

Legal Policy on the National Education System In Influencing Worker Productivity in Indonesia*

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[10.15408/jch.v10i2.27802](https://doi.org/10.15408/jch.v10i2.27802)

Abstract

Human resource investment significantly impacts the economic growth and development of a nation, including Indonesia. It is believed that education expenditures affect worker productivity in Indonesia. Theoretically, education expenditures will contribute to an improvement in worker productivity. Several factors, including a comparison of the competitiveness of domestic workers to the competitiveness of international workers, can be used to determine the effect of education investment on the rise in worker productivity. Empirically, productivity is a function of worker skills. The quantity of a worker's salary might be used to gauge their competitiveness and productivity. At the national level, it is simple to identify the productivity of various economic sectors, such as agriculture, services, and manufacturing. Due to the lack of trained people required by the labour market, conditions in Indonesia have prevented the three sectors mentioned above from achieving their full potential for productivity growth. This condition directly manifests some concerns, notably Indonesia's investment in education and worker productivity, which impacts economic growth. This study employs qualitative research methodologies of the normative research type. This study's research objectives will be satisfied by the study model. This study will answer how education investment affects worker productivity in Indonesia. The study's findings indicate that it is not accurate to assert that the education policy in Indonesia has a good effect on enhancing workers' abilities. Therefore, the issue of worker productivity must still be handled seriously to compete with workers from other nations.

Keywords: Worker Productivity; Economic Growth; Education Investment; Education Law Policy

* Received: March 15, 2022, revised: March 20, 2022, accepted: April 15, 2022, Published: April 30, 2022.

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Tinjauan Kebijakan Hukum Sistem Pendidikan Nasional Dalam Mempengaruhi Produktivitas Pekerja Di Indonesia

Abstrak

Investasi sumber daya manusia berpengaruh penting terhadap pertumbuhan dan pembangunan ekonomi sebuah negara termasuk di Indonesia. Diduga terjadi pengaruh investasi pendidikan terhadap produktivitas tenaga kerja di Indonesia. Secara teori investasi pendidikan secara positif akan menyumbang kepada peningkatan produktivitas pekerja. Meningkatnya produktivitas pekerja karena pengaruh investasi pendidikan bisa dipastikan karena beberapa aspek, diantaranya adalah ukuran daya saing pekerja terhadap daya saing pekerja asing. Secara empirik, keterampilan pekerja merupakan ukuran produktivitas tersebut. Daya saing dan produktivitas pekerja dapat diukur melalui jumlah gaji yang diterimanya. Dari perspektif negara, produktivitas diberbagai sektor ekonomi seperti di bidang pertanian, bidang jasa dan manufaktur mudah diidentifikasi. Hal ini disebabkan pada kondisi di Indonesia, ketiga sektor di atas belum sepenuhnya menunjukkan adanya peningkatan yang optimum terhadap produktivitas yang dihasilkan, disebabkan oleh kurangnya pekerja terampil sesuai yang dibutuhkan pasar tenaga kerja. Keadaan ini secara langsung mewujudkan berbagai masalah, khususnya investasi pendidikan dan produktivitas tenaga kerja yang dialami oleh Indonesia sehingga mempengaruhi pertumbuhan ekonomi. Penelitian ini menggunakan metode penelitian kualitatif, dengan jenis penelitian normatif. Model kajian akan menjawab tujuan penelitian yang dimaksud pada penelitian ini. Penelitian ini akan menjawab masalah pengaruh investasi pendidikan terhadap produktivitas pekerja di Indonesia. Hasil penelitian menunjukkan bahwa tidak sepenuhnya dapat dikatakan bahwa kebijakan pendidikan di Indonesia berpengaruh positif atas peningkatan keterampilan para pekerja sehingga masalah produktivitas pekerja masih harus dibenahi secara serius agar dapat bersaing dengan pekerja dari negara lain.

