EXPORT DIVERSIFICATION DETERMINANTS IN WEST AFRICAN SUB-REGION

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ABSTRACT: *This paper empirically studies the export diversification determinants in west Africa sub-region as diversification is critical for the region to promote sustainable development and economic transformation. The study used regression to analyze the data sourced from 17 west African countries from year 1995-2015. The results suggest that per capital income, human capital, investment, geographical location and good governance are significant drivers of export diversification, while terms of trade and population have negative relationship with export diversification in Africa. The evidence shows that export diversification is necessary in managing sustainable development in Africa. The study recommend among other things that the region should come up with an efficient governance that formulate and implement sound economic policies, create investment friendly environment and should pursue an aggressive process of export diversification that will result in buoyant and robust economy which will reduce high dependent on imported goods.*

KEYWORDS: *Export diversification, Economic growth, African continent, West Africa, developing economy.*

INTRODUCTION

Africa is a continent with a sizeable land mass, located in an earthquake-free, tsunami-free zone of the world, and in abundance of natural endowments. Several of the countries in the continent are oil exporting or are largely dependent on few agriculture cash crops. Because of this abundance natural resources is likely to limit the scope of diversification and more so, countries abundant in one resource tend to have highly concentrated export structures (Harrigan and Zakrajsek, 2000).

African economies show low levels of export diversification and have been unable to manage and follow a sustainable route towards increasing exports diversification like other developed and developing economies of Asia and Europe. African continent needs to develop export diversification techniques in different areas that would each react differently to the same event but are likely to involve moving into manufacturing of high quality products or expanding into new markets (Brendon and Newfarmer, 2009).

This is an issue particularly important given that many developing economies have undertaken structural reforms in the recent time geared at diversifying exports.

Export diversification contributes to productivity and sustained economic growth of an economy. It reduces both exposure to external shocks,macro-economic volatility and increase economic growth. Diversification of the productive sectors and exports have the tendency of navigating the economy to a high level inclusive and sustainable growth that advance economic transformation, employment, insecurity, inadequate communication support and poverty alleviation.

Diversification of production and market contribute positively to sustainable growth of an economy in two ways:

1) Through increased sales and revenue. If an economy has captured a significant portion of a market place, it is difficult to improve profitability because there is little room for new customer acquisition. Adding a new product or service or entering a new market place offers the opportunity for exponential growth.
2) Dependency reduction: Again many African countries rely on only one or two large products for most of their revenue, making the continent extremely vulnerable to shocks and risks associated with fluctuations in commodity demand and prices (Edward, 2009). Even if diversification does not increase revenue, it can provide the economy with enough of a cushion to withstand dependency on one product but provide opportunity to seek a replacement.
3) More so, export diversification is relatedwithlowering macroeconomic fluctuations.

Many problems consistently prevent efforts by African continent to diversify their export and achieve economic benefits. Mostly in advanced and industrialized nations (Gelb and Sina, 2010). Some of these problems include reform related policies, human capital, market and product, infrastructure, market share, technology and natural resource based sectors which limits the urge to diversify its export into high-productivity sectors such as manufacturing in order to enjoy faster growth.Reforms related to industrial policies are very important.If Africa are to tackle these problems and focus on gains attributed to export diversification rather than a reliance on a less sophisticated export base not sufficient to guarantee sustained long-term growth and economic transformation (Housman, Hwang and Rodric, 2006 and Elhiraika, Mahamat, and Muhammed, 2013).The objective of this paper is to contribute with empirical evidence the export diversification determinants in Africa, with particular interest on sustainable growth and productivity. The next section reviews the conceptual framework and empirical review, section 3 methodology used in the empirical estimation while sections 4 and 5 presents the result and conclusion and recommendations respectively

LITERATURE REVIEW/THEORETICAL UNDERPINING

Diversification is a risk management technique that mixes a wide variety of exports within an economy. The rationale behind this technique contends that an economy constructed of different kinds of exports will, on average, yield high returns and pose a lower risk than any individual export found within the economy.

Diversification strives to smooth out systematic risk events in an economy so the positiveperformance of some exports neutralizes the negative performance of others. Therefore, the benefit of diversification hold only if the exports in the economy are not perfectly correlated.

