

Contractual Governance, Relational Governance, and Firm Performance: The Case of Chinese and Ghanaian and Family Firms

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Abstract

Financial performance of firms is a key to long-term survival and profitability. Investors will only invest in firms whose financial performance is creditable; and family businesses are no exception. Perhaps, the performance of family businesses could be attributed to their unique characteristics, which shape their governance. Contractual governance and relational governance are corporate governance structures used to manage the relationships between parties to a transaction and reduce opportunism. Governance models of family firms are often more complex because of the need for two systems (the family and the firm) to interact positively and efficiently despite their different aims, values, institutional structures, etc. In this study, we explore the effects that contractual and relational governance models exert on family firm financial performance, from a survey of 2432 management and non-management employees of family businesses across China and Ghana.

Keywords

Corporate Governance, Family Business, Firm Performance, Contractual Governance, Relational Governance

1. Introduction

Contractual governance and relational governance are corporate governance structures used to manage the rela-

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tionships between parties to a transaction and reduce opportunism. The concept of corporate governance sounds simple and unambiguous, but when one attempts to define it and scan available literature, one comes across a bewildering variety of perceptions behind available definitions. The definition varies according to the sensitivity analyst, the context of varying degrees of development and from the standpoint of academics versus corporate managements. Corporate governance is typically perceived by academic literature as dealing with “problems that result from the separation of ownership and control”. From this perspective, corporate governance would focus on: the internal structure and rules of the board of directors; the creation of independent audit committees; rules for disclosure of information to shareholders and creditors; and control of the management [1].

As stated in Sicoli [2], in an article from 1937, Coase uses the concept of governance to refer to those coordinating mechanisms internal to the firm which reduce market originated transaction costs [3]. Later, in 1979, Williamson takes up the term governance in his theory of transaction costs, to describe alternative forms of financial organization to the market and hierarchy. In his theory, governance designates the coordinating modalities of those individual and organizational actions, different from hierarchies and the market, through which the construction of the social order is achieved [4].

Tricker [5] suggests that corporate governance is concerned with the exercise of power over corporate entities. Addae-Boateng, Wen & Brew [6] project several definitions of the concept and reiterate the view of Mallin [7] that many of the definitions of corporate governance serve to illustrate that corporate governance is concerned with both the shareholders and the internal aspects of the company, such as internal control, and the external aspects, such as an organization’s relationship with its shareholders and other stakeholders.

In family firms, as for the other typologies of firms, there exists no one model of governance which is absolutely valid in every context, and even within the same business context, the structure of governance is not fixed but may change over time [8]. Depending on the specific situation and timeframe considered, very different types of institutional structures can prevail [9]. Addae-Boateng *et al.* [10] define family businesses as firms owned and controlled by a family (nuclear and/or extended), either wholly or in part. In their work on the reasons for work performance in family businesses, Addae-Boateng *et al.* [10] noted that all the definitions of family businesses project three qualifying combinations of ownership and management: family-owned and family-managed, family-owned but not family-managed, and family-managed but not family-owned [11]. However, there is consistency in the literature that a business owned and managed by a family is a family business.

Governance models of family firms are often more complex because of the need for two systems (the family and the firm) to interact positively and efficiently despite their different aims, values, institutional structures, etc. By extension, effective governance of family firms should incorporate both formal control and social control aspects of governance. That is, family firms need to develop governance structures that ensure effective supervision and control by owners and promote cohesion and shared vision among major stakeholders as well as reducing conflict. Ensuring effective management supervision and control by owners calls for formal principal-agency relationships and controls through contractual agreements (*i.e.* contractual governance). On the other hand, promoting cohesion and shared vision among major stakeholders as well as reducing conflict calls for the identification and use of social controls to promote social interaction and shared vision (Relational Governance Models). From the above, it suffices to state that governance structures of family firms could employ or draw on both contractual governance and relational governance models, either as complementary systems, or substitutory systems.

2. Contractual Governance

Wu and Pan [12] state that contractual governance means governing a transaction through formal contracts. Owing to the investments on specific purposes and asymmetric information, professional managers probably make use of their operational and managerial power in the pursuit of personal interests more than businesses’ overall interests. In order to lower the transactional risks between family businesses and professional managers, the family business will surely reinforce contractual governance as the power to regulate enterprises and professional managers [13] [14].

Heidi, Pia, Kirsimarja, & Paavo [15] define contractual governance as formal means of safeguarding the exchange between buyer and seller as they conduct joint R&D activities. The concept thus refers to contracts (explicit, formal and written collaboration contracts) and Intellectual Property Rights (IPRs) used for managing

buyer-supplier relationships. They view IPRs (patents, copyrights, trademarks and trade secrets) as part of contractual governance, since their existence (potentially) provides protection against opportunism where innovations are concerned [16]. The importance of contracting is emphasized in the literature on supply-chain and technology management in the context of knowledge transfer between buyers and sellers [17]-[22]. Contracting facilitates commitment and task allocation, which, in turn, are relevant in successful conflict management [23]. Whereas a certain amount of conflict may be beneficial for innovation, too much of it is likely to create problems [24]. As Cullen and Hickman [25] note, classical contracts are drafted with the presumption that “the parties are at arms’ length, rather than collaborating on the basis of close working relations”. Thus, the use of contracts may include terms that assume from the start that parties will not perform their obligations if left unchecked. Generally, without contracts the risk of abuse and opportunism increases, which may lead to collaboration failure and leave the firm at a disadvantage.

However, as Cullen and Hickman [25] note, no contract can account for every potential issue or contingency. Because property rights and other formal protection are costly and may not always be efficient, firms need to use an array of organizational arrangements to protect valuable knowledge. Thus, given the limitations and rigidity of contractual governance, relational governance mechanisms are also needed [15] [26].

3. Relational Governance

Relational governance is to govern transactions through relational norms. Relational norms refer to some social processes and regulations which exist because of the counterparts’ relations in a transaction [27]. Zaheer and Venkatraman [28] believe that relational contracts’ governance consists of a structure and a process. The relational structure dimension is represented as vertical semi-integration while processes underlined in the relationship are presented as joint actions.

Heidi *et al.* [15] note that relational contracting has been used to describe mechanisms that utilize non-legal sanctions that result in decreased opportunism along with improved effectiveness [29]-[31]. Indeed, under the label of the relational review [31] it is suggested that this governance mechanism has a value-adding function. They use the concept of relational governance to describe the non-contractual relational mechanisms (trust in its various forms and relational-cooperative norms) that affect the exchange relationship between buyer and supplier [32].

McNeil [33] holds the view that contracts can be explained as the exchange relations among different persons. Poppo and Zenger [34] state that relational governance basically hinges on trust, cooperation or cooperative spirit, open communication and sharing of information, and dependence. Where available, these should promote the flexibility, solidarity, and information exchange needed to enforce obligations, promises, and expectations. In their absence, it will be difficult for exchange partners to adapt to unforeseeable events, get a bilateral approach to problem solving, and acquire new information and opportunities that could aid the attainment of goals (both in the short-term and in the long-term). Through these social processes and the resulting norms, relational governance may function to mitigate the precise exchange hazards targeted by contractual governance [15] [33]-[40].

4. Governance and Family Firm Financial Performance

Firm performance is a multi-dimensional construct, which could be divided into financial and non-financial models. The financial models are linked with sales growth, cash flow, profitability, return on assets, and other financial performance measures; while the non-financial models are linked with market share, market position, product quality, and customer loyalty. Thus there is no universal unit of analysis for describing or measuring performance, competitiveness, and success in firms [41]-[51].

Although available literature suggests that family businesses are pestilenced by destructive nepotism [19] [52], determination of executive succession by broadly placing family interests first rather than competence [53], lack of access to capital due to ever-increasing needs of a growing family, lack of professional management [54], skepticism by financial markets [54] [55], etc., varying comparisons of family businesses and non-family businesses by researchers affirm that the former outperforms the latter [56]-[64].

