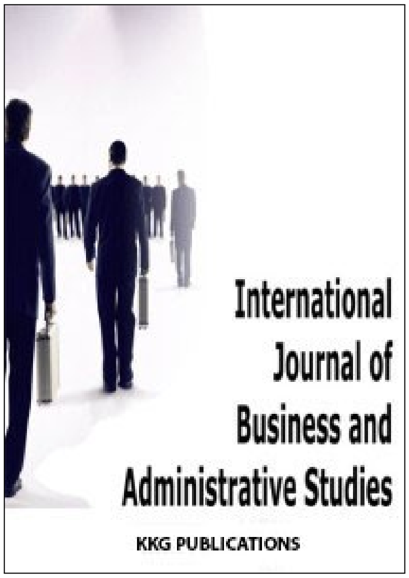
This article was downloaded by:
Publisher: KKG Publications
Registered office: 18, Jalan Kenanga SD 9/7 Bandar Sri Damansara, 52200 Malaysia



Key Knowledge Generation

Publication details, including instructions for author and subscription information:
http://kkgpublications.com/business/

Merger and Acquisiton (M&A) Analysis of Pt Kimia Farma Tbk and Pt Indofarma Tbk

RANDY KUSUMA

Bandung Institute of Technology, Bandung, Indonesia

Published online: 22 June 2017

To cite this article: Kusuma, R. (2017). Merger and acquisiton (M&A) analysis of Pt Kimia Farma Tbk and Pt Indofarma Tbk. *International Journal of Business and Administrative Studies, 3*(3), 84-91.
DOI: https://dx.doi.org/10.20469/ijbas.3.10001-3

To link to this article: http://kkgpublications.com/wp-content/uploads/2017/3/IJBAS-10001-3.pdf

PLEASE SCROLL DOWN FOR ARTICLE

KKG Publications makes every effort to ascertain the precision of all the information (the "Content") contained in the publications on our platform. However, KKG Publications, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the content. All opinions and views stated in this publication are not endorsed by KKG Publications. These are purely the opinions and views of authors. The accuracy of the content should not be relied upon and primary sources of information should be considered for any verification. KKG Publications shall not be liable for any costs, expenses, proceedings, loss, actions, demands, damages, expenses and other liabilities directly or indirectly caused in connection with given content.

This article may be utilized for research, edifying, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly verboten.

KKG PUBLICATIONS

International Journal of Business and Administrative Studies
2017, 3(3), 84-91

IJBAS

MERGER AND ACQUISITON (M&A) ANALYSIS OF PT KIMIA FARMA TBK AND PT INDOFARMA TBK

RANDY KUSUMA *

Bandung Institute of Technology, Bandung, Indonesia

Keywords:
Kimia Farma
Indofarma
Merger
Acquisition
Valuation
Synergy

Received: 15 February 2017
Accepted: 11 April 2017
Published: 22 June 2017

Abstract. Under the 2014-2019 roadmap, Indonesias Ministry of State-owned Enterprises (SOEs) plans to cut the number of SOEs from 119 to 85 and restructure them into 15 sector-based holding companies to improve efficiency. Within healthcare sector, the government has re-initiated the merger plan of PT Kimia Farma Tbk and PT Indofarma Tbk. The government is now considering whether the merger, which actually has been planned since 2005, should be conducted prior to the establishment of holding company. At one side, the government believes that the merger will diminish business overlap between these two SOEs and catalyze growth through synergy. In spite of that, some concerns start to emerge around the plan, including disagreement among shareholders and the uncertain impact of JKN scheme to both companies, among others. Given the aforementioned issues, the purpose of this research is to analyze the feasibility of the merger and propose the most appropriate acquisition scheme. As for the methodology, the author uses PESTLE, SWOT and TOWS to perform qualitative analysis at the economy, industry and company level. For the quantitative analysis, the author performs firm valuation using Discounted Cash Flow (DCF) method to calculate the standalone and post-merger values of both firms. Eventually, the result shows that there is expected synergy that comes from revenue enhancement and costs reduction with total value of IDR 968,332,350,219 under base case scenario, IDR 361,754,014,000 under downside scenario, and IDR 1,274,420,797,608 under upside scenario. The best scheme for this merger will be PT Kimia Farma Tbk acquiring PT Indofarma Tbk using 100% stocks with 0.41 exchange ratio. Through this merger, the two companies will form a stronger and more efficient pharmaceutical SOE that can withstand competition in years to come.

