

Risks and Challenges in Cross-Border Mergers and Acquisitions Under Digital Transformation

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Abstract. Under digital transformation, new legal issues rise in cross-border mergers and acquisitions. Data and privacy protection, transfer and attribution of intellectual property, and antitrust and anti-monopoly investigation are three aspects that need more focus. This paper summarizes the status quo of digital transformation and the trend in three aspects, data, intellectual property, and antitrust and anti-monopoly in cross-border mergers and acquisitions. It highlights how the legal risks associated with these transactions are predominantly due to the significant differences in legal systems, regulatory frameworks, cultural norms, and languages between countries. Through a detailed analysis of these legal risks, the paper outlines effective risk mitigation strategies that incorporate comprehensive due diligence, thorough legal and regulatory analysis, and strategic evaluation. Finally, the article advocates for the development and adoption of internationally unified norms that could harmonize the disparate standards and procedures across different jurisdictions, thereby facilitating smoother digital cross-border mergers and acquisitions in the future. This would not only streamline processes but also enhance legal certainty and investor confidence on a global scale.

Keywords: Legal Risk, Cross-Border M&A, Digital Transformation.

1 Introduction

With the advancement of digital transformation, the digital economy based on emerging technology such as the Internet, cloud computing, big data, and artificial intelligence is rapidly developing. Digital economy has penetrated into the primary, secondary and tertiary industry, especially for the tertiary industry. Data has become a crucial asset in this economy, prompting governments worldwide to maximize its exploitation and utilization, thereby significantly stimulating economic growth. Besides, during this process, algorithms, data, platforms become even more important. Nowadays, many multinational enterprises (MNEs) rely on digital technology and are leading the global economy. Undoubtedly, cross-border mergers and acquisitions (M&A) is an essential path for them to go through. Enterprises can combine each other's resources to make the best use of it through M&A. Cross- border M&A also help them expand their global market share. Under challenging background nowa-

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days, relevant M&A activities might create a lot of opportunities for MNEs, but they also bring legal risks and specific issues. Key concerns include data security, individual privacy, intellectual property protection, anti-monopoly acts, and anti-unfair competition regulations.

Emerging technology brings emerging issues, because supporting system might not catch up in time. Only if the emerging issues get resolved, can the global M&A runs better and promote the global economy. The significance of studying on digital-based MNEs M&A and analyzing the risks in them lies in three aspects. Firstly, it can aid MNEs in navigating the complexities and mitigating the risks associated with M&A processes more effectively. Secondly, it prompts national legislative and policy reforms aimed at supporting MNEs through these processes. Lastly, given that crossborder data transactions typically involve multiple countries, MNEs may turn to international law or organizations for assistance, thus highlighting the need for reforms in these areas as well.

This paper aims to deeply analyze the risks and issues in cross-border M&A activities, offering a comprehensive discussion on effective strategies for identifying, assessing, and mitigating these risks. Based on that, valid suggestions will be given to MNEs. The first part introduces cross-border M&A, focusing on its definition, characteristics, impacts, and trends in the digital economy. The second part analyses legal risks in cross-border M&A, covering data security, intellectual property, and antitrusts and anti-monopoly laws. The third part provides valid and detailed strategies on how MNEs avoid legal risks in cross-border M&A, with a focus on navigating conflicting international laws.

2 M&A Under Digital Era

2.1 Definition and Features of Cross-Border M&A

Cross-border M&A is a management strategy that includes purchasing, selling, parting, and amalgamating different corporations or similar entities in different countries to promote their growth. Legally, when two corporations are merged into one, their ownership and right of management are merged into one as well and a brand new corporation is established. When one corporation acquires another corporation, the acquired one disappears and the acquirer still exists. Although traditionally there are slight distinctions between merger and acquisition, these differences are increasingly becoming blurred in practice.

The features of cross-border M&A lie in different aspects. The most prominent feature is that it faces cross-border cultural fusion. Corporations with different backgrounds have to spend time adapting to each other's culture and it leads to cultural fusion within a new corporation. Additionally, these transactions are fraught with various risks, including political risks, risks of legal compliance, etc. These risks stem from differences in legal systems, ideologies, and cultures, potentially leading to conflicts that require significant time, effort, and capital to resolve, thus impacting profitability. Finally, it is complicated to unify the resources of the two countries. Mergers and acquisitions can necessitate departmental reorganizations, staff reassignments,

and operational adjustments, making the coordination between multinational corporations a complicated endeavor.

