



# Theoretical Insights into The Interplay of Corporate Governance and Intellectual Capital on Firm Performance in Jordan

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## Abstract

This conceptual study develops an integrated theoretical framework to examine how corporate governance (CG) and intellectual capital (IC) interact to enhance firm performance (FP) in Jordanian industrial companies. The study focuses on internal and external governance mechanisms, transparency and disclosure practices, and risk management, while positioning IC as a mediating factor linking CG to firm performance. The framework emphasizes the strategic role of effective governance in fostering IC and improving financial, market, and operational performance. This research examines all manufacturing firms traded on the Amman Stock Exchange during 2017–2022. As a central component of the Jordanian economy, the ASE is closely connected to regional and international financial markets, supporting investment inflows and market confidence. Although previous studies have explored CG, IC, and FP individually, limited research has integrated these variables within a unified framework in developing economies. The research aims to cover this knowledge gap by enhancing the literature and providing practical recommendations for regulators and corporate executives in Jordan.

**Keywords:** Corporate Governance; Firm Performance; Jordanian Industrial Companies; Intellectual Capital.

## 1. Introduction

This paper proposes a conceptual framework to examine the complex interactions between CG and IC in driving firm success within Jordan's continuously evolving industrial sector. It argues that a deeper understanding of the systematic and interdependent correlations between these constructs, and their implications for sustainable business practices, CG effectiveness, and IC development, necessitates further theoretical re-examination.

In the context of Jordanian industrial companies, as in global business environments, firm success is strongly influenced by CG structures, IC resources, and performance outcomes. In recent years, these factors have attracted increasing scholarly and practical attention as critical drivers of organizational growth, competitiveness, and long-term sustainability. Accordingly, gaining insight into the dynamic interplay between CG, IC, and FP is essential for designing strategies that effectively enhance organizational efficiency and competitive advantage within Jordan's industrial landscape.

Jordan has made notable progress in adopting CG practices aligned with internationally recognized standards, particularly the OECD Principles of CG. Despite these advancements, persistent challenges remain concerning accountability, transparency of corporate conduct, and, most critically, the effective enforcement and implementation of governance standards and regulatory frameworks. Accountability and transparency constitute core pillars of sound CG; however, institutional and legal constraints continue to undermine their full realization.

Evidence from international indicators highlights these structural weaknesses. According to the World Bank's Ease of Doing Business Report, Jordan ranked 143rd out of 190 countries in the category of enforcing contracts, suggesting deficiencies in the efficiency and effectiveness of the legal and judicial system that may adversely affect CG enforcement and investor protection (World Bank, 2021). Furthermore, Jordan's position in Transparency International's Corruption Perceptions Index ranked 60th out of 180 countries in 2020 indicates that, although substantial efforts have been made to improve transparency and combat corruption, significant challenges persist in ensuring consistent transparency and accountability within CG practices (Transparency International, 2020). Collectively, these indicators imply that while the formal adoption of governance standards has improved, practical enforcement and institutional effectiveness remain critical areas for further reform.

Investment in IC is commonly acknowledged as a crucial factor of corporate competitiveness and operational efficiency. In the Jordanian context, notable progress has been achieved in the development of IC, particularly through improvements in the national education system and human capital (HC) formation. Despite these advancements, persistent challenges remain in fostering innovation, enhancing knowledge-based capabilities, and effectively developing human and intellectual resources. These challenges are reflected in fluctuations

observed in Jordan's Quality of Life Index, which signal underlying structural constraints affecting productivity, innovation, and sustainable development (Jordan Strategy Forum, 2023).

Nevertheless, there remains a significant gap in empirical and theoretical understanding regarding the precise correlation between IC, CG, and FP within Jordan's industrial sector. Although the existing literature provides valuable insights into these constructs individually, sector-specific and integrated analyses remain limited, especially when considering emerging economies like Jordan. Consequently, further empirical investigation is required to comprehensively examine how CG mechanisms interact with IC to influence the financial, market, and operational performance of industrial firms in Jordan.

By developing a comprehensive conceptual framework that examines the effects of IC and CG on the FP of Jordanian companies, particularly within the industrial sector, this research aims to address an important gap in the body of current literature. The proposed framework aims to provide empirical evidence that clarifies both the theoretical and practical dimensions of the correlation between CG, IC, and FP. In doing so, the study offers valuable insights for scholars, decision-makers, and professionals operating in Jordan's industrial sector.

IC and CG are widely recognized as two critical determinants of firm performance, as they significantly influence organizational strategy, operational efficiency, and competitive positioning (Asiaei & Jusoh, 2015; Kalkan et al., 2014; Smriti & Das, 2018). Effective CG mechanisms promote transparency, accountability, and ethical behavior, which are essential for enhancing investor confidence, safeguarding stakeholders, interests, and sustaining market trust (El-Chaarani et al., 2022). In parallel, IC comprising human capital (HC), structural capital (SC), capital employed (CE), and innovation-related assets plays a pivotal role in strengthening organizational capabilities, fostering innovation, and improving long-term competitiveness (Alipour, 2012; Asiaei & Jusoh, 2015; Zéghal & Maaloul, 2010). Accordingly, understanding how these two constructs interact is crucial for explaining performance differentials among industrial companies in emerging economies like Jordan.

