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Batam, Bintan, and Beyond A Review of Riau Islands’ Post-Pandemic Development Strategies

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Batam, Bintan, and Beyond: A Review of Riau Islands' Post-Pandemic Development Strategies*

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Abstract

Riau Islands, situated in one of the world's busiest shipping routes along the Malacca Strait and South China Sea, is Indonesia's closest province to major trading partners Singapore and Malaysia. The province has leveraged on this proximity by transforming several of its cities such as Bintan and Batam into premier manufacturing hubs of the region, with the manufacturing industry contributing over 40% of the province's Gross Regional Domestic Product (GRDP) in 2020. Long known for its strength in low-cost manufacturing, the province is transforming itself to pivot to more high-skilled, capital-intensive outputs. This paper studies the socio-economic trends as it navigates through the pandemic and finds that Riau Islands' economy emerged relatively unscathed due to its reliance on manufacturing. The tracking of the province's current progress vis-a-vis its Regional Medium Term Development Plan (RPJMD) targets reveals an over-optimism by policymakers in its economic development, labour market, and social development.

*We thank Paul Cheung for his constructive comments.

1 Introduction

Riau Islands was established as a province in 2002 ([Riau Islands Provincial Government, 2016](#)), following its elevation from being a municipality under Riau province. The Indonesian government had officially announced its establishment under Law Number 25 Year 2002. The entire province of Riau Islands spanning 251,810.71 km² is made up of 2,408 islands covering a total land area of 10,595 km² and total sea area of 241,215.30 km² ([Riau Islands Provincial Government, 2016](#)). The province's main hub is Bintan, where the province's capital, Tanjung Pinang is located. The main islands are Bintan, Karimun, Batam, Lingga, Anambas, and Natuna. Riau Islands is rich in natural resources such as oil and natural gas, as well as mineral resources ([Riau Islands Provincial Government, 2016](#)).

The Riau Islands' 2016-2021 Provincial Medium-Term Development Plan (RPJMD) includes nine items in its mission, which encapsulates its vision of "Staked in Trust, Anchored in Dignity" (*Berpancang Amanah, Bersauh Marwah*). These include: 1) Developing a religious and democratic society under the customs of Malay culture; 2) Developing connectivity infrastructure; 3) Improving human capital quality; 4) Improving social welfare aspects such as health, gender equality, poverty, and the disadvantaged community; 5) Developing a resources-based economy including fisheries, tourism, and agriculture to boost economic growth; 6) Building a conducive business climate to attract investment along with development of SMEs; 7) Developing the industrial economy and export of raw materials; 8) Improving environmental sustainability; and 9) Improving public service governance.

The main industry of Riau Islands is manufacturing, for which Batam island is the hub since 1970 ([Ministry of Development Planning, 2015](#); [BP Batam, 2021](#)). The sector has consistently contributed over 40% of the economy. The principal output of which includes electronics, mineral and metal products, plastics, and heavy machinery ([Gorlinski, 2016](#)). While manufacturing had been the core of the province's economy, the Provincial Government had also invested efforts to develop the potential of the province's other areas of growth to complement the aforementioned industry, such as the maritime, agriculture, mining, and forestry industries ([Riau Islands Provincial Office, 2021](#)).

1.1 Manufacturing as the Cornerstone of the Economy

Riau Islands' transformation as a key manufacturing hub took root in the late 1960s when Batam was identified as a potential logistics and operational base to support offshore oil and gas fields. Since 1979, the Batam Industrial Development Authority focused on the development of transshipment facilities, industrial estates, and the provision of infrastructural support in light of Batam's close proximity to Singapore to leverage the latter's established business and financial services (see [1](#)). In the 1990s, several industrial parks were developed in Batam to capitalise on the rising demand for low-cost manufacturing centres ([Tan et al., 2005](#)).

This sector has absorbed 25.10% of Riau Islands' labour force in 2020 ([Riau Islands Bureau of Statistics, 2020](#)). As of end-2019, 31% of the workers in this sector produce computers, electronics, and optical products ([Riau Islands Bureau of Statistics, 2021a](#)). The growth of the labour force in the manufacturing sector, at 38.9% from February to September 2020 and another 17.2% from September 2020 to February 2021, far exceeds the other sectors, highlighting an increasing shift to higher capital-intensive outputs. Over 81% of the manufacturing firms in Riau Islands are located in Batam. This development of Batam has widened the economic gap between Batam and the other regions of Riau Islands with the former's contribution towards the entire province's GRDP covering over 60% since 2010 ([Riau Islands Bureau of Statistics, 2021b](#)).



Figure 1: Map of Riau Islands

The Central Government under President Joko Widodo had announced the development of two new special economic zones, namely Batam Aero Technique and Nongsa Digital Park ([National Council of Special Economic Zones, Indonesia, 2021](#)), in addition to the previously established zones such as Galang Batang. The IDR 8.62 tr Batam-Bintan Bridge that is expected to reduce the gaps in the manufacturing outputs between the islands of Batam and Bintan, was kick-started with a proposed IDR 44 mn land acquisition cost in September 2021 ([Heryanto, 2021](#)). The increased inter-connectivity is expected to have spillover effects in both cities, increasing economic activity and movement of labour.

1.2 Maximising the Resource-based Economy

Even though the total sea mass of Riau Islands covers 96% of the province's total area, sea resources are still relatively untapped, highlighting the potential economic gains apart from the manufacturing industry. Potential production sectors include wild caught and farmed fish output. The government targets 379,948 tonnes of fish output by 2021, up from 375,412 tonnes at the start of the Riau Islands' medium-term development plan (RPJMD) 2016-2021. Fish output of Riau Islands is bottlenecked by lack of technology (the preferred mode of transport of local fishermen is still dominated by non-mechanical traditional boats) and skills. Governor Ansar Ahmad had introduced initiatives to empower fishermen such as training to operate larger boats ([Septiari, 2021](#)). Besides human capital, the Provincial Government also aims to improve physical infrastructure such as roads to increase access to docks that are capable of accommodating heavy industrial vehicles. However, the sea surrounding Riau Islands is rife with widespread illegal fishing by foreign vessels. The Central Government has in recent years, resorted to stronger measures, including the sinking of foreign vessels to protect the interests of local fishermen and to maintain national sovereignty ([CNN Indonesia, 2020](#)). According to the Marine and Fisheries Ministry, wild-caught fish production had increased from 157,506 tonnes in 2011 up to 310,053 tonnes in 2019 ([Marine and Fisheries Ministry, 2021](#))

Besides fish production, the government identified anchorage tariff as a potential revenue source, particularly during the COVID-19 pandemic period. The Governor suggested that parking fees could rake up to IDR 200 bn in annual revenue. With increased crowding in the seas off the coasts of Singapore and Johore (Malaysia), the Governor envisages Riau Islands to be a potential stopover for international vessels. However, the government needs to resolve several issues, which includes law and regulation,

administrative services, and the determination of competitive tariff rates. Several companies, ranging from private firms to public-owned PT Pelabuhan Kepri had been awarded licenses by the Provincial Government to develop and operate anchorage areas in Batam ([Fadli, 2021b](#)).

On land, Riau Islands is endowed with resources stemming from forests and harvest-based agriculture. The production area of the forest spans 164,662 hectares of limited production forest, 49,439 hectares of permanent production forest, and 252,940 hectares of converted forests. Potential products include wood, but the province still faces the challenges of developing sustainable wood production, efficient forest management practices, and the lack of proficiency in wood certification ([Riau Islands Provincial Government, 2016](#)).

The recent RPJMD has allocated 227,682 hectares for agriculture. The area consists of land for food harvests, horticultural activities, and livestock production. The majority of Riau Islands possesses favourable agriculture areas due to its fertile soil. Mainstay production items include food crops such as rice, corn, soy, fruits, and vegetables, as well as palm oil. As the province borders five countries, the Agriculture Ministry has proposed to promote Riau Islands as a core province in the Gerakan Tiga Kali Ekspor) which aims to increase revenue through exports of agricultural products. In light of this, the Agricultural Technology Research Center (BPTP Kepulauan Riau) has spearheaded research to identify and develop suitable crops to enable export-based horticulture. However, prevailing challenges include farmers' limited capabilities and knowledge, minimum technology utilisation that resulted in non-optimal production, and the lack of supporting infrastructure for product transportation ([Riau Islands Agricultural Technology Research Center \(BPTP\), 2020](#)).

1.3 Long-term Strategies

The Provincial Government is in the process of developing the next RPJMD for the 2021-2026 period. The government made some adjustments to the 2021-2026 development plan, especially those related to post-pandemic economic recovery. The government highlighted several goals for the next period ([Riau Islands Provincial Government, 2021](#); [Riau Islands Director General of Regional Development, 2021](#)) that includes: 1) Optimising the province's natural resources, including maritime and land resources based economy, and the tourism potential; 2) Accelerating cross islands infrastructure development to support productivity and business climate; 3) Expediting structural transformation, including economic and digital financial acceleration, as well as strengthening SMEs in supporting the successful implementation of excellent programs; 4) Transparent, open, and service-oriented good governance, and ensuring minimum service standard of public services; and 5) Preserving and promoting Malay and national culture.

The province's upcoming plan emphasises the prevailing strategy of optimising natural resources, as well as improving infrastructure development and the adequacy of public services. The government stressed that the resources-based economy and infrastructure will be the key drivers of the post-pandemic economic recovery. The government is cognisant that the two targets are key for sustainable development – both are interrelated, and aim to reduce inequality among the province's residents while contributing to the province's food security – since the province still relies on other provinces and imported products to fulfil its domestic food consumption needs ([Riau Islands Director General of Regional Development, 2021](#)).

2 Economic Development

To capture a holistic understanding of the economic performance of Riau Islands, this section will provide an assessment of the macroeconomic and microeconomic conditions of the province. The macroeconomic assessment considers time-series analysis of both the canonical macroeconomic variables such as gross regional domestic product (GRDP), inflation, investments and trade indicators. Subsequently, the microeconomic assessment concerns firm-level statistics.

2.1 Economic Outlook

Figure 2 shows the economic development of the Riau Islands economy for the years 2011-2020. The province enjoyed an upward increase of GRDP growth since 2011. Despite the fall in GRDP in 2020 as a result of the pandemic, it is still higher than the 2018 GRDP. The manufacturing industry is the largest contributor of GRDP for the 2011-2020 period, followed by construction, and mining and excavation. Cumulatively, they constitute over 70% of the province's GRDP. The contribution of these sectors, especially manufacturing, is the result of the efforts to designate Riau Islands as a manufacturing hub.

