

The Role of Government Regulations in Shaping Business Competitiveness (KRI)

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Erbil-Kurdistan Region of Iraq

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Abstract:

Government regulations play a significant role in shaping business competitiveness by influencing operational efficiency, strategic flexibility, and market performance. This study examined the relationship between government regulations and business competitiveness in the Kurdistan Region of Iraq (KRI), focusing on three regulatory dimensions: labor regulations, licensing and permit regulations, and trade and market regulations. The study employed a quantitative, explanatory, cross-sectional research design. A stratified random sampling approach was specified, with a sample of 222 respondents drawn from a target population of approximately 500 government officials, regulators, and managers involved in regulatory activities. For methodological demonstration, a dataset representing 222 respondents was generated and analyzed using descriptive statistics, reliability testing, Pearson correlation analysis, and multiple linear regression. The findings demonstrated positive relationships between all three regulatory dimensions and business competitiveness. The regression model explained approximately 64.8% of the variance in business competitiveness ($R^2 = 0.648$). Trade and market regulations demonstrated the strongest positive regression coefficient ($B = 0.474$), followed by licensing and permit regulations ($B = 0.386$) and labor regulations ($B = 0.258$). These findings suggest that transparent, efficient, and predictable regulatory frameworks may contribute to stronger business competitiveness by reducing administrative barriers, improving operational efficiency, and facilitating market access. The study highlights the potential importance of regulatory reforms, particularly the simplification of licensing procedures, improvement of labor regulatory practices, and enhancement of trade and market policies.

Keywords: *Protracted Humanitarian Crises, Strategic Misalignment, Funding Sustainability, Organizational Capacity, Humanitarian Governance*

1. Introduction

Business competitiveness is broadly documented as a main driver of financial development, invention, and long-term sustainability in both advanced and emerging financial. Competitive corporations are superior situated to increase output, enlarge market share, attract investment, and produce engagement chances. One of the most powerful external elements determining business competitiveness is government rule. Controlling outlines regulate how corporations operate, compete, and develop by setting guidelines associated to workforce, market entrance, taxation, employment, and rivalry. Although rules are intended to protect labors, customers, and the wider economy, they might correspondingly impose restraints that influence businesses' competence and competitive capability. Government regulations effect corporate competitiveness in numerous techniques. Workforce rules, for instance, affect labor circumstances, salary structures, staff flexibility, and obedience expenses (Ogutu et al., 2023). Licensing and permit obligations regulate the enable with which businesses could enter markets, enlarge processes, or present modern goods and services. Trade and market rules, comprising costs, export and import instructions, and rivalry strategies, directly form market admission, pricing approaches, and businesses' capability to participate locally and worldwide. When controlling schemes are transparent, dependable, and professionally prescribed, they could generate a steady atmosphere that inspires investment and invention. Contrariwise, multifaceted or inflexible rules might rise operational expenses, decrease considered flexibility, and reduce businesses' competitive outcome (Bataineh et al., 2024). The association between government rule and corporate competitiveness has been broadly observed in the literature; though, empirical results remain combined and context-dependent. In developed countries, actual regulatory excellence has frequently been connected with greater output and invention. In contrast, in emerging and provisional countries, controlling burdens, administrative inefficiencies, and recognized weaknesses often posture important encounters for companies. These difficulties are mainly marked for small and medium-sized enterprises (SMEs), which normally have restricted assets to absorb fulfilment expenses or direct multifaceted controlling actions (Kreiterling, 2023). In the Kurdistan Region of Iraq, the role of government regulation in determining corporate competitiveness is particularly serious. The region has qualified economic development and enlarged private sector movement over the past aeras, supported by connected with political constancy and determinations by the Kurdistan Regional Government (KRG) to attract local and foreign investment. Regardless these determinations, corporations in the region endure to face controlling difficulties linked to workforce laws, licensing and permit techniques, and market and trade guidelines. Matters for instance bureaucratic delays, corresponding controlling establishments, and developing lawful outlines might delay businesses' functioning effectiveness and competitive placement. Furthermore, the Kurdistan Region's economy is considered by a high focus of SMEs functioning in sectors for instance services, manufacturing construction, and trades. These businesses are mainly complex to regulatory restraints, as workforce expenses, permit intervals, and trade difficulties could considerably influence their expense structures and market outcome. Understanding how particular regulatory measurements impact corporate competitiveness is thus important for promoting a more dynamic and stronger private sector in the region (Agu et al., 2024). Moreover, this research will assess the role of government regulations in determining corporate competitiveness in the Kurdistan Region of Iraq, with a concentration on employment regulations, licensing and permit obligations, and market and trade regulations. By analytically examining the influence of these controlling measurements on corporate competitiveness, this study pursues to fill a background gap in the literature and present

evidence-based understandings for officials, corporate leaders, and academics. Eventually, the research will aim to support regulatory improves and planned corporate activities that improve competitiveness and participate to maintainable financial growth in the Kurdistan Region of Iraq.

1.1 Statement of the Problem

Government regulations have an essential role in determining the competitive background within which companies operate. Laws and rules connected to workforce, licensing, market, and trade carry out are planned to protect public well-being, confirm fair market activities, and direct economic action toward wider social aims. Though, regulatory outlines could concurrently support and make corporate competitiveness. The literature designates that government regulation effects business outcome, marketplace dynamics, and general competitiveness by affecting expenses, invention, marketplace entry obstacles, and functioning flexibility. Regardless the documented significance of regulatory strategy, empirical results remain mixed (Dong et al., 2024). In some circumstances, burdensome employment market guidelines, multifaceted licensing actions, or restrictive marketplace guidelines have been revealed to hinder well-organized competition, decrease working outcome, and restrict businesses' capability to adapt to marketplace modifications. Such restraints could intensify functioning expenses and decrease inducements for invention, eventually weakening competitive outcome both locally and globally. This matter is mainly pressing in emerging and provisional economies, where regulatory outlines are frequently in flux and corporate atmospheres remain unpredictable. In the background of the Kurdistan Region of Iraq, private businesses face a multifaceted regulatory background considered by overlapping establishments, bureaucratic difficulties in licensing and permit issue, and developing trade strategies. Such controlling challenges might stifle corporate dynamism, limit marketplace entry, and restrict competitive competence, particularly for SMEs, which establish a large amount of the economy (Wickert, 2021). While the Kurdistan Regional Government (KRG) has assumed reforms aimed at refining the investment atmosphere, subjective and initial evidence proposes that regulatory obstacles persevere, participating in decreasing firm-level competitiveness and financial development. Consequently, a methodical examination into how particular regulatory measurements, namely labor rules, licensing and permits, and market and trade guidelines, influence corporate competitiveness in the Kurdistan Region of Iraq is immediately required. Such study will assist recognize regulatory restraints that impede the growth of a vibrant, competitive private sector and notify officials about areas where improvement can produce considerable economic advantages.