The correlation between CG and FP has been extensively examined in the academic literature. Internal corporate governance mechanisms, particularly board characteristics have a substantial effect on the efficiency of the board and influencing Procedures for making decisions. Empirical evidence suggests that specific board attributes have differentiated effects on firm outcomes. For example, Nikolić et al. (2022) discovered that while there is no statistically substantial connection among gender diversity on corporate boards and conventional financial performance metrics, board independence and size are favorably correlated with IC efficiency, indicating their importance in supporting knowledge-based value creation Lee et al., 2024).

In addition to internal governance mechanisms, external governance systems like market competition and legal and regulatory constraints are also fundamental determinants of firm success (Guluma, 2021). These external forces discipline managerial behavior, reduce opportunistic actions, and enhance overall corporate accountability. Furthermore, transparency and disclosure practices constitute essential components of effective CG, as they contribute to reducing information asymmetry and investment risk, thereby improving FP and investor confidence (El-Chaarani et al., 2022). However, the practical implementation of transparency and disclosure policies remains challenging in certain institutional contexts. This challenge is evident in Jordan's ranking in the Corruption Perceptions Index, which reflects persistent obstacles to achieving full transparency and effective enforcement of governance practices (Transparency International, 2020).

Investment in IC has been widely demonstrated to enhance firm performance. Prior research indicates that companies that actively integrate IC considerations into their governance structures tend to achieve superior profitability and stronger competitive positioning (Lee & Lin, 2019). Moreover, empirical evidence suggests that IC exerts a favorable impact on key FP indicators, like return on capital and return on equity, underscoring its role as a critical value-creating resource (Angelica et al., 2022). Within the Jordanian context, CG practices are shaped by regulatory frameworks, ownership structures, and broader institutional characteristics. Existing studies reveal that governance-related factors significantly influence IC management and disclosure. For instance, Hamdan (2017) finds that SC positively affects the level of IC disclosure, while family ownership is associated with weaker disclosure practices. Additionally, external governance pressures and institutional constraints have been shown to significantly affect the development and utilization of IC in Jordanian companies (Alfraih, 2018).

Despite these valuable insights, the literature remains limited with respect to understanding how IC and CG jointly influence the FP of industrial firms in Jordan. Sector-specific empirical investigations are therefore necessary to systematically examine how these factors interact to shape firm outcomes within the industrial sector. In particular, longitudinal research designs would be especially useful in capturing the long-term implications of CG structures and IC investments on organizational performance. Such studies would contribute to a more comprehensive understanding of the dynamic correlation between CG, IC, and FP in Jordan's industrial sector.

This study adds multiple major contributions to the existing library of literature. Its primary objective is to present theoretical proof on the effect of IC and CG on FP efficiency of industrial firms listed in Jordan. In doing so, the study highlights the role of Jordanian corporations and regulatory authorities in shaping and strengthening the CG framework within the context of emerging economy like as Jordan. Specifically, this research examines the interrelationships among firm performance, IC, and CG, thereby addressing key limitations in prior studies that have largely focused on these constructs in isolation. By adopting an integrated perspective, the study contributes to a more comprehensive understanding of CG scope and the extent of investment in IC within Jordanian industrial companies. Furthermore, the results are predicted to offer valuable implications for policy-makers, regulators, and corporate decision-makers by providing insights that can support governance reforms and strategic investment in IC to enhance organizational efficiency and competitiveness.

### 1.1. Motivation and significance

This study focuses on Jordan's industrial sector, which It performs an important role in the national economy through its large contributions to GDP and job growth. The sector is currently undergoing a transitional phase, as companies strive to align with international standards while simultaneously addressing local institutional, regulatory, and operational challenges. This transition provides a particularly relevant and insightful context for examining the roles of CG and IC. Given the growing global emphasis on these factors as key drivers of productivity, competitiveness, and sustainable growth, the sector represents an appropriate and timely setting for empirical investigation.

The study carries two key implications. From an academic perspective, it addresses a notable gap in the literature by offering sector-specific evidence on the interaction between CG and IC within Jordan's industrial sector, an area that remains under-explored in emerging market research. From a practical standpoint, the findings are expected to inform policy formulation aimed at improving sectoral performance, assist business leaders in strengthening governance structures and effectively leveraging IC, and enhance investor confidence by demonstrating the performance benefits of sound governance practices. In addition, the study may provide guidance for educational and professional development programs seeking to better prepare future managers and corporate leaders. Overall, the research seeks to contribute to improving performance and sustainability in Jordan's industrial sector by advancing the effective integration of CG and IC, thereby delivering value to academics, policymakers, practitioners, and educators alike.

## 2. Literature review and hypotheses development

Through a critical evaluation of the existing body of knowledge, this study identifies theoretical gaps in the ways CG and IC have been conceptualized in relation to FP. In particular, within the relatively underexplored context of Jordan, the study highlights the need for a revised analytical perspective that explicitly recognizes the IC mediates the link between CG structures and FP outcomes.