2.2 Digital Transformation's Influence on Cross-Border M&A

The digital economy, driven by technologies such as the Internet, cloud computing, big data, and artificial intelligence, is flourishing, significantly influencing the growth of digital multinational enterprises and stimulating cross-border M&A with a focus on digital assets.

With the prevailing digital transformation, world-developed entities have rolled out investment investigation systems to guarantee national security. The overall number of investment policies has been rising these years. Investment policy-making activity surged since 2022. Sixty-six countries introduced 146 policy measures affecting foreign investment in 2022, which increased by 35 percent from the number in 2021. Among these policies, the number of those favoring investment nearly doubled, and the number of those less favorable remained stable. Nearly half of those policies less favorable to investment are related to national security concerns about foreign ownership of critical infrastructure, core technologies, or other sensitive domestic assets [1].

Undoubtedly, the restrictive policy increases the uncertainty factors of cross-border M&A, particularly concerning security screening. Governments often have broad discretion over national security decisions without clear criteria, making it difficult for corporations to anticipate potential national security objections. For instance, the US government initiated executive orders to restrict TikTok's operation in the US market, following the Committee of Foreign Investment of the United States' review that suggested TikTok posed a national security threat [2].

2.3 The Growing Trend of Cross-Border Mergers and Acquisitions

The overall trend of the growth of cross-border M&A has been escalating in fluctuation since the 20th Century but it also faces challenges. From the late 1990s to the beginning of the 21th Century, the number of digital cross-border M&A boosted fast. Digital corporations at this stage were mainly about postal and telecommunications [3]. After the outbreak of the 2008 financial crisis, the global M&A developed slowly, it did not recover until 2015. During this period, digital multinational enterprises were mainly about information services and computer programming.

From 2016 to 2021, the scale and number of cross-border M&A surged in fluctuation. Corporations during this period mainly work on application software development, machine learning, cloud computing, and artificial intelligence. The escalation of the largest trade war by the Trump administration in 2018, followed by a stark decline in global cross-border M&A in 2020 to nearly the lowest level in a decade, further complicated the landscape. In 2022, the value of cross-border M&A fell by 4 percent, and the global environment for cross-border investment faced significant challenges in 2023 [4]. Currently, cutting-edge technology and high-end manufacturing are considered the driving forces behind the digital economy's advancement.

Moreover, digital cross-border M&A also have regional features. It mainly covers Northern America, Middle-East, and Western Europe. Major developed economies play a leading role in global cross-border M&A.

3 Analysis of Legal Risk of Cross-Border M&A

3.1 Legal Risk of Data and Privacy Protection

As the digital transformation prevails, digital assets show up, which refers to data that possesses a certain amount of value. For instance, game data, gene data or operation data and so on. These data has its value thus it can be traded. During this process, how to protect the intellectual property of digital assets becomes an issue. Cross-border data flow is facing challenges brought by policy restrictions. Many countries have rolled out policies to restrict cross-border data flow. The nominal reasons for the restriction vary, which include national security, privacy protection, consumer protection etc. Most concerns are about national security and privacy protection. Until late 2023, more than half of countries in the world have passed or are passing the data protection law. However, every country's legal framework and specific provisions are different or even conflict with each other. And different countries' supervision processes and degrees of law enforcement also vary. So corporations have to cope with diverse situations when it comes to law compliance.

International Law Binding Cross-Border Data Flow.

Although there hasn't been a general international law governing cross-border data flow, countries themselves legislate to solve relevant issues. Besides, the right to data protection has been widely acknowledged by the international society.

Several agreements and treaties involve the protection of cross-border data flow, represented by the Comprehensive and Progressive Agreement for Trans-Pacific Partnership ("CPTPP"), the first trade agreement stipulating cross-border data flow. Besides, in January 2019, 76 WTO members initiated negotiations on e-commerce, aiming for a comprehensive agreement enhancing existing WTO frameworks [5].

WTO plays an essential part in promoting free trade and averting the threat of protectionism on cross-border data flow. It acknowledges the significance of data in international investment and encourages its members to avoid imposing restrictions or protectionism on cross-border data flow. It also encourages its members to legislate on privacy protection. WTO has a strong awareness of how important it is to let cross-border data flow freely because it is essential for the growth of the economy and service trade. However, WTO mainly concentrates on international laws regarding trade, so its function in protecting cross-border data flow is limited.

Legal Requirement of Privacy Protection.

Privacy protection is also a dominant reason for restricting cross-border data, variably termed as "privacy" or "data protection" across different jurisdictions.

