## E-COMMERCE TRANSACTIONS INTERNET USERS AND FIXED BROADBAND SUBSCRIPTIONS AS DRIVERS ON THE ECONOMIC GROWTH IN THE 6 ASEAN COUNTRIES



SUBMITTED TO THE FACULTY OF ISLAMIC ECONOMICS AND BUSINESS SUNAN KALIJAGA STATE ISLAMIC UNIVERSITY YOGYAKARTA AS ONE OF THE REQUIREMENTS TO OBTAIN A BACHELOR'S DEGREE IN ISLAMIC ECONOMICS

ARRANGED BY :
MUHAMMAD FASYA SYAHRAUSAN
NIM 20108010050

E ISLAMIC UNIVERSI

SHARIA ECONOMICS STUDY PROGRAM
FACULTY OF ISLAMIC ECONOMICS AND BUSINESS
UIN SUNAN KALIJAGA YOGYAKARTA

2024

## E-COMMERCE TRANSACTIONS, INTERNET USERS AND FIXED BROADBAND SUBSCRIPTIONS AS DRIVERS ON ECONOMIC GROWTH IN 6 ASEAN COUNTRIES



ACC Munagusah /2024

RISWANTI BUDI S.

ARRANGED BY:

MUHAMMAD FASYA SYAHRAUSAN

NIM 20108010050

SUPERVISOR

RISWANTI BUDI SEKARINGSIH, M.Sc.

NIP. 19851009 201801 2 001

SHARIA ECONOMICS STUDY PROGRAM

FACULTY OF ISLAMIC ECONOMICS AND BUSINESS

UIN SUNAN KALIJAGA YOGYAKARTA

## HALAMAN PENGESAHAN TUGAS AKHIR



## KEMENTERIAN AGAMA UNIVERSITAS ISLAM NEGERI SUNAN KALIJAGA FAKULTAS EKONOMI DAN BISNIS ISLAM

Jl. Marsda Adisucipto Telp. (0274) 550821, 512474 Fax. (0274) 586117 Yogyakarta 55281

## PENGESAHAN TUGAS AKHIR

Nomor: B-1785/Un.02/DEB/PP.00.9/12/2024

Tugas Akhir dengan judul :E-COMMERCE TRANSACTIONS INTERNET USERS AND FIXED BROADBAND

SUBSCRIPTIONS AS DRIVERS ON ECONOMIC GROWTH IN THE 6 ASEAN

COUNTRIES

yang dipersiapkan dan disusun oleh:

Nama : MUHAMMAD FASYA SYAHRAUSAN

Nomor Induk Mahasiswa : 20108010050

Telah diujikan pada : Selasa, 19 November 2024

Nilai ujian Tugas Akhir : A

dinyatakan telah diterima oleh Fakultas Ekonomi dan Bisnis Islam UIN Sunan Kalijaga Yogyakarta

### TIM UJIAN TUGAS AKHIR



Ketua Sidang

Riswanti Budi Sekaringsih, M.Sc.

SIGNED

Valid ID: 675ed257b2f60



Penguji I

Dr. Sunaryati, SE., M.Si. SIGNED

Valid ID: 67528d88e4e44



Penguji II

Anggari Marya Kresnowati, S.E, M.E. SIGNED

Valid ID: 676114ddcea0t





Yogyakarta, 19 November 2024 UIN Sunan Kalijaga

Dekan Fakultas Ekonomi dan Bisnis Islam

Prof. Dr. Misnen Ardiansyah, S.E., M.Si., Ak., CA., ACPA. SIGNED

1.

18/12/2024

## HALAMAN PERSETUJUAN SKRIPSI

Hal : Skripsi Saudara Muhammad Fasya Syahrausan

Kepada

Yth. Dekan Fakultas Ekonomi dan Bisnis Islam UIN Sunan Kalijaga Yogyakarta

Di - Yogyakarta

Assalamualaikum Wr. Wb.

Setelah membaca, meneliti, memberikan petunjuk dan mengoreksi serta mengadakan perbaikan seperlunya, maka kami selaku pembimbing berpendapat bahwa skripsi saudara:

Nama : Muhammad Fasya Syahrausan

NIM : 20108010050

Judul skripsi: E-commerce Transactions, Internet Users, Fixed Broadband

Subscriptions as Drivers on Economic Growth in the 6 ASEAN

Countries.

Sudah dapat diajukan kepada Fakultas Ekonomi dan Bisnis Islam Jurusan/ Prodi Ekonomi Syariah UIN Sunan Kalijaga Yogyakarta sebagai salah satu syarat untuk memperoleh gelar sarjana Strata Satu dalam Ilmu Ekonomi Islam.

Dengan ini kami mengharap agar Skripsi saudara tersebut dapat segera dimunaqasyahkan. Untuk itu kami ucapkan terimakasih.

Wassalamu'alaikum Wr. Wb.

Yogyakarta, 11 November 2024

Pembimbing

2

Riswanti Budi Sekaringsih, M.Sc., NIP. 19851009 201801 2 001

## HALAMAN PERSETUJUAN PUBLIKASI UNTUK KEPENTINGAN AKADEMIK

Sebagai civitas akademika UIN Sunan Kalijaga Yogyakarta, saya yang bertanda tangan di bawah ini :

Nama

: Muhammad Fasya Syahrausan

NIM

: 20108010050

Program Studi

: Ekonomi Syariah

Fakultas

: Ekonomi Bisnis Islam

Jenis Karya

: Skripsi

Demi pengembangan Ilmu pengetahuan, menyetujui untuk memberikan kepada UIN Sunan Kalijaga Yogyakarta Hak Bebas Royalti Non eksekutif (non-exclusive royalty free right) atas karya ilmiah saya yang berjudul:

"E-commerce Transactions, Internet Users, Fixed Broadband Subscriptions as drivers on Economic Growth in 6 ASEAN Countries."

Beserta perangkat yang ada (jika diperlukan). Dengan Hak Bebas Royalti Non-Eksekutif ini, UIN Sunan Kalijaga Yogyakarta berhak menyimpan, mengalihmedia/formatkan, mengelola, dalam bentuk pangkalan data (database), merawat dan mempublikasikan tugas akhir saya selama tetap mencantumkan nama saya sebagai penulis/pencipta dan sebagai pemilik hak cipta.

