Conceptual Framework for ICT Development and Foreign Direct Investment Inflows as Drivers for Sustainable Economic Growth: Evidence from China and Malaysia

Muhammad Aiman Haziq Bin Norehan, Abdul Rahim Bin Ridzuan, Shafinar Binti Ismail

Conceptual Framework for ICT Development and Foreign Direct Investment Inflows as Drivers for Sustainable Economic Growth: Evidence from China and Malaysia

Muhammad Aiman Haziq Bin Norehan, Abdul Rahim Bin Ridzuan, Shafinar Binti Ismail

Faculty of Business Management, Universiti Teknologi MARA,Alor Gajah Campus, 78000 Melaka, Malaysia
Email: aimanryhan97@gmail.com, rahim670@staf.uitm.edu.my, shafinar138@gmail.com

Abstract
   Development of information and communication technology (ICT) plays a crucial role in catalysing economic growth. This paper proposed a conceptual framework for ICT development and foreign direct investment inflows as driver for economic growth in China and Malaysia. Although some studies have found evidence of the positive effect on economic growth of ICT development and FDI, others have revealed the opposite outcome. Policymakers are expected to implement specific policies that enhance the penetration of ICT in countries such as providing low pricing and improving ICT infrastructure. In addition, policy makers should develop policies to strengthen the macroeconomic position that leads to a stable financial sector and the use of foreign investment.
Keywords: ICT, FDI, GDP, ARDL

Introduction
    The Asian region is the main contributor to economic growth in the world and has thus become the fastest-growing economic region, according to the International Monetary Fund (2018). In 2018, China was the largest economy in Asia on the basis of nominal GDP and GDP PPP. Since technological developments have increased, this study chose to study China and Malaysia. China has become the world's second-largest economy and the largest payment penetration leader, therefore many multinational companies are looking forward to China's current and future market outlook. Chairman of Global Group, Dr Johnny Hon said that China has already surged ahead in major sectors such as e-commerce, financial technology and transportation Information and communication technology (ICT) has brought dramatic transformation to the world by connecting people, improving living standards, creating opportunity and increasing

productivity. ICT is the main focus for every developing nation which realises its importance. In fact, ICT development enhances policies and is therefore, the main agenda for governments of most developing nations today. From the economic perspective, ICT helps improve and increase market information and financial services to remote areas, changing the life of many people. High speed internet provides advantage such as business strategies, innovation and transformation to the industry.

Over the past decades, there is a dramatic transformation in the world through ICT by connecting people, improves living standards and creating opportunities for the people, facilitating modernization and increasing productivity around the globe (Mago and Mago, 2015).

It's been highlight that how ICT can improve every person and communities lead to the positive ways and improve daily routines. Among the region, Asian economies have benefits from the impact of ICT development and this continuously led to dramatic change in their economic growth.
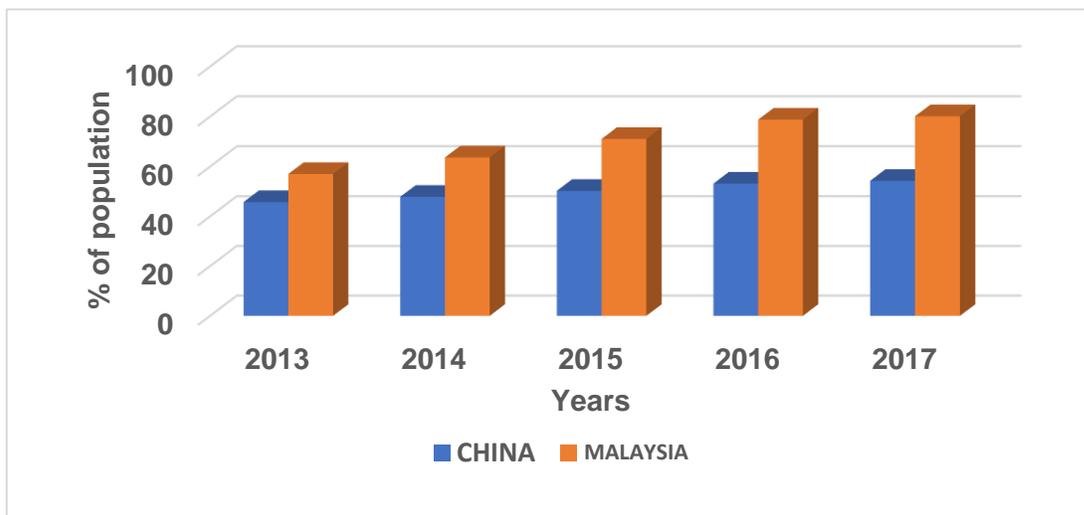
Source: World Development Indicator (2017)
Figure 1: Individuals using the Internet (% of population)

