



Institutional Model for Bankruptcy Settlement of Intellectual Property to Protect the Creative Arts Industry in Indonesia

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Abstract

Intellectual property is essential to economic progress and sustainable development as the creative industry grows. This study aims to find the implementation of the intellectual property bankruptcy assessment to protect the creative arts industry in Indonesia and formulate future regulatory formulations regarding the intellectual property bankruptcy institutional model to protect the creative arts industry in Indonesia. This research was conducted using the Systematic Review and Meta-Analysis (PRISMA) method. The study collects data from leading scientific sources, including Scopus, using relevant keywords from 2019 to 2023. The result show that the valuation of intellectual property (IP) in the context of bankruptcy in Indonesia is a significant challenge. To protect and develop the creative arts industry in Indonesia, the establishment of an intellectual property valuation institution as the leading authority for assessing intellectual property rights is a priority that must be implemented immediately. The study's implications are particularly relevant for policymakers, legal practitioners, and stakeholders involved in intellectual property rights and bankruptcy law.

Keywords

Bankruptcy, Creative arts industry, Intellectual property, Valuation

INTRODUCTION

Creative economy is defined as the natural result of increasing the value of intellectual property derived from human creativity rooted in cultural heritage, scientific knowledge, and technological developments (Cerisola, 2019). The outline obtained from the definition of the creative economy is the manifestation of intellectual property whose source is human creativity that has value. Therefore, intellectual property has begun to penetrate the world of the creative economy industry whose mobility is increasingly growing. Since 2001, the term creative economy has begun to gain widespread attention after being recognized by John Howkins in his book. The definition of Creative Economy by John Howkins refers to economic activities in which ideas are the primary input and output, making creativity the core of the process. Thus, through the capital of ideas, creative individuals can earn relatively high incomes (Howkins, 2002).

The concept of the creative economy is the foundation for efforts to realize sustainable economic growth based on human creativity. Its utilization involves resources that are not only renewable but also unlimited, such as ideas, creativity, and so on (Mitchell & Walinga, 2017). Creativity does not only refer to works of art and culture, but also embraces the fields of science and technology. The three pillars that serve as the foundation of the creative economy are creativity, innovation, and discovery (Purnomo, 2016). When drawn into the context of intellectual property, the creative economy is inseparable from how a person makes discoveries with all his creative abilities. However, the results of these discoveries need to be legally protected so that they can be utilized both morally and economically by the creator or rights holder.

The legal system related to Intellectual Property in Indonesia is formed with the strong influence of International law and the legal framework of other countries. For example, in his theory of property rights, John Locke stated that human rights to own goods that are produced have existed since humans were born. He argued that intellectual property laws provide exclusive ownership of a person's work (Ward, 2006). Intellectual Property Law can be used as collateral; this not only protects creditors by taking control of all debtor assets but also expands funding sources for the debt repayment process. Intellectual Property Rights can be submitted as collateral in obtaining funds for debtors must also be balanced with the protection of the rights of creditors who have submitted funds in the form of debt agreements. A debtor who cannot pay his obligations to creditors certainly gives rise to a legal situation: default. After the legal situation of default, the result is insolvency. Insolvency status occurs when a debtor cannot fulfill his debt obligations in a condition where the debtor's total debt exceeds the entire value of his assets (Onakoya & Olotu, 2017).

Article 1 number 1 of the Bankruptcy and Suspension of Debt Payment Obligations (PKPU) Law defines *bankruptcy* as a situation where a debtor's assets are seized. This process is overseen by a Curator, who operates under the guidance of a supervising judge. The decision to declare bankruptcy necessitates the appointment of a Curator and a Supervising Judge from the pool of court judges. This scenario unfolds when the debtor, creditor, or an authorized party files an application to declare bankruptcy as outlined in Article 12 paragraphs (2), (3), (4), or (5) of the Bankruptcy and PKPU Law. The Curator, an entity or individual selected by the court, is responsible for managing and settling a bankrupt debtor's assets, all under the watchful eye of the designated supervising judge.

Bankrupt assets can be physical such as property, land, or vehicles, but can also be intellectual property rights that do not have a physical form (Arner et al., 2017). Intellectual property rights are included in the company's assets that are not physical, so they act as collateral for the company's financial obligations (Bamakan et al., 2022). Intellectual property can be in the form of exclusive rights such as patents, copyrights, trademarks, industrial designs, confidential information, and other rights that are the main components of intellectual property (Voss et al., 2017). These intellectual property rights are essential assets for debtors facing bankruptcy in many situations. This condition often presents a challenge for curators who try to manage and settle abstract bankruptcy assets such as intellectual property rights because assessing the actual value of this type of asset becomes complex and requires a unique approach. Carrying out his/her obligations to manage and settle bankruptcy assets, curators are faced with the critical task of grouping the various types of assets owned by bankrupt debtors. This assessment is a crucial step in determining the actual value of these assets and ensuring that applicable regulations carry out the bankruptcy process (Van-Dijck et al., 2020).

The model of intellectual property assessment institutions from developed countries such as Singapore, Australia, and the United States can provide references for Indonesia. The implementation of intellectual property assessment in Singapore is very structured, starting from coordination between institutions, the creation of intellectual property valuation guidelines, accreditation for asset assessment institutions, and the role of the intellectual property office in implementing intellectual property assessments (Cheah & Ho, 2020). The role played by the Intellectual Property Office of Singapore (IPOS), its main objective is to manage intellectual property rights by increasing legal awareness among the public about the importance of protecting intellectual property rights, providing the necessary facilities and infrastructure, and facilitating the progress and development of intellectual property rights (Wang, 2018). In Australia, the assessment of the value of intellectual property assets is delegated to an independent body outside the scope of government. The particular institution in charge is The Australian Valuation Office (AVO). The primary function of AVO includes providing assessment services, including in the context of buying and selling transactions, acquisitions, and leasing of intellectual property assets (Smith et al., 2021). In America, although it is not explicitly regulated regarding the presence of an intellectual property asset assessment institution, this role is carried out by professionals known as members of the American Society of Appraisers (ASA) (Reviewe, 2017; Brandl et al., 2019).

