

DETERMINANTS OF STOCK MARKET DEVELOPMENT IN ASIAN CONTINENT: DYNAMIC PANEL ANALYSIS



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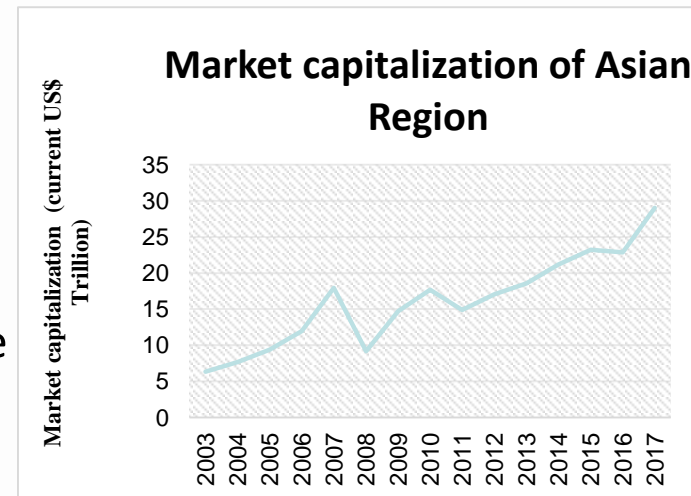
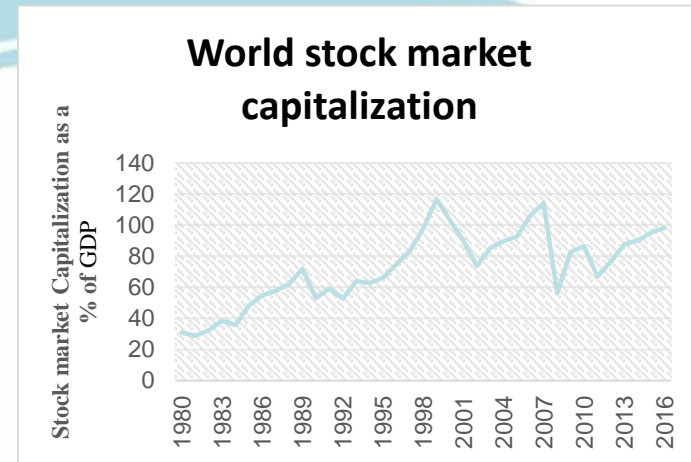
Flaw of the Session....

- ✓ Background of the Study
- ✓ Research Problem
- ✓ Research Objectives and Research Questions
- ✓ Significance of the Study
- ✓ Literature Review
- ✓ Methodology
- ✓ Data Presentation and Analysis
- ✓ Conclusion



Background of the Study

- ❖ Financial development is considered as a mechanism which subsidize to the economic growth.
- ❖ Stock Market is playing an vital part of the financial system.
- ❖ Stock market development is a multidimensional concept.
- ❖ Two sets of factors are affecting to the stock market development.
- ❖ Asia region is considered as the booming nations due to the prevailing diversification opportunities and growth potentials.





Research Problem

- lack of visible signs exist regarding investment in South and Southeast Asian Region, when compare to developed market.
- non-availability of information regarding the cross country transactions and the high transaction cost.
- little theoretical and empirical studies were conducted on this area.

According to the above reasons the main research problem is

What are the determinants which affect to the stock market development in Asian countries as whole?

Research Objectives and Questions

Objectives

- To explore the relationship between the determinants of stock market development in Asian Continent.

Research Questions

- What is the relationship between Macro Economic factors and Stock Market Development?
- What is the relationship between Institutional factors and Stock Market Development?