As illustrate in Figure 1, it shown a population of individuals that using internet in Malaysia and China. Where both shown an increasing trend of population using Internet in their countries. This positive trend has been supported by China when they have spent more than $182 billion to boost their high speed 4G mobile network, State Council of China, (2015). The result that come out from figure above have proven that China have achieve their goals where almost 80% population in China are using internet.

According to Akamai Technologies (2017), China has better average internet speed than Malaysia which is 9.3 Mbps for China and 4.4 Mbps for Malaysia. China notices that high speed internet has been main component of economic development and social change. The slow increasing trend of individuals using the internet in Malaysia also have been cause by internet access in Malaysia are considered expensive. According to World Bank (2018), Malaysia ranked 74 of 167 countries in terms of price per Mbps for fixed broadband. This is due to lack of competition among Internet provider firms in Malaysia which is have been led almost by Telekom Malaysia (TM) held 92.2 percent of the market share in 2017.

Economic growth performance across countries is causal depends on several factors, and ICT development and FDI inflows have been identify to be relevant in boosting economic growth (Simplice and Nicholas, 2019; Ahmed and Babiker, 2017; Hassan, 2005). Compared to ICT, FDI inflows has been an important indicator of economic growth where scares of capital due to insufficient domestic savings in a developing country (Bibhuti and Farid, 2020).

In the meantime, in Figure 2 shows the trend of foreign investment inflows into China and Malaysia. After the economic crisis in 2009, China and Malaysia have both shown positive improvement in their economic performance recovery, especially in terms of foreign investment. In 2016, Malaysia have achieve a higher FDI inflows since 2012 with total RM47.2 billion and China has been one of main investor during that years. In upcoming years, Malaysia have face decline trend of FDI inflows due to weak global economic growth where global FDI flows fells about 23% in 2016 (US$1.43 trillion). According to UNCTAD World Investment Report 2018, negative flows of global FDI are causes by weak of aggregate demand and slow growth in some commodity exporting countries. The X-axis of Figure 2 shows the years of the study period and the Y-axis shows the amount of FDI inflows in percent.
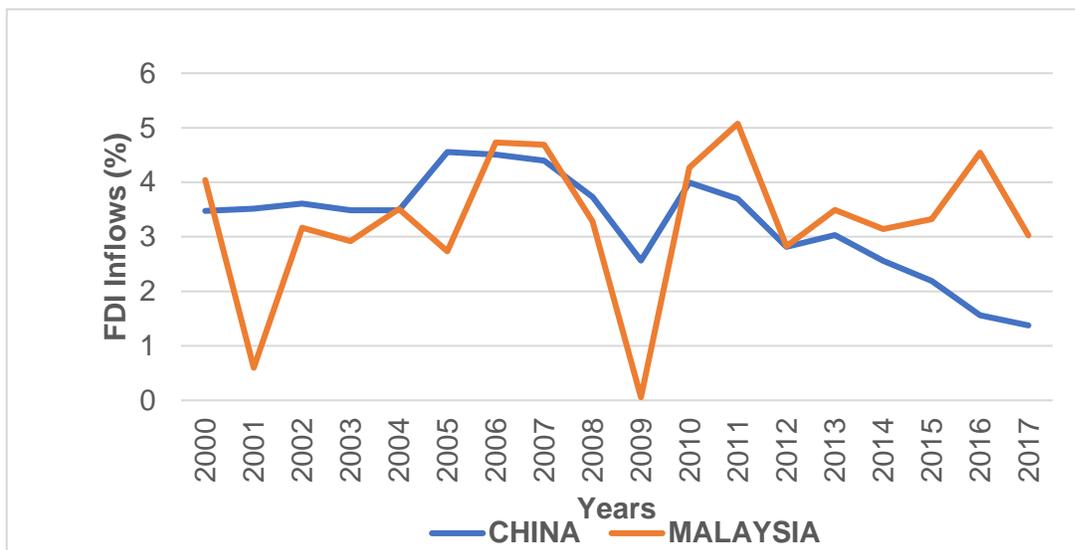
Source: World Development Indicator (2017)
Figure 2: FDI inflows as share of GDP

