Indonesia's Movement to Become the Main Player in The Electric Vehicle (EV) Market in Southeast Asia

Bagus Budiono¹, Asra Virginiata Asra Virginita²
Universitas Indonesia, Depok, DKI Jakarta, Indonesia¹,²
Email: bagus.budiono11@ui.ac.id¹, asravir2015@gmail.com²

ABSTRACT:
This article discusses Indonesia's position in the electric vehicle market with a focus on investment from multinational companies such as Hyundai. Globalization plays an important role in the development of the electric vehicle industry, with the aim of reducing pollution and exhaust emissions. Multinational companies are often involved in the production of environmentally friendly vehicles as part of efforts towards a green economy. Through descriptive qualitative research methods, this research describes the relationship between state policies and the behavior of investment actors in the phenomenon of global capitalism in globalization and its impact on the electric vehicle market in Indonesia. With investment from multinational companies, Indonesia is expected to become the leading electric car battery producer in ASEAN. The steps and strategies for cooperation between Indonesia and Hyundai in developing the electric car battery industry are also discussed in this article.

Keywords: Business to Business Partnerships, Electric Vehicles. Energy Sustainability, International Actors, Investments.

INTRODUCTION
Industries around the world are undergoing significant changes towards sustainable practices and technologies to address environmental issues and reduce carbon emissions. One of the main sectors undergoing transformation is the automotive industry, with increasing emphasis on electric vehicles (EVs) as a more environmentally friendly and sustainable alternative to traditional internal combustion engine vehicles (Safitri et al., 2022).

In the context of Indonesia, a country rich in natural resources, the development of the electric vehicle industry presents both challenges and opportunities (Li & Kimura, 2021). With the large production of nickel, which is an important component in electric vehicle batteries, Indonesia has the potential to become a key player in the global electric vehicle market (Niri et al., 2024). Collaborations between international actors and local stakeholders, such as the recent
partnership between Hyundai and an Indonesian entity, mark a strategic step towards advancing the electric vehicle sector in the country (Darmoyono, 2024).

This article aims to explore the importance of business-to-business (B2B) partnerships in driving the growth of the electric vehicle industry in Indonesia. By examining the case of Hyundai’s investment in electric vehicle and battery manufacturing facilities in Indonesia, this research seeks to analyze the implications of this collaboration for technology transfer, economic development, job creation and environmental sustainability (Crisafulli et al., 2020).

Through a comprehensive literature review regarding global trends in the automotive industry, the benefits of electric vehicles, and the role of partnerships in sustainable development, this research aims to provide insight into Indonesia's position in the electric vehicle market and the implications of international collaboration on the country's industrial landscape (Wangsa et al., 2023).

By exploring the complexities of B2B partnerships in the context of the electric vehicle industry, this research aims to contribute to the ongoing discourse regarding sustainable industrial development, technology transfer and economic growth in Indonesia (Cortez & Hidalgo, 2022). The findings of this research will shed light on the opportunities and challenges associated with international collaboration in advancing the electric vehicle sector in Indonesia and position the country as a key player in the global transition towards sustainable mobility solutions.

Problem Formulation Indonesia is a country rich in natural resources. As previously discussed, Indonesia has significant nickel production compared to other countries such as Canada and Russia (Olabi et al., 2023). Nickel resources in Indonesia are the main material in the production of electric vehicles by multinational companies around the world, including Hyundai, a multinational company from South Korea (Kim, 2023). This provides an opportunity for large multinational companies such as Hyundai to collaborate through investment in establishing electric vehicle production and assembly plants. Hyundai allocated funds amounting to 15.6 trillion to build an electric vehicle battery factory in collaboration with PT Industri Battery Indonesia or Indonesia Battery Corporation (IBC) (Darmoyono, 2024). This raises hopes for the domestic industry to become a producer of electric vehicle batteries in ASEAN. However, there are concerns that Hyundai may be exploiting Indonesia’s natural resources under the guise of investment. The batteries produced by PT Industri Batteries Indonesia may mainly be used in the production of Hyundai electric vehicles because they were purchased at low prices, thus potentially hampering Indonesia's goal of becoming an electric vehicle battery producer in ASEAN.