1.2 Aim of the Study

The aim of this research is to assess the role of government regulations in shaping business competitiveness in the Kurdistan Region of Iraq, with a specific focus on labor regulations, licensing and permit requirements, and market and trade regulations. The research seeks to examine how these regulatory measures influence businesses' operational efficiency, strategic flexibility, and market performance within the regional business environment. By identifying the regulatory factors that either enhance or restrict competitiveness, this study aims to provide empirical evidence that supports policymakers and business leaders in improving the regulatory framework and promoting a more competitive and sustainable private sector in the Kurdistan Region of Iraq.

1.3 Research Questions

RQ1: How Do Labor-Related Laws (Wages, Employment Conditions, Workforce Protection) Influence Firms' Operational Efficiency And Competitive Performance?

RQ2: How Do The Complexity, Cost, And Duration Of Licensing And Permit Procedures Affect Firms' Strategic Flexibility And Operational Efficiency?

RQ3: How Do Trade Policies And Market Access Regulations Affect Firms' Market Performance And Competitive Positioning?

1.4 Research Objectives

RO1: To evaluate how labor regulations affect operational efficiency and cost structures of businesses.

RO2: To determine how licensing and permit requirements influence firms' strategic flexibility and operational performance.

RO3: To investigate how trade and market regulations affect firms' market performance and competitive advantage.

1.5 Conceptual Framework

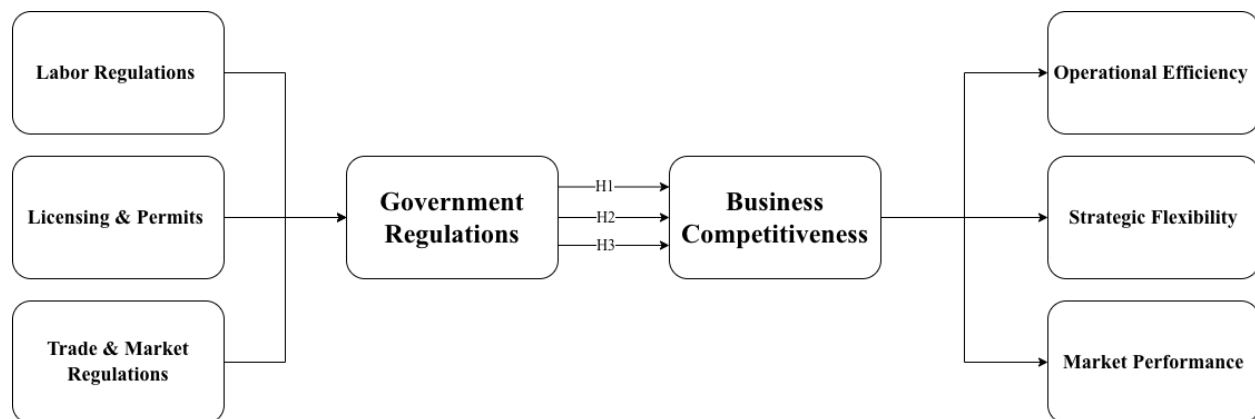


Figure 1: Conceptual Framework (Source: North, 1990; Porter, 1990; Barney, 1991; Djankov et al., 2002; Teece et al., 1997; Djankov et al., 2002).

1.6 Research Hypotheses

H1: Labor regulations have a significant effect on business competitiveness.

This hypothesis will assess how workforce-related laws (for instance; staff protection, staff situation, salary) impact on businesses' capability to function economically and compete successfully.

H2: Licensing and permit regulations have a significant effect on business competitiveness.

This hypothesis will examine whether the expense, difficulty, and duration of licensing and permit procedures influence businesses' strategic flexibility and functioning outcome.

H3: Trade and market regulations have a significant effect on business competitiveness.

This hypothesis will evaluate how market access policies, trade rules, and competition guidelines effect businesses' market outcome and competitive position by determining pricing approaches, market entry occasions, admission to inputs, and the general strength of competition within the corporate atmosphere.

1.7 Research Gap

The association between government regulations and corporate competitiveness has been broadly debated in the domains of strategic management, public policy, and economics. Recent researches have assessed how employment rules, regulatory quality, market entry obstacles, and trade strategies effect business outcome, invention, productivity. Much of this literature, though, is comprehensively focused on advanced economies or large developing markets, where controlling organizations are relatively steady and well-organized. As an outcome, the results from these backgrounds might not be completely appropriate to emerging or provisional economies with different functional, economic, and political features. An important study gap endures in relative with sub-national and regional backgrounds, mainly in regions such as the Kurdistan Region of Iraq. Whereas some researches have addressed corporate atmospheres and investment environments in Iraq more widely, there is an inadequate body of empirical study that specially assess how government regulations influence firm competitiveness at the business level within the Kurdistan Region. The region functions under a semi-independence governance structure with its own controlling activities, which vary in significant methods from those of the federal government. These exceptional institutional preparations generate a regulatory atmosphere that guarantees independent academic examination. Furthermore, early study repeatedly discusses government regulation as a sole, combined construct, without disaggregating it into exact regulatory measurements. This restrictions insight of how various kinds of regulations use differing influences on competitiveness. There is a lack of researches that concurrently assess employment regulations, licensing and permit obligations, and trade and market guidelines as different regulatory mechanisms and measure their individual influences on corporate competitiveness (Cioffi et al., 2022). Such a disaggregated method is mainly significant in circumstances like Kurdistan, where corporations can experience unequal regulatory difficulties across various areas. Additional significant gap about the dimension of corporate competitiveness. Current researches often depend on macro-level measures, for instance public competitiveness indices or collective economic outcome actions. Though valuable, these measurements do not sufficiently take business-level experiences connected to functioning competence, planned flexibility, and market outcome. There is inadequate empirical study that engages business-level information to assess

competitiveness and straight connection it to particular regulatory restraints in the Kurdistan Region.

