



## ***Legal Efficiency and Population Control: Analysis of Indonesia's Family Planning Programme Based on Richard A. Posner's Theory***

### **Efisiensi Hukum dan Pengendalian Populasi: Analisis Program Keluarga Berencana Indonesia Berdasarkan Teori Richard A. Posner**

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##### **Abstract**

This paper analyses the Family Planning Programme (KB) in Indonesia through the perspective of Economic Analysis of Law (EAL) developed by Richard A. Posner, with a focus on legal efficiency in internalising demographic externalities and maximising social wealth. This study uses a legal-economic approach, combining normative legal research methods with economic analysis of public policy, particularly Law No. 52 of 2009 on Population Development and Family Development, Government Regulation No. 87 of 2014 concerning Population Development and Family Development, Family Planning and Family Information Systems, and Presidential Regulation No. 72 of 2021 on Accelerating Stunting Reduction. The results show that family planning policies are legal interventions that meet the Kaldor-Hicks efficiency criteria, as their social benefits, such as a decrease in the total fertility rate (TFR), increased female economic participation, and the creation of a demographic bonus, aggregate to exceed their implementation costs. However, inefficiencies still occur due to increased transaction costs and unmet needs, which reflect market failures and bureaucratic constraints. The analysis shows that the 2025 fiscal efficiency policy, which cuts the budget for contraceptive procurement, has the potential to cause greater social deadweight loss in the future. Therefore, it is recommended that family planning policies be directed towards long-term efficiency through budget protection based on incremental cost-effectiveness ratio (ICER), reduction of transaction costs, and strengthening of access rights to family planning services. This study confirms that law can function as a rational instrument in efficient and socially equitable population management, in accordance with the values of Pancasila and the principles of sustainable development.

##### **Kata Kunci:**

Analisis  
Ekonomi  
Hukum;

##### **Abstrak**

Makalah ini menganalisis Program Keluarga Berencana (KB) di Indonesia melalui perspektif Analisis Ekonomi Hukum (EAH) yang dikembangkan oleh Richard A. Posner, dengan fokus pada efisiensi hukum dalam menginternalisasi eksternalitas demografis dan

Efisiensi  
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Keluarga.

memaksimalkan kesejahteraan sosial. Studi ini menggunakan pendekatan ekonomi-hukum, menggabungkan metode penelitian hukum normatif dengan analisis ekonomi kebijakan publik, khususnya Undang-Undang No. 52 Tahun 2009 tentang Pembangunan Kependudukan dan Pembangunan Keluarga, Peraturan Pemerintah No. 87 Tahun 2014 tentang Perkembangan Kependudukan Dan Pembangunan Keluarga Keluarga Berencana Dan Sistem Informasi Keluarga, dan Peraturan Presiden No. 72 Tahun 2021 tentang Percepatan Pengurangan Stunting. Hasil penelitian menunjukkan bahwa kebijakan keluarga berencana merupakan intervensi hukum yang memenuhi kriteria efisiensi Kaldor-Hicks, karena manfaat sosialnya, seperti penurunan angka kesuburan total (PGPR), peningkatan partisipasi ekonomi perempuan, dan penciptaan bonus demografis, secara agregat melebihi biaya implementasinya. Namun, inefisiensi masih terjadi karena peningkatan biaya transaksi dan kebutuhan yang tidak terpenuhi, yang mencerminkan kegagalan pasar dan kendala birokrasi. Analisis menunjukkan bahwa kebijakan efisiensi fiskal 2025, yang memangkas anggaran pengadaan kontrasepsi, berpotensi menyebabkan kerugian sosial yang lebih besar di masa depan. Oleh karena itu, disarankan agar kebijakan keluarga berencana diarahkan pada efisiensi jangka panjang melalui perlindungan anggaran berdasarkan rasio efektivitas biaya inkremental (ICER), pengurangan biaya transaksi, dan penguatan hak akses terhadap layanan keluarga berencana. Studi ini menegaskan bahwa hukum dapat berfungsi sebagai instrumen rasional dalam pengelolaan penduduk yang efisien dan adil secara sosial, sesuai dengan nilai-nilai Pancasila dan prinsip-prinsip pembangunan berkelanjutan.

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## INTRODUCTION

### Background of Problem

Indonesia currently ranks as the fourth most populous country in the world, with a population of approximately 284.44 million and an annual population growth rate of 1.09% (BPS, 2025). This massive demographic scale and sustained growth place significant pressure on natural resources, infrastructure, and social welfare systems. In the context of macroeconomics, inefficient population management will threaten the country's capacity to achieve sustainable development and maximise national wealth (Suhatman & Aimon, 2024).

The Family Planning Programme (KB) was launched by the government as a dual strategic response, curbing population growth and simultaneously improving community welfare (Hafid, 2025). In microeconomic terms, the KB programme has crucial benefits through its mechanism of regulating the number and spacing of births (Comolli & Albertini, 2025), which has direct implications for improving maternal and child health and empowering families' economic capacity according to Indonesian Law Number 52 of 2009 concerning Population Development and Family Development (Fitri, 2024). Through more effective management of household resources, KB enables

more optimal allocation of funds for fundamental needs such as education and health, reducing the risk of poverty caused by unplanned births (Kancherla, et al., 2022).

