



Comparative analysis of Indonesia's economic resilience in the Asia-Pacific context

Feliks Y.E. Santoso^{1*}, Palupi L. Samputra¹

¹ Program studi Ketahanan Nasional, Sekolah Kajian Strategik dan Global, Universitas Indonesia, Jakarta, Daerah Khusus Ibukota Jakarta, Jakarta, 10430, Indonesia.

*Correspondent: feliksiyanuar24@gmail.com

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ABSTRACT

Background: economic resilience, defined as the ability of an economy to absorb and recover from shocks, is crucial for sustainable development. This study aims to assess and compare Indonesia's economic resilience with other Asia-Pacific countries in the post-COVID-19 era. **Methods:** Using Briguglio's theoretical framework, the study evaluates economic resilience through four key dimensions: macroeconomic stability, microeconomic efficiency, governance, and social development. Data from 2019 to 2023 were collected from international sources such as the World Bank, IMF, and UNDP. **Finding:** The results indicate that Indonesia consistently ranks lower on the Economic Resilience Index (ERI) compared to its regional peers. The country's underperformance is particularly evident in microeconomic efficiency and governance, where it lags behind more resilient economies like Singapore and New Zealand. However, Indonesia has shown gradual improvements in social development indicators, suggesting a positive trend in human capital development. **Conclusion:** The study highlights the need for Indonesia to implement significant reforms in market regulation, governance, and social infrastructure to enhance its economic resilience. The findings contribute to the broader understanding of economic resilience in the Asia-Pacific region and provide actionable insights for policymakers aiming to strengthen Indonesia's economic stability and sustainability. **Novelty:** This study is among the first to apply Briguglio's framework to a comparative analysis of economic resilience across Asia-Pacific countries in the post-COVID-19 context, with a specific focus on Indonesia. The research highlights the unique challenges and opportunities for Indonesia in building economic resilience, providing new insights into the specific areas where policy interventions are most needed.

KEYWORDS: Asia-Pacific; Briguglio; economic resilience; Indonesia.

1. Introduction

Economic resilience, defined as the capacity of an economy to absorb shocks and recover quickly from disruptions, has become a pivotal area of research in the context of global economic stability. In an increasingly interconnected world, where economic shocks can have far-reaching consequences, understanding the determinants of resilience is essential for countries striving to achieve sustainable growth and development. For Indonesia, a key player in the Asia-Pacific region, assessing economic resilience is particularly important given the nation's diverse economic structure, large population, and susceptibility to external shocks. The COVID-19 pandemic has further underscored the importance of economic resilience. The pandemic caused significant disruptions across the globe, exposing vulnerabilities in national economies, particularly those with limited adaptive capacities. As noted by Duval, Hong, and Timmer (2021), countries with robust

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macroeconomic and structural policies were better equipped to withstand the economic fallout of the pandemic. In Indonesia, the pandemic highlighted the need to enhance economic resilience through improved governance, diversified economic activities, and stronger institutional frameworks.

Research on economic resilience often draws on several key theoretical frameworks. Briguglio et al. (2009) introduced the concept of economic vulnerability and resilience, emphasizing the importance of structural factors in determining a country's ability to cope with external shocks. This framework is particularly relevant to small and medium-sized economies, like Indonesia, that face unique challenges in maintaining stability amidst global economic fluctuations. Another relevant theory is that of adaptive capacity, which refers to the ability of an economy to adjust to new conditions, mitigate damage, and seize opportunities that arise from crises (Adger, 2003). This theory has been expanded upon in studies examining the role of institutional quality, governance, and human capital in fostering economic resilience (Acemoglu & Robinson, 2012). For Indonesia, enhancing adaptive capacity could be a crucial strategy for strengthening resilience in the face of future shocks, as evidenced by the varied responses to the COVID-19 pandemic across different regions of the country. In the Asia-Pacific context, studies have shown that countries with higher levels of digital competitiveness and innovation tend to exhibit greater economic resilience (IMD, 2022). This relationship suggests that investments in technology and human capital could play a significant role in enhancing Indonesia's resilience, especially as the digital economy becomes increasingly important. Moreover, the work by Duval, Hong, and Timmer (2021) on resilience in the face of pandemics highlights the need for strong macroeconomic policies and structural reforms to cushion the impact of global crises.

Despite the growing body of literature on economic resilience, there remains a significant gap in understanding how Indonesia compares to other Asia-Pacific countries in this regard, particularly in the post-COVID-19 era. While previous studies have examined various aspects of resilience, there is limited research that specifically addresses the comparative resilience of Indonesia within the Asia-Pacific framework, taking into account the recent economic disruptions caused by the pandemic. This gap is critical, as it hinders the development of targeted policy interventions that could enhance Indonesia's ability to recover from future economic shocks. Moreover, the interplay between digital competitiveness and economic resilience in Indonesia has not been fully explored, despite evidence suggesting that technological advancements can significantly bolster an economy's ability to adapt to and recover from crises. This study aims to address these gaps by conducting a comprehensive comparative analysis of Indonesia's economic resilience in the context of the Asia-Pacific region, with a particular focus on the post-COVID-19 period.

The primary objective of this study is to analyze and compare the economic resilience of Indonesia with other countries in the Asia-Pacific region, with a focus on the post-COVID-19 recovery phase. This research seeks to identify the key factors that contribute to Indonesia's economic resilience, assess how these factors compare to those in other Asia-Pacific countries, and provide insights into how Indonesia can enhance its resilience in the face of future shocks. The originality of this study lies in its comparative approach, which situates Indonesia's economic resilience within a broader regional context, thereby providing a nuanced understanding of how Indonesia's resilience strategies measure up against those of its regional counterparts.

Based on the theoretical background and the identified research gaps, this study hypothesizes that Indonesia's economic resilience, while significant, lags behind that of other leading Asia-Pacific countries.

2. Methods

2.1. Briguglio's framework of economic resilience

This study adopts Briguglio's (2009) theoretical framework for measuring economic resilience, which emphasizes the interplay between economic vulnerability and resilience. According to Briguglio, economic resilience can be understood as the ability of an economy to withstand or recover from the negative effects of external shocks. The framework consists of four main components that contribute to economic resilience: macro-economic stability, microeconomic market efficiency, good governance, and social development. These components will serve as the primary dimensions for evaluating Indonesia's economic resilience in comparison to other Asia-Pacific countries.

Data for the above indicators will be collected from reputable international sources, including: (1) World Bank for macroeconomic and governance indicators, (2) International Monetary Fund (IMF) for fiscal balance and external debt data, (3) World Economic Forum for competitiveness and market efficiency indicators, (4) United Nations Development Programme (UNDP) for social development indicators. The study will cover the period from 2019 to 2023, providing a comprehensive view of economic resilience before, during, and after the COVID-19 pandemic.

The economic resilience of Indonesia will be measured and compared against a selected group of Asia-Pacific countries, including both developed and emerging economies. The comparative analysis will involve: (1) Index Construction: An Economic Resilience Index (ERI) will be constructed using a weighted sum of the indicators from the four dimensions. The weights will be determined based on their relative importance as identified in the literature and previous empirical studies; (2) Ranking and Cluster Analysis: Countries will be ranked based on their ERI scores. Cluster analysis will be employed to identify groups of countries with similar levels of resilience, allowing for a more nuanced comparison.