The EU's General Data Protection Regulation ("GDPR"), effective May 2018, stands as the strictest regulation of its kind, directly binding all EU members. Article 45 of GDPR provides a whitelist, listing all the countries that are recognized as possessing adequate levels of protection. These countries are allowed to access the data from the EU. For non-whitelisted countries, GDPR demands enforceable rights for data subjects and legal remedies for international data transfers, facilitated through binding agreements or European Commission-approved mechanisms.

In the US, there are no fundamental laws binding data flow. The Congressional Research Service's 2019 reports highlight the fragmented US data protection laws, such as the Gramm-Leach-Bliley Act of 1999, the Computer Fraud and Abuse Act of 1986, the Children's Online Privacy Protection Act of 1999, the Video Privacy Protection Act of 1988, the California Consumer Privacy Act, etc. Since the US Acts of data protection is so decentralized, its scale of protecting data is vague and limited. In the American TikTok case, CFIUS held that TikTok has harmed US national's security because TikTok harmed user's privacy by collecting their data. And US Government imposed sanctions on TikTok to restrict its operation in the US market. In this case, it is considered that CFIUS possesses a large degree of discretion because the criteria for harming data protection are vague. Besides, because different states may adopt different modes of legislation, conflicts between Acts are likely to show up.

3.2 Legal Risk of Intellectual Property Protection and Transfer

The legal property can be regarded as part of an enterprise's assets, especially in the digital age where innovations and technological advancements are at the core of competitive advantage. In the absence of proper protection of intellectual property, imitators may rapidly exploit the efforts of innovators and investors, which impairs the incentives to invest and reduce the commercial value of the innovations. In crossborder M&A, assets of different corporations including enterprise's intellectual properties are faced with the problems of attribution and transfer. If intellectual properties are not properly transferred or devalued, the general assets of enterprises will be affected.

Attribution and Transfer of Intellectual Property.

Nowadays, most cross-border M&A are driven by intellectual property. Companies pursue these transactions to enhance their competitiveness and productivity by integrating more advanced technologies, innovative designs, and unique inventions that they currently lack. This strategic move allows enterprises to not only expand their technological capabilities but also to potentially enter new markets or improve their offerings in existing ones.

However, the disposition of intellectual property in cross-border M&A is complicated. Proper attribution and transfer of International Property assets are critical to the success of any merger or acquisition and necessitate a nuanced approach. When two or more companies from different legal and cultural backgrounds merge, the integra-

tion of intellectual property involves detailed mapping and understanding of what is transferred, how it is valued, and the legal implications of its transfer across borders.

Legal Risks of Intellectual Property Protection.

Different state laws and legal environments lead to differences in intellectual property transfer and attribution. In terms of the interpretation of regulations, different languages increase the vagueness of interpretation. If misunderstanding causes careless omission during the transfer and attribution, the progress of M&A will be impeded.

The features of intellectual property have decided the risks thereof. Firstly, intellectual property has a limited term of validity. As long as the term has expired, the owner of the intellectual property no longer possesses the right. As litigation generally takes a long time to come to a judgment, the time of the judgment may expire the limited term of intellectual validity. Secondly, the intellectual property has a regional identity. Generally, the intellectual property is applied and protected within a certain territory. Thirdly, the evaluation of the intellectual property may differentiate from each other as time passes by and as economic factors vary. Thus, the effectiveness of intellectual property in cross-border M&A contains a lot of uncertainty and complexity.

The enterprise's strategies also affect the risk of intellectual property. Firstly, enterprises need to enact effective strategies to guarantee business secrets. If business secrets are leaked, the intellectual property will be devalued, which tends to cause a drop in profits. Secondly, after an enterprise's M&A, the progress of how the properties are integrated is complex but significant. The advantages of cross-border M&A will be diminished if both intellectual properties are not relevant enough. If two properties cannot be well integrated, the purposes of enterprise M&A can't be reached and it will even cost a great amount of loss for both parties.

3.3 Legal Risk of Anti-Monopoly

The anti-monopoly legal system has a long history of maintaining the market order. Nowadays, most anti-monopoly law around the world stipulates merger control policies to prevent potential competition. In most judicial jurisdictions, there are reporting systems for the concentration of undertakings. If the M&A among enterprises is likely to pose a threat to host countries' market order, the entering enterprise shall report to the relevant judicial jurisdiction. There are mainly two elements in the laws requiring the mandatory report of M&A. The first element is the judicial thresholds that establish whether a M&A needs to be reviewed; Second, the substantive test that establishes whether a transaction is beneficial or detrimental to competition [6].

Standard and Procedure of Anti-Monopoly Screening.

Different judicial jurisdiction has different stipulations on the report systems for the concentration of undertakings. The differences lie in the time to report, the consequence of not reporting, the reason for reporting, etc. For instance, in some states, the report is mandatory, while in others, it is voluntary.

