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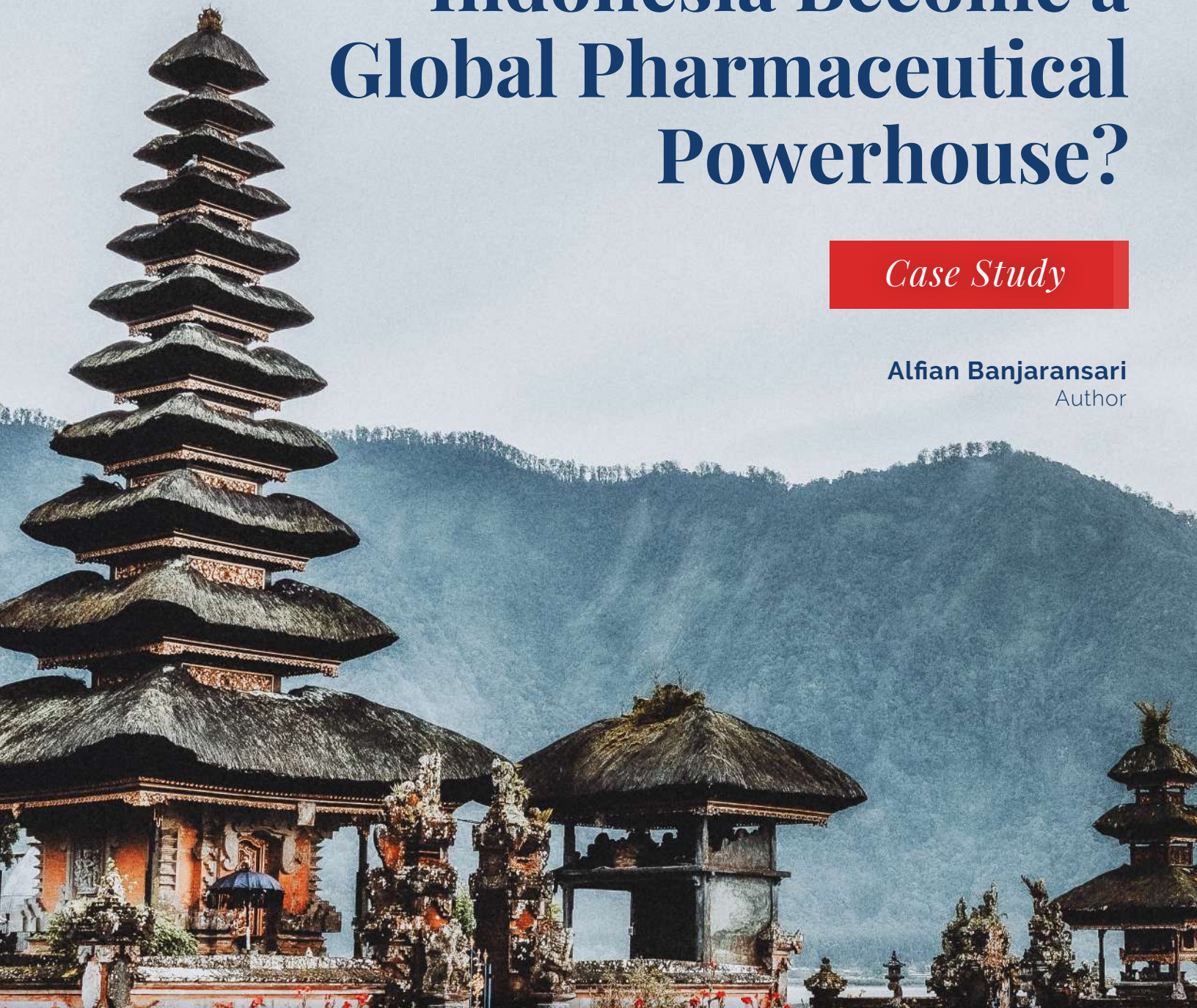
PROSPERITY

