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## Do economic and financial integration stimulate economic growth? A critical survey

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### Abstract

The recent vote by Britain to quit European Union (EU) and the political pressures in some member countries to exit EU necessitates a critical evaluation of the long-run economic benefits of economic integration or union to member countries. Consequently, this paper examines recent empirical studies on the nexus between economic integration and economic growth in developed and developing countries. It also investigates the literature on the impact of financial integration on economic growth. Evidence from the study shows that though other views exist, but there are overwhelming supports for growth-enhancing effects of economic integration, albeit common currency adoption has insignificant effect on growth. The channels through which economic integration exerts its influence on growth include, capital accumulation, productivity growth, trade and financial integration. However, the study shows that the impact of financial integration on economic growth is inconclusive. Based on the findings, the study draws some implications and policy options.

**JEL** E44, F15

**Keywords** Economic integration, financial integration, economic growth

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## I. INTRODUCTION

Theoretical evidence indicates that economic integration or union<sup>1</sup> has the capacity to promote capital accumulation, productivity and economic growth. The potential channels through which integration exerts its influence on growth include acceleration of international trade, strong macroeconomic stability, sound institutions, price transparency, financial integration and development, exploitation of the single market and reduction in exchange rates volatility (Conti, 2014). For instance, since the launching of European Union (EU) Single Market in 1993, the number of member countries had more than doubled with many smaller countries joining the EU in the last enlargement rounds (Konig, 2015). However, the recent vote of Britain to quit the EU and the political pressures in some member countries to exit the EU necessitates a critical evaluation of the long-run economic benefits of economic union to member countries. Thus, one crucial issue is that economic union could be confronted with some economic and institutional challenges which may hinder its' operations and effectiveness. Some of these difficulties include productivity gaps and widening trade imbalances among member countries, absence of fiscal and financial union as well as limited power of the common central bank (Conti, 2014; Shambaugh, 2012).

Moreover, theoretical literature supports the role of financial integration in the process of economic growth and development. Hence, several developing and emerging economies have embarked on rapid process of financial integration in the past few decades. This is because financial integration has the capacity to promote capital allocation, production specialization,

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<sup>1</sup> Economic union represents a kind of trade bloc that comprises a common market with a custom union; and the members have common policies on regulation of products, free movement of goods, services, capital and labour as well as a common external trade policy. When an economic union entails a common currency among member states, it becomes economic and monetary union. On the other hand, economic integration involves the unification of economic policies (coordination of monetary and fiscal policies) between different countries via full or partial elimination of tariff and non-tariff restrictions on trade among them. The various levels of economic integration include free trade area, customs union, common market, monetary and economic union, and full integration. The essence of economic union or integration is to improve productivity, economic efficiency, welfare as well as establish closer cultural, economic and political ties among member states.

international consumption risk-sharing and economic growth (Acemoglu & Zilibotti, 1997; Gehringer, 2015; Obstfeld, 1994; Saafi et al., 2016). Besides, financial integration improves factor productivity via greater efficiency in resources allocation and easy access to investment opportunities thereby stimulating economic growth (Edison et al., 2002; Gehringer, 2013; Giannetti et al. 2002). Furthermore, by intensifying competition and the import of financial services, financial integration could accelerate the development and operations of the domestic financial sector, and spurs more investment and growth (Klein & Olivei, 2008; Levine, 2001).

Arising from these theoretical postulations, the integration-growth nexus has received the attention of several scholars in the past decades. For instance, different empirical studies have focused on whether economic integrations or unions in Europe, Asia, Africa and Latin America have long-run economic benefits for member countries. In other words, empirical studies seek to determine the benefits of economic integration on productivity growth, capital accumulation, international trade as well as financial integration and development. Similarly, another strand of literature had focused on whether economic integration promotes economic growth by enhancing financial integration<sup>2</sup>. Thus, diverse econometric methods, proxy variables, time periods and countries have been utilized by various empirical studies. However, there are no aggregated empirical outcomes to either support or refute the integration-growth nexus despite the importance of the policy implications from such findings. Hence, the policy implications of the link between integration and growth could be fundamental depending on the sort of association between the variables aggregated from empirical studies.

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<sup>2</sup> Financial integration occurs when the financial markets of neighbouring, regional or global countries are closely linked together. The various forms of financial integration include sharing of information, best practices and technologies among financial institutions, cross-border capital flows, direct access of firms to funds and investors to investment in international capital markets, trading of domestically innovated financial products in the international capital markets as well as involvement of foreign investors in domestic financial markets. In essence, financial integration entails eradication of restrictions on cross-border financial operations so that financial institutions can freely operate, firm can directly borrow or raise fund, and equity and bond's investors can directly invest across countries without restrictions.

Consequently, the objectives of this study are in two-folds. (i) To review recent literature on the nexus between economic integration and economic growth. (ii) To survey recent literature on the nexus between financial integration and economic growth. To the best of our knowledge, this is the first attempt to survey theoretical and empirical literature with a view to aggregating and analysing the nexus among economic integration, financial integration and economic growth in developed and developing countries. In this regards, this paper makes fundamental contributions to the integration-growth literature because it aggregates and analyses recent scholarly views on the links among these variables. The output of this study could serve as guidelines for policymakers and government in making better, informed and more accurate decisions about their participation in economic and financial integration.