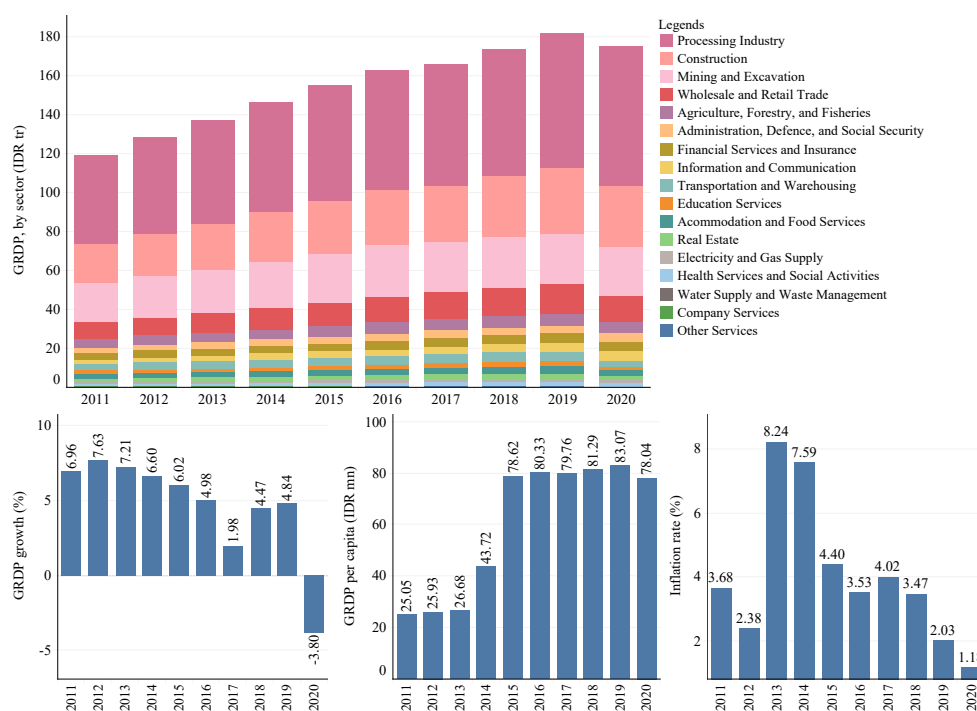


Figure 2: GRDP by sectors (top), GRDP growth (bottom-left), GRDP per capita (bottom-middle), and inflation rate (bottom-right)

Source: Indonesia's National Bureau of Statistics

Although total GRDP has been increasing, the GRDP growth rate of Riau Islands has decreased over the 2012-2017 period. The GRDP growth rate rebounded for two consecutive years in 2018-2019, owing to higher investment values in these two years. GRDP growth fell to -3.8% in 2020 due to the pandemic. In contrast to declining GRDP growth, GRDP per capita of Riau Islands' has increased from IDR 68.0 mn in 2012 to IDR 78.0 mn in 2019. The province's GRDP per capita of IDR 78.0 mn for 2020, puts it just slightly below its 2018 level.

Riau Islands recorded a spike in inflation rate in 2013 and 2014, at 8.24% and 7.59% respectively. This was attributed to the fuel price hike from approximately IDR 4,500/litre to IDR 6,500/litre in 2013 and IDR 6,500/litre to IDR 8,500/litre in 2014. This led to a multiplier effect which caused further increases in the price of food and transportation (Sinaga, 2013). From 2014 onwards, inflation has generally trended downwards.

2.2 Trade and Investments

The geography of Riau Islands is unique among other provinces of Indonesia due its archipelagic landscape, and its strategic proximity to Singapore and Malaysia on the tip of the Malacca Strait. A sectoral decomposition of investment would provide a deeper insight into Riau Islands' investment climate. The biggest investor for both foreign and domestic direct investment is in the mining, manufacturing (transportation vehicles and electronic equipment), and chemistry and pharmacy industries. (BPKM Kepri, 2021).

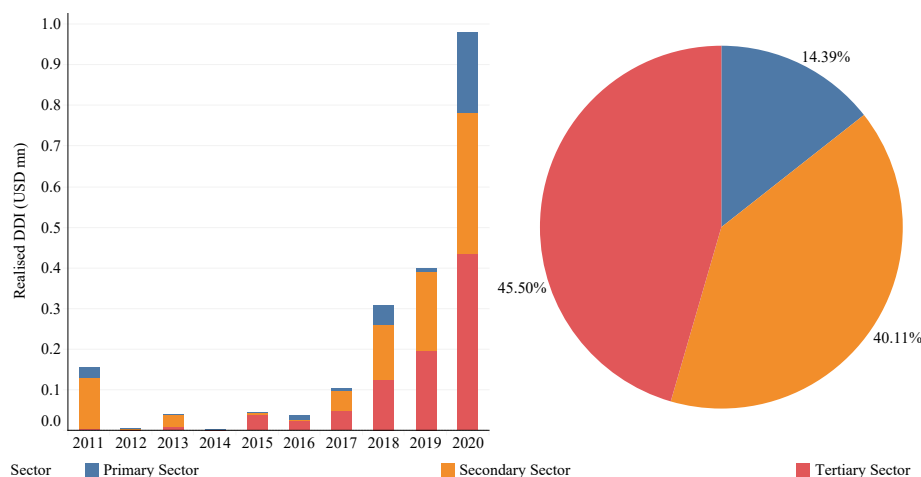


Figure 3: Overview of DDI by sector for 2012-2020 (left) and 2020 (right)

Source: Indonesian Investment Coordinating Board

*DDI value in USD derived from ratio of GDP (IDR) to GDP (USD) (International Monetary Fund, 2020)

Figures 3 and 4 show the development of Riau Islands' domestic direct investment (DDI) for the past 9 years. There is a huge leap in DDI from 2017, particularly from the chemistry and pharmacy, and mining sectors. In 2020, there are 41 mining investment projects and 32 chemistry and pharmacy projects with total investment values of USD 186.36 mn and USD 291.71 mn respectively. The most active industry in the primary sector in 2020 is mining, while that of the secondary sector is the base metals and metallic items industry at 62 projects. For the tertiary sector, the most active industry is the trade and repair industry with 1,023 projects while the industry that raked in the highest value in investments is the housing, industrial estate, and offices industry at USD 230.69 mn.

Alongside its domestic direct investment, the foreign direct investment (see Figure 5) of Riau Islands has grown more than 250% within 9 years and peaked in 2020 when the FDI value exceeded USD 1.649 bn covering 2,294 projects (Riau Islands Provincial Government, 2020). In the primary sector, the most active industry is the mining industry which received USD 71.90 mn worth of investments over 73 projects. The secondary sector was the largest recipient of FDI out of all three sectors, with the base

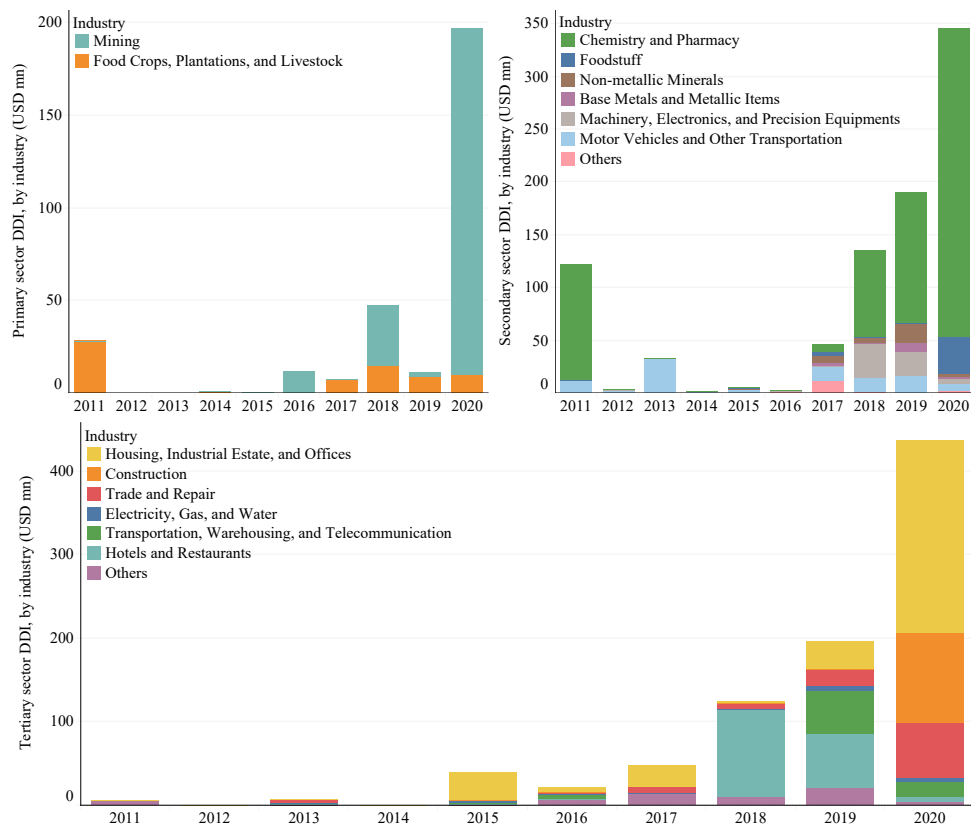


Figure 4: DDI by sectors: primary (top-left), secondary (top-right), and tertiary (bottom)
Source: Indonesian Investment Coordinating Board

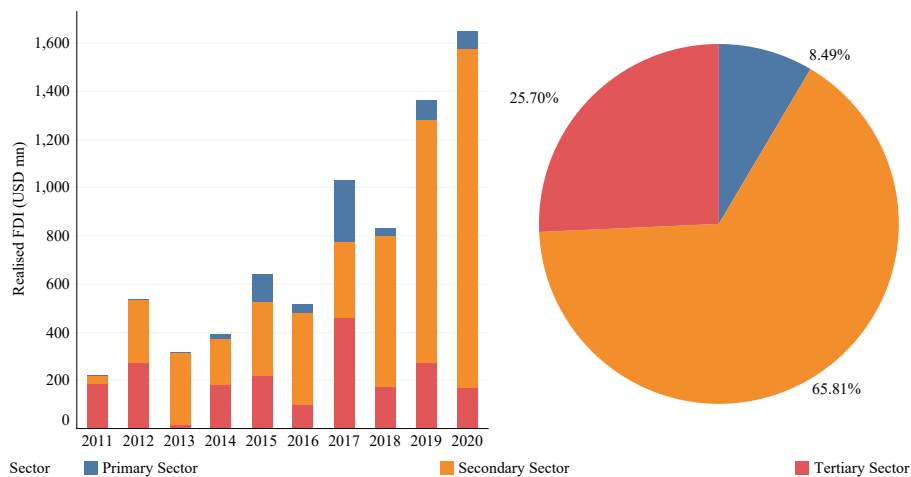


Figure 5: Overview of FDI by sector for 2012-2020 (left) and 2020 (right)
Source: Indonesian Investment Coordinating Board

*FDI value in USD derived from ratio of GDP (IDR) to GDP (USD) (*International Monetary Fund, 2020*)

