

PUSHING THE IMPROVEMENT OF THE INDONESIAN LEGAL DATABASE FOR LAW RESEARCH AND ECONOMIC RESEARCH

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ABSTRACT

Indonesian legal databases are still scattered in various agencies. Indonesia's legal database, both qualitative and quantitative, is very important for legal research, especially law and economics. The issue discussed is how to encourage the Indonesian legal database. This research is descriptive-analytical that aimed at expressing a problem or situation or event as it is so that it can reveal the actual facts. Data types used in this study is secondary data. All data is analyzed by the qualitative analysis method. The results of the study indicate that Indonesia does not yet have the quantitative database, the establishment of a college database in Indonesia can encourage the formation of a national Indonesian legal database, the establishment of a Research institutes database also can encourage the formation of a national Indonesian legal database. Data integration needs to be done to encourage the formation of a national Indonesian legal database.

Keywords: legal database, data integration, legal research, law economics

A. INTRODUCTION

Indonesian legal databases are still scattered in various agencies. Indonesia's Supreme Court has a regulatory database,¹ The Law and Human Rights Research and Development Agency has a database of Legal issues² At the end of 2017, the Supreme Court of the Republic of

Indonesia (MA) signed a collaboration with hukumonline.com and the Institute for Study and Advocacy for Judicial Independence (IeIP) in providing digital data centers for legislation and court decisions for all judicial citizens in Indonesia.³ The Ministry of Research, Technology and Higher Education has Sinta (Science and Technology Index)

¹ Mahkamah Agung Republik Indonesia, *Databased Peraturan Perundang-undangan*, <http://pn-airmadidi.go.id/hukum/dokumentasi-hukum/database-perundangan.html>, accessed Wednesday 12 June 2019.

² Balitbang Hukum dan HAM, *Database Permasalahan Hukum dan HAM Datamaskumham*, <http://www.balitbangham.go.id/detailpost/database-permasalahan-hukum-dan-ham-datamaskumham-agustus-2018>, accessed Wednesday 12 June 2019.

³ Hukum Online, *Mulai 2018, Hukumonline Sediakan Database Peraturan Terlengkap Bagi MA dan Warga Peradilan Indonesia*, <https://www.hukumonline.com/berita/baca/lt5a6991503026a/mulai-2018--hukumonline-sediakan-database-peraturan-terlengkap-bagi-ma-dan-warga-peradilan-indonesia/>, accessed Wednesday 12 June 2019.

Indonesia.⁴ The National Legal Information & Documentation Center and Network, National Legal Development Agency, The Minister of Law and Human Rights has more than 161350 Legal Documents.⁵ All databases produced are qualitative databases.

Indonesia needs a quantitative legal database. This is important because the legal database not only qualitative but also quantitative, although at least the central statistics agency produced a quantitative database.⁶ This opinion is supported by Hartono⁷, that the law not only as legal regulations or norms but includes salary, employee welfare, development budget, and others.

Indonesia's legal database, both qualitative and quantitative, is very important for legal research, especially law and economics, both individual or organization. For example, based on quantitative data, the World Bank welfare analysis⁸ shows that Indonesia's growth outlook remains moderately

positive and stable due to sound macroeconomic fundamentals and stronger domestic demand being projected over the forecasting horizon. However, downside risks remain substantial despite some recent easing in financial volatility. The issue discussed is how to encourage the Indonesian legal database?

B. RESEARCH METHODS

This descriptive-analytical research aimed at expressing a problem or situation or event as it is so that it can reveal the actual facts.⁹ Data types used in this study are secondary data and primary data. Secondary data which consists of Primary Legal Materials such as Law of the Republic of Indonesia Number 18 of 2002 concerning National System for Research, Development and Application of Science and Technology (State Gazette of the Republic of Indonesia of 2002, Supplement to State Gazette of the Republic of Indonesia

⁴ Kemenristek Dikti, *Sinta Indonesia*, [http://sinta2.ristekdikti.go.id/journals?q=&search= 1&sinta=1](http://sinta2.ristekdikti.go.id/journals?q=&search=1&sinta=1), accessed Wednesday 12 June 2019.

⁵ JDIH BPHN, *Lebih Dari 161350 Dokumen Hukum Dapat Diakses Di JDIHN*, <http://jdihn.bphn.go.id/>, accessed Wednesday 12 June 2019.

⁶ Badan Pusat Statistik, *Informasi Terbaru*, <https://www.bps.go.id/>, accessed Wednesday 12 June 2019.