Kata Kunci: Produktivitas Pekerja Pertumbuhan Ekonomi; Investasi Pendidikan; Kebijakan Hukum Pendidikan

Правовая политика национальной системы образования влияющая на производительность труда в Индонезии

Абстрактный

Инвестиции в человеческие ресурсы оказывают значительное влияние на экономический рост и развитие стран, в том числе Индонезии. Считается, что расходы на образование влияют на производительность труда в Индонезии. Теоретически расходы на образование повышают производительность. Несколько факторов, в том числе сравнение конкурентоспособности домашних работников с конкурентоспособностью иностранных работников, можно использовать для определения воздействия инвестиций в образование на повышение производительности. Как правило, производительность зависит от квалификации работника. Зароботная плата работника может быть использована для оценки его или ее конкурентоспособности и производительности. Нетрудно определить показатели различных секторов экономики, таких как сельское хозяйство, услуги и производство на национальном уровне. Ситуация в Индонезии не позволяет трем упомянутым выше секторам полностью реализовать свой потенциал роста производительности из-за нехватки подготовленного персонала, необходимого рынку труда. Такая ситуация прямо указывает на ряд проблем, в частности на инвестиции Индонезии в образование и производительность труда, которые влияют на экономический рост. В этом исследовании используются качественные методы исследования, такие как нормативное исследование. Дизайн исследования будет соответствовать исследовательским целям настоящего исследования. Это исследование ответит на вопрос, как инвестиции в образование влияют на производительность труда в Индонезии. Полученные данные свидетельствуют о том, что не совсем верно утверждение о том, что политика в области образования в Индонезии оказывает положительное влияние на развитие работников, и что для того, чтобы конкурировать с работниками в других странах, необходимо тщательно следить за производительностью труда.

Ключевые слова: производительность труда; Экономический рост; Инвестиции в образование; Политика в области законодательства об образовании

A. INTRODUCTION

Human variables with proper qualifications determine economic values; hence education is an investment in human capital. The field of academic economics investigates the nexus between monetary policy and schooling. However, education's importance lies in its individual and collective benefits. Of course, this is mandated by a statute with specific, measurable objectives for raising the bar in educational excellence.

Challenges to labour productivity in Indonesia arise across industries. For instance, most people with poor access to resources and outdated technology have focused their efforts on agriculture since the New Order era. As a result, even if the service sector was not flourishing, agricultural employment was no longer the first option for job seekers. In addition, the bulk of Indonesian factory workers is unskilled labourers since the quality of human resources falls short of what the manufacturing industry requires. Thus, due to these conditions, most Indonesian workers have resorted to the informal economy and freelance employment. Yet, in terms of Indonesian standard skills productivity, the quality of the work falls short. As a result, this research is crucial for appreciating the long-term viability of productivity in light of educational investment in Indonesia. Education spending in Indonesia has resulted in a highly productive and competent worker population, allowing the country to successfully meet the demands of the labour market. Work productivity in this context refers to the standard set of abilities in the agriculture, service, and manufacturing sectors.

The quality of human resources is a measure of education seen from the ability of workers to influence the income earned. Barro (2013) stated that, in general, the evidence base for the success of education would significantly impact the competitiveness of human resources in the country. Barro also continued his study by looking at aspects of the size of human resources through the stages of school achievement. Furthermore, the study classified respondents based on gender and age in primary, secondary and tertiary education (Barro & Lee, 1993). This study is supported by Cohen & Soto (2007), who confirms that the development of the Solow production function with the Mincerian approach to the growth of human resources is significant.

In theory, Mankiw et al. (1992) emphasize the importance of human resources in a country's economic growth. This situation was proven by Kendrick in 1976, who predicted that more than half of the total share capital in the United States was represented by human resources in 1969 (Psacharopoulos, 1984). Furthermore, Mankiw et al. (1992) added that acquiring adequate human resources directly impacts how individuals conceptualize growth, as

demonstrated by theoretical modelling. As a result, the theory of investment in human resources was established, emphasizing the educational component, which is the source of labour income.

Every year, Indonesia's economic growth improves dramatically. This influences the nation's labour force quality. There has been a steady decline in poverty in Indonesia since President Soeharto through the administrations of BJ Habibie, Abdurahman Wahid, Megawati Soekarno Putri, and the direct election of the President beginning with Susilo Bambang Yudhoyono and continuing through the current administration of President Joko Widodo.

