(32,975,737)	(12,446,376)	(10,521,321)	(3,575)	(14,036,688)
Finance Expenses	(11,887,212)	(13,543,859)	(13,816,545)	(10,239,099)	(12,605,186)
<b>INCOME (LOSS) BEFORE PROVISION FOR TAX EXPENSE</b>	<b>121,585,402</b>	<b>(18,419,028)</b>	<b>(73,346,099)</b>	<b>45,514,138</b>	<b>21,905,676</b>
Provision for Tax Expense	(29,699,715)	4,855,063	18,133,395	(13,809,581)	(11,620,987)
<b>INCOME (LOSS) FOR THE YEAR</b>	<b>91,885,688</b>	<b>(13,563,965)</b>	<b>(55,212,704)</b>	<b>31,704,557</b>	<b>10,284,688</b>
<i>OTHER COMPREHENSIVE INCOME</i>					

<i>ITEMS NOT TO BE RECLASSIFIED TO PROFITS OR LOSS:</i>					
Actuarial gain (losses)	-	(5,302,875)	(823,928)	(5,566,010)	4,012,800
Related income tax	-	1,325,719	205,982	1,391,502	(1,003,200)
<b>TOTAL ITEMS NOT TO BE RECLASSIFIED TO PROFITS OR LOSS</b>	<b>-</b>	<b>(3,977,156)</b>	<b>(617,946)</b>	<b>(4,174,507)</b>	<b>3,009,600</b>
<i>ITEMS TO BE RECLASSIFIED TO PROFITS OR LOSS:</i>					
Net fair value gain (loss) on available-for-sale financial assets	(530,175)	(35,345)	(371,123)	243,881	(183,794)
Related income tax	132,544	8,836	92,781	(60,970)	45,949
<b>TOTAL ITEMS TO BE RECLASSIFIED TO PROFITS OR LOSS</b>	<b>(397,631)</b>	<b>(26,509)</b>	<b>(278,342)</b>	<b>182,910</b>	<b>(137,846)</b>
<b>TOTAL OTHER COMPREHENSIVE INCOME FOR THE CURRENT YEAR</b>	<b>(397,631)</b>	<b>(4,003,665)</b>	<b>(896,288)</b>	<b>(3,991,597)</b>	<b>2,871,755</b>
<b>TOTAL COMPREHENSIVE INCOME (LOSS) FOR THE YEAR</b>	<b>91,488,057</b>	<b>(17,567,630)</b>	<b>(56,108,992)</b>	<b>27,712,960</b>	<b>13,156,443</b>
Weighted average number of outstanding shares	8,200,000	8,200,000	8,200,000	8,200,000	8,200,000
<b>BASIC EARNING PER SHARE</b>	<b>11.21</b>	<b>(1.65)</b>	<b>(6.73)</b>	<b>3.87</b>	<b>1.25</b>

**B. PT Jaya Pari Steel Tbk (in Thousand Rp)**

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Net Sales	195,247,201	313,636,426	143,326,451	120,691,470	244,324,396
Cost of Goods Sold	(196,344,451)	(308,572,790)	(166,669,015)	(120,194,342)	(238,016,116)
<b>GROSS PROFIT</b>	<b>(1,097,250)</b>	<b>5,063,636</b>	<b>(23,342,564)</b>	<b>497,128</b>	<b>6,308,280</b>
Selling Expenses	(5,680,524)	(4,641,397)	(4,210,864)	(4,258,604)	(4,168,383)
General and Administrative Expenses	(12,462,620)	(14,275,679)	(15,170,604)	(16,508,186)	(14,671,118)
Gain on Sales of Fixed Assets	-	-	83,000	-	-
Gain (Loss) on Foreign Exchange - Net	30,265,275	4,125,331	16,431,000	(2,991,446)	(6,740,686)
Others - Net	152,742	715,942	(95,387)	(1,522,684)	354,260
<b>OPERATING INCOME (LOSS)</b>	<b>11,177,624</b>	<b>(9,012,167)</b>	<b>(26,305,419)</b>	<b>(24,783,792)</b>	<b>(18,917,646)</b>
Interest Expense	(916,609)	(1,670,268)	(2,500,954)	(225,613)	(445,315)
Interest Income	459,210	4,018,842	6,681,440	5,545,136	5,189,160
Net Profit (Loss) of Associates	7,617,324	(1,124,453)	(4,577,133)	2,628,308	852,601
Rental Income	-	-	-	-	-
<b>INCOME (LOSS) BEFORE TAXES</b>	<b>18,337,548</b>	<b>(7,788,046)</b>	<b>(26,702,066)</b>	<b>(16,835,962)</b>	<b>(13,321,200)</b>
Income Tax Benefit (Expenses)	(3,292,055)	1,107,683	4,712,361	(2,432,987)	(1,572,992)
<b>INCOME (LOSS) FOR THE YEAR</b>	<b>15,045,493</b>	<b>(6,680,363)</b>	<b>(21,989,705)</b>	<b>(19,268,949)</b>	<b>(14,894,192)</b>