Indonesia can adopt one of the models of intellectual property assessment institutions by adjusting the existing conditions in Indonesia by studying philosophically, legally, and sociologically from the Indonesian society itself. So that the adoption of the intellectual property institutional model, especially in the settlement of bankrupt assets to protect the creative industry in Indonesia, can provide convenience and legal certainty for the Curator in the future. By analyzing peer-reviewed articles, SLR will offer a thorough understanding of the intellectual property valuation problems, a comparison of regulations related to intellectual property valuation, and know the right solution based on previous research studies related to intellectual property valuation. The findings of this review will be invaluable to researchers, policymakers, and stakeholders.

This paper is structured as follows. We begin by outlining the methodology used for the systematic literature review, which includes the criteria for source selection, data extraction, and analysis. We then provide an overview of the valuation, intellectual property rights, bankruptcy law review, regulation, and creative economy industry review, which will guide you through the critical aspects of our research. Finally, we address the intellectual property valuation problems, comparison of regulations related to intellectual property valuation, and determine the right solution based on previous research studies related to intellectual property valuation. By conducting a comprehensive review of the literature, this review aimed to find the implementation of the intellectual property bankruptcy assessment to protect the creative arts industry in Indonesia and formulate future regulatory formulations regarding the intellectual property bankruptcy institutional model to protect the creative arts industry in Indonesia. This study focuses on the institutional model for settling intellectual property bankruptcy assets, including patents, copyrights, trademarks, and industrial designs. The purpose of this study is to protect and manage intellectual property in the bankruptcy process, especially in Indonesia's creative arts industry, which is often overlooked in bankruptcy.

METHODS

Research data were collected through a systematic literature review of sources related to creative thinking skills in high school biology education. This data was obtained from reputable scientific databases such as Scopus, using targeted keywords such as valuation, intellectual property rights, bankruptcy estate, regulation, America, Australia and Singapore from 2019 to 2023. The study was developed using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) 2020 guidelines to investigate intellectual property rights. Further analysis used bibliometric analysis to understand the development of educational models for enhancing creative thinking and research directions, using VOSviewer software.

The study employed the VOSviewer software to analyze research trends and evolution. Bibliographic data including authors, publication years, journal titles, and keywords were extracted from the selected articles. Co-occurrence networks of keywords and co-authorship networks were constructed to identify prominent themes and collaborations in the research field, and these networks were visualized using VOSviewer to highlight the key areas of focus and development of research over time. The study was limited to articles available in the selected databases and may not capture all relevant studies published outside these sources. Additionally, the qualitative nature of the study implies that the findings are based on a subjective interpretation of the literature.

Procedure

The procedure was carried out in several stages:

- Select the database: Data were obtained through reputable scientific databases such as Scopus.
- Define the search concept: Keywords were generated to be included in the search process. These words include valuation, intellectual property rights, bankruptcy estate, regulation, America, Australia and Singapore.

Study Screening

This search used 380 articles, evaluated based on their titles and abstracts, to yield 380 unique articles. In contrast, 109 articles were deemed ineligible and were excluded during the initial screening phase. Further analysis, considering papers that did not meet the criteria, was excluded, resulting in 149 unique articles that met the specified criteria, as shown in Fig. 1.