Both ICT development and foreign investment have been highlighted above as factors important to a country's economy. The goal of this study is therefore to determine whether ICT development and foreign investment will contribute to sustainable economic growth in China and Malaysia. This research is structured as follows: Section 2 addresses the related literature, while Section 3 covers the data, methodology and estimation phase of the study.

Literature Review
This section will review past studies on the topics discussed in the paper. The first section discusses past literature on ICT development. The second part presents past studies conducted on FDI, and the last part explains past studies on economic growth.

Empirical Studies on Foreign Direct Investment
A previous study done by Bibhuti and Farid (2020) analysed the causal relationship between foreign direct investment (FDI) and economic growth in Bangladesh. Using time series data covering the period from 1972 to 2017, the study also conducted a Granger causality test to determine the direction of causality among variables. The results showed that economic growth significantly influenced FDI inflows in Bangladesh.

Javeria and Ashok (2019) examined the relationship between economic growth, trade openness and exchange rate with FDI inflows in the BRICS countries (Brazil, Russia, India, China, and South Africa) for the period from 1994 to 2018. By applying the PMG ARDL approach, the researchers found that trade openness and economic growth positively influenced FDI inflows into the BRICS countries.

Badri and Danny (2019) conducted a causality test to investigate the relationship between information and communication technologies (ICT) development with economic growth in Indonesia using annual data for the period from 1980 to 2014. The results showed that ICT development significantly influenced economic growth in Indonesia. The researchers suggested that the Indonesian government should create an effective strategy to improve the nation's technology as it will lead to positive economic growth in the future.

Empirical Studies on ICT Development
Ronald et al. (2015) used time-series data on China to examine the effect of information and communication technology (ICT) towards output per worker in order to measure economic growth. The researchers employed an autoregressive distributed lag model (ARDL) for data analysis. Their findings indicated that ICT increases China's economic growth. Capital per worker and communication technology were found to be the main drivers of output per worker. The report also indicated that further effort is required to invest in the acceleration of technological development with a particular emphasis on technologies and telecommunications that will improve competitiveness and promote long-term sustainable economic growth.

A study by Zahid et al. (2018) investigated the causal link between ICT, FDI and economic development in Brazil, Russia, India, China and South Africa over the period from 2000 to 2014. By using the ARDL approach to find correlations between variables, the results showed that ICT significantly influences economic performance, but it depends on a country's usage of ICT. They also found that economic growth is influenced by FDI. The researchers combined all ICT drivers into a single factor called the ICT index by using the principal components analysis (PCA) technique.