RESEARCH METHODS
Research methods are a way to understand research objects through the process of planning and implementing research. This research is descriptive research with a qualitative approach. According to (Shorey et al., 2020), the qualitative descriptive method is a research method used to study the natural conditions of objects, where the researcher acts as a key instrument, data collection techniques are combined, data analysis is inductive/qualitative, and qualitative research results emphasize meaning rather than generalization. Qualitative descriptive research aims to describe, depict, explain, clarify and provide more detailed answers to the problems to be studied by studying a person, a group or an event as completely as possible. This research was carried out by conducting a series of literature studies through primary data sources such as policy documents, news media, and interviews with stakeholders related to electric vehicles, both researchers and business practitioners. By using qualitative descriptive methods, it is hoped that this research can describe and explain in more detail the problems to be researched by looking at the relationships between actors in a phenomenon.

Therefore, this study asks the research question, "Why does Indonesia receive investment in the form of building a Hyundai factory, which tends to exploit high levels of natural resources?"

This research will cover several topics. At the beginning of this article, we will discuss globalization and its impacts. The second part will discuss sustainable development programs as a form of effort to reduce damage to the earth due to the negative impacts of globalization. The third part will discuss battery electric vehicles, a form of environmentally friendly energy application. The fourth part of this article will discuss Indonesia's collaboration in the production of electric vehicle batteries to achieve Indonesia's interest in becoming an electric vehicle battery producer in ASEAN. Finally, in the final section, we will discuss how this collaborative relationship was established, as well as the steps and strategies chosen by Indonesia to collaborate to develop the electric vehicle battery industry with the South Korean multinational company, Hyundai.

RESULTS AND DISCUSSION

It is hoped that the development of the electric vehicle industry can be an important solution for reducing pollution and exhaust emissions due to the use of fuel oil in motorized vehicles. Electric vehicles use an electric motor as their driving force, which functions to convert the electrical energy stored in the battery into mechanical energy to turn the vehicle's wheels. This conceptual framework section contains the theories used in research to examine phenomena that could become problems in investment activities in the electric car industry in Indonesia, where the theories raised in this research are sourced from researched literature and are expected to support the course of the thought process in this lesson.

Investment

In a broad sense, the meaning of investment is the sacrifice of money in the present to obtain monetary rewards in the future. Viewed in terms of the sacrifices made in making an
investment, for now, it is relatively certain, while for the future, it is more uncertain or risky (Chang et al., 2022). Investment is a commitment to a certain amount of funds or other resources made at this time, with the aim of obtaining a number of benefits in the future (Abu-Rumman et al., 2020). Referring to the definition of investment, both in general and according to experts, it can be said that investment is an alternative for investors to obtain the hope of making a profit in the future by accepting the risks of their capital investment. Investment is divided into 3 types, namely (Maharani & Saputra, 2021):

1. Investment in financial assets or real assets:
   Investment in financial assets is an investment made by someone in the form of savings or securities. Investment in real assets is a form of investment where investors invest in real wealth.

2. Direct or indirect investment:
   Direct investment is an investment where the investor directly obtains rights or securities or wealth. Indirect investments are investments made in portfolios or securities.

3. Long-term or short-term investment
   Long-term investments are investments that have a term of more than 1 year. Short-term investments are investments that have a term of less than 1 year. An efficient investment is an investment that provides a certain risk with the greatest rate of return or an investment that provides a certain level of profit with the smallest risk.

A financier or investor carries out investment activities under securities supervision in the investment process. Therefore, investors will determine what securities to choose, how much capital to invest, and when the investment activities will be carried out. The basis for making investment decisions consists of the following (Raut, 2020):

1. Risk
   In general, the greater the risk, the greater the expected profit. Investors are more willing to take high investment risks, which are followed by high returns. On the other hand, investors who do not want to bear higher risks will certainly not be able to expect higher returns either.

2. Results
   In the context of investment management, it is necessary to distinguish between expected profits and risks that occur. The expected return is the level of profit that investors anticipate in the future. Meanwhile, returns or profits that occur or actual profits that investors have obtained in the past. The difference between the expected and actual returns is a risk that must always be considered in the investment process.