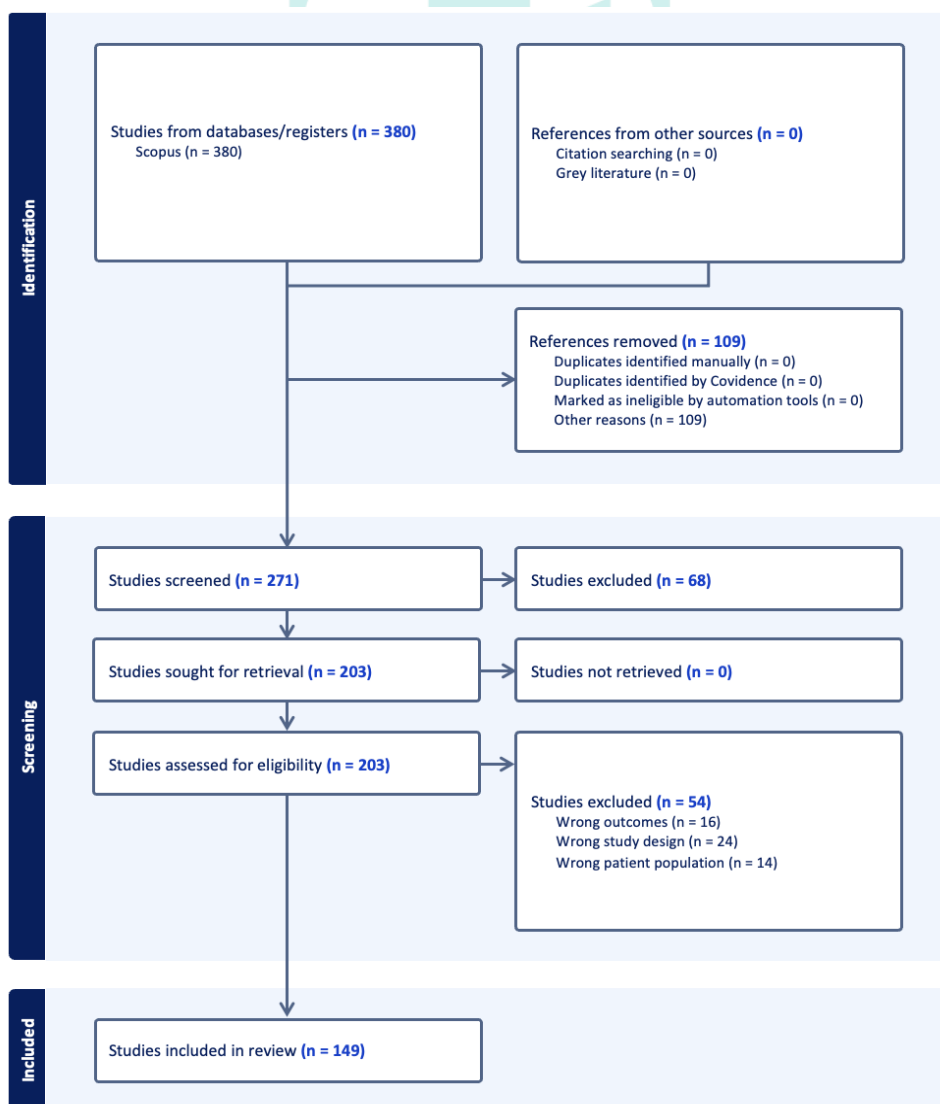


Fig. 1 Flowchart of PRISMA protocol

RESULT

Bibliometric Analysis

Bibliometric analysis provides a comprehensive overview, helping to identify research trends over time and develop a conceptual understanding of research patterns (Ingale and Paluri, 2022). A visualization of a conceptual network related to institutional model of bankruptcy settlement of intellectual property created by VOSviewer is shown in Fig. 2. The terms “Firm” and “market” are prominently displayed as the largest term, indicating its importance as a key focus area. Surrounding this central concept are numerous related terms and ideas, such as “data”, “cost”, “factor”, “innovation”, and “commercialization”. These terms are interconnected and form a complex web of relationships and ideas within the broader context of strategic management practices.

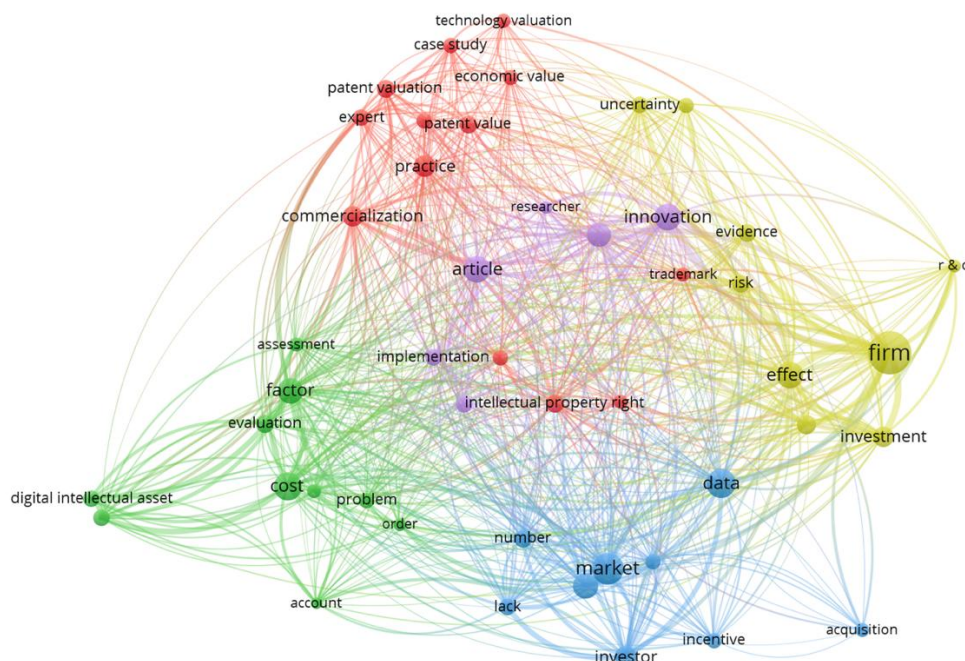


Fig. 2 Research topic distribution

Fig. 3 is a bibliometric network map commonly used in bibliometric analysis to demonstrate the relationships between various concepts, authors, or publications within a specific field of research. The map depicts five principal clusters linked by colored lines. The first cluster, highlighted in yellow, prominently features the keywords “firm” suggesting research that focuses on research and development, investment, market value, effect, risk, evidence, time, and uncertainty. The second cluster, in blue, contains keywords “market” indicating a research emphasis on the data, investor, incentive, and acquisition. The third cluster, in red, contains keywords such as property, commercialization, practice, importance, expert, case study, and technology valuation. The fourth cluster, in green contains keywords such as cost, factor, evaluation, account, and order. And the fifth cluster, in purple contains keywords such as innovation, country, article, and intellectual.

