

Effects of the **DUTCH DISEASE** On Asia-Pacific Economies

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ABSTRACT

There has been growing literature on Dutch Disease or the paradox of plenty and its effects, however, there is an urgent need to look into the regional economies of the global system to analyse the trends and opportunities the concept of resource curse presents itself with. The paper aims to address the issue of natural resource abundance in the economic development of the Asia Pacific region. This current work focuses on the issue of Dutch disease pertaining to the economies of Laos, Myanmar, Papua New Guinea, Mongolia, Timur-Leste and Australia. The focus is on the perspective of natural-resource abundance in the region and whether their accepted foreign aids have caused symptoms of Dutch disease or whether the policies taken up by the governments in this region have promoted economic growth. The Dutch disease effects due to different policy efforts are also discussed.

INTRODUCTION

Miguel de Cervantes Saavedra, the author of the much-celebrated *Don Quixote de la Mancha*, stated that *"the gratification of wealth is not found in mere possession or lavish expenditure, but in its wise application."* This adage was penned in the backdrop of 16th Century Spain when it was enjoying its newfound access to a wealth of natural resources, including gold, from the Americas (Zadeh, 2003). While the world didn't have a name for what he was referring to then, this phenomenon came to be known as 'Dutch disease.' It is a paradoxical situation in which the apparent boom in one sector of the economy, causes a decline in the other sectors of the economy, resulting in a negative impact on the state's overall economy. Although this phenomenon is often referred to in relation to natural resource discovery, "Dutch Disease" can also refer to *"any development that results in a large inflow of foreign currency, including a sharp surge in natural resource prices, foreign assistance, and foreign direct investment"* (Zadeh, 2003).

The term was coined by *The Economist* in 1977 to describe the decline of the manufacturing sector in the Netherlands after the discovery of the Groningen natural gas field in 1959. The country experienced a vast increase in its wealth, but this positive development had serious repercussions on important segments of the country's economy. The Dutch guilder¹ became stronger, making Dutch non-oil exports less competitive, lending the paradox its name.

W.M. Corden and J. Peter Neary, in their paper, *Booming Sector and Dutch Disease Economics: Survey and Consolidation*, published in 1982, looks into the question of why a dramatic increase in wealth has a paradoxical and adverse consequence. Their work later went on to become the classic economic model delineating the Dutch disease. The model states that there is a non-tradable sector, such as services, retail trade, construction; and two tradable sectors, one being the booming sector while the other the non-booming sector. The extraction of natural resources such as oil, natural gas, gold, copper, diamonds or bauxite, or the production of

¹ The Dutch guilder was the currency of the Netherlands from the 17th century until 2002, when it was replaced by the euro.

crops, such as coffee or cocoa becomes the booming sectors in most cases while the non-booming sectors usually pertain to the manufacturing or the agricultural sector.

When the revenue increases in the newfound, booming sector, mainly due to inflows of foreign aid, the nation's currency becomes comparatively stronger. This results in the nation's other exports becoming more expensive for other countries to buy, and imports becoming cheaper, making those domestic sectors less competitive. A jump in a country's natural resources exports initially raises incomes due to more flow of foreign exchange. However, when this is spent entirely on imports, it would have no direct impact on the country's money supply or demand for domestically produced goods. Nevertheless, if the foreign currency is converted into local currency and spent on domestic non-traded goods, and if the country's nominal exchange rate² is fixed, the conversion of the foreign currency into local currency would increase the country's money supply, and domestic demand would push up domestic prices. This would create an appreciation of the exchange rate. If the exchange rate is flexible, the increased supply of foreign currency would drive up the value of the domestic currency, which would also imply an appreciation in the real exchange rate, in this case through a rise in the nominal exchange rate rather than in domestic prices. In both cases, exchange rate appreciation weakens the competitiveness of the country's exports, causing its traditional export sector to shrink. This entire process is called the 'spending effect' (Zadeh, 2003). At the same time, resources such as capital and labour would shift into the production of domestic non-traded goods to meet the increase in domestic demand and into the booming oil sector. Both of these transfers would shrink production in the now lagging traditional export sector. This is known as the "resource movement effect."