©2017 KKG Publications. All rights reserved.

INTRODUCTION

Statement of the Problem

In the late 2015, the Ministry of SOEs launched its roadmap for the 2014-2019 period. According to the roadmap, government plans to cut the number of SOEs from 119 to 85 in order to promote efficiency. For this, the Ministry aims to restructure SOEs into 15 sectoral holding companies. Along with the consolidation issue within healthcare sector, the government has re-initiated the merger plan of two state-owned pharmaceutical giants, PT Kimia Farma Tbk and PT Indofarma Tbk, which has been postponed since 2005.

In December 2015, the Deputy of SOE Restructuring and Development division stated that the government was assessing the merger possibility of the two pharmaceutical SOEs prior to the establishment of holding company in pharmaceutical sector. The government is currently considering whether the merger should be executed prior to the establishment of holding company. Should the merger be realized, the most likely scenario will be PT Kimia Farma Tbk acquiring PT Indofarma Tbk considering the bigger size of PT Kimia Farma Tbk. At one side, the government believes that the merger will diminish business overlap between these two SOEs and improve cost efficiency, which will result in revenue and cost synergy.

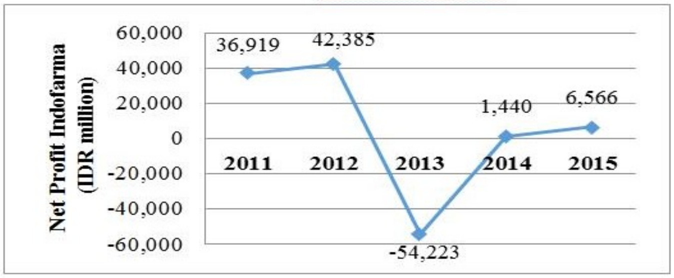
In particular, it is believed that this consolidation will enable both companies to capture the growth momentum of pharmaceutical industry that is expected to reach 10-year CAGR of 10.40%, according to Business Monitor International (2016). Despite such positive presumptions, there are some disagreements among shareholders and board members. They are questioning whether this merger will create synergy given the weak financial results of PT Indofarma Tbk and uncertain implication of Indonesia's universal health coverage scheme to pharmaceutical companies.

In view of the aforementioned issues, a research is needed to re-assess the feasibility of the merger plan between the two companies based on the latest economic and industry development. As such, the author will perform a comprehensive analysis on this merger plan by using qualitative frameworks and quantitative valuation method to identify the potential synergy from this merger and determine the most appropriate financing scheme for this transaction.

*Corresponding author: Randy Kusuma
†Email: randy.kusuma@sbm-itb.ac.id

Content from this work is copyrighted by KKG Publications, which permits restricted commercial use, distribution and reproduction in any medium under a written permission. Users may print articles for educational and research uses only, provided the original author and source are credited. Any further utilization of this work *must* maintain attribution to the author(s), the title of the work and journal citation in the form of a proper scientific referencing.

FIGURE 1
Net Profit of PT Indofarma Tbk



Source: PT Indofarma Tbk, (2015)

Discounted Cash Flow Method

In discounted cash flow valuation, one estimates the intrinsic value of any asset by discounting the expected cash flows on that asset at a risk-adjusted discount rate (Damodaran, 2001). The value of any asset is determined by its generated cash flow, life, expected growth, and degree of riskiness.

$$\text{Value of asset} = \sum_{n=1}^{\infty} \left(\frac{\text{Expected Cash Flow}}{(1+r)^n} \right)$$

The type of cash flow used in valuation may vary, depending on the valuation purpose and company's characteristics. There are three types of cash flow models that can be used for DCF valuation: Dividend Discount Model (DDM), Free Cash Flow to the Firm (FCFF) and Free Cash Flow to Equity (FCFE) (Damodaran, 2012).

