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## CONSIDERING BOSTON CONSULTING GROUP'S MATRIX OF STRENGTHENING COMPETITIVENESS AND GOOD GOVERNANCE IN INDONESIA: A LITERATURE REVIEW PERSPECTIVE <sup>1</sup>

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### Abstract:

The government must address several problems through good governance of tin mining companies in Indonesia in connection with tin reserves in Indonesia which are expected to run out in the next ten years. This study is sufficient to use a literature review to answer the existing problems. It was concluded that the reduced competitiveness of tin mining companies in specific years and the many obstacles they faced could be corrected by implementing the Boston Consulting Group (BCG) Matrix strategy.

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### Keywords:

Boston Consulting Group, tin, governance

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### A. INTRODUCTION

Indonesia is the owner of the 2<sup>nd</sup> largest tin reserves in the world after China, with total reserves reaching 800 thousand tons or 17% of the world's total reserves (CNN Indonesia, 2022). However, what must be realized is that if tin production reaches between 70,000 tons and 80,000 tons per year, it is estimated that these tin reserves will run out in about ten years (CNBC Indonesia, 2022). In addition to decreasing reserves, there are still several other problems in tin management, especially in Indonesia, including mining exploitation that violates regulations, the rise of artisanal mining without permits (as artisanal mining always seeks results by ignoring reclamation, which must be carried out because it damages the environment as mandated by law) and the unpredictable market price of tin metal are several essential factors that

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<sup>1</sup> This article is a private scientific study of the researcher and does not reflect the institution's opinion/policy.

undermine the performance of tin mining companies, including PT. Timah (Persero) Tbk.

Considering the problems in tin mining, the government needs to implement a strategy to improve company performance, such as including PT. Timah (Persero) Tbk., in the future while maintaining environmental sustainability. Thus, this study seeks to answer existing problems by demonstrating the need to address the main existing problems, namely how to analyze strategy and good governance through the Boston Consulting Group (BCG) matrix to strengthen the competitiveness of tin companies in Indonesia, such as PT. Timah (Persero) Tbk?

## **B. METHOD**

This study is adequate by using a literature review, as Efron and Ravid (2019) emphasize using a literature review as a systematic examination of scientific literature on one topic. Literature reviews critically analyze, evaluate and synthesize research findings, theories, and practices related to the research focus area (Efron and Ravid, 2019). In reviewing the literature, this study seeks to present a comprehensive, critical, and accurate understanding of the situation and knowledge related to the problem, compare it with research theory, reveal gaps in the study, and provide considerations or suggestions about the study topic (Efron and Ravid, 2019).

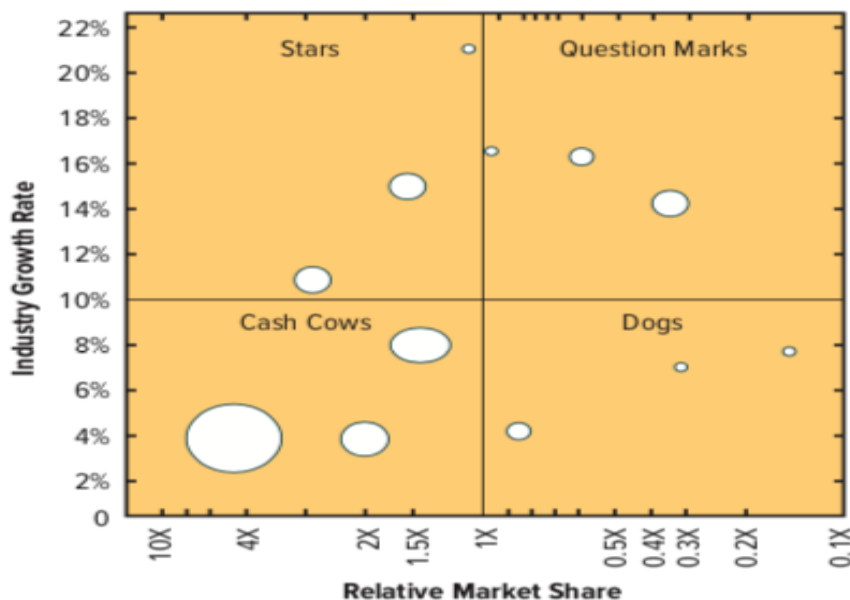
## **C. DISCUSSION**

### **1) Theoretical Framework**

In answering the research problems, dissecting them using the BCG Matrix (Boston Consulting Group) is essential and sufficient. The BCG matrix describes a company's investment portfolio in which each company's product line or business unit is plotted on the matrix according to the industry's growth rate and its relative market share. The relative competitive position of a unit is defined as its market share in the industry divided by the other largest competitors. The BCG matrix will map the performance of the company's business units based on relative market share and industry growth rate so that this matrix becomes a reference in allocating funds, producing, and selling its products.

