

2ND WORLD CONFERENCE ON MULTIDISCIPLINARY RESEARCH & INNOVATION (WCMRI)

*KEYNOTE SPEAKER

“DRIVERS OF TRADE OPENNESS IN MENA COUNTRIES”

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Venue: Online Platform

KEYNOTE SPEAKER: SHORT BIOGRAPHY



- Research areas: International Trade and Finance, Crowdfunding, Islamic Finance, Financial Technology and Affordable Housing/Property.
- An active researcher with contributions appearing in numerous international journals of finance and economics, reviewer and highly engaged in the industry grants.
- Invited by central banks from Malaysia and Indonesia, Asian Development Bank Institute (ADBI), State Government, universities, conference etc. to share his research findings on current issues like housing markets, fintech, digital economy, ESG etc.
- He is also appeared in local media and radio stations covering issues in finance and economics.
- Holding local, international and industry grants.
- Currently attached with the Kulliyyah of Economics and Management Sciences, International Islamic University Malaysia (IIUM) as an Associate Professor.

PLAN OF PRESENTATION

1. Research Problem, Gap, Questions, Objective
2. Trade Openness Theories
3. Data Sources, Variables, Test Equations, Hypotheses & Methodology
4. Findings
5. Conclusion



▶ **INTRODUCTION**

RESEARCH PROBLEM, QUESTION AND OBJECTIVE

Paucity of studies using recent data on how trade openness is related with theory-based macroeconomic factors in MENA economies: A gap in the literature found how these macro economic factors behave in MENA economies to drive trade openness. Classical & Modern Trade Theories predict significant factor effects driving trade openness in MENA economies. There is no systematic study to measure the relationship between Macroeconomic factors and trade openness in MENA countries sample.

□ **Research Question**

QR1: What is the relationship between trade openness and various macroeconomic indicators in MENA economies.

□ **Research Objective**

RO1: To investigate the relationship between trade openness and various macroeconomic indicators in MENA countries.

RESEARCH GAP

- This study aims to address this gap by establishing a relationship between the trade openness of MENA countries and its primary drivers, as proposed by various trade-economic theories, including Adam Smith's Laissez-Faire (1776), Mercantilism (16th to 19th century), Ricardo's theory (1817), Heckscher (1919) and Ohlin's model (1935), Schumpeter's innovation theory (1942), and Solow's growth model (1956).
- This research makes a second notable contribution to the international trade literature by analyzing the impact of trade drivers on trade openness within MENA economies. Prior studies in this domain have primarily focused on empirical results and have yet to consider the potential influences of multiple theoretical perspectives. Consequently, this study expands upon previous research by examining the theoretical foundations of trade drivers that promote trade openness in MENA countries.
- In this research study, we make a third significant contribution to the literature by utilizing data from Mena countries over 26 years and determining whether a long-run causal relationship exists rather than merely a relationship. Initially, we identified four drivers related to trade openness after conducting model-fitness tests (using stepwise AIC) and employing the latest panel regression methodology of pooled and fixed effects panel regressions. These findings suggest that the four drivers—(i) human capital, (ii) foreign direct net flow investment, (iii) gross national savings, and (iv) exchange rate—are associated with trade openness in MENA countries. Subsequently, cointegration tests (using Pedroni) reveal short-run and long-run integration relationships, indicating more than a simple relationship between trade openness and the four trade drivers. Finally, Granger causality tests suggest that flows from trade openness to the four theory-driven factors. To our knowledge, no study has explored the theory-driven factors influencing trade openness in the context of MENA countries.

SUMMARY OF THEORIES

Classical Trade Theories

- Adam Smith (1776)
- *Laissez-Faire* (19th century)
- Theory of Mercantilism (16th -19th century)

Modern Trade Theories

- Theory of Absolute Advantage Adam Smith (1776)
- Theory Comparative Advantage Ricardo's (1817)
- Factor-endowments Theory Heckscher (1919) and Ohlin (1933)
- Schumpeter Theory (1912)
- Growth Theory of Solow (1957)



▶ **METHODOLOGY**

Data Sources, and Estimation Techniques

Hypothesis 1: There is no relationship between trade openness factors and the measure of trade openness in MENA economies.

