

## RECOVERING VALUE IN DISTRESSED COMPANIES: A CASE STUDY OF TUBAN PETROCHEMICAL INDUSTRIES AND ITS SUBSIDIARIES

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### Abstract

This study aims to investigate the restructuring process of PT Tuban Petrochemical Industries (Tuban Petro) and its subsidiaries, formerly owned by the ex-National Bank Restructuring Agency (IBRA). The study also seeks to examine strategic initiatives aimed at increasing competitiveness and effecting leadership, organizational, and stakeholder changes to achieve value recovery. This qualitative study employs an explanatory case study approach. Data were collected through unstructured interviews and archival studies. The market multiples approach was used to measure the estimated stock value. The results indicate that the turnaround strategies and efforts successfully unlocked value during the distressing conditions. Strategies for restoring competitiveness, changing leadership and organization, and gaining stakeholder support were crucial for achieving value recovery. In distressed companies, shareholders, suppliers, distributors, and creditors play a significant role in restoring competitiveness and driving changes in leadership and organization. The estimated value recovery shows that the turnaround was implemented through a strategy with costs and a long value recovery time. This study fills a gap in the literature as few studies have examined the restructuring of ex-IBRA assets due to limited access to comprehensive information. The findings provide an alternative evaluation of the restructuring process and the strategies implemented, which can inform future strategies for similar distressed companies facing crises.

**Keywords:** Restructuring, Debt Restructuring, Financial Distress, Strategic Management, Valuation, Petrochemical Industry

### Introduction

Indonesia's economic crisis was triggered by the Mexico crisis in 1994-1995 and compounded by the regional economic crisis in Asia (Cho, 2003), which resulted from a currency exchange rate crisis against the US dollar. Suta (2003) attributes the exchange rate crisis in Thailand, Korea, and Indonesia to currency overvaluation and undervalued interest rates. Berg (1999) notes in an International Monetary Fund (IMF) report that crises are caused by fundamental deficiencies and financial panics, where declining currency values negatively affect the real sector. Companies that have debts to banks,

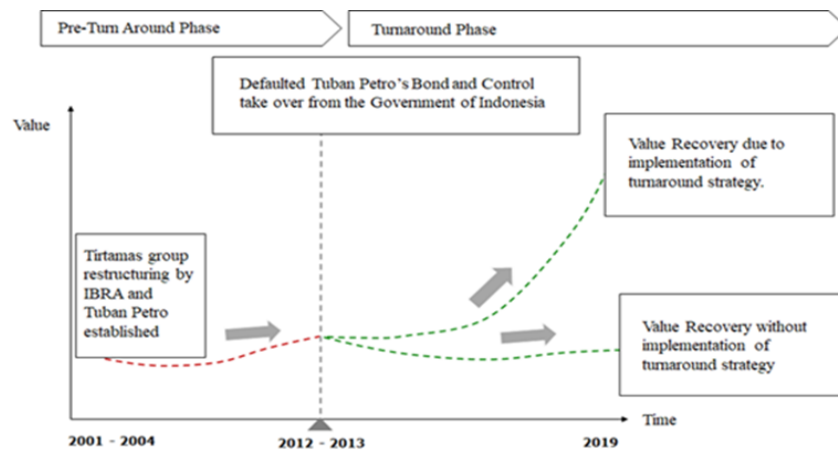
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investors, and suppliers with foreign currency denominations lose their repayment capacity.

To stabilize the national banking industry, the National Bank Restructuring Agency (IBRA) was established through Presidential Decree No. 27/1998 as a special agency under the Minister of Finance, with a limited operating period of five years. The program involves managing and restructuring assets, grouping the company's debt based on business prospects, the potential return on value, and the debtor's goodwill, as well as grouping debt restructuring based on the one obligor concept.

This study focuses on PT Tuban Petrochemical Industries (Tuban Petro), which was established in 2001 by the Indonesian government to facilitate the debt restructuring process of the Tirtamas Majutama Group (Tirtamas Group), one of the top ten obligors, which transferred its receivables to IBRA. IBRA transferred all principal receivables and guarantees to Tuban Petro and its subsidiaries engaged in the petrochemical industry in return for guaranteed and secured bonds issued on February 27, 2004, when the restructuring process was completed.

The 1998 Crisis left distressed assets and ex-IBRA debts that have not been repaid. Among the few assets that survived was the Tuban Petro group, which has undergone a restructuring process since 2002. This study analyzes the Multi Years Bond (MYB) with payment sources from Tuban Petro's subsidiaries in the pre-turnaround phase. After regular MYB payments until 2011, the 2008 global recession significantly impacted Tuban Petro's subsidiaries, which ceased operating in 2012. This led to MYB failure and Tuban Petro's repeated distress. The second Tuban Petro restructuring process was carried out in 2012, with various strategic steps to conduct turnaround and value recovery. The events presented in Figure 1 are important to explore how the processes were conducted on ex-IBRA assets and provide valuable insights for future restructuring schemes in the event of another crisis.



**Figure 1** Key Events that motivated the study.

Based on the problem formulation described, this study aimed to investigate the following questions: 1) What was the restructuring process and pattern of PT Tuban

Petrochemical Industries from 2002 to 2019? 2) What strategies did the company use to turn around and unlock its value? 3) How did the company's value develop during the restructuring process, as measured by the comparable market approach of EV/EBITDA multiples?

This case study seeks to investigate the company's strategy during the challenging restructuring period, focusing on the following aspects: 1) Analyzing the pattern of debt restructuring carried out by PT Tuban Petrochemical Industries between 2002 and 2019; 2) Examining the company's strategies for turnaround and value creation; 3) Identifying the increase in the company's value during the turnaround period.