Besides this introduction, the remaining part of the paper is divided into four sections. The nexus between economic integration and economic growth are surveyed in section 2, while section 3 reviews the nexus between financial integration and economic growth. Section 4 highlights the main findings from the surveys, while the final section concludes with some policy recommendations.

## II. ECONOMIC INTEGRATION AND ECONOMIC GROWTH

This section reviews recent empirical literature on the impact of economic integration on economic growth. It also examines the channels through which economic integration exerts its influence on economic growth such as productivity growth, capital accumulation, trade and financial integration. It categorizes the literature based on empirical studies that reported significantly positive or insignificant effects of integration on growth. It also examines the empirical literature on the impact of common currency adoption on economic growth. Figure 1 shows the conceptual framework of the possible patterns of relationship among economic integration, financial integration and economic growth.

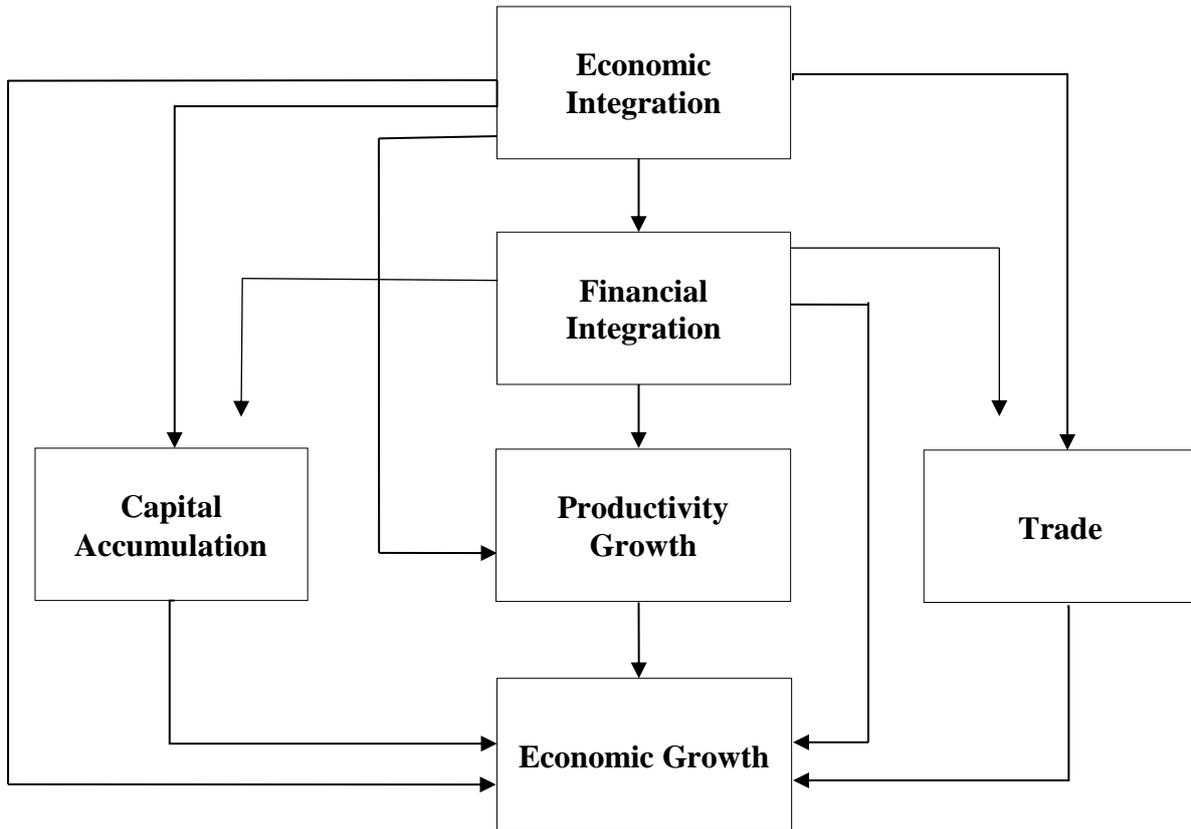


Figure 1: The conceptual framework of the possible patterns of relationship among economic integration, financial integration and economic growth

Source: Authors

### *II.1. Studies on Significant Positive Effects of Economic Integration on Economic Growth*

Some empirical literature on the nexus between economic integration and economic growth revealed positive relationships. For instance, Jones (2002) investigated the relationship between economic integration and convergence of per capita income in ECOWAS using cross-session and time series data, and showed that ECOWAS countries form a convergence club. In other words, there is a tendency for the per capita income to converge and decrease its standard deviation over time. Using the monetary union in West African region known as the West African Economic and Monetary Union (WAEMU) and Economic Community of West African States (ECOWAS), Anyanwu (2003) examined the how integration is linked with trade and output. The study revealed that monetary union has beneficial effects on bilateral trade and economic growth. However, it concluded that there is greater need for improvement,

specifically in the areas of greater intra-trade, fiscal discipline and price stability. Peretto (2003) examined the growth and welfare effects of economic integration and reported that economic integration is associated with increase in growth and welfare. Accordingly, integration generates larger and more competitive market where firms could have access to greater technological spillovers which enhance faster growth. The study argued that the entry of foreign firms because of integration does compensate for the exit of domestic firms thereby raising growth and welfare.

