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**Bank Lending and stock market performance:  
Evidence from ASEAN Banks**



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**MASTER OF SCIENCE (FINANCE)  
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Evidence from ASEAN Banks**



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**Universiti Utara Malaysia**

**Thesis Submitted to  
School of Economics, Finance & Banking (SEFB)  
Universiti Utara Malaysia  
In Partial Fulfillment of the Requirement for the Master of Sciences  
(Finance)**

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## ABSTRACT

The purpose of this study is to examine the impact of bank lending on bank stock performance through a panel data evidence on banks in ASEAN. The data for this study is retrieved from the DataStream. The sample consists of 68 listed banks from six countries (Indonesia, Malaysia, Singapore, Philippines, Thailand, and Vietnam) in ASEAN for the period 2000-2014. The results of the Panel Ordinary Least Square estimation showed that bank loans has a negative significant association with the stock performance of banks in ASEAN, implying that the fluctuations in bank lending negatively influence stock price movements, which then reduces stock returns. Bank size shows a positive and significant relationship with bank stock performance, indicating that the size of banks positively influences their stock performance since all the banks selected for this study are large banks listed on the stock exchange of their various countries in ASEAN. Bank capitalization and bank stock performance are positively related, implying that the capital of banks in ASEAN influences their stock performance because these banks have higher capital to asset ratio which make them to have a better margin of cushion and continuous profitability even during difficult periods. Net interest margin has a positive significant relationship with bank stock performance, indicating that interest margin has a positive influence on bank stock performance since ASEAN banks are well capitalized and more effective and which lead to increase in their stock performance. It is recommended that ASEAN banks need to improve in their bank lending policies by increasing their bank loan supply so as to influence stock price movements, and then improve stock returns.

**Keywords:** Bank lending, loan, capitalization, size, net interest margin, stock performance.

## ABSTRAK

Tujuan kajian ini adalah untuk mengkaji kesan pemberian pinjaman bank kepada prestasi saham bank melalui bukti berdasarkan data panel di bank-bank di ASEAN. Data untuk kajian ini diambil daripada sumber Datastream. Sampel kajian terdiri daripada 68 bank yang disenaraikan dari enam buah negara ASEAN (Indonesia, Malaysia, Singapura, Filipina, Thailand, dan Vietnam) bagi tempoh 2000-2014. Keputusan Panel Biasa anggaran Square menunjukkan bahawa pinjaman bank mempunyai hubungan yang signifikan tetapi negatif dengan prestasi saham bank-bank di ASEAN. Ini membayangkan bahawa turun naik dalam pinjaman bank adalah negatif dan mempengaruhi pergerakan harga saham, yang kemudiannya mengurangkan pulangan pada saham. Saiz Bank pula menunjukkan hubungan yang signifikan dan positif dengan prestasi saham bank, menunjukkan bahawa saiz bank secara positif mempengaruhi prestasi saham mereka kerana semua bank-bank terpilih untuk kajian ini adalah bank-bank besar yang disenaraikan di bursa saham pelbagai negara mereka dalam ASEAN. Permodalan Bank dan prestasi saham bank secara positif, membayangkan bahawa modal bank-bank di ASEAN mempengaruhi prestasi saham mereka kerana bank-bank ini mempunyai modal yang lebih tinggi kepada nisbah aset yang membuat mereka mempunyai margin yang lebih baik daripada margin keuntungan yang berterusan walaupun semasa tempoh sukar. Margin faedah bersih pula mempunyai hubungan yang signifikan dan positif dengan prestasi saham bank, menunjukkan bahawa margin faedah mempunyai pengaruh yang positif ke atas prestasi saham bank kerana bank-bank ASEAN yang mempunyai modal yang mencukupi dan lebih berkesan serta membawa kepada peningkatan dalam prestasi saham mereka. Disyorkan bahawa bank-bank ASEAN perlu meningkatkan dalam dasar pinjaman bank mereka dengan meningkatkan bekalan

pinjaman bank mereka untuk mempengaruhi pergerakan harga saham, dan kemudian meningkatkan pulangan saham.