At the national level, the successful implementation of family planning is expected to support the creation of a demographic bonus, which is an ideal condition where the majority of the population is of productive age and ready to contribute to economic output (Fathiya, 2023). The improvement in the quality of human resources supported by this programme is predicted to trigger sustainable economic growth. The Ministry of Population and Family Development even targets family planning to contribute up to 8% to economic growth by 2029 (Thawley, et al., 2024). Thus, the family planning programme goes beyond reproductive health issues; it is a vital economic and legal policy instrument.

The Indonesian Family Planning Programme, regulated by Law No. 52 of 2009 on Population Development and Family Development and its derivatives, is a legal intervention that positively meets the Kaldor–Hicks efficiency criteria (Cook, 2024). This law serves to internalise the negative externalities of high fertility, such as *stunting* and fiscal burdens, thereby maximising social wealth in aggregate terms (Yew & Zhang, 2025). Regulatory failures and inefficient fiscal policies (such as *unmet needs* and budget cuts) can be analysed as increases in *transaction costs* that hinder the achievement of long-term social efficiency (Nordin, et al., 2024).

The family planning programme in Indonesia is underpinned by a strong legal framework, which demonstrates the state's commitment to addressing negative demographic externalities (Rijanta, et al., 2025). The main legal basis is Law No. 52 of 2009 on Population Development and Family Development, which explicitly positions family planning as the main instrument for controlling population growth and improving family quality. This policy has structured objectives, including regulating desired pregnancies, maintaining health, and improving access to family planning and reproductive health services (Liyanto, et al., 2022).

The implementation of this programme is further regulated by Government Regulation No. 87 of 2014. This legal basis is further strengthened by the integration of family planning into human resource development strategies, particularly through Presidential Regulation No. 72 of 2021 on Accelerating Stunting Reduction. This integration demonstrates the regulatory understanding that family planning is an essential nutrition-sensitive intervention, providing early intervention through education and services.

Although the legal foundation is solid, implementation in the field faces significant efficiency challenges. One of the most obvious indicators of inefficiency is *unmet need*, where couples of childbearing age who want to space or stop pregnancies do not use contraception. Data shows that in 2022, the *unmet need* rate reached 6.9% of PUS, although it then decreased to 5.22% in 2023 (Ortega-Franco, et al., 2021). This challenge is exacerbated by the threat of fiscal constraints, particularly a significant reduction in the budget for contraceptive procurement in 2025 due to government spending efficiency policies. This legal-economic review seeks to analyse the legitimacy of Indonesia's Family Planning Programme using Richard A. Posner's (1974) theoretical perspective, as outlined in *Economic Analysis of Law*. Posner views law as a rational instrument for maximising economic efficiency.

## Problem Identification

Indonesia's large and growing population presents a significant macroeconomic challenge, straining resources and threatening sustainable development. While the

government has established a robust legal framework for the Family Planning (KB) Programme as a strategic intervention to curb growth and enhance welfare, a critical efficiency gap persists between this regulatory intent and on-the-ground implementation. This gap manifests in two primary forms: *First*, as persistent *unmet need* for contraception, indicating that a segment of the reproductive-age population cannot actualize their fertility preferences due to access or service barriers; and *second*, as vulnerability to *fiscal policy fluctuations*, notably threatened budget cuts for contraceptive procurement. From a law and economics perspective, these implementation failures represent increased transaction costs and a failure to fully internalize the negative externalities of unplanned fertility (e.g., stunting, poverty). Consequently, the core research problem is the tension between the programme's strong legal-economic rationale for promoting social wealth maximization (Kaldor–Hicks efficiency) and the systemic inefficiencies that hinder its optimal execution, thereby undermining its potential demographic and economic dividends.

### **Problem Formulation**

Derived from the identified problem, this research is guided by the following specific questions:

1. How does the Posnerian economic analysis of law framework conceptualize population management as a rational instrument for achieving societal efficiency?
2. How can Indonesia's Family Planning Programme be analyzed and justified as an efficiency-maximizing policy instrument within Posner's theoretical perspective?
3. How can the existing regulatory framework and critical need for sustained funding of the Family Planning Programme in Indonesia be defended on efficiency grounds, particularly in the context of prevailing implementation challenges and fiscal constraints?

### **Research Objectives and Benefit**

#### *Research Objectives*

This study aims:

1. To explicate the principles of Richard A. Posner's economic analysis of law, specifically its application to population regulation as a means of minimizing negative externalities and transaction costs to achieve social efficiency.
2. To analyze Indonesia's Family Planning Programme, its legal basis, and its socio-economic goals through the Posnerian lens, assessing its design as a tool for wealth maximization.
3. To evaluate the regulatory and fiscal challenges facing the programme's implementation and to construct a law and economics justification for strengthening governance and securing funding to overcome inefficiencies.

