

## **THE IMPLICATONS OF QRIS CROSS-BORDER FOR THE DIGITAL ECONOMIC SOVEREIGNTY OF INDONESIA IN SOUTHEAST ASIA**

**Julang Aryowiloto**

Universitas Bali Internasional

[aryowilotoj@unbi.ac.id](mailto:aryowilotoj@unbi.ac.id)

**Komang Gita Meiliana**

Institut Teknologi dan Bisnis STIKOM Bali

[gitameiliana@stikombali.ac.id](mailto:gitameiliana@stikombali.ac.id)

**Unegbu Ekene Kelvin**

Universitas Bali Internasional

[unegbukelvin@unbi.ac.id](mailto:unegbukelvin@unbi.ac.id)

**Abstract:** This research aims to investigate the implications of QRIS Cross-Border as a digital payment method for Indonesia's digital economic sovereignty within Southeast Asia. The study specifically analyzes the implementation of QRIS Cross-Border in three countries, namely Thailand, Malaysia, and Singapore, given the significant positive trend evidenced by increasing transaction volumes. Grounded in the concept of economic sovereignty, this study analyzes Indonesia's strategic position within the regional digital economy, its potential to influence the digital economic landscape, and its contributions to the realization of the ASEAN Digital Masterplan 2025. The research employs a qualitative, explanatory approach to examine the relationship between QRIS Cross-Border and Indonesia's digital economic sovereignty in the region. Data for this study were sourced from various channels, including books, journal articles, reports, policy papers, and media publications, in both print and online formats. In conclusion, this study affirms that the implementation of QRIS Cross-Border has significant implications for Indonesia's digital economic sovereignty. Indonesia's strategic position and bargaining power within the regional digital economy have been enhanced. Furthermore, through QRIS Cross-Border, Indonesia is well-positioned to play a crucial role in regional digital economy initiatives and has a significant opportunity to shape the future of Southeast Asia's digital economic landscape.

**Keywords:** *QRIS, QRIS Cross-Border, Digital Economy, Economic Sovereignty, Southeast Asia.*

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## INTRODUCTION

Digital transformation has become a primary driving force reshaping the global economic landscape in the 21st century. The Southeast Asian region, with its substantial population, rapidly increasing internet penetration, and dynamic middle-class growth, has emerged as one of the most competitive and innovative arenas in the global digital economy<sup>1</sup>. The proliferation of financial technology (fintech) has fundamentally transformed the modality by which commercial transactions, remittances, and financial services are accessed by hundreds of millions of inhabitants within this region. This phenomenon not only cultivates significant economic opportunities but also engenders novel and complex challenges pertaining to regulation, cybersecurity, and, most critically, the economic sovereignty of nation-states in the digital epoch<sup>2</sup>.

Amidst a landscape dominated by global technology platforms and established international payment systems, such as Visa and Mastercard, nations in Southeast Asia are formulating strategies to assert greater control and influence over their domestic and regional digital ecosystems. One of the most significant manifestations of this endeavor is the development of interoperable and integrated retail payment systems at the regional level. Initiatives such as the Regional Payment Connectivity (RPC) aim to create a more efficient, inclusive, and resilient regional financial ecosystem by

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<sup>1</sup> World Bank. 2019. "The Digital Economy in Southeast Asia: Strengthening the Foundations for Future Growth." World Bank.  
<https://hdl.handle.net/10986/31803>.

<sup>2</sup> H. Primawanti, W. Dermawan, R. M. N. Izziti, and Y. N. Pasha, "Digital Transformation in the Southeast Asian Region: A Study on ASEAN Cooperation in the Framework of ASEAN Smart Cities Network," in Proceedings of the International Conference on Business, Economics, Social Sciences, and Humanities—Humanities and Social Sciences Track (ICOBEST-HSS 2024), ed. L. Warlina and S. Luckyardi, vol. 854 (Atlantis Press SARL, 2024), 175–185,  
[https://doi.org/10.2991/978-2-38476-269-9\\_16](https://doi.org/10.2991/978-2-38476-269-9_16)

promoting the use of local currencies for transaction settlements, thereby reducing dependence on dominant currencies like the U.S. Dollar<sup>3</sup>.

It is within this context that the QRIS Cross-Border initiative, pioneered by Bank Indonesia, emerges as a highly relevant and strategic case study. QRIS, originally conceived to unify the fragmented landscape of QR payment systems within the Indonesian domestic market, has now been expanded to facilitate cross-border transactions with neighboring countries such as Thailand, Malaysia, and Singapore<sup>4</sup>. This initiative is not merely a technical innovation but is instead an instrument of foreign policy aimed at projecting national technological standards onto the regional stage. By promoting the adoption of its payment infrastructure beyond national borders, Indonesia is actively endeavoring to construct an alternative regional financial architecture centered on its interests. This move directly intersects with the concept of digital economic sovereignty, which can be defined as a state's capacity to autonomously regulate, control, and derive benefits from the infrastructure, data, and economic transaction flows occurring within its digital space<sup>5</sup>. This sovereignty encompasses the capacity to establish technical standards, safeguard citizen data, and ensure that the profits derived from the digital economy are equitably distributed domestically, free from undue intervention or domination by either state or foreign corporate actors<sup>6</sup>.

Prior research concerning QRIS Cross-Border and the digital economy in Southeast Asia has extensively explored various critical aspects. For instance, existing studies have identified QRIS as an instrument of

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<sup>3</sup> ASEAN Secretariat. (2024). ASEAN: Enhancing Connectivity and Resilience (No. 352.1159; p. 62). ASEAN.