According to Suryadarma & Suryahadi (2010), in the next 25 years, as much as 25% of the current workforce will still be actively employed. Therefore, the current workforce will undoubtedly get more educated over time, although this improvement will be incremental. In reality, the education level of new workers significantly impacts the education profile of future Indonesian workers. Therefore, the current status of education investment in Indonesia is threatened, which has implications for worker productivity.

Evidence implies that even if highly skilled individuals boost national wealth without fostering education, they do not necessarily invest that money in their children's education. The same holds for health issues, which are likewise affected by educational levels. Both are intertwined with the idea of investing in a country's human resources by way of its educational system. (Todaro & Smith, 2009)

B. METHODS

This study employs a qualitative descriptive method. This study examines the effect of education expenditures on labour productivity in Indonesia. In the process of normative analysis, relevant components are employed to conduct in-depth observations of the available empirical evidence to fulfil the predetermined study objectives. The utilization of qualitative theory research methods is crucial to the explanation of the theory. The fundamental document of legal research is a state-issued legal document that can be utilized as an analytical instrument to describe the factual situation in Indonesia related to investment in human resources and labour productivity.

C. RESULTS AND DISCUSSION

1. Legal Education Policy in Indonesia's Economic Sector

The development of educational investment in Indonesia is measured by the quantity of investment made by the Indonesian government after the 1945 Constitution was amended. The national education law number 20 of 2003 establishes a program design plan for education by establishing educational policies known as the three pillars of education strategy. The three pillars are increasing and equalizing access to education, enhancing relevant quality and competitiveness, and bolstering educational management responsibility. Following the 1945 Constitution of the Republic of Indonesia, the government guarantees citizens access to educational services and implements a national teaching system. Furthermore, the government is required to provide residents with academic services. ([Hafidati, 2020](#))

Education policy in Indonesia based on Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System is directed to achieve the following: ([UU No. 20/2003](#))

1. Striving for the expansion and equal distribution of opportunities for obtaining high-quality education for all Indonesian people towards creating high-quality Indonesian human beings with a significant increase in the education budget.
2. Increasing academic and professional skills and raising safeguards for the well-being of educational staff so that teaching staff can perform optimally, particularly in enhancing character and character education to reestablish the credibility of educational institutions and employees.
3. Reforming the education system entails updating the curriculum in the form of curriculum diversification to serve the diversity of students, assembling national and local curricula appropriate to local interests, and professionally diversifying education methods.
4. Empowering educational institutions both at and outside of school as centres for cultivating values, attitudes and abilities, as well as increasing family and community participation which adequate facilities and infrastructure support. Carrying out renewal and strengthening of the national education system based on the principles of decentralization, scientific autonomy, and management.

5. Improving the quality of educational institutions organized by the public and the government to establish an effective and efficient education system dealing with developments in science, technology and art.
6. It is developing the quality of human resources from an early age in a directed, integrated and comprehensive manner. This is done through various proactive and reactive efforts by all components of the nation so that the younger generation can develop optimally, accompanied by the right to support and protection following their potential.
7. Increasing the mastery, development and utilization of science and technology, including the nation's technology in the business world, tiny and medium enterprises and cooperatives.

Economic growth influences public investment in education and vice versa. In developed nations, the government pays a great deal of attention to the development of the education sector; for instance, the political commitment of the education sector's budget is comparable to that of other sectors, so the success of educational investment is correlated with the sector's macro development.

Education development is reflected in an increase in the income or welfare of individuals who have made private educational investments so that the income or wages of a worker can measure investment success. The quality of workers or the distribution of labour and capital sectors can be used to describe the output and productivity stages that move according to the conditions of the business sector.

Education is the most significant contributor to the country's productivity, so it has high efforts to increase state revenues. Therefore, after the amendment to the 1945 Constitution, Indonesia implemented a nine-year compulsory education program in addition to emphasizing primary and secondary education. Furthermore, Indonesia attaches importance to higher education, which is the main capital for producing more competitive workers globally.