Demikian pernyataan ini saya buat dengan sebenarnya.

Yogyakarta, 11 November 2024

(Muhammad Fasya Syahrausan)

## SURAT PERNYATAAN KEASLIAN

Saya yang bertanda tangan di bawah ini:

Nama : Muhammad Fasya Syahrausan

NIM : 20108010050

Jurusan/Program Studi : Ekonomi Syariah

Menyatakan bahwa skripsi yang berjudul "E-commerce Transactions, Internet Users, Fixed Broadband Subscriptions as drivers on Economic Growth in 6 ASEAN Countries." adalah benar-benar merupakan karya penyusunan sendiri, bukan duplikasi atau saduran dari karya orang lain kecuali pada bagian yang telah dirujuk dan disebut dalam bodynote dan daftra pustaka. Apabila di lain waktu terbukti adanya penyimpangan dalam karya ini, maka tanggung jawab sepenuhnya pada penyusun.

Demikian surat pernyataan ini saya buat agar dapat dimaklumi.

AIC UNIVERSITY

Yogyakarta 11 November 202

Penyusun

Muhammad Fasya Syahrausan

## HALAMAN TRANSLITERASI

Transliterasi kata-kata Arab yang dipakai dalam penyusunan skripsi ini berpedoman pada Surat Keputusan Bersama Menteri Agama dan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor: 158/1987 dan 0543b/U/1987.

## A. Konsonan Tunggal

Huruf Arab	Nama	Huruf Latin	Keterangan
1	Alif	Tidak dilambangkan	Tidak dilambangkan
ب	Bā'	b	Be
ت	Tā'	t	Те
ث	Śā'	İ	Es (dengan titik di atas)
ح	Jīm	j	Je
z STA	́Нā'	MIC INNIVE	Ha (dengan titik di
SU	VAN	KALII	bawah)
ż Y (	Khā'	AKAR	Ka dan ha
٦	Dāl	d	De
ذ	Żāl	Ż	Zet (dengan titik diatas)
J	Rā'	R	Er

j	Zāi	Z	Zet
m	Sīn	S	Es
<del>ش</del>	Syīn	Sy	Es dan Ye
ص	Sād	Ş	Es (dengan titik di bawah)
ض	Dād	Ď	De (dengan titik di bawah)
ط	Tā'	Ţ	Te (dengan titik di bawah)
ظ	Zā'	Z	Zet (dengan titik di bawah)
ع	'Ain		Koma terbalik diatas
غ	Gain	G	Ge
ف	Fā'	F	Ef
ق	Qāf	Q	Qi
STA	Kāf	MIC UNIVER	Ka
J Y (	Lām	AKAR	T A EI
٩	Mi	M	Em
ن	Nun	N	En
و	Wawu	W	We
ه	Ha'	Н	На

۶	Hamzah	۲	Apostrof
ي	Yā'	Y	Ye

## B. Konsonan Rangkap karena Syaddah Ditulis Rangkap

متعددة	Ditulis	Muta'addidah
عدة	Ditulis	ʻiddah

## C. Konsonan Tunggal

Semua ta' marbuttah ditulis dengan h, baik berada pada kata tunggal ataupun berada di tengah penggabungan kata (kata yang diikuti oleh kata sandang "al"). Ketentuan ini tidak diperlukan bagi kata-kata arab yang sudah terserap dalam bahasa Indonesia, seperti shalat, zakat dan sebagainya kecuali dikehendaki kata aslinya.

حكمة	Ditulis	Hikmah
علّة	Ditulis	ʻillah
E ISLA كرمة الألياء	Ditulis	Karamah al auliya'

## D. Vokal Pendek dan Penerapannya

Semua ta' marbuttah ditulis dengan h, baik berada pada kata tunggal ataupun berada di tengah penggabungan kata (kata yang diikuti oleh kata sandang "al"). Ketentuan ini tidak diperlukan bagi kata-kata arab yang sudah terserap dalam bahasa Indonesia, seperti shalat, zakat dan sebagainya kecuali dikehendaki kata aslinya.

Ć	Fathah	Ditulis	A
<b></b> ़	Kasrah	Ditulis	I
ć	Dammah	Ditulis	U
1:	T. 4. 1	D': 1'	П , 1
فعل	Fathah	Ditulis	Fa'ala
ذكر يذهب	Kasrah Dammah	Ditulis	Żukira Yażhabu

## E. Vokal Panjang

Fathah + alif	Ditulis	$ar{A}$
جاهليّة	Ditulis	Jāhiliyyah
Fathah + ya' mati	Ditulis	$ar{A}$
تنسى	Ditulis	Tansā
Kasrah + ya' mati	Ditulis	Ī
کریم	Ditulis	Karīm
Dhammah + wawu mati	Ditulis	$ar{U}$
فروض	Ditulis	Furūḍ

## F. Vokal Rangkap

Fatḥah + yā' mati	/ Ditulis	RSITY Ai
بينكم	Ditulis	Bainakum
Fatḥah + wāwu mati	Ditulis	R T AAu
قول	Ditulis	Qaul

## G. Vokal Pendek yang Berurutan dalam Satu Kata Dipisahkan dengan Apostrof

أأنتم	Ditulis	A'antum
أعدت	Ditulis	U'iddat
لئن شكرتم	Ditulis	La'in syakartum

## H. Kata Sandang Alif + Lam

1. Bila diikuti huruf *Qamariyyah* maka ditulis menggunakan huruf awal "al".

القرآن	Ditulis	Al-Quran
القياس	Ditulis	Al-Qiyas

2. Bila diikuti huruf *Syamsiyyah* maka ditulis sesuai dengan huruf pertama

Syamsiyyah tersebut.

لسماء	1	Ditulis	As-Samā'
شمس	i)	Ditulis	Asy-syams

## I. Penulisan Kata-Kata dalam Rangkaian Kalimat

Ditulis menurut penulisannya

ذوي الفروض	Ditulis	Zawī al-furūḍ
أهل السّنّة	Ditulis	Ahl as-sunnah

## **HALAMAN MOTTO**

"The best of people are those Who are the most beneficial to people."