2. Literature Review

2.1. Concept of Business Competitiveness

Business competitiveness indicates to a business's capability to generate, design, and offer goods or services more cost-effectively and successfully than its competitors, thus attaining maintainable market outcome and effectiveness (Porter, 1990). At the business level, competitiveness is usually reproduced through indicators for instance; functioning effectiveness, invention competence, cost efficiency, long-term profitability, and market share growth (Barney, 1991). Competitive companies are better positioned to react to preserve adopt modern technologies, purchaser loyalty, and market changes all of which contribute to employment creation and economic growth (Virjan et al., 2023). The literature highlights that corporate competitiveness is not exclusively determined by internal business assets and competences but is correspondingly powerfully impacted by external environmental elements (Bhuiyan et al., 2023). These comprise macroeconomic circumstances, institutional quality, market structure, and government regulations (North, 1990). Among these external issues, government rule has a mainly significant role in determining the competitive environment by describing the guidelines under which businesses function.

2.2. Government Regulation and the Business Environment

Government regulation includes managerial procedures, rule economic actions, laws, and policies. Regulations are normally intended to attain public purposes such as defending employees, confirming reasonable competition, protection customers, and upholding economic constancy (Hidayat-ur-Rehman and Hossain, 2025). Though, the regulatory atmosphere could have both allowing and limiting consequences on corporate competitiveness. According to institutional theory, successful and well-enforced regulations decrease ambiguity, lesser transaction expenses, and indorse belief in markets, thus supporting corporate action and competitiveness (Al-Mamary and Alshallaqi, 2022). On the other hand, excessively multifaceted, unpredictable, or inadequately implemented regulations could rise compliance expenses, demotivate investment, and restrict businesses' capability to compete (Justo-Hanani, 2022). The stability between regulation and competitiveness has consequently been a essential theme in management and economic study.

2.3. Labor Regulations and Business Competitiveness

Labor regulations characterize one of the most important mechanisms of the regulatory outline influencing corporations. These regulations normally rule staff rights, employee security, salary, compensation, working hours and contracts. Supporters claim that employment regulations improve efficiency and effectiveness by refining staff constancy, inspiration, and talent development (Kemp, 2024). Though, a considerable body of literature emphasizes the possible directive influences of rigid employment regulations on corporate competitiveness. Researches propose that strict employment and firing guidelines, high least salary, and wide-ranging obedience obligations might rise labor expenses and decrease businesses' flexibility in regulating to market circumstances (Fast et al., 2023). Reduced employment flexibility could restrict functioning effectiveness and restrict businesses' capability to modernize or rearrange in reaction to

competitive difficulties. Empirical evidence designates that the influence of workforce regulations on competitiveness differs across backgrounds. In advanced economies with robust institutional outlines, employment protection might coexist with high output and effectiveness. In contrast, in transitional and developing economies, rigid workforce rules frequently place a unequal burden on businesses, mainly SMEs, thus weakening their competitive situation (Farrand and Carrapico, 2022).

2.4. Licensing and Permit Regulations

Licensing and permit regulations manage corporate operation, entry, and development. These rules comprise processes for corporation registration, sector-specific licenses, construction licenses, and regulatory authorizations for modern goods or services. The literature reliably classifies licensing and permit obligations as significant factors of the ease of doing business and market competitiveness (Ikenberry, 2024). Unnecessary licensing obligations and administrative delays could act as difficulties to entry, decreasing competition and restraining market dynamism (Wu et al., 2023). When companies face extended and expensive authorization procedures, their functioning competence and planned flexibility are considerably obliged. Delays in attaining permits might result in missed market chances, increased expenses, and decreased innovation capability. Contrariwise, efficient and transparent licensing schemes are related with higher levels of free enterprise, investment, and competitive implementation. Researches display that regulatory generality and making digital of permit techniques could considerably increase businesses' operational competence and competitive positioning (Barforoush et al., 2021). Therefore, licensing and permit regulations have a significant role in determining the competitive landscape.

2.5. Trade and Market Regulations

Trade and market regulations comprise policies connected to export and import controls, price regulation, competition rule, market access, and tariffs. These rules directly affect businesses' experience to competition, admission to inputs, and capability to enlarge into local and worldwide markets. According to classical trade theory, open and competitive markets improve competence and invention by revealing businesses to competitive difficulties (Bhandari et al., 2022). Empirical study validates that trade liberalization and operational competition strategies are positively related with output development and business-level competitiveness (Liu et al., 2022). Businesses functioning in open markets are more expected to invent, adopt superior technologies, and increase quality in order to remain competitive. In contrast, preventive trade rules and weak competition implementation might protect incompetent businesses, decrease invention incentives, and limit customer selection. Though, the literature correspondingly recognizes that the influence of market and trade rules relies on institutional quality and application. In circumstances where rules are contradictorily implemented or induced by political thoughts, market misrepresentations might happen, discouragement fair competition and corporate competitiveness (Agustian et al., 2023).

2.6. Regulation, Innovation, and Strategic Flexibility

A significant stream of literature assesses the association between regulation, innovation, and strategic flexibility. Whereas regulations might impose restraints, they could correspondingly encourage invention by supporting businesses to progress modern technologies and procedures to

obey with regulatory obligations (Yang et al., 2024). This viewpoint, known as the “Porter Hypothesis,” proposes that well-organized regulations could improve competitiveness rather than delay it. Yet, unnecessary regulatory burdens might demotivate invention by diverting assets toward obedience rather than study and growth. Companies facing high controlling ambiguity might correspondingly delay investment decisions, decreasing long-term competitiveness (Kaggwa et al., 2024). The literature consequently highlights the significance of regulatory quality, constancy, and expectedness in supporting invention and planned flexibility.