International Trade Barrier Index 2023

# Moving Up the Ladder: Can Post Covid-19 Indonesia Become a Global Pharmaceutical Powerhouse?

*Case Study*

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## *Moving Up The Ladder: Can Post Covid-19 Indonesia Become a Global Pharmaceutical Powerhouse?*

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In the aftermath of the Covid-19 pandemic, Indonesia has ambitions of transforming itself into a formidable pharmaceutical powerhouse. Indeed, the nation's potential in the pharmaceutical sector is vast. However, Indonesia is mired by a recurring vicious cycle, whereby insufficient research and development (R&D) investment perpetuates overreliance on imported ingredients, resulting in limited supply chain control, increased costs, and a demand for affordable medicines that only drive the proliferation of counterfeit and substandard products. To navigate these challenges, Indonesia can draw guidance from indices such as the International Property Rights Index (IPRI) and the Trade Barrier Index (TBI). The case study emphasizes the necessity of both strengthening intellectual property rights (IPR) protection and the careful dismantling of trade barriers if Indonesia aims to move up the ladder rungs of the global pharmaceutical value chain (GVC). Only then can Indonesia unlock its true potential, address global health challenges, and thus make substantial strides in advancing its position in the global pharmaceutical industry.

## Background

The Covid-19 pandemic turned out to be a global phenomenon with a profound impact on the entire world. What initially emerged as a public health emergency rapidly descended into a multifaceted global crisis, encompassing social, political, and economic dimensions. The economic implications of the pandemic were particularly significant, with various regions experiencing economic recessions and severe disruptions to their economies.<sup>1</sup>

Indonesia, being the world's fourth most populous country and the largest in Southeast Asia, has not been immune to the impact of the Covid-19 pandemic and the subsequent consequence. Indeed, the pandemic has hit Indonesia worse than any other Southeast Asian country<sup>2</sup>.

However, in the aftermath of the Covid-19 pandemic, Indonesia's economy is gradually showing signs of recovery and resilience. The World Bank predicts Indonesia's GDP to grow by 5.2% in 2023, with growth expected to average 4.9% over the period from 2023 to 2025 (World Bank, 2022). Meanwhile, the Asian Development Bank (ADB) anticipates a more modest growth rate of 4.8% (ADB, 2022).

Nevertheless, the pandemic shook Indonesia's healthcare infrastructure, highlighting the country's lack of preparedness to effectively respond to such a disruptive shock. The healthcare system faced significant challenges in terms of capacity, resources, and infrastructure, which impacted the country's ability to effectively manage the spread of the virus and provide adequate healthcare services. News and reports highlighting an unprecedented crisis in the country's healthcare infrastructure dominated the national conversation. From hospital bed capacity to the healthcare workforce (and concerns for their well-being), and from medical equipment to supplies – all of which are arguably the cornerstones of a national healthcare infrastructure – everything seemed to be under extreme duress. Moreover, the broader consequences of a health crisis, including socioeconomic disparities and sociopolitical tensions exacerbated during the pandemic, should not be overlooked. Considering Indonesia's large population and vast geography, this should be a global concern, or at the very least, a cautionary example<sup>3</sup>.

Still, Indonesia entered 2023 with confidence; the country ranks 5th globally among Covid-19 vaccinated countries, fueling the government's confidence in returning to normalcy and sending a message that it is indeed open for business (Banjaransari & Ismail, 2023). Moreover, the government has expressed eagerness to learn from the pandemic and aims for better preparedness in the wake

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1. It is estimated that the global economy contracted by 3.5% in 2020 due to the pandemic, marking the worst recession since the Great Depression (IMF World Economic Outlook, 2021), which happened a *century* earlier.
  2. According to the latest available data in 2023, the number of confirmed cases in the country has exceeded 6.8 million. This figure demonstrates the wide reach of the virus within the Indonesian population with reports of over 160,000 deaths related to the virus (covid19.go.id).
  3. According to the Brookings Institute, Indonesia is "*an important bellwether for the state of democracy in the era of COVID-19*", highlighting the similitude of challenges it shares with "*large and diverse democracies like India, Brazil, and the United States*". In particular, it is concerned with the Indonesian government's lackluster response amidst concerns of democratic decline (Pepinsky, 2021).

of possible future pandemics. One area the government has repeatedly pledged to 'transform' is the healthcare sector. The government has laid out plans to transform its healthcare industry, which encompasses a multitude of industries, including pharmaceuticals, medical appliances, health insurance, and other related sectors.