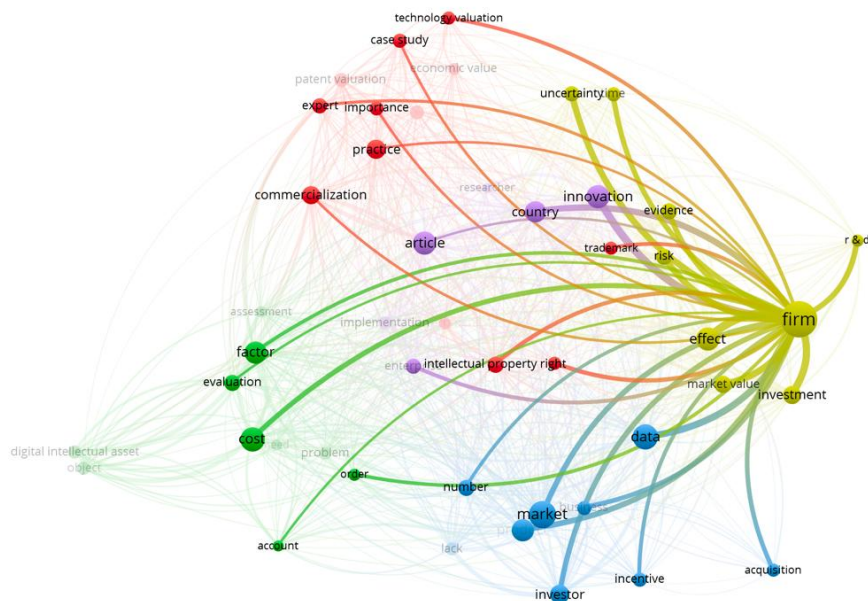


Fig. 3 Research topic distribution from 2019-2023

inventions, intellectual property rights, investments, commerce, investment, innovation, valuation, decision making, economics, and human. The prominence of words such as leadership “patents and inventions 24%” with 17 keywords, “intellectual property rights 14%” with 10 keywords, “investments 12%” with 9 keywords, “commerce 11%” with 9 keywords, “investment 8%” with 6 keywords, “innovation” with 5 keywords, “valuation 7%” with 5 keywords, “decision making 5%” with 4 keywords, “economics 6%” with 4 keywords, and “human 6%” with 4 keywords.

The visualization highlights the significance of concepts like patents and inventions, intellectual property rights, investments, commerce, investment, innovation, valuation, decision making, economics, and human. The insights provided by this word frequency analysis can help researchers, policymakers, and industry leaders better understand the key focus areas and priorities within the institutional model for bankruptcy settlement of intellectual property to protect the creative arts industry Indonesia.

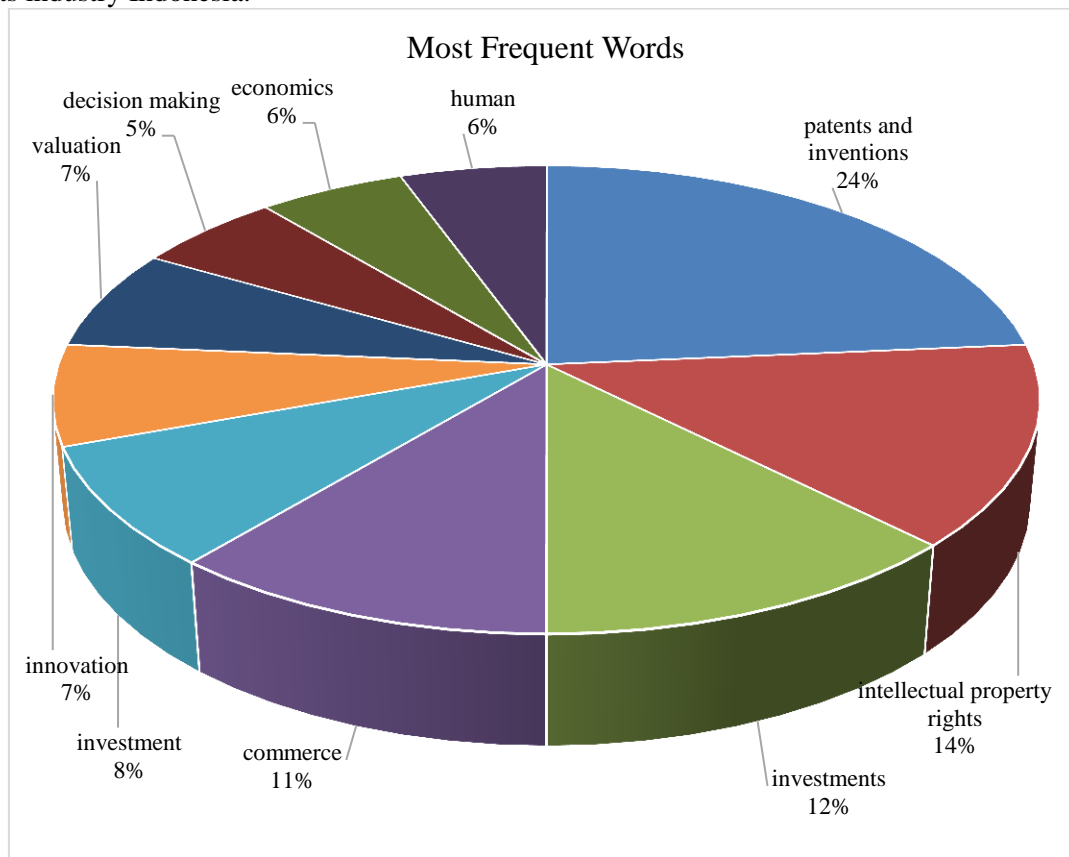


Fig. 6 Most Frequent Words

Color coding and the image layout make it visually appealing and easy to navigate. Overall, this visualization offers a holistic perspective on the intellectual property rights landscape, highlighting the interconnectedness and interdependence of various concepts and related metrics. It is used for analysis, comparison, or decision-making in intellectual property rights, providing stakeholders with a comprehensive understanding of the factors at play.

DISCUSSION

Problems of Intellectual Property Valuation in Bankruptcy in the Creative Arts Industry in Indonesia

As a sovereign state, Indonesia plays a vital role regulated by the constitution and various laws and is strengthened by modern state theories. Indonesia's role as a state is not only focused on maintaining sovereignty and security but also on protecting the fundamental rights of citizens and creating welfare for all its people. State theories, such as popular sovereignty, the rule of law, and the welfare state, provide a solid theoretical foundation in explaining how the Indonesian state carries out its duties and obligations by the constitution and democratic principles. Indonesia's role as a sovereign and legal state is reflected in efforts to support and manage the creative arts industry, primarily through the protection of intellectual property rights. Based on Article 33 of the 1945 Constitution, the state is responsible for advancing the national economy, including the creative sector, which contributes significantly to public welfare through job creation, tourism, and art exports.