Acquisitions

According to Ross (2010), there are three basic forms of acquisition, namely merger or consolidation, acquisition of stock, and acquisition of assets.

- Merger or Consolidation
  A merger is the acquisition where the acquiring firm absorbs the acquired firm. While the acquiring firm retains its identity, the target firm becomes incorporated into the acquiring firm and stops to operate as a sole entity. Meanwhile, a consolidation is the form of acquisition in which the acquiring and target firms consolidate into an entirely new entity.
- Acquisition of Stock
  Acquisition of stock is the acquisition method that involves purchase of the target firm's stocks using cash, stocks, or other securities. This method is mostly carried out through a tender offer, which is a public offer to buy shares of the target firm.
- Acquisition of Assets
  Acquisition of assets is a form of acquisition through the purchase of all of the target firm's assets. Here, the acquired firm does not vanish due to the retained "shell". A formal vote of the target firm's stockholders is required in this scenario.

Research Objectives

- To obtain the standalone firm values of PT Kimia Farma Tbk and PT Indofarma Tbk
- To obtain the post-merger firm value of PT Kimia Farma Tbk and PT Indofarma Tbk
- To calculate the expected synergy from the merger between PT Kimia Farma Tbk and PT Indofarma Tbk
- To recommend the appropriate acquisition scheme for the merger between PT Kimia Farma Tbk and PT Indofarma Tbk

Research Limitation

This study is limited to providing an acquisition recommendation for PT Kimia Farma Tbk and PT Indofarma Tbk based on information obtained from annual and financial reports in the last 5 years (2011-2015) as well as stocks performance in the last 10 years (2006-2015) (PT Indofarma Tbk, 2015; PT Kimia Farma Tbk, 2015).

LITERATURE REVIEW

PESTEL Analysis

PESTEL stands for political, economic, social, technological, ecological and legal. As the name implies, it is a tool used to identify political, economic, social, technological, ecological and legal forces surrounding a business (Wheelen, 2012).

SWOT Analysis

SWOT analysis is a tool used to identify internal and external factors surrounding a business. SWOT stands for strengths, weaknesses, opportunities and threats. The identification of these four strategic factors will enable a company to have a comprehensive understanding on its business and develop strategy for the future.

TOWS Matrix

TOWS matrix is the continuation of SWOT analysis. It matches a company's external factors with internal factors to produce four sets of alternative strategies. TOWS is one of the tools that can be used to brainstorm alternative strategies for growth and retrenchment purposes (Wheelen, 2012).

Based on the types of companies involved in the transaction, acquisition is generally classified into three types:

- Horizontal Acquisition
  In horizontal acquisition, both acquirer and acquired firms operate in the same industry and may operate in the same level of production process.
- Vertical Acquisition
  In vertical acquisition, the acquirer and target firm operate within the same industry, but in different level of production process.
- Conglomerate Acquisition
  In conglomerate acquisition, the acquirer and acquired firms operate in distinct and uncorrelated industries. Diversification is generally the main factor of this type of acquisition.

Synergy

Synergy is the additional value that can be created from a consolidation between two companies. As the key rationale beneath mergers and acquisitions, synergy is defined as the difference between the post-merger value of the combined firm and the standalone values of the acquiring and target firms. $Synergy = Value_AB - (Value_A + Value_B)$

Operating Synergy

"Operating synergies are those synergies that allow firms to increase their operating income, increase growth or do both" (Damodaran, 2012). Basically, there are four main sources of operating synergies:

- Economies of scale
- Greater pricing power
- Combination of different functional strengths
- Higher growth in new or existing markets

Financial Synergy

Damodaran (2001) states that financial synergy can take form by the following: (1) higher cash flows, (2) lower cost of capital (discount rate), or both. In practice, the factors that may contribute in creating financial synergy are as the following:

- A merger of a firm having excess cash and limited project opportunities with a firm having limited cash and high-return projects may create value for the combined firm since the high-return projects can now be funded using the excessive cash. Commonly, this synergy shows up when larger firms acquire smaller firms.
- As its earnings and cash flows become more stable and predictable after merger, the combined firm can expand its debt capacity. This allows the company to increase its debt proportion in its capital structure, which further results in tax benefit, lower cost of capital and higher firm's value.
- Tax benefits can arise either from the acquisition taking advantage of tax laws to write up the target company's assets or from the use of net operating losses to preserve income. Therefore, a profitable firm acquiring money-losing firm may harness the net operating losses of the acquired firm to reduce its tax burden. In addition, a firm can also take advantage of the higher post-merger depreciation expense to streamline tax.
- Diversification may spread the firm's risk. Nevertheless, diversification remains as a controversial reason as investors can perform diversification by their own at lower costs and easier way than the firm itself. In fact, diversification is more appropriate to private business or closely held firms.

METHODOLOGY

Problem Identification

Along with consolidation plan in healthcare sector, the government has re-initiated the merger plan of PT Kimia Farma Tbk and PT Indofarma Tbk, believing that the combination of PT Kimia Farma Tbk's vast distribution channels and PT Indofarma Tbk's strong production capability will create synergy and form a stronger and more efficient entity. Nevertheless, there is disagreement among shareholders on this merger plan due to PT Indofarma Tbk's weak financial results and uncertain impact of JKN scheme on pharmaceutical companies. Therefore, this research examines the feasibility of the merger plan between the two pharmaceutical state-owned enterprises by considering the latest industry development and calculating the potential synergy between the two firms. Subsequently, this research provides recommendation regarding the most appropriate scheme for this merger to ensure a fair and profitable transaction for both parties (Lopacinska, 2016).

Literature Review

The literature review of this research is taken from finance text books, including:

- Investment Valuation by Damodaran (2012).
- Corporate Finance: Theory and Practice by Damodaran (2001).
- Corporate Finance by Ross (2010).
- Principles of Managerial Finance by Gitman, (2012).

TABLE 1
Valuation Model

Model	Valuation Purpose	Applied for Companies with..
DDM	Equity Valuation	Stable dividend, financial services
FCFF	Firm Valuation	Unstable dividend, stable leverage
FCFE	Equity Valuation	Unstable dividend, unstable leverage

Source: Damodaran (2012)

Data Collection

This research is based on the secondary data from the annual reports of PT Kimia Farma Tbk and PT Indofarma Tbk from the year 2011-2015, the capital market data of PT Kimia Farma Tbk and PT Indofarma Tbk from the year 2006-2015 and other relevant data obtained from public news.

Model and Data Analysis

As the first step, the author conducts qualitative analysis at the macroeconomic, industry and company level using frameworks like PESTLE, SWOT and TOWS in order to gain holistic perspective on the external and internal factors surrounding PT Kimia Farma Tbk and PT Indofarma Tbk. Subsequently, the author performs quantitative analysis using Discounted Cash Flow (DCF) valuation method to calculate the standalone and post-merger values of both companies. The valuation results are then used to calculate the potential synergy from this merger and determine the most appropriate acquisition scheme. Basically, the quantitative analysis covers the following steps:

- Standalone Valuation
  As the first step, the author performs valuation of PT Kimia Farma Tbk and PT Indofarma Tbk as standalone entities (pre-merger) assuming both companies are going-concern.
- Post-merger Valuation
  After identifying potential revenue and efficiency synergy from the merger, the author performs post-merger valuation of PT Kimia Farma Tbk and PT Indofarma Tbk as a single entity by consolidating their financial statements and making necessary adjustments to the model based on several assumptions.
- Synergy Calculation
  With pre-merger and post-merger values obtained, the author calculates the expected amount of synergy by subtracting the post-merger value from the sum of the standalone values.
- Acquisition Scheme
  Eventually, the author determines the most appropriate acquisition scheme for this merger by considering the size of both companies and the intrinsic values of the shares relative to the prevalent market price.