In US antitrust law, M&A have always been the core. Sherman Act is the first contemporary antitrust law and it was enacted when the US was experiencing the high tide of enterprise M&A. Besides, the US antitrust legal system also includes the Clayton Act of 1914, the Federal Trade Commission Act, and the HSR Act. Under the HSR Act, if the value of M&A reaches the lowest stipulated 84.4 million dollars, enterprises shall report to the Federal Trade Commission or Antitrust Division of the Department of Justice. It also requires that parties must not complete certain mergers, acquisitions, or transfers of securities or assets, including grants of executive compensation until they have made a detailed filing with the U.S. Federal Trade Commission and Department of Justice and waited for those agencies to determine that the transaction will not adversely affect U.S. commerce under the antitrust laws.

In China's anti-monopoly law, only those who occupy so dominant a part that other competitors are all excluded or limited in the market will be bound by the law. Usually, the scale of the market will be defined in advance. China's anti-monopoly law divides monopoly into three categories: behaviors of operators attempting to jointly exclude competition, abuse of market dominance, and operation concentration with actual or potential exclusion or restriction of competition effects.

Judicial jurisdictions requiring mandatory notification of M&A around the world apply various standards of notification. From a macro perspective, there are mainly four types of standards for reporting around the world nowadays, which are market shares, assets, sales or turnover of the merging firms and the value of the M&A [6].

Legal Risks of Anti-Monopoly Screening.

Enterprises may face legal risks brought by the host state's severe penalty of anti-trust or anti-monopoly law. The complexities of digital markets, characterized by rapid technological advancements and global digital integration, heighten these risks. Non-compliance with required antitrust procedures can lead to severe consequences, directly affecting the structure and feasibility of international deals.

First, jurisdictions can impose substantial fines for failing to comply with reporting requirements or for completing transactions without necessary clearance. These penalties might be calculated as a percentage of the merged entities' global revenues, potentially amounting to significant sums that could escalate into the millions or billions, depending on the severity of the breach and its perceived impact on market competition. Besides, authorities have the power to nullify a merger or acquisition if it proceeds without proper antitrust review. This not only results in financial loss but also damages the strategic plans and can harm the reputations of the entities involved, casting them as non-compliant in the eyes of regulators and the public. Additionally, undergoing antitrust investigations can disrupt business operations significantly. Companies may encounter restrictions aimed at mitigating potential market distortions during the investigative period, which can stifle operational flexibility and efficiency. Furthermore, if a completed merger is later found to adversely affect market competition, regulatory bodies may mandate the divestiture of assets or business

units. Such enforced separations can disrupt strategic objectives and inflict financial and operational burdens on the company.

4 Risk Mitigation Strategies for Cross-Border M&A

4.1 Risk Mitigation Strategies for Data and Privacy Protection

Due diligence is necessary for mitigating the risks of data and privacy protection. In cross-border data flow, both the seller and the buyer need to carry out due diligence. The buyer needs to investigate the financial background, the law system, and other status of the seller. For the seller, it ought to evaluate and guarantee that the buyer is capable of protecting the transferred data and privacy. In the US Google-DoubleClick merger, the US Federal Trade Commission cancelled the merger for it believed that neither of the parties were capable of accessing the merged data [7].

All-round investigation of different laws on privacy and data protection helps reduce the risks of cross-border data flow. Different laws may conflict with each other. Thus, to reduce the risks of law conflicts, enterprises should investigate relevant international rules precisely and look for enough precedents as evidence. The OECD has explored several key areas where analysis must be adapted to, including network effects, multi-sided platform markets, rapid change in the competitive landscape and broad geographic market definition [8].

Furthermore, enterprises should incorporate specific clauses in merger agreements that address responsibility for data breaches, outline the measures for data protection continuity, and define the legal recourse in case of privacy violations. These contractual safeguards ensure that both parties have a clear understanding and agreement on how data and privacy risks are managed post-transaction.

4.2 Risk Mitigation Strategies for Intellectual Property

Due diligence is an essential step before transferring intellectual property. Due diligence includes making sure of the existence of the intellectual property and investigating the content, owner, efficiency of the intellectual property, and the form of the ownership. Besides, the developing trend and the making standing are also factors that need to be considered. The initial information references for due diligence can be the websites, news, articles or other public information.

