

## ECONOMIC GROWTH IN AFRICA: THE ROLE OF CORPORATE GOVERNANCE AND STOCK MARKET DEVELOPMENTS

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### Abstract

The study explored the link between corporate governance, stock market developments and economic growth by using data on selected African countries. Analysis was done within the Arellano-Bond Dynamic Panel data modelling. Results show that corporate governance and particularly the independence of corporate boards is important for firm performance and economic growth and that stock markets also play an important role in economic development. However, while market size is conclusive, our findings points to the fact that an increase in stock market activities must be focussed and carefully supported with appropriate mix of policies and programs in order to achieve the desired impact on economic growth because too many policies could erode the effect of critical indicators.

**Keywords:** Economic Growth, Corporate Governance, Stock Market Developments, Africa

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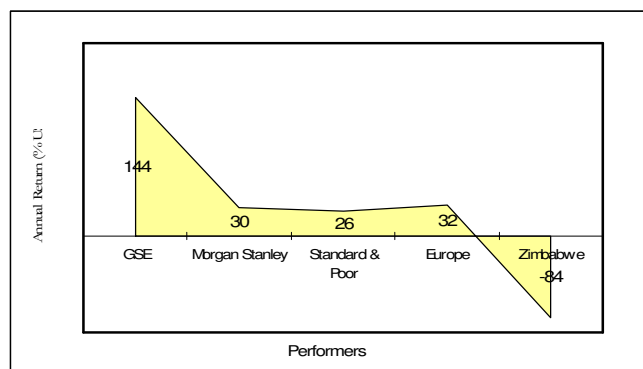
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### 1. Introduction

The fundamental role of stock markets in the economic growth and development of countries has never been in dispute. Thus, one main merit for the development of a stock market is its ability to promote long-term investment and economic growth through issuing shares and sharing risks between issuing firms and shareholders. Again, liquid stock markets allow shareholders to dispose of shares quickly and cheaply and in the process enable them to finance otherwise illiquid projects (Levine, 2000). An investment by a firm or the accumulation of physical capital formation has been identified to be closely associated with economic growth (McKinnon, 1973 & Shaw, 1973). Hence, stock or equity markets promote economic growth essentially through investment. Though, it is believed that one important role of the stock market is to promote efficient corporate governance, recent scandals involving firms such as the Enron Corp and WorldCom has raised more questions than answers. For instance, what should be the composition of a board of directors? The story of Enron and WorldCom shows clearly that corporate governance would fail to work if the board of directors lack the needed independence and capacity to monitor management due to information asymmetry. The development and growth of stock markets in emerging economies has been rampant in recent times especially in Africa. From thirteen stock

markets at the end of 1992, bourses in Sub-Saharan Africa (SSA) had increased to eighteen in 2002; these markets, with the exception of South Africa, doubled and in some cases more than doubled their capitalisation during the 1992-2002 period (S&P Emerging Markets Handbook). Total market capitalisation for Africa also more than doubled from US \$113,423 million to US\$ 244,672 million in the same period. For instance, the Ghana Stock Exchange was adjudged the world's best performing market at the end of the first quarter of 2004 with an annual return of 144% in US dollar terms compared to a 30% return by Morgan Stanley Capital International Global Index, 26% Standard & Poor in US and 32% in Europe, amongst others (The Databank Group, 2004). On the continent itself, five other bourses namely Uganda, Kenya, Egypt, Mauritius and Nigeria, besides Ghana, were amongst the best performers in the year. Zimbabwe, however, was the worst performer with an abysmal return of -84%. This is illustrated in Figure 1.

The concept of corporate governance has traditionally been associated with the principal-agent paradigm. The principal-agent relationship arises when there is a separation between ownership and control of firms according to Berle and Means (1932). In this instance, principals (owners) hire agents (managers) to manage a firm on their behalf for a fee. This arrangement often leads to conflict of objectives as managers may pursue a set of objectives very different from that of owners.