Following Ross et al. (2015), the financial distress of a company is the result of a capital structure that includes a certain portion of loans. Companies with higher risk of financial distress tend to borrow less, which is closely related to liquidity, a determining factor of financial distress. Financial restructuring is initiated when a company is unable to meet its loan or debt repayments through operating cash flows, leading to default on the credit agreement made (Altman, 2019). In this scenario, it becomes crucial for the company's management to make corrections involving shareholders and creditors. According to Altman (2019), the main objective of financial restructuring is to restructure the assets, liabilities, and equity in the financial statement of the company.

The motivation for financial restructuring is to maximize the company's value and reduce the capital cost. Companies with expensive capital structures require financial restructuring to reduce leverage to a more sustainable level in the long term. As suggested by Ross et al. (2015), corrective actions include selling a portion of the company's assets, merging with other companies, reducing capital expenditures and R&D, issuing securities, negotiating with creditors, exchanging debt for equity, and filing for bankruptcy.

Furthermore, improvements after financial distress can be seen in changes in management and governance (Wruck, 1990). Weak management and governance could cause financial distress, and therefore, improving these areas can help in a company's recovery or turnaround. Additionally, financial distress can impact an organization's economic activities, including operating models, which forces management to reformulate company strategy.

Altman (2019) conducted a study on the bankruptcy of 40 companies, including Lyondell Chemical Co. and Reliance Group Holdings Inc., which are petrochemical companies. Lyondell Chemical Co. merged with Basell, a deal worth USD 19.4 billion, and is now known as Lyondell Basell, which is the largest producer of polymers, petrochemicals, and fuel worldwide and a leading player in polyolefin technology licensor (Borhan et al., 2014). Reliance Group Holding Inc. and Lyondell Chemical Co. went bankrupt on June 12, 2001, and January 6, 2009, with a debt of USD 17.8 billion and USD 20 billion, respectively. Although the bankruptcies occurred after the economic crisis, the two companies have successfully turned around.

The success of debt restructuring and turnaround strategies has been a widely discussed topic in the energy and petrochemical industries. O'Neill (1986) conducted a

study on large companies in America in 1986, which showed that the success of restructuring is influenced by factors such as competitive position, product life cycle, industry, organization and management processes, and decline cause. Organizational change and effective management are crucial for a company's turnaround success.

Kazozcu (2011) found a link between global and regional economic recession conditions and increased business failure during a crisis. The study also found that a company's turnaround is related to the loss of competitive advantage, the threat of existence, and how to regain competitive advantage subsequently. Mann and Byun (2017) conducted a study on savings and investments in response to the great 2008-2011 recession in the United States.

They categorized the investment into market expansion, product and service development, strategic partnership, and corporate social responsibility. Nishihara and Shibata (2016) stated that a turnaround requires companies to sell assets, obtain lower financing, and renegotiate debt without liquidation. Asset sales could reduce debt to obtain an optimal capital structure.

Rico and Puig (2019) analyzed 868 sample companies in Spain from 2004 to 2017 and found that stakeholder support, cost efficiency, and retrenchment were the most influential factors in survival and recovery probability. The study also showed that savings should not be the only tool, but distressed companies should restore stakeholder relationships while selling assets, and their evaluation should be carefully considered when making a turnaround.

Therefore, promoting a successful turnaround in the petrochemical sector involves restoring competitive advantage in investment, cost efficiencies, strategic partnerships, stakeholder support, as well as organizational and leadership changes (Altman, 2019; Borhan et al., 2014; Kazozcu, 2011; Mann and Byun, 2017; Nishihara and Shibata, 2016; O'Neill, 1986; Rico and Puig, 2019).

Damodaran identified three approaches to valuation (Damodaran, 2012). The first is the discounted cash flow valuation, which relates to the asset value and the expected future cash flows. The second is relative valuation, regarding estimating the value of assets by looking at the pricing of comparable assets relative to general variables such as cashflows or the book value. The third is to use option pricing models. (Damodaran, 2012) found that mature companies with a long history could be compared with some current and past transactions. Moreover, (DePamphilis, 2005) stated that EBITDA is a popular measurement for valuing private firms.

This measurement compares several companies and eliminates distortions in net performance regarding differences in depreciation and financial leverage. The approach is also used in the comparative valuation method, which measures profitability. In relative valuation, the asset value is obtained from the price of comparable assets, such as earnings, cashflows, book value, or revenue, using the industry-average price-earnings ratio to a company's value. This assumes that other companies in the same industry are comparable to the company being assessed and that the market averages the correct value.

Another multiple used is the price to book value, where the company sells the book value at a discount. Multiple prices for sales could also be used. The enterprise value to EBITDA multiples is widely used through role price to cash flow. (Damodaran, 2012) stated that Multiple is often used for capital-intensive companies with heavy infrastructure investments. The multiple methods are suitable for use in the petrochemical industry, according to the study object. Besides EV/EBITDA, revenue multiples are used as the basis. (Damodaran, 2012) showed that a more popular price-to-sales ratio increases the multiples of the equity market value on the company's income.

The second and stronger ratio is a multiple of the company's value, including debt and equity to revenue, called the enterprise value to sales ratio. (Damodaran, 2012) explained the assessment of holding companies by considering the broader category of non-operating assets. The assessment begins by examining the various accounting treatments of different ownership and how they affect reporting in financial statements.

The equity in each ownership is assessed separately, and the value of proportional ownership will be estimated at the parent company's equity value. Therefore, this study assessed the equity to the value of a company with minority ownership in the other three companies. It took the percentage share of equity in each company and added it to the equity value in the parent company. The consolidated income statement should remove the subsidiary's income, assets, and liabilities from the parent company's finances to avoid doubling the subsidiary's value.

