

The Synergy of e-Procurement and e-Coupon Subsidies: An Innovation for Transparent Public Spending to Stimulate National Economic Circulation

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Article Info	Abstract
<p><i>Article history:</i></p> <p>Received January 24, 2026</p> <p>Accepted May 26, 2026</p> <p><i>Keywords:</i> e-procurement, e-voucher, transparency, industry growth, fiscal innovation.</p>	<p><i>The government is crucial in driving national economic growth through effective, transparent public spending strategies. This study examines two innovative approaches implemented by the government to strengthen public purchasing power and accelerate the circulation of money across various economic levels. First, implementing an electronic procurement system (e-procurement) ensures that goods and services are conducted openly, competitively, and accountably. This improves efficiency, reduces the risk of corruption, and maximizes the benefits of public spending for society. Second, the e-coupon-based consumption subsidy strategy directly incentivizes citizens, notably lower- and middle-income groups, to purchase essential goods or strategic services. This approach stimulates domestic consumption and revitalizes the retail and MSMEs sectors. Integrating e-procurement and e-coupons creates a dual effect: efficient public expenditure upstream and increased public consumption downstream. The analysis shows that this strategy enhances fiscal transparency, stimulates economic growth, and sustainably improves public welfare through widespread and equitable money circulation.</i></p>

1. INTRODUCTION

Public expenditure is a strategic instrument for promoting economic growth and equitable welfare distribution. The Indonesian government allocated a significant budget for goods and services procurement, amounting to IDR 1,600 trillion in 2023. However, the main challenge in managing this budget lies in ensuring transparency, efficiency, and accountability at every stage of procurement. The government has implemented an electronic procurement system (e-procurement) to address these issues as part of its digital transformation agenda. E-procurement enables the procurement process to be open and competitive, reduces the risk of corruption, and enhances participation from business actors, including Micro, Small, and Medium Enterprises (MSMEs). Data shows that procurement transactions reached IDR 44.34 trillion in 2023, the highest record (LKPP).

In addition, the government has developed an e-coupon subsidy strategy, which distributes digital vouchers to citizens for purchasing essential goods or specific services (Agroberichten Buitenland, 2020). This subsidy aims to boost purchasing power, particularly among the lower-middle-income groups, and stimulate economic activity in the retail and MSME sectors. Increased consumption is expected to result in broader money circulation across various social strata. The synergy between e-procurement and e-coupon subsidies is anticipated to create a cascading economic multiplier effect—money circulating from central to regional levels and across all income groups. This approach strengthens fiscal transparency and accountability in public spending and stimulates economic growth through active public participation in consumption.

Several countries have adopted similar strategies with positive results. In Ukraine, the ProZorro e-procurement system improved transparency and efficiency in public procurement, saving \$1.9 billion in its first two years of operation. The system allows all

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stakeholders to view the entire procurement process, from announcement to contract award, thus reducing corruption and building public trust (OECD Observatory of Public Sector Innovation, 2024). In Georgia, implementing e-procurement increased competition among suppliers and reduced bureaucratic hurdles. This reform has been recognized by international organizations as one of the most effective in the past decade (World Bank, 2015). Regarding consumption subsidies, Taiwan introduced the Triple Stimulus Voucher program to encourage domestic spending during the COVID-19 pandemic. Taiwan's Triple Stimulus Voucher program generated an estimated NT\$100 billion in total induced economic output, with particularly strong spillovers in retail, food services, and agriculture-related sectors (Lin & Chen, 2020).

Despite a growing body of literature examining e-procurement reforms and digital consumption subsidies independently, existing studies largely treat these instruments as separate policy domains. Prior research focuses either on transparency and efficiency gains from e-procurement or on the demand-stimulating effects of consumption vouchers, without systematically analyzing their interaction as a unified fiscal mechanism. Consequently, the literature lacks an integrated framework explaining how upstream transparency in public spending interacts with downstream consumption incentives to generate tiered economic circulation and multiplier effects.

This study addresses this gap by explicitly analyzing the synergistic mechanism between e-procurement and e-coupon subsidies. It contributes by (i) identifying the channels through which procurement efficiency and consumption stimulation reinforce each other, (ii) synthesizing cross-country evidence into a comparative analytical framework, and (iii) deriving policy-relevant propositions regarding the conditions under which such synergy maximizes national economic circulation.