Moreover, economic integration has the capacity to facilitate foreign direct investment (FDI) and Research and Development (R&D) which enhance economic growth. Thus, Gao (2005) examined the effects of economic integration on FDI and economic growth, and reported that economic integration increases FDI, expands R&D activity in industrial core, and enhances world growth rate. The study concluded that the positive link between FDI inflows and economic growth does not imply any causal link, rather both of them respond endogenously to economic integration.

Cappelen et al. (2003) examined the impact of EU regional support on economic growth and convergence in the EU region. The study showed that EU regional support has positive impact on growth performance. The study added that the impact is larger in the 1990s due to the 1988 structural funds reforms. Also, the economic effect is stronger in more developed countries suggesting that accompanying policies of receiving countries improve the impact of integration on growth. Cuaresma et al. (2008) examined the effects of European integration on long-run growth in 15 EU members using panel data methods. The study found that the length of EU membership has positive effect on growth, albeit larger in poorer countries. The study argued that regional integration has asymmetric and convergence-enhancing effects on long-run growth. Kamau (2010) constructed an economic integration index based on the level of

regional cooperation for Common Market for East and Southern Africa (COMESA), East African Community (EAC) and Southern African Development Community (SADC). Evidence from the study showed that economic integration has positive association with economic growth. It also reported that economic integration and trade separately and jointly have positive impact on economic growth. This viewpoint was supported by Gehringer (2013) who showed that EU membership and financial openness have strong positive impact on productivity growth, capital accumulation and economic growth.

Konig (2015) investigated the relationship among European economic integration, country size and economic growth in 27 EU member countries. The study was conducted on the backdrop of theoretical postulations that there exist national scale effect which favours large countries while small countries through greater international market integration could overcome the impediments of smallness. Evidence from the study revealed that European economic integration accelerates countries' convergence process, and country size has correlation with economic growth. There is a significant growth-enhancing effect stemming from EU membership, implying that entry into EU spurs growth. The study also indicated that the impact of size varies with the level of economic integration of individual country suggesting that long-run growth path has multiple transition points. Using the augmented Solow model, Mann (2015) investigated the impact of European integration process on economic growth in 10 central eastern European countries. The study measured European integration as trade with other EU members as a proportion of total trade. Evidence from the study showed that integration has small but significant medium-run effects on growth, and concluded that European integration is favourable to member countries.

The relationship between regional integration and corporate tax rates in European Union and Eurasian economic union was investigated by Klofat (2017). The study reported

that progressive regional integration leads to declining corporate tax rates which has the capability to spur economic growth. Regarding institutional development, Schonfelder and Wagner (2015) examined the impact of European integration or EU membership on institutional development, which has the capacity to accelerate economic growth in 33 European countries. They tested the hypothesis that prospective EU members have highest speed of institutional development, followed by EU members preparing to adopt the Euro, while institutional development grinds to a halt or even reversed in EU members that have adopted the Euro. The results of the dynamic panel data estimation confirmed the hypothesis. They found that prospective EU membership has positive effect on institutional development, whereas being a member of the EU does not influence institutional development. They also found evidence of robust institutional deterioration especially in the area of corruption in EU members that have adopted the Euro.

Furthermore, one of the channels through which monetary union accelerates economic growth is via trade. Thus, Choe (2001) examined the impact of economic integration via trade on business cycles in 10 East Asia Countries. Evidence from the study revealed that deeper trade interdependence among the countries lead to more economic fluctuations' synchronization within the region. Barr et al. (2003) investigated the economic effects of European economic and monetary union by conducting a comparative analysis between countries within and countries outside the union. Evidence from the study revealed that trade effects of monetary union were statistically significant, and that overall trade would have been greater if the countries outside the union had joined the union. The study also examined the impact of monetary union on other aspects of economic performance namely, financial market development, foreign direct investment and overall macroeconomic performance. The study found that inward investment would have increased, and have about 3% impact on GDP had the countries outside the union join the union. However, there were no clear significant positive

effects of monetary union on output, financial markets, unemployment and inflation. Baier et al. (2008) investigated the impact of regional economic integration agreements (EIAs) on bilateral trade and reported a significant relationship between EIAs and bilateral trade flows. The study argued that the effects of EIAs on trade have been underestimated by empirical evaluation because they ignored self-selection bias of country pairs into EIAs. After accounting for this bias, the study reported that European economic integration has greater economic effects on trade than previously documented.

Geda and Kebret (2008) investigated regional economic integration in Africa with special focus on the problems and prospects of Common Market for East and Southern Africa (COMESA). They reported that the two issues confronting regional economic integration in Africa are issues of implementation (institutional, political and economic constraints) and limitation of insight (menu of options for integration). The study examined the determinants of trade flows and documented the standard variables that explain bilateral trade flows among regional groupings, implying that regional integration has insignificant effect on bilateral trade flows. The study highlighted the constraints of regional integration performance as variation in initial condition, policy harmonization, overlapping membership, poor private sector participation and lack of diversification. They concluded that though regional integration is important due to increasing globalization, but these problems hinder their success in Africa. Similarly, Eichengreen (2012) examined the benefits of European monetary integration in the aftermath of the serious Eurozone crisis, and reported that the scholarly analysis of European monetary integration was not deficient despite failure to predict the crisis. However, the study noted that the standard analysis failed to consider effective banking and financial systems within the monetary union as well as understated political contemplations. Based on optimum currency theory, the study highlighted the factors responsible for the crisis to include, labour

immobility, underdeveloped fiscal federalism, strong resistance from high-income countries, small budget which is disproportionately dedicated to infrastructure and agriculture, etc.