⁷ Sunaryati Hartono, *Upaya Menyusun Hukum Ekonomi Indonesia Pasca Tahun 2003*, paper for 'Seminar Pembangunan Nasional VIII' with theme 'Penegakan Hukum dalam Era Pembangunan Berkelanjutan', hold on Badan Pembinaan Hukum Nasional, Denpasar, 14-18 juli 2003

⁸ The World Bank, *Indonesia Economic Quarterly Strengthening Competitiveness*, 2018. p. 24

⁹ Hardari Nawawi, *Metode Penelitian Sosial* (Yogyakarta, Gajahmda Press, 1993), p. 31.

Number 4219), Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education (State Gazette of the Republic of Indonesia of 2012 Number 158, Supplement to the State Gazette of the Republic of Indonesia Number 5336), the Republic of Indonesia Minister of Research, Technology and Higher Education Regulation Number 20 of 2018 concerning Research (Official Gazette of the Republic of Indonesia Year 2018 Number 759). The secondary legal material such as books, literature, papers, journal, and tertiary data such as Kamus Bahasa Indonesia. Secondary data collection was carried out using the literature approach method, which is library research. All data are analyzed qualitatively.¹⁰ The purpose of the analysis is to interpret, and hence, convert the data into the story that describes the phenomenon or the participant views.¹¹

C. DISCUSSION

To discuss the issue above, this paper is divided into three parts, namely

the definition of Indonesian legal database, research, and Indonesian legal database reform.

1. Definition of Indonesian Legal Database

According to Robbin, database, in general, is any collection of related data. Restrictively a database is a persistent, logically coherent collection of inherently meaningful data, relevant to some aspects of the real world.¹² Definition of the database is computers: a usually large collection of data organized especially for rapid search and retrieval (as by a computer).¹³

According to Oxford Lib Guides, legal databases are contents include:¹⁴

a. Law Reports and Cases:

- The Law Reports series - 1865 onwards
- Weekly Law Reports
- A large number of subject specialist reports
- The English Reports (reprint of the nominate reports)
- Unreported transcripts

¹⁰ David Silverman, "Qualitative Research_ Theory, Method and Practice" (Sage Publications Ltd, 2004).

¹¹ Barbara Kawulich, "Qualitative Data Analysis Techniques," no. January 2004 (2015). p. 112.

¹² Robert J Robbins, *Database Fundamentals*, 1995. p. 2

¹³ Meriam Webster, "Database," n.d., <https://www.merriam-webster.com/dictionary/database>.

¹⁴ Oxford LibGuides, "United Kingdom Law: Legal Databases," 2019, <https://ox.libguides.com/c.php?g=422832&p=2887406>.

- Case Analysis documents including case summaries and citator information
- b. Legislation
- Fully consolidated full text of acts since 1267 (currently in force)
 - Statutory Instruments since 1948 (currently in force)
 - Selected historical versions of acts
- c. Journals
- The Legal Journals Index which has abstracts of every UK published a legal article from 1986
 - A large number of full-text journals including the Criminal Law Review, Public Law, Cambridge Law Journal and Oxford Journal of Legal Studies
- d. Books
- The Common Law Series including Chitty on Contract and Clerk and Lindsell on Tort
 - Dicey and Morris on Conflict of Laws
 - White Book (Civil Procedure)
 - Archbold on Criminal Procedure
- e. Guides and tutorials

According to Hartono, usually, people only see and even identify the law

too often with legal regulations or / even narrower, only by law - just invite. In fact, the rule of law is only one element the entire legal system, which consists of 7 (seven) elements as follows:¹⁵

1. Principles of law (legal philosophy)
2. Legal regulations or norms, consisting of:
 - a. Law
 - b. Regulations for implementing the law
 - c. Permanent jurisprudence (case law)
 - d. Customary law
 - e. International conventions
 - f. Principles of international law
3. Professional, responsible and conscious human resources law
4. Legal institutions
5. Legal institutions include:
 - a. The organizational structure
 - b. His authority
 - c. Processes and procedures
 - d. Mechanism of action
6. Legal facilities and infrastructure, such as:
 - a. Furniture and other office equipment, including computers and systems office management

¹⁵ Sunaryati Hartono, *op. cit.*

- b. Weapons and other equipment (especially for the police)
 - c. Vehicle
 - d. Salary
 - e. Employee welfare/employees
 - f. Development budget, and others
7. Legal culture, which is reflected by the behavior of officials (executive, legislative as well as the judiciary), but also the behavior of the people (including the press), who are at Indonesia tends to judge itself before it is actually proven a suspect or defendant is truly guilty of something crime or despicable act.