#### *Benefits*

The research offers significant theoretical and practical benefits. Theoretically, it contributes to interdisciplinary scholarship by applying the Posnerian law and economics framework to a concrete demographic policy in a Global South context, testing and potentially enriching the framework's explanatory power. Practically, it provides evidence-based legal-economic reasoning for policymakers, particularly in the

Ministry of Population and the legislature, to advocate for protecting and prioritizing the KB programme budget. It also offers implementers a clearer efficiency-based rationale for addressing *unmet need*, framing it not just as a health issue but as a critical economic inefficiency. Ultimately, the study seeks to strengthen the argument that consistent, well-funded implementation of family planning is not a discretionary social programme but a foundational investment in Indonesia's long-term economic efficiency and social wealth.

## THEORETICAL AND CONCEPTUAL FRAMEWORK

### Theoretical Framework: Posner's Economic Analysis of Law

The theoretical foundation of this research is the Economic Analysis of Law (EAL) paradigm, principally as developed by Richard A. Posner (1974). This framework transcends traditional legal formalism by applying the tools of microeconomic theory to understand, evaluate, and predict the structure and impact of legal rules (Cserne, 2024). At its core, Posnerian analysis posits that the common law, and by extension, rational statutory law, tends to evolve towards rules that promote wealth maximization—a normative criterion where resources flow to their highest-valued uses as measured by willingness to pay (Eubanks & Furton, 2024). The central mechanism for achieving this is the minimization of social costs, which include both the direct costs of harmful activities and the costs of avoiding them (transaction costs).

For this study, two pivotal concepts within Posner's framework are operationalized. *First*, the Kaldor-Hicks efficiency criterion serves as the primary analytical benchmark (Cook, 2024). A legal policy is considered Kaldor-Hicks efficient if the winners from the policy could, in principle, compensate the losers and still be better off, leading to a net gain in aggregate social wealth. This is distinct from stricter Pareto efficiency and is deemed a practical guide for real-world policy assessment. *Second*, the concept of externalities is critical. High fertility rates, when resulting in unplanned births, can generate significant negative externalities—costs borne by society at large rather than the individual family (Dzhumashev & Tursunaliyeva, 2023). These include strains on public health (e.g., stunting epidemics), education systems, fiscal budgets, and environmental resources. Effective law, from this perspective, functions as an instrument to internalize these externalities, aligning private fertility decisions with social costs and benefits.

Furthermore, Posner's focus on transaction costs—the costs of negotiating, monitoring, and enforcing agreements—provides a lens to diagnose regulatory failure (Posner & Quaglia, 2024). Inefficiencies in the Family Planning Programme, such as unmet need or service delivery gaps, can be analyzed as prohibitively high transaction costs that prevent families from achieving their optimal fertility choices and prevent the state from realizing aggregate welfare gains (Coulson et al., 2023). Thus, the legal framework governing family planning is not merely a set of health directives but a sophisticated economic instrument designed to lower these transaction costs, correct market failures in reproductive behavior, and guide the population towards a demographic structure that maximizes long-term national wealth.

### Conceptual Framework: Integrating Theory, Law, and Empirical Reality

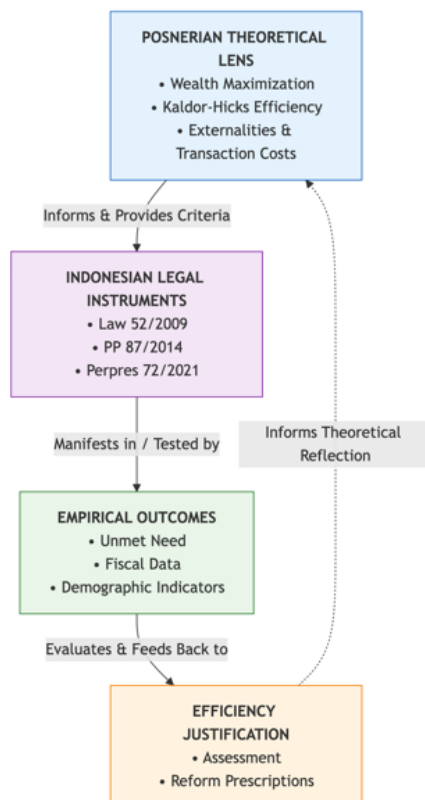
The conceptual framework synthesizes Posner's theoretical constructs with the specific components of Indonesia's Family Planning Programme, creating a tailored model for analysis. This framework visualizes the research as an integrative process where abstract economic principles interact with concrete legal texts and socio-demographic outcomes.



The framework begins with the Posnerian Theoretical Lens, comprising the core principles of Wealth Maximization (Parisi & Pi, 2016; Posner, 2001), Kaldor-Hicks Efficiency (Cook, 2024), Externality Internalization (van Noordwijk, et al., 2023), and Transaction Cost Economics (Syed, et al., 2023). This lens directly informs the analysis of the Indonesian Legal-Regulatory Instruments (Law No. 52/2009, PP No. 87/2014, Perpres No. 72/2021, Law No. 17/2023), which are examined not just for their juridical content but for their economic logic. The analysis asks: How is the law structured to create incentives/disincentives? How does it aim to reduce the transaction costs of accessing contraception? How does it seek to internalize the externalities of unplanned growth?