**Figure 1.** Performance of Some Stock Markets Compared to Other World Indicators (2004)

In order to reduce such agency costs associated with separation of ownership and control, several mechanisms have been proposed, among them is corporate governance. The term corporate governance has been used in many different ways and the boundaries of the subject vary widely. However, corporate governance could be defined as the set of rules, principles, structures, processes and mechanisms that a firm puts in place to ensure effective accountability of management to several corporate constituencies. The ongoing discussions on corporate governance have highlighted two basic models, namely the shareholder and the stakeholder models. The shareholder model posits that the fundamental objective of the firm is to maximise shareholder wealth through allocative, productive and dynamic efficiency. Thus, a firm's performance is judged by the market value or shareholder's value of the firm. In this case, managers aim constantly to ensure that firms are run in the interests of the shareholders. This has often been regarded as a narrow view of corporate governance warranting the advancement of the second model called the stakeholder model. This takes a broader view of the firm and its constituents. The main argument in this model is that a firm is responsible to a wider constituency of stakeholders other than shareholders. This wider constituency may include contractual partners such as employees, suppliers, customers, creditors, and social constituents such as members of the community within which a firm operates, environmental interests, local and national governments and indeed the society at large.

Corporate governance in Africa is relatively undeveloped. While much could be said of South Africa as having governance structures comparable to the developed market economies, corporate governance in most of the countries on the continent is in a developmental stage. One major characteristic of governance on the continent is the issue of institutional weaknesses and apparent lack of structures to swiftly address corporate disputes. For instance, Ayogu (2001) points out that the quality of

corporate governance in Africa may not be independent of the quality of state governance. This is because, he argues that the quality of the state provides the backbone upon which a board of directors can govern and upon which shareholders can "re-direct" the directors or monitor the monitors. Notwithstanding the above, there is overwhelming interest in corporate governance on the continent and this has become the focus of policy discussion and agenda because it is believed that good corporate governance leads to sustainable growth. Like corporate governance, stock markets in Africa are also at various levels of development and efficiency. As mentioned, however, the last three decades has seen an upsurge of stock markets on the continent.

The question concerns whether there is any link between corporate governance, stock market developments and economic growth. This is the fundamental question this paper seeks to explore. The theoretical link between stock market development and growth hinges on the advantage of stock markets spreading and pooling risk. In this light, stock markets influence growth through a number of channels: liquidity, risk diversification, acquisition of information about firms, corporate governance and savings mobilisation (Levine & Zervos, 1996). Levine (1991) used endogenous growth to show that stock markets help protect investors against idiosyncratic risk (firm-specific productivity risks) by providing firms with the opportunity to hold diversified portfolios. The rapid development of African bourses is also quite clear. Plausible reasons for these developments lie in the importance of stock markets in economic development. Pardy (1992) has noted that, even in less-developed countries, capital markets are able to mobilise domestic savings and are able to allocate funds more efficiently. Empirical studies on the link between stock markets and growth have varied in methods and results. Atje and Javanovic (1993), using cross-sectional regressions, conclude that stock markets have long run impacts on economic growth. Harris (1997) has also shown, within a cross-

sectional framework, that stock markets promote growth, though this occurs only for developed countries. Rousseau and Wachtel (2000) also find that stock markets influence growth via value traded of shares whilst Arestis, Demetriades and Luintel (2001), using time-series on five industrialised countries, indicate that stock markets play a role in growth. Indeed, one other critical role of stock markets is their ability to provide an alternative tool for corporate governance through the use of shareholders' monitoring devices as well as a market for corporate control where raiders can buy up the shares of poorly managed firms, replace the management and make capital gains as seen in the United States and the United Kingdom (Allen & Gale, 2000). The link between the equity market and corporate governance is through the gamut of listing requirements, satisfaction of objective criteria such as equity size, profitability, years of operation and future prospects. Hence, listed firms are supposed to be relatively profitable and large. While the positive relationship between stock market development and economic growth is not at all in dispute, the impact of corporate governance on economic growth is yet to be thoroughly explored, more so on the African continent where such studies are currently non-

existent. Some have argued that one important element of improving macroeconomic efficiency is through corporate governance (Maher & Anderson, 1999). Thus, well governed firms are expected to perform better and this could lead to higher economic growth. By this, therefore, the transmission mechanism through which corporate governance affects economic growth is firm performance.

The rest of the paper is organised as follows: Section two is devoted to data and methodology; Section three discusses empirical findings and section four concludes.

## 2. Data and Methodological Issues

In carrying out this study we use unique data from 103 companies listed on the Ghanaian, Nairobi, Nigerian, Kenyan and South African stock exchanges. Apart from the stock exchange factbooks, some data was also obtained electronically from INET-Bridge. Firms sampled were on the basis of data availability. Sampled firms cover the Industrial, Manufacturing, Mining, Agricultural and Services sectors.