Accordingly, this study is guided by the following research questions:

1. How does transparent and efficient e-procurement shape the distribution of public spending toward the real sector?
2. How do e-coupon subsidies amplify household consumption and local economic activity?
3. Through what mechanisms does the interaction of these two instruments generate a synergistic multiplier effect on national economic circulation?

This study will analyze the effectiveness of the synergy between e-procurement and e-coupon subsidies in stimulating national economic circulation. Using a qualitative approach and secondary data analysis, this research aims to contribute to formulating more transparent and impactful public spending policies that enhance social welfare.

The author's interest in exploring this synergy is based on the results of previous research, which has been confirmed in the form of a patent related to the design of a reliable e-coupon system (Goenawan, 2025). This innovation offers a solution for the government to implement digital subsidy distribution that is not only cost-efficient (low cost), but also prioritizes high security aspects, auditable transparency, and guarantees the authenticity of state-of-the-art documents. Based on this proven technological foundation, this research seeks to explore how the integration of e-coupons and e-procurement can become a new standard in more accountable public spending management.

2. LITERATURE REVIEW

2.1 The Government Policy

The government plays a crucial role as a catalyst for national economic growth, particularly by optimizing public spending instruments (Kuncoro, 2003). In the macroeconomic context, transparent, efficient, and accountable government spending holds significant potential to boost economic activity and promote equitable welfare distribution (Chipaumire *et al.*, 2014). Global trends indicate a shift toward good governance, where fiscal transparency and accountability are key pillars for building public trust and policy effectiveness (Engkus *et al.*, 2024).

One of the most significant innovations to enhance transparency and efficiency in public spending is the implementation of electronic procurement (e-procurement) systems (Firmansyah *et al.*, 2024). This system has revolutionized the government's procurement of goods and services by introducing a digital, open, and competitive platform.

Inherently, e-procurement reduces the potential for corruption, bureaucracy, and collusion that often occur in traditional procurement processes (Ariani & Setyaningrum, 2024). Regulatory frameworks, such as Indonesia's Ministry of Finance Regulation No. 213/PMK.06/2020, further reinforce transparent and accountable procurement practices (Database Peraturan | JDIH BPK, 2020). Research by Musah *et al.* (2025) confirms that e-procurement significantly improves efficiency and transparency while reducing procurement costs.

At the global level, Ukraine's ProZorro system demonstrates how complete transparency in procurement can lead to substantial budget savings and increased public trust (Yukins & Kelman, 2022). Similarly, e-procurement reform in Georgia has increased competition among suppliers, driving both efficiency and quality (Chania and Demetrashvili, 2017). In Indonesia, the recorded auction transaction value of IDR 44.34 trillion in 2023 reflects the government's success in optimizing this tool to stimulate the economy (LKPP, 2023; Bisnis.com, 2023). Increased participation from Micro, Small, and Medium Enterprises (MSMEs) in e-procurement also contributes to economic inclusivity and capital circulation in the real sector (Saefudin & Arbianti, 2024).

Beyond efficient public spending, the government also seeks to strengthen household purchasing power and encourage consumption through various subsidies and stimulus schemes. Subsidies—especially digital ones like e-coupons—are modern strategies designed to directly enhance consumer spending capacity, particularly among the lower middle class (Liou *et al.*, 2025). This approach aligns with Keynesian economic theory, which emphasizes the role of aggregate demand in driving economic growth (Mariati *et al.*, 2022). Taiwan's experience with its Triple Stimulus Voucher program during the COVID-19 pandemic illustrates how such consumption incentives effectively boosted revenues in the retail and food sectors while contributing significantly to GDP (Lin & Chen, 2020).

Research by Chen *et al.* (2025) in China found that distributing digital coupons significantly increased consumption—especially in the services and retail sectors—with a multiplier effect of 10 to 20 times the coupon value (ScienceDirect, 2020). Huang Manyu (2020) estimated that digital vouchers could increase consumption by up to 15 times the value of the subsidy. The e-coupon system aims not only to trigger direct consumption but also to generate tiered economic circulation. As consumers use e-coupons, money flows to retailers, distributors, and producers—creating a broad economic multiplier effect that spreads from central to regional areas and across socioeconomic classes (Cardoso *et al.*, 2024).