## **HALAMAN PERSEMBAHAN**

Segala puji syukur kehadirat Allah SWT, atas segala rahmat dan karunia-Nya yang tiada terhingga. Hanya atas izin-Nya lah segala kebaikan dapat terselesaikan.

Shalawat serta Salam senantiasa ditasbihkan kepada junjungan kita, suri tauladan kita, Rasulullah Muhammad SAW.

Skripsi ini saya persembahkan untuk

Keluarga saya terkhusus kedua Orangtua saya Bpk. R. Lukman Fauroni dan Ibu Indah Sri Sayekti tak lupa adik saya Raffa Aghna Haigar.

Seluruh Guru-Guru saya, yang tulus memberikan ilmu, motivasi, dan segala Pendidikan yang saya dapat selama ini.

Selain itu sahabat sa<mark>ya, kerabat ser</mark>ta demi terciptanya kemajuan dan keabadian Ilmu, baik nasional hingga internasional.

Semoga Skripsi ini dapat kemudian bermanfaat bagi maslahat banyak hal kelak.



## **FOREWORD**

By mentioning the name of Allah, the Most Compassionate, the Most Merciful, thanks be to Allah SWT who has given His grace and guidance, so that researchers can complete the thesis entitled "E-commerce Transactions, Internet Users, Fixed Broadband Subscriptions as Drivers on Economic Growth in the 6 ASEAN Countries." Sholawat and salam may remain in the presence of our Prophet, Rasulullah Muhammad SAW.

Alhamdulillah 'ala kulli haal wa ni'mah, finally this thesis can be realized. Therefore, on this occasion it is appropriate for the compiler to express his gratitude to:

- 1. Prof. Noorhaidi Hasan, M.A., M.Phil., Ph.D as the Rector of Sunan Kalijaga State Islamic University.
- 2. Prof. Dr. Misnen Ardiansyah, S.E., M.Si., Ak., CA., ACPA, as the Dean of the Faculty of Economics and Islamic Business.
- 3. Dr. Miftakhul Choiri, S.Sos.I., M.S.I, as Head of the Sharia Economics Study Program, Faculty of Economics and Islamic Business, UIN Sunan Kalijaga Yogyakarta.
- 4. Mrs. Riswanti Budi Sekaringsih, M.Sc. as Thesis Supervisor who is always patient and sincere in guiding and directing the author from the beginning until the completion of this thesis.
- 5. Dr. Abdul Qoyyum, SEI, M.Sc.Fin as Academic Supervisor and All Lecturers of the Sharia Economics Study Program, Faculty of Economics and Islamic Business who have provided knowledge and insights during the study period.
- 6. All employees and administrative staff of the Faculty of Economics and Islamic Business, UIN Sunan Kalijaga Yogyakarta.
- 7. To My Heaven, Beloved Parents Mrs. Indah Sri Sayekti and Mr. R. Lukman Fauroni, also my only little brother Raffa Aghna Haigar, who never stop to provide support both in terms of moral and material as well as prayers that everytime never break to me so that the preparation of this thesis can be finally completed properly.

- 8. To my friends in arms, second small family: Rico Dwi Putra, Iqbal Effendi, Rifqi Al-Naquib, Muh. Faroqi, Dina Affra, Sofiatul Husna, Shinta Rachmawati, Hayyina, and Bunga who have contributed to give many good days KKN before starting the journey of my lectures.
- 9. To my best friends, Gabriel Al-Hudhary and Adhitia Yusuf, who have given me blindspot perspective to keep surviving in life.
- To my beloved friend and always that accompanying me during the lecture period, Neysa Khairina Nur Said who always encourages me to complete the lecture level.
- 11. Alvian Dwi Chandra, Irgi Nur Ardzi, Muhamad Zulfikar, Qolbi Alhaafiz, Lutfi Muthi Fiwari, Ari Aryanto, Hanifuddin, Anggi Puji and All students of Sharia Economics FEBI UIN Sunan Kalijaga class of 2020 who have accompanied me in taking lectures.
- 12. All elements that cannot be mentioned one by one that have helped in the preparation of this thesis.

May Allah SWT bless the kindness and services of all of them with His best grace and goodness. The author realizes that this thesis is still far from perfection, for that with an open heart the author receives constructive criticism and suggestions, hopefully this thesis can be useful for those who read and study it.

STATE ISLAMIC U Yogyakarta, 11 November 2024
SUNA Author,
Author,
(Muhammad Fasya Syahrausan)

## TABLE OF CONTENTS

HALA	MAN JUDUL	i
HALA	MAN PENGESAHAN TUGAS AKHIR	ii
HALA	MAN PERSETUJUAN TUGAS AKHIR	iii
	MAN PERSETUJUAN PUBLIKASI UNTUK KEPENTING	
AKAD	EMIK	iv
SURA'	T PERNYATAAN KEASLIAN	v
HALA	MAN TRAN <mark>SLITE</mark> RASI	vi
HALA	MAN MOTTO	xi
	MAN PERSEMBAHAN	
	WORD	
TABL	E OF CONTENTS	XV
LIST (	OF TABLES	xvii
	OF FIGURES	
	RACT	
CHAP	TER I INTRODUCTION	
1.1	Background	
1.2	Research Question	10
1.3	Research Purposes  Benefits of Research	10
1.4	Benefits of Research	10
1.5		
CHAP	TER II THEORETICAL FRAMEWORK Theoretical Framework	13
2.1	Theoretical Framework	13
2.2	Literature Review	29
2.3	Framework	44
2.4	Research Hypothesis	45
CHAP	TER III RESEARCH METHODOLOGY	48
3.1	Type of Research	48
3.2	Variable Operational Definitions	49
3.3	Analytical Method	51

CHAPTER :	IV RESULTS AND DISCUSSIONS	62		
4.1 RES	ULTS	62		
4.1.1	Descriptive Statistic	62		
4.1.2	Analysis of Hypothesis Test Results	64		
4.1.3	The Model Specification Test	65		
4.1.4	Classical Assumsion Test	67		
4.1.5	Hypothesis Test	70		
4.2 DIS	CUSSION	74		
4.2.1	The impact of E-commerce Transaction Value on GDP per			
capita		74		
4.2.2	The impact of Internet Users on GDP per capita	75		
4.2.3	The impact of Fixed Broadband Subscriptions per capita	76		
CHAPTER	V CONCLUSION AND SUGGESTION	78		
5.1 Conclusion				
5.2 Suggestion				
REFERENC	CES	81		
ATTACHM	ENTS	86		