Furthermore, Roy and Mathur (2016) examined the bilateral trade structure between India and EU, given that United Kingdom (the most important trading partner of India) decided to exit from EU. The study argued that the bilateral trade costs between EU and UK would increase because of the new tariff and non-tariff barriers which would affect trade flows between trading partners and indirectly influence their income growth. The study showed that Indian and UK would have greater benefits if the latter remains a member of EU, but the GDP growth rate of EU would decline from 0.1% to -0.5% while that of India would decline from 1.1% to 0.5% if UK exit from EU. Mevel et al. (2016) investigated the effects of regional trade integration on reindustrialization via free trade agreements and trade facilitation in North African countries. It found that free trade agreements stimulate the exports of North African countries from many major industries. Thus, continental free trade area with trade facilitation measures seems to give support to industrialization in North African countries. Soete and Hove (2017) investigated the trade effects of Europe Economic integration agreements, and reported that economic integration has general trade-enhancing impact albeit there is asymmetric effect on European imports and exports. The study argued that free trade agreements robustly improve import competition in the EU market, but they have complex effect on exports. Nonetheless, the overall effect over time is positive for both imports and exports.

Besides the relationship between economic integration and economic growth, some empirical literature have also examined the impact of common currency adoption on economic growth. Thus, Frankel and Rose (2002) investigated the effects of common currency on trade and income, and showed that currency union triples trade with other currency union members, albeit there is evidence of trade diversion. It was also found that an increase in overall trade

raises income per capita. The study also confirmed the hypothesis that the important beneficial effects of currency union come through the acceleration of trade. Similarly, Bun and Klaassen (2002) documented that euro adoption has significantly increased bilateral trade with an effect of 4%-40%. Moreover, Micco et al. (2003) showed that monetary union has significant positive impact of about 4%-10% on bilateral trade between member countries relative to trade between others pairs of countries, and 8%-16% relative to trade among non-member countries. However, Bun and Klaassen (2007) argued that the impact of Euro on trade is not as large as commonly thought. They examined the impact of Euro on trade in 19 EU countries, and showed a significant positive impact of Euro on trade which increases the prospects for economic growth.

Apart from trade, common currency could also be significantly linked with the level of per capital income, productivity growth, capital accumulation and economic growth. For instance, Conti (2014) used data from 17 European countries and showed a significant positive impact of the Euro adoption on economic growth and labour productivity. However, the impact of Euro on growth is smaller in countries with high debt relative to GDP in 1999 when the Euro was introduced. Conversely, Gehringer (2013) investigated the effects of adoption of Euro on productivity growth, capital accumulation and economic growth. The study indicated that the adoption of Euro has no substantial effects on capital accumulation, productivity growth and economic growth. Likewise, Holtemoller and Zeddies (2013) who analysed price elasticities in international trade flow between some EMU countries (Germany, France and UK) before and after the adoption of Euro. Evidence from the study indicated that there was no substantial change in the price elasticities in trade between EMU members after the adoption of Euro suggesting that there was no increase in international price competition.

Furthermore, Kalaitzoglou and Durgheu (2016) investigated the impact of adoption of Euro on economic growth in European countries and showed that the adoption of Euro has no direct effects on economic growth. Similar result was documented by Konig (2015) who found insignificant impact of EMU membership on economic growth. The study ascribed the result to weak change in relative price elasticity experienced by EMU members following the adoption of the Euro. Janus and Riera-Crichton (2015) also investigated the relationship among Euro adoption, real exchange rate volatility and economic growth for OECD countries. Evidence from the study revealed that Euro adoption was associated with a 0.4 standard deviation decrease in long-run real effective exchange rate volatility before the 2008-2009 Recession. The paper concluded that euro played growth-stimulating role before the recent Eurozone debt crises.

## *II.2. Studies on Insignificant Effects of Economic Integration on Growth*

The empirical literature in this category posited that economic integration has no significant positive effects on economic growth. Rather, some of the empirical studies documented adverse effects of economic integration on income inequality. For instance, Bertola (2010) investigated the impact of Europe economic and monetary integration on disposable income inequality. They argued that simple theoretical argument suggests that economic integration may or may not aggravate income inequality and volatility, but it hampers the capacity of national governments to carry out independent fiscal policies as well as implement income redistribution schemes. The study found that economic and monetary union increases disposable income inequality, probably due to less generous social policies. Similarly, Garcia-Penalosa (2010) examined how economic integration influences opportunities for growth and inequality and reported that economic integration has influence on the conflict between productive efficiency and distribution considerations.

Moreover, Busemeyer and Tober (2015) examined the relationship between European integration and political economy of inequality in 14 EU countries. It also sought to ascertain whether European integration is a potential source of income inequality in EU member states. The study differentiated between economic and political integration, and highlighted the theoretical channels that relate them to increasing inequality levels. The study found a positive link between political integration and inequality, albeit economic integration has no link with inequality. The study concluded that the recent trend towards inequality in EU national level could be partly explained by greater supranational level political integration. Kalaitzoglou and Durgheu (2016) investigated the impact of political and monetary integration on economic growth within a framework that also accounted for financial integration and debt in 26 European countries. The results of the study showed that neither political nor financial integration has any direct impact on economic growth. Nevertheless, the study found that monetary integration has dual indirect impact on economic growth through increased access to financing.