Data Source	WDI, IMF, E-Ikon Data base
Sample of Countries/Firms	MENA Economies
Test Period	t=1995... 2020
Data Item	Trade openness dependent variable and six factors are independent variables
Frequency	Data item collected at each year end for each country
Statistical Issues	Normality (Jurqa-Bera) serial correlation (Breusch-Pagan test), cross-correlation (VIF), stationary (ADF),
Econometric Issue	Winsorian tests, GDP used denominator to make variable comparable
Estimation Technique	SR, Pool OLS, FEM/REM, FMOLS, Granger Causality and Pedroni

TABLE OF VARIABLES

Panel A: Trade Openness Factors

Variables	Description	Symbol	Source	DV/IV
Trade openness	Trade/GDP	TOP	WDI	Dependent variable
Foreign direct net flow investment	FDI Net inflow/ GDP		WDI	X1 factor effect '+'
Savings	Gross national Savings	GNS	WDI	X2 factor effect '+'
Per capita income	Total GDP/Total Population	PCI	WDI	X3 factor effect '+'
Exchange rate	Exchange rate (Domestic Currency per U.S. Dollar, End of Period)	ER	WDI	X4 factor effect '+'
Human Capital	Total Population (Age 15 - 64)% of total population	HC	WDI	X5 factor effect '+'
Gross capital formation	Gross capital/GDP	GCF	IMF/WDI	X6 factor effect '+'
Trade Balance	Exports-Imports/GDP	TB	IMF/WDI	X7factor effect '+'

TEST EQUATIONS

Testing a relationship between the degree of trade-openness and the marginal effects of 6 factors driving the trade-openness of MENA economies. To achieve the objective of the study we specified model in Eq. 1.

$$\text{TOPEN}_{jt} = \theta_{jt} + \theta_{ij} (\text{GNS}_{ijt}) + \theta_{ij} (\text{FDI}_{ijt}) + \theta_{ij} (\text{TB}_{jt}) + \theta_{ij} (\text{ER}_{ijt}) \eta_{jt} + \theta_{ij} (\text{PCI}_{ijt}) + \theta_{ij} (\text{HC}_{ijt}) \eta_{jt} \dots \dots \dots (1)$$

Equation 1 hypothesized relationship between theory-suggested trade openness theory factors and the measure of trade openness in sample of MENA countries.



▶ **Findings and Conclusion**

PANEL REGRESSION RESULTS

Dep. Var. is TO	SR	Pooled	FEM	FMOLS
C	2.53 (0.21)	2.53*** (0.21)	29.22*** (2.12)	
HC	1.02*** (5.22)	1.02*** (5.22)	0.48** (2.26)	0.80* (1.70)
GNS	0.27*** (3.74)	0.27*** (3.74)	0.63*** (8.74)	0.78*** (6.69)
FDI	1.75*** (7.25)	1.74*** (7.25)	1.79*** (7.26)	1.74*** (7.25)
ER	-0.00*** (4.51)	-0.00*** (4.51)	0.00 (0.90)	0.00 (0.39)
Adj R²	0.32	0.32	0.76	0.75
F-test	39.29***	39.29***	69.62***	
B-P-LM		298.09***		
Hausman chi²			24.01***	

GRANGER-CAUSALITY RESULT

Null Hypotheses	F-Statistic	Prob.
No causation	0.61	0.54
HC → Granger-Cause TOPEN	5.23	0.00
GNS → Granger Cause TOPEN	3.74	0.02
No causation	0.52	0.58
FDI → Granger cause TOPEN	3.15	0.04
TOPEN → Granger caused FDI	5.25	0.00
ER → Granger causes TOPEN	0.67	0.51
TOPEN → Granger cause ER	1.61	0.31