<sup>4</sup> Interactive QRIS. (2025). Ekspansi QRIS Lintas Negara, Sebaran dalam 9 Negara per Agustus 2025. <https://qris.interactive.co.id/homepage/blog-detail.php?lang=en&page=MjE4-ekspansi-qris-lintas-negara-sebaran-dalam-9-negara-per-agustus-2025>

<sup>5</sup> Carr, M. (2016). US power and the Internet in international relations: The irony of the Information Age. Palgrave Macmillan.

<sup>6</sup> Drezner, D. W. (2012). The Irony of Global Economic Governance: The System Worked [Working Paper]. Council on Foreign Relations.

diplomacy utilized by Indonesia in the digitalization of payments across Southeast Asia, citing its success in compelling neighboring countries to adopt the QRIS framework despite already possessing their own digital payment methods<sup>7</sup>. Other studies have emphasized the benefits of Cross-Border QRIS in facilitating tourism, trade, and remittances through the Local Currency Settlement (LCS) mechanism, which is aimed at reducing transaction costs and dependence on the U.S. Dollar<sup>8</sup>. Additionally, from the geopolitical perspective of digital infrastructure, research has analyzed how a nation such as China projects its influence through digital platforms like Alipay and WeChat Pay in Southeast Asia<sup>9</sup>. Finally, there is also research that reviews how domestic digital infrastructure can bolster a nation's sovereignty. For instance, studies on QRIS and the National Payment Gateway (GPN) in Indonesia highlight the importance of onshore transaction processing for data security and for achieving independence from global payment networks such as Visa and Mastercard<sup>10</sup>. As another illustration, research on the Unified Payments Interface (UPI) in India shows how a digital public infrastructure can become the foundation for data and economic sovereignty<sup>11</sup>.

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<sup>7</sup> Aryowiloto, J., Numadi, K. R., & Manggo, T. N. (2024). QRIS Cross-Border: Indonesia's Soft Power Diplomacy Instrument in Payment Digitalization in Southeast Asia. *WIMAYA*, 5(02), 108–121.  
<https://doi.org/10.33005/wimaya.v5i02.168>

<sup>8</sup> Bustami, S. Y., & Ramdiana, L. R. (2024). ASEAN De-dollarization Strategy to Reduce Dependence on the US Dollar. *Proceedings of Sunan Ampel International Conference of Political and Social Sciences*, 2, 362–382.  
<https://doi.org/10.15642/saicopss.2024.2..362-382>

<sup>9</sup> Rabe, W., & Kostka, G. (2023). China's growing digital reach: Explaining citizens' high approval rates of fintech investments in Southeast Asia. *Review of International Political Economy*, 30(3), 1098–1124.  
<https://doi.org/10.1080/09692290.2022.2044884>

<sup>10</sup> Agustiana, A., Putri, T. M., Nurvianti, R. A., Utami, L. D., Soliha, I., & Syahwildan, M. (2025). Analisis Kritis QRIS dan GPN dalam Memperkuat Kedaulatan Ekonomi Digital Indonesia (Tinjauan Laporan USTR 2025). *Jurnal IKRAITH-EKONOMIKA*, 8(2), 708–720.

<sup>11</sup> Raghavan, V., Jain, S., & Varma, P. (2019). India stack—Digital infrastructure as a public good. *Communications of the ACM*, 62(11), 76–81.  
<https://doi.org/10.1145/3355625>

Based on the studies, a discernible gap exists in the literature that specifically analyzes the use of a national payment standard like QRIS as an instrument for establishing a nation's digital economic sovereignty within a regional context. Most analyses tend to view cross-border payment systems purely through the lens of technical efficiency or trade facilitation. There remains a significant scarcity of research into how a developing nation such as Indonesia leverages its fintech infrastructure to shape the regional digital economic order and assert its sovereignty. Therefore, this research aims to fill that void. It poses the strategic question of how Indonesia is utilizing the expansion of QRIS Cross-Border as an instrument to construct and affirm its digital economic sovereignty in the Southeast Asian region.

## METHOD

This study employs a qualitative approach with an explanatory case study design. The qualitative method was selected to gain a deep, contextual, and holistic understanding of a contemporary phenomenon<sup>12</sup>. The explanatory nature of this research aims to clarify the cause-and-effect relationships between the variables under investigation<sup>13</sup> specifically how QRIS Cross-Border impacts Indonesia's digital economic sovereignty in the Southeast Asian region. To ensure the depth and validity of the findings, this research utilizes a combination of primary and secondary data, collected through interviews and literature review. Primary data were obtained via semi-structured, in-depth interviews with industry practitioners and academics specializing in international relations, the digital economy, and Southeast Asian studies. Secondary data sources include official policy documents, reports from international institutions, news articles, and academic

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<sup>12</sup> Creswell, J. W., & Poth, C. N. (2025). *Qualitative inquiry and research design: Choosing among five approaches* (Fifth edition. International student edition). Sage.

<sup>13</sup> Neuman, W. L. (2015). *Social research methods: Qualitative and quantitative approaches* (Indian edition, first impression). Pearson.

literature such as books, scholarly journal articles, and relevant research. In its analysis, the study applies the theory of economic sovereignty as an analytical tool to explain the implications of Cross-Border QRIS for Indonesia's digital economic sovereignty in the Southeast Asian region.