The BCG matrix is also closely related to the product life cycle, often referred to as the Product Portfolio Matrix (Ruswana et al., 2020). A product is generally categorized into one of four types for decision-making purposes, namely Question marks, Stars, Cash cows, and Dogs, as the chart is illustrated in Chart 1 below (Wheelen et al., 2018, 238-239).

Chart 1. BCG Matrix



Question marks refer to new products with the potential to be successful but require much cash to develop. Stars refer to market leaders who are usually at or near the peak of their perceived product life cycle and can generate enough cash to maintain a high market share and usually contribute to company profits. Cash cows usually refer to trying to bring in more cash than is needed to maintain their market share. Meanwhile, the Dogs refer to low market share and not having the potential (usually because they are in an unattractive industry without a significant market position) to make a lot of money. (Wheelen et al., 2018, 238-239).

Generally, the analysis of the BCG Matrix assumes that business products have a life cycle (PRODUCT LIFE CYCLE), where, in particular, the “mature” stage is of sufficient duration to allow the firm to reap the benefits of previous investments in its current cash cows. However, specific industries may have to constantly be challenged by new technologies, which may place a heavy cost burden on matrix “cash cows” in the future, thereby damaging their horizon market position. Emphasis on market share may deter decision-makers from such a possibility and increasingly rely on vulnerable industries, whereas competitors may leapfrog firmly (Littler, 2014).

## 2) Overview of Mining Legal Standing in Indonesia

The constitution has mandated that the management, control, and exploitation of natural resources, including mining and mineral resources, is used to the greatest extent for the benefit of the people as formulated in Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia (1945 Constitution), which states that "the earth, water and natural resources contained therein are controlled by the state for the greatest prosperity of the people (*Bumi dan air dan kekayaan alam yang terkandung didalamnya dikuasai oleh Negara dan dipergunakan untuk sebesar-besarnya kemakmuran rakyat*)."

The constitutional mandate is further implemented in Law no. 3 of 2020 concerning Amendments to Law no. 4 of 2009 concerning Mineral and Coal Mining (*Minerba Law*), which has formulated the obligation to pay holders of

Special Mining Business Permits (*IUPK*) a certain percentage of their net profits to the Central Government and Regional Governments.

This should be carried out by mining companies in Indonesia towards the government (both the central government and the government) for payment obligations that must be carried out by the *IUPK*, where the *IUPK* in accordance with Article 1 number (11) of the *Minerba* Law has been defined as a permit to carry out a Mining Business in the area of a special mining business permit. Furthermore, Article 129 of the *Minerba* Law stipulates that there are payment obligations that must be made by *IUPK* holders, as formulated as follows:

- 1) *IUPK* holders at the Production Operations stage for Metal Mineral and Coal Mining must pay 4% to the Central Government and 6% to the Regional Government from the net profit since production. (2) The share of the Regional Government as referred to in paragraph (1) is regulated as follows:
  - a. Provincial Regional Government gets a share of 1.5%;
  - b. Producing regency or municipality Regional Government gets a share of 2.5%;
  - and other district or city Regional Governments within the same province receive a share of 2%.
- (3) Further provisions regarding the calculation, reporting, and payment of the share of the Central Government and Regional Governments shall be regulated by or based on a Government Regulation.

Indonesian version

- (1) Pemegang *IUPK* pada tahap kegiatan Operasi Produksi untuk Pertambangan Mineral logam dan Batubara wajib membayar sebesar 4% kepada Pemerintah Pusat dan 6% kepada Pemerintah Daerah dari keuntungan bersih sejak berproduksi. (2) Bagian Pemerintah Daerah sebagaimana dimaksud pada ayat (1) diatur sebagai berikut:
  - a. Pemerintah Daerah provinsi mendapat bagian sebesar 1,5%;
  - b. Pemerintah Daerah kabupaten/kota penghasil mendapat bagian sebesar 2,5 %;
  - danc. Pemerintah Daerah kabupaten/kota lainnya dalam provinsi yang sama mendapat bagian sebesar 2%.
- (3) Ketentuan lebih lanjut mengenai penghitungan, pelaporan, dan pembayaran bagian Pemerintah Pusat dan Pemerintah Daerah diatur dengan atau berdasarkan Peraturan Pemerintah.

Furthermore, further regulation of Article 129 of the *Minerba* Law concerning "from the net profit" of *IUPK* holders has been formulated by the government in Article 15 paragraph (3) PP No. 37 of 2018, which states that the net profit of Production Operation *IUPK* holders is net profit after deducting Corporate Income Tax (*PPH*) for Production Operation *IUPK* holders which is a change in the form of a Mining Business from a Contract of Work whose contract has not ended every year since production based on reports audited by a public accounting firm.