# STATE ISLAMIC UNIVERSITY SUNAN KALIJAGA YOGYAKARTA

## LIST OF TABLES

Table 1. Previous Studies	38
Table 2. Descriptive Statistic.	62
Table 3. Model Estimation Results.	64
Table 4. Hausman Test Result.	66
Table 5. Fixed Effect Model.	66
Table 6. Multicollinearity Test Results.	68
Table 7. Heteroskedasticity Test Results.	69
Table 8. F Test Result.	70
Table 9. T Test Result.	72
Table 10. The Coefficient of Determination Result	73



## LIST OF FIGURES

Figure 1: The Level of ICT Use in ASEAN Countries (per 100 Persons)	5
Figure 2 : Framework of Research.	45



## **ABSTRACT**

Concerns about the business sectors are raised by the current state of technology, particularly for Indonesia and other ASEAN nations. The purpose of this study is to determine how the variables of E-commerce transactions, Internet users, and fixed broadband subscriptions, affect economic growth as measured by GDP per capita in the six ASEAN countries—Indonesia, Malaysia, Brunei Darussalam, Thailand, the Philippines, and Singapore—over the period of 2015–2022. The results of this study clarify whether the variables of E-Commerce Transactions Value and Fixed Broadband Subscriptions have a beneficial impact on GDP per capita by employing Panel Data analysis techniques through the Fixed Effect Model (FEM) methodology. Meanwhile Internet Users variable has no effect on GDP per capita of these six countries in this research, so government need to evaluate and educate the Internet Users in order to be effective in maintaining their utilization of this advanced technology for increasing economic growth scale.

**KEYWORDS:** E-Commerce Transactions, Internet Users, Fixed Broadband Subscriptions, Technology, Consumptions, GDP, Economic Growth.



## **CHAPTER I**

## INTRODUCTION

## 1.1 Background

A rapid rise of technology has contributed to an industrial revolution which economics is one of the many sectors that depends on information and communication technology. Information and communication technology (ICT) has developed in many sectors, including the manufacturing industry, resulting in new business models. Technological advancements contribute to economic development and contribute to a country's growth (Arsyad, 1999; Cette et al., 2005; Choi & Yi, 2009), increasing productivity and efficiency and creating competition in the market (Choi & Yi, 2009).

Economic growth is a critical factor that cannot be overlooked in the development of the economy and society. Economic growth is one of the key success indicators in a country's development. The growth and prosperity of an economy is indicated by the changes in national output (Ma'ruf & Latri Wihastuti, 2008). According to Karl E. Case and Ray C. Fair (2006), increasing total output in a given economy occurs when people buy new goods or learn how to use more goods.

E-commerce platform and digital transactions are increasingly improving people's practicality and efficiency by increasing the number of people using the internet and social media, with the majority of them are digitally informed customers (Widagdo, 2020). According to Esfandiar Jahangard and Zeinabsadat Pourahmadi (2013), e-commerce has a positive impact on economic growth through

the dissemination of ideas and information, and can be used as a primary input in economic activities. At its core, e-commerce transactions contribute positively to Indonesia's economic growth. E-commerce refers to any type of transaction that occurs over the internet or other electronic networks. As an example, a network or marketplace that sells physical or digital goods via the Internet.

The Covid-19 pandemic and the Fourth Industrial Revolution have had a significant impact on the economic actors involved in business. Consumption interactions that have traditionally relied on face-to-face transactions are gradually transitioning to more efficient and streamlined means. One of the tools for change is the use of the internet through electronic devices, such as a phone. On a global scale, Forbes's growth in the Adobe Digital Economy Index indicates that e-commerce sales have reached USD 876 million, or approximately Rp 12.702 trillion, in the fourth quarter of 2021, or 38 percent year on year. Global e-commerce is led by American companies, which account for the majority of overall transactions.

As many as 88.1% of internet users in Indonesia have used e-commerce services to purchase specific products in the past few months. That percentage is the highest in the world according to *the We Are Social Survey* in April 2021.

In 2019, Indonesia's e-commerce transaction value was the largest among ASEAN countries, accounting for 18.76 billion USD or 1% of total GDP (Gross Domestic Product). Tokopedia, Shopee, and Bukalapak are among the leading online shopping platforms in Indonesia, accounting for a substantial portion of

transaction value. The top three e-commerce sites dominate Indonesia's online purchasing industry (Dianari, 2018).

Economic growth cannot be based just on technological advancement, infrastructure, productivity, and innovation. Education and knowledge are being impacted by the ongoing development of technology, which is becoming more advanced and sophisticated. According to Nasution et al. (2020), recent technological innovations have improved productivity and quality of life for people. With the advancement of technology, so has the method of data capture in communication.

In today's world, technological advancements and innovations have made it easier for people to conduct economic activities on a global scale. The growth of the internet as a totalitarian unit mediator has resulted in a more efficient way of communicating across the globe. Time, space, and distance can all be measured using technology and the internet. Indonesia is a developing country with a growing population and a growing interest in e-commerce. Additionally, Indonesia is a country with a growing population and a growing population and a growing consumer base.

Customers are more likely to make secure purchases when security standards are followed, claim Park and Kim (2006). Online sales transactions will not occur in the absence of client trust. Ensuring security throughout the transaction is essential when delivering items to a destination. The potential for economic growth in a nation can be increased by increasing e-commerce transactions.

According to Galindo et al. (2009), as internet access becomes more widespread and reliable, e-commerce will improve and increase the value of the local economy through GDP overtime. E-commerce has a positive impact on economic growth across various countries.

According to Liu (2013), Qu, and Chen (2014), the introduction of ecommerce in China has resulted in rapid economic growth, which can be attributed to improved infrastructure and other factors.

Georgiou (2009) used the Generalised Least Squares (GLS) estimation method to study the impact of e-commerce on national economic growth in Western Europe from 2003 to 2006. The purpose of this study is to assess the impact of GDP on the total revenue of e- commerce companies. This study found that the growth of the internet and e-commerce had a positive impact on National economic development in the West Peninsula.