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Two types of risk exist in diversification. They are undiversifiable/systematic or market risk and diversifiable or unsystematic risk. Undiversifiable risk is associated with every economy or country or continent or sector. Causes are things like inflation rates, exchange rates, political instability, war and interest rates. This type of risk is not specific to a particular country, and it cannot be eliminated or reduced through diversification. It is just a risk that must be accepted. Diversifiable risk is specific to a country. It can be reduced through diversification and common among them are business risk and financial risk. The aim is to export to various countries, continents and various products so that they will not all be affected. Therefore, to achieve superior diversification needs to diversify across borders and into new markets and products. The more uncorrelated the better.

Recent literature on export diversification is most on effect of diversification on economic growth and the major determinants of diversification which can answer the observed variance in diversification rates across nations that have similar feature. Prominent among the determinants which have consistently investigated to be robust in explaining diversification are per capital income, human capital, exchange rate, geographical location, investment, terms of trade, population, institution and governance factors.

PER CAPITA INCOME

Countries with lower level of export specialization and more diversified exports tend to experience higher economic growth rate and contributed more to overall exports. Mattheeand Naude (2008) carried out a research in South Africa on Export Diversification across South Africa's regions. Their result supported the above statement and went further to say that more diversified exports contributed more to South Africa overall export. Dodora (1991) uses panel data for forty-one developing countries finds that a higher share of manufacturing exports affects real GDP growth positive. Pineres and Ferrantino (1997, 1999) in Chile found a positive relationship between export diversification and economic growth so also is Marhubi (2000). Also, Hausmann et al (2006), Agosin (2007) found that strong positive impact of export diversification on per capital GDP exist in Latin America and Asian economies between 1980 and 2003. Maloney (2007) and Hesse (2009) found that export concentration is detrimental for per capital GDP growth in developing economies. This scenario show that West African sub-region, with her low per capital income exhibit a lower level of export diversification than the other developing countries and export diversification increase at a slower pace.

HUMAN CAPITAL

The level of qualifications of the workforce and the efforts made in education have a relevant influence on the capability of a country to diversify, innovate, upgrade to high technology, in production of quality and sophistication of exports and also in promoting product differentiation Gullstrand (2000). Parketa and Tamberi (2008) emphasize that higher quality human capital facilitates the production diversification and increases the rate of new activities through innovation. Improving the education standards of the labour force is determinant for a successful exports diversification strategy Manuel and Paula (2010). Human skilled manpower has been associated with increased diversification especially in industrial goods or service manufacture

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(Agopsin et al, 2012). Production of new products requires research and development, human knowledge is important in the research of new, efficient and affordable production method (Elhiraika 2014). The greater availability of specialized human capital and the lower relative cost of input allow countries to engage a larger amount of human capital for adopting existing goods and technologies to the national environment which induce export diversification (Manuel, Roberto and Claudio, 2000).

INVESTMENT

Acquiring new markets for products entails need to expand and diversify exports to high-value markets in the industrialized countries. Part of the strategy is to put in place policies that attract more foreign direct investment (FDI) in order to facilitate more technology transfer. West Afrrican Countries need to improve their business regulation and governance environment for business. FDI was found to be a factor to speed up export diversification in countries that devoted significant amount of investment on education, health, and infrastructure as these will in turn create a better conducive atmosphere for FDI inflow (Vera and Deborah, 2015). It has been argued that the effect of FDI on export diversification in West Africa has been weak owing to poor conducive atmosphere (Ofa et al, 2012).

Domestic Investment plays an important role in enhancing export diversification. Instability of the export revenue affect growth as well as investment decisions (Dalve, 1996). There is need to increase domestic investment especially private sector as an important driver of export diversification and helps in dispersion of the risk with other sectors. Private investment diversificatio nstrategy help in shifting the composition ofexports from primary products to manufacture products, whose prices are stable than those of primary exports (Ali, 1991).Hausman et al (2007) argue that the composition of a country's exports matters, since exporting higher quality and higher productivity goods may lead greater export performance and higher growth. These will benefit other economic activities and improve the ability of more industries to compete internationally (Herzer and Nowak-Lehnmann, 2006).