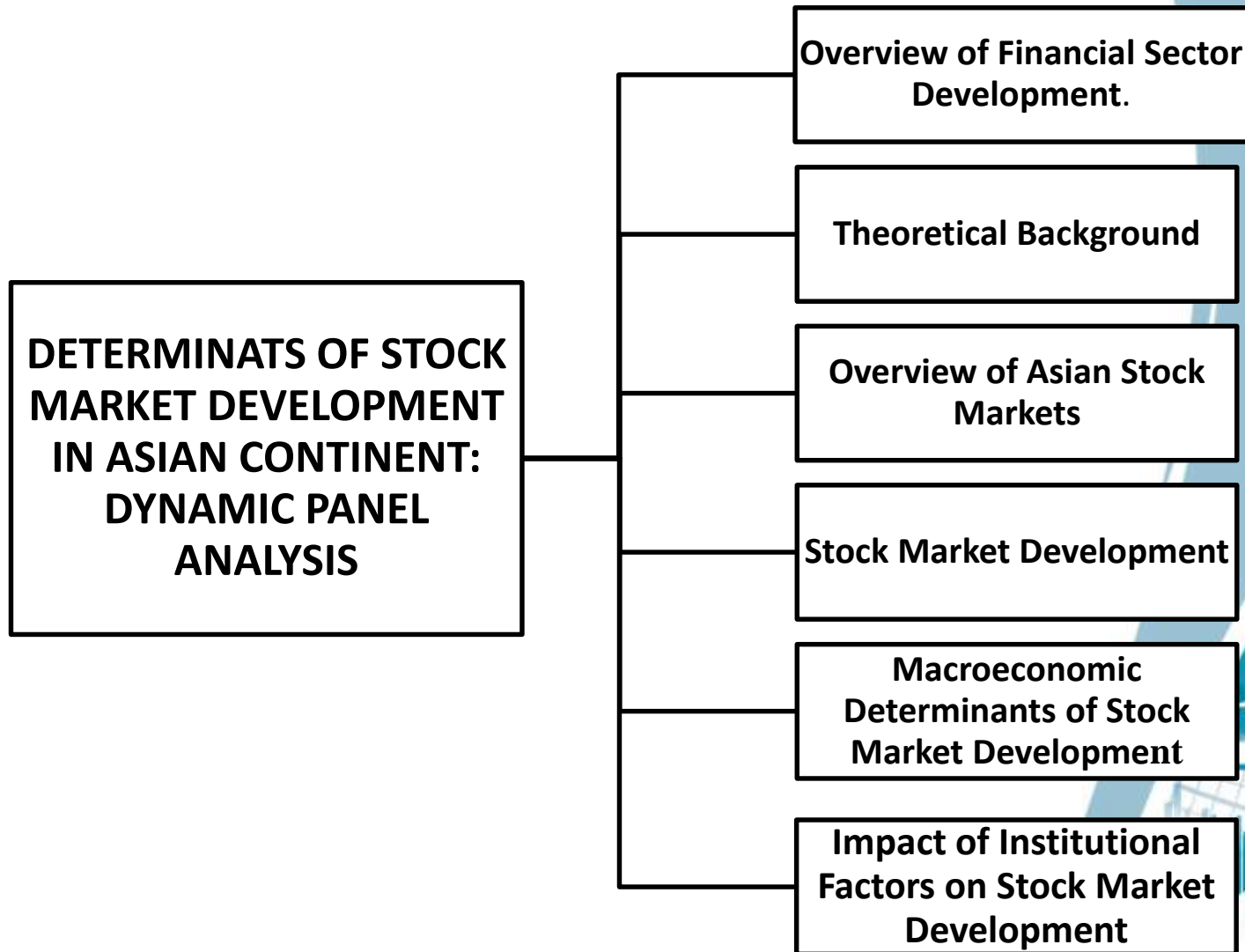
Research Hypothesis

- **H1** : There is a negative relationship between Macro Economic Stability and Stock Market development.
- **H2** : There is a positive relationship between FDI and Stock Market development.
- **H3** : There is a positive relationship between Initial Income and Stock Market development.
- **H4** : There is a positive relationship between Trade Openness and Stock Market development.
- **H5** : There is a positive relationship between Regulatory Quality and Stock Market development.