3. The relationship between the level of risk and the expected return
   The relationship between risk and expected return is a unidirectional relationship. This means that the greater the risk of an asset, the greater the expected return from that asset, and vice versa. To be able to make a decision, actors need the following steps:
1. Determine Investment Policy

   In this first stage the investor or financier determines the objectives and how much capital will be invested, where this stage has the function of seeing the relationship between risk and profit or return. Therefore, this stage is also known as the investment strategy preparation stage.

2. Securities analysis

   This stage means carrying out securities analysis including assessing individual securities or several groups of securities. There are various ways to carry out this analysis, but in general these methods are grouped into two, namely technical analysis and fundamental analysis. Significant analysis is carried out using data that forms price patterns in the past, which is then processed to find patterns that form price estimates in the future. Meanwhile, fundamental analysis is the process of identifying the prospects of a company through a series of analyses of the factors that influence it to be able to estimate future prices.

3. Portfolio Formation

   This stage focuses on identifying securities to see which securities will be selected and what proportion of funds will be invested in each security.

4. Revise portfolio

   This stage is a repetition of the three previous stages with the aim of making changes to the portfolio if necessary.

5. Evaluate portfolio performance

   At this stage, each actor assesses the performance of his portfolio, both the level of profit obtained and the level of risk borne. Everyone's financial investment orientation is different. This depends on economic conditions and the level of understanding and knowledge of actors regarding issues related to financial management. In general, there are 3 types of actors in calculating risk in investing, namely:

   1. Conservative: Very afraid/not brave enough to face investment risks
   2. Moderate: Be careful in investing and tend not to take risks
   3. Aggressive: Also called Risk Taker. This type is very brave to face risks. Risk Takers feel uncomfortable if they invest in types of investments that provide small profits. He firmly believes that investing in high-risk instruments means he has the potential to get high-risk - high returns.

   Apart from taking risk into account, each party in investment activities must also consider the level of profit that will be obtained from an investment as a basis for making investment decisions. Return is the expectation of future profits with compensation for the time and risks associated with the investment made. "Return is one of the factors that motivates investors to interact and is also a reward for investors' courage in bearing the risk of their investment." (Garg et al., 2022). Basically, investors' goal in investing is to maximize profits. Returns can be realized returns or expected returns. Where the realized return is the return that has occurred which is calculated based on historical data, while the expected return is the return expected in the future.
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This conceptual framework concludes that if an actor wants to carry out investment activities, then that actor must pay attention to considerations such as risks and profits or returns obtained. Where these considerations are at the stage of strategy preparation or policy-making in investing. Apart from everything that has been explained previously, it is important to know that reference data for assessing risk and return at the policy-making stage can be obtained from the Stock Exchange. The following is an overview of the conceptual framework for examining the strategies and steps taken by Indonesia in investment activities in the electric car industry.

**New Addiction Theory (Dos Santos)**

In “The Structure of Dependency”, Dos Santos begins his explanation with what is meant by dependency. Dependency, according to him, is a situation where the internal conditions of underdeveloped countries become part of the world economy (Suwandi, 2020). According to Dos Santos, dependency is historically conditioned by the basic form of the world economy which has its own laws of development, the type of economic relations dominant in capitalist centers and the means of outward expansion, as well as the types of economic relations that dominate the capitalist centers. Economic relations that put peripheral countries in a situation of dependence on international economic networks generated by capitalist expansion. Of these three dependencies, Dos Santos proposed three forms of dependency, namely (Zhou et al., 2020):

1. **Colonial Dependency.** Here it occurs in the form of colonial control (central country) over peripheral countries. The main economic activity of peripheral countries is the export trade of agricultural products needed by the colonial countries. Colonists monopolized land, mining, labor. The colonialists' relationship with the local population was very destructive.

2. **Financial Dependency.** Here the peripheral countries are politically independent, but in reality are still controlled by the financial power of the central country. As with colonial dependencies, peripheral countries still export raw materials for the central country's industrial needs. The central country invests in local entrepreneurs in peripheral countries to produce these raw materials. Thus control is carried out through economic power, in the form of financial power.

3. **Technology – Industry Dependence.** This is a new form of dependency. Economic activities in peripheral countries no longer export raw materials for industrial purposes in central countries. Multinational companies from central countries began to invest in industrial activities in peripheral countries whose products were intended for markets in peripheral countries.