2.2 Measurement of economic resilience

Macro-Economic Stability: This component assesses the ability of an economy to maintain stable growth and low inflation in the face of external shocks. It is measured through indicators such as: (1) GDP Growth Rate: Annual percentage change in GDP, indicating the economy's growth performance; (2) Inflation Rate: Consumer Price Index (CPI) changes, representing the stability of prices; (3) Fiscal Balance: The ratio of the government budget balance to GDP, reflecting the sustainability of fiscal policies; (4) External Debt: The ratio of external debt to GDP, indicating the country's exposure to external financial risks.

Microeconomic Market Efficiency: This dimension evaluates the efficiency of market operations and the capacity of the private sector to adapt to economic changes. Key indicators include: (1) Ease of Doing Business Index: Measures the regulatory environment's conduciveness to business operations; (2) Trade Openness: The ratio of total trade (exports plus imports) to GDP, reflecting the level of integration with the global economy. (3) Labor Market Flexibility: Indicators such as unemployment rate and labor force participation rate, demonstrating the adaptability of the labor market.

Good Governance: Good governance is crucial for creating a stable and predictable environment that supports economic resilience. It is assessed through: (1) Corruption Perception Index (CPI): A measure of perceived levels of corruption within the public sector; (2) Government Effectiveness: An indicator of the quality of public services, the capacity of the civil service, and the independence of the civil service from political pressures; (3) Regulatory Quality: Measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

Social Development: This component considers the role of social factors in economic resilience, including human capital development and social safety nets. Indicators include: (1) Human Development Index (HDI): A composite index measuring average achievement

in key dimensions of human development: a long and healthy life, knowledge, and a decent standard of living.

Table 1. Variable and data source

No.	Variable	Indicator		Data Source
1	X1 ₁	Knowledge		IMD WDC
2	X1 ₂	Technology		IMD WDC
3	X1 ₃	Future readiness		IMD WDC
4	X1	Daya saing digital		IMD WDC
5	X2	Populasi		World bank
6	X3	GDP		World bank
7	X4	Daya Saing Negara	Global Competitiveness Index	IMD
8	Ketahanan Ekonomi (y)	Stabilitas makroekonomi	Defisit anggaran terhadap PDB	World bank
Tingkat pengangguran			World bank	
Tingkat inflasi			World bank	
Rasio hutang luar negri			World bank	
9	Efisiensi pasar mikroekonomi		Good Market Efficiency	World bank
Labor Market Efficiency			World bank	
Soundness of Bank			World bank	
Regulations of Securities Exchange			World bank	
10	Tata kelola yang baik		Ease of doing business	
Government Effectiveness			World bank	
Politic Stability				
			Indeks persepsi korupsi	Transparency International
11	Pembangunan Sosial		Health and primary education	World bank
			Higher Education and Training	World bank

The stages of measuring the economic resilience index of each country follow two stages: (1) measuring the index with the principle of the composite index in measuring the macroeconomic stability index, microeconomic efficiency index, social development index, and good governance index. The determination of weights follows the same weight rule between each index. (2) measuring the economic resilience index of each country follows the formula:

$$ERI_{it} = 0,25 * MacroIndex + 0,25MicroefficiencyIndex \\ + 0,25 SocialDevelopmentIndex + 0,25Good GovIndex$$

3. Result and Discussion

This study presents a comparative analysis of economic resilience between Indonesia and several countries in the Asia-Pacific region. The objective of this analysis is to provide a clearer picture of Indonesia's position in terms of economic resilience relative to neighboring countries, as well as to identify key factors that influence economic resilience in this region. Through this comparison, it is hoped to gain an understanding of Indonesia's strengths and weaknesses, as well as opportunities to strengthen the nation's economic resilience in the future.

3.1 Macro-economic stability

Macroeconomic stability is the fundamental foundation for a country's economic resilience. By maintaining this stability, a nation can create a conducive environment for sustainable economic growth, reduce vulnerability to external shocks, and improve the well-being of its citizens. In this discussion, we will explore several key indicators that reflect macroeconomic stability, including the budget deficit relative to GDP, the unemployment rate, the inflation rate, and the ratio of external debt.

Year	Country	Budget deficit to gdp	Unemployment rate	Inflation rate	External debt ratio
2019	Singapura	-0.3	2.25	0.57	425.29
	Korea Selatan	-1.9	3.75	0.38	28.496
	Taiwan	-1.8	3.7275	0.56	30.206
	Hong Kong	-1.3	2.925	2.88	468.261
	Australia	0	5.175	1.59	126.679
	China	-6.1	5.15	2.9	14.499
	New Zealand	2.4	4.1	1.62	90.162
	Japan	-3.6	2.358	0.47	83.005
	Malaysia	-3.4	3.3	0.66	62.631
	Thailand	-1.8	0.98	0.71	31.7
	Indonesia	-2.2	5.145	2.82	36.061
	India	-4.64	7.391	4.77	19.867
	Philippines	-3.4	5.1075	2.39	22.19
Mongolia	0.9	9.975	7.32	216.118	
Year	Country	Budget deficit to gdp	Unemployment rate	Inflation rate	External debt ratio
2020	Singapura	-10.8	3	-0.18	488.403
	Korea Selatan	-3.5	3.975	0.54	33.468
	Taiwan	-2.9	3.85	-0.24	28.202
	Hong Kong	-12	5.49	0.25	518.439
	Australia	-4.3	6.475	0.91	132.314
	China	-8.6	5.616	2.49	16.344
	New Zealand	-7.3	4.6	1.72	90.244

Japan	-8.7	2.7916	-0.03	92.601
Malaysia	-6.2	4.491	-1.14	67.57
Thailand	-6.1	1.685	0.85	38
Indonesia	-6.5	6.005	2.03	39.369
India	-9.17	10.358	6.17	20.88
Philippines	-7.6	10.405	2.39	27.225
Mongolia	-11.5	7.025	3.73	243.084

Year	Country	Budget deficit to gdp	Unemployment rate	Inflation rate	External debt ratio
2021	Singapura	-0.9	2.65	2.31	432.612
	Korea Selatan	-5.2	3.64	2.5	34.701
	Taiwan	-2.1	3.95	1.97	27.627
	Hong Kong	-3.6	5.425	1.57	508.789
	Australia	-6.4	5.13	2.82	116.347
	China	-6.1	5.116	0.92	15.415
	New Zealand	-1.3	3.775	3.94	87.364
	Japan	-5.1	2.808	-0.24	95.88
	Malaysia	-6.4	4.583	2.48	69.75
	Thailand	-9.1	1.935	1.23	38.8
	Indonesia	-4.65	6.375	1.56	34.894
	India	-6.75	7.816	5.51	23.703
	Philippines	-8.6	7.766	3.93	27.006
	Mongolia	-6.8	8.175	7.36	221.147