### **Economic Sovereignty**

A country's economic sovereignty is the objectification of the substantial components of sovereignty itself<sup>14</sup>. It is the capacity of a state to independently and effectively govern its economic life including its assets, data, and infrastructure to achieve its national interests without external coercion or domination. Traditionally, this concept centered on control over natural resources and monetary policy<sup>15</sup>. However, in the context of globalization and digitalization, its meaning has evolved significantly. The modern discourse on economic sovereignty is no longer about absolute independence, which is considered unrealistic in a deeply interconnected global economy. Instead, the focus has shifted toward strategic control over vital sectors and the ability to formulate independent economic policy. In other words, a state possesses the authority to determine its own economic destiny, even while actively participating in international trade and investment<sup>16</sup>. In addition to this shift, the concept of economic sovereignty has also undergone a transformation in step with the times. Notably, as the world entered the era of digitalization, economic sovereignty has transformed into digital economic sovereignty.

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<sup>14</sup> Richardson, M., & Stähler, F. (2019). International agreements, economic sovereignty and exit. *European Economic Review*, 120, 103326. <https://doi.org/10.1016/j.euroecorev.2019.103326>

<sup>15</sup> Schelly, C., Bessette, D., Brosemer, K., Gagnon, V., Arola, K. L., Fiss, A., Pearce, J. M., & Halvorsen, K. E. (2020). Energy policy for energy sovereignty: Can policy tools enhance energy sovereignty? *Solar Energy*, 205, 109–112. <https://doi.org/10.1016/j.solener.2020.05.056>

<sup>16</sup> Sapir, J. (2020). Basic Principles of Economic Sovereignty and the Question of the Forms of Its Exercise. *Studies on Russian Economic Development*, 31(2), 129–135. <https://doi.org/10.1134/S107570072002015X>

Digital economic sovereignty refers to a state's capacity to regulate and control the digital infrastructure, data flows, and technology platforms operating within its territory<sup>17</sup>. This concept emerged in response to the dominance of a handful of multinational technology corporations that control global data and digital infrastructure. Recent dynamics have closely linked economic sovereignty with techno-nationalism, an ideology which posits that technological mastery is a central element of national security, economic prosperity, and geopolitical influence<sup>18</sup>. To be economically sovereign in the international arena, nations no longer compete solely through trade, but also through technological dominance. In this context, economic sovereignty is exercised through what is known as economic statecraft, wherein economic instruments such as industrial policy, technology export controls, and standardization are utilized to achieve strategic objectives<sup>19</sup>.

To operationalize this framework for analysis, it is crucial to delineate these related, but distinct, concepts. If digital economic sovereignty is the ultimate goal, a state's capacity to govern its digital life<sup>20</sup> then techno-nationalism is the driving ideology<sup>21</sup>, or the core belief that national power is contingent on technological independence and dominance. Finally, economic statecraft<sup>22</sup> is the instrument or set of policy actions, such as the

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<sup>17</sup> Timmers, P. (2023). Sovereignty in the Digital Age. In *Introduction to Digital Humanism: A Textbook* (pp. 571–592). Springer Nature Switzerland.

<sup>18</sup> Youvan, D. C. (2024). *Techno-Nationalism vs. Global Collaboration: Navigating the New Reality in Diverse Industries*. Unpublished.  
<https://doi.org/10.13140/RG.2.2.22074.16329>

<sup>19</sup> Aggarwal, V. K., & Reddie, A. W. (2020). New Economic Statecraft: Industrial Policy in an Era of Strategic Competition. *Issues & Studies*, 56(02), 2040006.  
<https://doi.org/10.1142/S1013251120400068>

<sup>20</sup> Timmers, P. (2023). Sovereignty in the Digital Age. In *Introduction to Digital Humanism: A Textbook* (pp. 571–592). Springer Nature Switzerland.

<sup>21</sup> Youvan, D. C. (2024). *Techno-Nationalism vs. Global Collaboration: Navigating the New Reality in Diverse Industries*. Unpublished.  
<https://doi.org/10.13140/RG.2.2.22074.16329>

<sup>22</sup> Aggarwal, V. K., & Reddie, A. W. (2020). New Economic Statecraft: Industrial Policy in an Era of Strategic Competition. *Issues & Studies*, 56(02), 2040006.  
<https://doi.org/10.1142/S1013251120400068>

promotion of a national standard, used to translate techno-nationalist ideology into the reality of digital sovereignty. This study argues that the QRIS Cross-Border initiative is a textbook case of economic statecraft, driven by techno-nationalism, with the explicit goal of achieving digital economic sovereignty for Indonesia within the ASEAN region.

## RESULT

### Indonesia's Digital Economic Landscape: Pre- and Post-QRIS

Indonesia's digital economic landscape began to take shape in the 2010s with the emergence of various digital platforms, such as Gojek and Grab in the ride-hailing sector and Bukalapak and Tokopedia in e-commerce. The societal introduction of these platforms prompted a fundamental shift in public consumption patterns. Furthermore, another impact was the creation of new employment opportunities, which had the effect of increasing economic inclusivity<sup>23</sup>. Key factors contributing to the formation of Indonesia's early digital economic landscape were internet penetration and smartphone adoption. The Indonesian Internet Service Providers Association (APJII) reported that internet penetration stood at 24.23% in 2013 and increased annually, reaching 64.8% by 2019<sup>24</sup>. Concurrently, data from the 2023 National Socio-Economic Survey by BPS (Statistics Indonesia) indicates that smartphone usage has also grown at an average rate of 6.5% per year since 2016. The most significant growth occurred in 2017, reaching 25%, and by 2023, over 214.5 million Indonesians were using smartphones. This figure represents an increase from the 183.8 million users recorded during the pandemic<sup>25</sup>.

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<sup>23</sup> Huda, N., Ayu, D., & Septyarini, R. (2024). Outlook Ekonomi Digital 2025. Center of Economic and Law Studies (Celios).

<sup>24</sup> APJII. (2024). Survei Penetrasi Internet Indonesia 2024. Asosiasi Penyedia Jasa Internet Indonesia.