Data Collection and Analysis

PESTLE Analysis

Political Analysis

Indonesia's political environment in 2016 remains controlled despite the challenging global macroeconomic landscape. In terms of political mapping, President Joko Widodo has gradually managed to consolidate political parties and now relish majority support from the parliament to get his policies pass through. Furthermore, the return of Sri Mulyani as Finance Minister has brought positive sentiment to the market. In terms of policies, the government has launched economic stimulus packages that focus on red tape deregulation and tax easing policies to attract foreign investments. Under the 11th package, the government has revised the negative investment list of pharmaceutical industry, allowing 100% foreign stake in order to boost the number of domestic raw material plants. In addition, the President has also launched the universal health coverage scheme, or also known as Jaminan Kesehatan Nasional (JKN) in 2014.

Economic Analysis

By the end of 2016, Indonesia's economic fundamentals have indicated positive standings. Inflation is controlled at the level of 3.00-3.20%, down from above 8.00% in 2013 (Bank Indonesia, 2014, 2015). Rupiah exchange rate has also remained steady. As at the end of November 2016, Rupiah has appreciated by 1.70% (year-to-date) to IDR 13,550 per US dollar. Based on these numbers, it can be implied that Indonesia had performed quite well in 2016. Going forward, Bank Indonesia has decided to maintain interest rate and inflation target for 2017. In terms of fiscal policy, the tax amnesty has managed to record around IDR 100 trillion revenue from penalty fees and IDR 144 trillion repatriated fund by the end of 2016. This inflow has raised government's tax revenue and helped covering the budget deficit. There lies an opportunity for the Southeast Asia's largest economy to become the world's seventh largest economy by 2030, according to McKinsey Global Institute.

(2012). The enormous market size and emerging economy, if appropriately managed, will become the key catalysts for growth.

Societal Analysis

Titled as the world's fourth most populous country, Indonesia has been a promising emerging market for global investors. The dense population offers large market size, while the rising middle class fuels the expenditure. Indonesia is privileged to relish the demographic bonus by 2030, in which the number of productive age population outpaces that of old population. The Boston Consulting Group (2013) predicts that the number of middle class and affluent Indonesians will double to 141 million by 2020. In regards to healthcare sector, reluctance on healthcare spending from consumers seems to decline since the implementation of JKN scheme. Overall, the societal factors indicate that Indonesia's healthcare sector still holds ample room for growth.

Technological Analysis

Some Indonesia's pharmaceutical companies have started to establish domestic raw material plants to reduce dependency on foreign suppliers. Seizing advantage from the 11th economic stimulus package that allows foreign stake in raw material plants, they embark a joint venture agreement with foreign companies to realize this. Moreover, with JKN scheme on the surge, generic drugs become the main focus for research and development.

Environmental Analysis

As a country with tropical climate, Indonesia has only dry and rainy seasons. Nevertheless, the weather has turned uncertain due to global warming, causing many people to get sick during weather transition. On the other hand, some regions suffer a considerable level of pollution due to forest fires that happened in Sumatera and Kalimantan in the recent years. With this condition, medicines are highly needed by Indonesian citizens.

Legal Analysis

Under a 2008 law, all drugs registered in Indonesia must be locally produced. This provides significant advantage to local pharmaceutical companies. Nevertheless, the Indonesian government has now allowed 100% foreign stake in medicine's raw material factory under the 11th economic stimulus package.

TABLE 2
SWOT Analysis of PT Kimia Farma Tbk

Internal Factor	External Factor
Strengths:	**Opportunities:**
- Strong market presence in Indonesia, particularly retail	- Rising healthcare spending due to JKN scheme implementation
- Business model that fits with JKN scheme	- Expansion to hospital and hotel industry
	- Partnership with foreign investors to establish raw material plants
Weaknesses:	**Threats:**
- High dependence on foreign raw materials suppliers	- Volatility of cost of goods sold due to currency fluctuation
	- Loose government's investment policy that may attract foreign competitors