These effects have been a constant source of economic depreciation for many of the nations' affected by Dutch disease. Domestic political instability can also give rise to Dutch disease. It can be seen that political instability is associated with significantly reduced investment inflows in the tradable manufacturing and services sectors (Burger, Ianchovichina, & Rijkers, 2015). One of the classic examples of Dutch disease is that of the Venezuelan crisis. Venezuela, once the richest country in South America, having the largest petroleum reserves on the planet, has witnessed a combination of political and financial chaos that can be attributed as causes of Dutch disease. The steep price of oil had led to the growth in oil revenue in the country. Venezuela is a prime source for oil for many of the countries. This, in turn, led to the rise in revenues of the country that the government, led by Hugo Chavez, spent generously on welfare policies aimed at creating a socialist state. Nonetheless, the large scale dependence on oil revenue led to the decline of other sectors including business (Suresh, 2019). With the fall in global oil prices and revenue being hard to come by, the Latin American nation found itself in a state of zero export revenue, which paved the way for inflation, and poverty. Thus, the Venezuelan crisis points out that an overdependence on only one sector of the economy can

² The nominal exchange rate tells how much foreign currency can be exchanged for a unit of domestic currency

have serious repercussions for the country and should be a warning call for countries that are heavily dependent upon their oil or other natural resources revenue.

Dutch Disease and the Asia Pacific Economies

Whilst looking at the effects of Dutch Disease and related policy recommendations in the Asia Pacific region, one can notice that the region is very economically diverse. The countries in the region are generally based around trade and manufacturing, particularly the East Asian region, with which they have accrued more than half of the world's foreign exchange reserves (Garton, 2020). While the countries with the likes of China, Japan, India and South Korea are global economic powers, other countries in the region are propelled by their resources. Laos and Myanmar, are resource-based economies, largely being driven by hydropower production and natural gas development. Papua New Guinea (PNG), a country located in the southwestern Pacific Ocean is enriched with natural resources such as oil, gas and minerals. Mongolia sits on vast mineral wealth, it is valued between \$1 trillion and \$3 trillion in copper, coal and gold (Kwong, 2019). The World Bank's (*World Bank Country and Lending Groups*)³ classification of all the economies of the Association of South-East Asian Nations (ASEAN)³, except Brunei and Singapore, now belong to the middle-income class. One of the interpretations of the region is that the transformation of the resource effects could come from the improvement of institutional quality and the progress in policy efforts taken by the countries.

In recent decades, natural resource-rich countries in the Asia Pacific region have suffered from low economic growth, partly due to weak investment and trade activities, even when some natural resource-poor countries have achieved considerable economic transformations.. While the Asia Pacific region boasts of large, resource-rich economies such as China, Indonesia and India, it is the region's smaller resource-rich countries that are vulnerable to the impacts of the resource curse.

There's a need for resource-rich economies to use their resource revenues to productive use in terms of investing in their future development. This was done by Indonesia when the country started to direct its oil revenues to rural infrastructure. Indonesia suffered the calamities of Dutch disease from 1970 till 1996 (Taguchi & Khinsamone, 2018). In 1975 Indonesia's national oil company, Pertamina, due to its mismanagement of resources, nearly bankrupted the country. Since then, Indonesia has carried out a series of reforms to reduce the country's dependence on natural resources and diversifying the economy (Asanuma, 2008). At the same time, Malaysia achieved resource-based industrialisation by directly allocating natural resource revenues to investment in heavy industries (Taguchi, 2018). Thus, while the 1970s

³ The Association of Southeast Asian Nations (ASEAN), is a regional organisation that promotes economic, political, and security cooperation among its ten members; Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

and the 1980s showcased Indonesia and Malaysia as oil-producing economies, today, due to a series of policy changes, their economies are largely driven by manufacturing.

The World Bank's *Worldwide Governance Indicators* that looks into institutional-quality reports that while Indonesia and Malaysia have improved and maintained high scores in the last two decades, this is not the case with Laos and Myanmar. The *Resource Governance Index*⁴ evaluation of the revenue management of Laos and Myanmar states that they are far behind allocating resource revenues for investment and development projects. According to the World Bank's *Ease of Doing Business Rankings*, Laos and Myanmar are also far behind when it comes to improving their business environments to attract FDI.