### 2.1. Corporate governance (CG) and intellectual capital (IC)

The existing literature provides valuable insights into the interactions among IC, CG mechanisms, transparency and disclosure practices, and risk management. However, empirical research specifically examining these correlations within Jordanian industrial companies remains limited. While prior studies conducted in more advanced or structurally different economies, like Spain and Indonesia, offer important theoretical and empirical contributions, their findings may not be directly transferable to the Jordanian context due to differences in institutional environments, regulatory frameworks, and market structures. Accordingly, there is a clear need for research that explicitly investigates the effect of both (internal and external) governance tools, transparency and disclosure policies, and risk management practices on IC within the specific institutional and economic setting of Jordanian industrial companies. Such context-sensitive analysis is necessary to improve the external validity of CG and IC theories in emerging markets and to generate results that are both conceptually and practically significant for Jordan.

#### 2.1.1. Internal governance and intellectual capital

Several empirical studies have examined whether CG mechanisms influence IC, producing mixed and sometimes contradictory results. Evidence from Jordan, for example, indicates that certain internal governance attributes may not significantly enhance IC outcomes. Alshhadat (2018) finds no positive correlation between board independence and IC efficiency, thereby rejecting the assumption that larger or more independent boards necessarily improve IC management. Similarly, governance traits indicating a separation of the CEO and chair of the board roles have no statistically significant effect on IC, suggesting that these structural features do not inherently contribute to more effective IC management.

Comparable findings have been reported in other developing-country contexts. Tran et al. (2021), examining companies in Vietnam, demonstrate that IC efficiency is inversely related to board independence, board size, and CEO duality, indicating that stronger formal CG elements may, in some settings, constrain managerial flexibility and innovation. Tran et al. (2021) further evaluate IC in relation to governance mechanisms like board size, the proportion of independent directors, and CEO duality, reinforcing the view that governance and IC correlations are highly context dependent.

Other studies offer more nuanced insights. Saruchi et al. (2019), focusing on Islamic financial institutions, find that while relational capital does not significantly affect IC development, female board representation positively contributes to relational capital formation. These findings highlight the importance of board composition and diversity rather than purely structural governance attributes. Nevertheless, the role of board characteristics in regulating IC remains inconclusive. While some studies suggest that larger boards enhance IC efficiency through broader information processing and diverse expertise (Attarit, 2016), Others find no statistically significant connection among board size and IC (Al-Musalli & Ismail, 2012).

Similarly, evidence regarding board competency and expertise remains mixed. Saeed et al. (2015) emphasize the importance of board financial expertise in strengthening firm outcomes, whereas Darmadi (2013) reports an unfavourable association with organizational efficiency and a higher proportion of directors with finance-related qualifications. Collectively, these mixed findings underscore the complexity of the correlation between CG mechanisms and IC efficiency, particularly in emerging market contexts.

Previous research indicates that internal governance mechanisms do not consistently enhance intellectual capital outcomes. Rather, their effectiveness appears to be contingent on contextual and functional factors, rather than on formal board structures alone, particularly within emerging market settings.

Drawing on the Resource-Based View (RBV), CG structures like executive incentives, board composition, and diversity can enhance IC by creating an enabling environment for knowledge creation, innovation, and effective resource utilization. Recent evidence from the Middle East, including Jordanian companies, supports this perspective. Al-Matari et al. (2022) document a positive correlation between board diversity and IC, suggesting that governance attributes emphasizing diversity and strategic oversight may foster IC development in Jordanian companies. Accordingly, the following hypothesis is proposed:

H1: Internal corporate governance mechanisms have a significant influence on the intellectual capital of Jordanian companies.

#### 2.1.2. External governance and intellectual capital

A firm's IC encompassing HC, SC, and CE constitutes a fundamental source of innovation and sustainable competitive advantage. In the Jordanian context, understanding the correlation between external CG mechanisms and IC is particularly important given the country's unique institutional and economic environment. External governance mechanisms, notably debt financing and market competition, provide valuable insights into how companies develop, manage, and sustain their IC over time. Market competition exerts disciplinary pressure on companies, encouraging the efficient utilization of IC to stimulate innovation and maintain competitive advantage (Guluma, 2021). From a theoretical perspective, debt financing may enhance financial discipline and monitoring, potentially freeing resources for investment in IC. However, excessive reliance on debt or overly stringent external monitoring may constrain managerial discretion and discourage long-term investments in knowledge-based assets. In environments where shareholders prioritize short-term financial performance, companies may underinvest in IC, which typically yields returns over a longer horizon (Weir et al., 2002). Thus, while external governance mechanisms can enhance accountability, excessive pressure or regulation may inadvertently stifle innovation and IC development.

Previous research suggests that the effects of external governance involve inherent trade-offs. Unlike excessive debt financing, which can constrain long-term investment in knowledge assets, market competition often incentivizes the efficient utilization of intellectual capital. This indicates that the influence of external governance on intellectual capital is contingent upon stakeholders, time horizons and the firm's financial flexibility, a dynamic that may be especially pronounced in developing countries such as Jordan. The association among external corporate governance and IC in Jordan demands a balanced regulatory structure that encourages accountability while not harming future value development. Drawing on Agency Theory (AT) and the RBV, effective external governance structures can facilitate the creation, protection, and disclosure of IC by aligning managerial incentives with sustainable organizational objectives (Schäuble, 2019).