## **Research Methods**

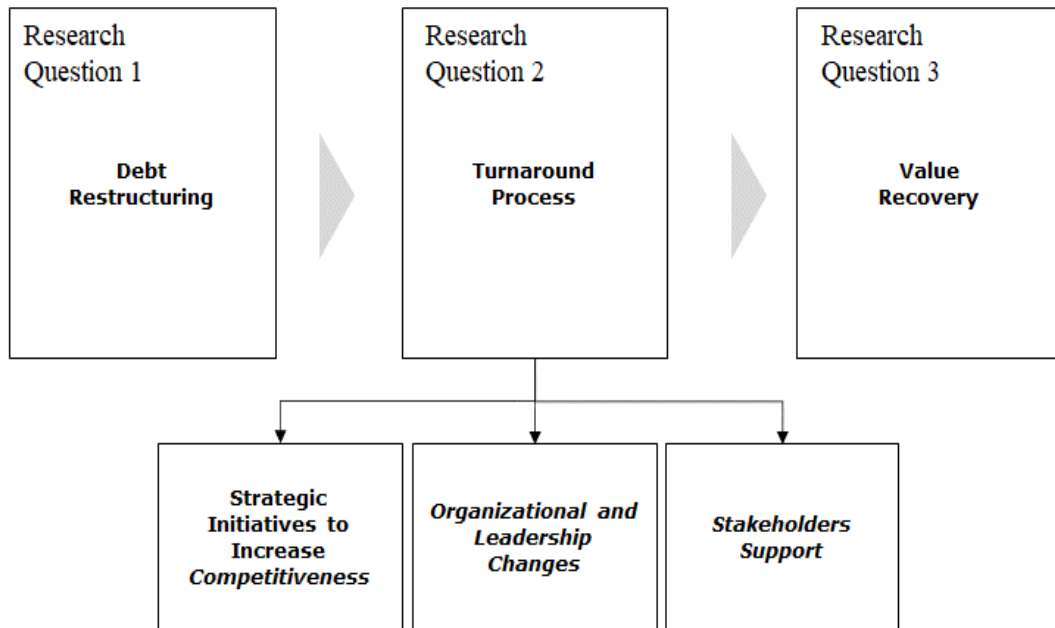
This qualitative study employs the Explanatory Case Study approach (De Massis and Kotlar, 2014) to gain an in-depth understanding of why a particular phenomenon occurs. According to Creswell (2018), a case study is a valuable strategy for exploring programs, events, activities, processes, and individuals in depth. The selection of cases is determined by a focus on analyzing a single object, and De Massis and Kotlar (2014) recommend conducting multiple case studies within one organization instead of analyzing multiple case studies of different organizations. Data were collected using triangulation and interviews with actors and experts to obtain confirmation and validity from independent parties based on related theories.

In this case study, unstructured interviews, or in-depth interviews, as described by Yin (2018), will be predominantly used. In addition to confirming the interpretation of results from the archival study, these interviews will provide deeper insights to the researchers regarding the research problem. The interviewees will include representatives from TubanPetro management, senior members/managers from the former national bank restructuring agency (BPPN), and officials from the Ministry of Finance or PT Perusahaan Pengelola Aset (Persero) who were in leadership positions during the research period.

A framework was developed based on previous studies to maintain focus. Schoenberg et al. (2013) identified historically effective turnaround and recovery strategies, which include cost efficiencies, asset retrenchment, focus on the firm's core

activities and building for the future, as well as the reinvigoration of the firm's leadership and culture changes.

Additionally, other studies, such as Rico and Puig (2019), Kazozcu (2011), Mann and Byun (2017), and theories from Rothaermel (2017) and Altman (2019) were consulted. Competitive advantage restoration, comprising investment activities, cost efficiencies, strategic partnerships, stakeholder support, as well as organizational and leadership changes, are the key factors driving a successful turnaround. Several main focuses were determined and described in Figure 2 based on this compilation.



**Figure 2** Initial Study Framework

The following is an explanation of the study framework: 1) The study investigates how the pattern and scheme of debt restructuring are implemented to ensure the company is not burdened with unsustainable debt repayment obligations. This step answers the first study question. 2) The study investigates the process of turnaround and value recovery, including strategic initiatives to increase competitiveness, organizational and leadership changes, as well as stakeholder support. This phase answers the second study question. 3) The study calculates the estimated share value using a market-comparable approach to obtain information on the value recovery from Tuban Petro.

Table 1 provides a detailed explanation of the data processing stages through the phase division explored using archival studies and interviews assembled and concluded.

**Table 1. Data Processing Based on Study Stage Division**

No	Study Stage	Scope of Study Questions	Data Collection	Expected Output
1	Debt Restructuring	Q1	Archival Study <ul style="list-style-type: none"> <li>• Related agreements</li> <li>• Terms sheets</li> <li>• Financial statements</li> <li>• Other documents</li> </ul> Interview <ul style="list-style-type: none"> <li>• Unstructured Interview with IBRA and PPA.</li> </ul>	<ul style="list-style-type: none"> <li>• Restructuring Instruments</li> <li>• Guarantee Structure</li> <li>• Special Purpose Vehicle as a restructuring transaction deal structure</li> <li>• Situations that lead to default</li> <li>• Consequences of default and structural changes</li> </ul>
2	Turnaround Strategy and Process	Q2	Archival Study <ul style="list-style-type: none"> <li>• Financial statements</li> <li>• Business Plan (RJPP)</li> <li>• Agreements and other documentation</li> </ul> Interview <ul style="list-style-type: none"> <li>• Unstructured Interview with IBRA and PPA</li> </ul>	<ul style="list-style-type: none"> <li>• Identified strategic initiatives in debt settlement</li> <li>• The role of efforts to return/increase competitiveness</li> <li>• The role of leadership and organizational change</li> <li>• The role of stakeholder support</li> </ul>
3	Company Value Growth	Q3	Archival Study <ul style="list-style-type: none"> <li>• Financial statements</li> <li>• Business Plan</li> <li>• Industry Data</li> </ul>	<ul style="list-style-type: none"> <li>• Equity Value (Estimated) during the turnaround period</li> </ul>

This study also identified comparison companies to set valuation multiples according to the same field to answer the third question. Data on comparison companies were collected to calculate Tuban Petro's shares using the market multiples method. According to Damodaran (2012), the equity in each ownership is assessed separately in distressed holding companies. The study estimated the proportional ownership value added to the equity value of the parent company.