Therefore, the synergy between transparent government spending through e-procurement and consumption subsidy policies via e-coupons is a key strategy for stimulating sustainable economic growth (Juhro *et al.*, 2023). This combination not only ensures fiscal transparency and accountability—supported by data authenticity and security systems (Goenawan, 2021)—but also actively promotes public economic participation, which ultimately contributes to evenly distributed national welfare (Yuniar & Firmansyah, 2023; Indonesia Corruption Watch, 2020). This study will further analyze how these two strategies can reinforce one another to achieve broader macroeconomic objectives.

2.2. Synthesis of Existing Evidence and Unresolved Issues

Empirical studies consistently confirm that e-procurement enhances transparency, competition, and cost efficiency in public spending (Firmansyah *et al.*, 2024; Musah *et al.*, 2025; Yukins & Kelman, 2022). Separately, digital consumption vouchers are shown to significantly stimulate household spending and generate large fiscal multipliers (Lin & Chen, 2020; Chen *et al.*, 2025; Cardoso *et al.*, 2024).

However, findings remain fragmented. While procurement studies emphasize governance outcomes, voucher studies prioritize consumption responses, leaving the interaction between supply-side fiscal efficiency and demand-side stimulus empirically underexplored. Moreover, contradictions exist regarding the magnitude and persistence of multiplier effects, which appear sensitive to targeting accuracy, institutional transparency, and implementation scale.

The synergy between e-procurement and e-coupon systems creates a 'Fiscal Integrity Loop.' Theoretically, transparency in public spending (e-procurement) enhances fiscal efficiency by minimizing information asymmetry. This efficiency, when redirected through targeted e-coupon subsidies, accelerates the velocity of money within the local economy, thereby maximizing the Keynesian multiplier effect.

This unresolved disconnect motivates the present study to move beyond parallel evaluations and instead examine synergy as an integrated fiscal architecture, rather than as isolated instruments.

3. RESEARCH METHODOLOGY

This study adopts a descriptive-analytical qualitative approach to examine the synergy between government e-procurement strategies and e-coupon subsidies in driving national economic circulation. The choice of a qualitative approach is based on the study's objective to understand this complex phenomenon from multiple perspectives, to identify mechanisms, and to assess impacts that are not solely measurable through numerical data (Creswell, 2022; Moleong, 2017). The study also employs comparative case studies from countries that have implemented similar strategies—such as Ukraine, Georgia, Taiwan, and China—to provide contextual and additional insights (Yin, 2018).

3.1 Data Sources

The data used in this study are secondary data obtained through library research and document content analysis. The data are collected from various reliable sources, including:

1. Official government reports: This includes annual reports from the Ministry of Finance (MoF), the National Public Procurement Agency (LKPP), and data on budget realization and e-procurement transactions (LKPP, 2023; MoF, 2024).
2. Scholarly journals and conference proceedings: Previous research articles discussing e-procurement, fiscal policy, consumption subsidies, digital economy,

and relevant international case studies. These were sourced from academic databases such as ScienceDirect, Google Scholar, and Semantic Scholar, focusing on publications from 2021 onward (Lin & Chen, 2020; Firmansyah *et al.*, 2024).

3. News reports and policy analysis from credible media outlets: This includes sources such as *Bisnis.com* and international sources like World Bank, which provide data and analysis related to government policies.
4. Policy documents and regulations: This includes Indonesia's Minister of Finance Regulation No. 213/PMK.06/2020 and documents from international organizations such as the Open Contracting Partnership and Indonesia Corruption Watch, which address public procurement transparency (Database Peraturan | JDIH BPK, 2020; Open Contracting Partnership, 2023; Transparency International Indonesia, 2023).
5. Publications from research institutes and think tanks: Reports and policy analyses from institutions focusing on economic and governance issues, as well as patents supporting the security and authenticity of e-documents and e-coupons (Goenawan, 2021 and 2025).

3.2. Narrative Review + Comparative Case Analysis

This study adopts a narrative literature review combined with comparative case analysis to synthesize evidence on e-procurement and e-coupon policies. The process involves:

1. Keyword Identification: Using search terms such as “e-procurement,” “e-auction,” “e-coupon subsidy,” “consumption stimulus,” “government spending transparency,” “economic circulation,” “economic multiplier effect,” and “national welfare” to ensure comprehensive literature coverage.
2. Source Screening: Selecting sources that are relevant, credible, and up to date (published in 2020 or later) to ensure the accuracy and timeliness of the information.
3. Data Extraction: Collecting essential information on concepts, theories, empirical data, case studies, and findings from previous studies relevant to the two strategies being analyzed.