<sup>25</sup> BPS. (2023b). Survei Sosial Ekonomi Nasional 2023. Badan Pusat Statistik.



The primary pillars supporting Indonesia's digital economy included e-commerce, which peaked at approximately one billion U.S. dollars in investment in 2017; ride-hailing, driven by technological advancements and rising mobile application adoption; online travel agencies, which grew in popularity and displaced brick-and-mortar agencies; the trend of digital payments, which began to supplant ATMs and credit cards; and online lending, which recorded disbursements of 58.83 trillion rupiah in 2019<sup>26</sup>.

Meanwhile, investment in the digital sector grew slowly but surely. Indonesia, along with Singapore, became one of the two primary destinations for digital economy investors in Southeast Asia. In 2019, Indonesia received 27% of the total digital sector investment in the region. The e-commerce sector proved to be fertile ground for investment, attracting one billion U.S. dollars in 2017 alone. Alongside investment, regulation played a crucial role in developing the digital economic climate. Bank Indonesia (BI) issued Regulation No. 18/40/PBI/2016 concerning Payment Transaction Processing, followed by Regulation No. 19/12/PBI/2017 concerning Financial Technology. These regulations were designed to support secure and efficient digital payment transactions and foster digital economic growth without sacrificing transactional security or user data protection. An additional note on Indonesia's digital economic climate is the persistent digital divide and the disparity in digital access between urban and rural areas. In 2022, internet access in urban areas reached 90.9%, while in rural areas, it was only 80.54%, indicating a significant access gap of over 10%<sup>27</sup>.

Entering 2020, the trajectory of Indonesia's digitalization shifted due to the COVID-19 pandemic. The onset of the pandemic and its associated social distancing mandates compelled daily activities, spanning education, shopping, and work to move into the digital realm. This resulted in a surge in the use of online facilities. Within e-commerce, there was a drastic spike in users in 2020 as consumers turned to online shopping platforms for their

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<sup>26</sup> Huda, N., Ayu, D., & Septyarini, R. (2024). Outlook Ekonomi Digital 2025. Center of Economic and Law Studies (Celios).

<sup>27</sup> BPS. (2023a). Statistik Telekomunikasi Indonesia. Badan Pusat Statistik.

daily needs, which in turn boosted investment in the sector. A 2024 report from Dealroom shows that investment in e-commerce reached its highest peak in 2021 at 1.6 billion U.S. dollars<sup>28</sup>.

The pandemic accelerated the shift from offline to online finance. The use of e-money, mobile banking, and internet banking all showed significant growth trends, with e-money surging in 2020 and internet banking in 2022. The introduction of QRIS as a payment method also had a significant impact on strengthening the digital transaction infrastructure. As of the first half of 2025, the number of QRIS users in Indonesia had reached 57 million individuals and 39.3 million merchants. Meanwhile, abroad, through the QRIS Cross-Border initiative during the same period, Thailand recorded 900 thousand transactions valued at 435.7 billion rupiah, Malaysia saw 4 million transactions worth 1.2 trillion rupiah, and Singapore processed over 200 thousand transactions equivalent to 77.1 billion rupiah<sup>29</sup>.

The value of digital payment transactions is projected to continue its rapid increase, reaching 2,908.59 trillion rupiah by 2025<sup>30</sup>. Digital payments have become the turning point for post-pandemic digital acceleration. Consequently, the growth of fintech services has been exceptionally rapid, in turn accelerating financial inclusion. The Financial Services Authority (OJK) noted that monthly loan disbursements grew consistently from approximately 6.8 trillion rupiah in January 2020 to nearly 27.4 trillion rupiah by mid-2024. Total outstanding loans also increased from 13.5 trillion rupiah at the start of 2020 to nearly 69.5 trillion rupiah by mid-2024.

On the regulatory front, the government enacted Law No. 27 of 2022 concerning Personal Data Protection (PDP) to govern digital interactions and ensure transactional security. Additionally, the Ministry of Trade

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<sup>28</sup> Dealroom. (2024). Global Tech Update—Q1 2024.

<https://dealroom.co/reports/global-tech-update-q1-2024>.

<sup>29</sup> Tarigan, I. Y. (2025). BI Sebut Pengguna QRIS Tembus 57 Juta Orang per Semester I-2025. <https://keuangan.kontan.co.id/news/bi-sebut-pengguna-qr-is-tembus-57-juta-orang-per-semester-i-2025>

<sup>30</sup> Huda, N., Ayu, D., & Septyarini, R. (2024). Outlook Ekonomi Digital 2025. Center of Economic and Law Studies (Celios).

issued Regulation No. 31 of 2023 to protect consumers and ensure fair business competition in e-commerce, including setting a minimum price of 100 U.S. dollars for imported goods. However, the existence of these regulations has not created an ideal situation; despite clear legal frameworks, cases of personal data misuse, such as data breaches, continue to occur frequently. This aligns with a 2021 public perception survey by the Ministry of Communication and Information (Kominfo), which indicated that no less than 28.7% of Indonesians had experienced personal data misuse<sup>31</sup>. This issue is attributed to a digital literacy index that, despite improving, still shows the digital security pillar as its weakest component. This is compounded by Indonesia's financial literacy score of 57, which remains below the OECD standard average of 63<sup>32</sup>.