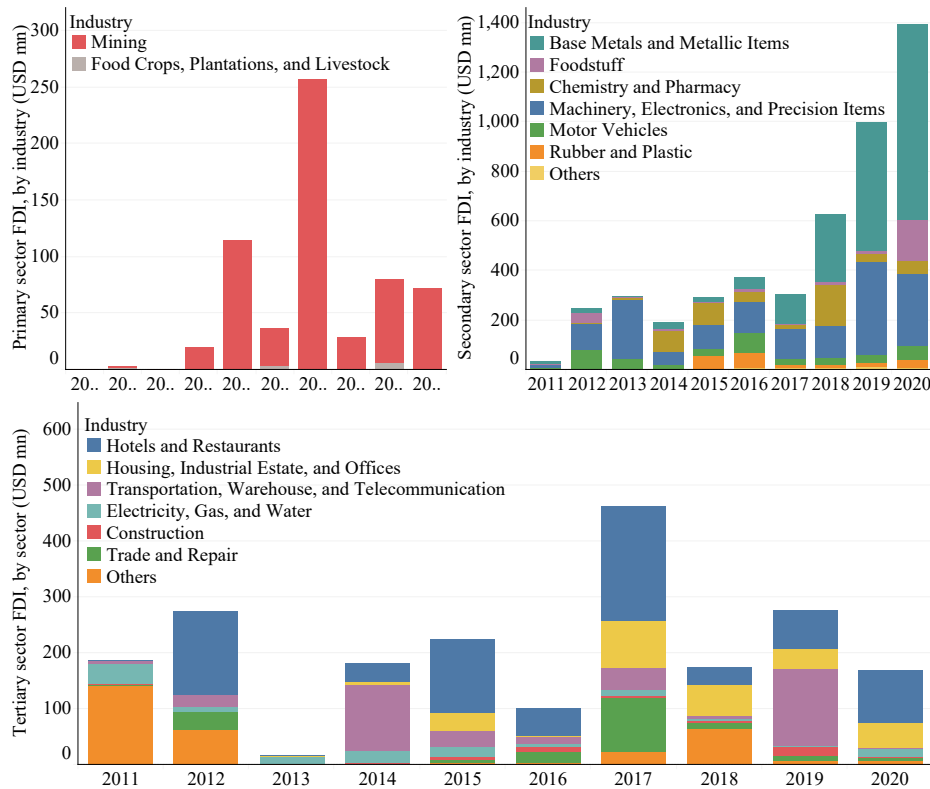


Figure 6: FDI by sectors: primary (top-left), secondary (top-right), and tertiary (bottom)
Source: Indonesian Investment Coordinating Board

metals and metallic items industry being the most valued since 2017, amounting to USD 787.23 mn in 2020 (see Figure 6), while the most active industry is the machinery, electronics, and precision items industry with 329 projects in 2020 (BPKM Kepri, 2021). For the tertiary sector, the highest valued industry which is also the most active industry is hotels and restaurants, raking in USD 92.91 mn over 259 projects in 2020.

In addition to the external factors, the Provincial Government initiated several internal programmes to boost investments. These include the establishment of the Bintan, Batam, Karimun free trade zone (BBK FTZ), investment incentives for Natuna-based companies and the establishment of competitive costs for port and utility services in Batam. The BBK FTZ is a free trade zone initiated by the Indonesian Chamber of Commerce (Kamar Dagang Indonesia) and the Provincial Government in 2017. The aim of this programme is to boost investment sectors during the pandemic by providing stimulus such as the 5 years of land rental waiver in Batam, Bintan, Karimun, and Tanjung Pinang (Maulana, 2021).

Singapore is the primary source of investments into Riau Islands. Both countries signed a bilateral investment treaty in 2018 to strengthen their cooperation (UNCTAD, 2018). Since then, Indonesia and Singapore have been involved in several mega-projects including the development of the Nongsa Digital Park in Batam in 2018. The Nongsa Digital Park is an integrated digital park covering 166 hectares for digital businesses and data centres that was built as a joint venture project by the Indonesian and Singapore Governments. With its close proximity to Singapore, it is designed to be a digital bridge between Singapore and Indonesia (Siregar, 2020). In addition to strengthening Indonesia-Singapore

relations and being the source of knowledge transfer, the Central Government has estimated the digital park to attract up to IDR 30 tr in investments annually and produce over 16,500 job openings (Fadli, 2021a).

Figure 5 shows that there is a hike in FDI in 2019 and 2020. The hike in FDI was caused by several external factors such as the US-China Trade War, and the effect of the Omnibus Law on Job Creation. The trade war led to an influx of investments into Indonesia, such as the relocation of Pegatron, Apple’s manufacturer factory to Batam in 2019 (Chan, 2019). Meanwhile, the Omnibus Law relaxed regulations on industrial zone licensing, which directly benefits the special economic zones of Nongsa Digital Park, Batam Aero Technic, and Galang Batang.

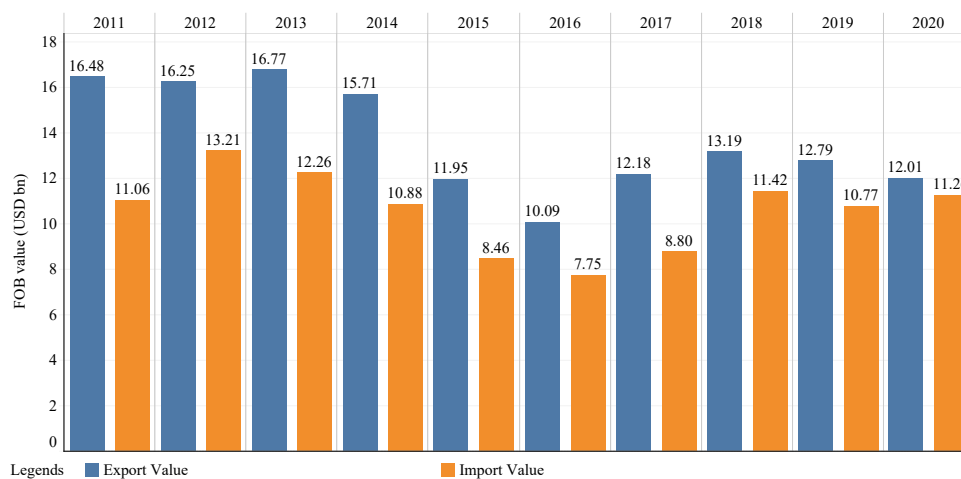


Figure 7: Exports and Imports by FOB value (USD bn), 2012-2020
Source: Indonesia Bureau of Statistics

Riau Islands is a major trading port in Indonesia due to its centralised location and proximity to major trading partners. The province has two international airports (Hang Nadim International Airport and Raja Haji Fisabilillah International Airport), four domestic airports, and 51 active passenger harbours.

Figure 7 shows the data of freight-on-board (FOB) values of trade in Riau Islands as an international port. The highest number of exports and imports in this area was in 2013 and 2012 when they reached their peaks of USD 16.77 bn and USD 13.21 bn respectively. Riau Islands’ primary exported commodities are electronics and machinery, congruent to their relative importance in the province’s GRDP.

2.3 Tourism and SMEs

Foreign tourist arrivals of Riau Islands showed an upward trend during 2012-2019 and dropped significantly in 2020 due to the pandemic (see Figure 8). The top foreign visitors are from neighboring countries, Singapore and Malaysia. As tourism becomes a new mainstay industry for the province, the government is drafting regulation that would support investment in the tourism industry. The “Draft Regional Regulations on Coastline and Islands Zones” will cover the licensing and business regulations on islands, coasts, and forest areas for the tourism industry.

The province is blessed with natural wonders and traditional culture which translates into great tourism potential. The tourism sub-area includes underwater tourism in the Anambas Islands Regency for snorkelling and diving, white sand beaches in Natuna and Lingga Regencies, and a world-class

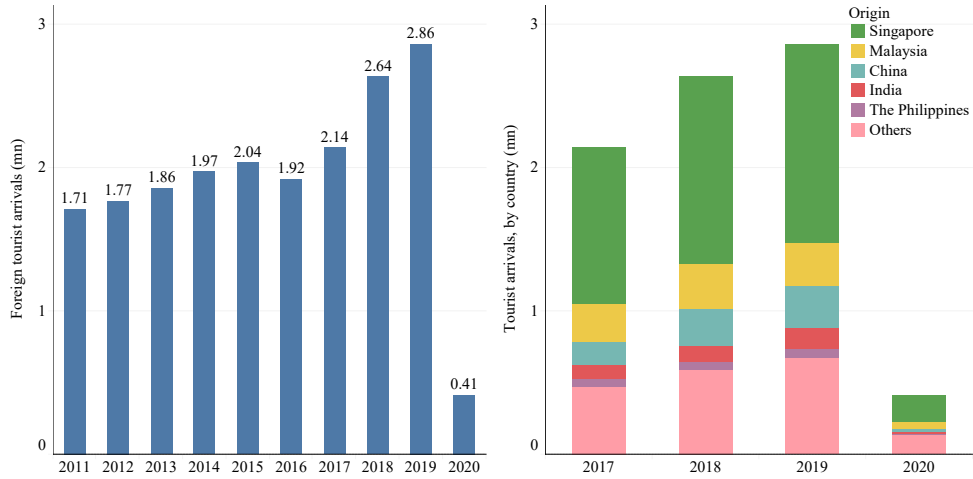


Figure 8: Foreign tourist arrivals, 2012-2020 (left) and tourist arrivals by country, 2017-2020 (right)
Source: Indonesia Bureau of Statistics

Industry	Number
Food & Beverages	494
Fashion	75
Furniture and Woodwork	37
Handcraft	57
Metals, Machinery, Electronics and Instruments	76
Chemicals and Buildings Materials	61
Others	142
Total	942

Table 1: Number of SMEs in 2021, by sector
Source: Indonesia Bureau of Statistics

resort area in Bintan. The Riau Islands Province Tourism plan is divided into seven Regional Tourism Corridors, where each corridor has its own feature and selling point. Major plans of the corridors include developing Batam’s MICE industry and retail sectors, Bintan’s Exclusive Integrated Tourism Zone, Tanjung Pinang’s cultural tourism, and several municipalities to be developed for sea tourism.

During the COVID-19 pandemic, the government planned to capitalise on its relationship with Singapore and Malaysia to attract tourists from these two countries. For instance, there is a plan to launch the “Batam-Bintan-Singapore” tourism lane as well as vaccinated travel lanes (Arshad, 2021). To achieve this, the government is aiming to achieve herd community to ensure the health and safety aspects are maintained.

Small and Medium Enterprises (SMEs) absorb 96.9% of Indonesian employment and contribute 57%-60.51% of Indonesia’s GDP (Ministry of SMEs of Indonesia, 2019). SMEs also play an important part in Riau Islands’ economy. According to Riau Islands Provincial Office (2018), over 72% of Riau Islands’ workforce worked in SMEs in 2016 and is estimated to rise further due to the increase in number of SMEs from 840 units (2016) to 942 units (2021) (Riau Islands Provincial Office, 2021).

From Table 1, SMEs are concentrated in the food and beverages sector, especially for seafood. SMEs in sectors such as food and beverages, fashion, and handcraft support the tourism industry and equally benefit from the previously mentioned initiatives to enhance tourism in the province. Despite their

contribution to the economy, SMEs have faced several problem, such as credit access, human resources quality, marketing network, and product innovation. The recent RPJMD has allocated IDR 36 bn to prepare several programmes to aid SMEs, such as: 1) Cooperative quality enhancement programmes, 2) Promoting Cooperative with 3 Sehat principles (Sehat Organisasi, Sehat Mental, Sehat Usaha), and 3) Increasing the number of accessible capital resources for SMEs.