The efficacy of this legal design is then tested against Empirical Implementation and Outcomes, the observed reality. Key empirical variables include: the Unmet Need rate (a direct indicator of transaction costs and market failure), Fiscal Allocations (reflecting political commitment and resource investment), and Demographic/Health Outcomes (e.g., fertility rate trends, stunting prevalence, maternal health metrics) (Van Long, et al., 2025). These outcomes are the measurable manifestations of the law in action.

The framework posits a dynamic relationship. An efficient legal framework (one that aligns with Posnerian principles) should, if implemented effectively, lead to positive empirical outcomes (lower unmet need, efficient spending, improved demographics). Conversely, identified inefficiencies (e.g., regulatory gaps, budget cuts) manifest as negative outcomes or persistent challenges. The analysis therefore moves in a cycle: from theory to law, from law to empirical reality, and then back again, using the empirical findings to critically evaluate both the legal design and the theoretical application. The ultimate synthesis is a Holistic Efficiency Justification—a coherent argument that defends or critiques the programme’s regulation and funding based on its contribution to minimizing social costs and maximizing long-term social wealth for Indonesia.



**Figure 1.** Conceptual Relationship Diagram

This conceptual framework (Figure 1) ensures the research is not a mere doctrinal legal review nor a purely empirical policy study, but a rigorous interdisciplinary investigation that uses a robust economic theory to explain, connect, and evaluate the legal and factual dimensions of Indonesia's most critical population policy.

## RESEARCH METHOD

This study adopts a qualitative research design with a legal-empirical (socio-legal) approach to conduct a holistic and interpretative analysis. The qualitative paradigm is chosen as it is suited to investigating complex social phenomena—such as the interplay between law, population policy, and economic efficiency—where meaning, context, and institutional processes are paramount. The legal-empirical approach is instrumental in bridging the gap between the *law in books* (the formal regulatory framework) and the *law in action* (its implementation and socio-economic effects). This dual focus allows the research to not only exegetically analyze legal texts but also to examine how those texts function within a specific social and economic reality, thereby providing a grounded assessment of their efficiency according to the Posnerian framework.

Data collection employs triangulation from multiple qualitative sources to ensure depth and validity. Primary data encompasses the core legal instruments: Law No. 52 of 2009, Government Regulation No. 87 of 2014, Presidential Regulation No. 72 of 2021, and Law No. 17 of 2023. Secondary data includes official policy documents, strategic plans from relevant ministries (e.g., BKKBN, Ministry of Health), national demographic and health survey reports (e.g., IDHS), and academic literature on Indonesia's family planning and economic development. This documentary analysis is supplemented by a critical review of scholarly works on law and economics, particularly Posner's theories, to construct a robust analytical lens. The empirical dimension is captured through the systematic analysis of published implementation reports, budget allocations, and program outcome statistics, which reveal the operational challenges and transaction costs alluded to in the problem formulation.

Data analysis follows an interpretative process guided by the principles of Posnerian economic analysis. The first stage involves a doctrinal legal analysis to map the regulatory architecture and its stated efficiency objectives. Subsequently, the collected empirical data on implementation (e.g., unmet need rates, budget trends, stunting reduction efforts) is critically interpreted through the theoretical framework. This involves assessing whether and how the legal rules are structured to internalize demographic externalities and reduce transaction costs, and evaluating the *de facto* outcomes against the *de jure* Kaldor–Hicks efficiency goals. The final analytical synthesis provides a reasoned argument on the program's efficiency justification, framing regulatory and fiscal shortcomings not merely as administrative failures but as substantive economic inefficiencies within the legal system.

## RESULTS AND DISCUSSION

### Results

#### *Posnerian Framework*

Posnerian Law and Economics (LE) is based on the principle of wealth maximisation. Posner states that the purpose of economic analysis of legal issues is rational decision-making that maximises the efficient use of resources (Posner, 2014). Efficiency, in this framework, is measured through maximising value, which is a function of willingness to pay. The fundamental assumption underlying this analysis is scarcity, where resources

are limited in relation to human desires . The law, therefore, must function as a system that mimics the market to allocate rights and resources efficiently, either through free market transactions or through the establishment of legal rights. Posner applies EAH not only to private law, but also to public law, which includes regulation, taxation, and legal proceeding.

Family planning law as a form of population and family regulation falls within the domain of public law, which is also particularly relevant to Posner's analysis of family law. In evaluating changes in public policy, Posner rejects the Pareto Superiority criterion because it is too rigid (requiring that no party be disadvantaged) and inapplicable to most real-world policies. Instead, Posner uses Kaldor–Hicks Efficiency as a normative criterion for maximising social wealth. A change is a Kaldor–Hicks improvement if the hypothetical beneficiaries (winners) can compensate the hypothetical losers, thereby creating an increase in the total net value in society. Actual compensation is not required; what is important is that the total gains exceed the total losses.

The application of the Family Planning Programme is crucial. The Family Planning Programme generates macro and micro economic benefits, but also involves the regulation of reproductive autonomy rights and fiscal expenditure. Posnerian justification for family planning must demonstrate that the monetary value of averted costs or prevented social costs, such as stunting, poverty, and infrastructure burdens, coupled with increased net productivity, exceeds the direct costs of programme implementation and losses incurred by certain parties. If family planning can generate an aggregate increase in social wealth, then such regulation is a rational and efficient legal intervention.