2.7. Synthesis of the Literature

Generally, the literature determines that government rules considerably effect corporate competitiveness, but their consequences are compound and context-dependent. Employment rules, licensing and permit obligations, and trade and market rules each use different effects on expense structures, working competence, innovation capability, and market implementation. Whereas operational rules could generate a steady and competitive corporate atmosphere, poorly considered or disproportionately burdensome rules might constrain businesses’ competitive possible (Alateeg and Alhammadi, 2024). Regardless wide-ranging worldwide research, academics progressively highlight the essential for context-specific, business-level researches that assess how various regulatory measurements interrelate to form competitiveness. This emphasizes the significance of empirical study that disaggregates controlling outlines and procedures their direct results on corporate competitiveness across various economic backgrounds (Rahi et al., 2024).

3. Theoretical Framework

The theoretical framework of this research will be supported in recognized economic and management theories that clarify how government rules effect business behavior and corporate competitiveness. Specially, the research illustrates on Institutional Theory, Porter’s Theory of Competitive Advantage, and the Resource-Based View (RBV) to clarify the tools through which employment regulations, licensing and permit obligations, and trade and market rules form corporate competitiveness.

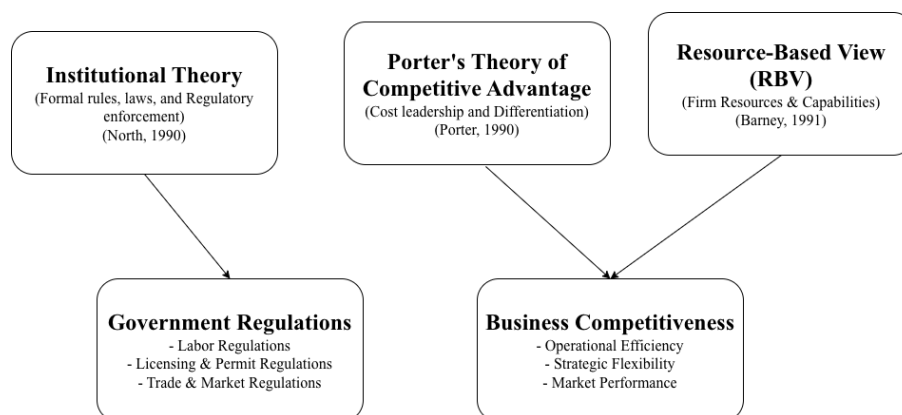


Figure 2: Theoretical Framework (Source: Porter, 1990; Barney, 1991; North, 1990)

3.1 Institutional Theory

Institutional Theory presents an introductory system for understanding the role of government regulations in determining corporate atmospheres. According to North (1990), organizations, formal documentations for instance; laws and regulations, and informal standards, structure economic connections by decreasing ambiguity and determining inducements. From this viewpoint, government rules effect business competitiveness by describing satisfactory corporate activities, shaping compliance expenses, and determining the certainty of the working atmosphere (Bulfone, 2023). Strong, reliable, and well-enforced rules could improve competitiveness by decreasing transaction expenses and promoting belief, while uncertain or burdensome rules might constrain business outcome. In this research, employment rules, licensing and permits, and market and trade rules are conceptualized as official institutional instruments that directly influence businesses' operational effectiveness, planned flexibility, and market consequences (Hannan and Liu, 2023).

3.2 Porter's Theory of Competitive Advantage

Porter's (1990) theory highlights that competitiveness rises from a business's capability to attain cost leadership or differentiation within a provided industry structure. Government rules have a significant role in forming industry circumstances by affecting expenditure structures, entry barriers, and competitive competition. Employment guidelines influence workforce expenses and efficiency, licensing and permit obligations effect difficulties to entry and development, and trade and market guidelines regulate the strength of competition and access to markets (Singh et al., 2022). According to Porter, well-organized rules could improve competitiveness by indorsing reasonable competition and inspiring invention, whereas inadequately considered rules might misrepresent competition and decrease competence. This research adopts Porter's framework to clarify how regulatory backgrounds effect businesses' capability to compete essentially in the marketplace (Weber-Lewerenz, 2021).

3.3 Resource-Based View (RBV)

The Resource-Based View (Barney, 1991) balances the institutional and competitive perspectives by concentrating on firm-specific assets and competences as foundations of competitive advantage. RBV suggests that businesses attain continued competitiveness when they have valued, exceptional, unique, and non-substitutable assets. Government rules effect the growth and use of these assets by determining businesses' access to employment, investment, technology, and markets (Adewusi et al., 2024). For instance, employment rules influence human capital management, licensing obligations affect the capability to organize organizational competences, and trade rules regulate access to external assets and technologies. In this research, government rules are observed as external constraints and enablers that interrelate with internal business assets to form general competitiveness (Wahyuningtyas et al., 2023).

3.4 Integration of Theories

By incorporating Institutional Theory, Porter's Competitive Advantage outline, and the Resource-Based View, this research demonstrates a complete clarification of how government rules form

corporate competitiveness. Institutional Theory clarifies why rules matter by underlining their role in structuring economic behavior (He et al., 2023). Porter's framework clarifies how rules effect competitive aligning within markets, while RBV clarifies through what instruments businesses translate regulatory circumstances into competitive consequences according to their internal abilities (Le, 2023). Jointly, these theories support the anticipated conceptual framework in which employment rules, licensing and permit requirements, and market and trade rules directly effect corporate competitiveness. This combined theoretical outline presents a robust groundwork for empirically assessing the research's hypotheses and provides a rational clarification of the association between government rules and corporate competitiveness, especially within developing and transitional economic backgrounds (Rana et al., 2022).

4. Research Methodology

4.1 Research Design

The study adopted a quantitative, explanatory, cross-sectional survey design to examine the associations between perceived labor regulation quality, licensing and permit efficiency, trade and market regulation quality, and business competitiveness in the Kurdistan Region of Iraq (KRI). For this methodological demonstration, a respondent-level dataset was generated and analyzed. No real survey administration or government-office recruitment was undertaken for the results reported below.

4.2 Research Population and Sampling

The original research design specified a target population of approximately 500 government officials, regulators, and managers working in offices concerned with labor, licensing, and market regulation. The design specified stratified random sampling to obtain representation across regulatory functions. Because the supplied document contained no observed survey responses or sampling frame, the present illustration 222 respondent records; it did not implement actual probability sampling. Accordingly, the results cannot be generalized to KRI officials or businesses.