## Results and Discussion

### Object

This study focuses on PT Tuban Petrochemical Industries (Tuban Petro) and its subsidiaries, namely PT Trans-Pacific Petrochemical Indotama (TPPI), PT Petro Oxo Nusantara (PON), and PT Polytama Propindo (PP), which are involved in restructuring and turnaround processes. TPN is excluded from the study. Tuban Petro, as a holding company, manages its subsidiaries' activities.

TPPI was established in 1995 with an original design capacity of producing 3.6 million MT per year of aromatics and refined products. In April 2006, TPPI began producing its first aromatic products after previously operating as an oil and petroleum products facility. However, in May 2009, the plant complex restarted a new operation with government-owned condensates. PON, established in 1995, is a pioneer in the 2EH

(2-Ethyl Hexanol), Normal Butanol (NBA), and Iso Butanol (IBA) industry in South East Asia. The original nameplate capacity of PON was 115,000 MT per year of 2-EH production, but the facility was revamped to increase the total plant capacity to 135,000 MT per year of 2-EH in early 2008. PP, established in 1993, is a significant manufacturer of polypropylene in Indonesia, taking a leading role in responding to the rapid increase in demand for polypropylene. Currently, PP's capacity is 300,000 MT polypropylene per annum.

In terms of the study framework, Tuban Petro is the object in the Debt Restructuring stage. TPPI, PON, and PP are also investigated to determine their involvement in restructuring schemes. The second stage, the Turnaround Process, focuses on Tuban Petro and its subsidiaries, including TPPI, PON, and PP. Finally, in the third stage, the equity value estimation of Tuban Petro and its subsidiaries, including TPPI, PON, and PP, is calculated. As a holding company with no operations besides management activities, the value of Tuban Petro is contributed by the investment value of its subsidiaries' shares, which are estimated and combined into the value of Tuban Petro as the parent.

### **Debt Restructuring of PT Tuban Petrochemical Industries**

A company's financial distress often leads to restructuring, which is necessary when operating cash flows cannot meet loan or debt repayments (Altman, 2019). This triggers a default on credit agreements, requiring corrective measures by management involving shareholders and creditors. This study examines the restructuring pattern of Tuban Petro, which resulted from the Tirtamas Group restructuring carried out by IBRA. Poor operating performance and high financial leverage due to exposure to loans in foreign currencies caused the restructuring (Altman, 2019; Jiang et al., 2019).

To overcome financial distress conditions, troubled companies need to recover effectively and avoid entering the liquidation process. Therefore, IBRA implemented a structure stipulating that the debts of the Tirtamas Group to IBRA would be transferred to a holding company along with the attached guarantees. The Tirtamas Group would owe the debt to a new company in place of IBRA. The new company would issue a bond to IBRA for the amount of the transferred receivables. The founding shareholders would still be responsible for the obligations of the founding shareholders and would arise in the future from the companies that would become assets. This ensures that all cash flows are pooled together, and debtor companies become more optimal under the new company (Jiang et al., 2019).

A new company, PT Tuban Petrochemical Industries, also known as Tuban Petro, was established in March 2001. The shares of Tuban Petro are 70% owned by the Government/IBRA, and the remaining 30% belong to the Tirtamas Group. This 70% share ownership ensures that all obligations are paid in full. The purpose of managing it is not owned and developed by the Minister of Finance but for monetization or recovery (Informant 1, 2022). All the debts were collected and discussed with Tirtamas. It was



agreed that the debts accrued by forming a new company, Tuban Petro, as a substitute for the indebted companies in Tirtamas (Informant 3, 2022).

The formation and restructuring schemes of Tuban Petro are illustrated in Figure 3. All companies belonging to the Tirtamas group engaged in the petrochemical sector were acquired by Tuban Petro. TPPI refinery is not operational, with a completion status of 40%, whereas Polytama (PP) is in commercial operation. PON operates but has not completed restructuring with foreign creditors, and Pacific Fibretama (PF) is not operational, with a completion status of 85%. It has not finished restructuring with foreign creditors. The companies are expected to be the source of repayment for the acquisition, meaning they are in a distress acquisition (Iwasaki et al., 2021).

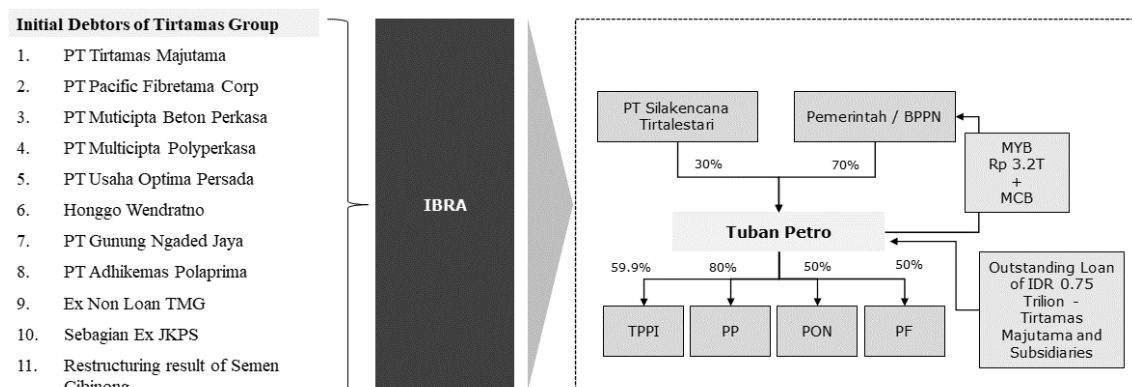


Figure 3. Tirtamas Majutama Group Restructuring Scheme

Acquirers face challenges and opportunities to determine the crucial points and valuable insights, the source of repayment, and the return of value from shareholders. Debt repayment sources to IBRA with the acquired companies are restructured with MYB. The amount of MYB mirrors the total liabilities of the Tirtamas Group, which is IDR 3,2 trillion. The bonds are divided into ten series with different maturities of 10 years and a coupon of 1% per year. The rescheduling and interest reduction allow Tuban Petro to revitalize its business and regain competitiveness to pay its obligations to IBRA/Government.