Current progress vis-a-vis RPJMD targets

This section charts the progress of selected macroeconomic indicators against their corresponding targets from Riau Islands' medium-term development plan (RPJMD) for the periods of 2011-2021, and the associated priority programmes outlined in its latest RPJMD¹.

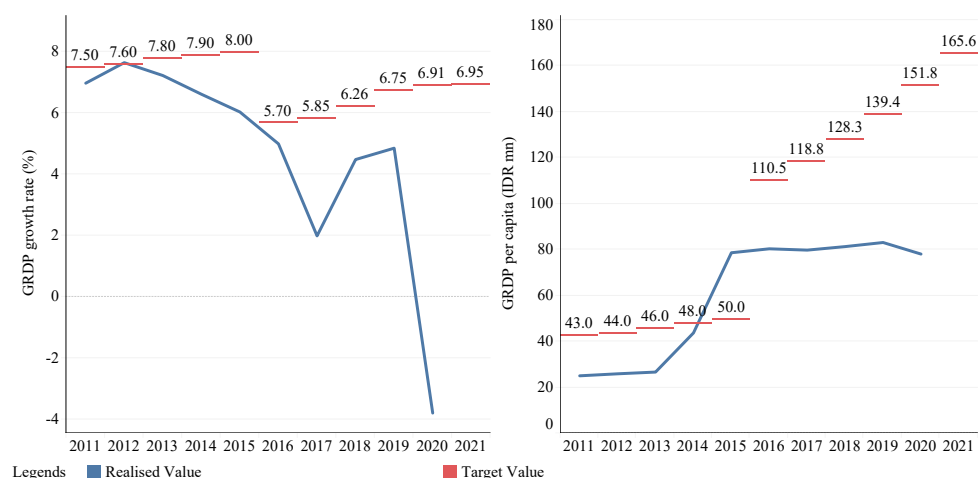


Figure 9: GRDP growth (left) and GRDP per capita (right), and respective RPJMD targets
Source: Indonesia's National Bureau of Statistics, Provincial Government of Riau Islands

Figure 9 shows the GRDP growth rate and GRDP per capita with their respective targets in the RPJMD for the current and preceding periods. The Provincial government set ambitious goals for both GRDP growth rate and GRDP per capita for the previous period, and has exceeded them for the latter. The former lagged their targets, even after the adjustment for the most recent period's RPJMD and prior to the COVID-19 pandemic. GRDP per capita failed to keep up with targets set out in the after 2017. While the RPJMD did not detail specific programmes to uplift the economy, several programmes were introduced to enhance rural areas to increase their economic contribution, such as the Rural Economic Institution Development Programme.

Figure 10 shows the inflation rate in Riau Islands' and their respective targets. Inflation rate fluctuated throughout the period, and has been below the targets since 2016. To maintain the inflation level, the government introduced several programmes in the RPJMD which include 1) Domestic Trade Efficiency Improvement Programme and 2) Food Availability, Access and Distribution Improvement Programme.

Figure 11 illustrates total exports and foreign tourist arrivals for Riau Islands and their respective RPJMD targets. Export values had exceeded targets in the first period's RPJMD prior to 2015. The readjustment in 2016 allowed total exports to more closely follow their targets, but had again slipped

¹The policies listed in this section are non-exhaustive. Refer to Riau Islands' RPJMD 2016-2021 for the complete list

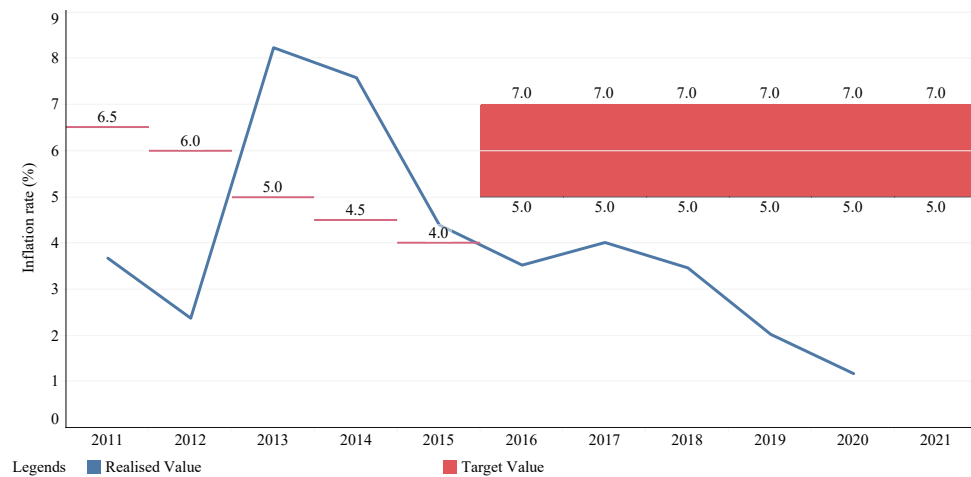


Figure 10: Inflation rate and respective RPJMD targets
Source: Indonesia's National Bureau of Statistics, Provincial Government of Riau Islands

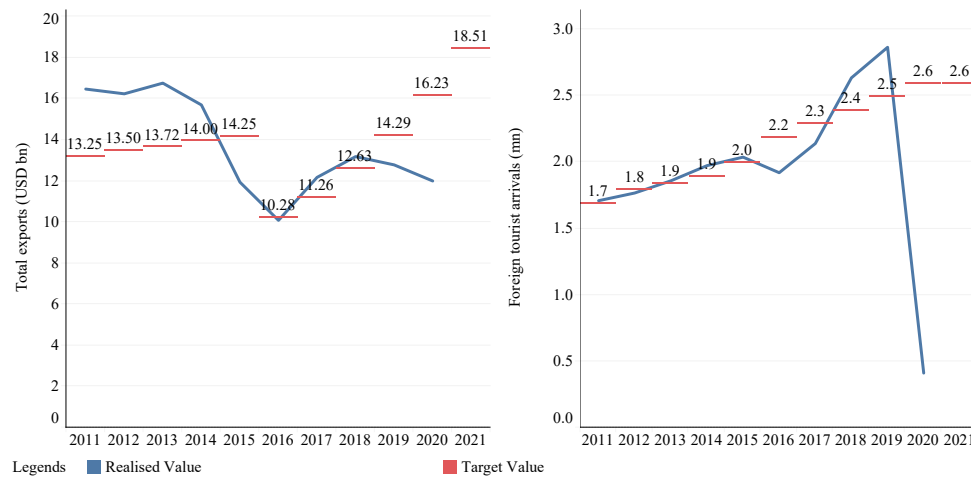


Figure 11: Total exports (left) and foreign tourist arrivals (right), and respective RPJMD targets
Source: Indonesia's National Bureau of Statistics, Provincial Government of Riau Islands

after 2018. Tourist arrivals had also closely followed the RPJMD targets, but had unsurprisingly plunged in 2020 due to the pandemic. Several programmes highlighted in the RPJMD to increase exports include 1) Export Improvement and Development Programme and 2) Fishery Products Quality Control and Safety Programme, the latter being consistent with efforts to improve fish yield. There is considerable effort to improve tourism with programmes to promote as well as to improve tourist experience such as 1) Tourism Destination Development Programme, 2) Tourism Institutional Development Programme, and 3) Tourism Marketing Development Programme.

Figure 12 shows Riau Islands' investment performance. For FDI, Riau Islands had exceeded targets for the entire part of the previous period's RPJMD, and for all but two years in the later RPJMD. For DDI, investments skyrocketed after 2017 but had lagged targets before then. The RPJMD had introduced several programmes to attract investments as well as to retain them, such as 1) Promo-

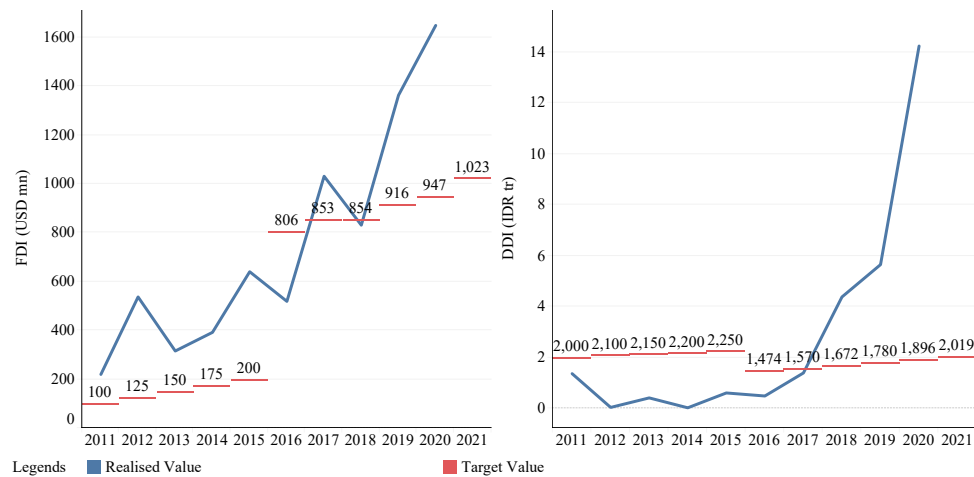


Figure 12: FDI (left) and DDI (right), and respective RPJMD targets
Source: Capital Investment Coordinating Board (BKPM), Provincial Government of Riau Islands

tion and Investment Improvement Programme and 2) Investment Climate Improvement and Investment Realization Programme.

3 Labour Market Dynamics

This section illustrates the employment situation and wage statistics of the province. The indicators that will be used for this assessment include labour force participation rate, unemployment rate, numbers of workers by industry, average monthly wage and provincial minimum wage. The presented data is from two reporting periods: February and August of each year.