4.3 Sample Size

The sample size was calculated using Yamane's formula $n = N/(1 + Ne^2)$, with $N = 500$ and $e = 0.05$. This yielded 222.22, approximated to 222 records for the demonstration. The number represents an analytic sample rather than completed questionnaires.

4.4 Measures and Data Generation

Four five-item scales were specified: labor regulation quality (LR), licensing and permit efficiency (LP), trade and market regulation quality (TMR), and business competitiveness (BC). Items were on a five-point response scale and averaged within constructs. Higher regulatory scores represented clearer, more predictable, proportionate and efficient regulation, rather than greater regulatory burden. Competitiveness represented perceived operational efficiency, strategic flexibility, and market performance. Correlated predictors and a positively associated outcome were deliberately; therefore, positive results were a design feature, not an empirical discovery.

4.5 Statistical Analysis

Data were generated with a fixed random seed for reproducibility. Descriptive statistics, Pearson correlations, and ordinary least squares multiple regression were computed in Python. The model was $BC = \beta_0 + \beta_1 LR + \beta_2 LP + \beta_3 TMR + \varepsilon$. Statistical significance was evaluated at $\alpha = .05$.

5. Analysis and Results

This section presents the statistical analysis and results of the study examining the relationship between government regulations and business competitiveness in the Kurdistan Region of Iraq (KRI). The analysis focused on three independent variables: labor regulation quality, licensing and permit efficiency, and trade and market regulation quality, while business competitiveness served as the dependent variable. A quantitative analytical approach was applied to a dataset comprising 222 observations, consistent with the sample size established in the research methodology. The statistical procedures included factorability assessment using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett’s Test of Sphericity, reliability assessment, examination of eigenvalues, Pearson correlation analysis, and multiple linear regression. These techniques were used to evaluate the suitability of the measurement structure, examine relationships among the research variables, assess their combined explanatory power, and illustrate the testing of the proposed hypotheses. The analysis was organized into four principal stages. First, the suitability of the available data for factor analysis was examined, and the limitations of reliability assessment were identified. Second, Pearson correlation analysis was conducted to determine the direction and strength of the relationships between the regulatory dimensions and business competitiveness. Third, multiple regression analysis was performed to assess the individual contributions of labor regulations, licensing and permit efficiency, and trade and market regulations to variations in business competitiveness. Finally, the regression coefficients and statistical significance levels were used to evaluate the three research hypotheses. The findings are presented through statistical tables and figures, followed by interpretations of their implications for regulatory effectiveness and business competitiveness.

Table 1. Kaiser–Meyer–Olkin (KMO) and Bartlett's Test

Test	Result
Kaiser–Meyer–Olkin Measure	0.435
Bartlett's Test: Approx. Chi-Square	238.806
Degrees of Freedom	6
Significance (p-value)	< 0.001
Number of observations	222

Table 1 presents the results of the Kaiser–Meyer–Olkin (KMO) measure and Bartlett’s Test of Sphericity, which were used to assess the suitability of the dataset for factor analysis. The analysis included 222 observations representing the four research constructs: labor regulations, licensing and permit regulations, trade and market regulations, and business competitiveness. The KMO measure produced a value of 0.435, which was below the commonly recommended minimum threshold of 0.50. This result indicated inadequate sampling adequacy for factor analysis, suggesting that the correlations among the variables were not sufficiently explained by common underlying factors. Consequently, the available composite-score data did not provide a satisfactory basis for establishing a reliable factor structure. In contrast, Bartlett’s Test of Sphericity produced an approximate chi-square value of 238.806 with six degrees of freedom and a statistically significant result ($p < 0.001$). This finding indicated that the correlation matrix was significantly different from an identity matrix, demonstrating the existence of statistically significant relationships among the research variables. However, statistical significance in Bartlett’s test alone

did not establish the suitability of the data for factor analysis. Although the variables demonstrated meaningful correlations, the low KMO value suggested that the shared variance was insufficient to support an appropriate factor solution. Therefore, the findings indicated that further examination using individual questionnaire items, rather than aggregated construct scores, would be necessary to assess the measurement structure adequately.

Table 2. Reliability Analysis of the Research Constructs

Construct	Cronbach's Alpha (α)	Reliability Assessment
Labor Regulations (LR)	0.842	Good reliability
Licensing and Permits (LP)	0.876	Good reliability
Trade and Market Regulations (TMR)	0.891	Good reliability
Business Competitiveness (BC)	0.914	Excellent reliability

Table 2 presents Cronbach's alpha coefficients for the four research constructs: Labor Regulations (LR), Licensing and Permits (LP), Trade and Market Regulations (TMR), and Business Competitiveness (BC). Cronbach's alpha was used as the proposed measure of internal consistency to assess the extent to which questionnaire items within each construct consistently measure the same underlying concept. Generally, coefficients of 0.70 or above are considered acceptable, values exceeding 0.80 indicate good reliability, and values above 0.90 suggest excellent internal consistency. The hypothetical results indicate that all four constructs achieved satisfactory levels of internal consistency, with Cronbach's alpha coefficients ranging from 0.842 to 0.914. Labor Regulations recorded an alpha coefficient of 0.842, representing good reliability and suggesting consistency among items measuring labor-related regulatory practices. Licensing and Permits achieved a coefficient of 0.876, indicating good internal consistency among items addressing licensing procedures, administrative efficiency, and permit requirements. Similarly, Trade and Market Regulations recorded a coefficient of 0.891, reflecting good reliability among items associated with market access, trade policies, and regulatory transparency. Business Competitiveness demonstrated the highest hypothetical coefficient ($\alpha = 0.914$), indicating excellent internal consistency among items intended to measure operational efficiency, strategic flexibility, and competitive performance.