TABLE 3
SWOT Analysis of PT Indofarma Tbk

Internal Factor	External Factor
Strengths:	**Opportunities:**
- Strong production capability, particularly for unbranded generics	- Rising demand of unbranded generics from JKN scheme
	- Trade partnership with other countries
Weaknesses:	**Threats:**
- High dependence on foreign suppliers	- Volatility of cost of goods sold due to currency fluctuation
- No independent retail pharmacy	- Loose government's investment policy that may
- Low Margin Business Model	attract foreign competitors

TABLE 4
TOWS Matrix of PT Kimia Farma Tbk

External/Internal	Strengths (S)	Weaknesses (W)
Opportunities (O)	**SO Strategies:** - Focus on JKN scheme - Leverage strong distribution channels to negotiate pricing and payment policies with foreign suppliers	**WO Strategies:** - Boost sales volume from JKN scheme to compensate low margin - Partner with suppliers from various countries to diversify currency risk
Threats (T)	**ST Strategies:** - Leverage strong brand to increase bargaining power towards foreign suppliers - Merge with INAF to increase capacity and market share	**WT Strategies:** -Establish local raw material plants gradually

TABLE 5
TOWS Matrix of PT Indofarma Tbk

External/Internal	Strengths (S)	Weaknesses (W)
Opportunities (O)	**SO Strategies:** - Focus on unbranded generics - Supply unbranded generics to other players	**WO Strategies:** - Merge with KAEF to gain access to wider distribution channel
Threats (T)	**ST Strategies:** - Maintain niche market on unbranded generics	**WT Strategies:** - Establish local raw material plants gradually - Build own retail channels

Standalone Valuation

With all necessary data on hand, the value of the firm can now be computed by discounting the total free cash flow to the firm at the weighted average cost of capital to the valuation date of 30 June 2016. The respective firm's values of PT Kimia Farma Tbk under worst case, base case, and best case scenario are IDR 4,226,038,639,266, IDR 4,743,252,953,755, and IDR 5,080,525,878,118 respectively. On the other hand, the firm's values of PT Indofarma Tbk under worst case, base case, and base case scenario are IDR 1,165,628,503,669, IDR 1,510,634,682,619 and IDR 1,896,098,177,616, respectively.

Post-Merger Valuation

Synergy from Revenue Enhancement

One of the sources of synergy in this merger transaction is revenue enhancement. The combined firm is expected to generate higher revenue than the sum of both firms' revenues through the amalgamation of PT Kimia Farma Tbk's vast distribution channel with PT Indofarma Tbk's strong production capability. In practice, growth synergy is commonly estimated based on historical transactions (Historical Data PT Indofarma Tbk, n. d.). According to Kearney (2013), the average growth synergy in M&A transactions ranges from 2.00% to 3.00% of the pre-merger sales. Based on the author's analysis, this range is deemed reasonable for Kimia Farma-Indofarma merger. In 2015, generic drugs market accounted for IDR 32.71 trillion. Assuming that the merger will boost market share by 0.50% annually to reach 5% increase in the next 10 years, the revenue synergy will be IDR 163.57 billion (0.50% $\times$ IDR 32.71 trillion) each year. Dividing revenue synergy with the combined firm's sales in 2015, we obtain incremental sales growth of 2.52%.

Synergy from Cost of Goods Sold

Considering the similarity of product lines between PT Kimia Farma Tbk and PT Indofarma Tbk, increasing production efficiency from economies of scale will emerge as a key source of synergy. Before the synergy takes place, the combined cost of goods sold of KAEF and INAF in FY 2015 accounts for 71.20% of the combined sales. In fact, this level is considered high compared to the industry average of 52.26%. If the synergy between KAEF and INAF takes place, it is expected that the combined firm will be able to increase production efficiency due to economies of scale. Furthermore, given the product similarity of KAEF and INAF, the combined firm will also be able to purchase raw materials at larger quantity per order, which generally leads to higher purchase discount. Through these ways, the combined firm will be able to decrease its CoGS/Sales ratio.