Perhaps, the performance of family businesses could be attributed to their unique characteristics, which shape their governance. For example, issues about succession may encourage family firms to invest more efficiently

because they may consider their firms as assets to be passed on to succeeding generations [65]-[67]. Also, their control of management, together with the founding family's historical presence and active involvement, accord the family auspicious berth to oversee its business and hence ensure that the firm performs better financially [59] [67]-[69]. Furthermore, because family members working in the business are not simply economic individuals seeking their self-interests, but often act with altruism for the benefit of the organisation and family [70]-[72], they identify with the organisation and embrace its objectives; and are committed to make it succeed, even at personal sacrifice [10] [63] [73].

Since family firm performance could, in part, be attributed to its governance [6], this study intended to measure family firm financial performance in the light of contractual governance and relational governance. The researchers attempted to measure the degree to which contractual complexity affects individual and family firm performances as well as the degree to which relational governance affects individual and family firm performances. Thus by firm performance, we are referring to the financial returns generated by the firm when it invests in assets, otherwise called Return on Assets (ROA). Since the study aims at ascertaining how effectively family businesses could use their human assets to create profits, we adopt the definition proposed by Chen & Dodd [74], and Ross, Westerfield, & Jaffe [75], thus ROA measures how effectively a firm uses its assets to create profits, *i.e.* how much is generated by the family business from investing any amount in one individual employee.

5. Research Problem and Hypotheses

Over the years, most research on governance of firms, both family and non-family, have concentrated on Fortune 500 corporations and from United States, British, and Finnish firms [76]-[79]. This research concentrates on corporate governance structures in Chinese and Ghanaian family firms, with emphasis on the relationship between management and non-management employees within these firms.

Financial performance of firms is a key to long-term survival and profitability. Investors will only invest in firms whose financial performance is creditable. Although literature on governance of family business units exists, a detailed study of the effect that each of contractual and relational governance systems could have on a family firm's financial performance, when the concept is applied to the relationship between management and employees of family businesses, is yet to be conducted.

To address the above problems of research, the study sought to answer the following questions.

- 1) What is contractual governance and how does it apply to the relationship between management and employees of family businesses?
- 2) What is relational governance and how does it apply to the relationship between management and employees of family businesses?
- 3) What is the effect of contractual governance on family firm financial performance?
- 4) What is the effect of relational governance on family firm financial performance?

Based on the above discussions and the problems highlighted, we hypothesized the following:

- a) Null Hypothesis 1 (H_1): The level of contractual complexity has no effect on individual and ultimately family firm financial performance.
- b) Alternate Hypothesis 1 (H_2): The level of contractual complexity has effect on individual and ultimately family firm financial performance.
- c) Null Hypothesis 2 (H_3): The level of relational governance does not influence individual and family firm financial performance.
- d) Alternate Hypothesis 2 (H_4): The level of relational governance influences individual and family firm financial performance.

6. Methodology

In order to achieve the objectives of this study, we employed both qualitative and quantitative methods in sampling our respondents and investigating the variables of interest. We described and explored the strength of relationships between the variables as well as their cause-and-effect relationships using correlation and regression analyses techniques, which are consistent with available literature and previous research of this nature [80]-[84].

As has already been stated, we studied family businesses across Ghana and China. Distinct criteria were used to identify the family businesses to be included in the sample frame. The major criterion applied was Chua,

Chrisman, & Sharma's [11] definition of family business, *i.e.* "a family business is a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families". Therefore, the criteria developed from the attributes of family businesses according to the above definition were applied to the determination of the sample of the study as follows:

- 1) Family-owned and family-managed;
- 2) Family-owned but not family-managed; and
- 3) Family-managed but not family-owned.

After identifying the family businesses that fall within the criteria described above, cluster sampling was used in selecting the cases study firms. Thus the family businesses identified from our definition of family business were clustered into three for each study area and a sample randomly selected from each of them. The three clusters were defined as follows:

- 1) "family businesses that are 15 years old or less";
- 2) "family businesses that had existed for more than 15 years but less than 30 years";
- 3) "family businesses that are 30 years old or more".

Based on the above clusters, three (3) family businesses (one from each cluster) within the Sichuan Province of China were purposefully selected or sampled. The same process was used in selecting the three (3) family businesses in Ghana. The family businesses were selected in this manner because the researchers needed businesses who were interested in the research and whose CEOs and the Boards were willing to encourage the management staff, non-family-member-employees, and family-member-employees to discuss the questions in the questionnaires objectively with the researchers. The process adopted in the study therefore met Merriam's [85] recommendation regarding purposeful sampling that it is not the number and representativeness of the sample that are the major considerations, but rather the potential of each person or group to contribute to the development of insight and understanding. This potential for contribution to the study was determined by the participants' high response to the questionnaire survey.

The use of cluster sampling conforms to the elucidation by Cochran [86] and Henry [87] that sampling clusters guarantee that results will be proportionate to known groups in the population, and can substantially reduce study costs of data gathering while ensuring that all characteristics within the population are represented.

After sampling the family businesses, convenience and purposive sampling techniques were used in the administration of questionnaires, which in some cases, were followed with interviews to clarify unclear responses. These techniques were employed because of the difficulty associated with identifying and contacting all the elements in our population of study (*i.e.* all staff of the sampled firms) as well as the necessity to purposively select respondents in some cases (e.g. management) because, in the researchers' judgment, they could provide answers that would enhance the attainment of the study's objectives. This method became necessary because, since the approach adopted was the personal, face-to-face method of collecting data in order to encourage high response rates, the researchers could only interact with those people they met at the various work places they visited during the period of the data collection. The use of these sampling tools is consistent with the suggestions by De Vos [88] and Saunders *et al.* [89].

The probability sampling method employed (*i.e.* cluster sampling) provided an excellent way to select samples (the cases study firms) that were quite representative and less biased; while the non-probability sampling techniques (*i.e.* convenience and purposive sampling) were employed in the administration of the questionnaires and conduct of interviews because of the difficulty associated with identifying, contacting, and getting the consent of all the elements in the study's population of interest (*i.e.* all staff of all the sampled cases) to participate in the study. Because they represent different interests in the various family businesses, respondents were categorized into three, *i.e.* Management staff, family-member-employees, non-family-member-employees. Upper-level management personnel (Directors, Chief Executives, Managers, etc.) and middle-level management personnel (e.g. Supervisors) were combined to constitute the "management" respondents for this study.

A total of 1762 completed questionnaires (414 for Ghana, and 1348 for China) were collected out of the 2432 that were distributed, yielding 72% response rate (refer to [Table 1](#)). However, out of the 1762 questionnaires retrieved, 1701 (395 for Ghana, and 1306 for China) were usable due to missing values, representing 70% of the whole. The response rate of 70% was found to be above the acceptable range for such a survey, representing a high response rate [90].

Table 1. The Response pattern.

Country	Case	Freq	Management	Family Employees	Non-family Employees	Total
Ghana	Company A	Distributed	10	25	60	95
		Collected	6	20	44	70
		%	60	80	73.3	73.4
	Company B	Distributed	20	35	95	150
		Collected	16	25	71	112
		%	80	71.4	74.7	74.7
	Company C	Distributed	45	60	165	270
		Collected	39	45	145	229
		%	86.7	75	87.9	84.8
	Overall	Distributed	75	120	320	515
		Collected	61	90	260	414
		%	81.3	75	81.3	79.8
	Company D	Usable	60	87	248	395
		Usable %	80	72.5	77.5	76.7
		Distributed	34	24	179	237
China	Company E	Collected	19	20	131	170
		%	55.9	83.3	73.2	71.7
		Distributed	80	100	300	480
	Company F	Collected	44	66	202	312
		%	55	66	67.3	65
		Distributed	200	200	800	1200
	Overall	Collected	92	150	610	852
		%	46	75	76.3	71
		Distributed	314	324	1279	1917
	Overall	Collected	156	241	951	1348
		%	49.7	74.4	74.4	70.3
		Usable	151	225	930	1306
		Usable %	48.1	69.4	72.7	68.1

Table 1 shows the response pattern of the study by country. The final usable sample size was 395 for Ghana and 1306 for China. Out of the 395 Ghanaian respondents, 60 representing 80% response rate of that category were management personnel; 87 representing 73% response rate of that category were family-member-employees, and 248 representing 78% response rate of that category were non-family-employees. Also, out of the 1306 Chinese respondents, 151 representing 48% response rate of that category were management personnel, 225 representing 69% response rate of that category were family-member-employees and 930 representing 73% response rate of that category were non-family-member-employees. The effective response rate was thus 77% for Ghana and 68% for China, which compares more favourably and higher than similar studies [34].