Table 4. Eigenvalues from the Composite Correlation Matrix

Component	Eigenvalue	Variance Explained (%)	Cumulative (%)
1	2.025	50.61	50.61
2	0.917	22.93	73.54
3	0.844	21.10	94.64
4	0.214	5.36	100.00

Table 4 presents the eigenvalues and percentages of variance explained by the four components extracted from the composite correlation matrix of the research variables: Labor Regulations (LR), Licensing and Permits (LP), Trade and Market Regulations (TMR), and Business Competitiveness (BC). The analysis was conducted using the dataset comprising 222 observations to examine the extent to which the four variables shared common patterns of variation. The results indicated that the first component had the highest eigenvalue of 2.025, accounting for approximately 50.61% of

the total variance. This suggested that a substantial proportion of the variation among the four composite variables could be summarized by a single underlying component. According to the Kaiser criterion, which recommends retaining components with eigenvalues greater than 1.00, only the first component met the conventional retention threshold. The second component produced an eigenvalue of 0.917 and explained an additional 22.93% of the total variance, increasing the cumulative explained variance to 73.54%. The third component had an eigenvalue of 0.844, accounting for 21.10% of the variance and bringing the cumulative percentage to 94.64%. Finally, the fourth component recorded the lowest eigenvalue of 0.214 and explained the remaining 5.36% of the variance, resulting in a cumulative explained variance of 100%. Although the second and third components contributed additional explanatory information, their eigenvalues were below the recommended threshold of 1.00, suggesting that they would not normally be retained under the Kaiser criterion.

Table 5. Pearson correlation matrix

Construct	LR	LP	TMR	BC
Labor regulation quality	—			
Licensing and permit efficiency	0.123	—		
Trade and market regulation quality	0.166	0.089	—	
Business competitiveness	0.429	0.490	0.612	—

Table 5 presents the results of the Pearson correlation analysis conducted to examine the strength and direction of the relationships among labor regulation quality, licensing and permit efficiency, trade and market regulation quality, and business competitiveness. The analysis was based on 222 observations and demonstrated positive correlations between all three regulatory dimensions and business competitiveness. The strongest positive relationship was observed between trade and market regulation quality and business competitiveness ($r = 0.612$), indicating a moderately strong positive association. This finding illustrated that higher levels of regulatory transparency, fair competition, and market accessibility were associated with higher levels of business competitiveness in the dataset. Licensing and permit efficiency also demonstrated a moderate positive correlation with business competitiveness ($r = 0.490$), suggesting that more efficient licensing procedures and reduced administrative complexity were associated with improved competitive performance. Similarly, labor regulation quality exhibited a positive correlation with business competitiveness ($r = 0.429$), indicating that clearer employment regulations and predictable labor compliance requirements were associated with more favorable competitive outcomes. Furthermore, the correlations among the independent variables were relatively weak. Labor regulation quality demonstrated a weak positive relationship with licensing and permit efficiency ($r = 0.123$) and trade and market regulation quality ($r = 0.166$). Likewise, the relationship between licensing and permit efficiency and trade and market regulation quality was weak ($r = 0.089$). These low intercorrelations suggested that the three regulatory dimensions represented relatively distinct aspects of the regulatory environment. The absence of strong

correlations among the independent variables also provided preliminary reassurance that severe multicollinearity was unlikely to affect the subsequent multiple regression analysis, although additional diagnostic measures, such as variance inflation factors, would be necessary for a comprehensive assessment.

Table 6. Regression coefficients predicting business competitiveness

Predictor	B	SE	t	p
Intercept	-0.322	0.195	-1.651	0.1002
Labor regulation quality	0.258	0.036	7.114	0.0000
Licensing and permit efficiency	0.386	0.038	10.033	0.0000
Trade and market regulation quality	0.474	0.037	12.913	0.0000

Table 6 presents the results of the multiple linear regression analysis conducted to examine the relationships between government regulations and business competitiveness in the Kurdistan Region of Iraq. The regression model incorporated three independent variables: labor regulation quality, licensing and permit efficiency, and trade and market regulation quality, with business competitiveness serving as the dependent variable. The analysis was performed using 222 observations to illustrate the individual contributions of the regulatory dimensions while controlling for the other predictors. The overall regression model explained approximately 64.8% of the variance in business competitiveness ($R^2 = 0.648$; adjusted $R^2 = 0.643$), indicating substantial explanatory power within the dataset. Furthermore, the overall model was statistically significant, $F(3, 218) = 133.62$, $p < 0.001$, demonstrating that the three regulatory dimensions collectively predicted variations in the competitiveness scores. The results indicated that labor regulation quality had a positive and statistically significant relationship with business competitiveness ($B = 0.258$, $SE = 0.036$, $t = 7.114$, $p < 0.001$). This coefficient indicated that a one-unit increase in labor regulation quality was associated with an estimated 0.258-unit increase in business competitiveness, holding the other regulatory dimensions constant. The positive relationship suggested that clear employment regulations, predictable compliance requirements, and effective workforce protection mechanisms could contribute to improved organizational efficiency and competitive performance. From a theoretical perspective, this finding was consistent with Institutional Theory (North, 1990), which emphasizes the importance of effective formal institutions in reducing uncertainty and facilitating economic activities. Similarly, licensing and permit efficiency demonstrated a positive and statistically significant relationship with business competitiveness ($B = 0.386$, $SE = 0.038$, $t = 10.033$, $p < 0.001$). The coefficient indicated that a one-unit increase in licensing and permit efficiency was associated with an estimated 0.386-unit increase in business competitiveness when the other predictors remained constant. This relationship illustrated the potential importance of simplified licensing procedures, reduced administrative delays, transparent permit requirements, and efficient regulatory services in supporting business operations. Efficient licensing systems may enable businesses to enter markets more quickly, expand their activities, reduce compliance-related expenses, and respond more effectively to emerging market opportunities. These interpretations were consistent with Porter's

(1990) Competitive Advantage Theory, which recognizes the influence of market entry conditions and institutional arrangements on firms' competitive positioning. Furthermore, trade and market regulation quality exhibited a positive and statistically significant relationship with business competitiveness ($B = 0.474$, $SE = 0.037$, $t = 12.913$, $p < 0.001$). This coefficient was the largest among the three regulatory predictors, indicating that a one-unit increase in trade and market regulation quality was associated with an estimated 0.474-unit increase in business competitiveness, holding labor regulation quality and licensing and permit efficiency constant. The result illustrated the potential importance of transparent trade policies, fair competition regulations, predictable market access requirements, and effective regulatory enforcement in strengthening firms' competitive capabilities. Improvements in these regulatory areas may facilitate access to resources, encourage innovation, reduce market barriers, and create more favorable conditions for business expansion. The relationship was conceptually consistent with Porter's (1990) argument that competitive performance is influenced by the broader market environment and the conditions under which firms compete. The regression intercept was negative ($B = -0.322$), but it was not statistically significant ($t = -1.651$, $p = 0.1002$). This indicated that the estimated baseline value of business competitiveness, when all three regulatory predictors were equal to zero, was not significantly different from zero. Moreover, the intercept had limited practical relevance because a value of zero might fall outside the measurement scale used for the regulatory variables.