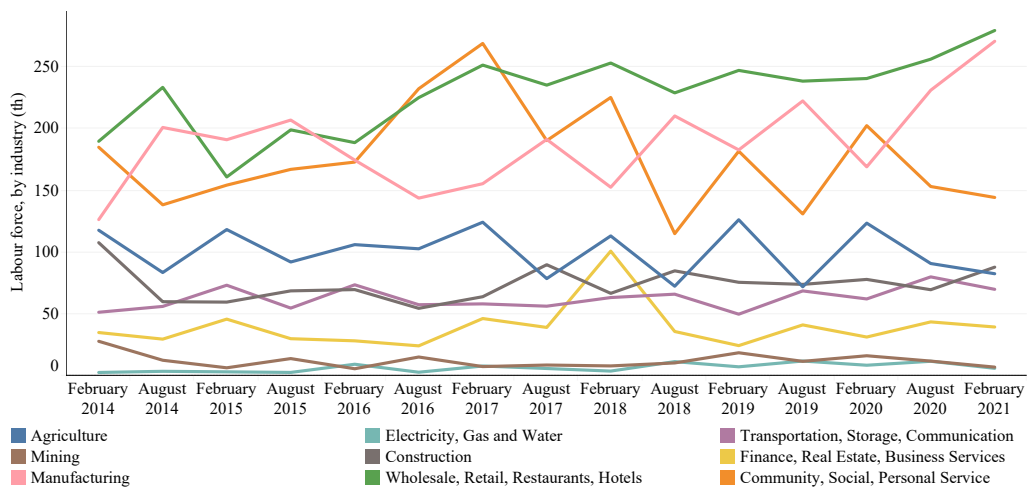


Figure 13: Number of workers, by industry
Source: CEIC

From Figure 13, the wholesale, retail, restaurant, and hotels sector is the largest employer, increasing

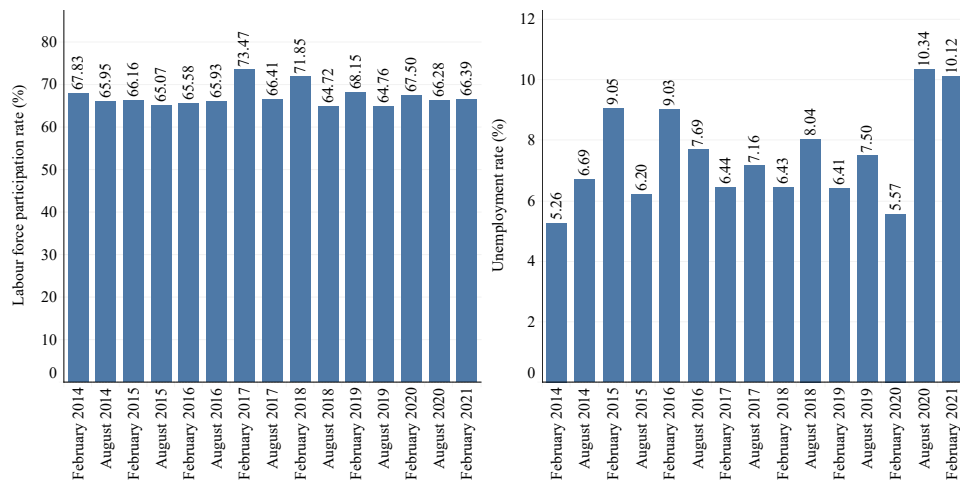


Figure 14: Labour force participation rate (left) and unemployment rate (right)
Source: Indonesia's National Bureau of Statistics

even further despite the year of the pandemic. This could be attributable to the increase in business confidence in late 2020 and early 2021 on the back of possible reopening plans, as well as hotels being converted into isolated centres for returning Indonesians (Oktivianti, 2020). Figure 14 shows Riau Islands' labour force participation rate had remained largely stable since 2014, weathering the COVID-19 pandemic. Unemployment rate had also generally been below 10% before the pandemic. This is corroborated by the high number of returning Indonesians who remained in international gateways such as Riau Islands, unable to continue their journey to their respective home provinces due to movement restrictions (BBC, 2020).

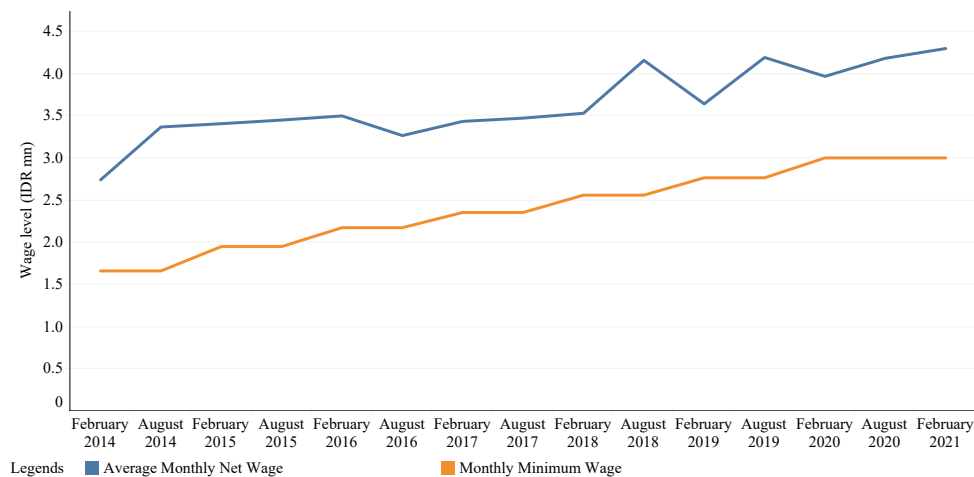


Figure 15: Average monthly wage and minimum wage
Source: CEIC

Riau Islands' average and minimum monthly wage levels had generally been increasing across the period. There were slight upticks in 2018 and 2019. The minimum wage level generally ranks within the

top 10 provinces in Indonesia (Zhang et al., 2020).

Current progress vis-a-vis RPJMD targets

This section charts the progress of selected labour market indicators against their corresponding targets laid out in the RPJMD for the period 2011-2021, and the associated priority programmes carried out by the government as outlined in the RPJMD².

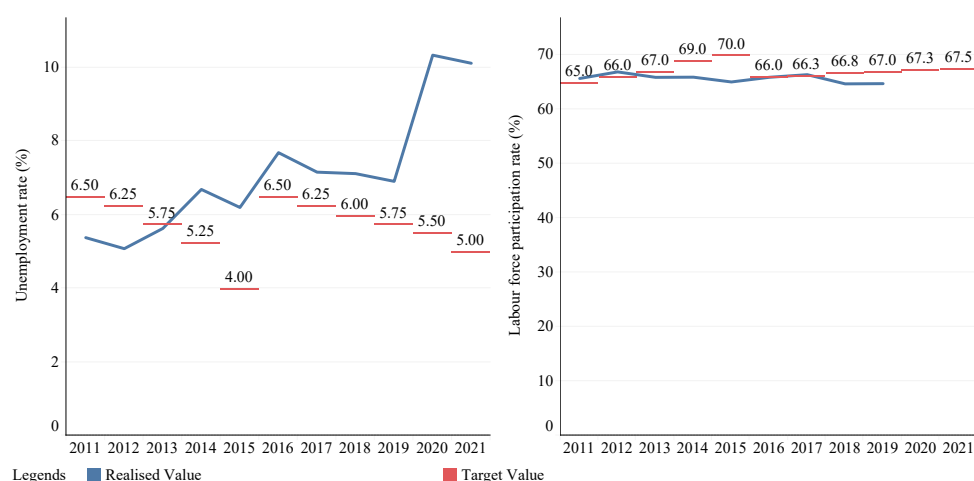


Figure 16: Unemployment rate (left) and labour force participation rate (right), and respective RPJMD targets

Source: Indonesia's National Bureau of Statistics, Provincial Government of Riau Islands

From Figure 16, Riau Islands' unemployment rate in 2016 to 2021 was targeted to be between 5% and 6%. The target was not met after 2013 and the rates worsened thereafter, with pre-pandemic unemployment rates fluctuating between 6% to 7% and reaching 10% by the time of the pandemic. Labour force participation rate was slightly below the period's target at 64.76% in 2019 just before the pandemic. The previous RPJMD highlighted efforts the government is taking to reduce unemployment. These includes occupation and entrepreneurship training, as well as managing job placement programmes.

²The policies listed in this section are non-exhaustive. Refer to Riau Islands' RPJMD 2016-2021 for the complete list

4 Infrastructure

Scattered across a chain of islands, the infrastructure landscape of Riau Islands significantly differs to that of other provinces in Indonesia. Sea travel is unsurprisingly more prominent than that of other provinces. Nevertheless, the high population density as well as economic and industrial centres on Batam necessitates robust road networks and other physical infrastructure for public utilities such as electrification, internet and water connectivity. High-quality infrastructure would catalyse inter-island connectivity to stimulate social mobility and economic activities.

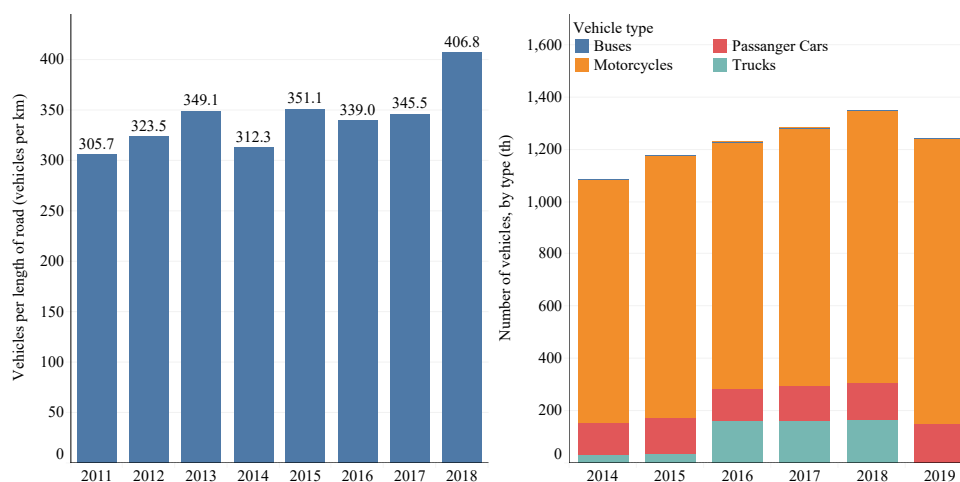


Figure 17: Vehicles per length of paved road (left) and total vehicles, by type (right)

Source: Riau Islands' Bureau of Statistics (*Kepulauan Riau Dalam Angka*)

*As of this writing, the number of trucks is unavailable for 2019

From Figure 17, the number of vehicles per length of roads has been increasing throughout the period, indicating increasing congestion. Meanwhile, motorcycles constitute the bulk of land passenger transport. The Provincial Government has been increasing efforts to improve inter-connectivity between Batam, Bintan, and Karimun islands. 19 priority locations has been identified for infrastructure development with a proposed budget of IDR 20 tr. These projects include the Batam-Bintan bridge, the Ranai International Airport, highway and flyover projects in Batam and Bintan, as well as the construction of an international port at Batu Ampar, Bintan ([Bisnis Indonesia, 2019](#)).

As mentioned in Section 2, the province is home to two international airports, four domestic airports, and 51 passenger harbours. Figure 18 illustrates passenger movement by mode of transport. The COVID-19 pandemic slashed over half of Riau Islands' passenger movement by both air and sea. Total passenger movements had been over 20 mn annually prior to the pandemic, but had fallen to 8.89 mn in 2020. Batam and Bintan had often been mooted as possible Vaccinated Travel Lane (VTL) destinations with Singapore throughout 2021 into 2022, thus potentially reigniting the muted travel industry of the province ([Arshad, 2021](#)).

Figure 19 shows the percentage of residents with mobile phones and the percentage of households with computers. The percentage of residents with mobile phones in Riau Islands had been consistently above 70% since 2015, ranking the province at third nationally for this aspect, only slightly behind DKI Jakarta and East Kalimantan. Meanwhile, the percentage of households with computers has been decreasing in recent years, falling to a mere 27.09% in 2020.