Posner analyses family law as an area in which individual decisions have significant externalities on society. In the context of family planning, reproductive law serves as a tool for regulating the family reproduction market (Bendix & Schultz, 2018). If individuals have complete autonomy in reproduction without internalising the full social costs of their children (e.g., the burden of public education or competition for resources), then there will be overproduction or overpopulation from a social efficiency perspective.

Family planning regulations (Law No. 52 of 2009) are justified as an effort to internalise the massive negative externalities of high fertility and unplanned pregnancies. These externalities include the fiscal burden on the health, education and social welfare systems. By regulating access to and information about family planning, the law encourages couples of childbearing age to make more rational decisions, which are in line with maximising family utility and minimising social losses. The existence of unmet needs indicates market failure, where high transaction costs (e.g., logistical or social costs) prevent couples of childbearing age from reaching a point of efficient utility, so the law must actively intervene to reduce these costs.

Posner pays close attention to the family structure as the smallest economic entity that is key to achieving household efficiency. His theory links the ability to manage population growth with regulating individual reproductive behaviour. The concept of population in Richard Posner's work emerges as part of his broader analysis of human behaviour, particularly in the fields of family law and sex law, which he views through the lens of economics and legal analysis. The law has the function of balancing population growth with available resources and social needs, thereby achieving economic and social efficiency.

Population is viewed as the aggregate result of individuals' rational choices regarding having children, whereby each individual or couple considers the economic costs and benefits in their reproductive decisions (Posner, 1974). Therefore, population is not



merely a demographic statistic, but a product of human economic behaviour related to reproduction. The population is maintained and regulated so that its growth is balanced with resources, quality of life, and social needs through laws governing contraception, abortion, marriage, and other sexual rights. These laws serve as a regulatory mechanism to achieve social and economic efficiency in the population. Population is seen as an entity that is dynamically influenced by social policies and cultural norms that shape birth patterns, family structures, and sexual orientation, which ultimately affect the demographic balance of society. In Posner's (2001) view, population is not a static entity or merely a number of inhabitants, but rather the collective result of rational individual decisions regarding reproduction and sexual behaviour (Vagle, 2024). Individuals consider the economic costs and benefits of having children, which influence birth rates and the overall composition of the population. In his work, Posner links legal regulations, such as marriage, contraception, and abortion laws, as instruments for regulating the population within a socio-economic context (Posner, 1974).

### *Family Planning Programmes from a Posnerian Efficiency Perspective*

Law No. 52 of 2009 serves as the legal basis for the efficient allocation of reproductive rights (JDIH BPK, 2009). In conditions of resource scarcity, high population growth (1.09% per annum) (BPS, 2025) creates tremendous pressure on public resources, known as the demographic Tragedy of the Commons. Individual reproductive decisions that do not take collective costs into account cumulatively result in waste and inefficiency. Family planning laws, by advocating for small, planned families, act to limit these externalities for the sake of national wealth. This law does not prohibit reproduction, but allocates rational reproductive rights, ensuring that limited resources are not distributed thinly among many individuals, but rather invested deeply in a planned number of children, thereby improving the quality of human resources. Law No. 52 of 2009 is, therefore, a tool for long-term Social Wealth Maximisation.

Presidential Regulation No. 72 of 2021, which integrates family planning as a nutrition sensitive intervention in the stunting reduction strategy, is a specific example of a legal intervention aimed at correcting market failures that result in high social costs. Stunting is an economic cost that reduces future national productivity potential (savethechildren, 2024). Unplanned or closely spaced pregnancies are significant risk factors for stunting (UNFPA, 2022).

This regulation forces a correction to information failures (PUS's ignorance of the risks and solutions to stunting) and service access failures. By placing family planning as part of stunting prevention, the government explicitly internalises the long-term costs of stunting into the *ex-ante* policy framework. This action is a Posnerian manifestation that loss prevention (through reproductive planning) is a far more efficient strategy than loss treatment (through post-stunting nutritional interventions).

**Table 1.** Legal Framework and Economic Efficiency of the Family Planning Programme

Legal Basis	Legal Purpose (Juridical)	Economic Function (Posnerian Analysis)	Type of Efficiency
<b>Law No. 52/2009</b> (Population & Family Development)	Population control and improving family quality.	Internalizing negative externalities of overpopulation (e.g., fiscal burden, stunting) to maximize social wealth.	Long-Term Allocative Efficiency (Social Wealth Maximisation)

<b>Government Regulation No. 87/2014</b> (Implementation of Family Planning)	Regulating administration of family planning services and information systems.	Reducing transaction and information costs for accessing reproductive health services.	Productive & Distributive Efficiency
<b>Presidential Regulation No. 72/2021</b> (Stunting Reduction)	Accelerating the reduction of stunting prevalence.	Correcting market failures in health and nutrition linked to unplanned pregnancies.	Kaldor–Hicks Efficiency (Averted Social Costs)
<b>Law No. 17/2023</b> (Health)	Guaranteeing the right to access quality family planning services.	Providing public goods to maximize individual utility and welfare through informed choice.	Pareto Efficiency & Social Welfare