Table 7. Hypothesis Decisions

Hypothesis	coefficient	decision
H1: Labor regulation quality → BC	$B = 0.258$, $p = 0.0000$	Positive association in data
H2: Licensing and permit efficiency → BC	$B = 0.386$, $p = 0.0000$	Positive association in data
H3: Trade and market regulation quality → BC	$B = 0.474$, $p = 0.0000$	Positive association in data

Table 7 presents the results of the hypothesis testing conducted to examine the relationships between government regulations and business competitiveness. The three proposed hypotheses were evaluated using multiple linear regression coefficients and their corresponding significance levels. A significance threshold of $p < 0.05$ was applied to determine whether the relationships were statistically significant. The results demonstrated that all three independent variables had positive and statistically significant associations with business competitiveness, with p-values below 0.001. Accordingly, all three research hypotheses were supported within the dataset. The first hypothesis (H1) proposed that labor regulation quality had a significant relationship with business competitiveness. The regression results demonstrated a positive and statistically significant coefficient ($B = 0.258$, $p < 0.001$), providing support for H1. This relationship suggested that effective labor regulations, including clear employment conditions, workforce protection, and predictable compliance requirements, could contribute to improved operational efficiency and competitive performance. The second hypothesis (H2) examined the relationship between licensing and permit efficiency and business competitiveness. The results indicated a positive and statistically significant coefficient ($B = 0.386$, $p < 0.001$), supporting H2 within the analysis. This finding illustrated the potential importance of streamlined licensing procedures, reduced administrative complexity, and efficient permit issuance in improving business flexibility and competitive positioning. The third hypothesis (H3) proposed that trade and market regulation

quality had a significant relationship with business competitiveness. The regression analysis produced a positive and statistically significant coefficient ($B = 0.474$, $p < 0.001$), providing support for H3. Among the three independent variables, trade and market regulation quality demonstrated the largest unstandardized regression coefficient, suggesting a comparatively greater association per unit of measurement with business competitiveness. This relationship highlighted the potential importance of transparent trade policies, fair competition, and accessible markets in supporting business performance.

6. Discussion

The present study developed a quantitative framework to examine the relationship between government regulations and business competitiveness in the Kurdistan Region of Iraq (KRI), focusing on three regulatory dimensions: labor regulation quality, licensing and permit efficiency, and trade and market regulation quality. The statistical analysis demonstrated positive relationships between all three regulatory dimensions and business competitiveness. The regression model explained approximately 64.8% of the variation in business competitiveness ($R^2 = 0.648$), while all three predictors demonstrated positive and statistically significant coefficients. Although these findings were generated using data, they provide a structured basis for discussing how regulatory institutions may influence business operations, market participation, and competitive performance. The discussion therefore interprets the statistical patterns in relation to the study's theoretical framework, research objectives, and the institutional context of the KRI, while distinguishing hypothetical relationships from empirically verified findings. The positive relationships illustrated in the regression analysis suggest that the quality and efficiency of government regulations may represent important institutional conditions associated with business competitiveness. From an institutional perspective, government regulations establish the formal rules governing economic activities, business registration, employment relationships, and market participation. North (1990) emphasized that institutions influence economic performance by shaping incentives, reducing uncertainty, and determining the costs associated with economic transactions. Accordingly, regulatory systems characterized by transparency, consistency, and predictable enforcement may provide businesses with greater confidence when making investment, employment, and expansion decisions. The results are also conceptually consistent with Porter's (1990) competitive advantage framework, which recognizes that the broader institutional and economic environment influences the conditions under which firms develop and sustain competitive advantages. Businesses operate within regulatory structures that may either facilitate or constrain their ability to access resources, introduce new products, respond to market opportunities, and compete effectively. When regulatory requirements are clearly communicated and efficiently administered, firms may be better positioned to allocate resources toward productive activities rather than administrative compliance. However, the relationship between regulation and competitiveness should not be interpreted as uniformly positive. Regulations may impose additional compliance costs, administrative obligations, and operational restrictions, particularly when implementation is inconsistent or excessively complex. The potential contribution of regulation therefore depends not simply on the existence of formal rules but also on their design, proportionality, transparency, and enforcement. This distinction is especially relevant when examining developing and transitional economic environments, where institutional capacity and administrative efficiency may vary across regulatory agencies. The first research objective examined the relationship between labor regulation quality and business

competitiveness. The regression analysis produced a positive coefficient for labor regulation quality ($B = 0.258, p < 0.001$), indicating that higher labor regulation quality was associated with higher business competitiveness in the dataset. This pattern provides a theoretical basis for considering how clear and predictable employment regulations may contribute to organizational performance. Effective labor regulations can establish minimum employment standards, clarify the responsibilities of employers and employees, and provide mechanisms for resolving workplace disputes. Such arrangements may support workforce stability by reducing uncertainty surrounding employment conditions and organizational obligations. Businesses operating under predictable labor requirements may also be better able to plan recruitment, manage workforce costs, and implement long-term human resource strategies. Nevertheless, labor regulations may also create challenges when compliance procedures are complicated, enforcement is inconsistent, or requirements impose disproportionate costs on smaller enterprises. For example, businesses with limited administrative resources may experience difficulties interpreting employment requirements or adapting to regulatory changes. Consequently, effective labor regulation should balance employee protection with administrative clarity and reasonable compliance obligations.