Indonesian President Joko Widodo admits that the lack of independence of the nation's medicine industry, vaccine production, and healthcare equipment remains one of the country's weaknesses in handling the pandemic (Akbar, 2021). Building upon the president's statement, in September 2022, the Ministry of Industry announced that the government is laying out a "roadmap for the development of the national pharmaceutical industry" (Evandio, 2022), with the aim of positioning Indonesia as a global player in the pharmaceutical sector while achieving self-sufficiency in meeting domestic needs. This statement seemingly reflects the government's intention to expand the reach of Indonesian pharmaceutical products and compete in the global market. The Ministry of Health shares these ambitions and aims to transform the industry towards "healthcare resilience" through the consolidation of the national medical and pharmaceutical supply (Kementerian Kesehatan, 2023).

However, unleashing Indonesia's pharmaceutical industry requires a vastly different approach compared to building other healthcare infrastructure, such as constructing hospitals or increasing the ratio of doctors per capita. It entails a shift in mindset from a linear approach to one that is multidimensional and increasingly complex. The focus is not solely on increasing the quantity of pharmaceutical products but also on enhancing quality through innovation, and research and development (R&D). This can lead to the development of new and innovative drugs, technologies, and treatments that address local and global health challenges. Only then can Indonesia's pharmaceutical industry tap into the opportunities presented by the global market. With its large population and growing middle class, Indonesia indeed has the potential to become a major player in the pharmaceutical industry while addressing domestic healthcare needs.

This case study delves into the dynamic landscape of Indonesia's pharmaceutical industry, examining its current situation while also laying out the factors contributing to it. Furthermore, it aims to present a critical overview of the challenges involved in developing Indonesia's pharmaceutical industry and positioning it for a global presence. To navigate this analysis, the study draws from renowned external indices such as the International Property Rights Index (IPRI) and the Trade Barrier Index (TBI) to provide insights into what Indonesia can learn from best practices.

## **Indonesia's Pharma Industry Landscape: A Critical Overview**

The largest in geography and demographics, Indonesia is also the largest pharmaceutical market among ASEAN (Association of South East Asian Nations) members in terms of volume alone. Indonesia also is the region's largest pharmaceutical manufacturer (Fitch Solutions, 2021) with a market value of around USD 10.11 billion in 2021, projected to exceed USD 11 billion in 2023.

Classified as a "pharmerging" 4 country, Indonesia's pharmaceutical industry holds the 10th position in terms of revenue within the Asia Pacific – a region projected to experience a CAGR (compound annual growth rate) of 10.4% during 2021–2026 (Research and Markets, 2021). The industry's growth has been driven by the sheer market size of 270 million people as well as the expansion of the government's universal healthcare program enacted in 2014<sup>5</sup>. Notably, the market is predominantly driven by over-the-counter (OTC) and generic drugs for household consumption.

Unfortunately, Indonesian pharmaceuticals have yet to make a significant breakthrough in foreign markets, with exports only accounting for 8% of the total production output in 2021. Consequently, Indonesia ranks 14th out of 19 countries in the Asia Pacific region in terms of export share (Euromonitor, 2022). Looking at the bigger picture, Indonesia's pharmaceutical industry currently represents a small fraction of the Asia Pacific market, accounting for approximately 0.5% of the total market value in 2021 (Fitch Solutions, 2021).