While the literature review follows structured search and screening procedures, the objective is analytical synthesis rather than exhaustive coverage. Therefore, the approach is positioned as a theory-informed narrative review, avoiding over-claiming the methodological rigor of a formal SLR.

3.3 Data Analysis Techniques

The collected data are analyzed using qualitative content analysis and thematic narrative synthesis. The steps include:

1. Data Reduction: Sorting, focusing, simplifying, and abstracting the data obtained from various sources to identify key patterns and themes.
2. Data Presentation: Organizing data into narratives, tables, or conceptual diagrams to facilitate understanding and comparison.
3. Verification and Conclusion Drawing: Interpret findings using relevant theoretical frameworks and compare them with international case studies. The analysis focuses on three main aspects:
 - a. Transparency and efficiency in public procurement through e-procurement.
 - b. The effectiveness of e-coupons in enhancing household purchasing power; and
 - c. The synergistic impact on national economic circulation, based on the theories of fiscal transparency and economic multiplier effects. Cross-comparing analytical results from various academic publications and official government policies ensures data validity.

This study employs a conceptual modeling approach to simulate the integration of G2B (Government-to-Business) and G2C (Government-to-Citizen) platforms. The methodology utilizes a 'Comparative Structural Analysis' to evaluate the efficiency gains of integrated digital flows against traditional siloed procurement and subsidy models. Validation is conducted through a 'Logical Consistency Check' using cross-referenced data from international benchmarks (e.g., Ukraine's ProZorro and Georgia's e-procurement success).

Through this methodology, the study aims to provide a comprehensive understanding of the synergistic potential of e-procurement and e-coupon subsidies as innovative public spending instruments to enhance sustainable societal welfare.

4. RESULTS AND DISCUSSION

This study finds that the synergy between e-procurement and e-coupon subsidies constitutes a highly effective fiscal policy innovation in promoting national economic circulation and enhancing public welfare. An in-depth analysis of various sources shows that while these two digital instruments serve different functions, they complement each other to create a significant economic impact. The main findings are discussed in three dimensions: procurement efficiency through e-procurement, purchasing power enhancement through e-coupons, and their synergistic impact on economic circulation.

4.1 Procurement Efficiency and Transparency through e-Procurement

Implementing the e-procurement system in Indonesia has fundamentally transformed the management of state expenditure. Through an open and competitive digital platform, the procurement process for goods and services has become more measurable and less susceptible to non-technical interference. Data from LKPP (2023) indicates that the value of e-procurement transactions in 2023 reached IDR 44.34 trillion, the highest in the system's history. This figure reflects a significant increase in business participation, including Micro, Small, and Medium Enterprises (MSMEs), and demonstrates that the system promotes efficiency and inclusiveness (Saefudin & Arbianti, 2024).

A study by Firmansyah *et al.*, (2024) confirms that e-procurement can reduce procurement costs by up to 15% through open competition mechanisms. Meanwhile, regulations like the Ministry of Finance Regulation No. 213/PMK/2020 (Database Peraturan | JDIH BPK, 2020) provides a strong legal foundation for transparent and accountable procurement practices. Indonesia's success aligns with Ukraine's experience through the ProZorro system, which saved \$1.9 billion in public funds in its first two years of operation (Yukins *et al.*, 2022). Similarly, e-procurement reforms in Georgia have strengthened competition among suppliers, promoting both efficiency and quality (Chania and Demetrashvili, 2017). As emphasized by the Open Contracting Partnership (2023), e-procurement transparency significantly reduces the risk of corruption and collusion, ensuring that public budgets are optimally used for the benefit of society.

4.2 Strengthening Public Purchasing Power through e-Coupon Subsidies

On the other hand, the e-coupon subsidy strategy has proven effective in directly increasing public purchasing power and stimulating domestic consumption. This approach aligns with Keynesian economic principles emphasizing the importance of aggregate demand (Mariati *et al.*, 2022), creating an economic push from the consumption side. E-coupons provide direct incentives for the population, especially lower- and middle-income groups to boost spending on essential goods and strategic services.