From Dos Santos' dependency theory, this research uses a type of technological-industrial dependency. Where the actors involved are multinational companies from central or developed countries who invest their capital in industrial activities in peripheral countries whose products are aimed at peripheral country markets. These actors include Hyundai and LG, which is a multinational company from Korea. Hyundai and LG invest in Indonesia through the management
of PT. Indonesia Battery Corporation (Multinational Company from Indonesia) and several State-Owned Enterprises such as *Pertamina* and PLN. The following is an illustration of Dos Santos' dependency theory:

**Transnational Capitalist Class Theory (Wiarda HJ)**

Transnational Capitalist Class Theory is a theoretical approach that highlights the role of the global capitalist class in regulating the global economy and strengthening economic inequality between developed and developing countries. The following is a complete explanation of the transnational capitalist class theory:

Key Theory Assumptions: Transnational capitalist class theory emphasizes that there is a global capitalist class that operates across national borders and has similar economic interests. This capitalist class consists of individuals, companies, and financial institutions that have great economic power and influence global economic policy.

The Role of the Transnational Capitalist Class:

The transnational capitalist class is considered to have significant power in determining the direction of the global economy, including in terms of investment, trade and economic policy. They tend to strengthen economic inequality between developed and developing countries through the practice of exploiting resources and labor, as well as dominating global markets.

Impact on Development:

This theory highlights that transnational capitalist groups tend to strengthen economic inequality between countries, which can hinder economic and social development efforts in developing countries. The impacts can include exploitation of natural resources, wage inequality, and market domination to the detriment of Global South countries.

Solutions and Recommendations:

To overcome the negative impacts of the transnational capitalist class, several proposed solutions include regulating foreign investment, protecting national interests, and strengthening the domestic economic sector.

In addition, regional and international cooperation between Global South countries is also considered important to counter the economic domination of the transnational capitalist class.

**Views on Global Capitalism and Its Critiques**

Bob Jessop discusses the concept of internal relations in global capitalism. Traditional approaches to studying global capitalism are considered to tend to use a more separate analytical framework between economic, political and social elements. The following are several points that explain the traditional approach to studying global capitalism in full according to Jessop:

Dualism of Material Content and Forms of Ideation: Traditional approaches often separate material content (such as production, distribution, and consumption) from forms of ideation (such as ideology, culture, and values). This can result in a limited understanding of how these elements interact with each other in the global capitalist system.
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Separation Between Agency and Structure: Traditional approaches tend to separate between agency (individual or group actions) and structure (institutional and power frameworks). This can obscure understanding of how individual or group agency interacts with the existing structures of global capitalism.

Exclusion of External Factors: Traditional approaches to studying global capitalism often ignore external factors such as environment, gender, race, and culture in their analysis. This can lead to an inability to comprehensively understand the complexity of relationships in the global capitalist system.

Exclusion of Temporal and Spatial Dimensions: Traditional approaches tend to focus on static analysis and pay less attention to the temporal (time) and spatial (space) dimensions in the development of global capitalism. This can hinder understanding of how historical and geographic changes influence the dynamics of global capitalism.

Thus, traditional approaches to studying global capitalism tend to have limitations in integrating interrelated elements and understanding the complexity of internal relationships in the global capitalist system. Therefore, criticism of this traditional approach encourages the development of a more holistic and integrated approach, such as the internal relations philosophy approach proposed by Bob Jessop in his research.

Research Findings

This research reveals Indonesia's position in the electric vehicle market, with a focus on investment from multinational companies such as Hyundai. Globalization plays an important role in the development of the electric vehicle industry, with the main aim of reducing pollution and exhaust emissions produced by conventional motorized vehicles that use oil-based fuels. Electric vehicles, or EVs, are considered an important solution to address environmental problems caused by land transportation.

The global automotive industry has experienced significant changes along with advances in technology and awareness of environmental sustainability. Almost all motor vehicle manufacturers throughout the world are now refocusing on electric vehicles as an environmentally friendly alternative. Electric vehicles use an electric motor as their driving force, converting electrical energy stored in the battery into mechanical energy to turn the vehicle's wheels. The main advantages of electric vehicles include high energy conversion efficiency, reduced fuel consumption and reduced harmful exhaust emissions.

