IMPACTS OF FINANCIAL DEPTH AND DOMESTIC CREDIT ON ECONOMIC GROWTH: THE CASES OF LOW AND MIDDLE-INCOME COUNTRIES FROM 1995-2014

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CONTENTS

INTRODUCTION

Problem statements:

- Many factors influence the development of economic growth. Financial development is considered as one of the most important stimulators.

- The impacts of financial development on economic growth have been widely examined but the results are controversial.

INTRODUCTION

Problem statements:

- The impacts of financial development on economic growth in low and middle-income countries are different from those in high-income countries.

INTRODUCTION

Research objectives:

- Are there any impacts of ratio of liquid liabilities to GDP on GDP growth rate?
- Are there any impacts of ratio of domestic credit to private sector by banks to GDP on GDP growth rate?

In the cases of low and middle-income countries from 1995-2014

LITERATURE REVIEW

❖ **Financial development definition:**

A process through which financial intermediaries and financial markets improve their scales and efficiency.

❖ **Channels through which financial development influences economic growth:**

1. Stimulating capital reserves
2. Improving investment productivities
3. Increasing investment rates

LITERATURE REVIEW

- **Roles of financial system:**

1. Providing information and distributing resources
2. Reducing costs of information and transaction
3. Mobilizing capitals
4. Facilitating transactions
5. Strenthening entrepreneur management

LITERATURE REVIEW

REFERENCES	KEY CONCLUSIONS
King & Levine (1993), Habibullah & Eng (2006), Ang & McKibbin (2007), Leitao (2010), Ndlovu (2013)	Financial development stimulates economic growth.
Levine & Zervose (1996)	Stock market and banking development have positive influence on economic growth.
Levine et al. (2000) , Beck et al. (2000)	Financial development is positively correlated with economic growth.
Fase & Abma (2003), Phan (2011)	Financial development has positive impacts on economic growth.
Wu et al. (2010)	Financial development is positively correlated with economic growth in the long run but negatively correlated in the short run.
Qayyum et al. (2004)	There is no correlation between financial development and economic growth.

LITERATURE REVIEW

❖ **Measurements of financial development indicators:**

1. **Ratio of liquid liabilities to GDP (DEPTH) (%)**
   - The sum of currency plus demand and interesting-bearing liabilities, owned by financial institutions, divided by GDP.
   - Illustrating “financial depth” or measurement of financial sector as a whole.

LITERATURE REVIEW

❖ **Measurements of financial development indicators:**

1. **Ratio of liquid liabilities to GDP (DEPTH) (%)**
2. **Ratio of domestic credit to private sector by banks (CREDIT) (%)**
   - The loans offered to private institutions by commercial banks, divided by GDP.
   - Illustrating how effectively and efficiently the financial systems work.