Year	Country	Budget deficit to gdp	Unemployment rate	Inflation rate	External debt ratio
2022	Singapura	-0.3	2.1	6.12	379.361
	Korea Selatan	-7	2.86	5.09	39.755
	Taiwan	-0.5	3.674	2.95	26.57
	Hong Kong	-5	4.325	1.88	494.589
	Australia	-1.4	3.725	6.61	115.829
	China	-7.4	5.583	1.98	13.703
	New Zealand	-2.7	3.3	7.17	84.984
	Japan	-6.4	2.591	2.5	104.052
	Malaysia	-5.6	3.816	3.38	63.899
	Thailand	-5.6	1.32	6.08	40.4
	Indonesia	-2.35	5.845	4.14	30.061
	India	-6.44	7.558	6.65	20.027
	Philippines	-7.3	5.4	5.82	27.552
	Mongolia	-1.9	6.75	15.15	194.47

Year	Country	Budget deficit to gdp	Unemployment rate	Inflation rate	External debt ratio
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2023	Singapura	0.95	1.925	4.82	391.096
	Korea Selatan	-4.5	2.68	3.59	38.76
	Taiwan	-0.5	3.479	2.49	27.34
	Hong Kong	-4.5	2.983	2.1	480.135
	Australia	0.9	3.7	5.6	109.399
	China	-6.7	5.216	0.23	13.746
	New Zealand	-2.4	3.725	5.73	87.051
	Japan	-5.05	2.583	3.27	106.851
	Malaysia	-5	3.43	2.49	68.172
	Thailand	-2.8	0.9775	1.23	37.5
	Indonesia	-1.65	5.385	3.71	29.69
	India	-5.63	8.105	4.38	18.854
	Philippines	-6.2	4.35	5.98	28.719
	Mongolia	-2.95	5.375	10.35	173.962

In 2019, Budget Deficit to GDP: Singapore had the smallest deficit (-0.3%), while India had the largest deficit (-4.64%). Unemployment Rate: Thailand recorded the lowest unemployment rate (0.98%), while Mongolia had the highest (9.975%). Inflation Rate: South Korea had the lowest inflation rate (0.38%), while Mongolia had the highest (7.32%). External Debt Ratio: Hong Kong had the highest ratio (468.261%), while China had the lowest (14.499%). In 2020, Budget Deficit to GDP: Singapore experienced a significant increase in its deficit (-10.8%), while South Korea recorded a decrease (-3.5%). Unemployment Rate: Thailand maintained the lowest unemployment rate (1.685%), while India saw a sharp increase (10.358%). Inflation Rate: Taiwan recorded a negative inflation rate (-0.24%), while India had the highest (6.17%). External Debt Ratio: Hong Kong remained with the highest ratio (518.439%), while China had the lowest (16.344%). In 2021, Budget Deficit to GDP: Singapore showed significant improvement (-0.9%), while Hong Kong and Mongolia experienced large deficits (-6.8% and -8.6%). Unemployment Rate: Japan had the lowest unemployment rate (2.808%), while Mongolia had the highest (8.175%). Inflation Rate: Japan recorded a negative inflation rate (-0.24%), while Mongolia had the highest (7.36%). External Debt Ratio: Hong Kong remained with the highest ratio (508.789%), while China had the lowest (15.415%).

In 2022, Budget Deficit to GDP: Singapore (-0.3%) and Australia (0.9%) recorded the smallest deficits, while China (-7.4%) and India (-6.44%) experienced the largest deficits. Unemployment Rate: Thailand again recorded the lowest unemployment rate (1.32%), while Mongolia had the highest (6.75%). Inflation Rate: China had the lowest inflation rate (1.98%), while Mongolia had the highest (15.15%). External Debt Ratio: Hong Kong still had the highest ratio (494.589%), while China had the lowest (13.703%). In 2023, Budget Deficit to GDP: Singapore and Australia recorded small surpluses (0.95% and 0.9%), while India and Mongolia had large deficits (-5.63% and -2.95%). Unemployment Rate: Thailand again had the lowest unemployment rate (0.9775%), while India had the highest (8.105%). Inflation Rate: China had the lowest inflation rate (0.23%), while Mongolia had the highest (10.35%). External Debt Ratio: Hong Kong still had the highest ratio (480.135%), while China had the lowest (13.746%). During the period from 2019-2023, Singapore demonstrated relatively stable performance in terms of budget deficit and unemployment, although its external debt ratio remained quite high. Hong Kong consistently had the highest external debt ratio, which could pose a risk to long-term economic stability. Indonesia experienced fluctuations in budget deficit, unemployment, inflation, and external debt ratio, indicating challenges in maintaining macroeconomic stability. Through this comparative analysis, we can understand how Indonesia compares with other Asia-Pacific countries in terms of maintaining macroeconomic stability and overall economic resilience. + 0,006IHSG

3.2 Micro-economic efficiency

Microeconomic market efficiency is a key element in creating a competitive and productive economic environment. This efficiency encompasses various market aspects that ensure optimal resource allocation, enhance competitiveness, and promote sustainable economic growth. In this discussion, we will examine several important indicators that reflect microeconomic market efficiency, including the efficiency of goods and labor markets, the soundness of the banking sector, and the regulation of securities exchanges.

Year	Country	Good market efficiency*	Labor Market Efficiency*	Soundness of Bank*	Regulation of securities exchanges*	Ease of doing business
2019	Singapura	5.675	5.772	6.456	6.301	86.198
	Korea Selatan	4.761	3.923	3.632	3.397	84.001
	Taiwan	5.250	4.673	6.311	5.856	80.920
	Hong Kong	5.643	5.587	6.388	6.090	85.315
	Australia	4.577	4.307	6.427	5.662	81.215
	China	4.459	4.569	4.772	4.899	77.284
	New Zealand	5.373	5.460	6.543	5.808	86.765
	Japan	5.198	4.654	6.025	5.793	78.000
	Malaysia	5.378	4.740	5.349	5.349	81.473
	Thailand	4.746	3.886	5.743	4.738	80.092
	Indonesia	4.301	3.472	4.985	4.103	69.579
	India	4.174	3.983	4.065	3.990	71.045
	Philippines	4.177	4.054	5.559	5.044	62.829
Mongolia	4.241	4.358	3.531	2.699	67.773	

Year	Country	Good market efficiency*	Labor Market Efficiency*	Soundness of Bank*	Regulation of securities exchanges*	Ease of doing business
2020	Singapura	5.672	5.771	6.455	6.342	84.771*
	Korea Selatan	4.755	3.870	3.491	3.259	84.770*
	Taiwan	5.258	4.661	6.445	5.933	83.426*
	Hong Kong	5.647	5.579	6.376	6.119	84.274*
	Australia	4.523	4.237	6.409	5.642	81.170*
	China	4.467	4.567	4.755	4.995	77.463*
	New Zealand	5.385	5.494	6.537	5.834	86.831*
	Japan	5.209	4.613	6.112	5.875	78.365*
	Malaysia	5.413	4.730	5.301	5.352	81.536*
	Thailand	4.767	3.790	5.759	4.710	78.521*
	Indonesia	4.273	3.383	5.018	4.022	71.136*
	India	4.154	3.967	3.888	3.847	72.540*
	Philippines	4.188	4.060	5.565	5.101	62.374*
Mongolia	4.277	4.337	3.477	2.677	69.402*	