As it stands, Indonesia's pharmaceutical exports lag behind those of its neighbors. In 2020, the country's pharmaceutical exports amounted to approximately \$334 million, significantly lower than Singapore's \$11.7 billion, Malaysia's \$1.6 billion, and Thailand's \$936 million. These figures emphasize Indonesia's inward-looking pharmaceutical industry, which has yet to establish a strong regional, let alone global, presence. Furthermore, a closer look reveals that a vast majority of pharmaceutical ingredients are imported. The figures typically vary between 90 to 95%<sup>6</sup>, yet the takeaway message remains; Indonesia is heavily dependent on imported pharmaceutical ingredients<sup>7</sup>. This over-reliance on imported active pharmaceutical ingredients (APIs) and finished products is a common thread that informs Indonesia's ambitions of self-sufficiency and competitiveness.

From the consumer's perspective, Indonesia's average tariff on imported medicines is currently 4.4%, – relatively high compared to global and regional standards. For instance, the Philippines imposes a 2% average tariff on medicines, while Vietnam and Malaysia have tariffs of 0.5% and zero tariffs, respectively. Indonesia's neighbor, Singapore<sup>8</sup> stands out by not applying any tariffs on

4. Pharmerging comprise 21 countries ranked by IQVIA as high-growth pharmaceutical markets. These countries include Algeria, Argentina, Bangladesh, Brazil, Colombia, Chile, China, Egypt, India, Indonesia, Kazakhstan, Mexico, Nigeria, Pakistan, Philippines, Poland, Russia, Saudi Arabia, South Africa, Turkey and Vietnam (as cited in EFPIA, 2022)

5. The impact of Indonesia's universal healthcare program (JKN or *Jaminan Kesehatan Nasional*) on the country's pharmaceutical industry has been extensively documented, indicating a growth pattern that is influenced by the government's healthcare provision mandate. According to the World Bank, from 2014 to 2019, JKN coverage expanded, reaching 83 percent of the population (over 200 million people) and reducing individual out-of-pocket expenditures on healthcare from 47 percent to 32 percent. As of 2021, JKN has approximately 220 million beneficiaries, with 60 percent of them being poor or near-poor individuals (World Bank, 2021).

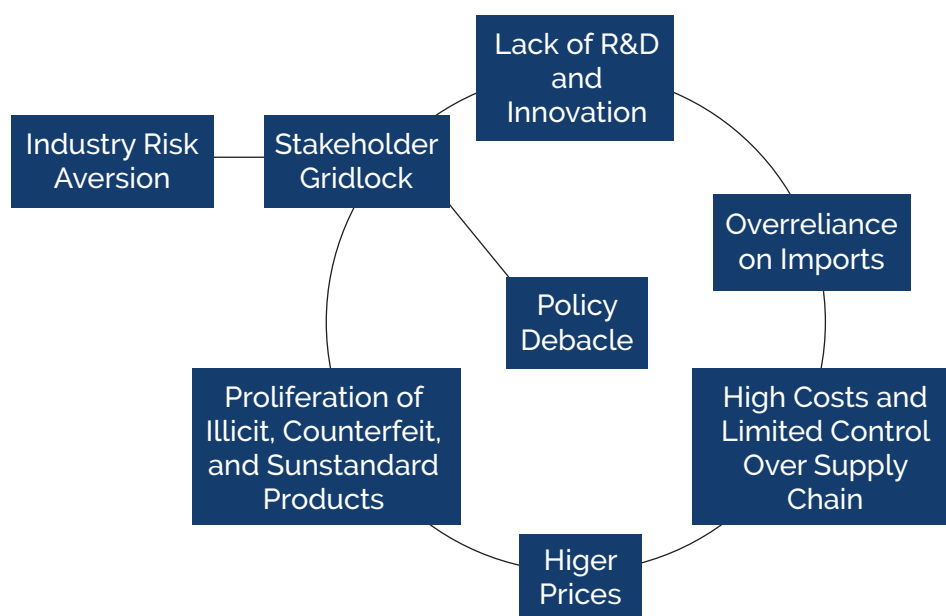
6. In 2020, Research and Technology Minister Bambang Brodjonegoro remarked that 95% of pharmaceutical ingredients are imported (Sugianto, 2020). Member of Parliament Achmad Baidowi remarked how the over-reliance on imported pharmaceutical ingredients is a reflection of the Ministry of Industry's failure (Prakoso, 2020). Among Indonesians, a common trope circulating is that the only pharmaceutical ingredient Indonesia is able to produce is paracetamol. In the article, "*RI Impor 90% Bahan Baku Obat, Hanya Paracetamol Cs yang Lokal*" published by CNBC Indonesia, Deputy Health Minister Dante Saksono reiterated the frustration, "*Out of the ten most consumed, we can only produce four molecules: paracetamol, clopidogrel, omeprazole, and atorvastatin. We still can't produce cefixime, amlodipine, candesartan cilexetil, bisoprolol, lansoprazole, and ceftriaxone.*" (Yanwardhana, 2021).