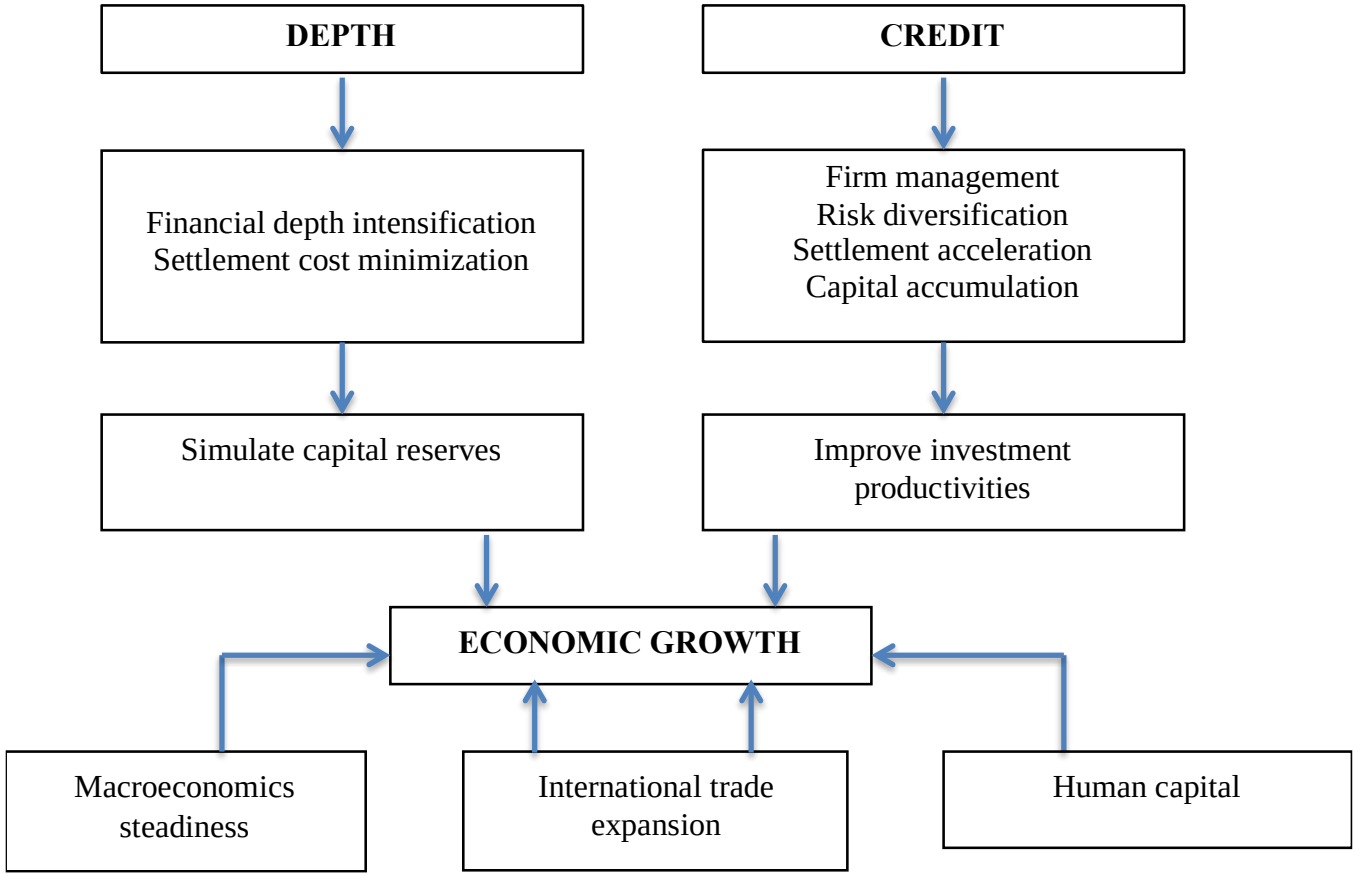
LITERATURE REVIEW

- **Measurements of control variables:**

1. Inflation rate (INFLATION) (%)
2. Ratio of government expenditures to GDP (GOVERNMENT) (%)
3. Ratio of exports and imports to GDP (TRADE) (%)
4. Secondary school enrollment rate (EDUCATION) (%)

LITERATURE REVIEW

❖ Analytical framework:



RESEARCH METHODOLOGY

❖ Model specification:

$$y_{it} = a + by_{i,y-i} + gx_{it} + m_i + l_t + e_{it}$$

$$GROWTH_{it} = a + bGROWTH_{i,t-1} + c_1 FD_{it} + c_2 INFLATION_{it} + c_3 GOVERNMENT_{it}$$
$$+ c_4 TRADE_{it} + X_5 EDUCATION_{it} + m_1 + l_t + e_{it}$$

(i = 1, …, N; t = 1, …, T)
(General estimation model) (3.1)

RESEARCH METHODOLOGY

- **Research methodology:**

1. Pooled OLS
2. Fixed effects method
3. Random effects method
4. Generalized method of moments

RESEARCH METHODOLOGY

❖ Pooled OLS, FEM and REM regression model:

$$GROWTH_{it} = a_0 + a_1 DEPTH_{it} + a_2 CREDIT_{it} + a_3 INFLATION_{it} + a_4 GOVERNMENT_{it} + a_5 TRADE_{it} + a_6 EDUCATION_{it} + u_{it}$$

(i = 1, …, N; t = 1, …, T)
(Static regression model) (3.2)

❖ GMM regression model:

$$GROWTH_{it} = a_0 + a_1 GROWTH_{i,t-1} + a_2 DEPTH_{it} + a_3 CREDIT_{it} + a_4 INFLATION_{it} + a_5 GOVERNMENT_{it} + a_6 TRADE_{it} + a_7 EDUCATION_{it} + u_{it}$$

(i = 1, …, N; t = 1, …, T)
(Dynamic regression model) (3.3)