Year	Country	Good market efficiency*	Labor Market Efficiency*	Soundness of Bank*	Regulation of securities exchanges*	Ease of doing business
2021	Singapura	5.669	5.769	6.453	6.382	84.420*
	Korea Selatan	4.749	3.817	3.350	3.121	85.099*
	Taiwan	5.266	4.649	6.579	6.010	84.270*
	Hong Kong	5.651	5.571	6.363	6.148	84.108*
	Australia	4.469	4.168	6.391	5.621	81.307*
	China	4.476	4.566	4.737	5.091	80.374*
	New Zealand	5.398	5.528	6.532	5.860	86.790*
	Japan	5.221	4.573	6.199	5.956	78.533*
	Malaysia	5.448	4.720	5.254	5.356	82.039*
	Thailand	4.788	3.695	5.774	4.682	79.086*
	Indonesia	4.245	3.293	5.051	3.941	72.706*
	India	4.133	3.950	3.711	3.703	75.865*
	Philippines	4.198	4.066	5.570	5.158	62.919*
	Mongolia	4.314	4.317	3.422	2.654	70.286*
Year	Country	Good market efficiency*	Labor Market Efficiency*	Soundness of Bank*	Regulation of securities exchanges*	Ease of doing business
2022	Singapura	5.665	5.767	6.452	6.423	84.068*
	Korea Selatan	4.743	3.765	3.209	2.984	85.428*
	Taiwan	5.274	4.637	6.714	6.087	85.114*
	Hong Kong	5.655	5.564	6.351	6.176	83.942*
	Australia	4.415	4.098	6.374	5.601	81.444*
	China	4.484	4.565	4.719	5.186	83.284*
	New Zealand	5.411	5.562	6.526	5.885	86.749*
	Japan	5.232	4.533	6.285	6.038	78.701*
	Malaysia	5.484	4.710	5.207	5.359	82.542*
	Thailand	4.808	3.599	5.790	4.654	79.651*
	Indonesia	4.217	3.204	5.084	3.860	74.276*
	India	4.113	3.934	3.534	3.559	79.190*
	Philippines	4.209	4.072	5.575	5.215	63.463*
	Mongolia	4.350	4.296	3.368	2.632	71.171*
Year	Country	Good market efficiency*	Labor Market Efficiency*	Soundness of Bank*	Regulation of securities exchanges*	Ease of doing business
2023	Singapura	5.662	5.766	6.450	6.463	83.717*
	Korea Selatan	4.737	3.712	3.068	2.846	85.756*
	Taiwan	5.282	4.625	6.848	6.164	85.958*
	Hong Kong	5.658	5.556	6.339	6.205	83.776*
	Australia	4.360	4.029	6.356	5.581	81.581*

China	4.492	4.563	4.701	5.282	86.195*
New Zealand	5.424	5.596	6.521	5.911	86.708*
Japan	5.243	4.492	6.372	6.120	78.870*
Malaysia	5.519	4.700	5.160	5.363	83.045*
Thailand	4.829	3.504	5.806	4.625	80.217*
Indonesia	4.189	3.114	5.117	3.779	75.846*
India	4.092	3.917	3.356	3.415	82.516*
Philippines	4.220	4.078	5.581	5.271	64.008*
Mongolia	4.386	4.276	3.314	2.609	72.055*

In 2019, Goods Market Efficiency: Singapore led with a score of 5.675, followed by Hong Kong (5.643) and New Zealand (5.373). Indonesia ranked lower with a score of 4.301. Labor Market Efficiency: Singapore (5.772) and Hong Kong (5.587) were at the top, while Indonesia (3.472) and Thailand (3.886) ranked lower. Soundness of Banks: Singapore (6.456) and New Zealand (6.543) had the highest scores, while Indonesia (4.985) and Mongolia (3.531) had the lowest. Regulation of Securities Exchanges: Singapore (6.301) and Hong Kong (6.090) ranked at the top, while Indonesia (4.103) and Mongolia (2.699) were at the bottom. Ease of Doing Business: New Zealand led with a score of 86.765, followed by Singapore (86.198), while Indonesia had a score of 69.579. In 2020, Goods Market Efficiency: Singapore remained in the lead (5.672), followed by Hong Kong (5.647) and Taiwan (5.258). Indonesia remained at the lower end with a score of 4.273. Labor Market Efficiency: Singapore (5.771) and Hong Kong (5.579) stayed at the top, while Indonesia (3.383) and Thailand (3.790) were at the bottom. Soundness of Banks: New Zealand (6.537) and Singapore (6.455) remained at the top, while Indonesia (5.018) and Mongolia (3.477) were at the bottom. Regulation of Securities Exchanges: Singapore (6.342) and Hong Kong (6.119) stayed at the top, while Indonesia (4.022) and Mongolia (2.677) were at the bottom. Ease of Doing Business: New Zealand remained in the lead (86.831), while Indonesia showed slight improvement with a score of 71.136. In 2021, Goods Market Efficiency: Singapore remained in the lead (5.669), followed by Hong Kong (5.651) and Taiwan (5.266). Indonesia continued to rank lower with a score of 4.245. Labor Market Efficiency: Singapore (5.769) and Hong Kong (5.571) stayed at the top, while Indonesia (3.293) and Thailand (3.695) were at the bottom. Soundness of Banks: New Zealand (6.532) and Singapore (6.453) remained at the top, while Indonesia (5.051) and Mongolia (3.422) were at the bottom. Regulation of Securities Exchanges: Singapore (6.382) and Hong Kong (6.148) stayed at the top, while Indonesia (3.941) and Mongolia (2.654) were at the bottom. Ease of Doing Business: New Zealand still led (86.790), while Indonesia showed improvement with a score of 72.706.

In 2022, Goods Market Efficiency: Singapore remained in the lead (5.665), followed by Hong Kong (5.655) and Taiwan (5.274). Indonesia continued to rank lower with a score of 4.217. Labor Market Efficiency: Singapore (5.767) and Hong Kong (5.564) stayed at the top, while Indonesia (3.204) and Thailand (3.599) were at the bottom. Soundness of Banks: New Zealand (6.526) and Singapore (6.452) remained at the top, while Indonesia (5.084) and Mongolia (3.368) were at the bottom. Regulation of Securities Exchanges: Singapore (6.423) and Hong Kong (6.176) stayed at the top, while Indonesia (3.860) and Mongolia (2.632) were at the bottom. Ease of Doing Business: New Zealand still led (86.749), while Indonesia showed improvement with a score of 74.276. In 2023, Goods Market Efficiency: Singapore remained in the lead (5.662), followed by Hong Kong (5.658) and Taiwan (5.282). Indonesia continued to rank lower with a score of 4.189. Labor Market Efficiency: Singapore (5.766) and Hong Kong (5.556) stayed at the top, while Indonesia (3.114) and Thailand (3.504) were at the bottom. Soundness of Banks: New Zealand (6.521) and Singapore (6.450) remained at the top, while Indonesia (5.117) and Mongolia (3.314) were at the bottom. Regulation of Securities Exchanges: Singapore (6.463) and Hong Kong (6.205) stayed at the

top, while Indonesia (3.779) and Mongolia (2.609) were at the bottom. Ease of Doing Business: New Zealand still led (86.708), while Indonesia showed improvement with a score of 75.846. During the period from 2019 to 2023, Singapore consistently ranked at the top for goods market efficiency, labor market efficiency, bank soundness, regulation of securities exchanges, and ease of doing business. Hong Kong and New Zealand also demonstrated strong performance in terms of microeconomic market efficiency. Indonesia, although ranked lower, showed a trend of improvement in various indicators, particularly in ease of doing business. Through this analysis, we can understand how Indonesia compares with other Asia-Pacific countries in maintaining market efficiency and ensuring economic stability and sustainable growth.