The state's role in the creative arts industry includes copyright protection, economic support, education, and cultural preservation, in line with the theory of the modern state and the Indonesian constitution. Copyright protection the state provides is also essential for developing the creative arts industry because this sector is highly dependent on innovation, creativity, and originality. In the creative arts industry, the state must provide a regulatory framework that allows artists to enjoy the economic benefits of their work through adequate intellectual property rights protection. This includes protection from copyright infringement that can harm artists financially and morally. In addition, the state's role in managing intellectual property rights also includes providing support to expand market access for artists and creators.

State support for intellectual property rights also includes the creation of a legal framework that continues to evolve along with changes in the creative arts industry. The development of digital technology, for example, has influenced how works of art are produced, distributed, and consumed. The state must adopt an adaptive approach to intellectual property rights regulation to ensure that the protection of digital works remains guaranteed. In this case, the welfare state theory is also relevant because it requires the state to provide regulations protecting artists from digital exploitation, such as the piracy of art through online platforms.

In addition, the Financial Services Authority and the Ministry of Law and Human Rights ensure that intellectual property rights, especially those with a significant economic impact, are well-managed and given maximum legal protection. The state must ensure that artists and creative industry players can access adequate legal services to protect their intellectual assets effectively. Thus, the role of the Indonesian state in the context of intellectual property rights is not only as a regulator but also as a facilitator and prominent supporter of developing the creative arts industry (Purbasari et al., 2019). Intellectual property valuation has used three general approaches, namely the market, income, and cost, just like tangible assets. However, in the creative arts industry in Indonesia, intellectual property valuation faces significant problems due to the difficulty of obtaining accurate data. The intellectual property market in Indonesia still needs to be developed, so there are very few intellectual property transactions that can be used as a reference. In addition, historical data on income from intellectual property is also limited, and there needs to be clear rules on how to buy and sell or auction intangible assets. Another problem is the need for more transparency in market data, and intellectual property valuation often depends on public perception, which makes it subjective and unstable. These factors hinder accurate intellectual property valuation, so better regulations and development of the intellectual property market in Indonesia are needed (Payumo et al., 2014; Mayasari & Chandra, 2020).

So even though regulations related to intellectual property valuation in the context of bankruptcy in Indonesia already exist, the problems in their implementation remain significant. The main challenge arises in applying these regulations at a practical level, especially in intellectual property valuation in the creative arts industry. Some problems that persist despite regulations are that specific valuation standards for intellectual property still need to be clearly defined in existing laws. Intellectual property is often valued using the same methods as tangible assets, such as the market, income, and cost approaches (Fahmi et al., 2016). However, due to the intangible and dynamic nature of intellectual property, these approaches often fail to capture the actual value of intellectual property, especially those related to creative assets that tend to be subjective and dependent on socio-cultural factors. Without specific valuation standards, the value of intellectual property becomes highly dependent on the appraiser's interpretation and can vary significantly (Fahmi et al., 2017).

Several regulations governing valuation methods such as market, income, and cost approaches are the Regulation of the Minister of Finance No. 101/PMK.010/2016 and the Indonesian Valuation Standards 2018. These regulations stipulate that intellectual property is often valued using the same methods as tangible assets: the market approach, which compares with similar transactions; the income approach, which estimates the value of future cash flows; and the cost approach, which calculates the cost to recreate the asset. However, these regulations still need to accommodate in detail the unique character of intellectual property, especially in the creative industry, which is often subjective and highly influenced by socio-cultural factors.

In addition, regulations still need to fully regulate the mechanism for openly providing and accessing intellectual property (IP) market data. In Indonesia, the IP market still needs to be improved, making it difficult to obtain comparative data that can be used as a reference for valuation. This results in valuations often based on weak or irrelevant assumptions, such as relying only on the creator's reputation or current market trends. Limited access to accurate market data also makes conducting a historical analysis of IP revenues challenging, a significant obstacle in the income-based approach. Regulations related to IP valuation in bankruptcy proceedings still need to include a comprehensive transparency mechanism. Valuers often need full access to the information needed to value IP objectively and transparently. This creates uncertainty in valuation, exacerbated by fluctuations in IP values that can be influenced by changing social trends, fashion, or public perception. This lack of transparency creates problems in valuation and undermines stakeholder trust in the results (Irawan, 2017).

Although challenges in IP valuation remain in the US, the country has developed a more robust and mature valuation framework. Through the Uniform Standards of Professional Appraisal Practice, the US provides valuation standards that cover intangible assets such as IP. In addition, the market for IP auctions and sales in the US is more developed, so more transaction data is available as a reference. IP valuation in the US is also supported by the Bankruptcy Code, which regulates the treatment of intangible assets, including patents, trademarks, and copyrights. With the support of a mature legal and market infrastructure, IP valuation in the US is more stable and objective than in Indonesia (Arner et al., 2017).

Australia has more detailed intangible asset valuation standards than Indonesia, regulated by the Australian and New Zealand Valuation Standards. The country also has a more developed IP market, with more data that can be used as a reference in valuation. One well-known case is the valuation of Aboriginal artwork copyrights, which are often culturally valuable but commercially challenging. Regulation in Australia is more advanced in providing protection and recognition of cultural value in IP valuation (Manzini & Lazzarotti, 2016). As a hub for technological and creative innovation in Asia, Singapore has developed a relatively advanced legal and market framework for IP valuation. The country introduced the Singapore Intellectual Property Strategy 2030, which includes more robust IP valuation guidelines to encourage IP

trading in domestic and international markets. Singapore has also designed a transparent IP auction platform so that the value of IP can be more objectively measured based on actual market demand. This sophisticated regulatory support and infrastructure make Singapore one of the leading countries in Asia in terms of IP protection and valuation (Dimitriadou & Lanitis, 2023).