### **QRIS Cross-Border in Thailand, Malaysia, Singapura**

QRIS Cross-Border was first implemented in Thailand on August 17, 2021, as a pilot phase involving Bank Indonesia (BI) and the Bank of Thailand (BoT) as the primary monetary authorities. The agreement between BI and BoT was founded on the principle of mutual benefit, primarily to facilitate the growing number of Indonesian citizens visiting Thailand as tourists and workers, and to optimize economic revenue for Thailand from these Indonesian visitors. The implementation in Thailand was also a strategic initiative spearheaded by Indonesia within the framework of ASEAN's regional payment connectivity, with the main objective of promoting digital financial integration. Additional goals included creating a more efficient and inclusive cross-border payment system, fostering growth in the tourism sector and the digitalization of MSMEs, reducing transaction costs through a direct local currency exchange mechanism, and accelerating digital financial inclusion by standardizing infrastructure for international trade,

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<sup>31</sup> Kominfo. (2021). Persepsi Masyarakat terhadap Perlindungan Data Pribadi: Survei Nasional Tahun 2021. Kementerian Komunikasi dan Informasi.

<sup>32</sup> OECD. (2023). OECD/INFE 2023 International Survey of Adult Financial Literacy. Organisation for Economic Co-operation and Development.

remittances, retail payment systems, and capital markets<sup>33</sup>. However, prior to the launch of QRIS Cross-Border, financial cooperation between Indonesia and Thailand had already been established in 2017 under a Local Currency Settlement (LCS) framework, which promoted the use of local currencies in trade and investment transactions and aimed to reduce dependency on the U.S. Dollar by strengthening the Rupiah-Baht exchange rate<sup>34</sup>.

The technical implementation of QRIS Cross-Border in Thailand involved standardizing QRIS with Thailand's prevailing digital payment system, PromptPay. This standardization allows QRIS users from Indonesia to scan PromptPay codes in Thailand, and conversely, enables PromptPay users from Thailand to scan QRIS codes in Indonesia. Regarding the Rupiah-Baht exchange rate, a floating exchange rate mechanism is utilized. The parties involved in the implementation include banks and e-wallet companies. From the Indonesian side, participants include Bank Mandiri, BRI, BNI, BCA, Dana, LinkAja, ShopeePay, GoPay, and OVO, among others. From Thailand, entities such as Bangkok Bank, Bank of Ayudhya (Krungsri), and CIMB Thai Bank are involved. A key impact of this multi-stakeholder collaboration is that no transaction fees are charged to consumers for remittances<sup>35</sup>.

The application of QRIS Cross-Border had an immediate impact on cross-border transaction volumes between the two nations. From its launch until early 2023, transactions by Indonesian tourists in Thailand reached a value of 8.54 billion rupiah from a total of 14,555 transactions. Conversely, transactions by Thai tourists in Indonesia amounted to 114 million rupiah from 492 transactions. Subsequently, by May 2024, the volume of QRIS

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<sup>33</sup> Maharani, R. (2025). Indonesia's Economic Foreign Policy Towards Thailand on Cross-Border Payment. *Journal Of Global Strategic Studies*, 5(1), 122–141. <https://doi.org/10.36859/jgss.v5i1.3339>

<sup>34</sup> Syifa, S. R. (2024). Menuju Integrasi Ekonomi ASEAN: Implementasi Local Currency Settlement Antara Indonesia, Malaysia, Dan Thailand. *Jurnal Ilmiah Wahana Pendidikan*, 10(4), 808–816.

<sup>35</sup> Bank Indonesia, & Bank of Thailand. (2021). Indonesia and Thailand Launch Cross-border QR Payment Linkage [Joint Press Release].

Cross-Border usage in Thailand had reached 409,977 transactions with a value of approximately 175 billion rupiah<sup>36</sup>. This figure continued to climb, and by June 2025, the transaction volume had exceeded one million, equivalent to 437.54 billion rupiah<sup>37</sup>. On the merchant side in Indonesia, a merchant discount rate (MDR) of 0.3% is applied for micro-businesses and 0.7% for other transactions.

Following its successful implementation in Thailand, Malaysia became the next country for QRIS Cross-Border expansion, as part of a collaboration between BI and Bank Negara Malaysia (BNM). The implementation in Malaysia was divided into two phases: a trial phase in early 2022, followed by an official launch in May 2023 after a smooth operational assessment. To function in Malaysia, QRIS was integrated with DuitNow QR, the national QR code standard in Malaysia. The cooperation involved a wide range of stakeholders, from businesses and payment associations to banking institutions. All state-owned banks from both countries participated, along with several private banks such as Bank Permata, Bank Mega, CIMB Bank Berhad, and Hong Leong Bank<sup>38</sup>.

Since its launch, there has been a consistent upward trend in transaction volume using QRIS Cross-Border between Indonesia and Malaysia. From implementation until January 2024, transactions by Malaysian tourists in Indonesia reached a value of 20 billion rupiah from 73,300 transactions.

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<sup>36</sup> Santi, B. N., & Chalid, D. A. (2024). Analysis of the Factors Influencing the Intention to Use Cross-Border QRIS as A Payment Method. *Quantitative Economics and Management Studies*, 5(4), 844–861.

<https://doi.org/10.35877/454RI.qems2750>

<sup>37</sup> Kurniawan, P., & Achjari, D. (2024). Dynamic cross-border payment preferences: A qualitative study of Indonesian expatriates in Thailand and Malaysia. *Banks and Bank Systems*, 19(2), 115–125.

[https://doi.org/10.21511/bbs.19\(2\).2024.09](https://doi.org/10.21511/bbs.19(2).2024.09)

<sup>38</sup> Interactive QRIS. (2023, May 22). Belanja di Malaysia Sudah Bisa Pakai QRIS dan Kurs Langsung Terkonversi Secara Otomatis. Interactive QRIS.