3.3 Good governance

Good governance is a fundamental pillar in creating a stable and sustainable environment for economic growth. It encompasses various aspects that ensure transparency, accountability, and effectiveness in both public administration and the private sector. In this discussion, we will review several key indicators that reflect good governance, including government effectiveness, political stability, and the corruption perception index.

Year	Country	Government effectiveness	Politic Stability	Corruption perception index
2019	Singapura	2.231719255	1.480305552	85
	Korea Selatan	1.33259666	0.546021044	59
	Taiwan	1.395841718	0.788220286	65
	Hong Kong	1.707074881	-	76
	Australia	1.538760424	0.917313099	77
	China	0.544903398	-	41
	New Zealand	1.632602453	1.415749431	87
	Japan	1.550190926	1.019695044	73
	Malaysia	0.967821717	0.146066397	53
	Thailand	0.260645479	-	36
	Indonesia	0.138761014	-	40
	India	0.130844653	-	41
	Philippines	0.059996031	-	34
	Mongolia	-0.234557524	0.636659682	35

Year	Country	Government effectiveness	Politic Stability	Corruption perception index
	Singapura	2.284572601	1.438414216	85
	Korea Selatan	1.370355129	0.608559489	61
	Taiwan	1.539397478	0.755755544	65
	Hong Kong	1.618590951	0.05667685	77
	Australia	1.57377553	0.861676931	77
	China	0.644194782	-	42
	New Zealand	1.53899622	1.467778444	88

2020	Japan	1.547667146	1.026066899	74
	Malaysia	1.02247262	0.124463096	51
	Thailand	0.202014089	-	36
	Indonesia	0.317363322	-	37
	India	0.375041097	-	40
	Philippines	0.068197176	-	34
	Mongolia	-0.420242369	0.717772186	35

Year	Country	Government effectiveness	Politic Stability	Corruption perception index
2021	Singapura	2.250112772	1.442324996	85
	Korea Selatan	1.367321134	0.629525959	62
	Taiwan	1.432102442	0.766792595	68
	Hong Kong	1.489806294	0.263209611	76
	Australia	1.473996282	0.835315883	73
	China	0.809331775	-	45
	New Zealand	1.306894898	1.395236254	88
	Japan	1.362755299	1.015356421	73
	Malaysia	0.95354408	0.058753986	48
	Thailand	0.22119087	-	35
	Indonesia	0.347363114	-	38
	India	0.25085631	-	40
	Philippines	0.035662487	-	33
	Mongolia	-0.51641947	0.705798924	35

Year	Country	Government effectiveness	Politic Stability	Corruption perception index
2022	Singapura	2.144825935	1.45994246	83
	Korea Selatan	1.349573493	0.56241101	63
	Taiwan	1.403517604	0.754162133	68
	Hong Kong	1.590222836	0.61155504	76
	Australia	1.528874636	0.933572054	75
	China	0.495032012	-	45
	New Zealand	1.340531945	1.31238234	87
	Japan	1.619746804	1.073910952	73
	Malaysia	0.993270576	0.140358165	47
	Thailand	0.128285065	-	36
	Indonesia	0.436999291	-	34
India	0.370331407	-	40	

	Philippines	0.064777203	-	33
	Mongolia	-0.424908698	0.533999085	33
Year	Country	Government effectiveness	Politic Stability	Corruption perception index
2023	Singapura	2.238071871	1.526334953	83
	Korea Selatan	1.443444932	0.736214483	63
	Taiwan	1.473164821	0.748260645	67
	Hong Kong	1.561586658	0.05251887	75
	Australia	1.495303567	0.850909718	75
	China	0.768264997	-	42
	New Zealand	1.310729607	1.383101257	85
	Japan	1.468184805	1.053973556	73
	Malaysia	0.961060528	0.115773191	50
	Thailand	0.199250539	-	35
	Indonesia	0.499798243	-	34
	India	0.451361438	-	39
	Philippines	-0.020328658	-	34
	Mongolia	-0.358257899	0.679332352	33

In 2019, Government Effectiveness: Singapore had the highest score (2.231719255), followed by Hong Kong (1.707074881) and New Zealand (1.632602453). Indonesia ranked lower with a score of 0.138761014. Political Stability: Singapore (1.480305552) and New Zealand (1.415749431) were at the top, while Indonesia had a negative score (-0.502156675), indicating political instability. Corruption Perception Index: New Zealand led with a score of 87, while Indonesia had a score of 40. In 2020, Government Effectiveness: Singapore remained the leader (2.284572601), followed by Taiwan (1.539397478) and South Korea (1.370355129). Indonesia showed improvement with a score of 0.317363322. Political Stability: Singapore (1.438414216) and New Zealand (1.467778444) remained at the top, while Indonesia showed slight improvement with a score of -0.462322682. Corruption Perception Index: New Zealand continued to lead with a score of 88, while Indonesia slightly declined to 37. In 2021, Government Effectiveness: Singapore remained in first place (2.250112772), followed by Taiwan (1.432102442) and South Korea (1.367321134). Indonesia showed a slight improvement with a score of 0.347363114. Political Stability: Singapore (1.442324996) and New Zealand (1.395236254) remained at the top, while Indonesia showed a slight decline with a score of -0.531467199. Corruption Perception Index: New Zealand continued to lead with a score of 88, while Indonesia showed a slight improvement to 38.

In 2022, Government Effectiveness: Singapore remained in first place (2.144825935), followed by Taiwan (1.403517604) and South Korea (1.349573493). Indonesia showed slight improvement with a score of 0.436999291. Political Stability: Singapore (1.45994246) and New Zealand (1.31238234) remained at the top, while Indonesia showed slight improvement with a score of -0.439423859. Corruption Perception Index: New Zealand continued to lead with a score of 87, while Indonesia showed a decline to 34. In 2023, Government Effectiveness: Singapore remained in first place (2.238071871), followed by South Korea (1.443444932) and Taiwan (1.473164821). Indonesia showed slight improvement with a score of 0.499798243. Political Stability: Singapore

(1.526334953) and New Zealand (1.383101257) remained at the top, while Indonesia showed slight improvement with a score of -0.483155688. Corruption Perception Index: New Zealand continued to lead with a score of 85, while Indonesia showed slight improvement to 34. During the period from 2019 to 2023, Singapore consistently recorded the highest scores in government effectiveness and political stability, reflecting excellent governance. New Zealand also demonstrated strong governance performance. Indonesia, although ranked lower, showed a trend of improvement across various governance indicators year by year, reflecting progress in government management and political stability. Through this analysis, we can understand how Indonesia compares with other Asia-Pacific countries in implementing good governance, which in turn supports economic resilience and progress.