Keywords: pinjaman Bank, pinjaman, modal, saiz, margin faedah bersih, prestasi saham.



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## LIST OF ABBREVIATIONS

ASEAN – Association of South East Asian Nations

AEC – ASEAN Economic Community

BI – Bank of Indonesia

BNM – Bank Negara Malaysia

BoT – Bank of Thailand

BSP – Bangko Sentral ng Pilipinas

IMF – International Monetary Fund

MAS – Monetary Authority of Singapore

CAPM – Capital Asset Pricing Model

APT – Arbitrage Pricing Theory

ICAPM – Intertemporal Capital asset Pricing Model



# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

The relationship between stock market performance and financial institutions are gradually significant in determining economic development. For instance, stock market performance influence economic activity by for ways, which include investment spending, household wealth effects, household liquidity effects, as well as company balance-sheet effects (Karim, Lih & Karim, 2012). Therefore, a strong economic development usually go along with a strong financial market since it transfers its impacts to the real sectors. In modern days, the progressively developing of financial institutions plays a significant part in giving financial aid to the organizational growth. However, the rising significance of stock market and financial institution's development has made many to ask critical questions whether or how stock prices predict future bank lending activities, and whether or how bank loans play a significant part in transferring its financial shock to the real sectors (Karim et al., 2012). According to Almutair (2015) most economists believe that stock prices predict future economic performance. Therefore, stock market performance plays a significant part in predicting economic performance (Levine & Zervos, 1998). Moreover, study had shown that most stock markets indicators are hugely related with banking institution performance while majority of the advanced stock markets have established banking sectors (Demirguc-Kunt & Levine, 1996). In addition, companies located in countries with well-developed banks and stock markets develop quicker than predicted by individual company characteristics (Demirguc-Kunt & Maksimovic, 1996). Consequently, the stock prices have to reflect numerous macroeconomic variables in order to show current economic

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## **REFERENCES**

- Abreu, M., & Mendes, V. (2001). Commercial bank interest margins and profitability: evidence for some EU countries. In *Pan-European Conference Jointly Organised by the IEFS-UK & University of Macedonia Economic & Social Sciences, Thessaloniki, Greece, May* (pp. 17-20).
- Aebi, V., Sabato, G., & Schmid, M. (2012). Risk management, corporate governance, and bank performance in the financial crisis. *Journal of Banking & Finance*, 36(12), 3213-3226.
- Akella, S. R., & Chen, S. J. (1990). Interest rate sensitivity of bank stock returns: Specification effects and structural changes. *Journal of Financial Research*, 13(2), 147-154.
- Akhavain, J. D., Berger, A. N., & Humphrey, D. B. (1997). The effects of megamergers on efficiency and prices: Evidence from a bank profit function. *Review of Industrial Organization*, 12(1), 95-139.
- Almutair, S. (2015). Dynamics of the Relationship between Bank Loans and Stock Prices in Saudi Arabia. *The International Business & Economics Research Journal (Online)*, 14(3), 439.
- Angbazo, L. (1997). Commercial bank net interest margins, default risk, interest-rate risk, and off-balance sheet banking. *Journal of Banking & Finance*, 21(1), 55-87.
- Ariff, M. (1996). Effects of Financial Liberalization on Four Southeast Asian Financial Markets, 1973–94. *ASEAN Economic Bulletin*, 325-338.
- Asia Matters for America. <http://www.asiamattersforamerica.org/asean>