Improving the quality of education has a strong relationship between aspects of human capital which consists of the size of the education stage and the workforce's ability which affects the ability to spend and potential income. Knowledge and human resource externalities are necessary for explaining differences in growth rates between countries ([Klenow & Clare, 2005](#)) and differences in regional development ([Gennaioli, et al., 2013](#)). Lucas (1988), Romer (1989), and Moretti (2004) show that the increase in human resources is only offered in the educational aspect.

According to the ILO Indonesia report (2017), the poverty rate in Indonesia in 1996 was 17.4 per cent. The severe financial crisis then paralyzed the Asian continent and resulted in a drastic increase in population growth under the poverty line, as much as 24.2 per cent in 1998. Then, the ratio of poor people declined, although very slowly. This development is demonstrated by the number of poor people reducing from 19.40% to 10.12% from 2010 to 2017. However, ineffective educational investment results in slow productive human development, so low worker wages significantly affect the workforce's welfare conditions. When this happens, every less productive working household's poverty rate continues to rise.

Schultz (1974) and Deninson (1962) then show that the development of the education sector with the quality of human resources is a focus. The point has contributed directly to a country's economic growth by increasing workers' skills and productivity capabilities. These findings and perspectives have stimulated the interest of several experts to research the monetary value of education.

The development paradigm that refers to a knowledge-based economy is increasingly dominant. This paradigm emphasizes three things, namely: First, economic progress in many respects relies on the support base of science and technology; Second, the causal relationship between education and economic progress is becoming more solid; Third, education is the primary driver of the dynamics of economic development, which drives long-term structural transformation processes. As an illustration, Japan is the first Asian country to pioneer knowledge-based economic development after Japan, followed by other East Asian countries such as Singapore, China, Taiwan, Hong Kong and South Korea.

2. The Influence of Education on Labor Productivity in the Economic Sector in Indonesia

Education universally means efforts to change humans to become more intelligent and skilled, which in Indonesian educational philosophy, education is an effort to educate the nation's life. Reducing poverty, unemployment, and inequality and a better standard of living can only be done through increased productivity. Increased productivity is an essential determinant for improving the population's standard of living. Productivity increases result in spending increases, which can lower the price environment. The following effect is to increase real wages so the population can improve welfare. State productivity is associated with the number of goods and services produced by the average

worker in certain working hours (output per hour worked) ([Hanushek & Kimko, 2000](#); [Hanushek & Woessmann, 2012](#)).

Much economic literature explains that aggregate productivity is measured by Gross Domestic Product (GDP). The determinants of productivity are the tangible technological inputs and the quantity and quality of the information. It should be understood that technological developments are not the same for every industry or economic activity. In some sectors, technology changes quickly; in others, it changes slowly. In essence, the use of technology is strongly influenced by its compatibility with other inputs, especially labour. Besides directly determining the productivity level, workers' quality also affects productivity through technology. Low-quality workers have little influence over technology choices, resulting in lower productivity.

As evidence of its investment in education, the government must establish salary requirements for qualified workers—a demonstration of respect for the professionalism and skill of employees. However, the government can only set regional minimum salaries even during the transition and reform. Therefore, corporations implement minimum wages, where skilled workers must be able to earn a salary commensurate with their qualifications. In addition, the government offers laws and regulations for employee salary levels based on revisions to the wage adjustment system, as the previous year's economic growth influences the current year's economic growth.

The execution of investment in education in Indonesia needs to be focused on the formulation and implementation of various human resource development programs directed towards the needs of the labor market, which impact economic growth. The stages of appropriateness and the impact of educational investment develop human resources that are both productive and sustainable. This is due to the influence of investment policy reasons on the current developments in the global market and the corporate factor as a party that utilizes labour productivity since human capital has a competitive edge. ([Azhar, et.al., 2018](#))

The design of investment in education in Indonesia is the same as that of developed countries in other parts of the world practised. For example, several countries in Sub-Saharan Africa (SSA) spend as much as 8.9 per cent of their public budget on investment in the education sector ([Fredriksen & Fossberg, 2014](#)). In addition, Sri Lanka is one of the countries that emphasizes and prioritizes raising the population's education by enhancing the quality of more productive workers, hence fostering economic progress.