**Table 1.** Firm Distribution by Sector and Country

Country	Sector					Total
	Industrial	Manufacturing	Mining	Agricultural	Services	
South Africa	15	5	15	3	4	42
Ghana	4	10	1	2	5	22
Nigeria	4	3	5	2	2	16
Kenya	8	7	3	3	2	23
Total	31	25	24	10	13	103

In defining what constitutes these sectors, we largely depended on the classifications given by the various stock exchanges. We acknowledge the possibility of non-uniform classification which could pose a problem with regard to the analysis and results, but we are of the opinion that such differences are marginal and thus have little impact on compromising the validity of our results. The banking and finance sector was omitted in conjunction with studies on corporate governance (Faccio & Lasfer, 2000).

### 2.1. Empirical Model Specification

We carry out our analysis in a dynamic panel data framework with the following model specifications:

$$y_{i,t} = \delta + \lambda y_{i,t-1} + Z'_{i,t} \psi + u_{i,t}, \quad (1)$$

where  $i = 1, \dots, 103; t = 1, \dots, 5$ , and

$y_{i,t}$  is the annual GDP growth rates for country  $i$  at

time  $t$ ;  $Z'_{i,t}$  is a vector of explanatory variables of stock market development and firms' governance indicators, and control variables; and

$$u_{i,t} = \mu_i + V_{i,t} \quad (2)$$

Our main stock market development variables are the ratio of market capitalisation to GDP measuring size, and the ratio of value traded to GDP as a measure of liquidity, size and transaction cost. We use the size of the board (measured by the number of directors) and the independence of the board (measured by the ratio of non-executive directors to total board size) as the main governance variables. The duality of the CEO (a dummy variable equal to 1 when the same person occupies CEO and Board chair positions, and to 0, otherwise), CEO tenure, and the size of the economy measured by the standardised GDP in dollar terms are used as control variables. The specified model has two main characteristics. An autocorrelation problem due to

the presence of the lagged dependent variable among the regressors and individual effects characterising heterogeneity among the interactive variables. Thus, in carrying out our estimation we employ the Arellano and Bond estimator which uses additional instruments and utilises the orthogonality conditions that exist between lagged values of  $y_{i,t}$  and the disturbances  $V_{i,t}$  (Arellano & Bond, 1991). In this regard the study adopts the Arellano and Bond (1991) Generalized Method of Moments (GMM) dynamic instrumental variable modelling approach where the lagged values of the dependent variable (growth) and differences of the independent variables are suitably used as a valid instrument to control for this bias. The use of instruments is important because, in a dynamic panel, the lagged dependent variable  $[y_{it} - y_{it-1}]$  will be correlated with the lagged error terms  $[e_{it} - e_{it-1}]$  by construct and induce the possibility of endogeneity of some explanatory variables. Based on the assumption of no

serial correlation in the error terms and weak exogeneity of explanatory variables, the following moments condition applies:

$$E[y_{it-1}(e_{it} - e_{it-1})] = 0 \quad y \geq 2 \quad (3)$$

$$E[z_{it-1}(e_{it} - e_{it-1})] = 0 \quad y \geq 2, \quad (4)$$

where  $z_{it}$  is a set of explanatory variables. Arellano and Bond's (1991) GMM estimation is based on these moment conditions and is consistent if lagged values of explanatory variables are valid instruments. The validity of the use of instruments is checked via the utilisation of a Sargan test of over-identifying restrictions which tests for correlation between the instruments and the model residuals.

### 3. Empirical Findings

#### 3.1. Descriptive Statistics

**Table 2.** Summary Statistics

Variable	Obs	Mean	Std. Dev.	Minimum	Maximum
Board size	388	9.224227	3.409779	3	23
Board independence	388	0.4190222	0.259989	0.05	0.846
CEO duality	388	0.193299	0.3953953	0	1
CEO tenure	388	3.510309	1.585593	2	8
Board meetings	388	10.53093	2.149833	5	14
Size of audit	388	4.146907	1.188474	2	9
Audit committee meetings	388	4.71134	1.49907	2	12
Profitability (ROA)	388	0.1268295	0.1458879	-0.426	0.68
GDP Growth	388	0.0258657	0.147148	-0.0023688	0.0470028
Mkt. Capitalisation	388	311224.69	74642.71	209.7413	231289
Mkt. Cap to GDP	388	0.2943687	0.4461504	0.0564919	1.503618
Value Traded to GDP	388	0.0807902	0.190179	0.0020291	0.6349773