The findings of this restructuring scheme suggest the occurrence of repeated distress conditions. In 2012, Tuban Petro failed to pay MYB to the Government/Minister of Finance, which PT Perusahaan Pengelola Aset (Persero) (PPA) managed after dissolving IBRA. This study identifies several critical issues contributing to repeated distress conditions. The subsidiaries of Tuban Petro face challenges paying dividends to Tuban Petro regularly, owing to over-leveraged general conditions, negative retained earnings, operational problems, and delays in acquisitions because of the free and clear status to be achieved.

The main problem in this restructuring was that TPPI had stopped operating due to operational problems, including liquidity difficulties, unfavorable macro conditions, and working capital difficulties, and threats from creditors, particularly Pertamina. Problems in PP also led to a lack of MYB payment distribution, particularly the

availability of working capital and raw materials. The global crude oil price crisis significantly increased the price of raw materials and decreased product prices, causing PP to suffer losses. PP's receivables at TPPI in working capital assistance have also not been paid due to financial problems. Consequently, PP is experiencing serious cash flow difficulties, as explained by the informants in Table 2.

**Table 2. Summary of Findings Related to the Tuban Petro Restructuring**

Key Focus Area	Phenomena Description	Key Issues/Challenges
Debt Restructuring	<ul style="list-style-type: none"> <li>• Formation of Holding Company</li> <li>• Issuance of New Debt Instruments (restructured)                             <ul style="list-style-type: none"> <li>• Acquisition of share assets by the holding company as a source of remaining debt repayment. TPPI and PP were acquired first, and PON and PF followed.</li> </ul> </li> <li>• Rescheduling payments and reducing interest</li> </ul>	<ul style="list-style-type: none"> <li>• Cash flows come from companies under holding companies where payments are made through dividends (a certain level of profitability is required for dividends to be paid)</li> <li>• TPPI, which is expected to provide the largest cash flow, still requires additional investment for plant completion</li> <li>• PF failed to be acquired because it could not reach a restructuring agreement with foreign creditors other than domestic bank creditors whose receivables were transferred to IBRA.</li> <li>• Overleveraged and cash flow problems lead to default of the bonds.</li> </ul>

The findings of this study suggest that the restructuring scheme has the potential for deviations in its implementation to cause distress. The subsequent restructuring occurred in 2018 when MYB debt was converted into shares due to resulting issues and challenges. Nishihara (2016) stated that a company conducts a turnaround by selling assets, asking for lower financing, renegotiating debt, and choosing restructuring rather than liquidation. In 2018, the Head of Agreement was signed between Pertamina and the Ministry of Finance, where Tuban Petro planned to take corporate actions to resolve the MYB problem.

Tuban Petro and its subsidiaries were expected to develop their business and become an investment platform for the national petrochemical industry. The MYB settlement involved converting the debt principal and rescheduling the payment of interest costs and penalties. This option would convert the principal debt of IDR 2.62 trillion into share investments. The remaining portion of the payment would be rescheduled with a maximum period of ten years appropriate to the provisions.

Completing the MYB conversion significantly impacts the company, including additional cash flow reserves, reputation improvement, and opportunities for business development. The direct impact on Tuban Petro from the MYB conversion is reduced financial obligations, and increasing cash flow for use in operational and expansion activities. The reduced obligations would also improve the company's financial reputation. The MYB conversion would increase the solvency ratio, which has been poor due to the large MYB value and is not comparable to Tuban Petro's assets. Therefore, the

financial condition would look healthier and bankable, allowing Tuban Petro to apply for loans to finance development activities.

The MYB conversion also has a positive impact on the government's shareholding in Tuban Petro. The government's shareholding in TPI would be maintained, and the share ownership would increase with the portion of MYB liabilities converted into shares. Therefore, the government would still have control as a shareholder in decision-making aspects. TPI needs a growth initiative to increase its financial capacity to make payments for the unconverted portion and independently meet operational costs. This initiative is expected to increase the value of the Tuban Petro subsidiary in the future.

### **Tuban Petro Turnaround Process**

In a study conducted by Schoenberg et al. (2013), effective turnaround and recovery strategies were identified. The success factors promoting successful turnaround were also discussed in theories by Rico and Puig (2019), Kazozcu (2011), Mann and Byun (2017), Rothaermel (2017), and Altman (2019). These factors include returning competitive advantage in investment activities, cost efficiencies, strategic partnerships, stakeholder support, and organizational and leadership changes. This study investigates and discusses the roles of these factors in the restructuring of Tuban Petro, as follows:

1. Strategic initiatives to restore competitiveness refer to Tuban Petro management's implementation of initiatives to revitalize its business. Such initiatives could involve changes in business models, investment activities such as new product development, increased production capacity, strategic cooperation or alliances, and others with a competitive objective. Schoenberg (2013) described this factor as a focus on the firm's core activities and building for the future.
2. Organizational and leadership changes are essential factors in successful turnaround strategies. Studies have shown that changes in the leadership of the Board of Directors, Commissioners, and organizational structure are very effective strategies.
3. Stakeholder support includes the Indonesia Minister of Finance, PT PPA as the Tuban Petro manager, PT Pertamina (Persero) as the main supplier, and a TPPI shareholder, a Tuban Petro subsidiary. Others are customers as distributors of petrochemical products, exporters, agents, end-users, and the Government.