7. Variables and Measurement

7.1. Dependent Variable

The research aimed at finding the effect of relational and contractual governance on a family firm's financial

performance. Hence, the objectives of the research permitted the use of our financial performance variable as the dependent variable in the regression analysis. As already stated, one of the financial variables indicating a family firm's overall financial performance is the Return on Assets (ROA). ROA is also a widely used accounting metric of firm performance, which measures firms' profitability by dividing a company's earnings before interest and tax by its total assets. ROA measures how effectively a firm uses its assets to create profits, hence a higher ROA is more favorable [74] [75]. The study's objective was to measure how effectively family businesses could use their human assets to create profits, *i.e.* how much was generated by the family business from investing an amount of money (say \$1) in one individual employee? Thus, in line with previous studies, the respondents were asked to rate themselves on how much profits the company had reaped from them individually by investing in them over the past five years, using a 7-point Likert scale in which 1 represents "much worse" and 7 represents "much better." Management respondents were asked to rate individual employees on how much profits the company had reaped from them individually by investing in the individual employees over the past five years, using the same 7-point Likert scale described above [34] [74] [75].

7.2. Independent Variables

As was done for the dependent variable, the study's objectives allowed the use of our corporate governance models (*i.e.* contractual governance and relational governance) as the independent variables for the regression analysis. As already indicated in previous sections, contractual governance is the governance mechanism based on formal principal-agency rules and relationships, and controls through contractual agreements. In this research, the researchers attempted to apply the concept of contractual governance to the employment contracts or agreements (indicating the roles, responsibilities, position reporting, etc.) existing between managers and employees of family businesses. Consistent with Macneil [35] and Poppo and Zenger [34], contractual governance was measured by assessing the degree to which employees were given complex contracts, hence respondents were asked to indicate their level of agreement with the following statement using a 7-point Likert scale (1 represents "strongly Disagree" and 7 represent "strongly Agree"):

1) The formal contract of the employees is highly customized, which requires considerable legal work (coded as "A").

The measurement of this construct by a single item is limited. To further validate this measure, the survey also requests respondents to indicate the length of the contract (in pages), which previous work has shown as an indicator of contractual complexity [91]. A lower response rate as well as the use of a single answer (1.5 pages) by almost all those who answered for this question precluded its use as a second indicator of a complex contract.

Relational governance, on the other hand, refers to the governance based on the creation and usage of social capital embedded in social relationships among exchange parties. For such relationally-governed exchanges, the enforcement of obligations, promises, and expectation occurs through social processes that promote norms of flexibility, solidarity, and information exchange. In this study, relational governance is viewed as composite factor with the following three underlying norms and dimensions: open communication and sharing of information, trust, and cooperation. This specification is consistent with previous measurement [34] [92]. We modified three indicators from empirical studies and asked respondents to indicate their degree of agreement with each of the following statements using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree):

2) Managers and employees have extremely collaborative relationships with each other (*i.e.* cooperation among parties, coded as B1);

3) Managers and employees share long-term and short-term goals and plans (*i.e.* open communication and information sharing, coded as B2);

4) Managers and employees can rely on each other to keep promises (*i.e.* trust, coded as B3).

7.3. Control Variables

Control variables are those variables generally held constant in order to assess or clarify the relationship between two other variables, the dependent and independent variables. Control variables are mostly held constant and unchanged to test the relative impact of independent variables on dependent variables. Thus since it is almost impossible to consider every variable in a single study, the variables that are not measured but can impact on the results of the study are held constant, or eliminated, so they will not have a biasing effect on the other variables [93] [94]. This study is a social science research which involves the study of human behavior to discover

the relationship between the dependent and the independent variables in a multivariate analysis. In order to be able to test how these variables are related and whether the relationship is the same for all family businesses and industries, the researchers controlled for the firm size, type of industry, and the age of the family business under consideration. Firm size was measured using the number of employees as a factor. Our use of these control variables are consistent with literature on family business research involving the testing of relationships [95]–[97].

8. Results and Discussion

8.1. Relationships between Governance and Performance in Chinese Family Firms

8.1.1. Analyses of Chinese Family-Member-Employees' Responses

Table 2 presents the results of the regression analysis from the responses of family-member-employees, non-family-member-employees, and management of Chinese family businesses. Contractual governance or complexity is represented as “A” while all variables under relational governance (viewed as a composite factor having open communication and sharing of information, trust, and cooperation as its underlying norms and dimensions) are represented using “B1,” “B2,” and “B3.” “B1” represents Cooperation, “B2” represents Open communication and information sharing, and “B3” represents Trust. Performance is also measured using Return on Asset (P). In order to be able to test how these variables are related and whether the relationship is the same for all family businesses and industries, regardless of the size of the family business, we control for potential differences using type of industry, firm size, and age of the business.

Table 2. Relationship between Contractual Governance, Relational Governance and Performance based on responses of family-member-employees, non-family-member-employees, and management of Chinese family businesses.

Chinese Family-Member-Employees				
Dependent Variable	Independent Variable	Constant	Beta	Sig
P	A	3.381	0.029	0.755
P	B1	3.381	−0.295	0.000
P	B2	3.381	0.370	0.000
P	B3	3.381	0.331	0.001
Chinese Non-Family-Member-Employees				
P	A	2.204	−0.064	0.092
P	B1	2.204	0.223	0.000
P	B2	2.204	0.137	0.000
P	B3	2.204	0.369	0.000
Chinese Management				
P	A	−0.226	0.216	0.000
P	B1	−0.226	0.546	0.000
P	B2	−0.226	0.142	0.015
P	B3	−0.226	0.134	0.040
Codes	-	Interpretation		
P	-	Return on Assets		
A	-	Contractual Governance		
B1	-	Cooperation		
B2	-	Open Communication and Information Sharing		
B3	-	Trust		

Statistical inference is inductive in its nature, *i.e.* propositions are considered true or false only with a certain probability. The significance level is a pre-selected probability of declaring the null hypothesis false when it is actually true. Significant levels of 0.05 and 0.01 are widely used in testing hypotheses; but in social sciences, a significance of 0.1 is still acceptable because it deals with human behavior, opinions, etc., which cannot be easily measured like the physical sciences. The higher the level of significance was, the higher the margin of error used [98]. In this study, “p-values” below a level of 0.1 are considered significant. This level of significance was adopted because of the difficulty associated with collecting data in family business research and the subjective nature of the variables under consideration.

In examining the relationship between contractual governance and performance, the correlation analysis between Contractual Complexity and Return on Assets at 0.10 level of significance produced an indication of a positive relationship between them ($r = 0.190$, $p\text{-value} = 0.003$), but as shown in **Table 2**, the regression test to predict the linear relationship between the two did not produce any significant result. Because the probability level for the null hypothesis that the correlation between Contractual complexity and Return on Assets is zero in the data set has a $p\text{-value} = 0.755$, and the level of significance of 0.1 is less than 0.755, we fail to reject the null hypothesis 1. Therefore the results from the correlation and regression analyses of these variables offer support for H_1 .

In examining the relationship between relational governance and performance from the responses of family-member-employees of Chinese family businesses, the correlation analysis indicated a negative linear relationship between Cooperation (B1) and ROA (P) ($r = -0.064$, $p\text{-value} = 0.000$) in a correlation test. The regression test to predict the linear relationship between B1 and P, using P as the dependent variable and B1 as independent, produced significant results as shown in **Table 2**. The R^2 value for the equation is 20.8%.

This result implies that an increase in cooperation among exchange partners (managers and family-member-employees) in a family business in China could lead to a reduction in individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance. By implication, in order to increase the returns to be gained from investing in human assets (family-member-employees of family businesses) in China, managers may need to reduce the extent of their (management) cooperation with them (family-member-employees), hence not offering support for H_3 .