<https://qris.interactive.co.id/homepage/qris-news-detail.php?lang=id&page=37&belanja-di-malaysia-sudah-bisa-pakai-qris-dan-kurs-langsung-terkonversi-secara-otomatis>

Conversely, Indonesian tourists in Malaysia recorded 11,500 transactions with a value of 3 billion rupiah. Six months later, by mid-2024, transactions were increasing by an average of 18% per month through September 2024<sup>39</sup>. This growth was significantly driven by intensive promotional efforts from BI regarding the convenience of transacting with QRIS Cross-Border.

It did not take long for BI to expand QRIS Cross-Border to another country after Thailand and Malaysia. The next nation was Singapore, which officially implemented the system in November 2023. Unlike the previous expansions, the move into Singapore had a very clear primary objective from the outset, as articulated in a joint media release by BI and the Monetary Authority of Singapore (MAS). The stated goal was to enhance economic connectivity between Indonesia and Singapore, which would ultimately lead to digital economic integration and the creation of a larger financial ecosystem. To realize this vision, QRIS was positioned as an initiative to facilitate MSME transactions between the two countries<sup>40</sup>. Additionally, the implementation serves to facilitate transactions for Indonesian tourists in Singapore by reducing cash payments and the need to exchange Rupiah for Singapore Dollars, as the QRIS feature automatically converts the transaction amount at the prevailing exchange rate.

In its implementation in Singapore, QRIS Cross-Border is integrated with Singapore's NETS QR code. This allows Indonesian tourists to scan NETS QR codes in Singapore, and Singaporean tourists to scan QRIS codes in Indonesia. This mechanism involves various financial institutions from both nations. In Singapore, UOB and OCBC were initial participants, later joined by DBS. From Indonesia, participating entities include Bank Mega,

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<sup>39</sup> Liman, U. S. (2024, February 21). BI: Nominal dan volume transaksi via QRIS dengan Malaysia naik. Antara News.  
<https://www.antaranews.com/berita/3976401/bi-nominal-dan-volume-transaksi-via-qr-is-dengan-malaysia-naik>

<sup>40</sup> Bank Indonesia, & Monetary Authority of Singapore. (2023). Launch of Cross-border QR Payments Linkage between Indonesia and Singapore.

Permata, CIMB, BCA, BPD Bali, BSI, Sinarmas, BRI, PT Netzme Kreasi Indonesia, and PT Espay Debit Indonesia Koe.

An interesting aspect of the BI and MAS collaboration, beyond the QRIS Cross-Border launch, was the signing of a Letter of Intent (LoI) to establish an LCS framework. This framework became operational in 2024 and serves to facilitate cross-border payment settlements for trade and investment using the respective local currencies of each country. This was implemented to stimulate business growth between the nations while mitigating exchange rate risks and transaction costs. This LoI was a follow-up to a Memorandum of Understanding (MoU) signed by both countries in 2022 concerning cooperation to promote bilateral transactions in local currencies<sup>41</sup>.

According to data from BI, the growth of QRIS Cross-Border transactions in Singapore has been significant. In November 2023, there were 2,648 transactions equivalent to 745 million rupiah. By December 2023, this more than doubled, with the transaction value reaching 1.989 billion rupiah from 5,967 transactions. By mid-2024, specifically in May, transactions had reached 40,900 with a nominal value of 13 billion rupiah<sup>42</sup>. BI's deputy governor, Filianingsih Hendarta, stated that the monthly growth of users from Singapore to Indonesia reached 261% in terms of transaction volume and 342% in nominal terms. The primary Indonesian regions for these transactions by Singaporean tourists include Bintan, Batam, and Jakarta<sup>43</sup>. This data, therefore, provides empirical evidence of sovereignty-in-action,

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<sup>41</sup> Azhar, R. M., & Azmawati, D. (2024). Indonesia's Efforts in Supporting ASEAN Digital Economy by Expanding the Use of QRIS in Southeast Asia. SHS Web of Conferences, 204, 02004. <https://doi.org/10.1051/shsconf/202420402004>

<sup>42</sup> Santi, B. N., & Chalid, D. A. (2024). Analysis of the Factors Influencing the Intention to Use Cross-Border QRIS as A Payment Method. Quantitative Economics and Management Studies, 5(4), 844–861. <https://doi.org/10.35877/454RI.qems2750>

<sup>43</sup> Mubarok, F. (2024). Ramai Turis Singapura Pakai QRIS, BI: Transaksi Naik 261 Persen. *tirto.id*. <https://tirto.id/ramai-turis-singapura-pakai-qr-is-bi-transaksi-naik-261-persen-gUzZ>

demonstrating the successful projection of Indonesia's 'economic statecraft'<sup>44</sup> into one of the world's most critical financial hubs."

### **Southeast Asia's Digital Economic Landscape**

The dynamics of Southeast Asia's digital economic climate are continuously evolving, characterized by massive technology adoption, an increasing number of internet and mobile phone users, and various regional digital initiatives aimed at strengthening connectivity within the region. The digital economy has also played a crucial role as a driving force for regional economic growth, particularly during the pandemic. Several key initiatives are central to mapping and understanding this digital climate. The primary initiative is the ASEAN Digital Masterplan 2025, introduced in early 2021. Its vision is to establish ASEAN as a digital community and an open economic bloc, supported by transformative and secure digital services, technologies, and ecosystems. This vision aims to accelerate ASEAN's recovery from the pandemic and achieve long-term sustainable development<sup>45</sup>.