Chindo et al. (2015) conducted a causality test to investigate the causal relationship between technology, human capital and economic growth in Nigeria for a period of 35 years (1975-2010). The study used two different proxies for human capital which are secondary and tertiary school enrollment in different models. Their empirical findings confirmed that human capital in the different models have significant impact on Nigeria's economic growth. Also, Nigeria's economic growth is influenced by its technology. Besides, capital and labour were also found to have significant influence towards economic performance. The study suggested that the Nigerian government needed to upgrade and supply more facilities to secondary and tertiary schools in order to improve its economic growth. Moreover, the government needed to inject or invest more capital towards research and development sector to encourage inventions and innovations.

Empirical Studies on Economic Growth

Abbas and Amir (2019) examined the relationship between FDI into the agricultural sector and economic growth in Pakistan for the period from 1991 to 2013. The study implied the ARDL model to see the linkage between variables in a long run relationship. The study found that FDI boosted economic growth in Pakistan.

Olugbenga and Oluwole (2018) used data on Caribbean countries (Bahamas, Barbados, Jamaica, Dominican Republic, and Trinidad and Tobago) for the period from 1975 until 2015 to examine the linkage between FDI, public debt and output growth in the selected countries. The study used the Zivot and Andrews unit root tests in order to examine the stationarity of the chosen variables. Using the ARDL model, the study found that foreign and domestic investment, human capital and trade openness significantly influenced economic growth.

Tafirenyika (2017) investigated the relationship between FDI and export with economic growth in South Africa using data for the period from 1990 to 2014. The results confirmed that there is a long run relationship between FDI and exports with economic growth in South Africa. Based on the findings, the author suggested that the South African government can develop its infrastructure, create a positive macroeconomic environment and reduce trade barriers in order to increase FDI inflows into the economy. Besides, the economy can also work on increasing the production of local products to increase exports in order to create competition in the economy.

TABLE 1: Summary of Literature Review

Studies of	Sample and period	Time Series	Dependent Variables	Independent Variables
Abbas, Amir and Rashid (2019)	Pakistan 1991-2013	ARDL	FDI	GDP
Bibhuti and Farid (2020)	Bangladesh 1972-2017	ARDL	FDI	GDP
Javerua and Ashok (2020)	BRICS 1994-2018	ARDL	FDI	GDP, INFRA, GCF, TO, REER
Ronald, Peter, Aristeidis (2015)	China 1980-2013	ARDL	ICT	GDP, K, L
Zahid et al (2018)	BRIC 2000-2014	ARDL	ICT	FDI, GDP,TR
Chindo et al (2015)	Nigeria 1975-2010	ARDL	GDP	ICT, K, HC
Rath and Hermawan (2019)	Indonesia 1980-2014	ARDL	GDP	ICT, EXP,K TFP
Olugbenaga and Oluwole (2018)	Carribean 1975-2015	ARDL	GDP	TFP, DC, HC, TR, FDI
Sunde (2017)	South Africa 1990-2014	ARDL	GDP	FDI, EXP

Method and Data

This chapter begins with a summary of the research framework that is used to represent the three objectives studied in this study. The section then discusses the three pillar model used in the study.
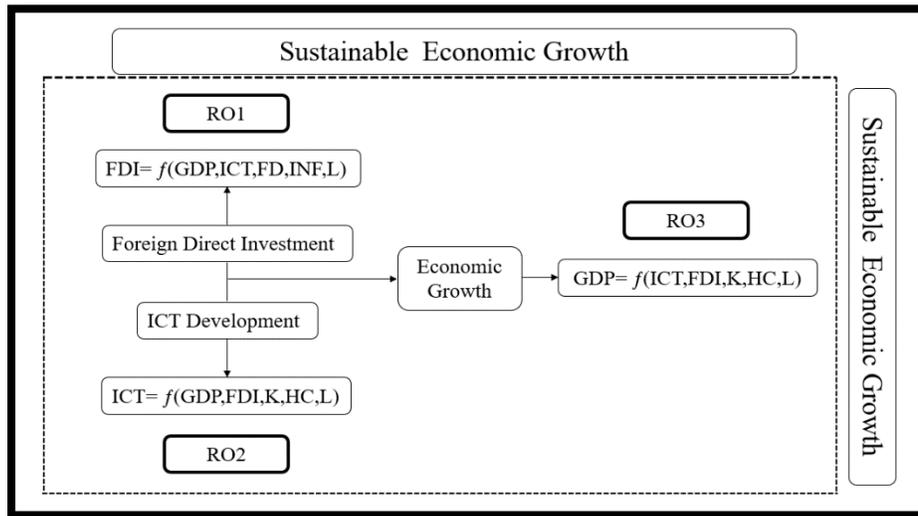
Research Framework