Research findings indicate that e-coupon programs effectively increase retail transactions and stimulate MSME sectors (Liou *et al.*, 2025). International experiences such as Taiwan's Triple Stimulus Voucher program offer strong empirical evidence of the effectiveness of e-coupons. That program boosted retail and food sector revenues and significantly contributed to Taiwan's GDP by NT\$100 billion (Lin & Chen, 2020). Studies from China also demonstrate a powerful multiplier effect of digital coupons, increasing consumption by 10 to 20 times the coupon value (Chen *et al.*, 2025). These phenomena affirm that e-coupons are not merely assistance but robust policy instruments to trigger money circulation in society. When citizens use e-coupons, the funds do not stop with the consumers but continue to flow to retailers, distributors, and producers creating a layered duplication of monetary circulation that activates the entire economic ecosystem (Cardoso *et al.*, 2024). In the national context, this strategy addresses weakened purchasing power due to inflation and global crises and encourages capital circulation from central to regional areas through increased consumption.

4.3 Synergistic Impact on Tiered National Economic Circulation

The analysis shows that the synergy between e-procurement and e-coupon subsidies generates a significant positive domino effect on national economic circulation. E-procurement ensures that government spending is transparent and efficient, with funds flowing to the real sector to generate practical projects. This constitutes a "supply-side push," where government funds are distributed to goods/service providers, including MSMEs, who recirculate capital into production and operations.

Simultaneously, the e-coupon subsidies directly provide a "demand-side push" to the public. Increased purchasing power drives consumption, especially in the retail and MSME sectors, which form the backbone of local economies. As people spend using e-coupons, the money benefits not only retailers but also flows to suppliers and producers. This is the mechanism of tiered duplication in money circulation: the funds initially disbursed through public procurement for infrastructure or supply projects eventually recirculate through consumer spending encouraged by e-coupons. This phenomenon aligns with Keynesian multiplier theory, which states that government spending leading to public consumption will trigger even greater rounds of economic activity (Mariati *et al.*, 2022).

This combination results in broad economic circulation from central to regional areas and all socioeconomic levels. Fiscal transparency from e-procurement (Transparency International Indonesia, 2023), combined with increased consumption driven by e-coupons, ensures that the benefits of public spending are not concentrated in a single sector but distributed evenly. The participation of MSMEs in this chain further strengthens economic inclusivity, a key factor in sustainable development. Thus, this synergistic strategy not only improves the efficiency of government expenditure but also actively stimulates economic growth through active public participation in consumption, with the potential to sustainably increase national welfare (Juhro *et al.*, 2023; Yuniar & Firmansyah, 2023). The government is encouraged to expand the program's geographic and sectoral scope to ensure equitable benefits across Indonesia.

Analysis indicates that the 'Synergy Mechanism' functions as a dual-sided economic stimulus. Upstream, e-procurement stabilizes the supply chain by ensuring fair market access for MSMEs. Downstream, e-coupons guarantee demand-side liquidity. The integration creates a closed-loop data environment where government spending is perfectly mapped to citizen consumption, significantly reducing fiscal leakage.