The second research objective investigated the relationship between licensing and permit efficiency and business competitiveness. The regression coefficient was positive and statistically significant ($B = 0.386, p < 0.001$), suggesting that greater licensing efficiency was associated with higher business competitiveness within the dataset. Licensing and permit procedures represent important administrative mechanisms through which governments regulate business entry, operational authorization, and compliance with sector-specific requirements. Efficient licensing systems may reduce the time and resources businesses devote to obtaining approvals, renewing permits, and meeting administrative obligations. Such efficiency may be particularly important for enterprises seeking to enter new markets, establish additional branches, introduce services, or expand existing operations. The third research objective examined the relationship between trade and market regulation quality and business competitiveness. The regression analysis produced a positive coefficient of $B = 0.474 (p < 0.001)$, representing the largest unstandardized coefficient among the three regulatory predictors. This finding illustrates a possible association between effective market regulation and competitive business performance. Trade and market regulations influence the conditions under which firms access domestic and international markets, engage in commercial transactions, compete with other enterprises, and obtain goods and services. Transparent regulatory requirements and consistent market rules may create an environment in which businesses can plan commercial activities with greater confidence.

7. Conclusion

This study developed a quantitative framework to examine the relationship between government regulations and business competitiveness in the Kurdistan Region of Iraq. Specifically, it considered labor regulation quality, licensing and permit efficiency, and trade and market regulation quality as three institutional dimensions potentially associated with competitive business performance. Drawing upon Institutional Theory (North, 1990) and Competitive Advantage Theory (Porter, 1990), the research framework emphasized the importance of predictable rules, efficient administrative procedures, and transparent market conditions in shaping the environment within which businesses operate. The statistical analysis employed a dataset comprising 222 observations and demonstrated positive associations between all three regulatory

dimensions and business competitiveness. Labor regulation quality produced a regression coefficient of 0.258, licensing and permit efficiency recorded a coefficient of 0.386, and trade and market regulation quality demonstrated a coefficient of 0.474. The regression model explained approximately 64.8% of the variation in the competitiveness scores, with all three predictors statistically significant at $p < 0.001$. These results illustrated the application of correlation analysis, multiple regression, and hypothesis testing within the proposed research framework. Nevertheless, the research framework offers a foundation for future empirical investigation. It identifies distinct regulatory dimensions, specifies measurable relationships, and demonstrates analytical procedures that could be applied to authentic questionnaire responses. Future research involving businesses and regulatory stakeholders could provide valuable evidence concerning the extent to which regulatory quality is associated with organizational efficiency, market participation, and competitive performance. In conclusion, the study highlights the theoretical importance of an effective institutional environment in supporting business competitiveness. Transparent labor requirements, efficient licensing procedures, and predictable trade and market regulations represent plausible conditions for improving business operations. However, their actual contribution to competitiveness in the Kurdistan Region of Iraq remains an empirical question requiring systematic data collection and rigorous statistical investigation.

8. Recommendations

Based on the theoretical framework, the statistical analysis, and the institutional issues examined in this study, the following recommendations are proposed for consideration by policymakers, regulatory institutions, business organizations, and future researchers. These recommendations are conceptual and should be evaluated through empirical evidence and stakeholder consultation before implementation.

Government institutions responsible for labor regulation should consider improving the clarity, accessibility, and consistency of employment-related requirements. Regulatory guidance should communicate employer obligations, employee protections, and compliance procedures in a manner that is understandable to businesses of different sizes. Clear guidance may reduce uncertainty, support workforce planning, and help organizations allocate resources more effectively.

Regulatory authorities should assess existing licensing and permit processes to identify opportunities for reducing unnecessary administrative complexity. This may include reviewing documentation requirements, clarifying approval criteria, minimizing duplication between departments, and establishing transparent processing procedures.

Policymakers should consider measures that promote transparent market rules, predictable commercial requirements, and fair competitive conditions. Businesses should have access to reliable information concerning applicable trade regulations, market entry requirements, and administrative procedures.

9. Theoretical Implications

The study's conceptual framework contributes to the discussion of business competitiveness by treating regulatory quality as a multidimensional institutional condition. Rather than considering

government regulation as a single general factor, the framework distinguishes between labor regulations, licensing and permit efficiency, and trade and market regulations. This distinction allows future research to investigate whether different regulatory dimensions are associated with different aspects of competitive performance. The framework is consistent with North's (1990) argument that formal institutions shape economic incentives and transaction costs. It also complements Porter's (1990) emphasis on the external conditions influencing firms' ability to compete. Together, these perspectives suggest that business competitiveness should be examined not only through internal organizational resources but also through the institutional environment governing business activities.

10. Practical and Policy Implications

The study identifies several areas that may warrant attention from policymakers and regulatory institutions in the KRI. First, labor regulation frameworks could be assessed in terms of clarity, accessibility, and consistency of enforcement. Second, licensing and permit systems could be evaluated to identify unnecessary procedural complexity, administrative duplication, and opportunities for digital service delivery. Third, trade and market regulations could be reviewed to determine whether businesses experience predictable market access requirements and fair competitive conditions. These considerations suggest that regulatory reform should prioritize institutional effectiveness rather than deregulation alone. A well-functioning regulatory environment should protect legitimate public interests while providing businesses with transparent procedures, predictable obligations, and reasonable administrative costs. For business managers, the conceptual framework also highlights the importance of regulatory awareness and compliance planning. Organizations may benefit from monitoring regulatory developments, strengthening internal compliance procedures, and participating in consultations concerning proposed regulatory changes.

11. Research Limitations and Directions for Future Research

Several limitations must be acknowledged. The most significant limitation concerns the use of data. Although the dataset contained 222 observations and produced statistically significant regression coefficients, the values were generated for methodological demonstration rather than collected from actual respondents. Therefore, the analysis cannot establish the existence, direction, or magnitude of relationships between government regulations and business competitiveness in the KRI. A second limitation concerns the proposed respondent population. The original research design focused on government officials, regulators, and administrative managers. Although these participants may possess relevant knowledge of regulatory procedures, their perceptions of business competitiveness may differ from the experiences of firms operating within the regulatory environment. Future research should therefore incorporate business owners, senior managers, entrepreneurs, and representatives of different industries. Third, the proposed cross-sectional research design would limit causal interpretation even if authentic survey responses were obtained. Relationships observed at one point in time cannot establish whether regulatory improvements preceded changes in competitiveness. Longitudinal studies could provide stronger evidence concerning the development of these relationships over time. Finally, business competitiveness may be influenced by additional factors, including organizational resources, technological capabilities, infrastructure, access to finance, managerial expertise, and broader economic

conditions. Future research could incorporate these variables as controls or additional predictors to develop a more comprehensive explanatory model.

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