The firms that were investigated operate with a mean board size of about nine members, with a minimum and maximum board size of three and twenty-three members respectively. Most of these boards are deemed to be relatively less independent because about 42% of them are composed of non-executive directors, which imply that about 58% of such boards are composed of executive directors or insiders (John & Senbet, 1998). With a mean percentage point of 19, most of the firms have two personalities occupying the positions of CEO and board chairperson. The situation suggests the presence of less conflict of interest and fewer agency problems. These CEOs have been operating with a mean tenure of about four years, with a range between two and eight years, and these boards have a mean of about eleven meetings annually with the minimum and maximum being five and fourteen meetings respectively. Having audit committees in place, these committees average four meetings per

year, though some meet twelve times a year. The mean of four meetings could be due to the fact that the audit committees review financial and operational issues on a quarterly basis. Though most of the firms show steady performance with regard to profitability, some of them also did not appear to perform well during the period under study. Stock markets in these economies have also experienced some degree of growth with regard to size, liquidity and cost of transaction.

The results also show that stock market indicators could influence each other towards growth and development.

For instance, the liquidity and the size of the market are positively correlated shown by the high correlation coefficient of 0.9758 at 1% level of significance. It is clear from the table that all the corporate governance indicators showed the expected signs both with stock market variables and economic growth.

**Table 3. Pair-wise Correlation Matrix**

	Board Size	Board Independence	CEO duality	CEO tenure	Ratio of Market Capitalization to GDP	Ratio of Value Traded to GDP	ROA	GDP Growth Rate
Board size	1.0000							
Board Independence	0.1277	1.0000						
CEO duality	-0.1108	-0.2426*	1.0000					
CEO tenure	0.3607*	-0.0130	0.2132*	1.0000				
Ratio of Mkt. Cap. To GDP	0.6124*	0.2655*	-0.2000*	0.5144*	1.0000			
Ratio of Value Traded to GDP	0.5998*	0.2624*	-0.1961*	0.4941*	0.9758*	1.0000		
ROA	0.2527*	0.2433*	-0.1324	0.0089	0.1363	0.1412	1.0000	
GDP Growth Rate	0.0653	0.2620*	0.1349	0.1551	-0.0044	0.0090	0.2152*	1.0000

Note: \* indicates significance at 1% level.

For instance, the size of the board has a positive relationship with both market size, liquidity and transaction cost likewise the independence of the board. A combination of board chair and CEO positions by the same person negatively affects stock market activities ostensibly through a rise in agency costs. The CEO tenure also has positive impact on both stock market development variables and firm profitability. The implication being that longer tenure enables CEO to enhance firm value and this eventually translates into market developments through size and liquidity.

### 3.2. Discussion of Regression Results

Arellano-Bond test that average autocovariance in residuals of order 1 is 0:  $H_0$ : no autocorrelation  $z = -7.80$   $Pr > z = 0.0000$ . Arellano-Bond test that average autocovariance in residuals of order 2 is 0:  $H_0$ : no autocorrelation  $z = -0.21$   $Pr > z = 0.8314$ . A regression analysis and the interaction between the dependent and the independent variables is also carried out and the results are shown in Table 4.

The results clearly reaffirm the notion that countries that grow have the potential to grow, in that previous growth rate reinforces current capacity to grow as lagged GDP growth rate is significantly and positively related to GDP growth. The capitalisation ratio (ratio of market capitalisation to GDP) and total value of share traded to the GDP ratio (measuring size, transaction cost and, more importantly, liquidity) are the main stock market development indicators. The results show that the ratio of market capitalisation to GDP has a positive relationship with GDP and economic growth, augmenting growth. In model 1, the surprise is the

negative relationship between market liquidity and economic growth. The results presuppose that an increase in stock market activities through higher liquidity has negative implications for economic growth. However, the correlation matrix in Table 3 suggest that there is a high correlation between the ratios of market capitalization and market liquidity (with coefficient of 0.9758) and thus using the two variables in the same regression could be problematic. This could partly explain the sign of market liquidity to GDP growth in model 1. In Model 2 however, higher liquidity is seen to augment GDP growth. The implication of the results of the two models is that an increase in stock market activities should be well-directed and focussed and that too many policies could erode the effect of critical indicators. The results also show that the independence of a corporate board enhances firm performance and therefore promotes economic growth. The pair-wise correlation matrix in Table 3 shows that both the size of the board and its independence have positive relationship with firm performance. Again, the independence of the board has a positive impact on economic growth through firm performance. This is consistent with other studies such as Fama (1980) who suggested that outside directors may act as “professional referees” to ensure that competition among insiders stimulates actions consistent with shareholder value maximisation and thus firm performance.