Research by Ganedodage & Rambaldi (2011) shows that 3% of Sri Lanka's GDP goes toward funding educational investment and expansion. When low-income nations invest between 3.2 and 4.1% of their gross domestic product (GDP) in education, everyone benefits. Focusing on education, the World Economic Forum's 2015 report titled "Growth in Economic Cooperation and Development" noted that OECD countries contributed 11% of total education spending, with several nations involved, including Costa Rica (30%), Chile (16%), and New Zealand (19%), while Greece only allocated 6%. ([Ganegodage & Rambaldi, 2011](#))

McMahon and Boediono's (1992) earlier study has explained their findings by emphasizing that per capita growth in Indonesia is influenced by universal primary education. The education growth that affects the educational investment strategy most is at the junior high school (SLTP) level, with the highest percentage of academic achievement. McMahon (1998), in his study, then gave the main focus that secondary and tertiary education spending became more significant because students at the basic education level were universal. That is, basic (primary) education is the main foundation for developing further education, namely secondary (secondary) and tertiary (higher). However, this finding differs from a study conducted by Mendy and Widodo (2018), which found that primary and secondary education did not show a significant effect; in fact, only tertiary education (university) substantially impacts economic growth.

A study by Kasri stated that education in Indonesia is dominated by elementary school graduates (SD) in the job market ([Kasri, 2011](#)). This is one of the contributing factors to the negative effect of JSS on productivity. On the other hand, the negative impact of junior high school education on labour productivity is partly driven by the quality factor of junior and elementary school education, which does not significantly contribute to increased productivity. The decision of this study follows the study of Suryadarma et al. (2006), which states that the quality of the elementary and junior high school education systems needs to be overhauled and improved, particularly in science and mathematics education.

Furthermore, Kasri (2011) argues that the level of high school education has a positive influence on economic growth and labour productivity in Indonesia. Several factors namely can explain the differences in the decisions of this study: First, the recruitment of high school graduates in Indonesia is still relatively low compared to the supply of other graduates, especially elementary school workers; Second, the market need for labour that prioritizes graduates with vocational (vocational) high school education. The limited supply of workers with vocational high school graduates has pushed the market to switch

to the diploma level ([Suryadarma & Jones, 2013](#)); Third, graduates of high school education in Indonesia tend to continue their education to a higher level (diploma and university) rather than entering the labour market. In addition to the three factors above, family economic factors also contribute to the influence of differences in junior and senior high school education levels ([Muttaqin, 2017](#)). The financial aspects of Indonesia's population, which is primarily low-income, reduce the opportunity to continue their education to senior high school ([Pradhan, 1998](#); [Suryadarma, et. al., 2006](#); [Sumarto, 2006](#); [Yudo, et.al. 2016](#); [Resosudarmo, et.al., 2014](#); [Wicaksono, et.al., 2018](#)). In addition, higher education clearly has a significant influence, especially in providing the skilled workforce required by the labour market, as experienced in developed countries. ([McMahon & Boediono, 1992](#); [Yussof & Zakariya, 2009](#); [Mora, et.al., 2015](#); [Wahyuni & Mahirda, 2016](#))

This status competition theory treats education as a social institution whose function is allocating personnel socially according to educational strata. The desire to achieve a higher status leads people to take higher education. Even though people with higher education have a higher proportion of national income, an increase in the proportion of people with higher education in a nation will not automatically increase economic expansion or growth.

On the other hand, the theory of class or social class growth argues that the primary function of education is to promote social class structures and imbalances. Elite-class education focuses more on classical studies, humanities, and other sciences that have nothing to do with social and economic development—at the same time, educating ordinary people in a way that serves the interests of the ruling class. As a result, the class growth process hinders education's contribution to economic growth. ([Bowles & Gintis, 1976](#))

D. CONCLUSION

The growth of the education system in Indonesia has undergone significant modifications. Education development in Indonesia is governed mainly by political influence inside the government system. Political shifts have ushered Indonesia into the reform era by favouring increasing education spending. The objective is to develop state-oriented educational standards, namely, to educate the nation to promote the people's prosperity.