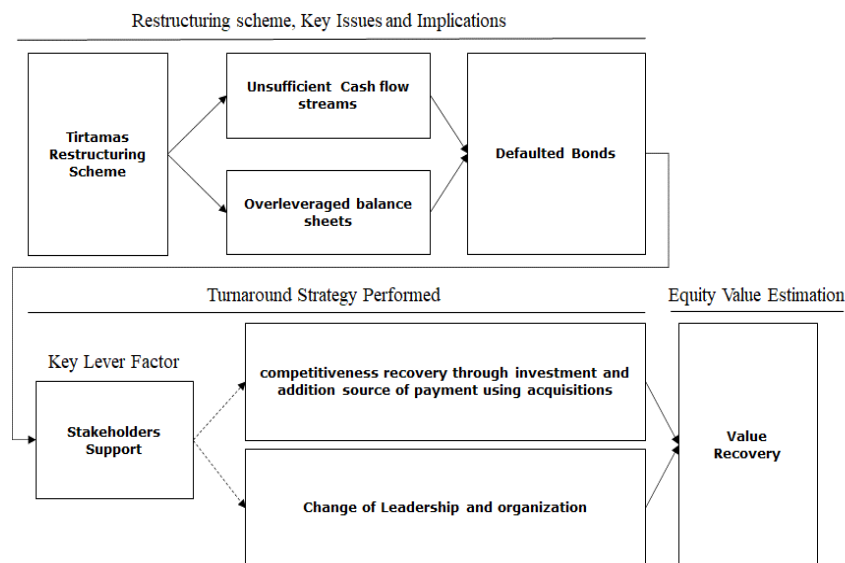
The roles of these turnaround success factors were observed during the restructuring process of Tuban Petro. The company completed the process during the turnaround period following the default in 2012 due to cash flow distribution issues, challenges, and overleveraged conditions. The summary of the phenomena is presented in Table 3.

**Table 3 Summary of Findings in Tuban Petro Turnaround Strategy**

Key Focus Area	Description	Role
Strategic Initiatives to Recover Competitiveness	<ul style="list-style-type: none"> <li>• TPPI operation through a tolling scheme by Pertamina</li> <li>• Reoperation of PP with tolling schemes and cash advance support through strategic alliances with major distributors.</li> <li>• Increasing PP's capacity to increase economies of scale accelerates dividend payments through improved retained earnings.</li> </ul>	<ul style="list-style-type: none"> <li>• As a critical factor in avoiding idle operations and generating the cash flow needed to repay debt. Moreover, this factor increases profitability during the turnaround period.</li> </ul>
Leadership and Organization Changes	<ul style="list-style-type: none"> <li>• Changes in leadership through the placement of government representatives</li> </ul>	<ul style="list-style-type: none"> <li>• The leadership factor has a role in giving better control to Tuban Petro as well as carrying out business transformation and revitalization.</li> </ul>
Stakeholders Support	<ul style="list-style-type: none"> <li>• The government as the ultimate shareholder increases the trust of suppliers, customers, and other creditors in the group.</li> <li>• Pertamina's support as a supplier in the re-operation of TPPI through a tolling scheme and re-supplying to PP.</li> <li>• The government's commitment as a shareholder and creditor in implementing debt-to-share conversion to support further development</li> </ul>	<ul style="list-style-type: none"> <li>• Support from stakeholders is an important factor and a lever for other factors analyzed in this case study.</li> </ul>

Overleveraged condition is the main challenge encountered when conducting a turnaround. Ross et al. (2015) stated that a company's financial distress results from a capital structure with a certain level of loan portion, which impacts insufficient working capital and difficulties in carrying out initiatives. Wruck (1990) suggested that the turnaround strategy that financial distress conditions promotes strategy re-formulation, which has been implemented by Tuban Petro.

However, the challenge lies in the implementation stage. When conducting a turnaround in overleveraged conditions, support from stakeholders is needed to leverage the success of initiatives. This includes the replacement of leadership overseeing the implementation of the turnaround strategy. The findings are summarized in Figure 4.



**Figure 4** Summary Chart of the Restructuring Phenomenon and Turnaround Strategy

The study compares its findings with those of Schoenberg et al. (2013) on effective turnaround and recovery strategies. Other relevant studies and theories from Rico and Puig (2019), Kazozcu (2011), Mann and Byun (2017), Rothaermel (2017), and Altman (2019) show that successful turnaround is encouraged by factors such as returning competitive advantage in investment activities, cost efficiencies, strategic partnerships, stakeholder support, as well as organizational and leadership changes.

These factors are crucial in the turnaround process of Tuban Petro and its subsidiaries. The study also finds that stakeholder support is a lever factor for competitiveness recovery and leadership and organizational changes. Tuban Petro's equity value is estimated to understand how its value moves in the turnaround process.

Therefore, the competitiveness recovery, leadership changes, and stakeholder support have implications for EBITDA recovery in Tuban Petro's subsidiaries as follows:

- 1) TPPI reoperation through a tolling scheme with Pertamina is a strategic initiative to restore competitiveness and stabilize EBITDA during the turnaround period. Pertamina's role as a supplier and shareholder makes it the best support in the turnaround process. TPPI's EBITDA grew by 28% CAGR in the last four years.
- 2) PP reoperation with a tolling scheme followed by an increase in production capacity provides recovery and a significant increase in EBITDA. In the last four years of the turnaround period, EBITDA increased by a CAGR of 68%.
- 3) PON experienced a decline in EBITDA due to the trade war between the United States and China, which reduced demand in China. As a result, 80% of PON sales were exported to China. Good management placement and better PON leverage capacity made the decline in EBITDA in 2019 not disrupt the company's operations.

The decrease in PON EBITDA was compensated by the increase in TPPI and PP EBITDA, which still contributed positively to the level of Tuban Petro as a holding. The chart indicates that further observations related to each factor could still be deepened to

suggest further analyses. Additionally, studies on the company's post-turnaround strategy could determine the next phenomenon after the turnaround period.