- Aviat, A., & Coeurdacier, N. (2007). The geography of trade in goods and asset holdings. *Journal of International Economics*, 71(1), 22-51.
- Athukoralge, P. C. (2001). Crisis and recovery in Malaysia: the role of capital controls. *Edward Elgar Publishing*.
- Bacha, O. I. (1998). Malaysia: From currency to banking crisis. *Malaysian Journal of Economic Studies*, 35(1/2), 73.
- Banz, R. W. (1981). The relationship between return and market value of common stocks. *Journal of financial economics*, 9(1), 3-18.
- Barber, B. M., & Lyon, J. D. (1997). Firm Size, Book-to-Market Ratio, and Security Returns: A Holdout Sample of Financial Firms. *The Journal of Finance*, 52(2), 875-883.
- Bashir, A. M. & Hassan, M.K. (2003). Determinants of Islamic Banking Profitability, presented on the ERF 10th Annual Conference.  
([www.erf.org.eg/tenthconf/Financial\\_Markets\\_Presented/Kabir\\_Bashir.pdf](http://www.erf.org.eg/tenthconf/Financial_Markets_Presented/Kabir_Bashir.pdf))
- Basel Committee on Banking Supervision, (2004), International Convergence of Capital Measurement and Capital Standards, Basel, BIS.
- Beccalli, E., Casu, B., & Girardone, C. (2006). Efficiency and stock performance in European banking. *Journal of Business Finance & Accounting*, 33(1-2), 245-262.
- Berger, A. N. (1995). The relationship between capital and earnings in banking. *Journal of money, credit and Banking*, 27(2), 432-456.
- Berger, A. N., Herring, R. J., & Szegö, G. P. (1995). The role of capital in financial institutions. *Journal of Banking & Finance*, 19(3), 393-430.

- Berger, A. N., & Bouwman, C. H. (2009). Bank capital, survival, and performance around financial crises. *Documento de trabajo, Wharton Financial Institutions Center*.  
*Disponible en: <http://fic.wharton.upenn.edu/fic/papers/09/0924.pdf>.*
- Berger, A. N., & Bouwman, C. H. (2013). How does capital affect bank performance during financial crises?. *Journal of Financial Economics*, 109(1), 146-176.
- Berger, A. N., Hanweck, G. A., & Humphrey, D. B. (1987). Competitive viability in banking: Scale, scope, and product mix economies. *Journal of monetary economics*, 20(3), 501-520.
- Biers, D. (1998). Crash of '97: how the financial crisis is reshaping Asia. *Far Eastern Economic Review (Hong Kong)*.
- Bikker, J. A., & Haaf, K. (2002). Competition, concentration and their relationship: An empirical analysis of the banking industry. *Journal of Banking & Finance*, 26(11), 2191-2214.
- Black, F. (1972). Capital market equilibrium with restricted borrowing. *The Journal of Business*, 45(3), 444-455.
- Boscaljon, B., & Ho, C. C. (2005). Information content of bank loan announcements to Asian corporations during periods of economic uncertainty. *Journal of Banking & Finance*, 29(2), 369-389.
- Bourke, P. (1989). Concentration and other determinants of bank profitability in Europe, North America and Australia. *Journal of Banking & Finance*, 13(1), 65-79.
- Boyd, J. H., & Runkle, D. E. (1993). Size and performance of banking firms: Testing the predictions of theory. *Journal of monetary economics*, 31(1), 47-67.

- Carvalho, D. R., Ferreira, M. A., & Matos, P. P. (2013). Lending relationships and the effect of bank distress: Evidence from the 2007-2009 financial crisis. *Available at SSRN 1696246*.
- Chen, N. K. (2001). Asset price fluctuations in Taiwan: Evidence from stock and real estate prices 1973 to 1992. *Journal of Asian Economics*, 12(2), 215-232.
- Chia, S. Y., & Pacini, M. (Eds.). (1997). *ASEAN in the new Asia: issues & trends* (Vol. 82). Institute of Southeast Asian Studies.
- Cohen, R. B., Gompers, P. A., & Vuolteenaho, T. (2002). Who underreacts to cash-flow news? Evidence from trading between individuals and institutions. *Journal of financial Economics*, 66(2), 409-462.
- Cooper, M. J., Jackson, W. E., & Patterson, G. A. (2003). Evidence of predictability in the cross-section of bank stock returns. *Journal of Banking & Finance*, 27(5), 817-850.
- Demirgüç-Kunt, A., & Huizinga, H. (1999). Determinants of commercial bank interest margins and profitability: some international evidence. *The World Bank Economic Review*, 13(2), 379-408.
- Demirgüç-Kunt, A., & Huizinga, H. (2010). Bank activity and funding strategies: The impact on risk and returns. *Journal of Financial Economics*, 98(3), 626-650.
- Demirgüç-Kunt, A., & Levine, R. (1996). Stock market development and financial intermediaries: stylized facts. *The World Bank Economic Review*, 10(2), 291-321.
- Demirgüç-Kunt, A., & Maksimovic, V. (1996). Stock market development and financing choices of firms. *The World Bank Economic Review*, 10(2), 341-369.