Empirical evidence from international contexts supports the relevance of external governance mechanisms. Guluma (2021) reports that market competition is positively associated with firm performance, as measured by return on assets, while debt financing exerts a negative effect in the context of Chinese companies. Similarly, Weir et al. (2002), examining CG in the United Kingdom, emphasize the critical role of external governance instruments like capital market discipline and creditor monitoring in shaping firm behaviour and performance. Given the limited empirical evidence on these correlations within Jordan, it is essential to examine how external corporate governance mechanisms influence IC development and firm outcomes in Jordan's manufacturing firms. Accordingly, the following hypothesis is proposed:

H2: External corporate governance mechanisms have a significant influence on the intellectual capital of Jordanian companies.

### 2.1.3. Transparency & disclosure and intellectual capital

Many research has stressed the importance of transparency and disclosure, particularly in relation to IC development. Transparency mechanisms play a critical part in lessening the imbalance of information and enhancing stakeholders, understanding of companies, intangible resources. For instance, Tejedo and Ferraz (2018) investigate the correlation between CG, Board Features, and disclosure practices among companies listed on Spain's IBEX 35 index. Their findings highlight the importance of voluntary disclosure in improving CG by ensuring that reliable information on intangible assets, especially HC is made available to stakeholders. However, the authors also note that strict accounting standards limit the extent to which IC can be fully reflected in formal financial statements, thereby constraining governance-related disclosure practices.

Evidence from developing and emerging economies further illustrates the contextual variability of transparency outcomes. Hassouna et al. (2017), examining 85 Egyptian listed companies during 2006 to 2010, find no statistically significant correlation between corporate transparency and operational performance. Their results suggest that transparency, openness, and disclosure practices in such settings may be largely symbolic, with limited enforcement pressure to induce substantive improvements in CG. In contrast, Braune et al. (2020) provide deeper insights from European companies, demonstrating that CG structures significantly shape patterns of intangible asset disclosure. Their findings further indicate that the disclosure of intangible assets affects FP both directly and indirectly, particularly through market-based performance measures.

Despite the richness of this literature, most prior studies focus on developed or institutionally distinct contexts like Europe or North Africa. Empirical evidence examining how transparency and disclosure affect IC, particularly as a mediating construct remains scarce in Jordan. This gap is especially pronounced within Jordanian industrial companies, where institutional constraints, competitive pressures, and disclosure practices may differ substantially from those observed in developed markets. The present study therefore proposes that openness and disclosure policies are systematically associated with IC development in Jordanian companies. While transparency is theorized to enhance human, structural, and relational capital, it may also generate challenges, like competitive disadvantages and resource diversion due to excessive disclosure.

Several empirical studies support the positive role of transparency in fostering IC. Transparency and openness have been shown to enhance HC and SC by supporting innovation, strengthening internal processes, and improving production efficiency. Tejedo-Romero et al. (2023) find that high-quality disclosure practices are associated with improved employee morale and stronger internal control systems. Similarly, Thien and Hung (2023) report a positive correlation between IC reporting and firm performance, mediated through operational efficiency. Transparency also strengthens relational capital by fostering trust, cooperation, and long-term stakeholder correlations. In the Jordanian context, Salameh et al. (2022) demonstrate that sustainability disclosure among small and medium-sized enterprises enhances stakeholder trust and improves the credibility of financial reporting. Nevertheless, excessive transparency may expose companies to strategic risks. Fontana et al. (2019) caution that disclosing sensitive strategic information can weaken competitive positioning, particularly in highly competitive markets. Moreover, the financial and managerial resources required to achieve extensive disclosure may divert attention away from other critical investments in IC, a concern that is particularly relevant for smaller companies. When disclosure quality is high, transparency can facilitate the development of intellectual capital; however, when disclosure is excessive or merely symbolic, its effectiveness may diminish, especially in contexts characterized by weak institutional frameworks.

From a theoretical perspective, AT suggests that transparency mitigates information asymmetry between managers and stakeholders, thereby improving governance and facilitating more effective management of IC. Empirical support for this view is provided by Phurahong et al. (2023), who show that transparent reporting enhances the qualitative attributes of IC in emerging markets. Similarly, Stakeholder Theory ST emphasizes that transparency and disclosure strengthen IC by increasing stakeholder confidence, enhancing organizational legitimacy, and reinforcing corporate reputation (Dalwai et al., 2023).

According to the above discussion, the following hypothesis is provided:

H3: Transparency and disclosure practices have a significant influence on the intellectual capital of Jordanian companies

### 2.1.4. Risk management and intellectual capital

Research examining the correlation between IC and risk management (RM) has attracted increasing scholarly attention in recent years, particularly with respect to its implications for organizational performance. Mohammed and Knapkova (2016), collecting information from 12 of the 15 firms traded on the Prague Stock Exchange over the period 2009, 2014, investigate how RM practices embedded within good CG frameworks influence companies, exposure to external risks. Their findings provide strong evidence of a favourable correlation among RM and FP, particularly among companies that have made greater investments in IC. These results underscore the importance of extending this line of inquiry to other institutional contexts, like Jordan, to assess the consistency and generalizability of these correlations.