<b>OTHER COMPREHENSIVE INCOME</b>					
<i>Items that will not be Reclassified to Profit or Loss:</i>					
Actuarial Gain (Losses) of Remeasurements of Defined Benefit Pension Plans	-	(2,626,184)	6,991,467	(6,196,332)	(3,161,607)
Other Comprehensive Income Portion of Associate - Net	-	(439,608)	(68,304)	(346,067)	249,496
Related Income Tax	-	766,448	(1,730,791)	1,549,083	790,402
<b>TOTAL</b>	<b>-</b>	<b>(2,299,344)</b>	<b>5,192,373</b>	<b>(4,993,315)</b>	<b>(2,121,710)</b>
<i>Items that may be Reclassified to Profit or Loss:</i>					
Unrealized Gain (Loss) on Available for Sales Securities - Associate	(32,964)	(2,930)	(30,766)	-	-
Other Comprehensive Income (Loss) Portion of Associate - Net	-	-	-	15,163	(11,427)
Related Income Tax	-	733	7,692	-	-
<b>TOTAL</b>	<b>(32,964)</b>	<b>(2,198)</b>	<b>(23,075)</b>	<b>15,163</b>	<b>(11,427)</b>
<b>OTHER COMPREHENSIVE INCOME (LOSS) AFTER TAX</b>	<b>(32,964)</b>	<b>(2,301,541)</b>	<b>5,169,298</b>	<b>(4,978,152)</b>	<b>(2,133,137)</b>
<b>TOTAL COMPREHENSIVE GAIN (LOSS) FOR THE YEAR</b>	<b>15,012,529</b>	<b>(8,981,905)</b>	<b>(16,820,407)</b>	<b>(24,247,101)</b>	<b>(17,027,329)</b>

Total Weighted Average Number of Outstanding Shares for Computation of Basic Earnings per Shares (Shares)	750,000	750,000	750,000	750,000	750,000
<b>BASIC GAIN (LOSS) PER SHARE</b>	<b>20.06</b>	<b>(8.91)</b>	<b>(29.32)</b>	<b>(25.69)</b>	<b>(19.86)</b>

## APPENDIX C

### RATIO ANALYSIS FORMULA

#### Liquidity Ratios

Current Ratio = Current assets ÷ Current Liabilities

Quick Ratio = (Cash + Marketable securities + Accounts receivable) ÷ Current liabilities

#### Asset Management Ratios

Total Assets Turnover = Sales ÷ Total assets

Fixed Asset Turnover = Net annual sales ÷ (Gross fixed assets - Accumulated depreciation)

#### Debt Ratios

Debt to Assets Ratio = Total liabilities ÷ Total assets

Debt to Equity Ratio = Total liabilities ÷ Total equity

#### Profitability ratios

Gross profit margin = Gross Profit ÷ Sales

Operating profit margin = Operating profits ÷ Sales

Net Profit Margin = Net profits ÷ Net sales

Earning per share =  $\frac{\text{Earnings available for common stockholders}}{\text{Number of shares of common stock outstanding}}$

$$\text{Return on Total Assets (ROA)} = \frac{\text{Earnings available for common stockholders}}{\text{Total assets}}$$

$$\text{Return on Common Equity (ROE)} = \frac{\text{Earnings available for common stockholders}}{\text{Common stock equity}}$$

## **APPENDIX D**

### **ADVANCE MERGER MODEL**

Equity Purchase Price = Diluted Shares Outstanding \* Per Share Purchase Price

Funds Required = Equity Purchase Price + Refinanced Debt + Minority Interest  
Purchased + Fees & Expenses

PP&E Write-Up = (Equity Purchase Price – Seller Book Value + Seller’s Existing  
Goodwill) \* Percentage OR

Existing PP&E Balance \* Write-Up Percentage

#### Combining & Adjusting the Balance Sheets

Assets:

Cash: Add Buyer + Seller’s Cash and subtract any cash used in transaction.

Short-Term Investments / Other Cash-Equivalents: Add Buyer + Seller balances.

Accounts Receivable: Add Buyer + Seller balances; sometimes adjust for inter-  
company receivables.

Inventory: Add Buyer + Seller balances.

Other Current Assets: Add Buyer + Seller balances.

Capitalized Financing Fees: Add this item to Assets and create it in transaction.

Net PP&E: Add Buyer + Seller balances and add PP&E Write-Up.

Equity Investments: Add Buyer + Seller balances.