3.4 Social development

Social development is a vital component in creating a healthy, educated, and productive society. This development encompasses various aspects that ensure equitable access to healthcare and education services, ultimately enhancing the quality of life and the capabilities of human resources.

Year	Country	Health and primary education	Higher education and training
2019	Singapura	6.888867342	6.34191501
	Korea Selatan	6.449045422	5.31207657
	Taiwan	5.630283036	4.55218008
	Hong Kong	6.399861487	5.72576304
	Australia	6.576010371	5.8794717
	China	6.347180264	4.72794049
	New Zealand	6.67455668	5.90545565
	Japan	6.752997179	5.43500227
	Malaysia	5.857485506	4.58182945
	Thailand	6.540429751	5.63661006
	Indonesia	5.613522863	4.03824654
	India	5.562780195	4.5670172
	Philippines	5.591535133	4.608632
	Mongolia	6.293094775	4.91172237

Year	Country	Health and primary education	Higher education and training
2020	Singapura	6.934942945	6.41058003
	Korea Selatan	6.474424789	5.29633715
	Taiwan	5.63868982	4.57624281
	Hong Kong	6.435387462	5.8025294
	Australia	6.599938141	5.91923591
	China	6.398655609	4.79291264
	New Zealand	6.690222311	5.94405718
	Japan	6.79878007	5.45898854
	Malaysia	5.924398169	4.66095663
	Thailand	6.55785696	5.64097416
	Indonesia	5.670380396	4.04536939

India	5.571142944	4.61835135
Philippines	5.627656319	4.6617259
Mongolia	6.313469347	4.93445607

Year	Country	Health and primary education	Higher education and training
2021	Singapura	6.981018547	6.47924505
	Korea Selatan	6.499804156	5.28059773
	Taiwan	5.647096604	4.60030555
	Hong Kong	6.470913438	5.87929577
	Australia	6.623865911	5.95900013
	China	6.450130954	4.8578848
	New Zealand	6.705887942	5.98265871
	Japan	6.844562962	5.48297482
	Malaysia	5.991310833	4.7400838
	Thailand	6.575284169	5.64533826
	Indonesia	5.727237929	4.05249224
	India	5.579505694	4.6696855
	Philippines	5.663777506	4.7148198
	Mongolia	6.333843919	4.95718977

Year	Country	Health and primary education	Higher education and training
2022	Singapura	7.02709415	6.54791007
	Korea Selatan	6.525183523	5.26485832
	Taiwan	5.655503388	4.62436829
	Hong Kong	6.506439414	5.95606213
	Australia	6.647793681	5.99876435
	China	6.501606299	4.92285695
	New Zealand	6.721553573	6.02126023
	Japan	6.890345853	5.50696109
	Malaysia	6.058223496	4.81921098
	Thailand	6.592711378	5.64970236
	Indonesia	5.784095463	4.05961509
	India	5.587868444	4.72101965
	Philippines	5.699898693	4.76791371
	Mongolia	6.354218491	4.97992347

Year	Country	Health and primary education	Higher education and training
2023	Singapura	7.073169752	6.61657509
	Korea Selatan	6.55056289	5.2491189
	Taiwan	5.663910172	4.64843102
	Hong Kong	6.541965389	6.0328285
	Australia	6.671721451	6.03852856
	China	6.553081645	4.98782911

New Zealand	6.737219204	6.05986176
Japan	6.936128744	5.53094737
Malaysia	6.125136159	4.89833815
Thailand	6.610138587	5.65406646
Indonesia	5.840952996	4.06673795
India	5.596231193	4.7723538
Philippines	5.736019879	4.82100761
Mongolia	6.374593063	5.00265717

In 2019, Health and Primary Education: Singapore had the highest score (6.888867342), followed by New Zealand (6.67455668) and Japan (6.752997179). Indonesia ranked lower with a score of 5.613522863. Higher Education and Training: Singapore also led this indicator with a score of (6.34191501), followed by Australia (5.8794717) and New Zealand (5.90545565). Indonesia had a lower score (4.03824654). In 2020, Health and Primary Education: Singapore remained the leader with a score of (6.934942945), followed by New Zealand (6.690222311) and Japan (6.79878007). Indonesia showed a slight improvement with a score of 5.670380396. Higher Education and Training: Singapore remained in first place with a score of (6.41058003), followed by Australia (5.91923591) and New Zealand (5.94405718). Indonesia showed a slight improvement with a score of 4.04536939. In 2021, Health and Primary Education: Singapore remained the leader with a score of (6.981018547), followed by New Zealand (6.705887942) and Japan (6.844562962). Indonesia showed improvement with a score of 5.727237929. Higher Education and Training: Singapore remained in first place with a score of (6.47924505), followed by Australia (5.95900013) and New Zealand (5.98265871). Indonesia showed a slight improvement with a score of 4.05249224.

In 2022, Health and Primary Education: Singapore remained in the lead with a score of (7.02709415), followed by New Zealand (6.721553573) and Japan (6.890345853). Indonesia showed improvement with a score of 5.784095463. Higher Education and Training: Singapore remained in first place with a score of (6.54791007), followed by Australia (5.99876435) and New Zealand (6.02126023). Indonesia showed a slight improvement with a score of 4.05961509. In 2023, Health and Primary Education: Singapore remained in first place with a score of (7.073169752), followed by New Zealand (6.737219204) and Japan (6.936128744). Indonesia showed improvement with a score of 5.840952996. Higher Education and Training: Singapore remained in first place with a score of (6.61657509), followed by Australia (6.03852856) and New Zealand (6.05986176). Indonesia showed a slight improvement with a score of 4.06673795. During the period from 2019 to 2023, Singapore consistently recorded the highest scores in both social development indicators, reflecting high quality in health and primary education, as well as in higher education and training. New Zealand and Japan also demonstrated strong performance in these indicators. Indonesia, although ranked lower, showed a trend of improvement in both social development indicators year by year, reflecting progress in the health and education sectors. Based on the data above, key indicators reflecting social development will be reviewed, namely the Health and Primary Education Score and the Higher Education and Training Score. Through this analysis, we can understand how Indonesia compares with other Asia-Pacific countries in achieving inclusive and sustainable social development.

3.5 Economic resilience index

In this section, we present the Economic Resilience Index (ERI) scores for Indonesia and selected Asia-Pacific countries, calculated based on the key indicators of macroeconomic stability, microeconomic market efficiency, good governance, and social development. The ERI provides a comprehensive measure of a country's ability to withstand

and recover from economic shocks, reflecting its overall economic robustness. The rankings derived from the ERI scores highlight the relative positions of these countries in terms of economic resilience. Through this analysis, we can assess Indonesia's strengths and weaknesses in comparison to its regional counterparts, offering insights into areas where improvements can be made to enhance economic stability and sustainability.