### *II.3. Effects of Economic Integration on Financial Integration*

Just as economic integration has the capacity to promote economic growth, it also has the potentials to accelerate financial integration and financial market development. Some recent empirical studies have investigated the relationship between economic integration and financial integration. For instance, Kalemli-Ozcan et al. (2001) examined the relationship among economic integration, industrial specialization and macroeconomic fluctuations. The study reported that economic integration leads to greater capital market integration which induces higher specialization in production. It also leads to less symmetric output fluctuations that has the capacity to counter-balance lower trade barriers effects on symmetry of fluctuations. They argued that regions that have greater specialization in production structure display output fluctuations that are less associated with those of other regions. They reiterated the causal

relationship from capital market integration to regional specialization, and the higher the former the less symmetric fluctuations. Phylaktis and Ravazzolo (2002) investigated the link between economic and financial integration with equity prices for a group of Pacific-Basin countries. Evidence from the study revealed that financial integration accompanies economic integration at the regional and global levels.

Barr et al. (2003) investigated the relationship between European monetary union and financial markets development, and found that there were no clear significant positive effects of monetary union on financial markets development. Conversely, Masten et al. (2008) reported that monetary integration in Europe enhances higher level of financial integration just as European monetary union allows simultaneous development of financial markets and integration. They concluded that financial integration has positive impact on economic growth only at higher levels of financial development. Bekaert et al. (2013) investigated the impact of membership of European Union and Eurozone on financial integration using industry valuation differentials across European countries. They argued that discount rates and expected growth opportunities are identical within an industry in an integrated market. In other words, as countries become more integrated, valuation differentials become narrower. The study found a significant lowering effects of EU on discount rate and expected earnings growth differential across the countries. However, the study also showed that the adoption of the Euro has no significant effects on financial integration.

In addition to the empirical studies reviewed above, Table 1 presents a summary of other recent empirical studies on the effects of economic integration or union on economic growth and its sources.

TABLE 1

Summary of recent studies on the effects of economic integration on economic growth

Authors	Objectives/Country	Methodology/Period	Main Findings
Rivera-Batiz and Romer (1991)	Effects of economic integration on worldwide growth rate	Two models with different specification of R&D sector as source of growth	Economic integration promotes long-run growth if it spurs worldwide exploitation of increasing returns to scale in R&D sector.
Landau (1995)	Effects of European Common Market on economic growth of its members states		No significant difference between economic growth of EEC and non-EEC market economies. European integration has no significant effects on economic growth.
Henrekson et al. (1997)	Effects of European integration in the EC and EFTA on growth in 22 OECD countries	Base regression- OLS 1975-1990	EC and EFTA memberships have positive effects on economic growth, and no significant difference in the growth effects between EC and EFTA memberships.
Vamvakidis (1998)	Effect of regional integration on economic growth		Regional integration promotes growth. Countries with opened, large and more developed neighbouring countries grow faster than countries with closed, smaller and less developed neighbours.
Vanhoudt (1999)	Effects of European integration on productivity growth	Panel data estimation	No significant scale effect of European integration on productivity growth. EU membership is not associated with growth bonus
Breuss (2001)	Macroeconomic effects of EU enlargement for old and new members	World macroeconomic model	EU would gain about 0.5% of real GDP for a period of 6 years while CEEC would gain about ten times more than EU from EU enlargement. Individual countries could gain between 5-9% of real GDP, albeit some could experience reduction. It is a win-win game.
Sulamaa & Widgren (2003)	Economic effects of EU enlargement	Computable general equilibrium model	EU enlargement is beneficial to all EU regions, with no substantial welfare losses outside the EU.
Badinger (2005)	Effects of economic integration on growth performance of 15 EU member states	Dynamic growth framework 1950-2000	Sizeable level effects per annum but no permanent growth effect. GDP per capita of EU would be one-fifth lower without integration.
Dee (2007)	Impact of East Asia economic integration on future growth		Economic integration promotes growth, but greater income gain would be derived from comprehensive reform of non-discriminatory impediments to competition.
Kutan & Yigit (2007)	Effects of EU integration on convergence and productivity growth of 5 EU members	1980-2004	Accession process of 5 recent EU members improves productivity growth over Union benchmark. Pace of economic growth increased due to capital accumulation. Integration has long-run growth effects.
Weyerstrass & Neck (2008)	Macroeconomic effects of Slovenia's integration in the Euro area	Stimulations, Macroeconometric models	Euro Accession leads to temporary higher real GDP growth, permanent higher GDP level, greater employment, temporary lower inflation and permanent lower price level.
Kutan & Yigit (2009)	Effects of EU integration on labour productivity in 8 new EU members states	FE model 1995-2006	EU integration improves productivity.
Breuss (2010)	Effects of EU enlargement on Bulgaria and Romania	Macro-economic integration model	Bulgaria and Romania have greater overall integration benefits from EU accession than the incumbents. They could get additional 1/2% point real GDP growth per annum.