In the ASEAN Digital Masterplan 2025, eight Desired Outcomes (DOs) are outlined. These include prioritizing the acceleration of ASEAN's recovery from the pandemic, improving the quality and coverage of fixed and mobile broadband infrastructure, providing reliable digital services and preventing consumer harm, fostering a competitive and sustainable market for digital service provision, enhancing the quality and utilization of e-government services, developing digital services to connect businesses and facilitate cross-border trade, strengthening the capacity of businesses and communities to participate in the digital economy, and building a digitally inclusive society. However, in realizing these objectives, ASEAN faces a

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<sup>44</sup> Aggarwal, V. K., & Reddie, A. W. (2020). New Economic Statecraft: Industrial Policy in an Era of Strategic Competition. *Issues & Studies*, 56(02), 2040006. <https://doi.org/10.1142/S1013251120400068>

<sup>45</sup> ASEAN. (2021). ASEAN Digital Masterplan 2025. Association of Southeast Asian Nations.



key limitation in the form of a significant digital divide among member states as well as differing levels of development and regulatory frameworks.

The next initiative is the ASEAN Economic Community Blueprint 2025, which serves as a vision to create a deeply integrated and cohesive economy. In the context of the digital economy, this initiative functions as the foundation for the development of digital initiatives such as the ASEAN Digital Integration Framework Action Plan (DIFAP) 2019–2025, the ASEAN ICT Masterplan 2020, the ASEAN Work Programme on Electronic Commerce 2017–2025, and the Master Plan on ASEAN Connectivity 2025<sup>46</sup>.

Subsequently, the Regional Payment Connectivity (RPC) initiative represents ASEAN's formal commitment to enhancing the region's payment networks. Through the RPC, cooperation on payment connectivity is strengthened and expanded by developing fast, low-cost, transparent, and inclusive cross-border payment systems. Currently, ASEAN nations including Indonesia, Thailand, Malaysia, Singapore, Vietnam, Laos, and Cambodia are already linked within a single interconnected payment system using cross-border QR codes. The RPC initiative is an effort to modernize payment infrastructure for more efficient, seamless, and convenient cross-border transactions. Through this initiative, transaction costs are reduced, foreign exchange risks are minimized, and financial inclusion is enhanced. Furthermore, it enables MSMEs and unbanked communities to participate in the digital economy by providing them with access to foreign markets, which ultimately increases regional competitiveness<sup>47</sup>.

Local Currency Settlement (LCS) has emerged as another key initiative within Southeast Asia's digital economy. LCS is a mechanism for settling

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<sup>46</sup> ASEAN. (2023). Asean Leaders' Declaration On Advancing Regional Payment Connectivity And Promoting Local Currency Transaction.

<sup>47</sup> Pande, P., Quách, T. L., & Choo, C. Y. (2025). Powering Payments: The Role of Technology in ASEAN's Regional Payment Connectivity Initiative [Policy Perspectives].

bilateral transactions using the respective local currencies of the participating countries, without relying on a third-party currency. Its objectives are to build strong financial resilience, reduce dependency on the U.S. dollar, promote regional trade and investment, and strengthen intra-regional relations. The LCS framework arose in response to high global inflation and rising U.S. dollar interest rates<sup>48</sup>.

The origins of LCS can be traced to several ASEAN initiatives, including Malaysia's 2013 proposal to develop a regional framework for cross-currency markets. This was followed by the establishment of an LCS framework in 2018 by three nations—Indonesia, Thailand, and Malaysia, which later led to a Memorandum of Understanding (MoU) for regional payment connectivity cooperation among Indonesia, Malaysia, Thailand, Singapore, and the Philippines. The benefits of LCS include strengthening the stability of national currencies, facilitating exports and imports, and attracting foreign capital inflows.

The final initiative to emerge in Southeast Asia concerning the digital economy is the ASEAN Payment Connectivity Initiative, which refers to the overall effort and framework for connecting payment systems throughout ASEAN. The RPC is a critical component of this initiative, serving as part of a larger, umbrella framework that encompasses various other similar efforts. Within this initiative, central banks play a vital role. A robust legal framework serves as the primary pillar, as its presence ensures that the governance of the digital economy, particularly for e-commerce and the use of digital payments, is more secure and promising<sup>49</sup>.

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<sup>48</sup> Fernando, J., & Turnip, E. Y. (2024). Peluang Indonesia sebagai Ketua ASEAN Tahun 2023 dalam Mempromosikan Penggunaan Local Currency Settlement dan QR Code Lintas Batas terkait Transaksi Perdagangan di Asia Tenggara. *Jurnal Sentris*, 4(2), 114–134. <https://doi.org/10.26593/sentris.v4i2.7124.114-134>

<sup>49</sup> Ong, L. L., Long, Q. T., Nam, N. H., Pande, P., & Tamarind, V. (2023). Expanding Local Currency Transactions in ASEAN+3 Cross-Border Payments [Policy Position Paper].

## DISCUSSION

The implementation of QRIS Cross-Border has significant implications for enhancing Indonesia's digital economic sovereignty at the regional level. One of the most prominent implications is the strengthening of Indonesia's strategic position and bargaining power within the regional digital economic climate. This initiative is not merely a technical innovation but an instrument of foreign policy that projects Indonesia's national technological standards onto the regional stage. By promoting the adoption of its payment infrastructure in Thailand through standardization with PromptPay, in Malaysia with DuitNow QR, and in Singapore with NETS QR, Indonesia is actively constructing an alternative regional financial architecture centered on its national interests. This aligns with the concept of economic statecraft, wherein technology standardization is utilized to achieve strategic objectives and assert geopolitical influence. The success of QRIS in compelling neighboring countries to adopt a similar system, despite already possessing their own digital payment methods, demonstrates that QRIS is a potent diplomatic instrument in the digitalization of payments across Southeast Asia.