Related Insights from developing markets further support the relevance of RM in shaping IC outcomes. Tulung et al. (2018), examining private banks in Indonesia, analyse the impact of CG on IC disclosure and find that while the mere existence of a RM committee does not directly influence disclosure levels, the effectiveness of IC reporting is significantly shaped by governance structures related to audit and risk monitoring committees. Their study adopts a broader, qualitative perspective on RM, emphasizing governance practices rather than purely accounting-based indicators.

Several studies have also highlighted the role of RM and IC in enhancing FP and competitive advantage. Gunawan and Widodo (2022) argue that IC and CG represent two critical dimensions of RM that enable Indonesian banks to improve operational performance and sustain competitive advantage. Similarly, Faedfar et al. (2022) identify a strong Connection among RM and firm performance, particularly when IC acts as a moderating mechanism during adverse conditions, similar to those encountered during the COVID-19 outbreak. Khan et al. (2019), in the context of Pakistan, demonstrate that IC positively moderates the correlation between corporate RM and return on equity, suggesting that IC strengthens the performance-enhancing effects of effective RM.

Evidence from public sector and cross-sectoral studies further reinforces this argument. Girangwa et al. (2019) find that in Kenyan state-owned enterprises, higher levels of IC significantly amplify the favourable correlation of enterprise RM on organizational performance. Conversely, Pratama et al. (2022) report that in Indonesian companies, board-controlled governance mechanisms exert a stronger influence on firm value than RM disclosures or IC alone, indicating that the impact of RM on IC may be contingent upon broader governance structures.

Collectively, these findings imply that RM plays a critical role in the development and sustainability of IC, either directly or through its moderating and mediating effects on organizational performance and competitive advantage. Although risk management is generally associated with positive outcomes for intellectual capital, its effectiveness appears to be contingent upon the quality of governance. Evidence suggests that risk management enhances intellectual capital primarily when embedded within robust governance frameworks; conversely, in institutionally weaker contexts, it may function more as a protective mechanism rather than as a driver of intellectual capital development. Although these studies are conducted in diverse institutional settings, they offer valuable insights into the potential mechanisms through which RM may influence IC mechanisms that are likely to be relevant in the Jordanian context.

At the national level, empirical investigation is therefore required to validate these correlations within Jordanian companies. Such analysis should account for specific RM strategies and assess how they influence the accumulation, protection, and utilization of IC, as well as overall firm performance. From a resource-based perspective, effective RM strategies can enhance IC by reducing uncertainty, safeguarding intangible assets, and supporting the long-term availability of critical knowledge resources. Well-developed RM systems may thus minimize losses arising from unforeseen events while simultaneously reinforcing the value-creating potential of IC (Saiedi et al., 2021).

According to the above discussion, the hypothesis is as follows:

H4: Risk management practices have a significant influence on the intellectual capital of Jordanian companies.

## 2.2. Intellectual capital (IC) and firm performance (FP)

IC exerts a multifaceted and context-dependent influence on companies, financial, market, and operational performance across different industries and geographical regions. Prior empirical evidence suggests that the magnitude and direction of this influence vary according to institutional settings, industry characteristics, and companies, strategic orientations. In this regard, Public (2004) presented the Value Added Intellectual Coefficient (VAIC) methodology as a systematic approach for measuring the efficiency with which IC contributes to value creation within companies. The VAIC model provides an analytical framework for assessing how HC, SC, and CE jointly enhance organizational value added, thereby offering a widely adopted proxy for examining the performance implications of IC.

### 2.2.1. Intellectual capital (IC) and financial performance

Numerous empirical studies across different industries and national contexts have documented a predominantly beneficial connection among IC and the financial success of businesses. Vishnu & Gupta's (2014) study the purpose of IC in Successful Performance of the Pharmaceutical Sector in India, examine 22 large Indian pharmaceutical companies using IC as a framework for performance evaluation. IC was conceptualized as comprising HC, SC, and CE. Their results reveal a favourable connection among IC and FP indicators, including return on assets and return on sales (ROS). However, the study also reports that relational capital does not significantly influence financial performance, suggesting that the individual components of IC may exert heterogeneous effects on financial outcomes. While informative, the industry-specific focus on the Indian pharmaceutical companies limits the generalizability of the results and highlights the need for further research across different sectors and institutional settings.

Consistent evidence is also found in the Jordanian context. Sharabati et al. (2010) investigate the correlation among IC and financial performance using survey data collected from 132 managers in Jordanian pharmaceutical firms. Their findings indicate a positive and significant correlation among IC and financial success, aligning with the results of Vishnu and Gupta (2014). Nevertheless, the relatively limited sample size and the exclusive focus on a single industry may constrain the external validity of the results and their applicability to broader sectors of the Jordanian economy Kimuam et al. (2025). Beyond the pharmaceutical industry, prior studies in other sectors and regions further corroborate the positive financial implications of IC. For example, Maqableh et al. (2022) document a favourable effect of IC on the financial performance of companies operating in Middle Eastern countries, reinforcing the view of IC as a strategic resource that contributes to superior financial outcomes. These findings are consistent with the RBV, which posits that companies possessing valuable, rare, and inimitable intangible resources, like IC are more likely to achieve sustainable financial advantages.

Drawing on the empirical evidence and theoretical arguments discussed above, the following hypothesis is proposed:

H5: Intellectual capital has a significant influence on the financial performance of Jordanian companies.