Classified by the World Bank as a low-middle income economy, Papua New Guinea has large natural assets per capita ratio (Avalos, Stuva, Heal, Lida, & Okazoe, 2015). While the 1992 discovery of oil and revenue from copper mines has helped the country to its economic record, the performance hasn't been constant. Excessive government expenditure, public borrowing and inflation have crept into the economic paralysis of the nation. Growth in the Asia Pacific region has boosted the demand for raw materials and other commodities that PNG produces (Barker, 2013). Exports are almost totally composed of commodities, with minerals, oil and gas making up around seventy per cent of exports by value (Gottschalk, Kanari, & Vellodi, 2014). Nevertheless, a great part of the earnings from these industries flows offshore to service debt and reward shareholders. According to the World Bank, this negatively affects the country's competitiveness and has made PNG less attractive for FDI. These factors show that the country is experiencing symptoms of Dutch disease. The challenge for the country is to analyse how to effectively spend the revenues that flow from natural resources. Underperforming institutions and lack of investment in public infrastructure go hand in hand with a deteriorating economy that ails from the symptoms of the resource curse. Ineffective spending of natural resource revenues by the government can cause a serious impediment to the overall development of the economy.

Mongolia, where high mineral prices have been translated into large government revenues, has struggled to convert this wealth into any identifiable development growth. The revenue was converted into across-the-board cash transfers and civil service salaries, thus leading the economy to contract high inflation due to the economy's lack of absorptive capacity. This goes on to further prove that Mongolia has a fiscal policy that is largely governed by resource revenue and can lead the economy further into inflation and exchange rate appreciation. Thus ultimately resulting in lowering purchasing power for ordinary citizens. Mongolia shows ailments of Dutch disease since 71 per cent of FDI went into the mining sector, whereas only 1 per cent went to the communications and IT sectors (Ge & Kinnucan, 2017). For the Mongolian economy to overcome the anomalies of its resource curse, there's an urgent need to change its resource-management practices. Although the government has increased its investment expenditures and passed a Fiscal Stability Law (Baatarjav, 2018), nearly half the

⁴ The Resource Governance Index measures the quality of resource governance in 81 countries.

current budget goes to direct cash transfers. While such transfers have benefited low-income populations, widespread transfers contribute to inflation (Vega, 2016).

The case of Mongolia can also be seen in Timor-Leste. While Timor contains less than 1 per cent of the world's known oil reserves (Polk, 2016), this still translates into significant potential development revenue. Timor has a Petroleum Fund that is supposed to preserve its oil wealth for future generations. Under the Petroleum Law governing the Fund, policy-makers cannot draw down more than the Estimated Sustainable Income (ESI), calculated from the price of oil and other factors, in any given year without parliamentary approval (*Timor-Leste Petroleum Fund*). The ESI provision is supposed to ensure money is spent wisely and guaranteed for future generations. However, this has not been the case. Over the years, the government has drawn more than the permitted ESI. The primary problem is that there is no check on parliamentary authority to override the ESI provision. Since the same government that proposes and passes budgets can simply vote to override the ESI, it is not clear the mechanism is sufficient to rein in spending from the Petroleum Fund. At present, incentives in Mongolia and Timor-Leste are bound by short-term political and financial gains. Both the countries point out to the fact that while emphasis should be on policy adjustments and revisions, there is an urgent need to counter the political forces that manipulate resource distribution. Thus, there is a need to counter the resource curse without altering the resource blessing.