- Devakula, P. (2001, July). Monetary policy in Thailand: current challenges and Prospects. in *APFA 2001 Conference, Bangkok* (Vol. 24).
- DeYoung, R., & Hasan, I. (1998). The performance of de novo commercial banks: A profit efficiency approach. *Journal of Banking & Finance*, 22(5), 565-587.
- Elyasiani, E., & Mansur, I. (1998). Sensitivity of the bank stock returns distribution to changes in the level and volatility of interest rate: A GARCH-M model. *Journal of Banking & Finance*, 22(5), 535-563.
- Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *The Journal of Finance*, 47(2), 427-465.
- Fama, E. F., & MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *The Journal of Political Economy*, 607-636.
- Foong, L.K., Lok, T.W. & Hoon, Y.Y. (2012). The impact of macroeconomic variables on banks' stock returns: evidence from Malaysia. BSc. Degree research project. Universiti Tunku AbdulRahman Malaysia.
- Furletti, M. J. (2003). Credit card pricing developments and their disclosure. *Federal Reserve Bank of Philla Payment Cards Center Discussion Paper*, (03-02).
- Gandhi, P., & Lustig, H. (2010). *Size anomalies in US bank stock returns: A fiscal explanation* (No. w16553). National Bureau of Economic Research.
- Gelos, M. G. (2006). *Banking Spreads in Latin America* (No. 6-44). International Monetary Fund.
- Gertler, M., & Kiyotaki, N. (2010). Financial intermediation and credit policy in business cycle analysis. *Handbook of monetary economics*, 3(3), 547-599.

- Goddard, J., Molyneux, P., & Wilson, J. O. (2004). The profitability of European banks: a cross-sectional and dynamic panel analysis. *The Manchester School*, 72(3), 363-381.
- Handbook, C. (2010). Loan portfolio management, Comptroller of the Currency Administrator of National Banks, USA.
- Hanweck, G. A., & Ryu, L. H. (2005). The sensitivity of bank net interest margins and profitability to credit, interest-rate, and term-structure shocks across bank product specializations.
- Hasan, I., & Sarkar, S. (2002). Banks' option to lend, interest rate sensitivity, and credit availability. *Review of Derivatives Research*, 5(3), 213-250.
- Haslem, J. A. (1968). A statistical analysis of the relative profitability of commercial banks. *The Journal of finance*, 23(1), 167-176.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hsiao, C. (1986). *Analysis of Panel Data*, Econometric Society Monograph No. 11.
- Ho, T. S., & Saunders, A. (1981). The determinants of bank interest margins: theory and empirical evidence. *Journal of Financial and Quantitative analysis*, 16(04), 581-600.
- Holmstrom, B., & Tirole, J. (1997). Financial intermediation, loanable funds, and the real sector. *The Quarterly Journal of economics*, 663-691.

- Hughes, J. P., Lang, W. W., Mester, L. J., & Moon, C. G. (1999). The dollars and sense of bank consolidation. *Journal of banking & finance*, 23(2), 291-324.
- Humphrey, D. B., & Pulley, L. B. (1997). Banks' responses to deregulation: Profits, technology, and efficiency. *Journal of Money, Credit, and Banking*, 73-93.
- Ibrahim, M. H. (2006). Stock prices and bank loan dynamics in a developing country: The case of Malaysia. *Journal of Applied Economics*, 9(1), 71.
- Ioannidis, C., & Kontonikas, A. (2008). The impact of monetary policy on stock prices. *Journal of Policy Modeling*, 30(1), 33-53.
- Jeanneau, S., & Micu, M. (2002). Determinants of international bank lending to emerging market countries.
- Karim, B. A., Lih, L. S., & Karim, Z. A. (2012). Bank loans and stock prices: An empirical evidence. *Aceh International Journal of Social Science*, 1(2).
- Karkrah, J and Ameyaw. V. W. (2010). Information Finance Markets. Conclusions. New Agriculture is Transforming. Demand for Rural Financial Services
- Kim, S. B., & Moreno, R. (1994). Stock prices and bank lending behavior in Japan. *Economic Review-Federal Reserve Bank of San Francisco*, (1), 31.
- Kosmidou, K., Pasiouras, F., Doumpos, M., & Zopounidis, C. (2004). Foreign versus domestic banks' performance in the UK: a multicriteria approach. *Computational Management Science*, 1(3-4), 329-343.
- Kosmidou, K., & Zopounidis, C. (2008). Measurement of bank performance in Greece. *South- Eastern Europe Journal of Economics*, 1(1), 79-95.