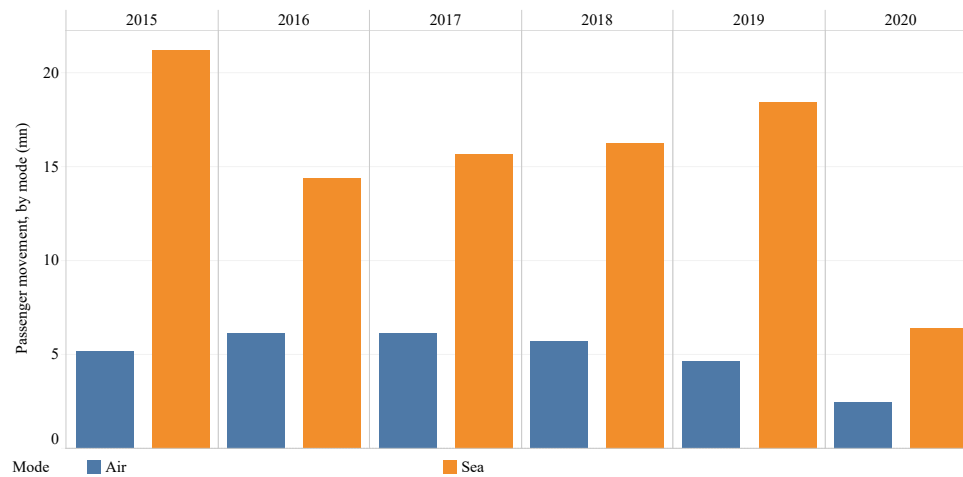


Figure 18: Passenger movement, by mode (mn)
Source: Riau Islands' Bureau of Statistics

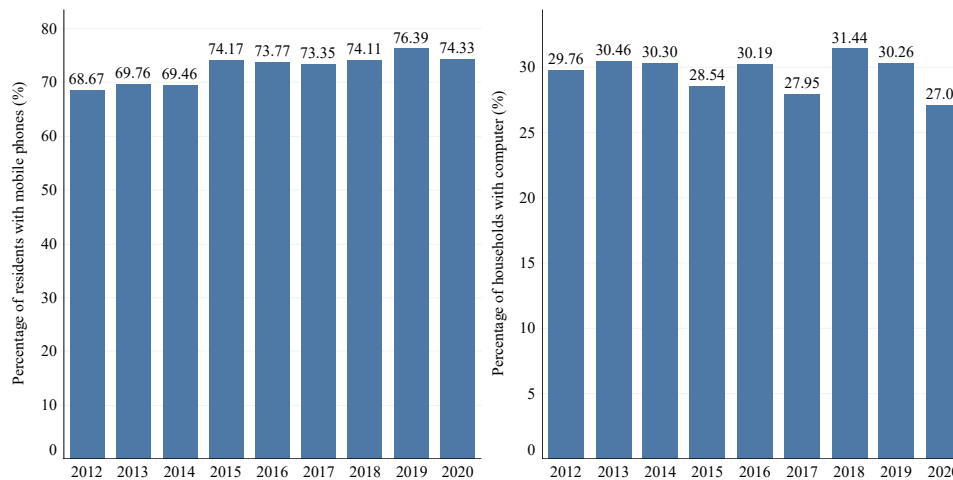


Figure 19: Residents with mobile phones (left) and households with computer (right)
Source: Indonesia's National Bureau of Statistics

The Provincial Government has put focus on digitalisation efforts through the Kepri Smart Province (KPS) initiative. KPS aims to provide a one-stop centre for residents to access government services as well as to receive pertinent, time-sensitive announcements (Trisna, 2021). From Figure 20, 91.15% of Riau Islands residents are internet users thus aiding the successful implementation of this project. The Nongsa Digital Park, a tech hub collaboration between Indonesia and Singapore, aims to house rising tech talents from both countries to collaborate closely, spurring the exchange of IT talent and cross-border commerce (Fadli, 2021a).

Figure 21 shows basic utilities for residents in Riau Islands. Around 99.64% and 88.51% of Riau Islands residents have access to electricity and adequate drinking water respectively in 2019. This puts Riau Islands as one of the most adequate province for electrification in Indonesia. Additionally, Singapore and Indonesia had proposed plans to develop solar farms with a combined 7 gigawatt-peak

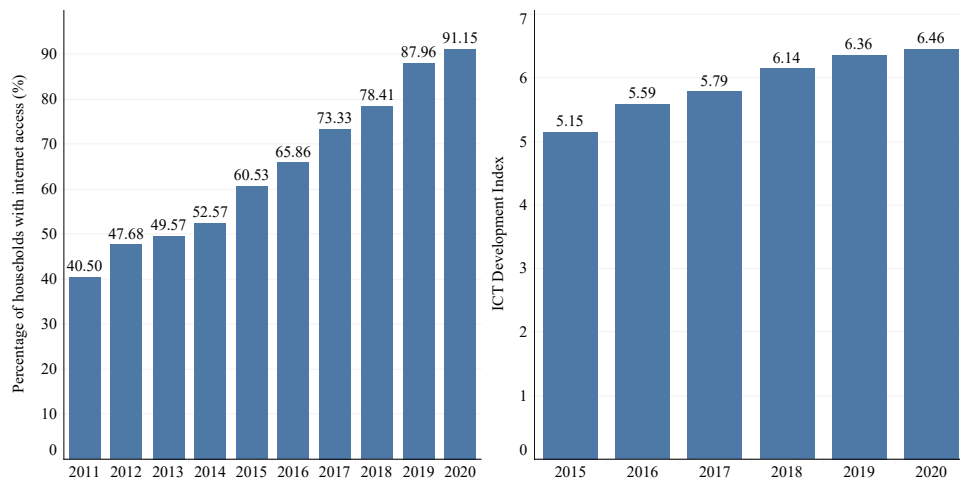


Figure 20: Households with internet access (left) and ICT Development Index (right)
Source: Indonesia's National Bureau of Statistics

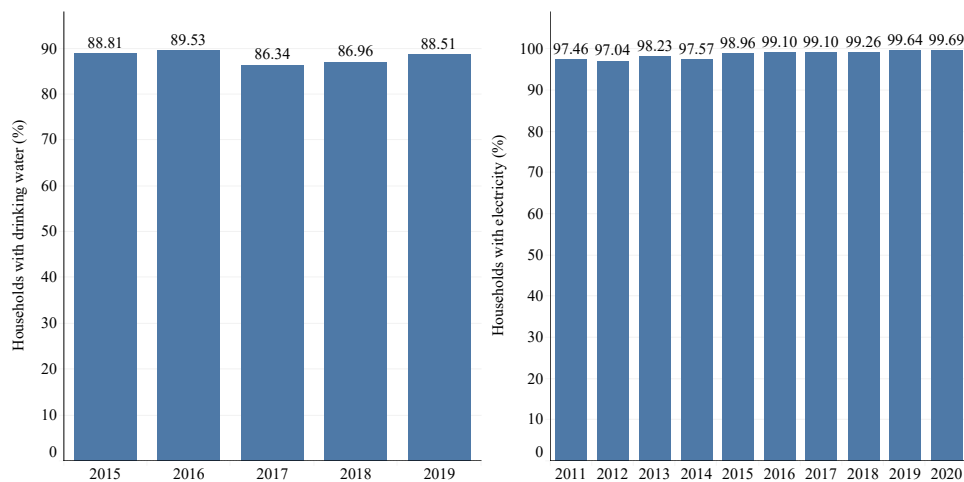


Figure 21: Households with drinking water (left) and electricity (right)
Source: Indonesia's National Bureau of Statistics

(GWp) capacity on Batam island - a proportion of which will be exported to Singapore - to meet clean-energy goals of both nations (CNA, 2021).

Current progress vis-a-vis RPJMD targets

This section charts the progress of selected indicators against their corresponding targets laid out in the RPJMD for the period 2011-2021, and the corresponding priority programmes carried out by the government as outlined in the RPJMD³.

Figure 22 shows that the percentage of household with drinking water and proper sanitation have exceeded targets since 2017. The provincial government has prioritised building more clean water sources

³The policies listed in this section are non-exhaustive. Refer to Riau Islands' RPJMD 2011-2021 for the complete list

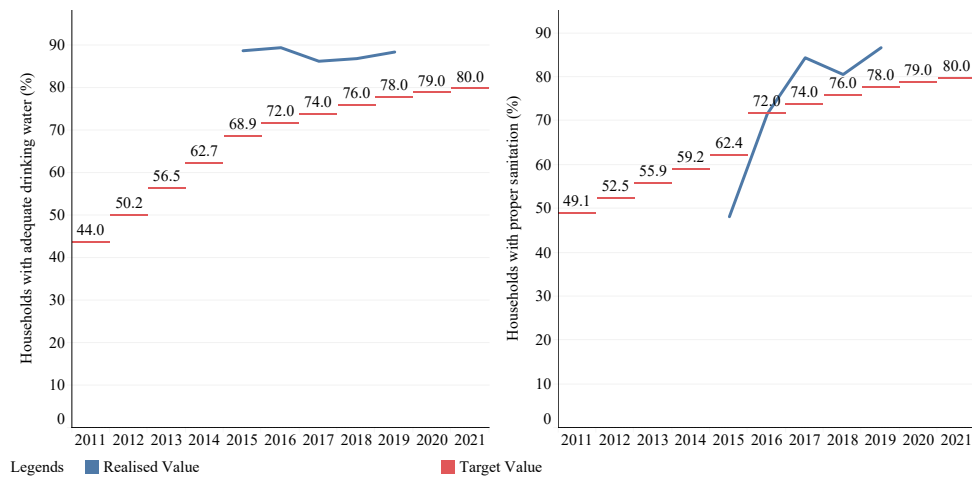


Figure 22: Households with adequate drinking water (left) and households with proper sanitation (right), and respective RPJMD targets

Source: Provincial Government of Riau Islands, Indonesia's Bureau of Statistics

for both drinking and sanitation. The development of these infrastructure will be managed province-wide and the government is inviting public-private partnerships to build the infrastructure. Current programmes mentioned in the RPJMD, which aims to provide water for irrigation and consumption as well as improve sanitation services include 1) Water Resources Management Program, 2) Clean/Drinking Water Management Performance Development Programme, and 3) Sanitation Access Fulfillment Improvement Programme.

5 Social Development

Social welfare and human development are important components to the holistic progress of a nation. Several indicators used to measure social welfare - most notably the GINI Index and the Human Development Index (HDI) - are congruent to the realisation of the United Nation's Sustainable Development Goals (SDG).

Within 9 years, the GRDP per capita of Riau Islands has increased nearly 50% from 2011 to 2019, and did not drop down drastically in 2020 despite the pandemic as shown in Section 2. This is reflected in the GINI Index and the percentage of people below the poverty line (see Figure 23, for which both generally trended downwards from 2011 to 2020, except in 2014 for GINI Index. Percentage of people below the poverty line rose up to 6.33% in the year of the pandemic after a long period of cooling.

The Flats for Rent (Rusunawa) programme had been unveiled by the Provincial Government to improve the quality of housing and the living environment of low-income families who have no income and permanent work. These dwellings could be occupied and rented on a daily or monthly basis (Dinas Perakimtan Kota Batam, 2021). The programme aims to prevent the development of slums, provide decent homes for low-income people, enhance land efficiency and effectiveness in urban areas, and create a sustainable housing environment (Ikhlās and Shiki, 2020).