### 2.2.2. Intellectual capital (IC) and market performance

The correlation among IC and market performance has attracted considerable scholarly attention, with prior studies reporting predominantly positive, yet sometimes complex, effects across different industries and institutional contexts. Alfrah (2018) and Bayraktaroglu (2019), examining companies in the banking and industrial sectors respectively, present proof of an overall favourable connection among IC and market-based performance metrics, like profitability and the market to book ratio. These results recommend that the efficient administration and strategic disclosure of IC can enhance market valuation and strengthen companies, competitive positioning in pursuit of sustainable market advantages.

Nevertheless, the correlation between IC and market performance is not uniform and may vary depending on the measurement approach and the specific components of IC considered. For instance, Hermawan et al. (2019) demonstrate that while Market-Based Intellectual Capital (MBIC) exhibits a relatively limited influence, VAIC exerts a substantial effect on both financial outcomes and market performance. This divergence indicates that different dimensions and proxies of IC may affect market performance through distinct mechanisms. Similarly, Hamdan (2018) finds that although IC significantly influences accounting-based performance measures, its impact on market-based performance is comparatively weaker, suggesting that regional economic conditions and market characteristics may moderate the IC and market performance correlation. In the Jordanian context, where economic structures, capital markets, and industrial dynamics differ from those in developed economies, it is particularly important to investigate how IC affects market performance at the firm level. Variations in market efficiency, investor awareness, and disclosure practices may lead to differential outcomes for Jordanian companies, especially within the manufacturing and industrial sectors. Accordingly, further empirical analysis is required to identify the particular ways that IC affects market performance in Jordan.

According to the discussion above, the hypothesis is as follows:

H6: Intellectual capital has a significant influence on the market performance of Jordanian companies.

### 2.2.3. Intellectual capital (IC) and operational performance

IC is widely recognized as a critical determinant of companies, operational performance. An expanding collection of literature suggests that the various components of IC human, structural, and CE can significantly influence efficiency and effectiveness across a range of organizational operations. For instance, Suzan and Ardiansyah (2023) argue that IC contributes substantially to business value creation, thereby enhancing operational performance. Similarly, Danladi et al. (2023) given empirical proof that all dimensions of IC, including innovation and knowledge management embedded within HC, SC, and CE, positively affect operational performance, particularly within the banking sector.

However, the correlation between IC and operational performance is not uniformly positive and may vary depending on organizational and contextual factors. Lee and Lin (2019), focusing primarily on HC, find that its correlation with operational performance is heterogeneous, with HC exerting adverse or marginal effects in certain operational areas. Likewise, Gupta and Raman (2021) suggest that the performance benefits derived from IC may depend on strategic repositioning and industry-specific conditions, raising questions about the universality of the IC and operational performance link across different organizational contexts.

Research indicates that intellectual capital contributes more consistently to improvements in financial performance than to market or operational outcomes. While market efficiency and disclosure credibility significantly influence market performance, operational effectiveness is primarily determined by a firm's ability to convert knowledge resources into process efficiencies. These distinctions highlight the multifaceted and context-dependent nature of the relationship between intellectual capital and firm performance.

Understanding how IC influences operational performance is especially important in the Jordanian context, where industrial companies play a central role in economic development. Jordanian manufacturing and industrial companies face distinct operational challenges, including inventory management inefficiencies, workforce productivity constraints, and employee turnover. From a RBV perspective, companies endowed with strong IC are better positioned to enhance operational performance through process innovation, efficiency improvements, and the creation of sustainable competitive advantages (Ni et al., 2020).

The following hypothesis is put out in light of the theoretical justifications and empirical data previously discussed:

H7: Intellectual capital has a significant influence on the operational performance of Jordanian companies.

### 2.3. Integration of theories

This study integrates AT, the RBV, and ST within its conceptual framework to provide a comprehensive understanding of the correlations among CG, IC, and firm performance. The combined application of these theoretical perspectives offers a robust foundation for explaining how governance mechanisms influence IC development and, in turn, organizational outcomes.

AT, originally articulated by Jensen and Meckling (1976), posits that CG mechanisms perform an essential role in reducing agency conflicts between investors and directors. Effective internal and external governance structures align managerial incentives with shareholders' interests, thereby reducing opportunistic behaviour and enhancing managerial accountability. From this perspective, well-designed CG practices facilitate the efficient management and utilization of IC by encouraging managers to invest in long-term value-creating activities, eventually resulting in enhanced business performance.

The RBV, developed by Barney (1991), proposes that company-specific assets that are valued, uncommon, inimitable, and non-substitutable give rise to sustained distinctive advantages. IC encompassing human, structural, and employed resources represents a core strategic asset within this framework. RBV supports the view that IC serves as a critical mediating mechanism linking CG to firm performance. CG practices that promote knowledge development, innovation, and effective resource deployment enhance IC, which subsequently contributes to superior financial, operational, and market performance. This perspective is particularly relevant for Jordanian industrial companies operating in increasingly competitive and resource-constrained environments.