Year	Country	Macro-Economic Stability	Micro-Economic Efficiency	Good Governance	Social Development	Economic Resilience Index	Ranking
2019	Singapura	0.146205364	0.330023982	0.219403057	0.112	0.807632403	1
	New Zealand	0.140882287	0.299409657	0.202220274	0.092339854	0.734852072	2
	Hong Kong	0.178252208	0.315068285	0.138521352	0.076371455	0.7082133	3
	Australia	0.133665448	0.190856841	0.170098517	0.087546647	0.582167452	4
	Japan	0.050887027	0.222675107	0.168000541	0.08421608	0.525778756	5
	Taiwan	0.072584134	0.241110519	0.145066695	0.015343849	0.474105197	6
	Mongolia	0.2720491	0.052988008	0.049518135	0.052074192	0.426629435	7
	Malaysia	0.060105432	0.233366274	0.095694263	0.025659245	0.414825215	8
	Korea Selatan	0.069340013	0.132011596	0.127333968	0.068392142	0.397077719	9
	Thailand	0.049229082	0.160969085	0.031094519	0.080140358	0.321433044	10
	China	0.068823048	0.148458299	0.053741452	0.049890631	0.32091343	11
	India	0.127279995	0.069405892	0.024790927	0.012853914	0.234330729	12
	Indonesia	0.109970075	0.066856288	0.032693854	0.002142838	0.211663055	13
	Philippines	0.090167065	0.076388751	0.008845886	0.015079837	0.190481539	14

Year	Country	Macro-Economic Stability	Micro-Economic Efficiency	Good Governance	Social Development	Economic Resilience Index	Ranking
2020	Singapura	0.112735192	0.325057351	0.217141268	0.112	0.766933811	1
	New Zealand	0.115650957	0.302063312	0.201781868	0.090905699	0.710401835	2
	Hong Kong	0.135406432	0.311699652	0.143608187	0.077090849	0.66780512	3
	Australia	0.158747407	0.187675236	0.16820402	0.086610792	0.601237455	4
	Japan	0.066039349	0.227519049	0.168647663	0.083878523	0.546084583	5
	Taiwan	0.116135072	0.254293486	0.147405759	0.015342837	0.533177154	6
	Korea Selatan	0.121595606	0.133070786	0.132568703	0.066708909	0.453944004	7
	Malaysia	0.088342914	0.236597475	0.093797726	0.029080249	0.447818364	8
	China	0.109974012	0.153674353	0.051926248	0.051678346	0.367252958	9
	Thailand	0.080229086	0.157017012	0.028214528	0.078294591	0.343755217	10
	Mongolia	0.14861198	0.064023079	0.051378685	0.051531708	0.315545452	11
	India	0.192693218	0.073880948	0.030006818	0.013566229	0.310147213	12
	Philippines	0.165508311	0.081452909	0.01537775	0.016913726	0.279252696	13
	Indonesia	0.131478293	0.072646098	0.036464332	0.004074862	0.244663585	14

Year	Country	Macro-Economic Stability	Micro-Economic Efficiency	Good Governance	Social Development	Economic Resilience Index	Ranking
2021	Singapura	0.191117819	0.323300954	0.218158036	0.112	0.84457681	1
	New Zealand	0.161664994	0.303964471	0.195508606	0.089547377	0.750685448	2
	Hong Kong	0.205476357	0.310808429	0.149689479	0.077773329	0.743747593	3
	Australia	0.120587136	0.184162589	0.162690342	0.08572409	0.553164157	4
	Taiwan	0.124218714	0.260721236	0.152743742	0.015342115	0.553025807	5
	Japan	0.065834101	0.23017357	0.165208093	0.083557633	0.544773397	6
	Malaysia	0.101702482	0.240815399	0.091385057	0.032321359	0.466224297	7
	Korea Selatan	0.095609567	0.133643971	0.138739284	0.065112092	0.433104914	8
	Mongolia	0.224565023	0.070876641	0.054276142	0.051017853	0.400735659	9
	China	0.085602718	0.167415068	0.065917052	0.053372741	0.37230758	10

	India	0.166702371	0.083646476	0.038881937	0.014242416	0.303473199	11
	Thailand	0.020048196	0.159342917	0.035117446	0.076544824	0.291053383	12
	Indonesia	0.127417846	0.076533843	0.043672678	0.005902911	0.253527278	13
	Philippines	0.130503389	0.086136359	0.014780418	0.018651173	0.250071339	14
<i>Year</i>	<i>Country</i>	Macro-Economic Stability	Micro-Economic Efficiency	Good Governance	Social Development	Economic Resilience Index	Ranking
2022	Singapura	0.1835614	0.32049876	0.21671163	0.112	0.83277179	1
	New Zealand	0.127060587	0.304739878	0.193986565	0.088259024	0.714046054	2
	Hong Kong	0.151494444	0.308939664	0.162207382	0.078421666	0.701063156	3
	Australia	0.14980207	0.179811643	0.17004384	0.084882763	0.584540316	4
	Taiwan	0.121260734	0.265929878	0.15071424	0.015341643	0.553246496	5
	Japan	0.048218274	0.231720134	0.174703396	0.083252207	0.537894012	6
	Malaysia	0.072516463	0.244453266	0.089164389	0.035396413	0.441530531	7
	Mongolia	0.251500186	0.077698507	0.042504342	0.050530416	0.42223345	8
	Korea Selatan	0.049890564	0.134462554	0.135765458	0.063595198	0.383713774	9
	China	0.057519748	0.181036332	0.052242103	0.054980945	0.345779128	10
	Thailand	0.052076271	0.160955528	0.03130334	0.074883751	0.319218891	11
	India	0.125525966	0.09402498	0.03744283	0.014885155	0.271878931	12
	Indonesia	0.13661206	0.080061174	0.035538174	0.007635156	0.259846564	13
	Philippines	0.082737974	0.089878563	0.014113938	0.020299598	0.207030074	14
<i>Year</i>	<i>Country</i>	Macro-Economic Stability	Micro-Economic Efficiency	Good Governance	Social Development	Economic Resilience Index	Ranking
2023	Singapura	0.199432174	0.31784449	0.219349308	0.112	0.848625972	1
	New Zealand	0.137214665	0.305634709	0.191303284	0.087035366	0.721188025	2
	Hong Kong	0.145998794	0.307249479	0.142968018	0.079038361	0.675254652	3
	Australia	0.175754107	0.175788947	0.165827263	0.084083412	0.601453729	4
	Japan	0.078335363	0.233244921	0.168499927	0.082961157	0.563041368	5
	Taiwan	0.117706308	0.271193126	0.150618816	0.015341386	0.554859637	6
	Malaysia	0.075451868	0.248184848	0.092188924	0.038317862	0.454143502	7
	Korea Selatan	0.075931859	0.13533777	0.143700175	0.062152369	0.417122174	8
	Mongolia	0.204020523	0.084341991	0.047808921	0.050067411	0.386238846	9
	China	0.049506156	0.195014854	0.060333111	0.056509376	0.361363497	10
	Thailand	0.054907528	0.162749442	0.036118809	0.073304791	0.32708057	11
	India	0.129944972	0.105033747	0.040291802	0.015496867	0.290767388	12
	Indonesia	0.137909436	0.08381086	0.037674073	0.009278938	0.268673308	13
	Philippines	0.094806158	0.093499136	0.011064519	0.021865677	0.221235489	14