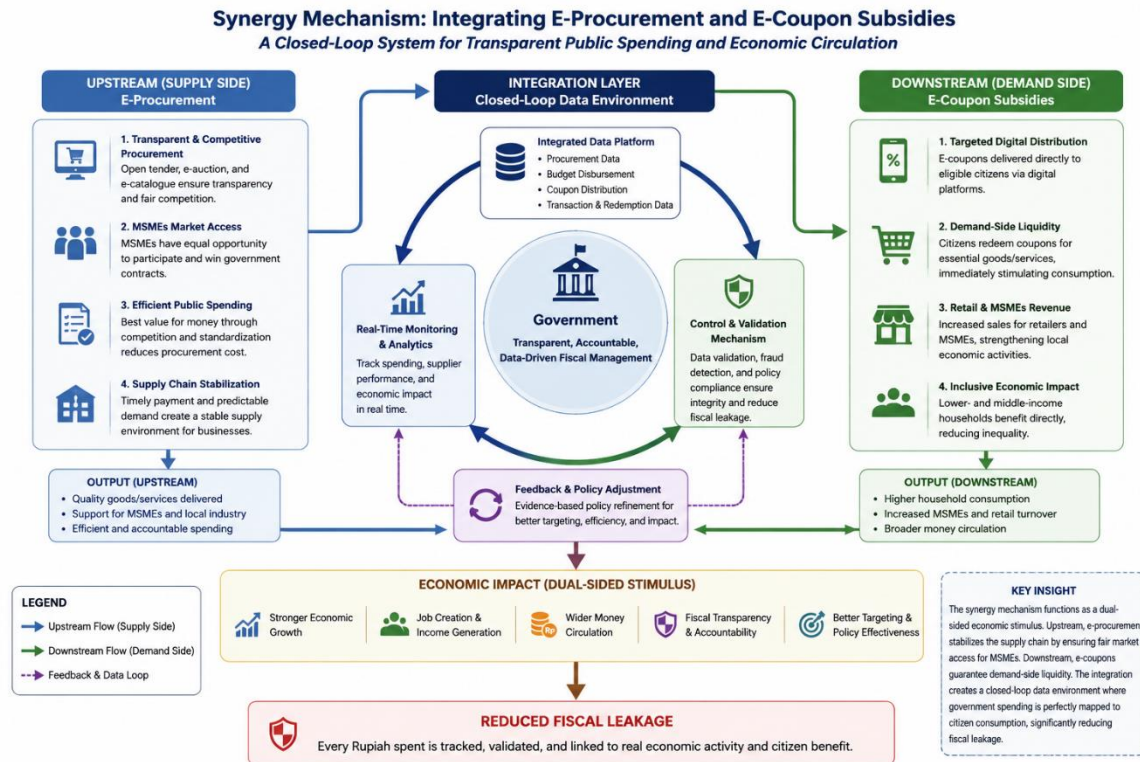


Figure 1.
Synergy Mechanism E-Procurement and E-Coupons

4.3.1 Analytical Framework: Mechanism of Fiscal Synergy.

Based on the synthesized findings, this study proposes a three-stage synergy mechanism. First, e-procurement improves allocative efficiency and governance quality, ensuring that public funds reach productive suppliers and MSMEs (supply-side discipline). Second, e-coupon subsidies activate latent household demand and accelerate transaction velocity at the retail level (demand-side activation). Third, the interaction of these channels generates a tiered multiplier effect, whereby public funds circulate repeatedly across regions and income groups rather than stagnating at initial recipients.

This framework clarifies why isolated implementation of either instrument yields limited impact, whereas their coordinated deployment produces disproportionately larger economic circulation.

4.4 Projected Synergistic Impact on National Economic Circulation

The assumed multiplier range of 3–7 is grounded in empirical findings from prior studies on government spending and digital consumption subsidies, which report multipliers ranging from moderate (3–5) in conservative fiscal environments to higher values (6–10+) under strong governance and targeting conditions (Cardoso *et al.*, 2024; Chen *et al.*, 2025). The simulation presented here is therefore illustrative rather than predictive, aiming to demonstrate potential orders of magnitude under realistic institutional assumptions.

Based on existing data and previous research, the synergy between e-procurement spending and e-coupon subsidies has the potential to generate a substantial economic multiplier effect. Chen *et al.* (2025) study in China, relevant to the e-coupon context, found consumption multipliers of up to 10–20 times. Meanwhile, Cardoso *et al.*, (2024) confirm that government spending and social assistance (including subsidies) can trigger multiplier

effects in local economies. More recent research by Engkus *et al.*, (2024) also emphasizes that transparency and good governance in public financial management, as enabled by e-procurement, can strengthen the positive impact of government spending on economic activity.

A simple simulation can be created to predict the impact of circulation on society based on the potential multiplier effect. A conservative assumption for the synergistic multiplier (combining e-procurement efficiency and e-coupon leverage) may range from 3 to 7 times the allocated funds. This range considers the efficiency gains from e-procurement, ensuring funds reach the real sector, and the consumption stimulus from e-coupons, with larger investment scales expected to yield even greater effects. Below is an example simulation in Table 1:

Table 1.

Simulated Forecast of the Synergistic Impact of e-Procurement and e-Coupon Subsidy Spending on Economic Circulation.