Base on Hartono's seven elements of the legal system above, the Indonesian legal database should not only the law as legal regulations or norms but includes salary, employee welfare, development budget, and others, that can be measured quantitatively. Unfortunately, Indonesia does not yet have this database.

The legal database does not only consist of qualitative data, but also quantitative data. According to Bhat,¹⁶ quantitative data is defined as the value of data in the form of counts or numbers

where each data-set has a unique numerical value associated with it. This data is any quantifiable information that can be used for mathematical calculations and statistical analysis, such that real-life decisions can be made based on these mathematical derivations. Quantitative data is used to answer questions such as "How many?", "How often?", "How much?". This data can be verified and can also be conveniently evaluated using mathematical techniques. For example, there are quantities corresponding to various parameters, for instance, "How much did that laptop cost?" is a question that will collect quantitative data. There are values associated with most measuring parameters such as pounds or kilograms for weight, dollars for cost et cetera.

Based on the definition above and in the Indonesian context, the Indonesian legal database is a collection of data both qualitative and quantitative that can be analyzed.

2. RESEARCH

Juridically, there are differences in the understanding of research in Law

¹⁶ Adi Bhat, "Quantitative Data: Definition, Types, Analysis And Examples," 2019, <https://www.questionpro.com/blog/quantitative-data/G>.

Number 18 of 2002 concerning the National System of Research, Development, and Application of Science and Technology with Law Number 12 of 2012 concerning Higher Education. According to Law Number 18 of 2002, research is an activity carried out according to scientific principles and methods systematically to obtain information, data, and information relating to understanding and proof of truth or untruthful assumptions and/or hypotheses in the field of science and technology and draw scientific conclusions for the needs of advancing science and technology,¹⁷ and according to Law Number 12 of 2012, research is an activity carried out according to scientific principles and methods systematically to obtain information, data, and information relating to understanding and/or testing a branch of science and technology,¹⁸ but based on the Republic of Indonesia Minister of Research, Technology and Higher Education

Regulation Number 20 of 2018 concerning Research (Official Gazette of the Republic of Indonesia Year 2018 Number 759), research is an activity carried out according to scientific principles and methods systematically to obtain information, data, and information relating to the understanding and proof of the truth or untruth of an assumption and / or hypothesis in the field of science and technology and to draw scientific conclusions for the advancement of science and/or technology.¹⁹ Based on the above understanding, data plays an important role in research, especially legal and economic research.

Indonesian legal database is very important for researchers because it will determine the research approaches. Research approaches are plans and procedures for research that span the steps from board assumptions to detailed methods of data collection, analysis, and interpretation. This plan

¹⁷ Indonesia, Law of the Republic of Indonesia Number 18 of 2002 concerning National System for Research, Development and Application of Science and Technology (State Gazette of the Republic of Indonesia of 2002, Supplement to State Gazette of the Republic of Indonesia Number 4219), Article 1 Number 4.

¹⁸ Indonesia, Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education (State Gazette of the Republic of Indonesia of 2012 Number 158, Supplement to the State Gazette of the Republic of Indonesia Number 5336), Article 1 Number 10.

¹⁹ Indonesia, the Republic of Indonesia Minister of Research, Technology and Higher Education Regulation Number 20 of 2018 concerning Research (Official Gazette of the Republic of Indonesia Year 2018 Number 759). .Article 1 Number 1.

involves several decisions. The overall decision involves which approach should be used to study a topic. Informing this decision should be philosophical assumptions the researcher brings to the study; procedures of inquiry (called research designs); and specific research methods of data collection, analysis, and interpretation. The selection of a research approach is also based on the nature of the research problem or issue being addressed the researcher's personal experiences, and the audiences for the study. Three research approaches are advanced: (a) qualitative, (b) quantitative, and (c) mix methods.²⁰

The quantitative database also can be analyzed by a quantitative analysis method that can describe economic growth. Economic growth is an increase in the production of goods and services over a specific period.²¹ According to OECD²² that the financial crisis and its consequences have raised new issues and sharpened the importance of addressing pre-existing issues. Three key

challenges for governments and the contribution of regulatory policy to meeting these challenges are examined below:

- The need for economic recovery and sustained growth.
- The need to manage increasingly complex policy goals.
- The need to regain the trust of citizens.