Open communication and sharing of information (B2) and Return on Assets (P) yielded a positive linear relationship ($r = 0.300$, $p\text{-value} = 0.000$) in the correlation test. A regression test to predict the linear relationship between B2 and P produced significant results at 0.10 level of significance, as presented in **Table 2**. This result suggests that an increase in Open Communication and sharing of information among exchange partners (managers and family-member-employees) in a family business in China could lead to an increase in individual performance (in terms of individual return on labour assets) and, ultimately, family firm financial performance. Thus in order to increase the returns to be gained from investing in human assets (family-member-employees of family businesses) in China, managers may need to improve upon their (management) communication and information sharing with them (family-member-employees). Therefore we reject H_3 .

Also, the correlation analysis between Trust (B3) and ROA (P) showed a significant positive linear relationship ($r = 0.460$, $p\text{-value} = 0.000$) between the two variables. **Table 2** shows that the regression test to predict the linear relationship between B3 and P also produced significant positive results. This result suggests that an increase in trust among managers and family-member-employees in a family business in China could lead to an increase in individual return on assets and, ultimately, family firm financial performance. Thus in order to increase the returns to be gained from investing in family-member-employees of family businesses in China, managers may need to build trusting relationships with them (family-member-employees). Therefore we reject H_3 .

We noted that with the control variables, the age of the business and the firm size were positively correlated ($r = 0.957$, $p\text{-value} = 0.000$). Age of the business and the type of the business were also positively correlated ($r = 0.733$, $p\text{-value} = 0.000$), while the size of the company and the type of the business were also positively correlated ($r = 0.503$, $p\text{-value} = 0.000$). However, none of the control variables had any significant relationships with any of the other measured variables.

Figure 1 presents the relationships discussed above graphically.

Figure 1 presents the described relationships between contractual governance, relational governance, and performance variables based on responses by Chinese family-member-employees graphically. Contractual governance or complexity is represented as “A” while all variables under relational governance (viewed as a com-

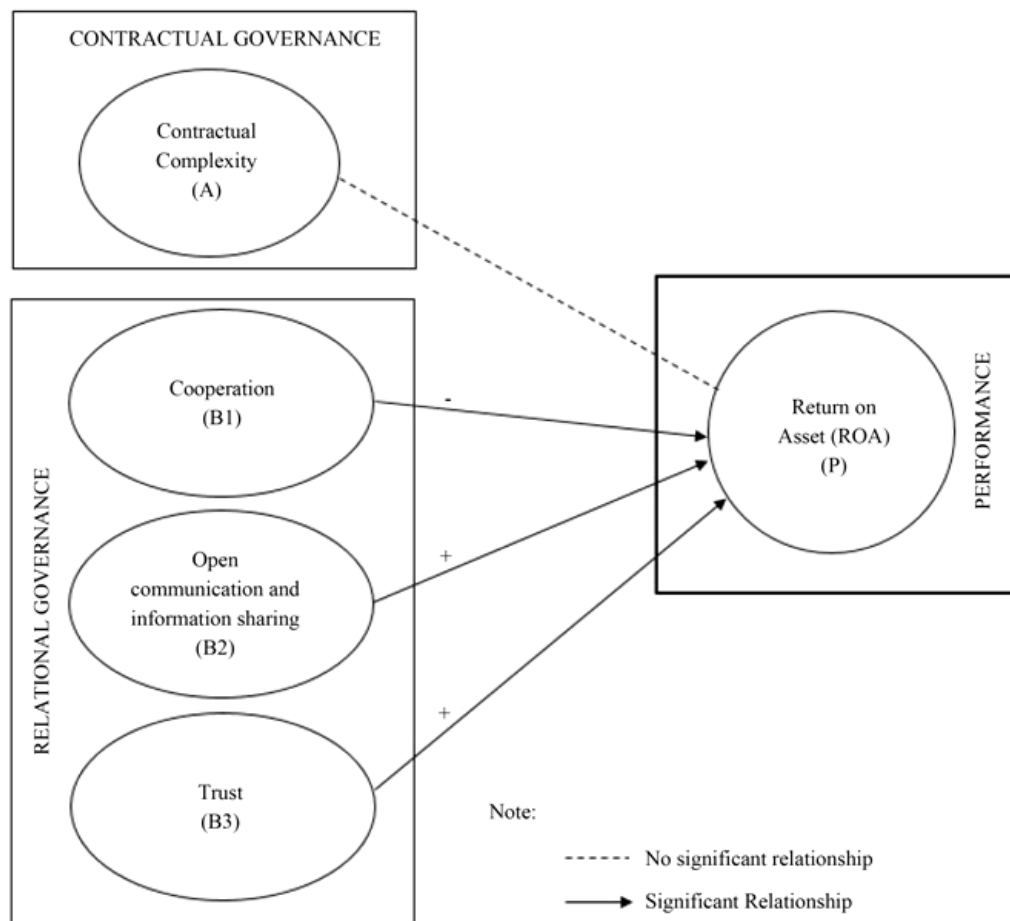


Figure 1. Relationships between Contractual Governance, Relational Governance, and Performance based on responses by family-member-employees of Chinese family businesses.

posite factor having open communication and sharing of information, trust, and cooperation as its underlying norms and dimensions) are represented using B1, B2, and B3. B1 represents Cooperation, B2 represents Open communication and information sharing, and B3 represents Trust. Performance is also measured using Return on Assets (P). The use of the arrow indicates the existence of a significant causal relationship between the variables. The use of the dotted line, however, indicates that there is no significant causal relationship between the variables. The positive (+) and negative (−) signs are used to indicate positive and negative relationships respectively.

As indicated in the research objectives and the hypotheses, the study sought to unearth the cause-and-effect relationships that exist between relational governance and contractual governance and performance so as to determine whether the two governance models influence performance positively or negatively, and which model is better at enhancing individual and ultimately family firm financial performance. Therefore if, after testing the variables and causality between them using the statistical measures, it is realized that changes in (say) contractual complexity (denoted as A) do not cause any significant changes in Return on Assets (denoted as P), then a dotted line would be used to depict this relationship (e.g. AP). If, on the other hand, changes in the independent variable (e.g. cooperation, coded as B1) could lead to significant changes in the dependent variable (P), then an arrow is used to represent such a relationship. The negative sign (−) indicates that the relationship between the two is inverse, *i.e.* as cooperation increases, ROA decreases. If the significant relationship is positive, it is represented as shown in B2P, with the positive sign (+), indicating that there is a direct significant relationship between the two, hence as open communication and sharing of information between the parties increases, individual performance (in terms of ROA) increases.

Therefore **Figure 1** shows that contractual complexity does not exert any significant influence on individual

ROA. Hence, use of formal written contracts between management and family-member-employees does not affect individual family-member-employees' financial returns. Similarly, there is a negative significant linear relationship between B1 and P, suggesting that cooperation among management and family-member-employees actually leads to a reduction in the financial returns generated by the firm from investing in these family-member-employees. Hence, if management of family businesses in China want to increase individual family-member-employee returns on assets, the extent of management cooperation with them (family-member-employees) must be reduced. However, management of family businesses in China must enrich their communication as well as take steps to build trust with family-member-employees if management wants to reap significant positive returns from investing in family-member-employees because there are positive significant relationships between open communication and ROA as well as between trust and ROA.

8.1.2. Analyses of Chinese Non-Family-Member-Employees' Responses

In examining whether there is a relationship between contractual complexity or governance and performance as given by responses from this category of workers in family businesses in China, correlation and regression analyses between the performance and contractual governance indicators were run at 0.10 level of significance. The results from the correlation analysis showed a negative relationship between contractual complexity (A) and ROA (P) ($r = -0.267$, $p\text{-value} = 0.000$). As shown in **Table 2**, the regression test to predict the linear relationship between the two (A and P) confirmed a significant negative relationship exists between the two, with R^2 value of 37% for the linear equation.

This suggests that the use of complex contracts by managers in dealing with individual non-family-member-employees could negate those employees' financial performances, and hence did not offer support for the Null Hypothesis 1.

Also, the correlation test between Cooperation (B1) and ROA (P) indicated a significant positive linear relationship between them ($r = 0.473$, $p\text{-value} = 0.000$). The regression test, shown in **Table 2**, yielded a positive significant regression equation with R^2 value of 37.2%. This suggests that cooperation among exchange partners (managers and non-family-member-employees) in a family business in China could exert a positive significant influence on individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance, hence we reject H_3 .