Liu (2013) examined the impact of e-commerce on economic growth in China from 1997 to 2012 using Pearson Correlation and Multiple Linear Regression methods. The study found a positive correlation between GDP and the number of internet users, online shoppers, CN domain names (Country Code Top Level Domain (ccTLD), representing China), websites, and international internet bandwidth. Qu and Chen (2014) examined the impact of e-commerce on economic growth in China from 1997 to 2012 using Pearson Correlation and Multiple Linear Regression methods. This study aims to assess the number of internet users, e-commerce businesses, and online shoppers. The results of this study show that the

number of internet users, e-commerce businesses, and online shoppershas a positive impact on China's economic growth.

ASEAN is a region with significant economic potential. This is due to ASEAN's population reaching 8.5% of the world's population and accounting for 3.5% of global GDP in 2017. In 2017, ASEAN saw a 15% increase in goods trade and a 6.1% increase in services trade (Aryani, Y., etc, 2021).

In 2018, ASEAN countries exported 24% to intra- ASEAN countries, totaling US\$346.46 billion, while 76% went to extra-ASEAN countries. ASEAN has significant exports to its own member countries. Indonesia exported US\$41.19 billion to ASEAN countries, accounting for 12% of total intra-ASEAN exports.

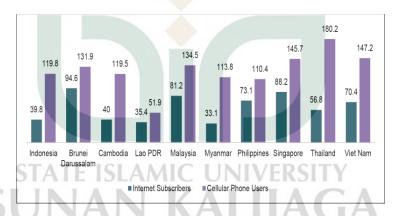


Figure 1: The Level of ICT Use in ASEAN Countries (per 100 Persons)

Source: ASEAN Secretariat 2019

According to Figure 1, the top external market for ASEAN in 2017 was Tiongkok with a total of USD441.6 million, followed by Europe with a total of USD261.3 million, and the United States with a total of USD235 million (9.1%). Intra-ASEAN trade accounts for 22.9% of ASEAN trade, with a total value of \$590.4 billion.

Figure 1 depicts ASEAN countries' online connectivity and smartphone communication services. According to Bankole, Osei- Bryson, and Brown (2013) and Chu and Guo (2019), advancements in ICT (Information Communication and Technology) have a significant impact on trade facilitation. In 2018, ASEAN had an internet penetration rate of 53.4 per 100 people, making it Asia's third-largest country behind China and India (Sen, Attavar, & Jaiswal 2016). Research suggests that higher internet coverage leads to increased international trade and economic growth.

ASEAN economic growth is being driven mostly by improved ICT infrastructure and technologically literate demographics. Studies by Xing (2017), Chu and Guo (2019), and Ozcan (2017) show that using ICT in trade has several benefits, including: (i) integration of markets and industries, (ii) cost efficiency, (iii) increased market access, and (iv) faster business activities in ASEAN and global markets. The ICT revolution, which included digitalization, resulted in the birth of ecommerce. E- commerce is rapidly expanding due to its major impact on transaction quality, whether B2B (Business to Business), B2C (Business to Customer), or other modes of use. According to Google, Temasek, and Bain & Company (2019), the ASEAN digital economy is expected to reach US\$300 billion by 2025, growing at a 33% CAGR (Global Information Technology Report).

According to the World Economic Forum's 2016 Global Information Technology Report, B2C trade in ASEAN countries (Singapore, Malaysia, Thailand, Indonesia, and Vietnam) is expected to increase by 37%, from US\$7 billion in 2013 to US\$34.5 billion in 2018.

To maximise market potential, ASEAN member nations agreed in the ASEAN ICT Masterplan 2020 (ASEAN 2015) that participation in the digital economy and e- commerce will drive the ASEAN economy forward.

Consequently, ASEAN nations have undertaken several advanced Information Communication and Technology (ICT) development efforts, including enhancing digital connectivity to diminish obstacles and enhance public accessibility to e- commerce. In addition, in 2018, ASEAN nations made the decision to create an ASEAN Coordinating Committee on Electronic Commerce. The purpose of this committee is to address the needs of cross-border e-commerce trade and to promote economic growth within ASEAN.

During the period of widespread utilisation of ICT to promote trade, Indonesia's digital economy significantly contributes to economic growth. Research has shown that ICT has a positive impact on development and economic growth. For example, studies have found that a 10% increase in internet penetration leads to a 1.3% increase in GDP, and a 21.5% increase in internet usage results in a 10% increase in GDP per capita (Andres et al. 2010; Choi and Yi 2009). Indonesia holds the position of being the largest e-commerce market among the ASEAN countries. Based on a 2019 research carried out by Google, Temasek, and Bain & Company, the value of Indonesia's digital economy amounts to \$40 billion. Indonesia's digital economy transactions hold the top position in the Southeast Asian area, with a remarkable 32% compounded annual growth rate (CAGR).

Due to the expanding demographic and improved telecommunications infrastructure, along with a rising internet penetration rate of 68.4% in 2018, the

telecommunications sector is expected to make a significant contribution to the Indonesian economy. It is projected to reach a value of US\$133 billion by 2025.

The study aims to ascertain the impact of e-commerce value transactions, internet users, and fixed broadband subscriptions on the economic growth of Indonesia and other ASEAN nations from 2017 to 2022. Several studies have examined the effects of ICT on trade in ASEAN partner countries' markets and the role of e-commerce in boosting trade activity. However, no study has specifically explored the impacts of ICT and e-commerce on the intra-ASEAN market and their significant contribution to economic growth, as measured by GDP.

The author finds a significant and complex association between three variables: e-commerce, internet users, and fixed broadband subscriptions, and economic growth. E-commerce has a crucial role in stimulating economic activity by broadening market reach and streamlining trade. Expanding the market's scope enhances sales and consumption, thereby increasing business profits and tax revenue for governments. In addition, E- Commerce promotes innovation and the development of jobs, especially in the technology and logistics industries, there by improving overall economic productivity and efficiency.

The role of internet users is crucial in this context, since an increasing number of users leads to enhanced availability of information, education, and services. This increased accessibility improves the skills and productivity of the workforce, resulting in a more skilled and capable labour market. Moreover, the internet enables more streamlined communication and transactions, which in turn attracts international investment and broadens trade prospects. The increase in

internet users also stimulates the expansion of digital industries such as fintech, edutech, and healthtech, which make a substantial contribution to economic growth.