FINDINGS

- The findings of this study support existing literature and empirical research by confirming the relationships between trade openness and four key macroeconomic factors, both in the short run and long term.
- The four major macroeconomic factors observe a consistent upward trend as trade openness increases. The study establishes a significant relationship between trade openness and these macro factors. Human capital, including education and skills, positively affects trade openness.
- Moreover, the study highlights that the degree of trade openness directly impacts the magnitude of these factors in MENA nations. Specifically, as trade openness intensifies, the effects of these macroeconomic factors on trade openness become more pronounced.
- Among the four factors examined, gross national savings (GNS) emerge as the most influential determinant of trade openness. Gross national savings reflect the prosperity achieved through economic policies that promote open trading. Furthermore, the study reveals that the exchange rate does not affect trade openness economically. This implies that changes in exchange rates do not significantly contribute to variations in trade openness. Instead, it is the presence of substantial gross national savings and the associated economic benefits that primarily drive trade openness.

CONCLUSION

- The results show both long-run and short-term relationships between trade openness and (i) human capital, (ii) gross national savings, (iii) foreign direct net flow investment (iv) exchange rate.
- The researchers also detected unidirectional and bidirectional causality relationships between trade openness to these four factors.
- The study also revealed that gross national savings (GNS) emerge as the most influential determinant of trade openness, and the exchange rate does not exhibit economic significance concerning the trade openness of MENA countries.

POLICY IMPLICATIONS

- ❑ Policymakers should prioritize macroeconomic factors that foster trade openness within MENA countries. MENA countries' governments should formulate and execute trade strategies that drive their nations toward global openness.
- ❑ Trade determinants such as human capital, gross national savings, foreign direct net flow investment, and exchange rate play significant roles in the short- and long-run dynamics of trade openness in MENA economies.
- ❑ FDI, an investment in a foreign country by an entity or individual from another country, can stimulate trade openness by contributing capital and know-how to domestic businesses. This enables MENA nations to broaden their operations and penetrate novel markets. Furthermore, FDI can foster job creation and enhance productivity, propelling economic growth. The relationship between human capital and trade openness is also noteworthy.
- ❑ An increased human capital in MENA nations can heighten demand for goods and services, both domestically and globally, potentially leading to augmented trade. This increment in trade can, in turn, generate new employment opportunities, thus further enhancing human capital. High savings rates in MENA countries tend to be related to higher levels of trade openness, as more resources are available for investment in trade-related activities.
- ❑ Higher savings can lead to increased investment in trade infrastructure, such as ports and transportation systems, improving a country's ability to engage in international trade. The exchange rate policy also impacts a country's trade balance in MENA economies. For instance, devaluing a country's currency could make its exports cheaper and thus more attractive, which could increase the trade balance. Conversely, a stronger currency could make imports cheaper, leading to a trade deficit if not well managed.

LIMITATION AND FUTURE DIRECTION

- Like any scholarly work, this research has limitations, which may inspire future inquiries. The present multi-country study implements a multi-model testing methodology, examining data related to trade openness and its theorized drivers within a sample of MENA economies.
- This is recognized as a foundation for novel insights and presents various opportunities for further research. For instance, assessing the validity and reliability of the proposed multi-model testing technique in diverse geographic regions, such as the Gulf and South Asian Association for Regional Cooperation (SAARC) regions, could prove intriguing.
- The current research encourages scholars to explore additional trade theory-suggested factors influencing trade openness in various geographic contexts. The data utilized in this study were sourced from the World Trade Organization (WTO) and spanned from 1995 to 2020. Future research may consider adopting different time frames, such as data from the United Nations Conference on Trade and Development (UNCTAD) between 1964 and 2020 or from Uruguay between 1995 and 2020.



THANK YOU