7. The composition required to manufacture pharmaceutical material include both active pharmaceutical ingredients (APIs) as well as inactive ingredients or excipients. APIs represent the bulk drugs that are pharmaceutically active which generate a desired pharmacological effect, whereas excipients represent the pharmacologically inactive substances which are generally used as a carrier of the API in the drug (American Pharmaceutical Review, 2018).

medicines, taking cues from early adopters who signed the WTO's pharmaceutical agreement<sup>9</sup> and have tariffs of zero percent on medicines (World Trade Organization, 1994).

The high average tariff on imported medicines in Indonesia is just one aspect that adds to the challenges faced by the pharmaceutical industry in the country. Indonesia also grapples with the persistent issue of the proliferation of illicit, counterfeit, and substandard products inundating its domestic market<sup>10</sup>. According to an estimate by the Indonesia Anti-Counterfeiting Society (MIAP), counterfeit pharmaceuticals accounted for 3.8% of the market, while constituting 25% of total pharmaceutical sales (Integrity, 2017).

The continuum of challenges in the Indonesian pharmaceutical landscape is perpetuated by a series of interconnected factors, forming a cyclic pattern that impedes industry growth. The "vicious cycle" within the Indonesian pharmaceutical landscape is evident as we delve into the the challenges faced by the industry.



8. The irony becomes even more pronounced when we consider the tariff profiles of Indonesia and Singapore in the pharmaceutical trade as mentioned above. While Indonesia imposes higher tariffs and non-tariff measures on chemicals, including active pharmaceutical ingredients (APIs), its second largest pharmaceutical export destination happens to be Singapore. In contrast, Singapore maintains lower tariffs and a more favorable trade environment for pharmaceuticals, enabling its pharmaceutical industry to thrive. This juxtaposition underscores the irony of Indonesia relying on a market with lower trade barriers to bolster its pharmaceutical exports, highlighting the potential benefits of reducing trade barriers and fostering a more conducive business environment for the industry's growth.

9. According to WTO, "The 1994 Agreement on Trade in Pharmaceutical Products eliminates tariffs and other duties and charges on a large number of pharmaceutical products and the substances used to produce them, permanently binding them at duty-free levels". Parties in this agreement include Canada, EU, Japan, Macao (China), Norway, Switzerland, the United Kingdom and the United States. The negotiated concessions leading to the agreement cover finished pharmaceutical products as well as APIs and compound chemicals.

10. In a report published in 2019 by the Organisation for Economic Co-operation and Development (OECD) and the European Union Intellectual Property Office (EUIPO), half of countries in South-East Asia (SEA), such as Singapore, Thailand, Malaysia, the Philippines and Vietnam, are listed among the top 25 economies for the provenance of counterfeit and pirated goods (EUIPO, 2021).

A prominent fixture in the landscape is the lack of investment in research and development (R&D) and innovation<sup>11</sup>, leading to stagnation of new drug development. Consequently, the industry becomes heavily reliant on imports for pharmaceutical ingredients and products, which in turn causes a ripple effect of high costs and limited control<sup>12</sup> over the supply chain. This inflates the demand for more affordable medicines. In an economy with low purchasing parity and lax consumer protection, this fuels the proliferation of illicit counterfeits and substandard products.