- Kuttner, K. N. (2001). Monetary policy surprises and interest rates: Evidence from the Fed funds futures market. *Journal of monetary economics*, 47(3), 523-544.
- Laruccia, E., & Revoltella, D. (2000). Banking Systems Stability in Developing and Transition Economies: An Analysis of the Determinants of Moody's Bank Financial Strength Rating. *Banca commerciale italiana*.
- Le Bras, A., & Andrews, D. (2004). Bank rating methodology: Criteria report. *FitchRatings* (available at [www.fitchratings.com](http://www.fitchratings.com)), (25 May).
- Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. *American economic review*, 537-558.
- Liadaki, A., & Gaganis, C. (2010). Efficiency and stock performance of EU banks: is there a relationship? *Omega*, 38(5), 254-259
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *The review of economics and statistics*, 13-37.
- Lummer, S. L., & McConnell, J. J. (1989). Further evidence on the bank lending process and the capital-market response to bank loan agreements. *Journal of Financial Economics*, 25(1), 99-122.
- Madura, J., & Schnusenberg, O. (2000). Effect of Federal Reserve policies on bank equity returns. *Journal of Financial Research*, 23(4), 421-447.
- Madura, J., & Zarruk, E. R. (1995). Bank exposure to interest rate risk: A global perspective. *Journal of Financial Research*, 18(1), 1-13.
- Markowitz, H. (1952). Portfolio selection. *The journal of finance*, 7(1), 77-91.



- Mason H. K., Howard M. G., & Ncube B. (2006). Industry Forecasting Framework for Bank Margins, Black Book - From Bigger to Better: The Improving Business Models of Chain Banks, p137-152
- Meh, C. A., & Moran, K. (2010). The role of bank capital in the propagation of shocks. *Journal of Economic Dynamics and Control*, 34(3), 555-576.
- Merton, R. C. (1973). An intertemporal capital asset pricing model. *Econometrica: Journal of the Econometric Society*, 867-887.
- Molyneux, P., Thornton, J., 1992. Determinants of European bank profitability: a note. *J. Bank. Finance* 16 (6), 1173–1178.
- Mossin, J. (1966). Equilibrium in a capital asset market. *Econometrica: Journal of the econometric society*, 768-783.
- Musyoki, D., & Kadubo, A. S. (2012). The impact of credit risk management on the financial performance of Banks in Kenya for the period.
- Naceur, S. B. (2003). The determinants of the Tunisian banking industry profitability: Panel evidence. *Universite Libre de Tunis working papers*.
- Palac-McMiken, E. D. (1997). An examination of ASEAN stock markets: a cointegration approach. *ASEAN Economic Bulletin*, 299-311.
- Pasiouras, F., & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance*, 21(2), 222-237.