The progress in these advancements is supported by fixed broadband subscriptions, which provide the essential infrastructure for reliable and fast internet connectivity. Dependable high-speed internet is crucial for the efficient functioning of e-commerce platforms and for users to actively participate in the digital economy. It facilitates the use of sophisticated technology and applications, which are crucial for enhancing productivity in diverse industries. Furthermore, a strong and reliable internet infrastructure facilitates the growth of digital enterprises and new ventures, stimulating creativity and promoting additional economic growth. Therefore, the interaction of e-commerce, internet users, and broadband infrastructure generates a mutually beneficial impact that drives continuous economic expansion.

The purpose of the research is to explore the interaction of e- commerce between Indonesia and the ASEAN nations, with a focus on understanding the influence of ICT development and the use of e-commerce on the growth of Indonesian trade in ASEAN nations. This study also investigates the influence of e-commerce on the economic expansion of ASEAN nations. By considering of this background description, the researcher is interested in taking the research title "E-Commerce Transactions, Internet Users and Fixed Broadband Subscriptions as Drivers on Economic Growth in the 6 ASEAN Countries."

## 1.2 Research Question

The study seeks to analyse the effect of e-commerce on the economic growth of ASEAN countries, based on the description of how e-commerce has influenced economic growth throughout time. Therefore, the author raises multiple questions regarding this issue:

- 1. How is E-Commerce transactions affect on Economic Growth?
- 2. How Internet Users affect Economic Growth?
- 3. How Fixed Broadband Subcriptions affect Economic Growth?

## 1.3 Research Purposes

The objective of the study is to analyse the impact of e- commerce on a nation's economic development, along with the associated systemic issues. Another objective is to assess the ability of trade relations among ASEAN nations to effectively address or reduce systemic risk, leading to a stronger impact in the future.

## **1.4** Benefits of Research

## 1. Benefits for Author

This research aims to provide comprehensive knowledge about the influence of technology to e- commerce in influencing the economic growth of a country, and other important roles that have a good impact on the economy of a nation. This research is used as a means to express

the writer's thinking necessary to and complete the Bachelor of Islamic Economics study.

## 2. Benefits for Academics

This study is expected to expand the literature that deals with trade themes specifically on e-commerce as well as its implications in improving the development of the country's economy and can be a reference for relevant writing.

## 3. Benefits for Regulators and Institutions

This research is very useful for regulators of economic and trade institutions in e-commerce development specifications to understand the impacts up to the need in achieving the goals of increased economic growth of a country. This research can provide a basis for better decision-making and more effective action to maintain the stability of the progress of e-commerce impact for a country in the future.

## 1.5 Research Structure A STRUC

Chapter I The introduction is a crucial step. Because of this, chapter I includes background information that explains the phenomenon and the first issues surrounding the subject of discussion. Once the context has been explained, create a problem formulation with research questions. The problem formulation is followed by the goals of the study and the advantages of the study for different stakeholders. Additionally, the introduction concludes with a methodical discussion that includes the phases of the research report.

Chapter II Theoretical Framework and Hypothesis Development. The theoretical framework includes prior empirical research that is pertinent to the research topic in this section. The uniqueness in this study comes from earlier research. This chapter also organizes the conceptual structure.

Chapter III The research variables, research objects, data analysis methodologies, research models, and test equipment are all described in the research methods section, which also shows how the stages of this study are operationally carried out.

Chapter IV The research findings that were examined utilizing the panel regression method will be discussed by the author. A variety of tables, graphs, and in-depth analysis will be used to illustrate the collected data. The main conclusions that came out of this study will be discussed by the author, along with how they connect to the stated research topics. The researcher will delve deeper through this chapter to comprehend the importance and ramifications of the findings considering relevant literature.

Chapter V is the last section of the author's thesis, where the researcher will present a summary of the findings and conclusions drawn from the investigation. Along with offering recommendations for additional research, the researcher will also talk on the implications of the findings.

## **CHAPTER V**

## **CONCLUSION AND SUGGESTION**

## **5.1 Conclusion**

Based on the results of the overall tests and analyses conducted by the author in the previous section regarding the impact of economic growth in 6 ASEAN countries. This research reached the following conclusion:.

Economic growth or Gross Domestic Product (GDP) is effected by E-commerce transactions, internet users and fixed broadband subscriptions in a certain area. But in the case of the six ASEAN countries studied, this potential has not yet been realized. This means that internet users in the 6 ASEAN countries such as Indonesia, Brunei Darussalam, Thailand, Malaysia, the Philippines, and Singapore have not yet fully utilized the internet to meet their own consumption needs. This has resulted in the per capita GDP not being driven up in those 6 countries.

The value of e-commerce transactions is the next variable. Since e-commerce is the biggest marketplace platform that can reach both domestic and even foreign consumers, it is without a doubt a very important variable on economic growth. Therefore, it can be said that this variable is a part of both the export-import and consumption components of the GDP calculation.

Furthermore, statistical test results have also demonstrated this, showing that the e-commerce transaction value's prob value against GDP per capita is 0.032 (<0.05) with a coefficient of 0.054. This indicates that it

significantly and favorably affects economic growth as measured by GDP per capita.

The last variable, namely internet subscriptions, still refers to fixed broadband subscriptions. In the variable of internet subscriptions, there is a positive and significant impact on economic growth. From the above partial test results, it is shown that fixed internet subscriptions have a positive effect, meaning that this variable can influence and thereby increase economic growth in 6 ASEAN countries.

## **5.2 Suggestion**

The author's suggestion in addressing the issue of the slow increase in economic growth rates, especially for ASEAN countries where shows a significant gap compared to other developed countries.

It is possible to employ a number of sophisticated analytical techniques to expand the breadth and depth of this study. Since the internet user variable (X2) in this study had no discernible effect on GDP per capita, investigating possible non-linear correlations could uncover underlying trends, such diminishing returns at high internet usage levels.

Furthermore, adding interaction effects between variables, such as fixed broadband subscribers (X3) and e-commerce transactions (X1), may help determine whether infrastructure quality increases the economic impact of e-commerce on GDP. Additionally, a comparative study of ASEAN nations would reveal distinctive economic environments and

digital policy initiatives, illuminating the ways in which certain elements influence GDP development in each nation.