In the Indonesian context, the Motor Company and the Indonesian government have signed a memorandum of understanding (MoU) to build a manufacturing factory in the country, which will also be the first manufacturing center in Southeast Asia. This factory has an investment value of approximately USD 1.55 billion, and this collaboration is planned to continue until 2030. One follow-up to this collaboration is the establishment of an electric vehicle battery factory in Indonesia. President Joko Widodo also inaugurated the groundbreaking for the PT HKML Battery...
Indonesia electric vehicle battery factory in Karawang, West Java, with an investment value of US$1.1 billion.

Indonesia does not have hostile relations with major world markets either politically or economically. The possibility for Indonesia to be securitized like China is also low because it does not pose a political and economic threat, at least in the not distant future. Indonesia also has the opportunity to partner with the EU under the Net Zero Industry Act and Critical Raw Materials Act to build a common EV supply chain and access the EU market which is leading in the transition to EVs. Meanwhile, Indonesia is proposing an FTA with the US so that EV products originating from Indonesia can meet the requirements of the Inflation Reduction Act, following Japan’s steps which have succeeded in doing so first.

Hyundai’s investment in building an electric vehicle battery factory in Indonesia is a strategic step to utilize Indonesia’s natural resources, especially nickel, which is the main material in electric vehicle production. Indonesia has large nickel production compared to other countries such as Canada and Russia, so it has great potential for multinational companies like Hyundai to invest in building electric vehicle production and assembly plants. Hyundai also plans to use its factory in Indonesia as a place to assemble electric vehicles once the construction phase is complete.

At this point, the discussion will enter the supply chain. The more diversified the locations of suppliers and producers, the greater the resilience. Because, when one location (which can include a region, country, or smaller geographic unit) is affected and cannot provide supplies, there are still other locations with the same business activities that can act as backup (Song et al., 2021). By collaborating with multinational companies, Indonesia has the opportunity to strengthen its position as a leading electric vehicle battery producer in the ASEAN region. Therefore, this research highlights the importance of cooperation between Indonesia and multinational companies in developing the electric vehicle industry as part of efforts towards sustainable development and reducing environmental impacts. The steps and strategies chosen by Indonesia in developing the electric vehicle battery industry together with the South Korean multinational company, Hyundai, are expected to provide sustainable benefits for Indonesia and the global environment in general.

Collaboration in the form of a business-to-business (B2B) partnership between international players in Indonesia and Hyundai is considered crucial for several reasons. First, the partnership can bring in advanced technology and expertise from multinational companies such as Hyundai, which can make a significant contribution to the development of the electric vehicle industry in Indonesia. This transfer of knowledge and technology can increase local capabilities and the competitiveness of the Indonesian automotive sector.

Second, B2B collaboration with multinational companies can create opportunities for local businesses to participate in global supply chains and access international markets. By working with Hyundai, Indonesian companies can gain exposure to best practices, quality standards and
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market insights that can help them improve their products and services to meet international requirements.

Moreover, this partnership can stimulate economic growth and create jobs in Indonesia. The construction of factories and assembly lines for electric vehicles and batteries can create jobs for local communities, increase industrial productivity, and contribute to the country's economic development.

Furthermore, B2B collaboration can encourage innovation and research and development (R&D) activities in electric vehicles. By partnering with Hyundai, Indonesian companies can engage in joint research and development projects, technology transfer and innovation initiatives that can create new products, processes and solutions in the electric vehicle industry.

Overall, the B2B partnership between international players in Indonesia and Hyundai plays an important role in driving the growth and sustainability of the electric vehicle industry in the country. This collaboration will not only bring investment and technological progress but also encourage knowledge exchange, market expansion, job creation and innovation, which are important for the long-term success and competitiveness of the Indonesian automotive sector in the global market.

In today's global economy, business-to-business (B2B) collaboration plays a critical role in driving economic growth and development. Especially in developing countries like Indonesia, establishing partnerships with international actors like Hyundai can be very beneficial. This article explores the importance of B2B collaboration between international entities operating in Indonesia and Hyundai, a leading global company. Drawing insights from existing literature, we investigate the benefits, challenges, and strategies associated with such partnerships.

B2B collaboration requires mutually beneficial relationships between businesses aimed at achieving common goals such as market expansion, innovation and increased competitiveness. For Indonesia, a country rich in resources and potential, partnering with international companies like Hyundai offers many benefits. This includes access to advanced technology, expertise and global networks, which can drive economic growth and enhance industrial capabilities.