Open Communication and sharing of information (B2) and Return on Assets (P) produced a significant positive linear correlation between them ($r = 0.361$, $p\text{-value} = 0.000$). The regression test, shown in **Table 2**, yielded a positive significant regression equation with R^2 value of 37%, which implies that open communication and sharing of information among exchange partners (managers and non-family-member-employees) in a family business in China could significantly influence individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance positively, hence we reject H_3 .

The correlation test between Trust (B3) and Return on Assets (P) also yielded significant positive results ($r = 0.489$, $p\text{-value} = 0.000$). The regression test also produced a positive significant regression equation as shown in **Table 2**. This implies that trust among managers and non-family-member-employees of family businesses in China could significantly influence individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance positively, hence we reject H_3 .

We noted from the control variables that the age of the business and the firm size were positively correlated ($r = 0.959$, $p\text{-value} = 0.000$). Age of the business and the type of industry were also positively correlated ($r = 0.832$, $p\text{-value} = 0.000$), while the size of the company and the type of industry were also positively correlated ($r = 0.642$, $p\text{-value} = 0.000$). However, none of the control variables had any significant relationships with any of the other measured variables.

Figure 2 simplifies the relationships discussed above graphically.

Figure 2 shows that among non-family-member-employees of family businesses in China, contractual complexity influences return on assets negatively; and all the relational governance variables influence return on assets positively. These relationships presume that in order to increase the returns the family business would generate from individual non-family-member-employees of family firms in China, management must resort more to the use of relational governance and less of contractual governance. Thus management must enhance their cooperation with non-family-member employees, build more trust, and enrich communication and information sharing at the workplace with this category of workers.

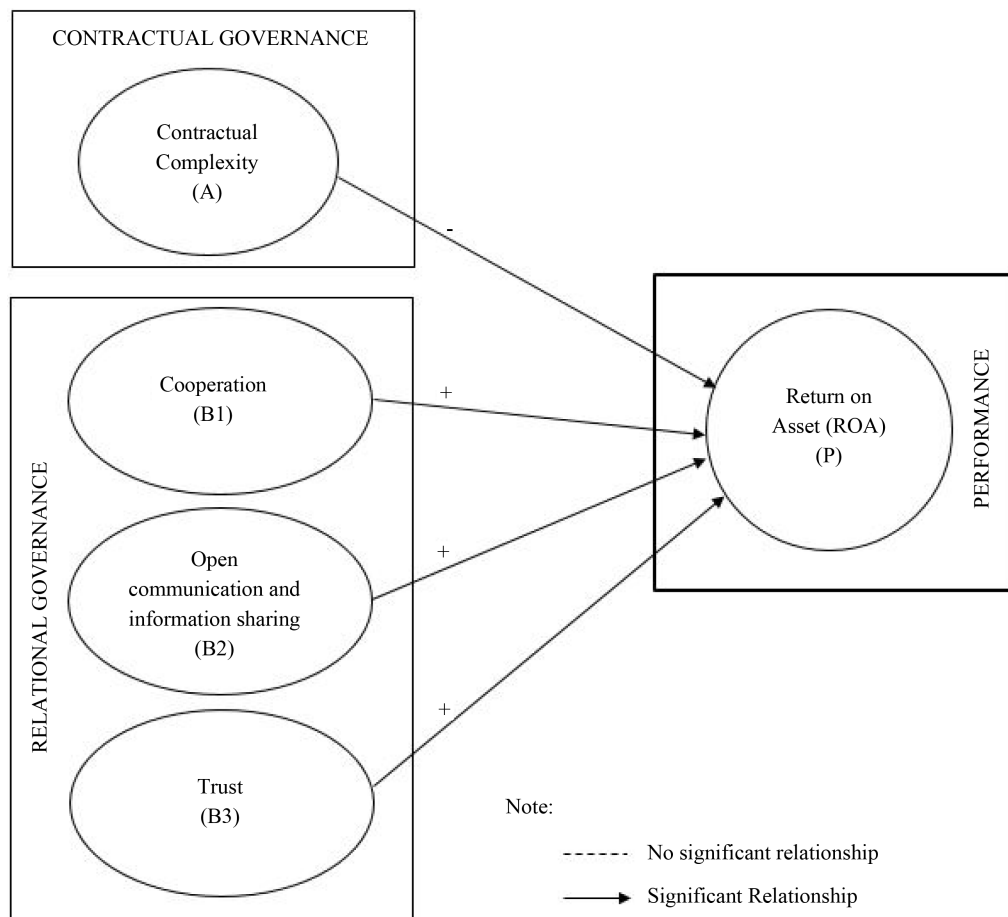


Figure 2. Relationships between Contractual Governance, Relational Governance, and Performance based on responses by non-family-member-employees of Chinese family businesses.

8.1.3. Analyses of Chinese Management's Responses

We examined whether there is a relationship between contractual complexity or governance and performance as given by responses from this category of workers in family businesses in China. In doing so, correlation and regression analyses between the performance and contractual governance indicators were run at 0.10 level of significance. The results from the correlation analysis showed a positive relationship between them ($r = 0.657$, $p\text{-value} = 0.000$). As shown in [Table 2](#), the regression test to predict the linear relationship between the two (A and P) predicted a significant regression equation with R^2 value of 82%. This suggests that the use of complex contracts by managers in dealing with individual employees of family businesses in China could boost up employee and cumulatively family firm financial performance. Therefore we reject H_1 .

Also, the correlation test between Cooperation (B1) and ROA (P) produced an indication of a positive significant linear relationship between them ($r = 0.854$, $p\text{-value} = 0.000$). The regression test to predict the linear relationship between the two (B1 and P), as shown in [Table 2](#), confirmed a significant positive linear relationship, suggesting that from management's perspective, cooperation among managers in dealing with individual employees of family businesses in China could boost up employee and cumulatively family firm financial performance. Therefore we reject H_3 .

Open Communication and sharing of information (B2) and Return on Assets (P) predicted a positive linear relationship after a correlation test ($r = 0.749$, $p\text{-value} = 0.006$). The regression test to predict the linear relationship between the two (B2 and P), presented in [Table 2](#), was positively significant, implying that open communication and sharing of information among exchange partners (managers and employees) in a family business in China could significantly and positively influence individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance, hence we reject H_3 .

The correlation test between Trust (B3) and Return on Assets (P) ($r = 0.771$, $p\text{-value} = 0.000$) predicted a positive linear relationship. The regression test to predict the linear relationship between the two (B3 and P) predicted a significant positive linear equation, thus from management perspective, the trust that managers build in dealing with individual employees of family businesses in China could boost up employee and family firm financial performance (*i.e.* return on assets). Therefore we reject H_3 .

The control variables revealed that the age of the business and the firm size were positively correlated ($r = 0.954$, $p\text{-value} = 0.000$), age of the business and the type of industry were positively correlated ($r = 0.784$, $p\text{-value} = 0.000$), and type of industry and the firm size were positively correlated ($r = 0.563$, $p\text{-value} = 0.000$). The age of the business and contractual complexity were, however, negatively correlated ($r = -0.166$, $p\text{-value} = 0.023$), age of the business and open communication and information sharing were negatively correlated ($r = -0.218$, $p\text{-value} = 0.004$), age of the business and cooperation were negatively correlated ($r = -0.234$, $p\text{-value} = 0.002$), and age of the business and trust were negatively correlated ($r = -0.165$, $p\text{-value} = 0.024$). Likewise, age of the business and ROA were negatively correlated ($r = -0.215$, $p\text{-value} = 0.001$).

Also, the size of the business and contractual complexity were negatively correlated ($r = -0.158$, $p\text{-value} = 0.029$), size of the business and open communication and information sharing were negatively correlated ($r = -0.229$, $p\text{-value} = 0.003$), size of the business and cooperation were negatively correlated (with $r = -0.245$ and $p\text{-value} = 0.002$), and size of the business and trust were negatively correlated ($r = -0.140$, $p\text{-value} = 0.047$). In the same vein, the size of the business and ROA were negatively correlated ($r = -0.221$, $p\text{-value} = 0.009$).