Stakeholder Theory, developed by Freeman (1984), expands the scope of CG over investors to include a broader range of stakeholders, like staff, customers, vendors, and the larger community. This theory underscores the importance of transparency, disclosure, and RM as integral components of effective governance. By fostering trust and accountability, these methods of governance support the development and protection of IC particularly high-quality HC by mitigating risks and enhancing stakeholder engagement. In turn, the alignment of stakeholder interests creates an organizational environment conducive to innovation, knowledge sharing, and sustainable value creation.

## 3. Methodology

Drawing on an extensive review of the relevant literature, this research followed a systematic process to develop its conceptual framework. First, the central research question focused on examining the effects of IC and CG on the performance of industrial companies operating in Jordan. To address this question, a comprehensive literature review was conducted to identify relevant theories, empirical studies, and analytical models from academic journals, scholarly books, and reputable databases.

The collected literature was critically analysed to identify key concepts, theoretical perspectives, hypotheses, and empirical findings related to CG, IC, and FP. This analysis facilitated the identification of research gaps and underexplored areas, thereby informing the direction and scope of the present study.

Building on this foundation, theoretical frameworks were developed to contextualize the interactions among CG, IC, and organizational performance. These frameworks were primarily informed by well-established theoretical perspectives, particularly AT and the RBV. Subsequently, further literature was reviewed to capture diverse viewpoints and empirical evidence on CG practices, IC development, and FP within the Jordanian industrial sector. This review relied on a variety of documents such as reviewed journal papers and academic articles, and scholarly databases like Google Scholar.

This study adopts a conceptual research design rather than an empirical approach; therefore, no primary data collection or statistical analysis is conducted. The proposed conceptual framework is developed through a systematic review and critical synthesis of established theoretical perspectives particularly Agency Theory and the Resource-Based View alongside prior peer-reviewed research on corporate governance, intellectual capital, and firm performance published in reputable academic outlets. This approach enhances theoretical rigor and coherence, while providing a solid foundation for future empirical investigation within the Jordanian industrial context.

### 3.1. Measurement of variables

To capture both firm-level controls and market-based disciplinary forces, CG is operationalized through a comprehensive framework that integrates internal governance, external governance, transparency and disclosure, and RM mechanisms. Internal governance focuses on board characteristics, such as the size of the board, the percentage of non-executive directors, and diversity of genders, directors, financial expertise, and CEO role duality. These attributes are collectively aggregated into an Internal CG score, reflecting the effectiveness of internal monitoring and strategic oversight (Kanakriyah, 2021; Alodat et al., 2022; Nikolić et al., 2022). External governance is assessed through The Herfindahl-Hirschman Index (HHI) is used to measure product market competition, and debt financing, measured by the debt ratio, capturing the disciplining roles of market competition and creditor monitoring (Jensen & Meckling, 1976; Guluma, 2021). Transparency and disclosure are explicitly incorporated as core governance dimensions using a Transparency and Disclosure Index (TDI), which evaluates the extent of voluntary disclosure, reduces information asymmetry, and enhances stakeholder confidence (Temiz, 2021; Alardi et al., 2021). In addition, RM is embedded within the governance framework and measured using ROE- and ROI-based volatility indicators, reflecting companies' ability to manage financial and operational risks and ensure earnings stability (Mohammed & Knapkova, 2016; Faedfar et al., 2022). IC is measured using the (VAIC) model, capturing the efficiency of HC, SC, and CE resources in value creation (Pulic, 2004; Alipour, 2012; Odat & Bsoul, 2022). Finally, FP is examined through a multidimensional framework encompassing financial performance (ROA), market performance (price to earnings ratio), and operational performance (inventory turnover and asset turnover), providing a comprehensive assessment of financial health, market valuation, and operational efficiency among Jordanian industrial enterprises (Xu & Liu, 2020; Ghaeli, 2017; Dwijayanti et al., 2020; Lee, 2023; Aroul et al., 2022; Rachman et al., 2023).

## 4. Conceptual Framework

Within the governance performance nexus, the conceptual framework presented in Figure 1 positions IC as a central mediating mechanism. The framework integrates insights from Resource Dependence Theory, AT, and ST to explain how IC enables companies to leverage both internal and external resources in order to enhance business performance. Specifically, CG mechanisms shape managerial incentives, resource allocation decisions, and stakeholder correlations, which in turn influence the development, deployment, and protection of IC. Through this mediating role, IC translates governance practices into improved financial, market, and operational performance outcomes.