GEOGRAPHICAL LOCATION

Remoteness increases export concentration. The effects of geographical location on export diversification, is supported by a research carried out by Parteka and Tamberi (2008) using a sample of developed and developing countries found that transport costs discourage export diversification. Mattee and Naude (2008) studied South Africa regions found that domestic transport costs are inversely related to the degree of export diversification. The implication of geographical location onexport diversification suggests that land locked countries or countries distant from the sea face extra difficulties to diversify export. This is consistent with the study carried out by (Radelet and Sachs, 1998; Limao and Venables, 2002) whose evidence suggests that land locked countries face higher transport costs and have lower trade volumes than coastal countries.

Another study carried out in 70 developing countries by Aded and temple (2009) found that countries living far from coastal region or seaports are linked with limited export diversification and unsteady growth. The natural barrier to international route

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negatively affects their level of diversification and trade (Elhiraika et al, 2014). A lower distance to the main world markets, access to the sea and overall lower transport costs, determined the ease with which a nation can increase the variety of products exported to the world market. Melitz (2003) shows that high variable and fixed trade costs reduce export opportunities and the number of exporters (and varieties). The implication is that there is negative relationship between trade costs (distance) and export diversification.

TERMS OF TRADE

Trade liberalization, where economies of scale and transport costs play a vital role is likely to affect diversification (Krugman and Venables, 1990, Haaland et al, 2011) with important gains from trade that can cause increases in product diversification (Coastas et al, 2008). Further theoretical and empirical literature suggests that failure to sustain industries with important internal and external economies of scale, and positive externalities of agglomeration of economic activity might limit Africa continent towards a more diversified exports. More so, positive terms of trade shocks by crude oil and primary agricultural cash crops exporting economies in particular inhibits the tendency for export diversification as a result of increases in export revenues associated with rising prices of commodities. These are interesting remarks that suggest that the efforts towards a regional integration, by increasing the economic size in which African business companies can operate, might play an important role to successful export diversification.

POPULATION

Another driver of diversification literature is population of a country which is capable of inducing export diversification by motivating greater demand and providing an avenue for new and higher value products. When the population of a country increases in terms of number and variety of consumers, this will lead to increased production of more diverse products that attend to the need of varied users/consumers (Parteka and Tamebri, 2011). Furthermore, the size of a country's economy i.e. population, education, health, infrastructure and income per capital are crucial factors that can be used as factor inputs in the manufacture of diversified products (Iwamoto and Nabeshima, 2012).

EXCHANGE RATE

Exchange rate volatility especially the over valuation of a currency can step down export diversification by increasing the prices of exports andundermining the competitiveness of the export. Current finding points to the negative implication of an exchange rate increase on the manufacture of sophisticated tradable goods and the long run effect of overvaluation on export concentration (Agosin et al, 2012 in Elhiraika et al, 2014). Binti (2011) argues that economic integration in East Asian countries has led to faster export diversification in the region. Again, regional integration could facilitate commercial activities through reforming trade through improved custom procedures and cross-border entrepreneurship and trade OECD and UN, 2011.

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METHODOLOGY

The main objective of this paper is to empirically assess the determinants of export diversification on economic growth evidence from West African sub-region. To carry out this, seven of the export diversification determinants data were sourced from 17 West African countries spanning from 1995 to 2014. The data bases are; United Nations Conference on Trade and Development (UNCTAD), Africa Development Indicator (ADI) and World Governance Indicator (WGI). The dependent variable is the export diversification. The data for the dependent variable was obtained from the UNCTAD data base while the other fundamental independent variables data were extracted from ADI and WGI data bases of the World Bank.

African continent is made up of five regions namely; East Africa region, Middle Africa region, North Africa region, South Africa region and West Africa region. Of these regions, West Africa region has the largest population, rich in natural endowments and less developed. The regions diversification statuses are; Middle Africa and West Africa show high level of specialization With Normalized Herfindhal Hirschman Index (HHI) of above 0.4, East Africa and South Africa regions have less than 0.2 and Angola and Chad are the most highly concentrated African countries with HHI of 0.92 and 0.80 respectively (Agosin 2007; Gelb and Sina 2010; Hamed et al 2014). The analysis above formed our choice of West African sub-region.