Here, the author assumes that the combined firm can improve its efficiency gradually until 2025 to reach the average industry ratio of 52.26%. Nevertheless, it is important to note that both KAEF and INAF, as state-owned enterprises, operate in a low-margin business given their dependence on BPJS tenders. It is not questionable if both companies have higher CoGS/Sales ratio compared to their non-state-owned-enterprise competitors. In regards to this matter, the target is adjusted with 10% premium, thus leading to a target of 63.29% CoGS/Sales ratio by 2025.

Synergy from Operating Expenses

Since both companies operate in the same line of business, increasing efficiency in operating expenses becomes one of the most significant sources of synergy. If the consolidation takes place, PT Kimia Farma Tbk and PT Indofarma Tbk can share their operating resources with each other to reduce costs in mutual areas. For instance, both companies who used to market and distribute their products independently will be able to join forces and save marketing and distribution expenses. According to Kearney (2013), the amount of operating expenses reduction that is expected from a merger is 10.00% up to 15.00%. In this case, it is assumed that the operating expenses will decline by 1.00% per year gradually to reach 10% by 2025.

TABLE 6
Standalone Valuation

PT Kimia Farma Tbk (KAEF)			
	Worst Case	**Base Case**	**Best Case**
Beta		1.4786	
After-tax cost of debt		5.45%	
Cost of Equity		19.99%	
WACC		18.75%	
Terminal Value	12,971,489,254,196	14,731,259,373,809	15,884,803,225,889
Value of the Firm	4,226,038,639,266	4,743,252,953,755	5,080,525,878,118
PT Indofarma Tbk (INAF)			
Beta		1.0719	
After-tax cost of debt		11.45%	
Cost of Equity		16.22%	
WACC		15.68%	
Terminal Value	2,436,572,446,753	3,195,660,953,446	4,051,025,228,785
Value of the Firm	1,165,628,503,669	1,510,634,682,619	1,896,098,177,616

TABLE 7
Synergy Calculation

	Worst Case	Base Case	Best Case
Value of Combined Firm	5,753,421,156,935	7,222,219,986,593	8,251,044,853,342
(-) Value of KAEF	4,226,038,639,266	4,743,252,953,755	5,080,525,878,118
(-) Value of INAF	1,165,628,503,669	1,510,634,682,619	1,896,098,177,616
Amount of Synergy	361,754,014,000	968,332,350,219	1,274,420,797,608

Acquisition Scheme

In order to identify the most appropriate financing for this acquisition, we should firstly look into the financial position and share price performance of PT Kimia Farma Tbk and PT Indofarma Tbk. In this case, the key takeaways include:

- PT Kimia Farma Tbk as the acquiring firm holds adequate number of cash for its operations, but not sufficient to cover the acquisition of PT Indofarma Tbk.
- The share price of PT Indofarma Tbk as the target firm is currently highly overvalued, with intrinsic value of IDR 332 yet trading at IDR 1,220 as of 30 June 2016. In fact, the Indonesia Stock Exchange has identified unusual market activity of this stock due to the unreasonable price increase in less than one year.

Here, the author takes the perspective of PT Kimia Farma Tbk as the acquiring firm. Based on the preceding points, it can be concluded that the most appropriate type of financing to be used in this acquisition is equity financing through stock swap due to limited cash of PT Kimia Farma Tbk and the overvalued share price of PT Indofarma Tbk. The most essential aspect of stock swap is determining how many shares of the target firm that will be offered per share of the acquiring firm. If market price is taken as the basis, it is likely that the more overpriced firm benefits at the expense of the more undervalued firm (Damodaran, 2001). Therefore, the fairer exchange ratio calculation would be using intrinsic value of both firms as the price basis. As such, the author calculates the exchange ratio using the intrinsic share price obtained from the standalone valuation.

$$\text{Exchange ratio}_{KAEF,INAF} = \frac{\text{Value per share}_{INAF}}{\text{Value per share}_{KAEF}}$$

$$\text{Exchange ratio}_{KAEF,INAF} = \frac{IDR332.07}{IDR807.07} = 0.41 KAEF sha-$$

$$res/INAF share$$

$$New shares issued = 0.41 \times 3,099,267,500 = 1,275,200,238 shares$$

Therefore, assuming the transaction is 100% financed by equity, PT Kimia Farma Tbk (KAEF) should issue 1,275,200,238 shares to acquire PT Indofarma Tbk (INAF). Eventually, this acquisition scheme will ensure a fair and beneficial transaction for the shareholders of PT Kimia Farma Tbk and PT Indofarma Tbk and help both companies form a bigger, stronger and more efficient pharmaceutical state-owned enterprise for Indonesia.