Figure 3: Research Framework

The formation of the three econometric models representing the main driver of sustainable economic growth is explained in this section. Selection of some variables are based on previous study, (Ahmed and Babiker, 2017) found that have existence of relationship between ICT and economic growth. Meanwhile, FDI have been influence GDP in long run relationship based on study (Bibhuti and Farid, 2020). According to study (Simplice and Nicholas, 2019) ICT development has modulate FDI to influence economic growth performance. According to past studies, ICT development and FDI inflows can boost economic growth in order to achieve sustainable economic growth.

All expected signs will be carefully explained to give a deeper understanding on the relationship between each selected variable. The proxies of variables included in all three models introduced in this study are the same. All variables were transformed into the log-linear form to explain the results in long run elasticities.

Model of Foreign Direct Investment

$$LNFDI_t = \delta_0 + \chi_1 LNGDP_t + \chi_2 LNICT_t + \chi_3 LNFD_t + \chi_4 LNINF_t + \chi_5 LNL_t \dots \ (1)$$

where FDI is foreign direct investment proxied by net inflows of FDI as a percentage of GDP, GDP is real gross domestic product held constant at 2010 USD, ICT is information and communication technological development consists of three indicators: mobile cellular subscription per 100 people, fixed telephone subscription per 100 and individuals using the Internet based on percent of population and FD is financial development proxied by money supply, M2 to GDP.

Model of ICT Development

For the second pillar of sustainable economic growth namely ICT development, the authors made some modifications by including additional important variables into the model which is shown as follows:

$$LNICT_t = \delta_0 + \eta_1 LNGDP_t + \eta_2 LNFDI_t + \eta_3 LNK_t + \eta_4 LNHC_t + \eta_5 LNL_t + \mu_t \ldots \ (2)$$

where ICT is information and communication technological development GDP is real gross domestic product held constant at 2010 USD, FDI is foreign direct investment proxied by net inflows of FDI as a percentage of GDP, K is capital proxied by gross capital formation (% of GDP), HC is human capital proxied by secondary school enrollment rate, and L is total labour force.

Model of Economic Growth

The proposed model for economic growth is based on the Cobb-Douglas production function that was extended with relevant variables introduced in this study to avoid the omitted variable problem. The model can be seen as follows:

$$LNGDP_t = \delta_0 + \gamma_1 LNICT_t + \gamma_2 LNFDI_t + \gamma_3 LNK_t + \gamma_4 LNHC_t + \gamma_5 LNL_t + \mu_t \ldots \ (3)$$

where GDP is real gross domestic product held constant at 2010 USD, ICT is information and communication technological development consists of three indicators: mobile cellular subscription per 100 people, fixed telephone subscription per 100 and individuals using the Internet based on percent of population, FDI is foreign direct investment proxied by net inflows of FDI as a percentage of GDP, K is capital proxied by gross capital formation (% of GDP), HC is human capital proxied by secondary school enrolment rate, and L is total labour force.