Source: Research Data (2025)

The main contribution of family planning to maximising social wealth is its support for the creation and utilisation of the demographic dividend (Fathiya, 2023). The demographic dividend, characterised by a low dependency ratio, is conducive to economic growth, innovation and increased basic consumption. From a Posnerian perspective, this is the most efficient reallocation of human resources. When the working-age population is abundant, the country's potential economic output increases substantially. Family planning programmes ensure that this productive population is not only large in quantity but also high in quality, as smaller families are able to invest more in their children's education and health. However, it must be acknowledged that this potential for wealth maximisation will be threatened if family planning efficiency is not supported by efficiency in other sectors, particularly the labour market. If the market is unable to absorb productive labour, inefficiencies in the form of unemployment will hinder the realisation of the social wealth promised by the demographic bonus.

Family planning programmes act as a significant catalyst for increasing women's economic participation (WEP), which directly contributes to GDP growth and wealth maximisation. Families who plan their births allow mothers to have the time and opportunity to enter the formal workforce, thereby increasing family income and strengthening women's contribution as economic actors.

Studies show that access to adequate family planning is strongly correlated with increased reproductive autonomy, higher educational attainment, and greater participation in the female workforce (UNFPA, 2012). Economically, family planning facilitates the reallocation of previously underutilised human resources in the informal/domestic market to the formal market, increasing total productive output.

This increase in PEK triggers a multiplier effect: educated and income-earning women tend to make rational and efficient decisions regarding childcare, such as investing more in their children's health and education, which in turn reduces social costs in the future. Thus, family planning interventions facilitate a positive feedback loop towards sustainable Kaldor Hicks efficiency.

Indonesia's historical success in family planning is empirical validation of the Kaldor–Hicks efficiency hypothesis. Indonesia has been globally recognised for its success in reducing its total fertility rate (TFR) from 5.6 in the late 1960s to 2.3 today. In addition, the rate of modern contraceptive use increased from 18.3% in 1976 to 61.4% in 2007 (Ministry of Health of the Republic of Indonesia, 2021). The accompanying decline in birth and maternal/infant mortality rates indicates that the social gains generated

through the family planning programme outweigh its implementation costs, justifying this regulation as an efficient intervention in Posnerian terms.

## Discussion

### *Justifying the Regulation and Funding of Family Planning Programmes in Indonesia Amid Inefficiency*

Law No. 52 of 2009 serves as the legal basis for the efficient allocation of reproductive rights (JDIH BPK, 2009). In conditions of resource scarcity, high population growth (1.09% per annum) (BPS, 2025) creates tremendous pressure on public resources, known as the demographic Tragedy of the Commons. Individual reproductive decisions that do not take collective costs into account cumulatively result in waste and inefficiency. Family planning laws, by advocating for small, planned families, act to limit these externalities for the sake of national wealth. This law does not prohibit reproduction, but allocates rational reproductive rights, ensuring that limited resources are not distributed thinly among many individuals, but rather invested deeply in a planned number of children, thereby improving the quality of human resources. Law No. 52 of 2009 is, therefore, a tool for long-term Social Wealth Maximisation. This rationale is further exemplified by specific interventions such as Presidential Regulation No. 72 of 2021, which integrates family planning as a nutrition-sensitive intervention in the stunting reduction strategy, aiming to correct market failures that result in high social costs like reduced future national productivity (savethechildren, 2024).

However, the pursuit of this efficient allocation encounters significant real-world constraints. A crucial indicator of systemic inefficiency is the phenomenon of unmet need—referring to couples of childbearing age who wish to space or stop pregnancies but do not use contraception. This reflects a deadweight loss, where resources and services fail to reach willing consumers. The fluctuating increase in unmet need, reaching around 6.9% in 2022, signals persistent structural barriers that hinder the achievement of Pareto efficiency at the individual level, even within a framework designed for collective social wealth maximisation.

The failure to meet this demand is due to high transaction costs that hinder PUS, namely the costs required to complete the transaction (in this case, accessing and using contraception on an ongoing basis):

1. **Information and Education Costs:** Unfounded concerns about side effects and cultural preferences for traditional methods (such as herbal medicine) indicate a failure of information, which acts as a high search cost.
2. **Logistics/Access Costs:** Contraceptive stockouts, distribution delays, and unavailability in remote areas are distribution failures that directly increase logistics costs for PUS (Ministry of Health of the Republic of Indonesia, n.d.). These failures force PUS to discontinue contraceptive use or switch to less effective methods.
3. **Social/Cultural Costs:** Opposition from husbands or family members serves as significant non-monetary transaction costs, especially for women (UNFPA, 2012). Efficient regulations should seek to reduce these costs through interventions that target changes in social norms.

The impact of unmet need on social wealth is manifested in an increase in unwanted pregnancies, which cause significant financial and social losses (UNFPA, 2022). The most prominent impact is an increased risk of stunting, especially in early or closely spaced pregnancies (UNFPA, 2022). Stunting is a massive intergenerational cost; it reduces the quality of the national human resources, lowers productivity, and increases

future public health expenditure, because the costs of stunting are not internalised by couples. Increased unmet need results in negative externalities that are borne by the whole community.