Figure 24 shows the Human Development Index (HDI) and Gender Empowerment Index for Riau Islands. Both these figures have shown generally improving trends, except for the latter which dipped

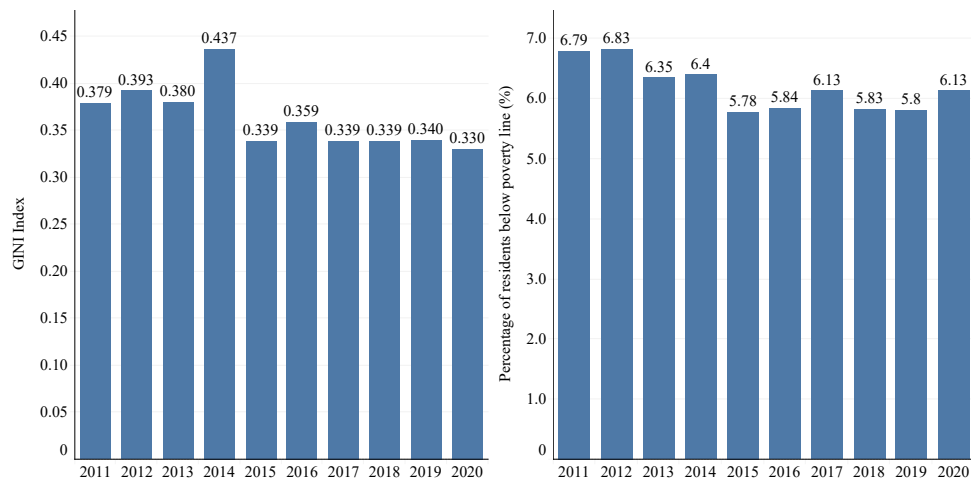


Figure 23: GINI Index (left) and percentage of residents below poverty line (right)
Source: Indonesia's National Bureau of Statistics

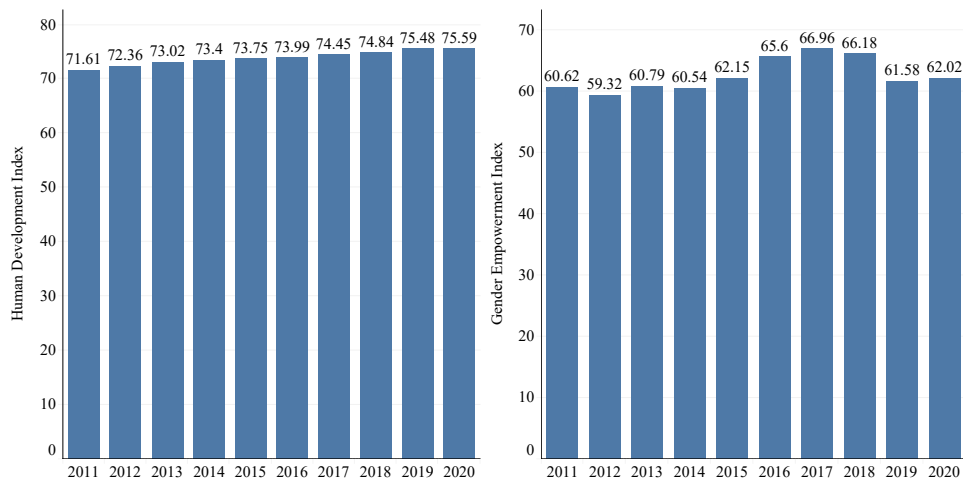


Figure 24: Human Development Index (left) and Gender Development Index (right)
Source: Indonesia's National Bureau of Statistics

in 2019. The HDI of Riau Islands is consistently among the highest in Indonesia. However, there needs to be greater effort to address gender equality in the province. The Governor had acknowledged the need for better protection and aid to women and children, as well as encouraging the collaboration with community organisations, such as the Indonesian Ulema Council (MUI) and the Women's Da'i Organisation ([Antara, 2021](#)).

Figure 25 indicates that the literacy rate and average schooling years of Riau Islands residents has been improving in recent years. The average number of schooling years grew from 9.46 years in 2011 to 10.12 years in 2020, well above the national mandatory schooling years of 9 years, which covers primary school and junior high school years. The literacy rate also increased from 97.7% to 99% in 2020, highlighting almost universal literacy in the province.

Figure 26 shows the trend of residents' life expectancy which increased from 2011 to 2020. Addi-

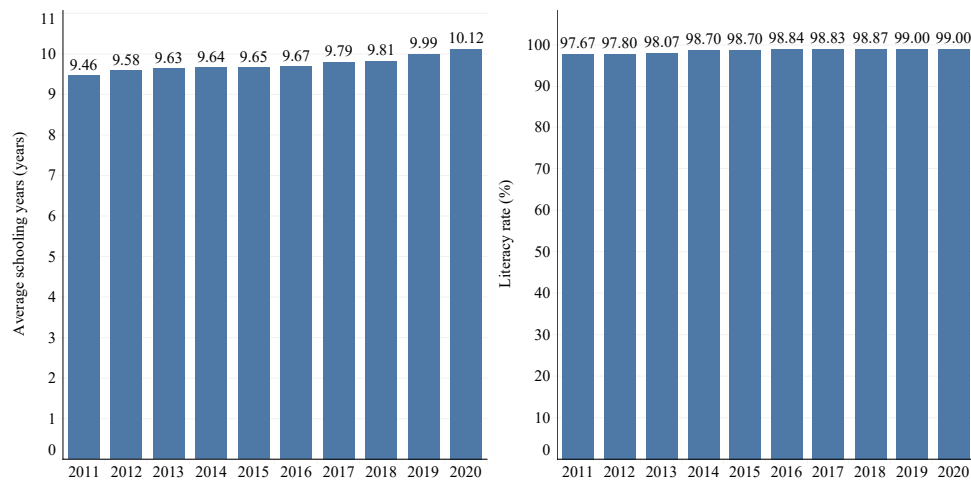


Figure 25: Average schooling years (left) and literacy rate (right)
Source: Indonesia's National Bureau of Statistics

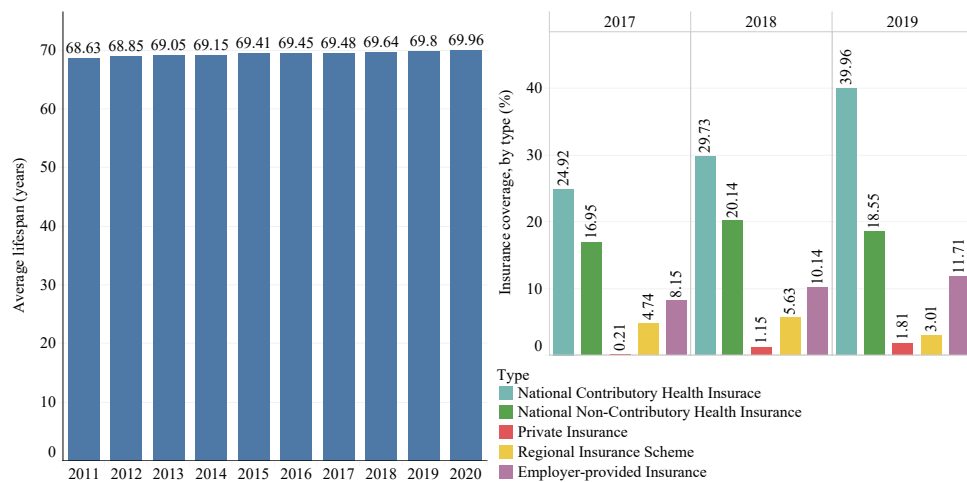


Figure 26: Average lifespan (left) and insurance coverage, by type (right)
Source: Indonesia's National Bureau of Statistics

tionally, the number of people insured has also increased across all insurance types for the past three years, in line with the Provincial and Central Governments' efforts to increase healthcare accessibility. To improve the life expectancy and health quality of residents, the Provincial Government increased and built new health facilities in 2016, particularly the number of Integrated Healthcare Center (Posyandu).

Figure 27 contrasts the projected dependency ratio between Riau Islands and Indonesia for the years of 2010, 2015 and 2020. Throughout the years, the dependency ratio for both Riau Islands and Indonesia has dropped since 2010, from 46.8 % to 46.4% for Riau Islands and from 50.5% to 47.7% nationwide. This is an encouraging sign for Riau Islands economy to have a healthy and increasing working population.

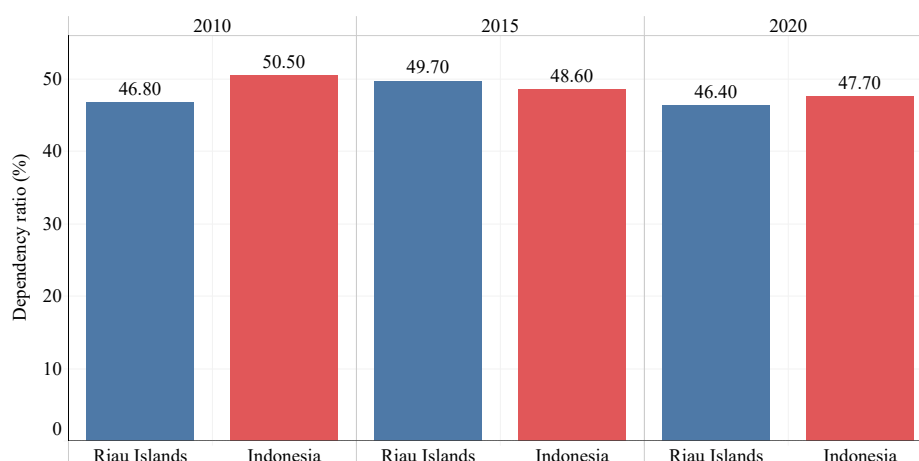


Figure 27: Dependency ratio, BPS Projection
Source: Indonesia's National Bureau of Statistics

Current progress vis-a-vis RPJMD targets

This section charts the progress of selected indicators against their corresponding targets laid out in the RPJMD for the period 2014-2023, and the corresponding priority programmes carried out by the government as outlined in the RPJMD⁴.