On the other hand, industry risk aversion and policy confusion emerge as parallel phenomena, mutually gridlocking each other. Indonesia's pharmaceutical players, apprehensive about taking risks, remain hesitant moving towards innovation and progress. At the same time, policy missteps<sup>13</sup> exacerbate the challenges faced by the pharmaceutical industry. Undoubtedly, the industry's reluctance to embrace innovation is a response to the existing market conditions. The prevalence of illicit, counterfeit, and substandard products, coupled with the high cost and scarcity of ingredients

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11. The lack of innovation and R&D is not exclusive to Indonesia's pharmaceutical sector. Indeed, innovation has played an underwhelming role to Indonesia's economic growth with the country's innovation performance lagging behind its regional peers (Damuri et al, 2021).

Moreover, the private sector support only makes up around 20% of total funding due to lack of business incentives, policies, and industry awareness regarding the importance of research (Robertson, 2022). The 2022 Global Innovation Index notes Indonesia's weakness in global corporate R&D investment (Global Innovation Index, 2022), indicating remoteness from the global R&D scene.

12. A recent report by PhRMA (Pharmaceutical Research and Manufacturers of America) called "The Global Access to New Medicines Report" looks at access to new medicines in G20 countries and examines that the availability of new medicines varied significantly across the countries. Access to new medicines is generally available to 85% of patients in the United States, compared to 61% in Germany, 59% in the United Kingdom and only 9% in Indonesia. For comparison, the G20 average was 36% (Sullivan, 2023).

13. [Minister of Industry Regulation No.16 of 2020](#) mandates local content level for pharmaceutical finished goods and raw materials, as well as the mechanism for calculating it. The calculation is made up of four components: raw materials, research and development, manufacturing process, and packaging. For the raw materials component, it is weighted at 50%. Within raw materials, APIs account for 65%, with the remaining 35% being additives. Since Indonesia virtually import most of its APIs, this poses a significant challenge for new drug development and manufacturing.

Another example of a policy misstep is Indonesia's tax reduction of up to 300% for pharmaceutical firms' R&D spending. Critics argue that this is out of step with trends in the global value chain. Since pharmaceutical firms are outsourcing their research and manufacturing process to third parties (which are almost always abroad), this makes the tax incentive misguided (Rahman, 2020).

creates a challenging environment that discourages industry players from investing in R&D and innovation. Moreover, policy confusion and a limited understanding of market incentives contribute to the industry's hesitance, as the government struggles to provide a supportive regulatory framework.

## A Way Forward: Taking Cues From IPRI and TBI

The International Property Rights Index (IPRI) presents comprehensive insights into the status of property rights among nations of the world. Initiated in 2007 by the Property Rights Alliance (PRA) which commissioned the Hernando de Soto Fellowship to produce an annual edition, IPRI follows an institutional approach, as property rights are a lynchpin institution for a free society based on the creation of a citizenship that controls its own life and builds its own destiny. The following are the core components of the IPRI: (i) Legal and Political Environment, (ii) Physical Property Rights (PPR), and lastly (iii) Intellectual Property Rights (IPR).

The IPR component includes a score on patent protection. In the context of pharmaceuticals, patent protection plays a crucial role in incentivizing innovation and investment in research and development. It allows pharmaceutical companies to recoup their investments by having exclusive rights to manufacture and sell a new drug, encouraging them to invest in costly and time-consuming drug development processes.

With a relatively low score of 4.617 on the International Property Rights Index 2022<sup>14</sup> (compared to China's score of 7.245, Malaysia's score of 6.215, India's score of 5.717, and Singapore's score of 7.082), Indonesia's patent protection framework poses challenges for new drug development. This score suggests that Indonesia may face limitations in providing adequate incentives and protections for pharmaceutical innovation.

The presence of illicit, counterfeit, and substandard drugs also raises concerns about IPR protection within the industry. Surely, it is neither a new, nor unique phenomenon to Indonesia (or developing countries for matter)<sup>15</sup>. However, it is important to understand that it is developing countries like Indonesia who bear the brunt from the rampant proliferation of illicit, counterfeit, and substandard drugs since *"... it is low- and middle-income countries and those in areas of conflict, or civil unrest, with very weak or non-existent health systems that bear the greatest burden"* (Fraser Institute, 2018).