Significance of the Study

- Findings of this study would be important to the investors in order to identify the market trends, determine the portfolios, and crafting the competitive advantages and capabilities through invest in Asian countries.
- When considering the determinants of stock market development in Asian counties, there is lack of studies related to this area. So, this study would fill-up the literature gap.
- This study will concur the policy makers to determine the macroeconomic policies which are favorable to the stock market development.

Literature Review



Literature Review Continued..

| Researcher | Conclusion |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Jansen (1990) | Financial development leads to economic growth by the allocation of financial resources in efficient mobilized production factors. |
| Schumpeter (1912) | Financial structure of an economy can accelerate the economic growth by mobilizing of funds. |
| Goldsmith (1969) | Investment in self-capital finance, bank-intermediated debt finance and financial instruments in the equity market leads to economic development. |
| Thiam (2002) | Emerging trade relations among the Asian economies have increased the importance of Asian region. |
| Liu, Pan & Joseph (1998) | Equity markets in Asia are achieving vast impact on world capital markets and tempting investors throughout the world. |

Literature Review Continued..

| Researcher | Conclusion |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dailami & Atkin (1990) | A well-developed stock market helps to the development of the nation by performing as an investment vehicle. |
| Naceur, Ghazouani & Omran (2007) | There is significant relationship between saving rate, financial intermediary development, stock market liquidity and inflation with the stock market development. |
| Jun, Hongzhong, Thierry & Yannick (2015) | Stock market liquidity, foreign direct investment & private capital flows as major determinants of stock market development. |
| Bayar (2016) | Political stability, rule of law, regulatory quality and control of corruption have a significant impact on SMD. |
| Gani & Ngassam (2008) | Regulatory quality, government effectiveness has a negative influence on the development of the stock market. |

Methodology

➤ Conceptualization

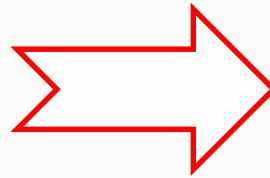
Independent Variables

(Macro-Economic Factors)

- Macroeconomic Stability
- Financial Liberalization
- Initial Income
- Trade Liberalization

(Institutional Factor)

- Regulatory Quality



Dependent Variable.

(Stock Market Development)

Size

- Market Capitalization Ratio

Research Design

Data

- Secondary Data from WDI & WGI 2013 to 2018.

Population

- 48 countries in the Asian Continent.

Sample

- 15 Countries in Asian Continent.

Method of Data Analysis and Presentation

- Analyzed by STATA statistical software.
- Used descriptive statistics.
- Used Pearson correlation analysis and system generalized movement method.

Econometric Model

$$SMD_{i,t} = \lambda SMD_{i,t-1} + \beta_1 INF_{i,t} + \beta_2 NFDI_{i,t} + \beta_3 RQUA_{i,t} + \beta_4 II_{i,t} + \beta_5 TL_{i,t} + \varepsilon_{i,t}$$

Where,

- $SMD_{i,t}$ = Stock Market Development in country i over time period t .
 $\lambda SMD_{i,t-1}$ = Lag of Stock Market Development in country i over time period t .
 $INF_{i,t}$ = Inflation rate in country i over time period t .
 $NFDI_{i,t}$ = Net Foreign Direct Investment in country i over time period t .
 $RQUA_{i,t}$ = Regulatory Quality in country i over time period t .
 $II_{i,t}$ = Initial Income in country i over time period t .
 $TL_{i,t}$ = Trade Liberalization in country i over time period t .
 $\varepsilon_{i,t}$ = The error term for each observation.