Over the period from 2019 to 2023, Singapore consistently ranked at the top of the Economic Resilience Index among the Asia-Pacific countries included in the analysis. This consistent performance is primarily driven by Singapore's strong scores in macroeconomic stability, microeconomic efficiency, and good governance. Singapore's high ERI score reflects its ability to maintain robust economic fundamentals and effective governance structures, which have enabled the country to withstand and recover swiftly from economic shocks. New Zealand and Hong Kong also consistently ranked among the top three countries, demonstrating strong economic resilience. New Zealand's success can be attributed to its high scores in social development and good governance, which are critical in building a resilient economy. Similarly, Hong Kong's strong performance in microeconomic efficiency

and governance contributed to its high ranking, despite some fluctuations in its macroeconomic stability over the years. Australia consistently held a strong position, usually ranking fourth, which reflects its balanced performance across all indicators. Japan, although slightly lower in ranking compared to Singapore, New Zealand, and Hong Kong, maintained a solid position, particularly excelling in social development and governance. In contrast, Indonesia, despite showing some improvement over the years, consistently ranked near the bottom of the index. The country's relatively lower scores in microeconomic efficiency, governance, and social development highlight areas of weakness that need to be addressed to enhance its economic resilience.

However, Indonesia's gradual improvement in these areas indicates positive momentum towards strengthening its economic foundations. Countries like the Philippines and India also ranked lower on the ERI, facing challenges similar to Indonesia in terms of microeconomic efficiency and governance. These countries need to focus on improving these key areas to enhance their overall economic resilience. Throughout the five-year period, the data reveals a clear disparity in economic resilience between the top-performing countries like Singapore, New Zealand, and Hong Kong, and the lower-ranking countries such as Indonesia, India, and the Philippines. This disparity underscores the importance of targeted policy interventions to address specific weaknesses in macroeconomic stability, governance, and social development to improve the economic resilience of the lower-ranked countries. Overall, the ERI rankings provide valuable insights into the economic resilience of countries in the Asia-Pacific region, highlighting both strengths and areas for improvement. For Indonesia, the findings suggest a need for continued efforts to strengthen governance, improve microeconomic efficiency, and enhance social development to achieve greater economic resilience in the face of future challenges.

3.6 Overview on Indonesia's economic resilience

Based on the Economic Resilience Index (ERI) data from 2019 to 2023, Indonesia consistently underperformed in several key areas, which have significantly impacted its overall economic resilience. Below, I will highlight and critique the specific areas where Indonesia has consistently performed poorly and identify areas that require urgent improvement:

Areas of persistent underperformance: (1) Microeconomic Efficiency (Consistent Weakness) Indonesia's scores in microeconomic efficiency have remained low throughout the period, reflecting significant challenges in the efficiency of its goods and labor markets, as well as in the soundness of its financial institutions. This inefficiency hampers the optimal allocation of resources, reduces competitiveness, and slows down economic growth. The persistently low performance in this area suggests structural issues in the regulatory environment, market practices, and perhaps a lack of sufficient incentives for innovation and competition. To improve, Indonesia needs to streamline regulations, enhance market openness, and foster a more competitive business environment; (2) Good Governance (Consistent Weakness) Indonesia's governance scores have been consistently low, indicating ongoing issues with transparency, accountability, and the effectiveness of public institutions. These governance challenges contribute to political instability and erode public trust in government actions. The low scores in governance reflect deep-rooted problems such as corruption, inefficiency in public administration, and weak rule of law. Indonesia must prioritize anti-corruption measures, strengthen institutional frameworks, and improve the effectiveness of governance at all levels to build a more stable and resilient economy.

Areas needing improvement: (1) Social Development (Need for Improvement) Although Indonesia has shown some improvement in social development indicators, its scores remain lower compared to more resilient economies like Singapore and New Zealand. Access to quality healthcare, primary education, and higher education and training remains uneven across the country. The relatively low performance in social development suggests that Indonesia has not fully capitalized on its human capital potential. To improve,

the country needs to invest more in education and healthcare, ensuring that these services are accessible and of high quality nationwide. Enhancing social development is crucial for building a skilled and healthy workforce, which is a cornerstone of long-term economic resilience; (2) Macroeconomic Stability (Need for Improvement) While Indonesia's performance in macroeconomic stability is relatively better compared to other areas, there is still room for improvement. Issues such as fiscal deficits, external debt management, and inflation control remain challenges that can undermine economic stability. To enhance macroeconomic stability, Indonesia needs to implement more prudent fiscal policies, improve debt management strategies, and maintain low and stable inflation rates. Strengthening macroeconomic stability will provide a more solid foundation for resilience against external shocks.

In summary, Indonesia's persistent underperformance in microeconomic efficiency and good governance is a significant barrier to achieving stronger economic resilience. These areas demand urgent reforms to unlock the country's full potential. Additionally, while there has been some progress in social development and macroeconomic stability, continued efforts are needed to elevate these areas to a level comparable with the more resilient economies in the Asia-Pacific region. By addressing these weaknesses, Indonesia can enhance its economic resilience and better position itself to withstand future economic challenges.

4. Conclusion

This study provides a comprehensive comparative analysis of Indonesia's economic resilience within the context of the Asia-Pacific region from 2019 to 2023. The findings reveal that Indonesia consistently ranks lower in the Economic Resilience Index (ERI) compared to its regional counterparts, particularly in areas of microeconomic efficiency, governance, and social development. While Indonesia has shown some improvements over the years, these gains have not been sufficient to elevate its standing significantly. The country's persistent challenges in market efficiency, governance, and human capital development indicate structural weaknesses that need to be addressed to enhance its economic resilience. To improve, Indonesia must focus on regulatory reforms, enhancing governance quality, and investing in human capital to build a more robust and resilient economy capable of withstanding future shocks.

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The authors declare no conflict of interest.

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Biographies of Author(s)

Warsito, Analis Intelijen Strategik, Kantor Pusat Direktorat Jenderal Pajak.

- Email: warz.aj@gmail.com
- ORCID: N/A
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage:

Heru Subiyantoro, Program studi S3-Ilmu Ekonomi, Universitas Borobudur.

- Email: palupi.ls@ui.ac.id
- ORCID: <https://orcid.org/0000-0002-4453-5715>
- Web of Science ResearcherID: [AAD-1443-2021](https://orcid.org/0000-0002-4453-5715)
- Scopus Author ID: [57222902196](https://orcid.org/0000-0002-4453-5715)
- Homepage: <https://sinta.kemdikbud.go.id/authors/profile/6648522>