While Indonesia has basic regulations for IP protection, it needs to catch up to the US, Australia, and Singapore regarding clear valuation standards and a mature IP market. These countries have addressed some of Indonesia's issues by developing more specific regulatory frameworks for intangible assets, establishing more transparent auction markets, and creating broader access to data. Solutions for Indonesia include adopting international practices that have proven effective in these countries. Therefore, in theory, to address these challenges, Indonesia needs to strengthen its regulations regarding the handling of IP in bankruptcy proceedings by providing clear guidelines to ensure that IP is not only viewed as an asset that can be liquidated but also as an asset with potential long-term value. There needs to be a mechanism to ensure that IP is protected and, where possible, its rights are extended to maximize its commercial potential during and after the bankruptcy process.

Comparison of Regulations Related to Intellectual Property Valuation in Several Countries

The laws and regulations regarding the valuation of intellectual property (IP) in the bankruptcy context vary from country to country, reflecting different approaches to protecting assets from creative industries such as art, design, and media. In the United States, bankruptcy proceedings are governed by the U.S. Bankruptcy Code, specifically Sections 363 and 365 (McDermott, 2017). These sections allow for intellectual property such as copyrights, patents, trademarks, and artwork to be sold or licensed during bankruptcy. What is interesting about these laws is the ability of the court to approve the sale of intellectual property assets “free from the rights or interests” of others. This means that assets can be sold without the legal burden of prior rights or claims, providing greater flexibility in disposing of assets during bankruptcy. On the other hand, licensees or contractors already tied to the intellectual property assets remain protected, ensuring that they can continue using or exploiting the intellectual property per the agreements before the bankruptcy. This approach provides a balance between the rights of debtors involved in the bankruptcy process and the protection of the commercial value of intellectual property, which in turn can benefit creditors (Arner et al., 2017).

In Australia, insolvency regulation is governed by the Corporations Act 2001, specifically Sections 588 and 415. Section 588 deals with managing and selling assets during bankruptcy, including intellectual property (Kashyap et al., 2019). Administrators, who are appointed to manage the affairs of the bankrupt entity, have the authority to sell or transfer intellectual property as part of the bankruptcy process to obtain the best value for creditors. Challenges in Australia include intellectual property valuations being highly influenced by market trends and rapid changes in value. Accurate valuation requires a deep understanding of the creative asset and current market dynamics (Dosso, & Vezzani, 2020). In addition, the protection of third parties associated with the intellectual property, such as licensees or business partners, must be considered to ensure they remain protected by existing agreements (Manzini & Lazzarotti, 2016).

In Singapore, the insolvency process and intellectual property valuation are governed by the Insolvency, Restructuring and Dissolution Act 2018, specifically Part 9 and Part 10. Part 9 deals with insolvency, including the sale or transfer of intellectual property assets, where the court has the authority to authorize the transaction to protect the rights of creditors and third parties (Seng & Tjio, 2021). The main challenge in Singapore is the complex nature of intellectual property valuation, where the value of creative assets is often dependent on subjective and dynamic factors such as market demand, technological advancements, and changes in consumer preferences that are difficult to measure in financial terms. Flexibility in the valuation approach and adequate protection during the insolvency process are vital to preserving the value of intellectual property and protecting all parties involved (Dimitriadou & Lanitis, 2023).

Although the United States, United Kingdom, Japan, Australia and Singapore have different legal frameworks for dealing with intellectual property during insolvency proceedings, they face similar challenges related to the speculative and dynamic nature of intellectual property valuation. The value of intellectual property, especially that from the arts and creative industries, is often speculative and volatile, requiring a flexible valuation approach and the assistance of experts with specialist knowledge of the assets (Birch, 2017). Protection of intellectual property during bankruptcy is also an important issue, as the value of these assets can decline drastically if not appropriately managed. Therefore, developing more explicit guidelines and standards on intellectual property valuation and management is essential to protect the creative industries and innovation sector in the future, and to ensure that bankruptcy proceedings do not harm the long-term value of valuable creative assets (Gustafsson & Lazzaro, 2021).

Formulation of Regulations Concerning the Institutional Model of Intellectual Property Bankruptcy to Protect the Creative Arts Industry in Indonesia

The valuation of intellectual property (IP) involves several methods specifically designed to measure the value of these intangible assets. The income approach is often used, where the IP value is calculated based on the projected future income streams generated by the IP. This includes assessing the asset's risk, economic life, and exploitation potential. In addition, the market approach can also be used, where the value of IP is determined by comparing market transactions for similar IP. However, because IP is unique, finding relevant direct comparisons in the market is often difficult. Another approach is the cost approach, where the IP value is calculated based on the cost required to reproduce or replace the IP. While this approach is practical in some cases, it can be complicated, primarily if the value of IP is based more on

innovation, reputation, or creative contributions that are difficult to measure directly. In the context of the creative industry, IP valuation is influenced by market dynamics and the popularity of a particular artist or work.

In the theory of IP valuation, it can be categorized as an intangible asset. According to Reilly and Schweih (2016), intangible asset valuation is essential for determining the economic value of the rights or ownership. Three main methods are used in intangible asset valuation: The based Approach, the based Approach, and the based Approach. Income income-based approach is based on estimates of future income that the asset will generate. Reilly and Schweih explain that this approach considers projected income and future discounted cash flows to reflect present value. This technique is comprehensive because it considers future business risks and potential (PWC, 2020). Meanwhile, the Cost Based Approach uses the costs incurred to create or acquire assets as the basis for valuation. Smith and Parr say this method refers to new reproduction or replacement costs. However, it is often less appropriate for assets that are difficult to measure directly, such as trademarks (Parr & Smith, 2017). As explained by Damodaran, Market Based Approach values intangible assets based on the market price of similar assets, taking into account recent transactions in the market. However, this method is highly dependent on the availability of relevant market data. The Income-based Approach is often considered more relevant in valuing intangible assets because it considers broader economic aspects, including future revenue potential and cost efficiency (PWC, 2020). On the other hand, the Cost Based Approach is more often used when there is no direct revenue stream associated with the asset or when there are no comparables in the market.