Libman & Vinokurov (2012)	Regional integration and economic convergence in the Post-Soviet Space		There was expansion in labour migration albeit trade integration experienced negative trend implying that integration of factor flows can outperform integration of market for goods and services.
Neck (2012)	Macroeconomic consequences of the integration of SEE Area into Eurozone		The accession of SEE countries into EU could increase economic divergence within EU and lead to asymmetric shock on European economies.
Rouis and Tabor (2013)	Regional economic integration in the MENA region		Deeper economic integration would enhance competitiveness, productivity growth, job creation and reduce costs to consumers across MENA economies.
Borodin and Stokov (2015)	Effects of custom union on trade in CIS	Gravity model	Trade sector showed relatively high trade activity of the customs union countries with large proportion belonging to EU and China.
Nnyanzi et al. (2016)	Effects of regional integration (East African community) on tax revenue.	GMM technique 1980-2014	East African regional integration has significant impact on tax revenue because of good institutions. Tax revenue is crucial to achieving long-run economic growth.
Kyophilavong et al. (2016)	Effects of AFTA on Poverty in Laos	Computable General Equilibrium model	Laos derive benefits from ASEAN Free Trade Agreement via improvement in trade facilitation and FDI and reduction in income inequality.
Naz et al (2017)	Wage convergence among European member states	Panel data, parametric and non-parametric techniques 1996-2006	There exists wage convergence for internal regions but no convergence for border regions. International borders somehow restrict wage convergence.

*Notes: AFTA= ASEAN Free Trade Area, ASEAN= Association of Southeast Asia Nations, EC= European Commission, CEEC= Central Eastern Economic Commission, EFTA= European Free Trade Association, MENA= Middle East and North Africa, SEE=South East European. CIS=Commonwealth Independent of States.*

### III. EFFECTS OF FINANCIAL INTEGRATION ON ECONOMIC GROWTH

Theoretically, international financial integration exerts its influence on economic growth through three main channels namely, improvement in global capital allocative efficiency, promotion of risk diversification and risk sharing among countries as well as through financial markets development (Ibrahim et al., 2016). But there is no consensus in empirical literature on the impact of financial integration on economic growth. For instance, some empirical studies documented that financial integration has positive impact on economic growth (Bekaert et al., 2005; De Nicolo & Juvenal, 2014; Henry, 2000; Klein & Olivei, 2008; Vithessonthi & Tongurai 2012). Conversely, other studies reported that financial integration has negative impact on economic growth (Ahmed, 2013, 2016; Gourinchas & Jeanne, 2013). Moreover, some studies have also documented insignificant relationship between financial integration and

economic growth in some countries (Edison et al., 2002; Grilli & Milesi-Ferretti, 1995; Mmolainyane & Ahmed 2015).

### *III.1 Studies on Significant Positive Effects of Financial Integration on Economic Growth*

This view posits that financial integration has positive impact on economic growth implying that the removal of restrictions (liberalization) promote growth, while capital controls or restrictions on liberalization adversely affect growth. Thus, financial integration plays direct and indirect role in the process of economic growth because it complements other determinants of growth. Therefore, policies that promote financial integration have the capacity to accelerate growth, while policies that stifle financial integration would undermine growth. For instance, Bailliu (2000) examined the impact of financial integration on economic growth in 40 countries, and found that financial integration fosters economic growth, albeit the effects depend on the level of financial sector development in low-income countries. Similarly, Reisen and Soto (2001) investigated the impact of financial integration on economic growth in 44 countries, and showed that financial integration stimulates long-term economic growth. They concluded that developing countries should not solely rely on national savings in the process of economic development, but should encourage foreign capital inflows.

International financial integration could exert its influence on economic growth through improvement in the operations of domestic financial markets and banks. Thus, Levine (2001) found evidence of growth-enhancing effect of liberalization; the removal of the restrictions on international portfolio flows enhance stock market liquidity which boosts productivity growth and ultimately economic growth. Besides, more foreign banks presence enhances the efficiency of the domestic banking system which leads to the development of the financial sector thereby promoting productivity growth and economic growth. Hence, by promoting domestic financial system, international financial integration spurs economic development. Giannett et al. (2002)

examined the impact of financial market integration on economic growth, and the distribution of the possible benefits among community members and industries in Europe. The study found that the promotion of financial market integration is a fundamental step in the acceleration of economic growth in Europe. Similar result was documented in Honig (2008) who revealed that financial integration (capital account liberalization) has positive impact on economic growth in 122 countries.

Using data from 80 countries, Shen et al. (2010) found evidence that financial integration has positive impact on economic growth, whereas foreign portfolio investment has negative effects. They documented that banking liberalization, human capital and higher-income level diminish the positive impact of financial integration on growth, while good shareholder protection and middle-income level have positive effects. Besides foreign portfolio investment, De Nicolo and Juvenal (2014) integrated globalization into the analysis of the impact of financial integration on dimensions of real activity in 48 emerging markets and developed countries. Evidence from the study indicated that financial integration and globalization stimulate economic growth, reduces growth volatility and the probabilities of severe reduction in real activity. They also showed that financial integration has positive effect on macroeconomic stability through corporate governance improvements. The study further revealed that there is no evidence to support trade-off among financial integration, globalization and economic growth and macroeconomic stability.

The channels through which financial integration exerts its influence on economic growth have been unearthed by Schularick and Steger (2010) and Gehringer (2015). Schularick and Steger (2010) investigated the effects of financial integration on investment and economic growth during the two eras of financial globalization, and provided evidence to support a robust growth effect of financial integration in the first era of financial globalization (1880-1914).