The type of industry and contractual complexity were negatively correlated ($r = 0.131$, $p\text{-value} = 0.058$), type of industry and open communication and information sharing were negatively correlated ($r = -0.127$, $p\text{-value} = 0.064$), type of industry and cooperation were negatively correlated ($r = -0.138$, $p\text{-value} = 0.049$), and type of industry and trust were negatively correlated ($r = -0.165$, $p\text{-value} = 0.024$). The type of industry and ROA were also negatively correlated ($r = -0.135$, $p\text{-value} = 0.026$).

Figure 3 presents graphically the relationships between contractual governance, relational governance, and performance variables based on responses by Chinese managers.

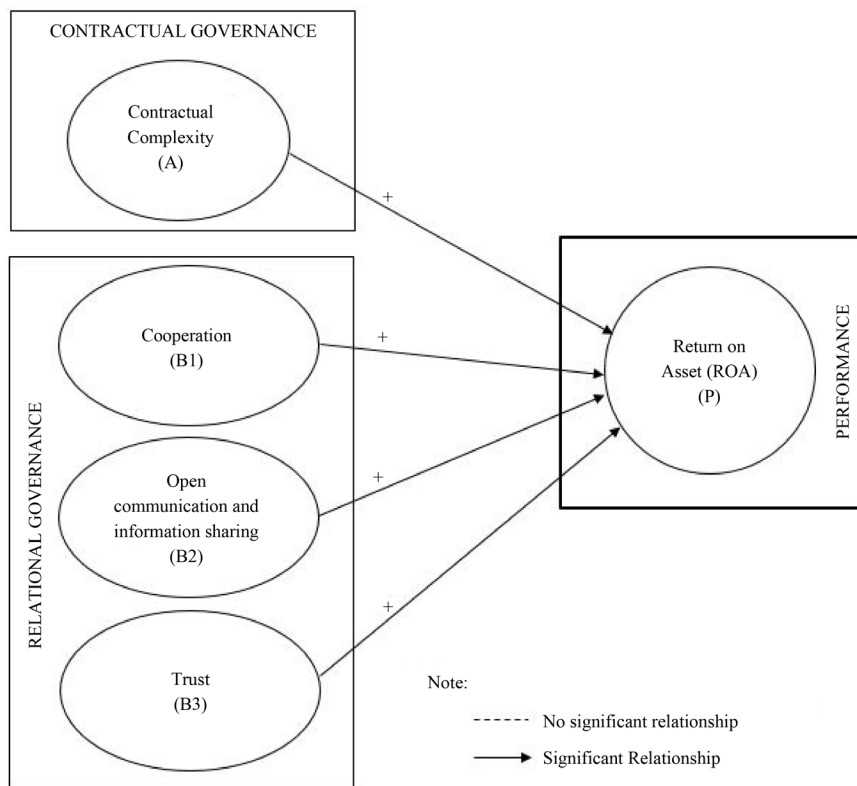


Figure 3. Relationships between Contractual Governance, Relational Governance, and Performance based on responses by management of Chinese family businesses.

The views of management of Chinese family businesses, as illustrated in **Figure 3**, shows that contractual complexity influences return on assets positively; and all the relational governance variables influence return on assets positively as well. These relationships presume that, as far as management of Chinese family businesses are concerned, in order to increase the returns the family business would generate from individual employees of family firms in China, and management must deepen the use of both contractual and relational governance models. Thus management must increase the complexity of the contractual obligations of parties, enhance their co-operation with employees using social processes and norms, build more trust, and enrich communication and information sharing at the workplace with workers if they intend to maximise the returns they could reap from investing in employees.

8.2. Relationships between Governance and Performance in Ghanaian Family Firms

8.2.1. Analyses of Ghanaian Family-Member-Employees' Responses

Table 3 presents the results of the regression analysis from the responses of family-member-employees, non-family-member-employees, and management of Ghanaian family businesses.

We examined whether there is a relationship between contractual complexity or governance and performance as given by responses from this category of workers in family businesses in Ghana. In doing so, correlation and regression analyses between the performance and contractual governance indicators were run at 0.10 level of significance. The results from the correlation analysis between Contractual Complexity (A) and Return on Assets (P) indicated a negative relationship between them ($r = -0.277$, $p\text{-value} = 0.005$). The regression analysis revealed a relatively significant negative linear relationship between the two (contractual complexity and ROA) with R^2 value of 27.7%. This result suggests that an increase in contractual complexity between exchange partners (managers and family-member-employees) in a family business in Ghana could lead to a reduction in individual performance (in terms of individual ROA) and, ultimately, family firm financial performance. Therefore, to improve individual family-member-employee and firm performance, management should reduce the use of formal controls through formal contracts (refer to **Table 3**).

The probability level for the null hypothesis that the correlation between contractual complexity or governance and ROA is zero in the data set has a $p\text{-value}$ of 0.000. Since $p\text{-value} = 0.000$ is less than the level of significance of 0.10, we reject the null hypothesis 1, hence changes in the level of contractual complexity or governance would lead to changes in individual and ultimately family firm financial performance.

A look at the control variables revealed that the age of the business and the firm size were positively correlated ($r = 0.775$, $p\text{-value} = 0.000$) but none of the two had any significant relationships on return on assets (ROA) or contractual complexity. The type of industry showed no effect on the results because all the companies surveyed from Ghana were in the same industry.

There was also an indication of a negative linear relationship between Cooperation (B1) and ROA (P) ($r = -0.047$, $p\text{-value} = 0.022$) in a correlation test. The regression test (see **Table 3**) to predict the linear relationship between B1 and P, using P as the dependent variable and B1 as independent, produced significant negative results. The R^2 value for the linear relationship is 28%.

The probability level for the null hypothesis that the correlation between cooperation and ROA is zero in the data set has $p\text{-value} = 0.012$. Since $p\text{-value}$ of 0.012 is less than the level of significance of 0.10, we reject the null hypothesis 2. This result implies that an increase in cooperation among exchange partners (managers and family-member-employees) in a family business in Ghana could lead to a reduction in individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance. By implication, in order to increase the returns to be gained from investing in human assets (family-member-employees of family businesses) in Ghana, managers may need to reduce the extent of their (management) cooperation with them (family-member-employees).

We noted that, on the part of the control variables, the age of the business and the firm size were positively correlated ($r = 0.775$, $p\text{-value} = 0.000$) but none of the two had any significant relationships with return on assets (ROA) or cooperation. The type of industry showed no effect on the results because all the companies surveyed from Ghana were in the same industry.

The correlation test between Open Communication and sharing of information (B2) and Return on Assets (P) also showed positive linear relationship ($r = 0.260$, $p\text{-value} = 0.008$). The regression test to predict the linear relationship between B2 and P confirmed the significant positive relationship between the two variables, as shown

in **Table 3**.

The probability level for the null hypothesis that the correlation between open communication and sharing of information and return on assets has p-value of 0.002, which is less than the level of significance of 0.01, hence we reject H_3 . This result suggests that an increase in Open Communication and sharing of information among exchange partners (managers and family-member-employees) in a family business in Ghana could lead to an increase in individual performance (in terms of individual return on labour assets) and, ultimately, family firm financial performance. Thus in order to increase the returns to be gained from investing in human assets (family-member-employees of family businesses) in Ghana, managers may need to improve upon their (management) communication and information sharing with them (family-member-employees).

The correlation test between Trust (B3) and ROA (P) also indicated a weak positive linear relationship ($r = 0.333$, $p\text{-value} = 0.001$) between the two variables. As shown in **Table 3**, the regression test to predict the linear relationship between B3 and P produced significant results, suggesting that an increase in trust among managers and family-member-employees in a family business in Ghana could lead to an increase in individual return on assets and, ultimately, family firm financial performance. Consequently, in order to increase the returns to be gained from investing in family-member-employees of family businesses in Ghana, managers may need to build trusting relationships with them (family-member-employees). The probability level for the null hypothesis that the correlation between trust and ROA is zero is 0.02, which is less than the level of significance of 0.10. Therefore we reject H_3 .

With the control variables, the age of the business and the firm size were positively correlated ($r = 0.775$, $p\text{-value} = 0.000$) but none of the two had any significant relationships with return on assets (ROA), contractual complexity, cooperation, open communication and information sharing, or trust. The type of industry showed no effect on the results because all the companies surveyed from Ghana were in the same industry.