Indeed, Indonesia has long been the subject of scrutiny when it comes to IP protection as a consequence of lax IPR enforcement<sup>16</sup>. Beyond obvious public health concerns, WHO warns that

14. As for Indonesia, 2022 saw the country's IPRI score decrease by 0.475 points to 4.799, placing it 12th in the Asia and Oceania region and 67th in the world (IPRI, 2022).

15. According to WHO, *"No country remains untouched by this issue – from North America and Europe through to sub-Saharan Africa, South East Asia, and Latin America. What was once considered a problem limited to developing and low-income countries has now become an issue for all,"* (World Health Organization, 2018).

16. According to the U.S. Department of Commerce, protection of intellectual property is a key concern, with Indonesia remaining on the Priority



if left unchecked, the rampant proliferation of these drugs will ultimately *“hamper industry growth by creating an unfair playing field, as legitimate pharmaceutical companies face competition from unregulated and potentially dangerous sources.”*

Furthermore, on the other side of the equation lies Indonesia’s trade challenges. Here, the 2023 International Trade Barrier Index (TBI) identifies the most direct and indirect trade barriers imposed. It’s analysis currently includes 88 countries affecting 76% of the world’s people and 96% of world GDP. It assesses countries based on their use of all direct types of trade barriers and behind-the-border facilitation environment required to enable trade to occur.

Being a composite index, the Index is composed of four pillars: (i) Tariffs (ii) Non-Tariff Barriers (NTBs), (iii) Services Restrictions, and lastly (iv) Facilitation. As a composite index, it captures these elements from various internationally recognized measures.

With regards to Indonesia’s pharmaceutical challenges, it is important to recognize that the implementation of trade barriers, including tariffs and other measures, are also not unique to Indonesia. Indonesia is no outlier here – other countries witnessed a rise in trade barriers in recent years, extending beyond traditional tariffs. Indeed, throughout 2021-2022 TBI has monitored a global uptick in trade barriers beyond mere tariffs, be it digital trade restrictions, worsening property right protections, and use of other non-tariff barriers – it appears that nations are finding more creative ways to sidestep the principles of free trade (TBI, 2023). However, Indonesia has long been noted for its heavy-handed use of tariff and non-tariff measures as part of its trade policies. Indonesia is notorious for being active in resorting to alleged protectionism, through the introduction or strengthening of a number of non-tariff barriers (PriceWaterhouseCoopers, 2021). These measures are implemented with the aim of safeguarding domestic industries, stimulating local production, and maintaining a favorable trade balance. However, the frequent, quick, and often unpredictable new rules pose unprecedented challenges. CME Indonesia has argued that the government’s utilization of trade measures stem from the belief that trade policy serves as a legitimate expression of national sovereignty<sup>17</sup>, a position which has encountered minimal opposition in the national discourse surrounding trade policies.

With regards to medicines and pharmaceutical products in general, trade barriers (either in the form of tariffs or NTBs) on pharmaceuticals and medical goods are inimical to affordable access to medicines and medical products (Bauer & Lamprecht, 2021). These trade barriers exacerbate uncertainty in the pharmaceutical supply chain, further solidifying the mercurial and volatile nature of trade barriers in the pharmaceutical and medicine sector<sup>18</sup>.

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Watch List in the 2021 Special 301 Report. It further warns how businesses *“should be aware of widespread copywrite piracy and trademark counterfeiting, both online and in physical markets”* (International Trade Administration, 2022).

17. The Indonesian government is seen as being trigger happy with interventions in trade policy (Guild, 2022). This is reflected in various industries, and in both import and export scenarios.

18. Governments have the ability to increase tariffs on medicines and their components whenever they want. However, there are limits on these tariff increases set by the World Trade Organization (WTO), known as bound duty rates or “tariff bindings.” The difference between the actual tariffs applied by countries and their bound duty rates creates uncertainty by discouraging exports to countries with patient demand, as

In order to address the challenges faced by the pharmaceutical industry, it is imperative for Indonesia to strengthen its commitment to IPR protection and reassess its stance on trade barriers. The cycle described above only illustrates the consequences of neglecting these crucial aspects. It is high time for Indonesia to break free from this cycle and embrace a forward-thinking approach that aligns with global standards and integrate the industry with the global value chain (GVC).