In Indonesia, the rules regarding the valuation of intangible assets are regulated by several necessary regulations covering accounting, taxation, and financial reporting standards. One of the main guidelines is Financial Accounting Standards Statement 19, which regulates intangible asset recognition and valuation methods according to international standards (International Financial Reporting Standards/IFRS). Financial Accounting Standards Statement 19 requires intangible assets to be recognized if the asset can generate future economic benefits and its acquisition cost can be measured reliably. Valuation can be done using the Cost- or Income-based approach, depending on the company's policy. In addition, Minister of Finance Regulation No. 169/PMK.010/2015 regulates the revaluation of assets for tax purposes, including intangible assets, to reflect fair market value. In the context of government, Government Regulation No. 71 of 2010 regulates the recording of intangible assets by the principles of Government Accounting Standards, which are similar to Financial Accounting Standards Statement 19. Law No. 36 of 2008 concerning Income Tax also provides provisions regarding intangible assets, such as patents and trademarks, which can affect tax calculations through amortization over their useful lives. For non-bank financial institutions, Financial Services Authority Regulation No. 29/POJK.05/2020 provides guidelines for evaluating intangible assets that international standards must carry out to maintain transparency and accountability in financial statements. Overall, these regulations aim to create clear and consistent standards in Indonesia's valuation and reporting of intangible assets.

Based on the theory and rules regarding the valuation of intangible assets, which in this case have been regulated by several necessary regulations in Indonesia, assessing IP in the context of the creative industry still faces challenges. This is because, first, the subjective nature of IP in the creative industry often makes its value difficult to measure objectively. For example, IP value, such as copyright or design, depends on market trends, cultural relevance, or aesthetics, which are often speculative and changing. Greenhalgh and Rogers explain that innovation and competition in the market significantly affect IP value, but these factors cannot always be easily predicted during liquidation. Second, IP assets are often considered challenging to liquidate in bankruptcy proceedings due to the need for established valuation standards. According to Turner, IP valuation methods such as patents or trademarks vary widely, ranging from cost-based and income-based to market-based approaches (Sharma & Kumar, 2021). However, this method has limitations, especially in art, where the value of assets is more influenced by subjective perceptions and tastes than clear benchmarks. In addition, the lack of transparency in the valuation of IP assets in the legal process is also a problem where curators or asset managers often need clear guidelines for assessing the market value of IP in the creative arts, which can trigger conflicts between stakeholders.

In conclusion, several important laws and regulations regulate IP protection in the creative arts industry. However, although existing regulations provide a framework for protection, several significant challenges exist. First, IP valuation is often influenced by subjective factors such as market trends and cultural preferences, making it difficult to measure consistently and objectively. Second, specific and established valuation standards can lead to certainty and conflict in bankruptcy and liquidation. The lack of clear guidelines on IP valuation, especially in the arts, can complicate bankruptcy and liquidation processes (Sharma & Kumar, 2021).

Furthermore, implementation and enforcement can still be problematic despite regulations, especially in the dynamic creative industry, where existing regulations may only partially accommodate rapid changes in the art market and trends. Overall, Indonesian laws and regulations provide an essential legal basis for IP protection in the creative industries. However, there is still a need for more specific valuation standards and clear implementation guidelines to address the challenges in IP valuation and liquidation. Both curators and artists even emphasized the importance of solid legal protection for IP during the bankruptcy process, including copyright and trademark protection. This is important so IP is not misused or exploited during the bankruptcy estate settlement process. Curators emphasized the importance of collaboration between stakeholders such as the Directorate General of IP, the Ministry of Creative Economy, and professional appraisal institutions to formulate more transparent and more integrated policies regarding IP assessment. Forming this policy is needed to provide better guidance for curators in handling IP assets in the context of bankruptcy. Finally, there is an urgency to establish a unique institution that focuses on IP assessment, especially in the context of

bankruptcy. This institution is expected to improve the accuracy of assessments, legal certainty, and IP protection. Both curators and artists agree that the existence of this institution will provide widely recognized assessment standards and support professionalism in handling IP. In addition, this institution is also expected to play an essential role in encouraging the development of the creative economy, providing clear guidance in the assessment process, and increasing investor confidence in the arts and creative industries in Indonesia.

Solutions Based on Previous Research Studies Related to Intellectual Property Valuation

According to bankruptcy law theory, all assets the debtor owns must be fully identified before settlement or sale can be carried out to satisfy debts. IP assets, such as patents, copyrights, and trademarks, have significant economic value and can potentially provide long-term returns. However, these assets are often poorly documented or incompletely disclosed by the debtor. This makes it difficult for the receiver to access and assess the economic value of the IP owned, slowing down the bankruptcy process and reducing the possibility of obtaining optimal value from the IP. From an intangible asset management perspective, IP is often considered difficult to identify and inventory due to its intangible nature. Many tiny and medium-sized companies need an efficient asset management system to record and monitor their IP. This can include a lack of record keeping of licenses, royalties, or contracts related to IP, which are essential sources of revenue but need to be better documented. Artists in the creative industries also face this challenge, where their IP assets may need to be better structured in the company administration, making information related to licenses, copyrights, or exclusive contracts challenging to access during the bankruptcy process.