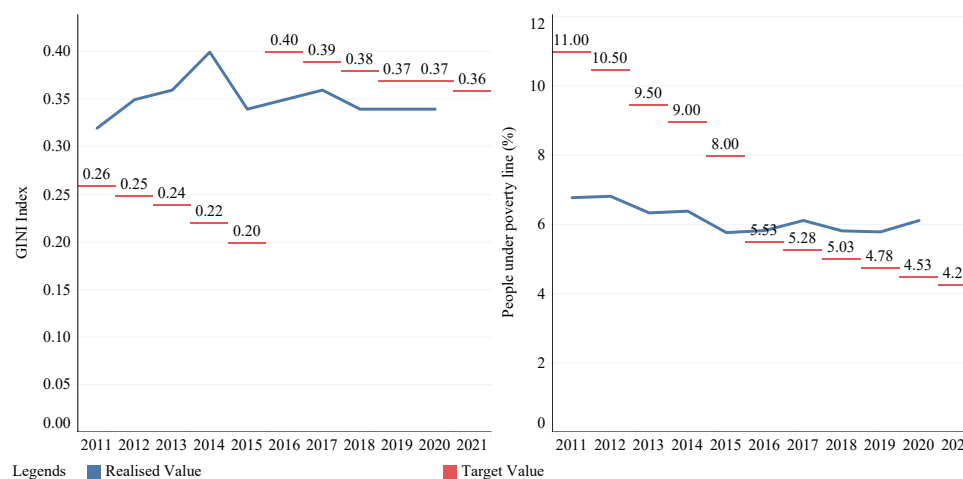


Figure 28: GINI Index (left) and percentage of residents below poverty line (right), and respective RPJMD targets

Source: Indonesia's National Bureau of Statistics, Provincial Government of Bali

From Figure 28, Riau Islands' GINI Index had been worse than target values in the previous RPJMD, with the biggest gap in 2014 at 0.18 points. After revision, the GINI Index consistently remained within the targets. The opposite is true for people under poverty where the values were worse than the targets in the recent RPJMD. Measures introduced in the RPJMD to tackle poverty by providing basic necessities

⁴The policies listed in this section are non-exhaustive. Refer to Riau Islands' RPJMD 2019-2023 for the complete list

include the 1) Poverty Reduction Program and 2) Joint Business Group Programme (KUBE) to empower poor community groups by providing business capital (Aminudin, 2018).

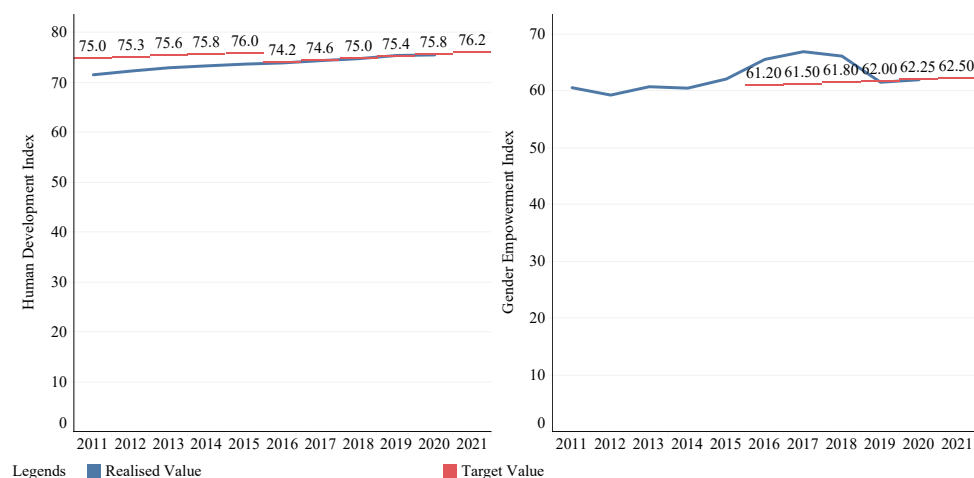


Figure 29: Human Development Index (left) and Gender Empowerment Index (right), and respective RPJMD targets

Source: Indonesia's National Bureau of Statistics, Provincial Government of Bali

From Figure 29, HDI had closely followed the targets albeit with a slight gap, particularly for the previous period's RPJMD, while Gender Empowerment Index had fluctuated throughout the period. The latter was not prioritised in the previous RPJMD. Programmes introduced in the RPJMD to tackle gender abuse, discrimination, and exploitation, as well as rehabilitation include 1) Gender and Child Institutional Strengthening Programme and 2) Social Rehabilitation Programme.

6 Governance

To briefly analyse governance aspects of Riau Islands, this section focuses on governance indicators related to fiscal condition and government's performance. The Provincial Government is committed to build a transparent, open, and service oriented administration and ensure maximum service standards.

As illustrated in Fig. 30, Riau Islands has been running a constant balanced fiscal profile since 2011. The government's revenue and expenditure have generally expanded since 2011. The increase in government expenditure is attributable to a multitude of development projects in the province, as laid out in the previous sections. The government budget is always balance, as the surplus or deficit is covered by the local government financing.

Figure 31 also shows Riau Islands' public reports of corruption per IDR 100 bn in government expenditure, for which has generally declined from a high of 2.84 in 2011 to 1.34 in 2018, but has seen an uptick to 2.00 in 2019.

The Provincial Government has introduced several initiatives to improve their public transparency including using social media, websites, and applications. In 2018, the Riau Islands' government released the KPS as mentioned in Section 4 to implement e-government programmes and improve public services. There are over 34 services within its system that can be used by the public or the civil servants. These services include Local Information Management System (SIMDA) for civil servants, E-Samsat for vehicle

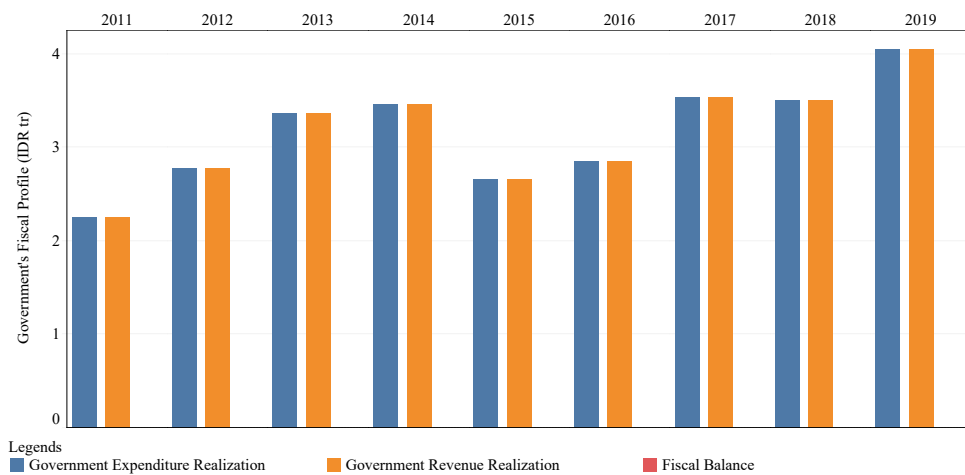


Figure 30: Government Fiscal Profile

Source: *Financial Statistics of Provincial Government (Indonesia's National Bureau of Statistics)*

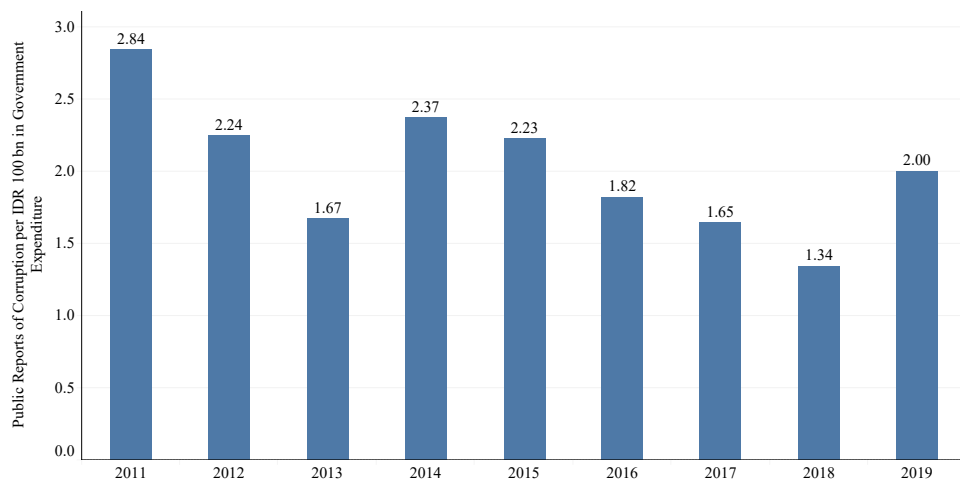


Figure 31: Government Expenditure Realisation components (left) and Public Reports of Corruption per IDR 100,000 in Government Expenditure (right)

Source: *Financial Statistics of Provincial Government (Indonesia's National Bureau of Statistics)*, *Corruption Eradication Commission (KPK) Annual Report*

taxes, and General Procurement Plan Information System (SIRUP LKPP) for citizens interested in government projects and offers.

7 Conclusion

The manufacturing sector has been the most significant contributor to the Riau Islands economy since 2011. Even as the pandemic has caused the provincial GRDP to contract by 3.8% in 2020, domestic and foreign investments in the secondary industry are at a record high. Comparing the actual data with the RPJMD targets reveals that the province's economic growth has been performing below the target

across the years, suggesting an over-optimism of the provincial government in driving economic growth. On the other hand, the FDI and DDI have far exceeded their targets since 2019 due to a surge in capital injection into the secondary and tertiary sectors.

The wholesale, retail, restaurant and hotels sector absorb the highest number of workers in the province. This number has grown despite the pandemic. There is also a significant increase in employment in manufacturing in August 2020 and September 2021, which further corroborates the economic growth in this sector. However, the unemployment rate in the province remains high. The provincial government's attempts to lower the unemployment rate constantly missed its targets.

In terms of infrastructure, the province is experiencing rapid growth in the digital sphere. The number of households with internet access more than doubled in a decade, and the ICT development index is also increasing. As the number of households with electricity reached 99.69% in 2020, this further supports the digital economy potential in the province.

Riau Islands has a mixed performance in social development. The province has an improving Gini index, HDI, educational attainment, life expectancy and insurance coverage. These indicators were seen to exceed their RPJMD targets. On the other hand, the poverty rate stays stubbornly high, and the province continues to fall short in enabling gender equality. For governance, the province's fiscal size has generally expanded over the year. Even though public reports of corruption have decreased from 2011 to 2018, there has been an uptick in 2019, prompting the government to initiate policies that improve public transparency.

Appendix

ACI Industrial Classification	BPS Nomenclature (2018 – Current)	BPS Nomenclature (2000 – 2017)
Agriculture	Agriculture, Forestry and Fishery	Agriculture, Forestry, Hunting and Fishery
Mining	Mining and Quarrying	Mining and Quarrying
Manufacturing	Manufacturing	Manufacturing
Electricity, Gas and Water	Comprises two sectors: 1. Electricity and Gas 2. Water supply, Sewerage, Waste Management and Remediation Activities	Electricity, Gas and Water
Construction	Construction	Construction
Wholesale, Retail, Restaurants, Hotels	Comprises two sectors: 1. Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles 2. Accommodation and Food Service Activities	Working: Wholesale, Retail, Restaurant, Hotels
Transportation, Storage and Communication	Comprises two sectors: 1. Transportation and Storage 2. Information and Communication	Transportation, Storage, Communication
Finance, Real Estate, Business Service	Comprises three sectors: 1. Financial and Insurance Activities 2. Real Estate Activities 3. Business Activities	Financing, Insurance, Real Estate, Business Service
Community, Social, Personal Service	Comprises four sectors: 1. Public Administration and Defense; Compulsory Social Security 2. Education 3. Human Health and Social Work Activities 4. Other Services Activities	Community, Social, Personal Service

Table 2: Industrial Classification for Labour Force

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