Table 3. Relationship between Contractual Governance, Relational Governance and Performance based on responses of family-member-employees, non-family-member-employees, and management of Ghanaian family businesses.

Ghanaian Family-Member-Employees				
Dependent Variable	Independent Variable	Constant	Beta	Sig
P	A	4.115	-0.185	0.066
P	B1	4.115	-0.294	0.012
P	B2	4.115	0.378	0.002
P	B3	4.115	0.307	0.002
Ghanaian Non-Family-Member-Employees				
P	A	4.383	0.091	0.188
P	B1	4.383	0.014	0.835
P	B2	4.383	0.024	0.720
P	B3	4.383	0.059	0.397
Ghanaian Management				
P	A	-1.726	0.178	0.089
P	B1	-1.726	0.594	0.000
P	B2	-1.726	-0.035	0.748
P	B3	-1.726	0.273	0.024
Codes	-	Interpretation		
P	-	Return on Assets		
A	-	Contractual Governance		
B1	-	Cooperation		
B2	-	Open Communication and Information Sharing		
B3	-	Trust		

Figure 4 presents the relationships discussed above graphically.

Figure 4 presents the described relationships between contractual governance, relational governance, and performance variables based on responses by Ghanaian family-member-employees graphically. It can be observed that contractual complexity and cooperation exert bear relationships with return on assets; while trust and open communication and sharing of information have direct relationships with return on assets. These relationships presume that, as far as family-member-employees of Ghanaian family businesses are concerned, in order to increase the returns the family business would generate from individual employees of family firms in Ghana, management must lessen the use of both contractual complexity and cooperative behaviour with employees who are members of the owning family. However, management must build more trusting relationships and encourage open communication and information sharing with employees who are members of the owning family if they (management) intend to maximise the returns they could reap from investing in family-member-employees.

8.2.2. Analyses of Ghanaian Non-Family-Member-Employees' Responses

In examining whether there is a relationship between contractual complexity or governance and performance as given by responses from this category of workers in family businesses in Ghana, correlation and regression analyses between the performance and contractual governance indicators were run at 0.10 level of significance. The correlation analysis between Contractual Complexity and Return on Assets (ROA) produced an indication of a weak positive relationship between them ($r = 0.096$, $p\text{-value} = 0.066$) but the regression test did not yield any significant linear relationship between the two (contractual complexity and ROA), as presented in **Table 3**. This suggests that the use of complex contracts by managers in dealing with individual non-family-member-employees of Ghanaian family businesses does not have any direct relationships or effects on their financial performance, and hence offers support for the Null Hypothesis 1.

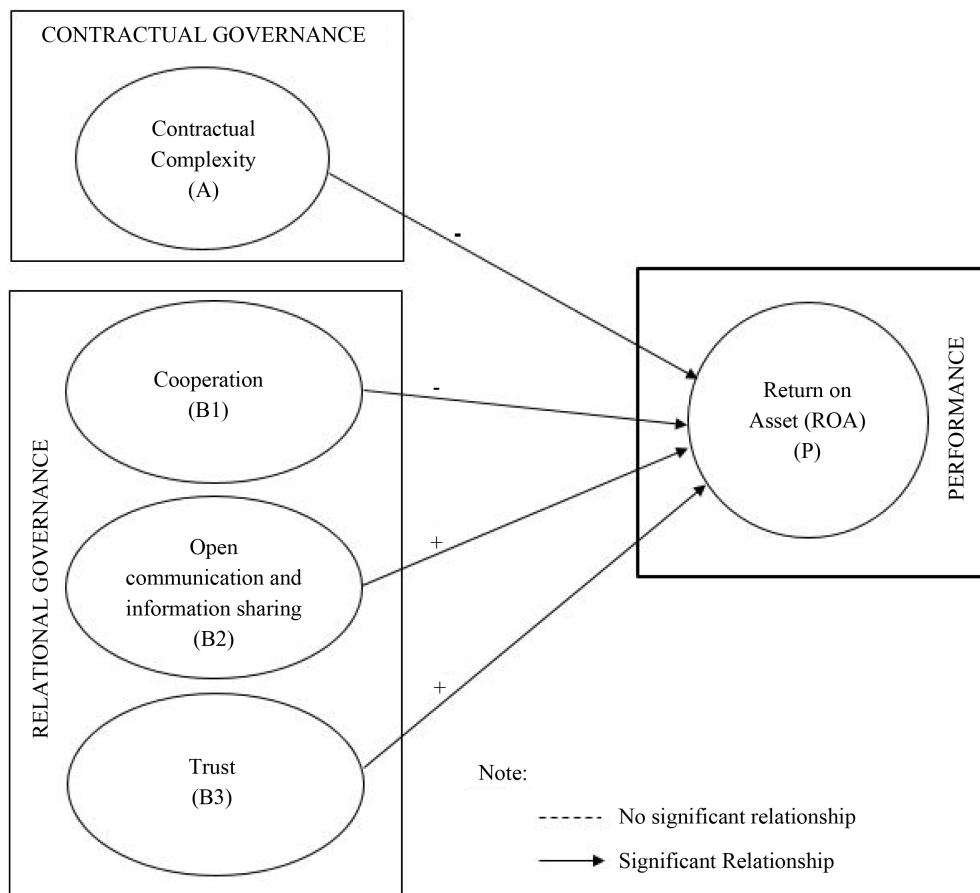


Figure 4. Relationships between Contractual Governance, Relational Governance, and Performance based on responses by family-member-employees of Ghanaian family businesses.

Also, the correlation test between Cooperation (B1) and ROA (P) did not produce any indication of a significant linear relationship between them ($r = 0.040$, $p\text{-value} = 0.265$). This suggests that cooperation among exchange partners (managers and non-family-member-employees) in a family business in Ghana may not exert any significant influence on individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance, hence we do not reject H_3 .

Open Communication and sharing of information (B2) and Return on Assets (P) failed to predict a linear relationship after a correlation test ($r = 0.041$, $p\text{-value} = 0.262$) at 0.10 level of significance. This implies that open communication and sharing of information among exchange partners (managers and non-family-member-employees) in a family business in Ghana may not exert any significant influence on individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance, hence we do not reject H_3 .

In addition to the above, a correlation analysis between Trust (B3) and Return on Asset (P) produced a weak positive linear relationship ($r = 0.091$, $p\text{-value} = 0.076$) between the two variables. However, as shown in [Table 3](#), the regression test to predict the linear relationships between these variables did not produce any significant results, suggesting that variations in the level of trust among managers and non-family-member-employees of family businesses in Ghana may not exert any influence on individual performance (in terms of individual return on assets). Therefore we do not reject H_3 .

With the control variables, the age of the business and the firm size were positively correlated ($r = 0.649$, $p\text{-value} = 0.000$), age of the business and contractual complexity were also positively correlated ($r = 0.132$ and $p\text{-value} = 0.019$), and age of the business and open communication and sharing of information were positively correlated ($r = 0.149$, $p\text{-value} = 0.009$). However, age of the business and return on assets were negatively correlated ($r = -0.113$, $p\text{-value} = 0.038$), age of the business and cooperation were negatively correlated ($r = -0.166$, $p\text{-value} = 0.004$), but the size of the business did not have any significant relationships with any of the variables. The type of industry showed no effect on the results because all the companies surveyed from Ghana were in the same industry.