As highlighted by (Nurhayati et al., 2023), "B2B collaboration serves as a channel for knowledge transfer, technological advancement, and resource optimization, enabling participating companies to leverage each other’s strengths and achieve synergistic outcomes." Hyundai, a leading player in the automotive industry, has built a significant presence in Indonesia over the years. Through joint ventures, strategic alliances and investment initiatives, Hyundai has harnessed the potential of the Indonesian market while contributing to the development of the country's automotive sector. For example, Hyundai's partnerships with local manufacturers have facilitated technology transfer, skills development and job creation, thereby driving economic growth.
Despite its many benefits, B2B collaboration poses certain challenges, including cultural differences, regulatory complexity, and different business practices. To overcome these obstacles, proactive steps and effective strategies are needed. One approach is to foster cross-cultural understanding and communication through cultural training programs and intercultural workshops. Additionally, establishing clear contractual agreements and navigating regulatory frameworks can reduce the legal and compliance risks associated with international partnerships.

According to (Kaski et al., 2018), “Successful B2B collaboration depends on effective communication, mutual trust, and shared vision, thus requiring proactive efforts to bridge cultural gaps and align business goals.” There are several recommendations that can be considered to optimize B2B collaboration between international players in Indonesia and Hyundai. First, fostering a conducive business environment through policy reforms, infrastructure development, and investment incentives can attract foreign partners and facilitate smoother collaboration. Second, encouraging industry-academic relations and research partnerships can encourage innovation and knowledge exchange, thereby increasing the competitiveness of local industries.

Indonesia is a natural candidate if you want to diversify the EV supply chain. For battery and electric vehicle manufacturers, locating production locations in the same jurisdiction and geographically close will reduce the risk of obstacles from cross-border restrictions and reduce transportation costs (Dai et al., 2021). It should be noted that Indonesia is also establishing a partnership with Australia, the largest lithium producer and neighbor to Indonesia, to ensure a sustainable EV supply chain in the region. In addition, for companies wishing to open battery and electric vehicle production, Indonesia has a growing extraction and refining sector that is capable of producing HPAL nickel as a cathode and battery cell material. The electric vehicle development or assembly sector can benefit from Indonesia which is already well established as an automotive hub in Southeast Asia with domestic linkages such as components and spare parts manufacturers that are quite well developed.

**The Role of the Indonesian Government in EV Production Investment**

In 2019, the government issued Presidential Decree No. 55 concerning the Acceleration of the Battery Electric Vehicle Program for Road Transportation. This presidential decree envisions the development of the domestic electric vehicle industry with various efforts. The Presidential Decree mandates the provision of fiscal and non-fiscal incentives by the central and regional governments to industrial companies, universities, research and development institutions, as well as various other stakeholders who contribute to industrial development and the clean renewable energy transition, including individual consumers. Fiscal incentives can be in the form of incentives for import duties on raw materials, components and machinery within a certain period, tax incentives for the sale of luxury goods, incentives for an exemption or reduction of central and regional taxes, incentives for making filling station equipment (SPKLU), incentives for export financing, SPKLU financing, relief parking and charging fees for...
consumers/users, etc. Meanwhile, non-fiscal incentives include exemptions from restrictions on the use of certain roads, delegation of patents held by the government, and provision of security in production and logistics processes which are classified as vital national objects (Setiawan et al., 2022).

The Ministry of Finance signed Minister of Finance Regulation (PMK) no. 130 of 2020 in September. The PMK underlies the provision of incentives in the form of tax holidays for investments that meet the requirements. The condition is that investment must be in the pioneer industry group, namely Indonesian Journal of International Relations 329 industries that add value, introduce new technology, provide strategic value to the national economy, and have domestic linkages. It appears that the EV industry meets these requirements easily. The tax holiday offered is in the form of an income tax reduction whose percentage and duration follow the investment size, ranging from 50 percent to 100 percent while the duration ranges from 5 to 20 fiscal years. Then, for consumers, the government authorized subsidies for purchasing electric vehicles, including conversion to electric motorbikes, with a subsidy value of 7 million Rupiah per unit, which meets the TKDN of 40 percent (Sundararjun & Wongbandit, 2021). Although not directly aimed at investors, these subsidies can support EV investment through increased sales.