Thus, openness to international capital market has positive effects on economic growth in the historical period because it led to greater investment and net capital movement. Similarly, Gehringer (2015) examined how financial integration relates to economic growth with emphasis on two growth channels namely investment and productivity. It also explored whether the effects of financial openness on manufacturing differ from those of services. The study indicated that the positive effects of financial integration on productivity growth are uneven, and differ between services and manufacturing sectors with the latter having greater effects. Conversely, capital accumulation was not influenced by financial integration.

The impact of financial integration on economic growth could also depend on the quality of institutions and the level of economic development. Hence, Bekaert et al. (2005) investigated the impact of financial integration on economic growth in 95 countries, and found that financial integration (equity market and capital account liberalization) accelerates economic growth, though the impact depends on the quality of institutions. The level of economic development could also moderate the nexus between financial integration and economic growth as demonstrated by Ibrahim et al. (2016) in 73 countries. Evidence from their study showed that financial integration has positive impact on economic growth, albeit the impact depends on the level of economic development. Accordingly, the impact of financial integration on economic growth is statistically insignificant in very low or very high income countries. They agreed with Bekaert et al. (2005), and asserted that the benefits of financial integration to developing countries depends on the quality of their institutions, strong macroeconomic framework, prudent policies, human capital and financial markets development.

Methodologically, the impact of financial integration on economic growth could differ between linear or non-linear frameworks. Saafi et al. (2016) investigated the causal relationship

between financial integration and economic growth within linear and non-linear frameworks in 19 developing and emerging economies. In the linear causality analysis, the study found weak causal relationship between integration and growth. Conversely, the study showed a robust evidence of non-linear causality between integration and growth in 18 out of the 19 countries. This analysis indicates that the nexus between integration and growth is sensitive to the methodology employed.

### *III.2 Studies on Insignificant Effects of Financial Integration on Growth*

This view suggested that there is no relationship between financial integration and economic growth implying that financial liberalization policies have no significant effects on economic growth. Thus, Edison et al. (2002) investigated the impact of international financial integration on economic growth in 57 countries. They also sought to examine whether the nexus between the two variables depends on the level of financial development, economic development, government corruption, legal system development and macroeconomic policies. Evidence from the study showed that financial integration has no impact on economic growth even after controlling for financial, economic, policy and institutional factors. Imbs (2006) investigated the real effects of financial integration, and showed how correlations in GDP fluctuations relate with financial integration during the 1960-2000 period. The study found that finance increases international correlations in both consumption and GDP fluctuations. The result prevailed even after accounting for the effects of finance on trade and specialization.

Ahmed, (2011) investigated the impact of international and regional financial integration on real economy in 25 African countries. The study found no robust evidence linking financial openness and economic growth, albeit there was a possibility of positive indirect effects via domestic financial market. The study argued that the negative impact of international financial openness can be mitigated by higher human capital level, stable

macroeconomic environment and good institutions. Hye and Wizarat (2013) also showed that financial integration has no significant long-run impact on economic growth in Pakistan, albeit short-run impact exists. Similar result was documented by Ahmed and Mmolainyane (2014) for Botswana. The study found no evidence of direct effect of financial integration on economic growth, albeit the former has positive impact on financial development. Though the direct connection between financial integration and growth is weak, but the study argued that since financial integration stimulates financial development, it implied that integration has positive indirect effect on growth. Analogous empirical outcome was reported in Mmolainyane and Ahmed (2015).

Besides, financial integration could have adverse effects on economic growth suggesting that the implementation of liberalization policies reduce economic growth relative to capital controls. For instance, Ahmed (2013) examined the role of financial liberalization in enhancing financial deepening and economic growth in 21 African countries. The study found that financial liberalization and income growth have negative relationship. This finding is consistent with the view that financial liberalization in developing countries could reduce economic growth via destabilization, increase in financial fragility risk, and domestic capital flight. Nonetheless, the study found that financial liberalization has positive effects on resource mobilization and financial deepening after accounting for some macroeconomic variables namely inflation, quality of institution and fiscal imbalances. Moreover, Gourinchas and Jeanne (2013) submitted that the elimination of the distorting effects of capital control could magnify the adverse effects of pre-existing distortions thereby making financial integration to undermine growth and cause welfare loss. Ahmed (2016) examined the impact of financial integration on economic performance in 30 African countries. It also sought to unveil the direct and indirect channels through which integration influences economic growth as well as the tripartite link among financial openness, financial development and economic growth.

Evidence from the study indicates a negative relationship between financial integration and economic growth. Nevertheless, the study found a positive link between financial integration and financial development, implying the indirect channel through which integration influences economic growth.

#### IV. SUMMARY OF MAJOR FINDINGS

From the analysis conducted in Sections 2 and 3 above, it is obvious that majority of the empirical studies reported that economic integration positively influences economic growth and its sources (productivity growth and capital accumulation), albeit other views exist. In essence, there is overwhelming support for growth-enhancing effects of economic integration despite the use of diverse econometric methods, proxy variables, time periods and economic integrations by different empirical studies. Accordingly, integration generates larger and more competitive market where firms could have access to greater technological spillovers which enhance faster growth. Thus, the entry of foreign firms as a result of integration does compensate for the exit of domestic firms thereby raising growth and welfare. Moreover, economic integration increases FDI, expands R&D activity in industrial countries, and enhances world growth rate.