- Pasiouras, F., Gaganis, C., & Zopounidis, C. (2006). The impact of bank regulations, supervision, market structure, and bank characteristics on individual bank ratings: A cross-country analysis. *Review of Quantitative Finance and Accounting*, 27(4), 403-438.
- Pasiouras, F., Gaganis, C., & Doumpos, M. (2007). A multicriteria discrimination approach for the credit rating of Asian banks. *Annals of Finance*, 3(3), 351-367.
- Phuwanatnaranubala, T. (2005). Globalisation, financial markets and the operation of monetary policy: the case of Thailand. *BIS Papers*, 23, 269-274.
- Pilbeam, K. (2005). Financial Intermediation and Financial Markets. In *Finance and Financial Markets* (pp. 22-38). Macmillan Education UK.
- Poon, W. P., & Firth, M. (2005). Are unsolicited credit ratings lower? International evidence from bank ratings. *Journal of Business Finance & Accounting*, 32(9-10), 1741-1771.
- Poon, W. P., Lee, J., & Gup, B. E. (2009). Do solicitations matter in bank credit ratings? Results from a study of 72 countries. *Journal of Money, Credit and Banking*, 41(2-3), 285-314.
- Price, M. M. (1994). *Emerging stock markets: a complete investment guide to new markets around the world*. New York: McGraw-Hill.
- Rasiah, D. (2010). Review of literature and theories on determinants of commercial bank profitability. *Journal of Performance Management*, 23(1), 23.
- Ross, S. A. (1976). The arbitrage theory of capital asset pricing. *Journal of economic theory*, 13(3), 341-360.

- Rose, A. K., & Spiegel, M. M. (2004). A gravity model of sovereign lending: trade, default, and credit. *IMF Economic Review*, 51(1), 50-63.
- Saunders, A., & Schumacher, L. (2000). The determinants of bank interest rate margins: an international study. *Journal of international money and finance*, 19(6), 813-832.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The journal of finance*, 19(3), 425-442.
- Short, B. K. (1979). The relation between commercial bank profit rates and banking concentration in Canada, Western Europe, and Japan. *Journal of Banking & Finance*, 3(3), 209-219.
- Siregar, R. Y., & Choy, K. M. (2010). Determinants of international bank lending from the developed world to East Asia. *IMF Staff Papers*, 57(2), 484-516.
- Slovin, M. B., Sushka, M. E., & Polonchek, J. A. (1992). Informational externalities of seasoned equity issues: differences between banks and industrial firms. *Journal of Financial Economics*, 32(1), 87-101.
- Smirlock, M. (1985). Evidence on the (non) relationship between concentration and profitability in banking. *Journal of money, credit and Banking*, 17(1), 69-83.
- Staikouras, C. and G. Wood (2003). The Determinants of Bank Profitability in Europe, Paper presented at the European Applied Business Research Conference.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, 71(3), 393-410.

- Sufian, F., & Chong, R. R. (2008). Determinants of bank profitability in a developing economy: Empirical evidence from the Philippines. *Asian academy of management journal of accounting and finance*, 4(2), 91-112.
- Suna, L., & Changb, T. P. A. (2010). Comprehensive analysis of the effects of risk measures on bank efficiency: Evidence.
- Tongzon, J. L. (1998). *The economies of Southeast Asia: the growth and development of ASEAN economies*. Edward Elgar Publishing.
- Unite, A. A., & Sullivan, M. J. (2003). The effect of foreign entry and ownership structure on the Philippine domestic banking market. *Journal of Banking & Finance*, 27(12), 2323-2345.
- Van Roy, P. (2006). Is there a difference between solicited and unsolicited bank ratings and, if so, why?. *National Bank of Belgium working paper*.
- Vong, L. K. (2005). Loans and profitability of banks in Macao. *AMCM Quarterly Bulletin*, 2, 91-107.
- Vong, A. P., & Chan, H. S. (2009). Determinants of bank profitability in Macao. *Macau Monetary Research Bulletin*, 12(6), 93-113.
- Waheed, A., & Mathur, I. (1993). The effects of announcements of bank lending agreements on the market values of US banks. *Financial Management*, 119-127.
- World Federation of Exchanges (2013)  
<http://www.worldexchanges.org/home/index.php/statistics>

World Stock Exchange Fact Book (1997). Meridian securities markets. LLC: Austin.

Xu, Y. (2010). *Empirical Essays on the Stock Returns, Risk Management, and Liquidity Creation of Banks* (No. EPS-2010-188-F&A).

Yartey, C. A. (2008). The determinants of stock market development in emerging economies: is South Africa different?. *IMF Working Papers*, 1-31.