Australia is a resource-rich country and has experienced several episodes of mining boom in its economy. Studies on the impact of mining booms on the economic growth and development indicate that mining boom either through a rise in commodity prices or mining investment tend to result in the appreciation of currency thus harming the manufacturing and other sectors in the economy, while the overall GDP increases (Koitsiwe & Adachi, 2015). The period between 2005 and 2011 saw the growth of the Australian mining industry to an all-time growth of 85 per cent. Exports of the mining industry's products, mainly iron ore and coal grew in 100 per cent value during the same period as well (Corden, 2012). This was primarily caused by an increase in natural resource products by China. In Australia, while there was a booming sector among exports, in this case, the mining sector, the boom in demand hurt the lagging sector, in this case, industries such as agriculture, tourism, education and manufacturing. For the country to avoid the perils of the Dutch disease, it is important to look into the fiscal policies. A macroeconomic policy package wherein fiscal surplus would be generated by tax and expenditure changes. This would not only let the domestic interest rate fall but would lead to some depreciation of the exchange rate resulting from capital outflow encouraged by the lower domestic interest rate relative to the relevant foreign interest rates (Corden, 2012). This would have a uniformly positive response and also benefit the tradable sectors of the economy. It should also be considered that such policy changes not only reduce the effects of Dutch disease but also weaken political pressures and protectionism from the elites and the ruling classes of the society.

Conclusion

From the perspective of natural-resource abundance in the Asia Pacific economies, the effects and perils of Dutch Disease cannot be said to be uniform. While countries such as Laos, Myanmar, PNR suffer from the aftermath of a resource curse, that is, corrupt governments and weak institutions, in the case of the economies of Indonesia, Malaysia and Australia, their accepted foreign aids have not caused the Dutch Disease and have rather promoted their economic growth, due to their aid contributions to infrastructure development. It can also be deduced that accepting capital inflows are accompanied by the risk of catching Dutch disease. That being said, the Asia Pacific region does require a significant improvement in institutional quality. Infrastructure development, human resource development and industrial policies to facilitate manufacturing production are some paths the countries in the Asia Pacific region can take to oust their economic irregularities. Qualified institutions along with good governance equal a stable economy.

Some economists are of the view that Dutch disease should be seen as the economy's adaptation to its newfound wealth. The shift in production from the tradable to the non-tradable sector is simply a self-correcting mechanism, a way for the economy to adapt to an increase in domestic demand (Bjørnland & Thorsrud, 2017). Alas, other economists argue that even a permanent change is worrisome. When capital and labour shift from one sector to another, industries will be forced to shut down and workers would have to find new jobs. This transition, no matter how brief, is painful, both economically and politically (Zadeh, 2003). Economists also worry that a shift in resources away from manufacturing sectors that generate 'learning by doing' might jeopardize a country's long-term growth potential by choking off an important source of human capital development (Wijnbergen, 1984).

Adopting strategic policies and diversifying their industries is the only available solution to escape Dutch disease. Research also supports that countries should undertake other reforms that enhance economy-wide productivity. Improvements in business regulations, reductions in red tape, reduction of monopolistic barriers that discourage small businesses, technological development and innovation are some of the steps that can be taken to avoid the disastrous consequences of Dutch disease (Brahmbhatt, Canuto, & Vostroknutova, 2010). Policies pertaining to more Foreign Direct Investment (FDI) that could create conditions for learning and development should also be taken up. The impacts and effects of Dutch disease on the economy largely depend upon policies taken by the respective governments. Fiscal policy is the main instrument for dealing with the negative impacts of Dutch disease since it can make the increase in wealth permanent, constrain the spending effect and smooth expenditures to reduce volatility (Brahmbhatt, Canuto, & Vostroknutova, 2010). Spending levels should be adjusted to sharpen rises in income levels. The smoothing of spending is achieved through a detachment of spending from the resource revenues, and the introduction of fiscal rules for how much of the resource revenues can be spent and how much saved in a natural resource fund (Davis, Fedelino, & Ossowski, 2003).

The paradox of plenty poses a serious threat to the resource-driven economies of the Asia Pacific region and need to take measures to alleviate the symptoms of Dutch disease. However, as they say, “prevention is better than cure” and countries in this region should diversify into other industries other than their premium economic resource and be proactive in their policy decisions to avoid catching the disease.

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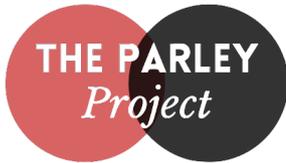
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