Besides that, to strengthen the findings, conducting robustness checks through varied statistical models or panel data analysis can validate the consistency of the results. Incorporating time series analysis, where possible, would also allow a closer look at variable impacts over time, particularly across pivotal events like the COVID-19 pandemic. Finally, expanding the study to include additional digital economy indicators, such as mobile broadband penetration or digital payment adoption, could paint a more comprehensive picture of how digital infrastructure contributes to economic growth across ASEAN. Together, these approaches could not only enhance the validity of the findings but also provide valuable insights for policymakers aiming to leverage digital infrastructure to boost economic development.

## SUNAN KALIJAGA YOGYAKARTA

## REFERENCES

- Agus, Widarjono. (2018). Ekonometrika Pengantar Dan Aplikasinya Disertai Panduan Eviews. Yogyakarta: UPP STIM YKPN Yogyakarta.
- Agus, Yulianto. (2019). Pengaruh Self-Efficacy Terhadap Hasil Belajar Ekonomi Siswa SMA. *Jurnal Pendidikan Ilmu Pengetahuan Sosial Indonesia*, 4(8), 8-12.
- Ahmadi dan Hermawan. (2013). E-Business & E-Commerce. Yogyakarta: Andi.
- Arsyad L. (1999). *Economic Development 4th Edition*. Yogyakarta: STIE YKPN Publishing Department
- ASEAN, (2015). The ASEAN ICT Masterplan 2020. Jakarta: ASEAN Secretariat.
- Asep Nurwanda, B. R. (2018). Diagnosis Pertumbuhan EKonomi dan Output Potensial Indonesia. *Kajian Ekonomi Keuangan*, 2(3), 179-194.
- Aula, N. K., & Suharto, S. (2022). Pengaruh e-commerce terhadap Produk Domestik Bruto Indonesia. *Jurnal Kebijakan Ekonomi dan Keuangan*, 1(1), 39–48.
- Autor, H. D. (2001). Why Do Temporary Help Firms Provide Free General Skills Training? *The Quarterly Journal of Economics*, 116(4), 1409-1448.
- Basuki, A. T. dan Imamuddin Yuliadi. (2015). *Ekonometrika Teori & Aplikasi*. Yogyakarta: Mitra Pustaka Nurani.
- Burhan, F.A. (2021), "Sediakan Fitur Daftar Usaha UMKM, Tokopedia: Kami Pertama di Indonesia", Katadata.Co.Id, available at: <a href="https://katadata.co.id/desysetyowati/digital/6152e539480ca/sediakan-fitur-daftar-usaha-umkm-tokopedia-kami-pertama-di-indonesia">https://katadata.co.id/desysetyowati/digital/6152e539480ca/sediakan-fitur-daftar-usaha-umkm-tokopedia-kami-pertama-di-indonesia</a>
- Case, K. E., & Fair, R. C. (2007). *Principles of economics* (8. ed). Pearson/Prentice Hall.
- Cette G., J. Lopez, and P. Noual. (2005). Investment in Information and Communication Technologies: An Empirical Analysis. *Applied Economic Letters*, 12(5), 309–312.
- Choi C., and Yi M. H. (2009). The Effect of the Internet on Economic Growth: Evidence from Cross-Country Panel Data. *Economics Letters*, 105(1), 39–41.

- Chu, S. H., & Guo, S. Y. (2019). Information and communication technology and international trade: A case of China-ASEAN countries. *Advances in Economics, Business and Management Research*, 8(7), 206–211.
- Dianari, R. G. F. (2017). Pengaruh E-Commerce Terhadap Pertumbuhan Ekonomi Indonesia. Skripsi, Universitas Katolik Parahyangan.
- Esfandiar Jahangard, & Zeinabsadat Pourahmadi. (2013). The effects of broadband infrastructure on economic growth in developing countries. *Iranian Journal of Economic Studies*, 2(2), 1–23.
- Freddy Rangkuti. (2019). *Teknik Membedah Kasus Bisnis*. Jakarta: Gramedia Pustaka Utama.
- Galindo, Miguel Angel et all. (2009). "Enterpreneurship and Business". A Regional Prespective. Berlin: Springer Berlin Heidelberg.
- Georgiou, M.N. (2009), "E-commerce has a positive impact on economic growth:

  A panel data analysis for Western Europe", available at <a href="http://dx.doi.org/10.2139/ssrn.1484687">http://dx.doi.org/10.2139/ssrn.1484687</a>
- Getha, R., & Dianari, F. (2018). Pengaruh E-Commerce Terhadap Pertumbuhan Ekonomi Indonesia. *Bina Ekonomi: Majalah Ilmiah Fakultas Ekonomi Universitas Katolik Parahyangan*, 22(1), 43-62.
- Google, Temasek, Bain & Company. (2019). e-Conomy SEA 2019.
- Gujarati, D. N., & Porter, D. C. (2010). *Dasar-dasar ekonometrika*. Jakarta:Salemba Empat.
- Gujarati, Damodar. (2003). *Ekonometri Dasar*. Terjemahan: Sumarno Zain, Jakarta: Erlangga.
- Hoffman, D. D. L. D. L., & Fodor, M. (2010). Can You Measure the ROI of Your Social Media Marketing?. *MIT Sloan Management Review*. <a href="https://doi.org/10.1287/mksc.1120.0768">https://doi.org/10.1287/mksc.1120.0768</a>
- Iskandar Putong. (2013). *Economics Pengantar Mikro dan Makro*. Jakarta: Mitra Wacana Media.
- Jogiyanto, Hartono. (2006). Analisis & Desain Sistem Informasi: Pendekatan Terstruktu Teori dan Praktek Aplikasi Bisnis. Yogyakarta: Andi Offset.
- Kolko, J. (2012). Broadband and local growth. *Journal of Urban Economics*, 71(1), 100-113.