Estimation Technique

This study adopted the ARDL model to check for the existence of long run relationships among the variables and derived the error correction version (ECM) of the ARDL specification to determine the short-run relations. Even though there are other alternative approaches such as the Johansen and Juselius (1990) and the conventional Johansen's (1998) co-integration test that could have been used to achieve same objective, the authors decided to use the ARDL model because of its advantages over the aforementioned tests. In this study, the short and long-run dynamic relationships among variables were estimated using the newly proposed ARDL bound testing approach which was initially introduced by Pesaran et al. (1997). The ARDL model has numerous advantages. Firstly, unlike the most widely method used for testing co-integration, the ARDL approach can be applied regardless of the stationarity properties of the variables in the samples and allows for inferences on long-run estimates which is not possible under alternative co-integration procedures. In other words, this procedure can be applied irrespective of whether the series are I(0), I(1), or fractionally integrated (Pesaran et al. 1997; Bahmani-Oskooee and Ng, 2002), thus avoiding problems resulting from non-stationary time-series data (Laurenceson and Chai, 2003). Secondly, the ARDL model takes sufficient numbers of lags to capture the data generating process in a general-to-specific modelling framework (Laurenceson and Chai, 2003). It estimates (p+1)k number of regressions in order to obtain optimal lag-length for each variables, where p is the maximum lag to be used and k is the number of variables in the equation. Finally, the ARDL approach provides robust results for a co-integration analysis on smaller sample sizes.

The Unrestricted Error Correction Model (UECM) bound form for all three proposed models that consist of both short-run and long-run dynamics is shown as follows:

Model of Foreign Direct Investment

$$\Delta LNFDI_t = \beta_0 + \theta_0 LNFDI_{t-1} + \theta_1 LNGDP_{t-1} + \theta_2 LNICT_{t-1} + \theta_3 LNFD_{t-1} + \theta_4 LNINF_{t-1} + \theta_5 LNL_{t-1}$$

$$+ \sum_{i=0}^{p} \beta_1 \Delta LNFDI_{t-1} + \sum_{i=0}^{q} \rho_1 \Delta LNGDP_{t-1} + \sum_{i=0}^{r} \delta_1 \Delta LNICT_{t-1} + \sum_{i=0}^{s} \lambda_1 \Delta LNFD_{t-1} + \sum_{i=0}^{s} \lambda_1 \Delta LNINF_{t-1}$$

$$+ \sum_{i=0}^{s} \lambda_1 \Delta LNL_{t-1} + \mu_t \ldots(4)$$

Model of ICT Development

$$\Delta LNICT_t = \beta_0 + \theta_0 LNICT_{t-1} + \theta_1 LNGDP_{t-1} + \theta_2 LNFDI_{t-1} + \theta_3 LNK_t + \theta_4 LNHC_{t-1} + \theta_5 LNL_{t-1}$$

$$+ \sum_{i=0}^{p} \beta_1 \Delta LNICT_{t-1} + \sum_{i=0}^{q} \rho_1 \Delta LNGDP_{t-1} + \sum_{i=0}^{r} \delta_1 \Delta LNFDI_{t-1} + \sum_{i=0}^{s} \lambda_1 \Delta LNK_{t-1} + \sum_{i=0}^{t} \vartheta_1 \Delta LNHC_{t-1}$$

$$+ \sum_{i=0}^{u} \zeta_1 \Delta LNL_{t-1} + \mu_t \ldots(5)$$

Model of Economic Growth

$$\Delta LNGDP_t = \beta_0 + \theta_0 LNGDP_{t-1} + \theta_1 LNICT_{t-1} + \theta_2 LNFDI_{t-1} + \theta_3 LNK_{t-1} + \theta_4 LNHC_{t-1} + \theta_5 LNL_{t-1}$$

$$+ \sum_{i=1}^{p} \beta_1 \Delta LNGDP_{t-1} + \sum_{i=0}^{q} \rho_1 \Delta LNICT_{t-1} + \sum_{i=0}^{r} \delta_1 \Delta LNFDI_{t-1} + \sum_{i=0}^{s} \lambda_1 \Delta LNK_{t-1} + \sum_{i=0}^{t} \vartheta_1 \Delta LNHC_{t-1}$$

$$+ \sum_{i=0}^{u} \zeta_1 \Delta LNL_{t-1} + \mu_t \ldots(6)$$

where is the first difference operator and the white noise disturbance term. This study used annual data starting from 1980 to 2017. The data (GDP, ICT, K, HC, L, and FD) were taken from the World Development Indicator (WDI) website. Data analysis was run using Eviews9.