**Obstacles: Maturity of the Nickel Industry in Indonesia**

Domestic Industry Maturity When the first nickel embargo was implemented in January 2014, Indonesia only had one refining facility run by Indoferro. This facility produces processed nickel in the form of pig iron which is used to make stainless steel. Five nickel refineries were under construction in December 2013 a month before the embargo was implemented. Moving forward to the re-imposition of the export embargo in 2020, smelter growth figures are also still disappointing. At the end of 2019, there were only 17 refining facilities operating, even though the government's target is 68 smelters operating by 2022. Of the 17 refining plants, 11 are nickel processing. If development proceeds at the same rate, achieving this target will be considered impossible. And sure enough, in 2022 the total smelters operating on all metals will be 26 units with 20 nickel smelters. This problem mainly occurs in the construction process, where entrepreneurs often experience funding problems, considering that smelters cost a lot of money (Ramadhini et al., 2023). Thus, from the government's point of view, it seems that existing players cannot independently fulfill the government's plans set in refining construction, so opening the investment tap is really needed.

The implementation of nickel ore export restrictions in January 2020 was simultaneously accompanied by a government program to accelerate the electric vehicle industry. Even though Indonesia already has 11 nickel smelters, these facilities produce stainless steel materials instead of refining nickel ore for EV batteries. In other words, Indonesia does not have a high-pressure acid leach (HPAL) type of refinery, which is more suitable for refining low-grade nickel (the most common nickel in Indonesia) into first-class nickel. In fact, first-class nickel derivatives, namely
nickel sulfate and cobalt sulfate, have a higher value and are used as raw materials for electric vehicle batteries. This means that downstream projects with the EV industry could be threatened by a lack of investment in the field of refining battery raw materials. Again, high costs are an obstacle, so local players have difficulty if they do not collaborate with foreign players, as reflected in the six HPAL (High-Pressure Acid Leaching) projects.

Meanwhile, in the downstream sector, Indonesia at the start of nickel nationalism did not yet have a battery cell industry, vehicle batteries and the manufacture or assembly of electric cars. The inauguration of the construction of the first vehicle battery factory in Karawang occurred in September 2021. In June of the following year, the construction of the integrated battery factory run by the LG consortium (a South Korean conglomerate company) was inaugurated and will later produce cathodes and precursors as materials for battery cells and vehicle batteries. itself. Both are currently still in the development process. Meanwhile, Hyundai and Wuling's electric car assembly plants have been operating since March and June 2022 respectively. Referring to this, the nickel processing stage to become electric cars is still filled with large foreign investments, so the EV battery production development program is likely to be slower to realize. Thus, it can be said that the government's bargaining position towards foreign players is relatively low. This is because the maturity of the domestic industry still needs to be developed with the help of foreign investment.

Global Dynamics Stimulus to Domestic Dynamics

In the case of This is the influence on nickel nationalism is the fruit of a two-way interaction between global/systemic and domestic dynamics. Global dynamics provide domestic stimulus in the form of energy transformation trends and movements to reduce dependency as incentives for openness. On the other hand, Indonesia's domestic dynamics captured this stimulus and returned the stimulus in the form of compromises/adjustments in its natural resource nationalism policy after considering domestic strengths and capabilities as an endorsement for foreign actors to get involved in the program.

Jokowi's government is often characterized as adherents of pragmatic developmentalism (Warburton, 2016). This means that the government prioritizes economic growth and development "above all else (Ibid)." However, in a democratic environment, this orientation will certainly not be accepted by all parties, and friction is almost inevitable. Apart from various objections by residents to nickel mines and projects in their area, several high-profile cases have occurred that have threatened the government's downstream projects.

Contestation over the government's establishment of investment openness will occur at the end of 2022. In this case, the problem is the extension of the PT contract. Vale Indonesia. Three governors, namely from South, Central and Southeast Sulawesi, rejected the extension of the Brazilian nickel mining company. The condition for the extension is the divestment of 51 percent of the shares given to the Indonesian entity. The central government is willing to buy the remaining divestment shares which effectively means allowing the contract to be extended. This
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government plan was opposed by the governors of the three provinces, Commission VII of the DPR, and the South Sulawesi DPRD. The opposing elements want the government not to divest so that Vale does not fulfill the conditions for extending the contract which will legally be taken over by the government. The reason is that Vale is considered not to provide benefits to society. In the end, the government ignored the rejection, and in June 2023, the government, through the Minister of Energy and Mineral Resources, signed a contract extension. In the cases reviewed in this section, it seems that the government dared to fight its ideational challenges by sticking to its policies and decisions.