According to OECD,²³ nurturing and sustaining economic growth remains imperative to OECD countries and more widely. Growth supports higher living standards. Over long periods of time, even small rates of annual growth can have large effects through the process of compounding. In today's post-crisis context it helps to manage otherwise unsustainable debt. Growth in output per capita increases government tax revenues, which can be used to pay for better services. Public debts, deficits and increasing costs of healthcare in an aging population, as well as pension benefits, are less of a burden in a growing

²⁰ Indonesia, Law of the Republic of Indonesia Number Nomor 18 of 2002 concerning National System of Research, Development, and Application of Science and Technology (State Gazette of the Republic of Indonesia of 2002).

²¹ Kimberly Amadeo, "Economic Growth, Its Measurements, Causes, and Effects," 2019, <https://www.thebalance.com/what-is-economic-growth-3306014>.

²² OECD, *Regulatory Policy and Governance: Supporting Economic Growth and Serving The Public Interest*, 2011.

²³ Ibid.

economy. Growth can also help societies afford higher levels of environmental quality. Finding ways to boost growth is now more important than ever because growth is expected to slow if no action is taken. The OECD estimates that in the long term, world annual growth will average 1.75%, down from 2.25% annually achieved over the seven years preceding the crisis (OECD, 2010a). However, this projected slowdown is not simply a consequence of the global 2008-09 financial and economic crisis. The underlying reasons behind slower economic growth projections are long-term trends such as the slower expansion in potential employment due to aging populations. As countries emerge from the crisis, regulatory policy has a positive role to play in raising growth prospects. As in the past ten years, better regulation can improve economic growth through deregulation and structural reforms, which have generally not been carried far enough in most countries. The importance of a strong overall regulatory framework for investment and innovation should not be underestimated. A better regulatory framework can influence economic growth in two ways:

- First, it improves market entry, through lower barriers to entry, and cutting red tape for new and growing businesses. It can also facilitate market exit, through better regulations for bankruptcy. As a result, it can improve market mechanisms and competition, which leads to higher productivity and growth prospects. It also reduces the potential for industry sectors to be shielded from competition, towards the best market outcomes.
- Second, it improves investors' confidence through increased clarity and transparency, reducing the risk premium and facilitating investment for key facilities, particularly in the infrastructure sectors such as energy water and transport. A sound regulatory policy that promotes transparency helps to build trust and reduces the scope for costly and unproductive rent-seeking.

3. Indonesian Legal Databases Reform

a. College Research Databases, and Research Institutions Database.

Higher education is a level of education after secondary education which includes diploma education programs, bachelor, master,

specialist, and doctoral degrees held by higher education. Higher education is held with an open system.²⁴

The legal college database in Indonesia has not yet been formed, even though there are many colleges in Indonesia. The college consists of universities, institutes, and high schools.²⁵ Data from PDDIKTI (Pangkalan Data Pendidikan Tinggi) states that there are 370 State Universities in Indonesia. While for Private Universities (PTS) there were 4,043 universities.²⁶ The number of higher education institutions will be higher if it is added with state Islamic higher education under the Ministry of Religion in the form of the State Islamic College (STAIN), service colleges managed by other Ministries / Ministries or Non-Departmental Government Institutions (for example: private universities or

private Islamic colleges), each of which has its own list.

Indonesia has research institutes, such as While for Private Universities (PTS) there were 4,043 universities.²⁷ The number of higher education institutions will be higher if it is added with state Islamic higher education under the Ministry of Religion in the form of the State Islamic College (STAIN), service colleges managed by other Ministries / Ministries or Non-Departmental Government Institutions (for example: private universities or private Islamic colleges), each of which has its own list.

Indonesia has research institutes, such as:

- 1) The Indonesian Livestock Research Center is a research center whose tasks involve the research of poultry, cattle, buffaloes, goats, sheep, et cetera.²⁸

²⁴ Anonimous, "Pengertian Pendidikan Tinggi Menurut Para Ahli," 2014, <http://tesispendidikan.com/pengertian-pendidikan-tinggi-menurut-para-ahli/>.

²⁵ Adnan Syafi'i, "Perguruan Tinggi Terbaik Di Indonesia," 2019, <https://calonmahasiswa.com/perguruan-tinggi-terbaik-di-indonesia/>. accessed Wednesday 12 June 2019.

²⁶ Niki Hidayati, "Perbandingan Jumlah PTN Dan PTS Berdasarkan PDDIKTI," 2019, <https://www.duniadosen.com/perbandingan-jumlah-perguruan-tinggi-swasta-dan-perguruan-tinggi-negeri-2/>. accessed Wednesday 12 June 2019.