Sources of Data

Annual data of over 37 years from 1980 to 2017 were used in the empirical analysis. The data were collected from the World Development Indicator (WDI) website. The sources of each data are listed in the following table.

Table 2: Sources of Data

Model	Description	Sources
Model of FDI inflows		
FDI	FDI inflows as % of GDP	WDI
GDP	Real GDP constant (2010) USD	WDI
ICT	Mobile cellular subscription per 100 people, fixed telephone subscription per 100 and individuals using the Internet based on percent of population	WDI
FD	Money supply, M2 as % of GDP	WDI
L	Total labor force	WDI
Model of ICT Development		
ICT	Mobile cellular subscription per 100 people, fixed telephone subscription per 100 and individuals using the Internet based on percent of population	WDI
GDP	Real GDP constant (2010) USD	WDI
FDI	FDI inflows as % of GDP	WDI
K	Gross capital formation as % of GDP	WDI
HC	Secondary school enrollment rate	WDI
L	Total labor force	WDI
Model of Economic Growth		
GDP	Real GDP constant (2010) USD	WDI
ICT	Mobile cellular subscription per 100 people, fixed telephone subscription per 100 and individuals using the Internet based on percent of population	WDI
FDI	FDI inflows as % of GDP	WDI
K	Gross capital formation as % of GDP	WDI
HC	Secondary school enrollment rate	WDI
L	Total labor force	WDI

Conclusion

In summary, this study tried to fill the ICT gap between China and Malaysia. China is one of the most successful countries in terms of ICT development and should thus be a role model and guide for other developing countries like Malaysia. The study tried to prove that ICT development and FDI have significant influence on economic performance and may lead to positive and sustainable economic growth. This means that FDI play an important role in enhancing and improving ICT development in each country. Meanwhile, if ICT development and foreign investment were found to be insignificant in influencing economic growth, governments should identify why they cannot efficiently allocate foreign investment in their economies since foreign investment is one of the main tools for a government to provide capital into its economy. This may lead to

unhealthy ICT development since the government cannot provide good capital to its industry, causing negative economic growth.

Since the importance of ICT development has been highlighted globally, it is important for China and Malaysia to identify whether positive ICT development and FDI inflows may lead to sustainable economic growth.

Acknowledgement

References

Albiman, M. M., & Sulong, Z. (2016). The role of ICT use to the economic growth in Sub Saharan African region (SSA). Journal of Science and Technology Policy Management, 7(3), 306–329. https://doi.org/10.1108/JSTPM-06-2016-0010

Asongu, S. A., & Odhiambo, N. M. (2020). Foreign direct investment, information technology and economic growth dynamics in Sub-Saharan Africa. Telecommunications Policy, 44(1), 101838. https://doi.org/10.1016/j.telpol.2019.101838

Bahmani, S. (2008). Stability of the demand for money in the middle east. Emerging Markets Finance and Trade, 44(1), 62–83. https://doi.org/10.2753/REE1540-496X440104

Belson, D. (2017). Akamai Report 2017. Akamai Report, 12(10), 1245–1248. https://doi.org/10.1093/ecco-jcc/jjy097

Chandio, A. A., Mirani, A. A., & Shar, R. U. (2019). Does agricultural sector foreign direct investment promote economic growth of Pakistan? Evidence from cointegration and causality analysis. World Journal of Science, Technology and Sustainable Development, ahead-of-p(ahead-of-print), 196–207. https://doi.org/10.1108/wjstsd-05-2019-0025

Farhadi, M., & Ismail, R. (2014). The impact of information and communication technology availability on economic growth. Research Journal of Applied Sciences, Engineering and Technology, 7(7), 1226–1231. https://doi.org/10.19026/rjaset.7.410

Hassan, M. K. (2005). FDI, Information Technology and Economic Growth in the MENA Region Using. http://www.mafhoum.com/press6/171T42.pdf

International Monetary Fund. (2018). IMF Annual Report 2018 Building a Shared Future. 1–108. https://www.imf.org/external/pubs/ft/ar/2018/eng/assets/pdf/imf-annual-report-2018.pdf

Johamen, S., & Jtiselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with appucations to the demand for money. Oxford Bulletin of Economics and Statistics, 52(2), 169–210.