Government Investment Scheme	e-Procurement Value (IDR Trillion)	e- Coupon Subsidy Value (IDR Trillion)	Total Synergistic Spending (IDR Trillion)	Predicted Multiplier Effect (x)	Estimated Economic Circulation (IDR Trillion)
Medium Scale	500	100	600	5	3.000
Large Scale	1.000	200	1.200	6	7.200
Expansive Scale	2.000	500	2.500	7	17.500

Simulation Explanation:

1. Total Synergistic Spending: This represents the combined allocation through e-procurement and e-coupon subsidies. It reflects the government's initial transparent investment aimed at stimulating consumption.
2. Predicted Multiplier Effect: These values are derived from literature findings reporting significant multipliers from similar instruments. In this simulation, multiplier values range from 5 to 7, representing economic circulation's potential spectrum and complexity. Higher multipliers are expected for larger allocations due to scale efficiency, broader outreach, and the support of procurement transparency.
3. Estimated Economic Circulation: This results from multiplying the Total Synergistic Spending by the predicted multiplier effect. It represents the estimated increase in economic activity and money circulation in society resulting from this government initiative.

For instance, if the government allocates IDR 1,000 trillion for e-procurement and IDR 200 trillion for e-coupon subsidies (a total of IDR 1,200 trillion), and assuming a multiplier effect of 6 times, it is projected that money circulation in society could increase by IDR 7,200 trillion. This figure illustrates how government-disbursed funds do not stop at the initial recipient but continue circulating through repeated economic transactions—creating added value and fostering growth across sectors while supporting equitable economic distribution from the center to the regions.

5. CONCLUSION

This study concludes that the synergy between the e-procurement system and the e-coupon subsidy policy constitutes an innovative and strategic approach that is highly effective in managing state expenditure. This approach comprehensively addresses the challenges of transparency, efficiency, and economic equity in Indonesia. Although

operating in different domains, these two digital instruments reinforce each other to create significant and sustainable economic impacts.

The e-procurement system has demonstrably enhanced the efficiency and accountability of government goods and services procurement. With its open and competitive platform, e-procurement has successfully reduced corruption risks, optimized budget utilization, and broadened the participation of business actors, including Micro, Small, and Medium Enterprises (MSMEs). This success is not only reflected in Indonesia's record-high transaction value (LKPP, 2023). However, it is also aligned with positive experiences from other countries, such as Ukraine's ProZorro system (Yukins *et al.*, 2022) and e-procurement reforms in Georgia (Chania and Demetrashvili, 2017), all of which demonstrate improved efficiency and public trust.

On the other hand, the e-coupon subsidy directly strengthens the purchasing power of the public, particularly among the lower-middle-income groups, and serves as a vital stimulus for the retail and MSME sectors at the local level. This program triggers a strong economic multiplier effect, whereby each subsidy unit generates multiple rounds of money circulation in these sectors (Dong *et al.*, 2023; Cardoso *et al.*, 2024). It stimulates broad-based economic activity from central to regional levels. Positive outcomes from similar programs in Taiwan and China (Chen *et al.*, 2025) further validate the effectiveness of this approach in boosting consumption and capital flow.

A crucial point highlighted in this study is the synergistic impact of these two strategies. E-procurement establishes a transparent and efficient foundation for government spending, ensuring that public funds are channeled optimally into productive sectors. Simultaneously, the e-coupon subsidy returns these funds to society through enhanced purchasing power, stimulating further consumption and monetary circulation. This combination results in layered economic duplication, where the benefits of government spending do not stop at a single point but continue to flow and circulate across various economic strata.

The simulation presented in this study reinforces the potential of this multiplier effect. With a calculated synergistic expenditure allocation, for instance, IDR 1,200 trillion (IDR 1,000 trillion from e-procurement and IDR 200 trillion from e-coupons), it is estimated that economic circulation could increase up to IDR 7,200 trillion. This represents a sixfold multiplier effect, significantly impacting economic activity. This figure reflects both the efficiency created by e-procurement in channeling funds into the real sector and the consumption boost from e-coupons, which triggers repeated transactions in the community. The multiplier effect is not confined to a single sector. However, it is distributed evenly from the central to regional levels and upper to lower economic classes, with MSME contributions enhancing economic inclusivity.