Again, a number of empirical studies on outside directors support the beneficial monitoring and advisory functions to firm shareholders (see Brickley & James, 1987; Weisbach, 1988; Byrd & Hickman, 1992; Brickley *et al.*, 1994).

**Table 4.** Regression Results (Dynamic Panel Estimation)

All models passed the diagnostic testing of validity of instruments via Sargan Test and second order serially correlated errors via AR tests. Results are not shown for brevity

Regressors	Dependent Variable: GDP Growth Rate	
	Model 1	Model 2
Lagged GDP	0.3395796 (14.38)**	0.8453405 (35.71)**
Board size	-0.0000493 (-1.40)	-6.08e-06 (-0.10)
Board independence	0.002097 (3.17)**	
CEO duality	0.0005314 (1.99)**	
Capitalisation ratio	0.1493188 (15.66)**	
Value traded to GDP	-0.2568253 (-13.24)**	0.01026 (5.38)**
Size of the economy	-0.0027471 (-21.49)**	
Constant	-0.000097 (-10.14)**	-0.0000196 (-1.41)
Obs	347	347
	Wald Chi2(7)=8492.93	Chi2(3)=2104.73

Baysinger and Butler (1985) and Rosenstein and Wyatt (1990) showed that the market rewards firms for appointing outside directors. Brickley *et al.* (1994) found a positive relation between the proportion of outside directors and stock-market reactions to poison pill adoptions. In addition, the size of a corporate board is seen to have a negative correlation with performance and therefore with economic growth, though it is not significant. While all the control variables relatively showed the

expected signs, the size of the economy showed a surprise result, pointing to a negative relationship between the size of an economy and growth. While this at first sight sounds surprising, it could be true, empirically re-iterating the fact that growth may not necessarily be dependent on size if resources are not effectively harnessed and channelled, and combined with appropriate policies within a conducive environment.

**Table 5.** Country Specific Effect on Growth (Random Effect Estimation)

Dependent Variable: GDP Growth Rate

Regressors	
Board Independence	0.0021712 (0.97)
Ratio of Value Traded to GDP	0.0450028 (6.23)**
Ghana	0.0417801 (10.41)**
Nigeria	0.0297743 (7.57)**
Kenya	0.0070739 (1.76)**
Constant	-0.0000965 (-0.02)
R-squared	0.9377
Number of Observations	388
Test of Probability	Wald Chi2(5)=1769.55 [0.0000]

Note: The regression includes a constant. \*\* indicates 5% significance level. T-statistics are in parenthesis and probability values in square brackets.

The regression results for country specific effects shown in Table 5 indicate that the performance in the growth variable is largely driven by Ghana, followed by Nigeria and Kenya in that order. The implication is that the economic growth pattern of these countries within the period under

study was influenced by the nature and direction of economic growth in Ghana. Surprisingly, all the countries in the sample namely Ghana, Nigeria and Kenya appear to have performed better than South Africa within the period.

#### 4. Conclusion

The study examined how corporate governance and stock market developments impact on economic growth. While most boards were seen to be less independent, the regression results point to a positive relationship between independent boards and economic growth. This performance appears to be largely driven by Ghana in particular followed by Nigeria, and Kenya in that order. Again, while stock market development has positive implications for economic growth, the study shows that policies should be well-focussed and well-directed in order to enjoy the benefits thereof. Our recommendation is that corporate boards should be made as independent as possible through the inclusion of more non-executive directors, and that stock market activities should be studied carefully in order to design an appropriate policy mix for the desired effect of achieving economic growth and development to be realised.