Digital economic sovereignty is defined as a state's capacity to autonomously regulate, control, and derive benefits from the infrastructure, data, and economic transaction flows that occur within its sphere<sup>50</sup>. Through the expansion of QRIS Cross-Border, Indonesia is reducing regional dependence on global technology platforms and established international payment systems like Visa and Mastercard. Processing transactions domestically or through an integrated regional network enhances data security and fosters independence from these global payment networks. With significant transaction volumes recorded in Thailand (over one million transactions, equivalent to 437.54 billion rupiah), Malaysia (an 18%

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<sup>50</sup> Carr, M. (2016). US power and the Internet in international relations: The irony of the InAggarwal, V. K., & Reddie, A. W. (2020). New Economic Statecraft: Industrial Policy in an Era of Strategic Competition. *Issues & Studies*, 56(02), 2040006. <https://doi.org/10.1142/S1013251120400068>formation Age. Palgrave Macmillan.

monthly<sup>51</sup> increase), and Singapore (40,900 transactions valued at 13 billion rupiah in May 2024), Indonesia is effectively shifting digital transaction flows into an ecosystem that is more controlled by and standardized according to its national interests.

Reducing dependency on dominant currencies such as the U.S. Dollar through the LCS mechanism is central to the reinforcement of economic sovereignty. QRIS Cross-Border is explicitly designed to facilitate the use of local currencies for transaction settlements, thereby reducing both transaction costs and exchange rate risks. LCS cooperation has been established with Thailand since 2017 and with Singapore through a Letter of Intent (LoI) that became operational in 2024. This measure not only strengthens the monetary stability of the respective countries but also builds regional financial resilience against external volatility, which is a crucial element of economic sovereignty in the era of globalization.

The QRIS Cross-Border initiative directly supports Indonesia's vital economic sectors, such as tourism, trade, and Micro, Small, and Medium Enterprises (MSMEs). By simplifying transactions for Indonesian tourists abroad and vice versa, as well as facilitating cross-border MSME transactions, QRIS ensures that the benefits of the digital economy are equitably distributed and contribute to enhancing financial inclusion. For instance, the growth of transactions by Indonesian tourists in Thailand has reached billions of rupiah, and the increase in MSME transactions between Indonesia and Singapore is bolstered by QRIS. This reflects the state's capacity to derive benefits from digital economic transaction flows in alignment with its national interests<sup>52</sup>.

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<sup>51</sup> New Economic Statecraft: Industrial Policy in an Era of Strategic Competition. Issues & Studies, 56(02), 2040006.

<https://doi.org/10.1142/S1013251120400068y>

<sup>52</sup> Schelly, C., Bessette, D., Brosemer, K., Gagnon, V., Arola, K. L., Fiss, A., Pearce, J. M., & Halvorsen, K. E. (2020). Energy policy for energy sovereignty: Can policy tools enhance energy sovereignty? *Solar Energy*, 205, 109–112.

<https://doi.org/10.1016/j.solener.2020.05.056>

The implementation of QRIS Cross-Border is an integral part of ASEAN's regional payment connectivity efforts, such as the RPC, and aligns with the vision of the ASEAN Digital Masterplan 2025. By successfully implementing an interoperable payment standard, Indonesia not only fulfills the masterplan's objective of creating a transformative digital ecosystem but also positions itself as a key player in shaping the regional digital economic order. This research argues that through QRIS Cross-Border, Indonesia has a significant opportunity to dominate the Southeast Asian digital payment landscape. The successful projection of the QRIS standard allows Indonesia to play a central role in defining the digital financial architecture of the region, which is a manifestation of digital economic sovereignty on a regional scale.

Despite domestic challenges such as the digital divide and personal data security issues, the expansion of QRIS Cross-Border highlights Indonesia's capacity to leverage its fintech infrastructure as a strategic instrument. This demonstrates the shift in focus of modern economic sovereignty, which is no longer solely about absolute independence but about strategic control over vital sectors and the ability to formulate independent economic policy<sup>53</sup>. Overall, the implementation of QRIS Cross-Border proves that Indonesia is not merely responding to the digital transformation but is proactively shaping it in accordance with its national interests. The success of this expansion affirms Indonesia's capacity to regulate, control, and derive benefits from its cross-border digital infrastructure and transaction flows, fundamentally strengthening its digital economic sovereignty in the Southeast Asian region.

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<sup>53</sup> Sapir, J. (2020). Basic Principles of Economic Sovereignty and the Question of the Forms of Its Exercise. *Studies on Russian Economic Development*, 31(2), 129–135. <https://doi.org/10.1134/S107570072002015X>

## Conclusion

This research affirms the argument that the implementation of QRIS Cross-Border significantly contributes to the strengthening of Indonesia's digital economic sovereignty in the Southeast Asian region. Viewing this through the lens of economic sovereignty, defined as a state's capacity to autonomously regulate, control, and derive benefits from its digital infrastructure, data, and transaction flows for the national interest, the study's findings indicate that the QRIS Cross-Border initiative functions as an effective instrument of economic statecraft. The policy implications that emerge from these findings demand a comprehensive strategy. The Indonesian government, through Bank Indonesia (BI), must continue its proactive expansion strategy for QRIS Cross-Border to more ASEAN member states, deepening regional integration and leveraging its momentum in digital leadership. Strengthening the regulatory framework for personal data protection and cybersecurity is essential to build public trust and maintain the integrity of the cross-border digital payment ecosystem. Furthermore, sustained investment in digital infrastructure and the enhancement of digital literacy across all societal levels are necessary to address the digital divide and ensure equitable economic inclusion, both domestically and regionally. Ultimately, Indonesia's leadership role in initiatives like QRIS Cross-Border can serve as a model for other developing nations seeking to assert their digital economic sovereignty amidst a deeply interconnected global landscape.

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