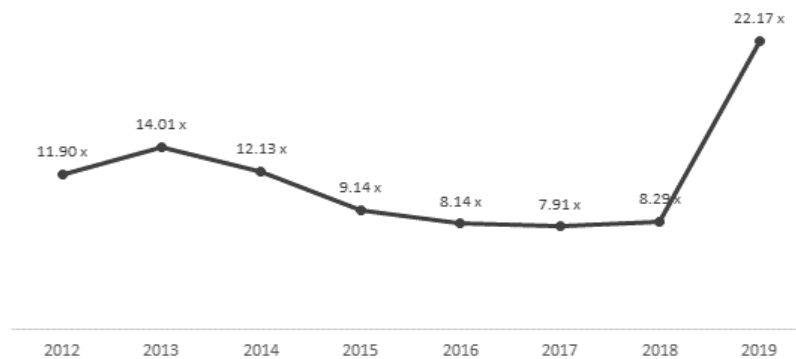
**Company Value Development**

This study aims to calculate the estimated equity value of Tuban Petro to assess the development of the company's value and recovery time during the turnaround phase. The multiples relative valuation method using 11 comparison companies in the petrochemicals industry in Asia was employed to determine the equity value from 2012 to 2019. The comparison companies used to determine equity value are shown in Table 4.

**Table 4 List of Comparable Companies (Comparables)**

Company	Bloomberg Ticker	Main Business
<b>Indonesia</b>		
PT Chandra Asri Petrochemical Tbk	TPIA/R: IJ	Petrochemicals
<b>Korea</b>		
Lotte Chemical	011170 KS EQUITY	Petrochemicals
LG Chem	051910 KS EQUITY	Petrochemicals
Korea Petrochem	006650 KS EQUITY	Petrochemicals
Kumho Petrochem	011780 KS EQUITY	Petrochemicals
<b>Taiwan</b>		
Formosa Chemicals & Fibre	1326 TT EQUITY	Petrochemicals
Nan Ya Plastics	1303 TT EQUITY	Petrochemicals
Formosa Petrochemical	6505 TT EQUITY	Petrochemicals
Formosa Plastics	1301 TT EQUITY	Petrochemicals
<b>Thailand</b>		
PTT Global Chem	PTTGC TB EQUITY	Petrochemicals
<b>Malaysia</b>		
Petronas Chemicals Group Bhd	PHECM MK EQUITY	Petrochemicals

The equity value for 2012 to 2019 was calculated based on the data from each comparison company. Figure 5 presents the mean EV/EBITDA for 2012 – 2019, which was calculated each year for the 11 companies. Using the mean EV/EBITDA, the equity value of the three subsidiaries of PT Tuban Petrochemical Industries (Tuban Petro) - TPPI, PP, and PON - was calculated. In determining equity value, enterprise value was obtained by multiplying the EBITDA of each subsidiary by the mean EV/EBITDA of the industry or comparable company.



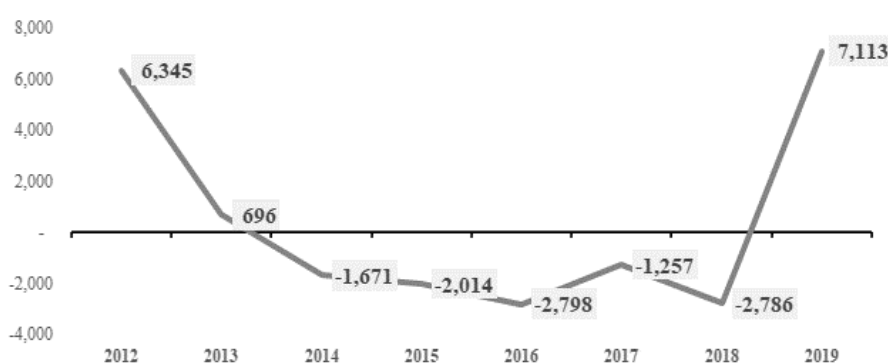
**Figure 5.** Industry Mean EV/EBITDA 2001-2019

In the event of a negative EBITDA for a subsidiary, the enterprise value was labeled N/A. To anticipate a negative N/A or EBITDA enterprise value, an alternative calculation was conducted using EV/Revenue on the N/A enterprise value. This involved multiplying the mean EV/Revenue with the revenue earned that year. Additionally, a 30% Discount on Lack of Marketability (DLOM) and a 30% Discount on Lack of Control (DLOC) for ownership under 20% (TPPI in 2014-2019) was applied in calculating the equity value for each subsidiary.

The EBITDA and mean EV/EBITDA values were used to determine the enterprise value of the three companies. Enterprise Value was calculated by multiplying the EBITDA of each company by the industry mean EV/EBITDA. Furthermore, the equity value was calculated by subtracting the enterprise values from the debt values to obtain the share value of the three subsidiaries. Tuban Petro's share ownership in TPPI, PP, and PON are as follows: 1) TPPI: from 2001 to 2013, it was 59.5%; from 2014 to 2018, by 19.16%; and in 2019, by 48%. 2) PP: from 2001 to 2019, 80%. 3) PON: 2001 to 2019 by 50%.

A 30% Discount on Lack of Marketability (DLOM) and a 30% Discount on Lack of Control (DLOC) were applied for ownership below 20% (TPPI in 2014 -2018). The Net Equity Value of TPPI, PP, and PON was then added. Additionally, the outstanding MYB value owned by Tuban Petro from the initial issuance until 2019 was subtracted from the net equity value of Tuban Petro, and the cash value of Tuban Petro was added. The largest Net Equity Value result of IDR 7.1 trillion was obtained in 2019.

Figure 6 illustrates the estimated annual equity value of Tuban Petro from the turnaround phase until 2019. The estimated equity value shows that recovery from a turnaround process cannot be achieved instantly. The increase in value was contributed by the increase in EBITDA of all subsidiaries, where turnaround efforts were made for the last seven years. All efforts to implement a turnaround strategy were the main drivers of increasing EBITDA, which contributed to the recovery in estimated firm value using market multiple methods.