Considering the present circumstance, education expenditures continue to rise. Education's objective is not simply to boost student morale but also to develop productive graduates. The development of the Indonesian education

system is more focused on primary and secondary education than on university education. Thus, the government must pay particular attention to fulfilling the primary objective of expanding knowledge and boosting public interest in education sustainably. Consequently, identifying and absorbing 20% of the APBN for education is anticipated to assist students, particularly those struggling, and balance the number of graduates from elementary, junior high, high school, and tertiary institutions to maximize the labour market implementation excellence and increased productivity.

REFERENCES:

- Azhar, M., Suwatno, S. & Mahmud, A. 2018. Determinant Return to Education in Indonesia. *Manajerial* 3(4): 52–69.
- Barro, R. J. 2013. Education and Economic Growth. *Annals of economics and finance*, 14(2): 277–304. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.656.7716&rep=rep1&type=pdf>.
- Barro, J. & Lee, J.-W. 1993. International comparison of educational attainment. *Journal of Monetary Economics* 32: 363–394.
- Bowles, S and Gintis, H. 1976. *Schooling in Capitalist America: Education Reform and the Contradictions of Economic Life*. New Yor: Basic.
- Cohen, D. & Soto, M. 2007. Growth and human capital: good data, good results. *Journal of Economic Growth* 12(1): 51–76. doi:10.1007/s10887-007-9011-5.
- Fredriksen, B. & Fossberg, C. H. 2014. The case for investing in secondary education in sub-Saharan Africa (SSA): Challenges and opportunities. *International Review of Education* 60(2): 235–259. doi:10.1007/s11159-014-9407-3.
- Gennaioli, N., Shleifer, A., Lopez-De-Silanes, F. & Shleifer, A. 2013. Human Capital and Regional Development. *The Quarterly Journal of Economics*, 105–164. doi:10.1093/qje/qjs050.
- Ganegodage, K. R., & Rambaldi, A. N. 2011. The impact of education investment on Sri Lankan economic growth. *Economics of Education Review*, 30(6), 1491–1502. <https://doi.org/10.1016/j.econedurev.2011.08.001>
- Hanushek, E. A. & Kimko, D. D. 2000. Schooling, labour-force quality, and the growth of nations. *American Economic Review* 90(5): 1184–1208. doi:10.1257/aer.90.5.1184

- Hanushek, E. A. & Woessmann, L. 2012. Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth* 17(4): 267–321. doi:10.1007/s10887-012-9081-x.
- ILO Indonesia. 2017. Laporan Ketenagakerjaan Indonesia. Jakarta, Indonesia.
- Kasri, R. A. 2011. Time Series Evidence on Education and Economic Growth in Indonesia. *Economic Journal of Emerging Markets* 3(2): 109–123.
- Kasri, R. A. 2011. Time Series Evidence on Education and Economic Growth in Indonesia. *Economic Journal of Emerging Markets* 3(2): 109–123.
- Klenow, P. J. & Rodríguez-Clare, A. 2005. Externalities and Growth. *Handbook of Economic Growth*, hlm. Vol. 1A, 818–859. Stanford University and NBER. doi:10.1016/S1574-0684(05)01011-7.
- Lucas, R. E. 1988. On the mechanics of economic development. *Journal of Monetary Economics* 22(1): 3–42. doi:10.1016/0304-3932(88)90168-7.
- Mankiw, N. G., Romer, D. & Weil, D. N. 1992. A Contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics* 107(2): 407–437. doi:10.2307/2118477.
- McMahon, W. W. & Boediono, W. W. 1992. Universal basic education: An overall strategy of investment priorities for economic growth. *Economics of Education Review* 11(2): 137–151. doi:10.1016/0272-7757(92)90004-M.
- Mendy, D. & Widodo, T. 2018. Do Education Levels Matter on Indonesian Economic Growth? *Economics & Sociology*, 11(3), 133–146. <https://doi.org/10.14254/2071-789X.2018/11-3/8>.
- Mora, J. G., Ferreira, C., Vidal, J. & Vieira, M. J. 2015. Higher education in Albania: developing third mission activities. *Tertiary Education and Management* 21(1): 29–40. doi:10.1080/13583883.2014.994556.
- Moretti, E. 2004. Estimating the social return to higher education: Evidence from longitudinal and repeated cross-sectional data. *Journal of Econometrics* 121(1–2): 175–212. doi:10.1016/j.jeconom.2003.10.015.
- Muttaqin, T. 2017. University of Groningen The education divide in Indonesia. Education is devide in Indonesia.
- Putri Hafidati, Kebijakan Publik Terhadap Pendidikan Di Indonesia Pada Masa Pemerintahan Orde Reformasi, Vol. V No. 1 Januari Tahun 2020, No. ISSN 2548-7884. <https://repository.uai.ac.id/wp->