A country's industrial policy to regulate sectoral specialization and position in the global value chain is an important strategy in increasing a country's economic competitiveness. The steps taken in industrial policy are as follows (Cresti & Virgillito, 2024):

**1. Identify Comparative and Competitive Advantages:** The first step in designing an industrial policy is to identify the comparative and competitive advantages of the country. Comparative advantage refers to a country's ability to produce goods or services at relatively lower costs compared to other countries, while competitive advantage refers to the ability to produce goods or services with better quality or innovation.

**2. Priority Sector Development:** Based on the identification of comparative and competitive advantages, countries can develop priority sectors that have the potential to develop and compete in the global market. Industrial policy can incentivize and support these sectors to increase their productivity, innovation and competitiveness.

**3. Resource Allocation:** Industrial policy can also help in the efficient allocation of resources to sectors that have the potential to grow and develop. By directing investment, research and development to strategic sectors, countries can strengthen their position in global value chains and increase their economic competitiveness.

**4. Increased Involvement in Global Value Chains:** By regulating sectoral specialization and position in global value chains, industrial policy can help countries increase their involvement in global value chains. By strengthening sectors that have comparative and competitive advantages, countries can expand their export markets, attract foreign investment, and create new jobs.

**5. Strengthening Economic Competitiveness:** Through appropriate industrial policies, countries can strengthen their economic competitiveness at the global level. By focusing on sectoral specialization and positioning in global value chains, countries can create a business environment conducive to long-term economic growth and sustainable development.

**Discussion**

The automotive industry is undergoing a significant transformation towards sustainability, focusing on developing and deploying electric vehicles (EVs) to address environmental concerns and reduce carbon emissions. The collaboration between Indonesia and Hyundai in building an electric vehicle battery factory marks an important step towards increasing domestic industrial
capabilities and positioning Indonesia as a key player in electric vehicle battery production in the ASEAN region.

Collaboration between governments, industry stakeholders and international partners is critical to advancing sustainable technologies such as electric vehicles. These partnerships generate investments, technological advances and knowledge-sharing opportunities critical to the automotive sector’s long-term success and competitiveness. Countries can attract foreign partners and facilitate smoother collaboration in the sustainable automotive industry by creating a conducive business environment through policy reforms, infrastructure development, and investment incentives.

Findings regarding global dynamics that provide stimulus to domestic dynamics prove that hybrid natural resource nationalism is more likely to emerge and survive if there are substantial prospects, which, in this case, originate from global supply chain dynamics. Meanwhile, cross-cultural understanding and effective communication are key elements for successful business-to-business (B2B) collaboration, especially in international partnerships such as Indonesia and Hyundai. By implementing cultural training programs, establishing clear contractual agreements, and implementing regulatory frameworks, organizations can mitigate the legal and compliance risks associated with cross-border collaboration.

CONCLUSION

In summary, this research underscores the multifaceted role of the state within global capitalism, encompassing economic regulation, protection and promotion of national interests, intervention during economic crises, and complex interactions with non-state actors. States function as nodal points in the global capitalist system, wielding significant influence over economic policies, resource management, and international economic interactions. They play pivotal roles in shaping market conditions, implementing fiscal and monetary policies, and negotiating trade agreements to safeguard domestic industries and advance national interests on the global stage. Moreover, states often intervene during economic downturns by providing stimulus packages, devising recovery strategies, and collaborating with non-state entities such as multinational corporations and international organizations. Understanding this intricate role of the state is crucial for comprehending the dynamics of the global economic landscape. Looking ahead, particularly in the context of Indonesia’s automotive industry transitioning towards sustainability, effective collaboration with international stakeholders is imperative for driving innovation and fostering cross-sector partnerships. This necessitates a robust government focus on prioritizing national interests to achieve sustainable economic development and long-term environmental benefits.

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