THE FINANCE-GROWTH-CRISIS NEXUS IN INDIA AND SELECTED ASIAN COUNTRIES: CAUSALITY ANALYSIS BASED ON SUMMARY INDICATORS

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ABSTRAK

Kajian ini berkaitan pertumbuhan India dan pengalaman kewangannya selama tempoh 1982Q1~2007Q4, mengambil kira krisis kewangan dan represi kewangan ke dalam estimasi. Untuk tujuan ini, ringkasan penunjuk asal pembangunan kewangan, krisis kewangan dan represi kewangan dibentuk. Analisis kausalitas Granger dengan menggunakan kaedah VAR yang tak terbatas, VECM dan ARDL dilakukan. Penemuan utama adalah: (1) hubungan kausalitas kewangan-pertumbuhan bagi India adalah dua arah, tetapi lebih cenderung ke arah pertumbuhan → kewangan; (2) represi kewangan sangat penting bagi pertumbuhan ekonomi dan perkembangan kewangan tanpa mengira rentang waktu, dan (3) pertumbuhan ekonomi, pembangunan kewangan dan represi kewangan secara signifikan mempengaruhi krisis kewangan. Kajian diperluaskan ke atas empat negara Asia Indonesia, Korea, Malaysia dan Thailand, yang terkesan teruk dari krisis Asia selama tempoh 1997-1998. Bagi setiap negara, kami memperoleh estimasi yang signifikan tetapi arah hubungan pertumbuhan-kewangan bergantung kepada negara tertentu, pembangunan kewangan adalah disebabkan krisis kewangan (kecuali Korea di mana pertumbuhan disebabkan krisis).

ABSTRACT

In this paper, we first examine India's finance-growth-crisis nexus over the period of 1982Q1~2007Q4, taking the elements of financial crisis and financial repression into estimation. For this end, we create the original summary indicators of financial development, financial crisis and financial repression, respectively, and conduct Granger causality analysis employing those methods of unrestricted VAR, VECM and ARDL. Our main findings are: (1) India's finance-growth causality is bidirectional, more inclining toward the causation of growth→finance; (2) financial repression is crucial for both economic growth and financial development irrespective of time spans; and (3) economic growth, financial development and financial repression significantly influence financial crisis. Subsequently, our "Indian approach" is extended to four Asian countries of Indonesia, Korea, Malaysia and Thailand, all of which were severely hit by the Asian financial crisis over the period of 1997-1998. For each country, we obtain significant estimates and confirm that while the directions of finance-growth nexus are country-specific, financial development crucially causes financial crisis (except Korea where growth causes crisis).

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LIST OF ABBREVIATION

AIC	Akaike Information Criteria
ARDL	Autoregressive Distributed Lag
ARDL-ECM	Autoregressive Distributed Lag Error Correction Model
BA	Deposit Money Bank Assets
BATG	Deposit Money Bank Assets/GDP
BP Test	Bai and Perron Test
CRTD	Commercial Bank Reserve/Total Deposit
CRTG	Commercial Bank Reserve/GDP
CRTM	Commercial Bank Reserve/Money Supply
ECM	Error Correction Model
ECT	Error Correction Term
ED	External Debt
EG	Economic Growth Indicator
ER	Exchange rate
FC	Financial Crisis Indicator
FCD	Fiscal Deficit
FD	Financial Development Indicator
FR	Financial Repression Indicator
FSD	Financial Structure Dataset
GCE	Government Consumption Expenditure
GDP	Gross Domestic Product
GMM	Generalized Method of Moment
GTD	Claims on the Government/Total Domestic Credit
GTG	Claims on the Government/GDP
GTM	Claims on the Government/Money Supply
IFS	International Financial Statistics
IR	Inflation Rate
IT	Inflation Tax
KMO	Kaiser-Meyer-Olkin
MS	Money Supply
MSA	Measure of Sampling Adequacy
MTF	Money Supply / Foreign Exchange Reserve
MTG	Money Supply/GDP
NR	Nominal Interest Rate

NSE	National Stock Exchange
OP	Oil Price
OTCEI	Over the Counter Exchange of India
PC	Private Credit by Deposit Money Banks
PCFC	Principal Component for Financial Crisis
PCFD	Principal Component for Financial Development
PCFR	Principal Component for Financial Repression
PCTG	Private Credit by Deposit Money Banks/GDP
PCD	Pre-Crisis Dummy
RBI	Reserve Bank of India
RR	Real Interest Rate
SBC	Schwarz Bayesian Criterion
SBGD	Structural Break in Economic Growth Dummy
SEBI	Securities and Exchange Board of India
SGD	Shock in Economic Growth Dummy
SFCD	Shock in Financial Crisis Dummy
SFD	Shock in Financial Development Dummy
SKTG	Stock Market Capitalization/GDP
SKTGV	Stock Market Capitalization/GDP (Volatility)
SP	Share Price
SVTG	Stock Market Total Value /GDP
SVTGV	Stock Market Total Value /GDP (Volatility)
TD	Total Deposit
TV	Trade Volume
VAR	Vector Autoregression
VECM	Vector Error Correction Model
WDI	World Development Indicators
ZA Test	Zivot and Andrew Test

CHAPTER ONE
INTRODUCTION

1.1 Backgrounds

Since the financial liberalization literature was pioneered by McKinnon (1973) and Shaw (1973) and the endogenous growth literature (e.g., Greenwood and Jovanovic 1990; Bencivenga, and Smith, 1991) emphasized the role of financial intermediaries in economic growth, it has been a general concept in development economics that "finance does matter growth." This argument means that a well-designed financial system and/or the supply of more sophisticated financial services can best meet the needs of developing countries for accelerating economic growth, or that the high degree of banking development and/or stock market development has a positive impact on economic growth.

Inspired by those theoretical achievements, a number of empirical studies of finance-growth nexus have been conducted. However, especially in the multi-country framework, there has been a methodological controversy between cross-country (section) studies and time series ones.[1] A pioneering cross-country

1 There have been several empirical studies that question the linear specification and suggest the nonlinearity of

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