[content/uploads/2020/03/Jurnal-Magister-Ilmu-Hukum-Vol-V-No.1-Januari-2020 Putri-Hafidati.pdf](http://content/uploads/2020/03/Jurnal-Magister-Ilmu-Hukum-Vol-V-No.1-Januari-2020-Putri-Hafidati.pdf)

- Psacharopoulos, G. 1984. The Contribution of Education to Economic Growth. International Comparisons. *International Productivity Comparisons and the Causes of the Slowdown* (320): 335–360. Retrieved from <http://www.csus.edu/indiv/l/langd/Psacharopoulos2.Pdf>.
- Pradhan, M. 1998. Enrolment and Delayed Enrolment of Secondary School Age Children in Indonesia. *Oxford Bulletin of Economics* 4: 413–430.
- Resosudarmo, B. P. & Suryadarma, D. 2014. The Impact of Childhood Migration on Educational Attainment: Evidence from rural–urban migrants in Indonesia. *Asian Population Studies* 10(3): 319–333. doi:10.1080/17441730.2014.942954
- Romer, P. M. 1989. *Human Capital and Growth: Theory and Evidence*. Cambridge.
- Schultz, T. 1974. *The Economic of the Family*. Chicago: Chicago of University Press.
- Suryadarma, D., & Suryahadi, A. 2010. Determinants of Education Attainment in Developing Countries: Can Higher Skills Compensate for Poverty? *Journal Australian National University*. [https://doi.org/10.1016/S0167-8809\(99\)00037-7](https://doi.org/10.1016/S0167-8809(99)00037-7).
- Suryadarma, D. & Jones, G. W. 2013. Education in Indonesia. *Education in Indonesia*. doi:10.4324/9780429397981-5.
- Suryadarma, D., Suryahadi, A. & Sumarto, S. 2006. Causes of low secondary school enrollment. The SMERU Research Institute.
- Suryadarma, D., Suryahadi, A., Sumarto, S. & Rogers, F. H. 2006. Improving student performance in public primary schools in developing countries: Evidence from Indonesia. *Education Economics* 14(4): 401–429. doi:10.1080/09645290600854110.
- Todaro, M. P. & Smith, S. C. 2009. *Pembangunan Ekonomi Ed.1* (11th ed.; N. I. S. Adi Malulana, ed.). Retrieved from www.erlangga.co.id.
- Undang-Undang Republik Indonesia No. 20 tahun 2003 tentang Sistem Pendidikan Nasional.
- Yudo, T. & Firman, W. 2016. The effect of child's socio-economic conditions during primary school on school transition : evidence from Indonesia.

Yussof, I. & Zakariya, Z. 2009. Pertumbuhan Ekonomi dan Keperluan Pendidikan Tinggi di Malaysia. *Jurnal Ekonomi Malaysia*, 43: 85–105.

Wahyuni, H. & Mahirda, K. 2016. Returning to General and Vocational High-Schools in Indonesia. *Review of Economics & Business Studies* 9(2).