Kumar, R. R., Stauvermann, P. J., & Samitas, A. (2016). The effects of ICT∗ on output per worker: A study of the Chinese economy. In Telecommunications Policy (Vol. 40, Issues 2–3, pp. 102–115). https://doi.org/10.1016/j.telpol.2015.06.004

Latif, Z., mengke, Y., Danish, Latif, S., Ximei, L., Pathan, Z. H., Salam, S., & Jianqiu, Z. (2018). The dynamics of ICT, foreign direct investment, globalization and economic growth: Panel estimation robust to heterogeneity and cross-sectional dependence. Telematics and Informatics, 35(2), 318–328. https://doi.org/10.1016/j.tele.2017.12.006

Mago, S., & Mago, S. (2015). Information and Communications Technologies (ICTs) and Livelihoods Enhancement in Agro-rural Communities in Zimbabwe: Connections Using the Capabilities Approach. Journal of Communication, 6(1), 93–103. https://doi.org/10.1080/0976691x.2015.11884851

Maryam, J., & Mittal, A. (2020). Foreign direct investment into BRICS: an empirical analysis. Transnational Corporations Review, 12(1), 1–9. https://doi.org/10.1080/19186444.2019.1709400

Onafowora, O., & Owoye, O. (2019). Public debt, foreign direct investment and economic growth dynamics: Empirical evidence from the Caribbean. International Journal of Emerging Markets, 14(5), 769–791. https://doi.org/10.1108/IJOEM-01-2018-0050

Phillips, P. C. B., & Hansen, B. E. (1990). Statistical inference in instrumental variables regression with i(1) processes. Review of Economic Studies, 57(1), 99–125. https://doi.org/10.2307/2297545

Phillips, P. C. B., & Perron, P. (1988). Testing for a unit root in time series regression. Biometrika, 75(2), 335–346. https://doi.org/10.1093/biomet/75.2.335

Rath, B. N., & Hermawan, D. (2019). Do information and communication technologies foster economic growth in Indonesia? Buletin Ekonomi Moneter Dan Perbankan, 22(1), 103–121. https://doi.org/10.21098/bemp.v22i1.1041

Sarker, B., & Khan, F. (2020). Nexus between foreign direct investment and economic growth in Bangladesh: an augmented autoregressive distributed lag bounds testing approach. Financial Innovation, 6(1). https://doi.org/10.1186/s40854-019-0164-y

Sarker, B., & Khan, F. (2020). Nexus between foreign direct investment and economic growth in Bangladesh: an augmented autoregressive distributed lag bounds testing approach. Financial Innovation, 6(1). https://doi.org/10.1186/s40854-019-0164-y

State of China (2015), Available at:
    https://www.reuters.com/article/us-china-internet-idUSKBN0O50JH20150520

Sulaiman, C., Bala, U., Tijani, B. A., Waziri, S. I., & Maji, I. K. (2015). Human Capital, Technology, and Economic Growth: Evidence from Nigeria. SAGE Open, 5(4). https://doi.org/10.1177/2158244015615166

Sunde, T. (2017). Foreign direct investment, exports and economic growth: ADRL and causality analysis for South Africa. Research in International Business and Finance, 41, 434–444. https://doi.org/10.1016/j.ribaf.2017.04.035

UNCTAD. (2018). World Investment Report; Foreign Direct Investment Inflows in Malaysia. www.unctad.org/diae