Overall, the synergistic strategy between e-procurement and e-coupon subsidies not only improves fiscal accountability and government spending efficiency but also actively fosters economic participation by the public. Hence, this modern fiscal policy model can stimulate inclusive economic growth and sustainably improve societal welfare (Juhro *et al.*, 2023; Yuniar & Firmansyah, 2023). Therefore, the synergy between e-procurement and e-coupons should not only be maintained but also expanded with stronger digital security measures and e-document authenticity systems (Goenawan, 2021), as well as widened geographic and sectoral coverage, as a pillar of the digital transformation of state spending—strengthening social equity, inclusive growth, and nationwide improvement in public welfare.

Furthermore, the successful implementation of this e-coupon system will have a far broader impact if it is developed independently by the nation's talented youth. By prioritizing the use of domestically developed technology, the government is directly contributing to strengthening and enhancing the competitiveness of Indonesia's information technology startup industry. This technological independence not only guarantees national data sovereignty but also serves as a catalyst for the growth of a local innovative ecosystem capable of addressing the challenges of the future digital economy.

6. POLICY RECOMMENDATIONS

Based on the findings regarding the synergy between e-procurement and e-coupon subsidies as a strategic innovation in state spending governance, the following policy recommendations are proposed for government consideration to optimize their positive impact:

6.1. Expansion and Strengthening of e-Procurement and e-Coupon Synergy Implementation

The government should broaden the geographic and sectoral coverage of the e-procurement and e-coupon synergy programs. This means moving beyond major cities and selecting sectors to include remote areas and various economic sectors with high potential multiplier effects. Such expansion will ensure a more equitable distribution of economic benefits across Indonesia.

6.2. Enhancing the Efficiency and Accountability of e-Procurement

To maximize the impact of e-procurement, the government should continue to improve the system's efficiency and accountability. This includes:

1. Simplifying procedures: Reducing unnecessary bureaucracy in the e-procurement process to facilitate broader participation, especially from MSMEs.
2. Strengthening oversight: Developing more advanced and proactive oversight systems to prevent corruption and collusion, thereby ensuring fair and transparent competition.
3. Utilizing data analytics: Leveraging procurement data to identify trends, optimize budget allocations, and evaluate procurement performance continuously.

6.3. Optimizing the Design and Targeting of e-Coupon Subsidies.

To enhance the leverage of e-coupon subsidies, the policy recommendations include:

1. More precise targeting: Developing more accurate targeting mechanisms to ensure subsidies reach the most vulnerable populations with high consumption tendencies.
2. Diversifying coupon types: Exploring a range of e-coupon types directed at specific sectors needing stimulus, such as local agricultural products, education services, or healthcare, to generate more focused multiplier effects.
3. Education and public outreach: Conducting widespread public education and outreach campaigns on how to use e-coupons and their benefits for local economic circulation, especially for MSME empowerment.

6.4. Developing Data Security and Authenticity Technologies

Investment in data security and authenticity technologies is essential to safeguard the integrity and public trust in the e-procurement and e-coupon systems. This includes:

1. Implementing blockchain or cryptographic technologies: Adopting blockchain technology to guarantee the authenticity of procurement documents and the validity of e-coupons (Goenawan, 2025). This will prevent forgery and unauthorized data modifications and ensure immutable records for transparency.
2. Robust identity verification systems: Establishing secure digital identity verification systems to prevent misuse of e-coupons and ensure accurate distribution.
3. Regular cybersecurity audits: Conduct routine cybersecurity audits of the e-procurement platform and the e-coupon distribution system to identify and address security vulnerabilities.
4. End-to-end data encryption: Ensuring that all transaction data and sensitive information are protected by end-to-end encryption to maintain user confidentiality and privacy.

6.5. Sustainable and Adaptive Evaluation Framework

The government should develop a strong and adaptive evaluation framework to continuously monitor and assess the effectiveness of e-procurement and e-coupon synergy. This includes:

1. Clear Key Performance Indicators (KPIs): Defining measurable KPIs to track procurement efficiency, purchasing power improvements, economic circulation, and contributions to GDP.
2. Periodic impact studies: Conducting regular impact assessments to measure actual economic multiplier effects and identify areas for improvement.
3. Feedback mechanisms: Creating effective feedback channels for businesses, the public, and oversight institutions to gather input and inform necessary policy adjustments.

By implementing these recommendations comprehensively, the synergy between e-procurement and e-coupon subsidies can be further optimized to enhance government spending transparency, stimulate tiered economic circulation, and ultimately improve the equitable and sustainable welfare of the Indonesian people.

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