Posnerian rationality demands that the government, as a regulator, allocate resources efficiently. In the context of family planning services, this is measured through costeffectiveness analysis, specifically the Incremental Cost-Effectiveness Ratio (ICER). ICER provides an empirical basis for assessing which contraceptive methods produce the greatest pregnancy prevention (benefit) at the lowest cost. ICER data clearly show that Long-Acting Reversible Contraceptives (LARC), such as IUDs and implants, are far more cost-effective than Short-Acting Reversible Contraceptives (SARC). IUDs have a very low ICER, around £0.64 per pregnancy avoided, while injections have a much higher ICER, reaching £4.00 per pregnancy avoided.

The profound policy implication is that efficient budget allocation must prioritise LARC. Failure to prioritise LARC is a form of allocative and productive inefficiency. Furthermore, logistical failures that cause contraceptive stock shortages in regions are a form of bureaucratic failure that shifts inefficiency to local governments and families, which is an inefficient cost shift from a Posnerian perspective.

Although the family planning budget allocation has been on an upward trend until 2024, there will be a significant decline in 2025, particularly in the procurement of contraceptives, which will only be allocated until September 2025. This policy is justified as an effort to improve the efficiency of state spending, which is a form of short-term fiscal rationality to reduce the deficit and maintain macroeconomic stability.

**Table 2.** Family Planning Programme Budget Profile in Indonesia (2021-2025)

Year	Budget (Rp Billion)	Key Notes
2021	Approximately IDR 17,000 - IDR 18,000 billion	The budget includes the Health and Family Planning Development Fund (DAK) and Family Planning Operational Assistance (BOKB).
2022	Approximately Rp18,000 - Rp19,000 billion	Increased allocation for the procurement of contraceptives, education, and family planning service support.
2023	Approximately Rp20 billion	Focus on strengthening regional-based family planning services and increasing modern family planning coverage.
2024	Approximately Rp20.700 billion	Strengthening the integration of family planning programmes with stunting reduction and reproductive health services.
2025	Approximately Rp12.7 trillion (for BOKB alone) and Rp200 billion specifically for contraceptives.	Significant budget efficiency; the contraceptive budget has been cut from the ideal requirement of Rp850 billion to Rp200 billion, resulting in contraceptive services only being sufficient until September.

These budget figures represent the total expenditure from the Physical Health and Family Planning DAK and Family Planning Operational Assistance, most of which is used for the procurement of contraceptives, distribution, education, and family planning guidance in the regions. Posnerian criticism of family planning budget cuts centres on the conflict between short-term fiscal efficiency and long-term Kaldor–Hicks efficiency. Posner (2001) emphasises that true efficiency must go hand in hand with effectiveness. Given the very low ICER of contraception, especially LARC, the marginal cost savings from eliminating contraceptives are almost certainly smaller than the marginal benefits or costs averted from stunting and unwanted pregnancies that should have been prevented.

These budget cuts will causally increase unmet needs and transaction costs for PUS, which in turn will increase the long-term social costs of addressing stunting, maternal health burdens, and lost GDP output (UNFPA, 2022). This action creates a net social loss, which means that from a Posnerian perspective, budget cuts are an inefficient measure. Rational regulators should protect the most cost-effective instruments from cuts, even under conditions of spending efficiency.

Budget cuts for contraceptive procurement at the central level carry a high risk of causing vertical cost shifting. The burden of logistical shortages and increased unmet need will shift from the central government to subnational governments, forcing them to cover service gaps or face increased unfunded social costs, or even cut other essential services. The Posnerian principle advocates that losses or costs of inefficiency should be borne by those who are best able to prevent them. If the central government fails to manage logistics transaction costs, the resulting inefficiencies are borne by third parties. Efficient fiscal policy should compel the National Family Planning Agency (BKKBN) and the central government to bear the transaction costs and ensure optimal distribution, rather than externalising the burden of inefficiency to the regional level.

There is a fundamental contradiction in government policy: legally, family planning is affirmed as a basic right and a tool for human resource development or long-term efficiency through Law No. 17 of 2023 and Presidential Regulation No. 72 of 2021. However, fiscally, the allocation for this vital instrument has been cut. This contradiction indicates that policymakers may be optimising different utility functions. They may prioritise fiscal stability, measured by debt-to-GDP ratio, over maximising long-term social wealth. EAH analysis highlights that this inconsistency results in socially inefficient resource allocation.

### **Research Limitation**

This study acknowledges several methodological and conceptual limitations. The qualitative, interpretative nature of the legal-empirical analysis, while providing depth, inherently carries a degree of subjectivity in applying the Posnerian theoretical lens to complex socio-legal phenomena. The reliance on secondary data, such as published government reports and survey results (e.g., unmet need rates, budget figures), means the analysis is constrained by the accuracy, consistency, and timeliness of these external sources. Furthermore, the research focuses on a macro and meso-level analysis of legal frameworks and national indicators, which may not fully capture the nuanced, localized transaction costs and cultural barriers experienced at the individual or community level. These limitations suggest that while the study establishes a robust economic-legal justification, future research incorporating primary qualitative data from service providers and users could further refine the understanding of on-the-ground inefficiencies.