### 3) Overview and Evaluation of Tin Mining in Indonesia

Tin mining in Indonesia must have mining rights or authorization. In addition, every mining company in Indonesia must contribute to the local government and central government in Indonesia. Accordingly, the portion of mining companies to the government should be the primary concern in the context of efficiency, considering that Article 129 of the *Minerba* Law stipulates that *IUPK* holders at the stage of Production Operations for Metal Mineral and Coal Mining are required to pay 4% to the Central Government and 6% to

Regional Governments. of net profit since production. This means that the contribution that must be paid by tin mining companies to the local government and the central government is only around 10% of the net profit since production, not from the sale of production.

Implementing the right strategic management must address the decline in tin reserves. In this case, it is sufficient to implement the BCG Matrix, which combines product life cycle and market share as two continuous variables having added appeal since they all incorporate the "attractiveness" dimension (broader than, but includes life cycle) and the "attractiveness" dimension "competitive position" (broader than, but includes, market share) (Hambrick et al., 1982). This matrix emphasizes how to allocate resources and what kinds of performance patterns are sought for each of the four divisions. For example, a high-stock/low-growth business (Cash Cows) must be managed to generate maximum cash, and that cash must be directed to new, higher-growth businesses (Stars). Low-growth/low-share Dogs are considered serious cash drains that must be harvested, liquidated, or divested immediately (Hambrick et al., 1982).

Based on financial reports and other information from PT. Timah (Persero) Tbk, consider the "Stars" in the BCG Matrix related to business units focused on growing key market shares. Of course, this unit requires resources and investment to take advantage of every opportunity (Seeger, 1984). Several components are considered "Stars" for tin mining companies, such as PT. Timah (Persero) Tbk, whose market share is exported, must spur their production in the following years, one of which is to immediately address the decline in tin ore reserves originating from land (and the people indeed carry out a prolonged conflict related to illegal mining without carrying out reclamation) by mining in the sea. Indeed, this effort entirely requires a lot of working capital because it must use the latest technology and machines. In this "Stars" position, tin mining must be aggressive and ambitious in increasing its competitiveness in overcoming growth challenges.

The suggestion to strengthen the "Stars" as described above is a suggestion for the short and medium term in terms of increasing tin prices. Not all components in the "Stars" are always winners in the long term, considering that market share and current market growth rates are not sufficient criteria to justify investment because investment in a situation where growth rates cannot be maintained in the future can reverse tin's market share which is very volatile.

Then, the occurred cost inefficiencies in the financial statements of tin mining companies must be addressed immediately by implementing performance-based costs. It means that every rupiah issued by the company must provide prospects for increasing its business circulation. Analysis shows that cost inefficiency is also caused by too many products of certain tin mining companies, such as *Banka Tin, Mentok Tin, Bank Law Lead, Bnak Four Nine, tin anode, tin special plae, tin shot, tin pellet, tin pyramid, tin cone, tinalloy, babbit dan pewter, zircon, ilmenite, monazite, and xenotime*. Thus, companies should sort out inefficient products in the Dogs category. This is with the consideration that if there are cases that are a burden to the company because even if they receive income from it, if it only increases costs significantly and is not commensurate with the income earned, then the company must abandon the product production segment, which is considered inefficient. The cost control

strategy is in the Dogs quadrant, which is expected to correct existing inefficiencies until the market segment grows well again (Tarigan et al., 2019).

Furthermore, tin mining companies must add value to each production. This means it would be better if the company's smelter is expanded and derivation to produce tin derivatives with a higher selling value. This business needs to implement a product development strategy as an open alternative by expecting new products that can improve the quality of the company's products in increasing its competitiveness (Tarigan et al., 2019). This strategy is part of the "Cash Cows" matrix. The categories of products that fall into the Cash Cows category are products or business units that are market leaders and have a high market share. Income earned at the Cash Cows level can also maximize funding for research and development of new products still in the Question Marks category. This includes being used to pay company debts and dividends to shareholders, considering that investor confidence is needed in the company's future expansion (Ruswana et al., 2020).

#### **D. CONCLUSION**

The reduced competitiveness of tin mining companies in specific years and the many obstacles that companies must face can be corrected by implementing the BCG Matrix strategy. There are several strategies that companies can apply to three of the four matrices in BCG. Strengthening the "Stars" quadrant is the best solution for the short and medium term because of the focus on growing key market shares. The company must maximize the momentum of rising tin prices by increasing production. Definitely, the increase in production must align with efforts to increase mining land, which is recommended to increase mining in the sea. Then, the Dogs quadrant must be maximized to correct inefficiencies considering operational costs and contribution costs which increase very much but only have a negligible effect on sales. Furthermore, the "Cash Cows" strategy must be strengthened through funding research and developing new products that can provide added value to the company.

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