#### References

- Allen, F. & Gale, D. (2000). *Comparing financial systems*. Cambridge, MA: MIT Press.
- Arellano, M. & Bond, S. (1991). "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations" *Review of Economic Studies*, 58: 277-297.
- Arestis, P., Demetriades, P. & Luintel, K. (2001). "Financial Development and Economic Growth: The Role of Stock Markets", *Journal of Money, Credit and Banking*, 33: 16-41.
- Atje, R. & Javanovic, B. (1992). *Stock markets and developments*. N.Y: New York University Press.
- Ayogu, M. (2001). "Corporate Governance in Africa: The Record and Policies for good Governance", *African Development Bank, Economic Research Paper No.66*.
- Baysinger, B.D. & Butler, H.N. (1985). "Corporate governance and the board of directors: Performance effects of changes in board composition", *Journal of Law, Economics and Organization*, 1: 101-124.
- Berle, A.A. & Means, G.C. (1932). *The Modern Corporation and Private Property*. New York: Macmillan.
- Brickley, J.A. & James, C.M. (1987). "The takeover market, corporate board composition, and Ownership structure: The case of banking", *Journal of Law and Economics*, 30: 161-181.
- Brickley, J.A., Coles, J.L. & Terry, R.L. (1994). "Outside directors and the adoption of Poison Pills", *Journal of Financial Economics*, 35: 371-390.
- Byrd, J.W. & Hickman, K.A. (1992). "Do outside Directors Monitor Managers: Evidence form Tender Offer Birds", *Journal of Financial Economics*, 32(2).
- Demirguc-Kunt, A. & Levine, R. (1993). "Stock market development and financial intermediary growth: a research agenda". *World Bank Working Paper No. 1159*, Washington DC, The World Bank.
- Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88.
- Harris, R.D.F. (1997). "Stock markets and Development: A Reassessment" *European Economic Review*, 41(1): 139-46.
- Jensen, M. (2001). "Value maximization, Stakeholders Theory and the Corporate Objective Function". *Working paper No. 01-01*, Harvard Business School.
- Jensen, M.C. & Meckling, W.H. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3: 305-350.
- John, K. & Senbet, L.W. (1998). "Corporate governance and board effectiveness", *Journal of Banking and Finance*, 22: 371-403.
- Levine, R. & Zervos, S. 1996. "Stock market development and long run growth" *World Bank Economic Review*, 10(2): 323-340.
- Levine, R. (1997). "Financial Development and Economic Growth: Views and Agenda", *Journal of Economic Literature* xxxv: 688-726.
- Maehara, Y. 1995. "Japan's Stock Market: Lesson from the recent Boom and Slump". *Journal of Asian Economics*, 6(1): 119-131.
- Maher, M. & Anderson, T. (1999). "Corporate governance: Effects on firm performance and economic growth", *OECD Working Paper*.
- Mayer, C. (2002). "Financing the New Economy: financial institutions and corporate Governance", *Information Economics and Policy*, 14.
- McKinnon, R. (1973). "Money and Capital in Economic Development" *The Brookings Institution*. Washington D C.
- Pardy, R. (1992). "Institutional Reform in Emerging Securities Markets." *Policy Research Working Papers, (Financial Policy and Systems)*. The World Bank, Working Paper Series, 907.
- Rosenstein, S. & Wyatt, J.C. (1990). "Outside Directors, Board Effectiveness and Shareholders Wealth", *Journal of Financial Economics*, 26.
- Rousseau, P.L. & Wachtel, P. (2000). "Equity markets and Growth: Cross-Country Evidence on Timing and Outcomes 1980-1995", *Journal of Banking and Finance*, 24: 1933-1957.
- Scharfstein, D. (1988) "The Disciplinary Role of Takeovers" *Review of Economic Studies*, 55: 185-199.
- Schumpeter, J.A. (1932). *The Theory of Economic Development*. Translated by Redvers Opie. Cambridge, Mass.: Harvard University Press.
- Shaw, E. (1973). *Financial deepening in economic development*. New York: Oxford University Press.
- Shirai, S. (2004). Testing the three roles of equity markets in developing countries: The case of China. *World Development Report*, 32(9): 1467-1486
- Shleifer, A. & Vishny, R.W. (1986). "Large Shareholders and Corporate Control" *Journal of Political Economy*, 94: 461-88.
- Stiglitz, J.E. (1985) "Credit Markets and the Control of Capital" *Journal of Money, Credit and Banking*, 17(2): 133-52.
- Weisbach, M.S. 1988. Outside Directors and CEO Turnover. *Journal of Financial Economics*, 20.