### **Novelty and Contribution**

This study offers a significant novel contribution by conducting a rigorous, interdisciplinary examination of Indonesia's Family Planning Programme through the specific lens of Richard A. Posner's Economic Analysis of Law (EAL). While family planning is often analyzed from public health, demographic, or sociological perspectives, this research innovatively frames it as a deliberate legal instrument for wealth maximization and externality internalization. It moves beyond doctrinal legal assessment to perform an efficiency audit of the regulatory framework, empirically testing its alignment with Kaldor-Hicks criteria. The novelty lies in its synthesis of



normative legal analysis, economic efficiency theory, and empirical policy evaluation to construct a coherent legal-economic defense of the program. Consequently, its primary contribution is twofold: theoretically, it expands the application of Posnerian analysis to population law in a developing country context, challenging and enriching the framework's universality; practically, it provides policymakers with a powerful, evidence-based rationale grounded in economic efficiency—rather than solely social welfare—to advocate for sustained regulatory commitment and protected fiscal allocation.

## CONCLUSION AND RECOMMENDATION

### Conclusion

This study concludes that Indonesia's Family Planning Programme is fundamentally a rational and efficient legal intervention when viewed through the Posnerian framework of wealth maximization. The analysis demonstrates that the program's core legal instruments are designed to internalize the significant negative externalities of unplanned population growth, such as stunting and fiscal strain, thereby meeting the Kaldor-Hicks efficiency criterion by generating aggregate social benefits that outweigh its costs. The program is justified as a tool for achieving long-term allocative efficiency in resource distribution and human capital development, essential for harnessing the demographic dividend. However, this theoretical efficiency is critically undermined by persistent implementation failures—primarily manifested as unmet need and vulnerable funding—which represent high transaction costs and regulatory inefficiencies. Thus, the program's economic legitimacy is firmly established in design but is contingently dependent on overcoming these operational hurdles to realize its full potential for social wealth maximization.

### Recommendation

Based on the findings, three targeted recommendations are proposed. *First*, for fiscal policymakers and the legislature, it is imperative to shield the family planning budget from disproportionate cuts by formally adopting a cost-effectiveness justification. Budget allocations should be prioritized based on Incremental Cost-Effectiveness Ratios (ICER), ensuring continued funding for highly efficient Long-Acting Reversible Contraceptives (LARCs) to prevent greater future social deadweight loss. *Second*, for implementing agencies (BKKBN and Ministry of Health), policy must focus on systematically reducing transaction costs. This requires strengthening supply chain logistics to eliminate contraceptive stockouts, launching targeted information campaigns to dispel myths and reduce information costs, and designing community interventions to lower social and cultural barriers to access. Finally, for future researchers, we recommend conducting micro-level studies to quantify the specific transaction costs faced by families in different regions, providing granular data to further refine the efficiency-driven policy adjustments suggested herein.

## AUTHOR CONTRIBUTION STATEMENT

**Didy Hermawan:** As the lead author and corresponding researcher, Didy Hermawan conceived the central research idea, formulated the primary research questions, and designed the overall analytical framework integrating Posnerian theory with Indonesian family planning law. He was primarily responsible for drafting the manuscript's core sections, including the introduction, theoretical framework, and conclusion, and

synthesized the arguments from all co-authors. He also oversaw the entire project timeline, coordinated revisions, and prepared the final manuscript for submission.

**Fajar Ronal Harry Pasaribu:** Fajar Ronal Harry Pasaribu contributed significantly to the legal-doctrinal analysis. His role involved the detailed exegesis and systematization of the primary legal materials, including Law No. 52 of 2009 and its derivative regulations. He was instrumental in constructing Table 1, analyzing the juridical purpose of each instrument, and articulating their legal-economic functions within the Posnerian paradigm, ensuring the accuracy of the legal analysis throughout the paper.

**Muhammad Gustry:** Muhammad Gustry provided the essential economic analysis and contextualization. His contribution focused on applying the principles of microeconomic theory, specifically the concepts of externalities, transaction costs, and Kaldor-Hicks efficiency, to the demographic and policy data. He played a key role in the "Results and Discussion" section, analyzing the efficiency implications of unmet need, budget profiles, and the demographic dividend, thereby bridging the theoretical framework with empirical observations.

**Muhamad Fathony:** Muhamad Fathony was responsible for the empirical data curation and policy analysis. He gathered, verified, and interpreted secondary data from national reports (e.g., BKKBN, Ministry of Health) on indicators such as fertility rates, contraceptive prevalence, and budget allocations. His work was crucial in populating the discussion with concrete evidence, developing Table 2 on budget profiles, and highlighting the practical inefficiencies and fiscal constraints facing program implementation.

**Faisal Santiago:** As the research advisor and promotor, Faisal Santiago provided overarching scholarly guidance, critical oversight, and quality assurance throughout the research process. He reviewed and refined the methodological approach, offered pivotal insights during the theoretical conceptualization, and provided rigorous feedback on multiple drafts of the manuscript to strengthen the coherence, academic rigor, and argumentative flow. His mentorship ensured the study maintained its interdisciplinary focus and contributed meaningfully to the field.

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