**Figure 6** Graph of Subsidiaries' Total Equity Value (in Billion IDR)

## Conclusion

The present study investigated the restructuring process of Tuban Petro, a distressed company in Southeast Asia. The study aimed to identify the challenges faced by Tuban Petro after the initial restructuring and to evaluate the effectiveness of the turnaround strategies implemented. The study used a qualitative case study approach and gathered data from various sources, including company documents, reports, and interviews with key stakeholders.

The study found that after the initial restructuring, Tuban Petro still faced serious challenges of insufficient cash flow for payments and overleveraged capital structure conditions. This led to repeated distress conditions, marked by the failure to pay MYB to the government. However, the company conducted a turnaround after the distress condition, which focused on restoring competitiveness, leadership and organizational change, and stakeholder support as a lever factor. The role of shareholders, suppliers, distributors, and creditors supported the restoration of competitiveness and changes in leadership and organization.

The study also found that the estimated value recovery showed that the turnaround had been successfully implemented by a strategy with costs and a long value recovery time. It took seven years for Tuban Petro to recover and reach IDR 7.1 trillion, exceeding the pre-distress value. The study highlights that economic crises and changes in dynamic market conditions are beyond the company's control. However, capital structure management and optimal calculation of sustainable debt composition make companies more sustainable and resilient to these conditions. A turnaround to restore company value requires stakeholder support, leadership changes, and restoration of competitiveness.

## BIBLIOGRAPHY

- Altman, E. I. (2019). *Corporate financial distress and bankruptcy: Predict and avoid bankruptcy, analyze and invest in distressed debt*. John Wiley & Sons.
- Berg A. (1999), *The Asia Crisis: Causes, Policy Responses, and Outcomes*, IMF Working Papers 1999/138, International Monetary Fund.
- Borhan, H., Naina Mohamed, R. and Azmi, N. (2014), *The impact of financial ratios on the financial performance of a chemical company*, *World Journal of Entrepreneurship, Management, and Sustainable Development*, Vol. 10 No. 2, pp.154–160. <https://doi.org/10.1108/wjemsd-07-2013-0041>
- Cho, D.S. (2003), *Imperatives in restructuring: lessons from the Korean economic crisis*. *Entreprises et Histoire*, Vol. 32 No. 1, 120–137. <https://doi.org/10.3917/eh.032.0120>
- Creswell, J.W. (2018), *Research design (5th ed.)*. SAGE Publications
- Damodaran, A. (2012), *Investment valuation: Tools and techniques for determining the value of any asset*. (Investment valuation.) Hoboken, NJ, Wiley.



- De Massis, A. and Kotlar, J. (2014), The case study method in family business research: Guidelines for the qualitative scholarship, *Journal of Family Business Strategy*, Vol. 5 No.1, pp.15–29. <https://doi.org/10.1016/j.jfbs.2014.01.007>
- DePamphilis, D.M. (2005), *Mergers, acquisitions, and other restructuring activities: An integrated approach to process, tools, cases, and solutions*, Boston, Elsevier Academic Press.
- Iwasaki, I., Kočenda, E. and Shida, Y. (2021), Distressed Acquisitions Evidence from European Emerging Markets Distressed Acquisitions Evidence from European Emerging Markets. RRC Working Paper Series, No. 90, (April). <https://doi.org/10.1016/j.jce.2021.04.008>
- Jiang, J., Liu, B. and Yang, J. (2019), The impact of debt restructuring on firm investment: Evidence from China. *Economic Modelling*, Vol. 81 No. December 2018, pp.325–337. <https://doi.org/10.1016/j.econmod.2019.05.019>
- Kazozcu, S.B. (2011), Role of strategic flexibility in the choice of turnaround strategies: A resource-based approach. *Procedia - Social and Behavioral Sciences*, Vol. 24, pp.444–459. <https://doi.org/10.1016/j.sbspro.2011.09.039>
- Mann, M. and Byun, S. (2017), To retrench or invest? Turnaround strategies during a recessionary time. *Journal of Business Research*, Vol. 80 No. August 2016, pp.24–34. <https://doi.org/10.1016/j.jbusres.2017.06.018>
- Nishihara, M. and Shibata, T. (2016), Asset sale, debt restructuring, and liquidation. *Journal of Economic Dynamics and Control*, Vol. 67, pp.73–92. <https://doi.org/10.1016/j.jedc.2016.03.011>
- O'Neill, H.M. (1986), Turnaround and recovery: What strategy do you need? *Long Range Planning*, Vol. 19 No. 1, pp.80–88. [https://doi.org/10.1016/0024-6301\(86\)90131-7](https://doi.org/10.1016/0024-6301(86)90131-7)
- Rico, M. and Puig, F. (2019), Successful turnarounds in bankrupt firms? Assessing retrenchment in the most severe form of crisis. *BRQ Business Research Quarterly*. <https://doi.org/10.1016/j.brq.2019.06.002>
- Ross, S.A., Westerfield, R.W. and Jordan, B.D. (2015), *Fundamentals of corporate finance* (11th ed.). McGraw-Hill Professional.
- Rothaermel, F.T. (2017), *Strategic Management* (3rd eds.), New York, McGraw-Hill Education.
- Schoenberg, R., Collier, N. and Bowman, C. (2013), Strategies for business turnaround and recovery: A review and synthesis. *European Business Review*, Vol. 25 No. 3, pp.243–262. <https://doi.org/10.1108/09555341311314799>
- Sekaran, U. and Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach* Seventh Edition. 7th ed. West Sussex: John Wiley & Sons.

Suta, I Putu Gede A. (2003), *Membedah krisis perbankan: anatomi krisis dan penyehatan perbankan*, Jakarta, Yayasan Sad Satria Bhakti

Wruck, K. H. (1990), Financial distress, reorganization, and organizational efficiency, *Journal of Financial Economics*, Vol. 27 No. 2, pp.419–444. [https://doi.org/10.1016/0304-405X\(90\)90063-6](https://doi.org/10.1016/0304-405X(90)90063-6)

Yin, R. K. (2018). *Case study research and applications: Design and methods*. Thousand Oaks, CA: Sage

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