Valuation of the intellectual property is the most essential step in due diligence, which ought to include all the intellectual properties of the target company. Though there isn't any formula to calculate the value, the acquiring corporation can request for an intellectual property register from the target corporation. And the valuation can base on the market value, cost and effect, and future economic effects. It is notable that some confidential information of the intellectual property need to be protected. Take precautions like making indemnity clauses to reduce the risks of misusing confidential information [9]. Only when a company conducts all-round due diligence, can it make the best use of the acquired intellectual property and reduce the risks of intellectual property transfer and attribution.

In addition, before entering into a M&A, enterprises ought to compare different cultures and legal systems among countries and evaluate whether is it suitable for cross-border M&A. Besides, the standards and progress of how the property ought to be transferred also vary from countries, thus precise investigation is required to reduce the omission in the progress. Enterprises ought to put more effort into examining the legal background like the legislation regarding intellectual property and the trade of intellectual property. However tiny the differences are, they should not be neglected.

Moreover, in the digital era where technology and intellectual property evolve at a rapid pace, it is crucial for enterprises to implement advanced monitoring and tracking systems for intellectual property management. These systems can leverage blockchain technology to provide a transparent, immutable ledger of intellectual property transactions, registrations, and usage rights. Blockchain's decentralized nature ensures that all records are secure and tamper-proof, facilitating trust and clarity in IP transactions across borders.

4.3 Risk Mitigation Strategies for Anti-Monopoly and Antitrust

Since enterprises need to submit a large amount of materials when reporting to antitrust and anti-monopoly institutions, it will be effective for enterprises to sum up and examine their data regularly in routine operations. Regular audits of data ensure consistency and completeness, reducing the risk of discrepancies that could lead to severe penalties during antitrust reviews. Establishing an online database for storing and managing all antitrust-related materials can also streamline the process of document preparation and submission. This database should be regularly updated and should allow for secure, real-time access to relevant data. Access should be restricted to authorized personnel only, such as compliance officers, legal teams, and appointed staff, ensuring data confidentiality.

Neglecting the differences in the antitrust and anti-monopoly laws among states will cause unexpected consequences. Thus, to avoid this situation, enterprises should compare the laws and cases precisely. Due to the huge workload thereof, enterprises can seek help from artificial intelligence to analyze and extract the differences among different law systems. Global artificial intelligence which specializes in the comparison and analysis of different state laws is expected to be invented and put into force in the future. Under the circumstances that enterprises share similar jurisdiction and rules, the international co-operation among competition authorities is encouraged [10].

Additionally, leveraging predictive analytics could significantly enhance an enterprise's ability to comply with anti-monopoly and antitrust laws. Predictive analytics tools can analyze large datasets to forecast trends and potential legal issues before they become problematic. These tools utilize historical data and machine learning algorithms to predict outcomes based on patterns and relationships within the data. By integrating predictive analytics into their compliance strategies, companies can proactively identify and address potential antitrust issues. For example, these tools can help predict the likelihood of a merger raising regulatory concerns based on similar past

transactions and outcomes, enabling companies to make informed decisions early in the merger planning process. Utilizing predictive analytics also allows for more dynamic risk management, adapting to new developments as they occur while maintaining compliance with existing antitrust regulations. This can be particularly useful in industries where rapid innovation and market dynamics can quickly change the competitive landscape.

5 Conclusion

As digital transformation prevails, emerging technologies like the Internet, big data, and artificial intelligence are prominent and dominant characteristics in cross-border M&A. Legal issues and risks come up regarding data and privacy protection, transfer and attribution of intellectual property, and antitrust and anti-monopoly protection. For all the risks of these aspects, the main reason lies in the huge difference among states. The differences mainly include the different legal systems, regulations, cultures, and languages. Another reason is the nature of the data flow, intellectual property, antitrust and anti-monopoly. The factors themselves contain certain risks and limitations.

Mitigation of the risks promotes the security and stability of cross-border M&A, as well as maximizes the profits of the enterprises. The first strategy is to conduct due diligence, which includes all-round investigation, analysis, and evaluation. The purpose is to make a good decision instead of making unnecessary losses. The second strategy is to compare the differences of states and be well-prepared for the criteria of M&A. This progress includes a large amount of workload but it can avoid legal consequences like severe consequences. Moreover, as global digital integration continues to deepen, there is an increasing need for international cooperation in harmonizing legal standards and practices. This would help mitigate the disparities in legal systems and regulatory frameworks that currently pose challenges to cross-border M&A.

In conclusion, while the digital era offers unprecedented opportunities for growth through cross-border M&A, it also requires a new level of diligence and innovation in legal risk management. By leveraging cutting-edge technologies and fostering international legal collaboration, enterprises can better protect themselves against the inherent risks of today's rapidly evolving market landscape.

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