[Figure 5](#) shows that among non-family-member-employees of family businesses in Ghana, both contractual

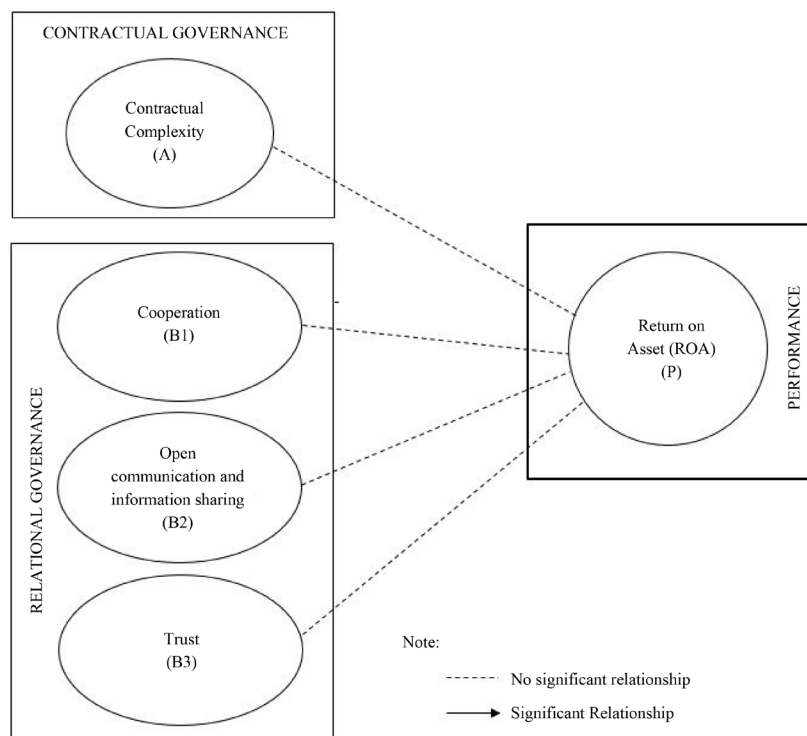


Figure 5. Relationships between Contractual Governance, Relational Governance, and Performance based on responses by non-family-member-employees of Ghanaian family businesses.

governance and relational governance do not exert any significant influence on individual return on assets, hence the dual governance models and the returns to be generated from investing in employees who are not members of the owning family stand independent of each other. These relationships suggest that management of family businesses in Ghana must conduct further research into the factors that may enhance the returns to be generated from investing in this category of workers, other than the governance relationships pursued with them.

8.2.3. Analyses of Ghanaian Management's Responses

We examined whether there is a relationship between contractual complexity or governance and performance as given by responses from this category of workers in family businesses in Ghana. In doing so, correlation and regression analyses between the performance and contractual governance indicators were run at 0.10 level of significance. The correlation analysis between Contractual Complexity (A) and ROA (P) indicated a positive relationship between them ($r = 0.188$, $p\text{-value} = 0.075$). **Table 3** shows that the regression test to predict the linear relationship between the two (A and P2), showed a significant positive relationship. This suggests that, from management's perspective, the use of complex contracts by managers in dealing with individual employees of family businesses in Ghana could boost up employee and cumulatively family firm financial performance. Therefore we reject H_1 .

Also, the correlation test between Cooperation (B1) and ROA (P) produced an indication of a positive significant linear relationship between them ($r = 0.655$, $p\text{-value} = 0.000$). From **Table 3**, the regression test confirmed the significant linear relationship between the two (B1 and P). The R-Square value for the equation is 57.1%. This suggests that cooperation among managers in dealing with individual employees of family businesses in Ghana could boost up employee and cumulatively family firm financial performance. Therefore we reject H_3 .

Open Communication and sharing of information (B2) and Return on Assets (P) predicted a linear relationship after a correlation test ($r = 0.321$, $p\text{-value} = 0.006$). However, the regression test to predict the linear relationship between B2 and P did not produce significant results (as shown in **Table 3**). This implies that, as far as management is concerned, open communication and sharing of information among exchange partners (managers and employees) in a family business in Ghana may not exert any significant influence on individual performance (in terms of individual return on asset) and, ultimately, family firm financial performance, hence we do not reject H_3 .

The correlation test between trust (B3) and return on assets (P) ($r = 0.547$, $p\text{-value} = 0.000$) predicted a positive linear relationship. Management responses from **Table 3** reveals that the regression test to predict the linear relationship between the two (B3 and P) yielded significant positive results, suggesting that the trust that managers build in dealing with individual employees of family businesses in Ghana could boost up employee and family firm financial performance (*i.e.* return on assets), hence we reject H_3 .

The control variables showed that the age of the business and the firm size were positively correlated ($r = 0.593$, $p\text{-value} = 0.000$), but both did not show any significant relationships with any of the other variables. The type of industry showed no effect on the results because all the companies surveyed from Ghana were in the same industry.

Figure 6 presents graphically the relationships between contractual governance, relational governance, and performance variables based on responses by Ghanaian managers.

Figure 6 shows that among managers of family businesses in Ghana, the opinions are that contractual governance influences return on assets positively; and cooperation and trust also influence return on assets positively. Thus managers wishing to reap more benefits from investing in individual employees of family businesses in Ghana would have to use complex contracts detailing the rights, obligations, etc. of parties as well as take steps to build trust and cooperation among managers and employees. The views of management, as illustrated in **Figure 6**, reveal that open communication and sharing of information does not have any significant relationship with return on assets.

9. Limitations and Further Research

This research concentrated on family businesses that are not listed and most of whom are Small- and Medium-Scale Enterprises (SMEs), and on six family businesses in two developing economies (*i.e.* China and Ghana). Future research could include large-scale and listed family businesses and in other developing countries with

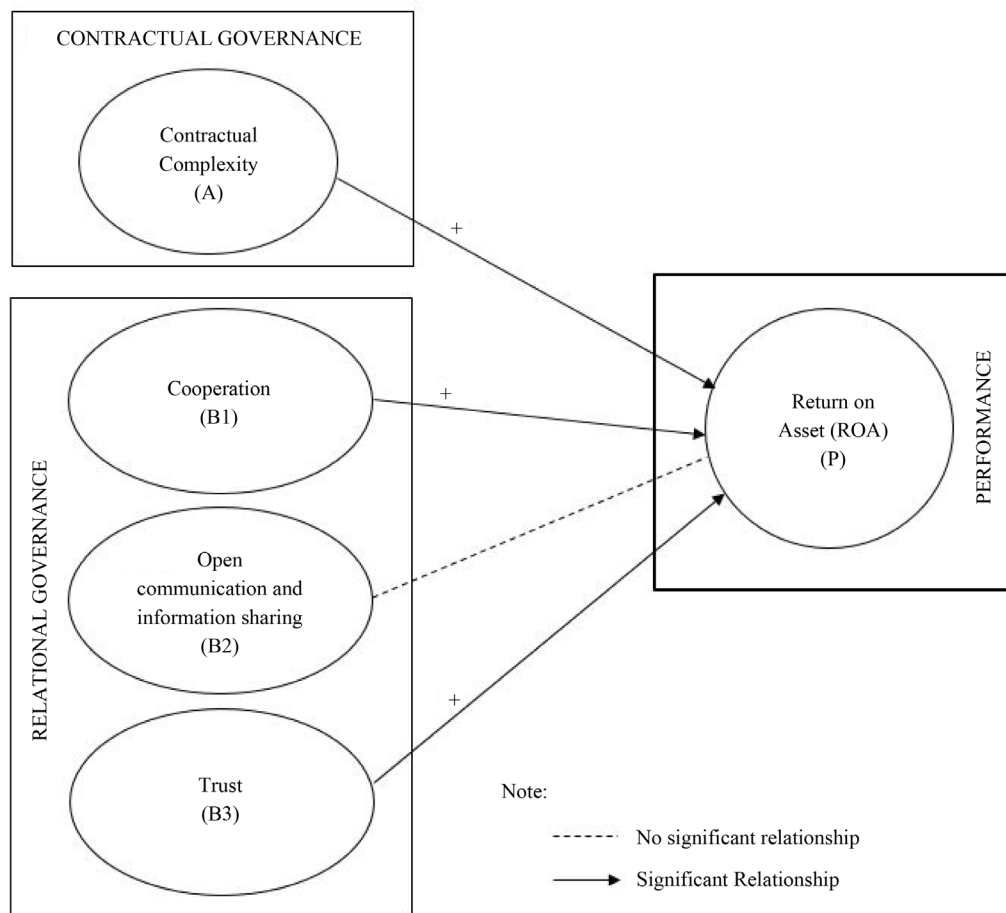


Figure 6. Relationships between Contractual Governance, Relational Governance, and Performance based on responses by management of Ghanaian family businesses.

different cultural practices as well. Also, it has been seen that both contractual and relational governance influence family firm financial performance when the concepts are applied to the governance relationships between management and employees. Future research could concentrate on whether these two governance models should be practiced concurrently or as substitutes.

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