DATA COLLECTION

VARIABLES	DATA SOURCE	INDICATOR NAME
GROWTH	World Development Indicators (World Bank)	GDP per capita growth (annual %)
DEPTH	World Development Indicators (World Bank)	Money and quasi money (M2) as % of GDP
CREDIT	World Development Indicators (World Bank)	Domestic credit to private sector by banks (% of GDP)
INFLATION	World Development Indicators (World Bank)	Inflation, GDP deflator (annual %)
GOVERNMENT	World Development Indicators (World Bank)	General government final consumption expenditures (% of GDP)
TRADE	World Development Indicators (World Bank)	Trade (% of GDP)
EDUCATION	World Development Indicators (World Bank)	Gross enrolment ratio, secondary, both sexes (%)

RESEARCH RESULTS

SUMMARY STATISTICS	OBS.	MEAN	STD. DEV.	MIN	MAX
GROWTH (%)	2366	2.781	6.096	-62.214	104.658
DEPTH (%)	2320	44.798	32.392	1.617	256.927
CREDIT (%)	2320	30.126	27.535	0.154	171.124
INLATION (%)	2364	16.793	135.726	-27.049	5399.507
GOVERNMENT (%)	2185	15.301	9.312	2.047	156.532
TRADE (%)	2297	81.167	37.677	0.021	321.632
EDUCATION (%)	1580	60.763	27.188	5.132	120.327

RESEARCH RESULTS

CORRELATIONS	DEPTH	CREDIT	INFLATION	GOVERNMENT	TRADE	EDUCATION
DEPTH	1					
CREDIT	0.671	1				
INFLATION	-0.105	-0.113	1			
GOVERNMENT	0.06	-0.018	-0.001	1		
TRADE	0.221	0.386	0.009	0.28	1	
EDUCATION	0.297	0.345	0.018	-0.007	0.241	1

RESEARCH RESULTS

VARIABLES	Pooled OLS Regression Results	Fixed Effects Model Regression Results	Random Effects Model Regression Results
DEPTH	-0.003	-0.024**	-0.003
	(0.009)	(0.014)	(0.009)
CREDIT	-0.051***	-0.064***	-0.051***
	(0.011)	(0.014)	(0.011)
INFLATION	-0.015***	-0.016***	-0.015***
	(0.003)	(0.003)	(0.003)
GOVERNMENT	-0.105***	-0.144***	-0.105***
	(0.023)	(0.032)	(0.023)
TRADE	0.037***	0.048***	0.037***
	(0.006)	(0.008)	(0.006)
EDUCATION	0.024**	0.021	0.024**
	(0.010)	(0.019)	(0.010)
Observations	1401	1401	1401

RESEARCH RESULTS

Discussions on FEM regression results:

- Credit projects have not been properly evaluated and credit decisions have not been carefully made ➔Reduce efficiency and effectiveness of social funds.
- Financial intermediaries have not properly performed their function of resource allocation.
- Resource allocation efficiently and effectively took place in other sectors, not banking sector.

RESEARCH RESULTS

VARIABLES	GMM Regression Results
GROWTH (-1)	0.069 (0.136)
DEPTH	-0.000 (0.007)
CREDIT	-0.025** (0.011)
INFLATION	-0.004** (0.002)
GOVERNMENT	-0.081*** (0.029)
TRADE	0.027** (0.015)
EDUCATION	0.014** (0.007)
Observations	1345

RESEARCH RESULTS

VARIABLES	GMM regression results	Impacts on economic growth
Ratio of liquid liabilities to GDP (%)	-0.000	Neutral
Ratio of domestic credit to private sector by banks to GDP (%)	-0.025**	Substitute
Inflation rate (%)	-0.004**	Substitute
Ratio of government expenditures to GDP (%)	-0.081***	Substitute
Ratio of exports and imports to GDP (%)	0.027**	Complement
Secondary education enrollment rate (%)	0.014**	Complement

RESEARCH RESULTS

Discussions on GMM regression results:

- High capability of providing transaction services has not ensured that capital resources have been efficiently and effectively utilized.
- High capability of allocating capital resources has not ensured investment productivity.

CONCLUSIONS

Main findings:

- CREDIT has negative impacts on GDP growth rate in low and middle-income countries from 1995-2014.
- DEPTH and CREDIT have failed to encourage economic growth in low and middle-income countries from 1995-2014.

CONCLUSIONS

Policy implications for low and middle-income countries:

- Reform credit making and supervising process.
- Improve information systems and reduce transaction costs.
- Look for other capital supplies and move domestic credit to other sectors.

CONCLUSIONS

Research limitations:

- More financial development indicators should be included.
- The impacts of stock market development on economic growth are not considered.

Thank You For Listening !