Moreover, countries in economic integration form a convergence club, suggesting that there is a tendency for the per capita income to converge, and decrease its standard deviation over time. Put differently, regional integration has asymmetric and convergence-enhancing effects on long-run growth. Deeper economic integration would enhance competitiveness, productivity growth, exports, job creation and reduce costs to consumers across member countries. Regional integration promotes growth because countries with opened, large and more developed neighbouring countries grow faster than countries with closed, smaller and less developed neighbours. However, the magnitude of the impact of integration on growth in

developed and developing countries could vary with the level of integration and size of individual country suggesting that long-run growth path has multiple transition points.

Besides productivity growth and capital accumulation, trade is another main channel through which economic integration spurs growth. In other words, it is evident from this analysis that economic integration stimulates economic growth through improvement in trade. Regional integration would be stepping stone to freer world trading system if the rules of GATT are reinforced, and if developing nations are integrated with developed economies. Deeper trade interdependence among the countries lead to more economic fluctuations' synchronization within the region. Integration spurs bilateral trade between member countries relative to trade between others pairs of countries, and relative to trade among non-member countries. Hence, economic integration and trade separately, and jointly have positive impact on economic growth, and an increase in overall trade raises income per capita.

Another finding from this analysis is that majority of the empirical studies found no direct significant positive effects of common currency adoption on capital accumulation, productivity or economic growth, albeit there are evidences that it could spur trade. Hence, this indicates that there was no substantial change in economic growth between EMU members after the adoption of Euro, suggesting absence of increase in international price competition. However, the beneficial effects of currency union could come through the acceleration of trade.

The analysis also found that economic integration has positive impact on financial integration. Thus, economic integration leads to greater capital market integration which induces higher specialization in production and less symmetric output fluctuations. Besides, monetary integration in Europe enhances higher level of financial integration just as European monetary union allows simultaneous development of financial markets and integration.

The analysis also found that there is no consensus in empirical literature on the impact of financial integration on economic growth. Some empirical studies documented that financial integration has positive impact on economic growth, while other studies reported negative effects. In-between these two extremes, some studies have showed that financial integration has no significant effects on economic growth. Thus, the heterogeneous nature of the findings on the nexus between financial integration and economic growth could be attributed to differences in empirical strategies. This indicates that the nexus between financial integration and growth could be country-specific which underscores the limitations of generalizations from cross-country studies. However, some of the empirical studies which found no significant direct impact of financial integration on economic growth reported indirect positive effects via the promotion of domestic financial system. Besides, the review also indicates that the positive impact of financial integration on growth depends on the level of economic development, quality of institutions, strong macroeconomic framework, human capital and prudent policies. Moreover, the review also shows the various channels through which financial integration promotes economic growth. Basically, integration spurs growth by boosting financial market development, private investment, net capital movement, productivity growth, improvement in firm value (stock prices) and capital accumulation.

Methodologically, the review shows that failure to account for some factors (financial, economic, policy and institutional features as well as the effects of crises on growth and the capacity of controls to limit disruptive output effects), reverse causation, differences in time periods used, measurement error and collinearity among the independent variables could be responsible for the differences in empirical outcomes. The analysis also shows that the link between financial integration and growth is sensitive to the methodology (linear or non-linear framework) employed by previous studies.

Finally, the aggregation of the findings of these empirical studies on integration-growth nexus has fundamental policy implications. The empirical outcomes of past studies could provide policy recommendations which could be applied by various countries irrespective of their distinct characteristics. Hence, it is necessary to monitor members' countries integration efforts. As opined by Konig (2015), there may be need for greater integration including the removal of trade barriers or substantial reduction in home bias effect. Since there is economic convergence, small countries have the opportunity for greater economic growth and development.

## V. CONCLUSION

This study seeks to survey the empirical literature on integration-growth nexus in order to provide researchers a snapshot of previous studies, and suggest some policy implications for future research studies. The understanding of the link between integration and growth serves as input for policy-making in various countries or regions. In other words, it is fundamental for policy makers to understand the nexus between economic integration and economic growth so as to formulate appropriate economic integration policies which would be beneficial to member countries. Thus, there is an increasing literature that investigated the association between economic integration and economic growth in Europe, Asia, Africa and Latin America. Though other views exist, but the overall survey showed overwhelming support that economic integration promotes economic growth, albeit common currency (Euro) has insignificant effects. The channels through which economic integration exerts its influence on economic growth include capital accumulation, productivity growth, trade and financial integration. It was also found that financial integration fosters economic growth, but the impact depends on other variables such as level of financial development, economic development, human capital, institutional quality and macroeconomic framework.

To avoid policy implication from conflicting and unreliable results, future studies may consider the use of robust methodologies that would holistically address the issues as well as account for other variables in order to eliminate omitted variable bias from the studies. In essence, future studies should consider the inclusion of important macroeconomic variables in the model. Moreover, the amalgamation of economic integration-growth nexus with financial integration-growth nexus would provide more insights into highlighting the interaction among economic integration, financial integration and economic growth. The delineation of the financial integration and growth studies into developing and advanced economies would provide greater insight for policy-making. Furthermore, for better inferences, future studies should endeavour to account for structural breaks and cross-sectional dependence in the panel data.

As observed by Karanfil (2009) and Ozturk (2010), studies that utilized the same empirical strategies with the same set of variables (except just changing the periods covered) do not have much potential contributions to extant literature. This is because these studies may only succeed in increasing the quantity of conflicting results and grave doubts on the reliability of the policy implications. Thus, future studies should concentrate on new techniques and perspectives in order to get reliable outcomes rather than use same methods and set of variables for different countries and periods.

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