Goodwill: Add Buyer + Seller balances; subtract Seller’s balance; add Newly  
Created Goodwill.

Net Intangible Assets: Add Buyer + Seller balances and add Intangibles Write-Up.

Deferred Income Taxes: Add Buyer + Seller balances; could also adjust for DTA Write-Down here.

Other Long-Term Assets: Add Buyer + Seller balances.

Liabilities & Shareholder's Equity:

Accounts Payable: Add Buyer + Seller balances; sometimes adjust for inter-company payables.

Accrued Expenses: Add Buyer + Seller balances.

Deferred Revenue: Add Buyer + Seller balances (deferred revenue written down after transaction close).

Other Current Liabilities: Add Buyer + Seller balances.

Debt: Add Buyer + Seller balances; subtract any refinanced debt; add newly issued debt.

Deferred Tax Liabilities: Add Buyer + Seller balances; subtract Seller's Balance; add newly created DTL; add write-down of seller's DTA if you haven't already adjusted on the Assets side.

Other Long-Term Liabilities: Add Buyer + Seller balances.

Minority Interests: Add Buyer + Seller balances; subtract any purchased Minority Interests.

Shareholders' Equity: Add Buyer + Seller balances; subtract Seller's Shareholders' Equity; subtract expensed transaction fees; add value of common / preferred stock issued.

### Combined Income Statements

Combined Revenue = Buyer Revenue + Seller Revenue + Revenue Synergies

Combined Gross Profit = Buyer Gross Profit + Seller Gross Profit + Revenue Synergies – Expenses Associated with Revenue Synergies

Combined Operating Income = Buyer Operating Income + Seller Operating Income + Revenue Synergies – Expenses Associated with Revenue Synergies + Expense Synergies

Combined Pre-Tax Income = Combined Operating Income + Buyer Interest Income/Expense + Seller Interest Income/Expense + Acquisition Effects

Combined Net Income = Combined Pre-Tax Income \* Buyer Tax Rate

Combined EPS = Combined Net Income / (Buyer's Old Shares Outstanding + New Shares Issued)

## APPENDIX E

### DISCOUNTED FREE CASH FLOW PROJECTION

#### A. PT Gunawan Dianajaya Steel Tbk (in Thousand Rp)

Free Cash Flow	2017	2018	2019	2020	Perpetuity Growth
EBIT	21,905,676	20,619,125	19,408,136	18,268,269	
EBIT Growth	-52%	-6%	-6%	-6%	-6%
Taxes	5,476,419	5,154,781	4,852,034	4,567,067	
EBIT(1-t)	16,429,257	15,464,344	14,556,102	13,701,202	
+ Depreciation and Amortization	13,101,536	13,315,120	13,521,908	13,724,307	
- Capital Expenditures	61,096,082	(59,874,160)	(58,676,677)	(57,503,143)	
- Change in Working Capital	(31,238,297)	(47,857,255)	(41,090,926)	(46,931,273)	
<b>FCFF</b>	<b>(326,992)</b>	<b>136,510,879</b>	<b>127,845,613</b>	<b>131,859,926</b>	
Discounted FCF		125,278,098	107,671,708	101,914,619	
<b>Total DCF</b>	<b>334,864,424</b>				
<b>Terminal Value</b>					<b>836,391,535</b>
PV Terminal Value	646,447,537				

<b>DCF Key Variables (1)</b>	
Risk Free Rate (Rf)	6.30%
Market Return (Rm)	13.41%
Equity Risk Premium (Rp)	7.12%
Beta	0.46
<b>Cost of Equity (Re)</b>	<b>9.54%</b>
<b>DCF Key Variables (2)</b>	
Interest Rate	10.50%
Tax rate	25.00%
<b>After-tax cost of debt (Rd)</b>	<b>7.88%</b>
<b>DCF: Key Variables (3)</b>	
Proportion of Equity (We)	65.68%
Proportion of Debt (Wd)	34.32%
Cost of Equity (Ke)	9.54%
After-tax cost of debt (Kd)	7.88%
<b>WACC</b>	<b>8.97%</b>
<b>The Valuation</b>	
PV of 3 years FCFF	334,864,424
PV of Terminal Value	836,391,535
PV of FCFF	1,171,255,959
Value of Cash & Non-operating assets	159,461,199
Value of the Firm	1,330,717,157
Value of Outstanding Debt	441,675,308
Value of Equity in Common Stock	1,772,392,465
Weighted common shares outstanding	8,200,000
<b>Value of Equity per share</b>	<b>216</b>
Current Price (as of Dec 29, 2017)	82