²⁷ Niki Hidayati, "Perbandingan Jumlah PTN Dan PTS Berdasarkan PDDIKTI," 2019, <https://www.duniadosen.com/perbandingan-jumlah-perguruan-tinggi-swasta-dan-perguruan-tinggi-negeri-2/>. accessed Wednesday 12 June 2019.

²⁸ Wikipedia, "Balai Penelitian Ternak," 2019, https://en.wikipedia.org/wiki/Balai_Penelitian_Ternak_Ciawi_Bogor. accessed Wednesday 12 June 2019.

2) The Center for International Forestry Research (CIFOR) is a non-profit scientific research organization that conducts researches on the use and management of forests with a focus on tropical forests in developing countries. CIFOR is the forestry research center of the Consultative Group on International Agricultural Research (CGIAR), a network of 15 research centers around the world that focus on agricultural research for sustainable development, working closely with governments and other partners to help develop evidence-based solutions to problems related to sustainable agriculture and natural resource management. CIFOR's research contributes to the three CGIAR System-Level Outcomes: reduced poverty, improved food and nutrition security, and improved natural resource systems and ecosystem services. It also

contributes to the new United Nations Sustainable Development Goals and commitments made by countries in the Paris agreement and other accords related to the UN Framework Convention on Climate Change.²⁹

3) The Indonesian Institute of Sciences (Indonesian: *Lemba-ga Ilmu Pengetahuan Indonesia*, or LIPI) is the governmental authority for science and research in Indonesia. It consists of 47 research centers in the fields ranging from social to natural sciences.³⁰

4) The Wahid Institute is a Research Center on Islam, based in Jakarta, Indonesia. It was founded in 2004 by the former President of Indonesia, Abdurrahman Wahid and is led by his daughter Yenny Zannuba Wahid.³¹

The establishment of a college database in Indonesia can encourage the formation of a national

²⁹ Wikipedia, "Center for International Forestry Research," 2019, https://en.wikipedia.org/wiki/Center_for_International_Forestry_Research#Component_2:_Management_and_conservation_of_for_est_and_tree_resources. accessed Wednesday 12 June 2019

³⁰ Wikiedia, "Indonesian Institute of Sciences," 2019, https://en.wikipedia.org/wiki/Indonesian_Institute_of_Sciences. accessed Wednesday 12 June 2019.

³¹ Wikipedia, "The Wahid Institute," n.d., https://en.wikipedia.org/wiki/The_Wahid_Institute. accessed Wednesday 12 June 2019.

Indonesian legal database, at least the results of research by students, both stratum 1, stratum 2, strata 3, and specialist. The establishment of a Research institutes database also can encourage the formation of a national Indonesian legal database.

b. Database Integration

Currently, the Indonesian legal database is still spread across various institutions, so data integration needs to be done.

According to The Tech-Faq, database integration means that multiple different applications have their data stored in a specific database – the integration database – so that data is available across all of these different applications. In other words, the data is available between two different parties and therefore, can be easily accessed and implemented into a different application without having to transfer to a different database. For the database integration to work successfully, it needs to have a plan that allows for all of the client

applications to be taken into account. Whether the scheme is more complex, general or both is irrelevant because a separate group controls the database to negotiate between the numerous different applications and the database group. In other words, this plan makes it possible for all the applications to be grouped into that one database group.³²

Data integration can be done in other ways, such as the following:³³

- **Application Integration (Application Integration)**
Data merger occurs by coordinating the flow of information events between business applications. The serving application must have facilities to integrate with other applications.
- **Business Process Integration**
Business processes can be achieved if there is coordination in every activity on the system, and this integration cannot be separated from the application integration.
- **User Interaction Integration**

³² The Tech-Faq, "Database Integration," 2019, <http://www.tech-faq.com/database-integration.html>. accessed Wednesday 12 June 2019.

³³ Softbless, "Data Integration," 2019, <https://www.softbless.com/Data - Integration>. accessed Wednesday 12 June 2019.

Making user interfaces that provide integration between different data systems. Such as the existence of a portal that becomes a door for user interaction with some important data on the company.

D. CONCLUSION

The Indonesian legal database should not only the law as legal regulations or norms but includes salary, employee welfare, development budget, and others, that can be measured quantitatively. Unfortunately, Indonesia

does not yet have this database. The establishment of a college database in Indonesia can encourage the formation of a national Indonesian legal database, at least the results of research by students, both stratum 1, stratum 2, stratum 3, and specialist. The establishment of a Research institutes database also can encourage the formation of a national Indonesian legal database. Currently, the Indonesian legal database is still spread across various institutions, so data integration needs to be done.

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BIOGRAPHY

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