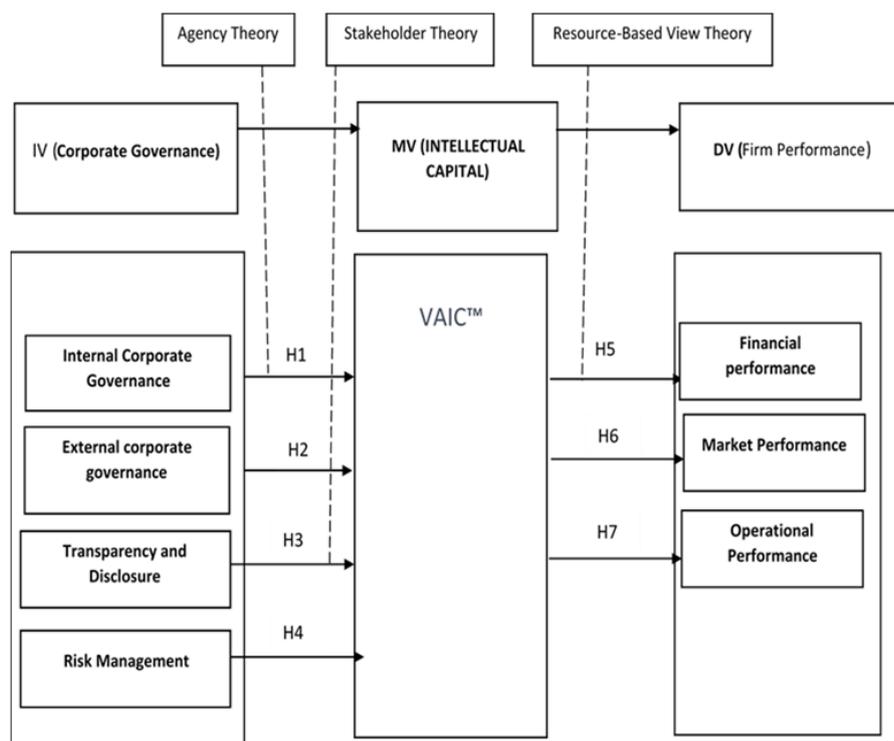


Fig. 1: Conceptual Framework.

By incorporating multiple theoretical perspectives, the framework provides a holistic explanation of how governance structures affect FP indirectly through IC. AT emphasizes the role of governance in aligning managerial behaviour with organizational objectives, thereby facilitating efficient investment in IC. Resource Dependence Theory highlights how companies utilize IC to manage external dependencies and secure critical resources, while ST underscores the importance of trust, transparency, and stakeholder engagement in strengthening IC and sustaining long-term performance. IC plays a pivotal mediating role in linking CG to firm performance. Theoretical perspectives like AT and the RBV provide strong support for this mediating function by emphasizing the importance of efficient resource allocation, incentive alignment, and the development of firm-specific capabilities as sources of competitive advantage. Empirical evidence consistently demonstrates that companies with well-developed IC tend to achieve superior financial and operational performance. By enhancing the effective utilization of organizational resources and fostering innovation, IC captures and amplifies the value generated by sound CG practices. Consequently, the inclusion of IC as a mediating construct is essential for fully understanding how CG mechanisms translate into improved FP outcomes.

## 5. Theoretical Implications

By incorporating IC as a central construct, extending existing theoretical perspectives, and emphasizing its relevance within the context of Jordanian enterprises, this study contributes to the ongoing theoretical discourse on CG. IC is integrated into the conceptual model as a mediating mechanism between CG and FP, consistent with contemporary research that underscores the critical role of intangible assets in shaping organizational success. Moreover, the study offers meaningful practical implications for CG practices in Jordan by highlighting the importance of explicitly accounting for IC within governance frameworks. For instance, companies can enhance their ability to leverage governance mechanisms by investing in knowledge management systems, employee training, and capability development initiatives. Such investments enable organizations to capture, develop, and utilize IC more effectively, thereby strengthening competitiveness and improving overall firm performance.

Additionally, from both a practical and policy perspective, these implications are relevant to investors, regulators, corporate executives, and policymakers in emerging markets. They underscore the critical need for governance reforms that promote transparency, as well as strategies that recognize the creation of both tangible and intangible value. It is important to distinguish theoretical implications, which elucidate the mediating role of intellectual capital IC, from practical and policy implications, which offer actionable guidance to management and regulatory authorities.

## 6. Contribution of The Study

By demonstrating that IC constitutes the primary transmission mechanism through which CG practices are translated into firm performance, this study advances contemporary CG research. It reconceptualizes governance as a strategic enabler of intangible value creation, moving beyond traditional compliance-oriented and purely agency-driven perspectives. By integrating AT, the RBV, and Stakeholder Theory, the study offers a coherent and context-sensitive explanation of governance effectiveness in emerging market settings. From a theoretical standpoint, the adoption of a multidimensional approach to firm performance, combined with a focused examination of Jordan's industrial sector, provides novel insights aligned with evolving global governance priorities that emphasize RM, long-term value creation, and the strategic management of intangible assets (OECD, 2023; WIPO, 2024). Collectively, these theoretical and conceptual contributions position the study as a timely and relevant framework for understanding sustainable competitiveness in developing economies.

## 7. Conclusion

This study elucidates how the proposed conceptual framework offers a novel perspective on the interactive role of CG and IC in improving FP. By explicitly positioning IC as a central mediating mechanism, the framework advances understanding of how governance structures are translated into tangible financial, market, and operational outcomes.

The study's conclusions are primarily theoretical, derived from the literature review, and require empirical validation to confirm their applicability across different industries and institutional contexts. Factors that may limit the generalizability of the proposed framework include its focus on Jordanian firms and potential constraints in accurately measuring the components of intellectual capital IC.

Future research is encouraged to extend this framework by examining additional mediating or moderating factors, like technological innovation, digital transformation, or organizational learning capabilities. By testing it empirically across a range of economic sectors and emerging economies. Methodologically, employing longitudinal or mixed-method approaches could enhance the generalizability and practical relevance of the proposed framework by strengthening causal inference and providing deeper insights into the temporal effects of governance systems on intellectual capital IC and firm performance.

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