## B. PT Jaya Pari Steel Tbk (in Thousand Rp)

Free Cash Flow	2017	2018	2019	2020	Perpetuity Growth
EBIT	(13,321,200)	(7,902,889)	(7,761,307)	(7,575,608)	
EBIT Growth		-41%	-2%	-2%	-2%
Taxes	(3,330,300)	(1,975,722)	(1,940,327)	(1,893,902)	
EBIT(1-t)	(9,990,900)	(5,927,167)	(5,820,980)	(5,681,706)	
+ Depreciation and Amortization	883,516	905,812	810,552	763,618	
- Capital Expenditures	(1,480,371)	3,500,000	3,780,000	4,082,400	
- Change in Working Capital	(14,126,498)	(19,323,189)	(15,480,190)	(20,548,319)	
<b>FCFF</b>	<b>6,499,485</b>	<b>10,801,834</b>	<b>6,689,762</b>	<b>11,547,831</b>	
Discounted FCF		9,988,030	5,719,728	9,129,510	
<b>Total DCF</b>	<b>24,837,268</b>				
<b>Terminal Value</b>					<b>84,541,920</b>
PV Terminal Value	66,837,338				

<b>DCF Key Variables (1)</b>	
Risk Free Rate (Rf)	6.30%
Market Return (Rm)	13.41%
Equity Risk Premium (Rp)	7.12%
Beta	0.38
<b>Cost of Equity (Re)</b>	<b>8.99%</b>
<b>DCF Key Variables (2)</b>	
Interest Rate	10.00%
Tax rate	25.00%
<b>After-tax cost of debt (Rd)</b>	<b>7.50%</b>
<b>DCF: Key Variables (3)</b>	
Proportion of Equity (We)	81.47%
Proportion of Debt (Wd)	11.03%
Cost of Equity (Ke)	8.99%
After-tax cost of debt (Kd)	7.50%
<b>WACC</b>	<b>8.15%</b>
<b>The Valuation</b>	
PV of 3 years FCFF	24,837,268
PV of Terminal Value	66,837,338
PV of FCFF	91,674,606
Value of Cash & Non-operating assets	2,411,714
Value of the Firm	94,086,320
Value of Outstanding Debt	66,219,548
Value of Equity in Common Stock	160,305,867
Weighted common shares outstanding	750,000
<b>Value of Equity per share</b>	<b>213.74</b>
Current Price (as of Dec 29, 2017)	129

### C. Combined Firm with Value Synergy (in Thousand Rp)

Free Cash Flow	2017A	2018F	2019F	2020F	Perpetuity Growth
EBIT	262,351,280	265,465,881	268,617,458	271,806,450	
EBIT Growth		1%	1%	1%	1%
Taxes	65,587,819.97	66,366,470	67,154,364	67,951,612	
EBIT(1-t)	196,763,460	199,099,410	201,463,093	203,854,837	
+ Depreciation and Amortization	14,002,722	14,144,074	14,286,853	14,431,073	
- Capital Expenditures	(62,964,678)	(180,302,529)	(119,726,390)	(120,054,408)	
- Change in Working Capital	45,364,795	217,794,232	128,148,413	128,499,505	
<b>FCFF</b>	<b>228,366,065</b>	<b>175,751,781</b>	<b>207,327,923</b>	<b>209,840,813</b>	
Discounted FCF		161,249,653	174,524,299	162,064,211	
<b>Total DCF</b>	<b>497,838,164</b>				
<b>Terminal Value</b>					<b>2,719,973,500</b>
PV Terminal Value	2,100,689,340				

DCF Key Variables (1)	
Risk Free Rate (Rf)	6.30%
Market Return (Rm)	13.41%
Equity Risk Premium (Rp)	7.12%
Beta	0.45
<b>Cost of Equity (Ke)</b>	<b>9.49%</b>

DCF Key Variables (2)	
Interest Rate	10.50%
Tax rate	25.00%
<b>After-tax cost of debt (Kd)</b>	<b>7.88%</b>

DCF: Key Variables (3)	
Proportion of Equity (We)	69.11%
Proportion of Debt (Wd)	30.89%
Cost of Equity (Ke)	9.49%
After-tax cost of debt (Kd)	7.88%
<b>WACC</b>	<b>8.99%</b>

Valuation	
PV of 3 years FCFF	497,838,164
PV of Terminal Value	2,100,689,340
PV of FCFF	2,598,527,504
Value of Cash & Non-operating assets	161,872,912
Value of the Firm	2,760,400,416
Value of Outstanding Debt	507,894,856
Value of Equity in Common Stock	3,268,295,272
Weighted common shares outstanding	9,242,500
<b>Value of Equity per share (Rp)</b>	<b>353.62</b>

Value Combined Firms with Synergy	2,760,400,416
Value Combined Firms	1,443,401,707
Value Synergy	1,316,998,709
Present Value of Synergy	556,641,881