CONCLUSION AND RECOMMENDATIONS

Based on the qualitative analysis using PESTLE, SWOT and TOWS as well as quantitative analysis using discounted cash flow valuation, PT Kimia Farma Tbk and PT Indofarma Tbk should execute the merger plan as there will be significant amount of synergy created from this action that sources from revenue enhancement and cost efficiency. For the standalone valuation, the firm's value of PT Kimia Farma Tbk under worst case, base case, and best case scenario is IDR 4,226,038,639,266, IDR 4,743,252,953,755 and IDR 5,080,525,878,118 respectively. Meanwhile, the respective firm's value of PT Indofarma Tbk under worst case, base case, and best case scenario is IDR 1,165,628,503,669, IDR 1,510,634,682,619, and IDR 1,896,098,177,616 respectively. If the merger takes place, the expected amount of synergy under worst case, base case, and best case scenario is IDR 361,754,014,000, IDR 968,332,350,219, and IDR 1,274,420,797,608 respectively. These numbers show that the merger between PT Kimia Farma Tbk and PT Indofarma Tbk is expected to be a value-adding and favorable merger.

The most appropriate scheme for this acquisition is 100% stocks acquisition, in which the shareholders of PT Indofarma Tbk will receive 0.41 KAEF shares for each INAF share they own. With this arrangement, PT Kimia Farma Tbk as the acquirer has to issue additional 1,275,200,238 shares to complete this acquisition. This financing scheme will be fairly beneficial for both parties and help create a bigger, stronger and more efficient state-owned pharmaceutical company for Indonesia. For future research, the author suggests to perform other qualitative research frameworks and valuation methods.

REFERENCES

Bank Indonesia. (2015). *Indonesia economic report 2014*. Retrieved from https://goo.gl/xyrd0u

Bank Indonesia. (2016). *Indonesia economic report 2015*. Retrieved from https://goo.gl/QnF0Iw

Business Monitor International. (2016). *Indonesia pharmaceuticals and healthcare report*. BMI Research, London, UK.

Damodaran, A. (2001). *Corporate finance: Theory and practice* (2nd ed.). New York, NY: John Wiley & Sons, Inc.

Damodaran, A. (2012). *Investment valuation: Tools and techniques for determining the value of any asset*. New York, NY: John Wiley & Sons, Inc.

Gitman, L. J. (2012). *Principles of managerial finance*. New York, NY: Pearson Education.

Historical Data PT Indofarma Tbk. (n. d.). Retrieved from https://goo.gl/d3HNzv

Kearney, A. T. (2013). *M&A deal evaluation: Challenging metrics myths*. Retrieved from https://goo.gl/S2ES2l

Lopacinska, K. (2016). The merger of Geely automobile and Volvo car corporation as an example of the expansion of Chinese capital in the automotive sector. *International Journal of Business and Administrative Studies, 2*(6), 162-172.

McKinsey Global Institute. (2012). *The archipelago economy: Unleashing Indonesia's potential*. Retrieved from https://goo.gl/OK33qV

PT Indofarma Tbk. (2015). *Annual report PT Indofarma Tbk.*

PT Kimia Farma Tbk. (2015). *Annual report PT Kimia Farma Tbk.*

Ross, S. (2010). *Corporate finance* (9th ed.). New York, NY: McGraw Hill.

The Boston Consulting Group. (2013). *Indonesia's rising middle-class and affluent consumers*. Retrieved from https://goo.gl/wK4KP

Wheelen, T. L. (2012). *Strategic management and business policy: Towards global sustainability* (13th ed.). New York, NY: Pearson Education.

– This article does not have any appendix. –