The score on intellectual property protections and prevalence of illicit trade combines to make Indonesia a poor trade facilitating environment in pharmaceuticals. However, a comprehensive intra-government plan can tackle them at once. For instance, increasing the capacity of border agencies to inspect and identify false and substandard medicines while increasing coordination and intelligence sharing with international agencies as well as inter-government law enforcement and health agencies is a proven recipe to weaken, detect, and dismantle illicit trade networks, as recommended by the WTO and OECD. To improve further on the GVC, Indonesia can reconsider the extra regulatory burdens on foreign pharmaceutical investors making domestic investments and the prohibition against foreign entities marketing pharmaceuticals.

It is perhaps an “ontological misread” of those in the policy seat to assume that industries can thrive in isolation and become globally competitive with minimum exposure to international markets and competition<sup>19</sup>. The reality is that integration into the global supply chain is a *prerequisite*, not merely a *catalyst*, for industry development and growth. This is especially true for Indonesia, which is severely lacking in its industrial and knowledge base. With a limited industrial and knowledge base, remoteness from global markets could impede the acquisition of essential resources and expertise needed for industry development. By participating in international trade, the Indonesian pharmaceutical industry can gain access to new technologies, knowledge, and resources that can accelerate their development.

## Conclusions

To break free from the confines of its current pharmaceutical challenges, Indonesia must embark on a trajectory marked by strengthened intellectual property rights (IPR) protections and careful dismantling of trade barriers. In doing so, policymakers must be cognizant and take into account

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manufacturers and distributors face legal and value chain constraints.

For pharmaceuticals, Indonesia has a tariff “water” of 35%. Tariff waters represent the difference between the bound duty rates (tariffs) and the applied duty rates (tariffs) set by the government. A significant tariff water indicates the potential for countries to raise tariffs on medicines and their components, which results in uncertainty and impacts trade flow.

19. According to OECD, Indonesia's measures to develop local industries and move up the value chain have raised concerns among trading partners. Examples include export restrictions, import licensing requirements, and ownership limitations. OECD's policy brief on Indonesia suggests that such measures may limit Indonesia's integration into global value chains (GVCs) compared to its economic potential (OECD, 2015). Indeed, Indonesia's participation rate in global value chains (GVC) has shown a decline, as highlighted by the OECD (2018) in comparison to 2005, particularly when compared to neighboring countries such as Singapore, Malaysia, the Philippines, Vietnam, and Thailand. Indonesia heavily relies on its natural resources as key products. However, this presents a challenge in fully integrating into GVC. The country's exports are primarily industrial products derived from low-value raw materials like minerals and commodities. Similar to the extraction of natural resources, the country's pharmaceutical manufacturing sector is primarily focused on the production of over-the-counter (OTC) and generic drugs.

the dynamic nature of the sector. The goal is to steadily integrate Indonesia into the pharmaceutical GVC; this is what moves Indonesia up the ladder rungs.

The Indonesian government can no longer remain insular and inward-looking, expecting breakthrough innovations happening at home, all while simultaneously being lax in IPR protections amidst the proliferation of illicit, counterfeit, and substandard drugs. Nor can Indonesia impose aggressive tariffs and other NTBs while expecting a sudden ramp in manufacturing capabilities. By implementing comprehensive legal reforms and combatting the pervasive issue of illicit, counterfeit, and substandard drugs, Indonesia can establish a grounded international IPR framework that fosters innovation and attracts vital investments. Simultaneously, by eliminating tariffs and NTB barriers — particularly considering the country's reliance on imported pharmaceutical ingredients — Indonesia can secure its seat at the pharmaceutical GVC table. Just as a rising tide lifts all boats, Indonesia's commitment to IPR norms and the cultivation of an industry-friendly ecosystem will unleash its true potential in the pharmaceutical sector.

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