- Kozinets, Robert V., et al. (2010). Networked Narratives: Understanding Word-of Mouth Marketing in Online Communities. *Journal of marketing*, 74(2), 71-89.
- Kuncoro, Mudrajad. (2018). *Metode Kuantitatif (Teori dan Aplikasi untuk Bisnis dan Ekonomi). 5th ed.* Yogyakarta: Unit Penerbit dan Percetakan Sekolah Tinggi Ilmu Manajemen YKPN.
- Liu, S. (2013). An Empirical Study On E-Commerce's Effects On Economic Growth. In 2013 Conference on Education Technology and Management Science (ICETMS 2013), 957-960. https://doi.org/10.1109/nces.2012.6543371
- Ma'ruf, A., & Wihastuti, L. (2008). Pertumbuhan Ekonomi Indonesia: Determinan Dan Prospeknya. *Jurnal Ekonomi & Studi Pembangunan*, 9(1), 44-55.
- Mankiw, N. G. (2010). *Macroeconomics Seventh Edition*. New York: Worth Publishers.
- Maulana, R. (2015). Pengaruh Human Capital Terhadap Pertumbuhan Ekonomi Regional di Provinsi Jawa Tengah. *Economics Development Analysis Journal*.
- Nasution, E. Y., Hariani, P., Hasibuan, L. S., & Pradita, W. (2020). Perkembangan Transaksi Bisnis E-Commerce terhadap Pertumbuhan Ekonomi di Indonesia. *Jesya*, 3(2), 506–519. https://doi.org/10.36778/jesya.v3i2.227
- Nasution, S. L., et al. 2020. Pengaruh kualitas produk, citra merek, kepercayaan, kemudahan dan harga terhadap keputusan pembelian pada E-Commerce shopee. (Survei pada Mahasiswa S1 Fakultas Ekonomi Jurusan Manajemen Universitas Labuhan Batu). Ecobisma (jurnal ekonomi, bisnis dan manajemen). ISSN: 2477-6092. Vol 7., No 1.
- New York: Worth Publishers.
- Ni Made Yulia Dewati Ayu, N. M. Y. D. A. & Jakaria. (2023). PENGARUH E-COMMERCE TERHADAP PERTUMBUHAN EKONOMI INDONESIA. *Jurnal Ekonomi Trisakti*, *3*(2), 2891–2900. <a href="https://doi.org/10.25105/jet.v3i2.17499">https://doi.org/10.25105/jet.v3i2.17499</a>
- Nopiah, R., Ekaputri, R. A., Barika, B., & Febriani, R. E. (2024). IMPACT OF E-COMMERCE ON INDONESIA ECONOMIC GROWTH: INTERMEDIATION MODELS WITH FINANCIAL TECHNOLOGY CONSTRAINT. *Jurnal REP* (*Riset Ekonomi Pembangunan*), 9(1), 1–23. https://doi.org/10.31002/rep.v9i1.1216

- Parishev, A., Hristovski, G., Jolakoski, P., & Stojkoski, V. (2020). *E-COMMERCE IMPACT ON ECONOMIC GROWTH*. 188–198. https://doi.org/10.47063/EBTSF.2020.0017
- Park, C.-H., & Kim, Y.-G. (2006). The Effect of Information Satisfaction and Relational Benefit on Consumers' Online Shopping Site Commitments: *Journal of Electronic Commerce in Organizations*, 4(1), 70–90. <a href="https://doi.org/10.4018/jeco.2006010105">https://doi.org/10.4018/jeco.2006010105</a>
- Pratiwi, K. D. (2022). E-COMMERCE AND ECONOMIC GROWTH IN INDONESIA: ANALYSIS OF PANEL DATA REGRESSION. *GEMA PUBLICA*, 7(1), 171–186. https://doi.org/10.14710/gp.7.1.2022.171-186
- Qu, L., & Chen, Y. (2014). The Impact of e-commerce on China's Economic Growth. WHICEB 2014 Proceedings, 65–72. https://aisel.aisnet.org/whiceb2014/101
- Raul Klatz, J. J. (2021). The impact of taxation in the telecommunications industry. Realeted Ejournals https://ssrn.com/abstract=3992806 or http://dx.doi.org/10.2139/ssrn.3992806.
- Sen, A., Attavar, A., & Jaiswal, R. (2016, 21 April). Internet: E-commerce in ASEAN Taking Off. Jefferies Franchise Note. Jefferies.Xing (2017), and Ozcan (2017)
- Siregar, 2010. Strategi meningkatkan Persaingan Bisnis Perusahaan dengan Penerapan *E-Commerce*.
- Sugiyono. 2010. Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif, dan R&D. Bandung: Alfabeta
- Sukirno, S. (2015). *Makroekonomi : teori pengantar*. Depok : Rajawali Pers, 2019 Hak cipta 1994, pada penulis, ISBN 979-421-413-2978-979-421-413-8.
- Suwandy, M. N., & Setyari, N. P. W. (2020). COMPARISON OF THE E-COMMERCE TRANSACTION VALUE RELATIONSHIP WITH ECONOMIC GROWTH IN INDONESIA AND THE UNITED STATES. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(3), 1–7.
- Todaro, M. S. (2006). Economic Development Ninth Edition. Boston Pearson Addison Wesley.
- Waferman, M. F. (2006). Beyond Acces to ICTs:Measuring Cupabilities in the Information Society . *international journal of education and development using ICT Vol 2(3)http://ijedict.dec.uwi.edu/viewarticle.php?id=1 96&layout=htm.*

- Wijanarka, T., & Sari, N. K. D. A. P. (2022). The Role of SMEs in Indonesian E-Commerce to the Indonesian Economy during the Covid-19 Pandemic. *Journal of World Trade Studies*, 7(1), 33–49.
- Yasmeen, R., & Tufail, S. . (2015). Impact of Internet Technology on Economic Growth in South Asia with Special Reference to Pakistan. *Pakistan Journal of Social Sciences*, 35(2), 777-784. Retrieved from <a href="https://pjss.bzu.edu.pk/index.php/pjss/article/view/352">https://pjss.bzu.edu.pk/index.php/pjss/article/view/352</a>
- Zhang, J. W. (2022). The Impact of Digital Economu on The Econmic Growth and The Development Strategies in The Post-Covid-19 Era: Evidence From Countries Along the "Belt And Road". Frotiers, <a href="https://doi.org/10.3389/fpubh.2022.856142">https://doi.org/10.3389/fpubh.2022.856142</a>.