DATA ANALYSIS AND DISCUSSION

➤ Descriptive Statistics

| Variable | | Mean | Std. Dev. | Min | Max |
|----------|---------|---------|-----------|---------|---------|
| MCAP | overall | 138.729 | 258.73 | 6.45 | 1185.86 |
| | between | | 265.061 | 17.41 | 1072.68 |
| | within | | 25.1115 | -25.338 | 251.903 |
| INF | overall | 4.85802 | 3.57688 | -0.895 | 18.6775 |
| | between | | 2.90803 | 0.47639 | 8.88824 |
| | within | | 2.19375 | -2.2951 | 15.5038 |
| NFDI | overall | 5.70059 | 10.7046 | -0.0138 | 58.5149 |
| | between | | 10.6288 | 0.14448 | 39.0527 |
| | within | | 2.82177 | -5.4746 | 25.1628 |

Descriptive Statistics continued..

| Variable | | Mean | Std. Dev. | Min | Max |
|----------|---------|---------|-----------|---------|---------|
| RQUA | overall | 0.19115 | 0.9266 | -0.9514 | 2.26054 |
| | between | | 0.94973 | -0.8936 | 2.00099 |
| | within | | 0.08527 | -0.0238 | 0.4507 |
| TRAO | overall | 116.144 | 116.834 | 27.6547 | 442.62 |
| | between | | 119.985 | 31.7506 | 419.195 |
| | within | | 7.90839 | 82.387 | 139.569 |
| PCGDP | overall | 8.55048 | 1.41202 | 6.38382 | 10.9391 |
| | between | | 1.44906 | 6.52654 | 10.8829 |
| | within | | 0.10945 | 8.20511 | 8.80613 |

➤ Correlation Analysis (MCAP)

| | MCAP | INF | NFDI | RQUA | TRAO | PCGDP |
|-------|----------|-----------|----------|----------|----------|--------|
| MCAP | 1.0000 | | | | | |
| INF | -0.1778* | 1.0000 | | | | |
| NFDI | 0.8907** | -0.1488 | 1.0000 | | | |
| RQUA | 0.6649** | -0.5763** | 0.6871** | 1.0000 | | |
| TRAO | 0.8086** | -0.2098** | 0.8954** | 0.7610** | 1.0000 | |
| PCGDP | 0.5185** | -0.6857** | 0.5279** | 0.9492** | 0.6059** | 1.0000 |

* = significant at 5% and 10% ** = significant at both 5% and 10%

Source: Stata Output for Sample Data Set

➤ Two-step System GMM (MCAP)

| Variables | Coefficient | P. Value |
|---------------------|-------------|----------|
| MCAP _{t-1} | 0.331895 | 0.000 |
| INF | -1.651695 | 0.324 |
| NFDI | -4.022938 | 0.000 |
| RQUA | 225.6984 | 0.000 |
| TRAO | 0.2675127 | 0.081 |
| PCGDP | 14.77863 | 0.000 |
| Sargan Test | | 0.7427 |
| Order 1 | | 0.4468 |
| Order2 | | 0.9918 |

The Model can be Shows as,

$$MCAP_{it} = 0.3319MCAP_{i,t-1} - 4.0229NFDI_{i,t} + 225.6984RQUA_{i,t} + 14.7786PCGDP_{i,t} + \varepsilon_{i,t}$$

CONCLUSION

- Recognized a positive relationship among Financial Liberalization, Regulatory Quality, Trade Openness, Initial Income while negative relationship of Macro Economic Stability with Stock Market Development
- As a general conclusion, it is identified the previous year Stock market development, financial liberalization, initial income and regulatory quality are significant determinates which impact to the stock market development in Asian region vice versa.

RECOMMENDATIONS

- Keep inflation through the appropriate mixture of monetary and policies. Also, the government should establish controls on money supply, government spending and encourage the production sector.
- Stock market regulatory body should take steps to monitor the manipulation activities of companies and provide education about stock market activities and encourage householders to invest.
- The government should establish more liberalized economic procedures in stock markets.
- The government should establish policy implications for the liberalization of the trading activities.
- Establishing procedures to retain and enhance the per capita GDP.

THANK YOU