In addition, the theory of IP risk management suggests that without adequate documentation, IP is at risk of being undervalued or unidentified during the bankruptcy process. Without clear information about the status of IP rights—such as the validity of patents or whether copyrights have been registered—the receiver cannot correctly assess the economic potential of the assets. This results in IP assets being unable to maximize their value during the liquidation or restructuring process. Lack of transparency from debtors regarding their IP assets is also a common problem. According to several studies, it is often the case that companies do not fully understand the value of the IP assets they hold or are not aware of the importance of systematically documenting IP (WIPO, 2018). This is compounded by the fact that many companies do not have internal systems or procedures to record and report their IP assets properly. When a company enters bankruptcy proceedings, IP-related information is often overlooked or not adequately reported, creating obstacles for the curator in conducting assessments and settlements.

According to the theory of intellectual property rights protection, the legal system must ensure adequate protection against IP misuse during bankruptcy. For example, protection of exclusive licenses must be guaranteed so that third parties cannot use IP without the consent of the administrator/curator or the legitimate owner of IP. Without adequate regulation, this misuse can lead to significant losses for the debtor and reduce the value of assets that can be used to pay creditors. One solution that can be implemented is a stricter law enforcement mechanism against IP misuse during bankruptcy, including a more detailed assessment of licenses and contracts before the liquidation process begins. This ensures that IP rights are protected and that no misuse by third parties could damage the value of IP or harm the original owner.

The study by Kieff and Paredes (2004) discusses the interaction between intellectual property rights and the bankruptcy process and its impact on corporate control. The authors highlight how bankruptcy can reduce the value of intellectual property rights due to delays and coordination issues in the bankruptcy process, resulting in a lack of enforcement of intellectual property rights. The study's results propose a solution by establishing a particular purpose entity separate from bankruptcy to control intellectual property assets. This aims to ensure that the value of intellectual property rights is maintained and prevent intellectual property assets from becoming part of the bankruptcy estate, which can reduce their value. In addition, they explore the argument that concerns about the loss of legal liability may be overblown, and instead, securitization of intellectual property rights can benefit creditors and other stakeholders.

Some frameworks or institutions deal with IP valuation in bankruptcy proceedings in some countries, particularly in the creative industries. For example, in the United States, bankruptcy courts often deal with IP as part of the debtor's estate. The US Bankruptcy Code includes provisions for dealing with IP in liquidation, although no specific institution is dedicated solely to IP valuation during bankruptcy proceedings. However, entities such as the United States Trustee Program oversee bankruptcy cases, and court-appointed trustees often employ IP valuation experts to value these intangible assets. The involvement of experts is essential to ensure accurate liquidation values and to protect the rights of creators and creditors. In Germany, IP assets are handled under general bankruptcy law, but similar to the US, trustees may engage experts to value patents, trademarks, and copyrights during liquidation proceedings. The German Insolvenzordnung (Bankruptcy Code) does not establish a specific institution for IP valuation. However, courts and administrators are expected to ensure fair valuations, particularly in the technology and creative arts industries. In the UK, a similar approach is implemented through the Insolvency Act 1986 which regulates IP in bankruptcy. Similar to other jurisdictions, courts in the UK also rely on external experts to value IP assets, given the complexity of IP valuation—such as determining future income from copyrighted works or patent royalties—often requiring the involvement of specialist firms.

A structured, inclusive approach involving various stakeholders is needed to build an effective institutional model for managing IP bankruptcy estates in Indonesia, especially in the context of the creative arts industry. The creative arts industry has high-value intellectual property, such as copyrights, patents, and trademarks, all requiring firm valuation and

protection mechanisms for bankruptcy or insolvency. However, Indonesia still faces significant challenges in overcoming the subjectivity of IP valuation and the absence of clear standards. Therefore, it is essential to establish a unique institution, namely the Intellectual Property Valuation Institute (Lembaga KI), which is tasked with regulating the valuation process, providing certification to valuers, and overseeing transparency in the valuation of IP bankruptcy estates.

To protect intellectual property in the creative arts industry during bankruptcy, a structured, inclusive institutional model is needed that focuses on establishing objective and fair valuation standards. The establishment of an Intellectual Property Valuation Institution responsible for setting standards, providing certification, and overseeing the valuation of IP assets is an essential step that the Indonesian government must take. Cross-sector collaboration between the government, experts, and creative industry players is also essential to ensure that the value of IP is valued by its contribution to the economy and society. By integrating effective conflict resolution mechanisms, the involvement of qualified experts, and the active participation of industry players, this model can help protect the value of IP during bankruptcy and support the development of the creative arts industry in Indonesia.

CONCLUSION

The conclusions of this study include first the valuation of intellectual property (IP) in the context of bankruptcy in Indonesia is a significant challenge. However, several regulations have been in place to provide an essential legal framework. Intellectual property, such as copyrights, patents, trademarks, industrial designs, and other intangible assets, have unique characteristics different from physical assets. One of the main challenges in valuing IP is its highly subjective nature. In addition to the subjective nature of IP, another challenge is the need for specific and established valuation standards in Indonesia. Second, based on the study's results on the challenges and needs in the valuation of intellectual property (IP) in the context of bankruptcy in Indonesia, it has been identified that formulating regulations regarding an effective institutional model is urgently needed. One of the leading solutions proposed is establishing the Intellectual Property Valuation Institution (Intellectual et al. Institution), an authoritative body that regulates and supervises the entire IP asset valuation process, especially in bankruptcy situations.

FUNDING INFORMATION

The authors affirmed that they did not accept any grants, funding, or other forms of assistance in preparing this paper.

DECLARATION OF CONFLICTS

There were no disclosed conflicts of interest by the authors.

ACKNOWLEDGEMENT

The authors would like to thank Universitas Sebelas Maret and colleagues who have helped us during this research.

AUTHOR CONTRIBUTIONS

The idea and design of the study were contributed to by all authors. EN conducted the data analysis and literature search. EN wrote the original draft of the manuscript, HH and BAR provided feedback on earlier drafts. The final manuscript was read and approved by all writers.

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