VARIABLES DISCRIPTION

Table 1: Definition, Measurement Units and Sources of Data used in the Analysis

S/N	Variables	Definition	Units	Source
1	GDP Per Capita	This is the gross domestic product divided by midyear population	Constant US Dollars	ADI
2	Terms of Trade	Export price index divided by import price index	Index (2000=100)	ADI
3	Exchange Rate	Principal exchange rate based on monthly average	Local currency units relative to the US dollar	ADI
4	Human Capital	Gross secondary enrollment ratio of total enrollment: Ratio of total enrollment to population of age group attending secondary level education	Ratio	ADI
5	Gross Public Investment	Public sectors' gross domestic fixed capital formation	Percentage of GDP	ADI
6	Population Growth	The exponential rate of growth of midyear population expressed as a percentage	Annual growth Rate	ADI

Sources: African Development Indicator(ADI), World Governance Indicator(WGI) and UNCTAD for various years.

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REGRESSION MODEL

In estimating the regression model for this study, fixed effect model was adopted . where export diversification is assumed to be a function of economic development in Afica. This represented mathematically as XP = F (PCI,HC,INV,GEL,TERMT,POP and EXR).

Drawing from this mathematical definition of this model for multiple regression involving fixed effect states that the model specified is assumed to take the form specified in eguation (1) and is adopted thus

$XP = \beta o + \beta_1 PC_1 + \beta_2 HC + \beta_3 inv + \beta_4 gel + \beta_5 + ermt + \beta_6 pop + \beta_7 exr + \phi$

Where

xp is the export diversification

Index,b0,b1 to b7 are the coefficients

ϕ is the stochastic terms.

Pci represent per capita income,

Hc is the human capita

Inv is investment,

gel is geographical location measured by nearness to sea,or market,

termtt is the term of trade

,pop is the population

exr represent the exchange rate.

The various determinants are expected to show varying degree of signs.

RESULTS/FINDINGS

Table 2 presents the result of the regression model

Table 2: T- Test table represents the results of the regression model using "a" as the dependable variable and seven (7) independent variables. In the table it was found that PC_1 which represent per capita income is derived by gross domestic product divided by mid- year population has a positive relationship with the rate of export in the region. This shows that increase in per capital income would ordinarily lead to an increase in the rate of export. This is in line with Pinres and Ferratino(1997 & 1999 respectively), Marhubi (2000), Hausmam et al 2006 and Agosin (2007). Also , experienced and skilled manpower has a positive relationship with rate of export in a region. High investment triggers export diversification in Africa and has been weak owing to its concentration on enclave sectors that have limited linkages to the rest of the world. Nearness to market or major sea is an advantage for some African countries than do some other countries that are land locked. Term of trade and population have negative relationship with export diversification in Africa.

Exchange rate has a concave shape with the rate of export. Exchange rate policies especially the over valuation of a currency can deter export diversification by inflating the prices of exports and undermining the competitiveness of the export. This is supported by the findings of (Agosin et al 2012, Binti 2011 and Elhiaika et al 2014).

Low production base and export concentration do not lead to sustainable and inclusive growth, employment generation and poverty reduction. Diversification of

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product , markets and export can act as a driver of high level inclusive growth that foster economic transformation, employment and poverty reduction.

DISCUSSION

Table 2 represents the finding of the regression model using fixed effect model as the Export diversification is the dependent variable and seven independent variables. In the table it was found that the relationship between the variables account for the changes in export diversification. Per capital income, experienced manpower and high investment have positive relationship with the rate of export while terms of trade and population have negative relationship with export diversification. Exchange rate has a concave shape with the rate of export. The import of the above finding is that as domestic investment increases, export concentration decreases. Private sector investment is an important driver of export diversification

Foreign Direct Investment (FDI) has a positive relationship with export diversification. We also found that the impact of FDI on export diversification in Africa has been weak owing to its concentration on enclave sectors that have limited linkages to the rest of the world. Narrow production base and export concentration do not augur well for sustainable economic development. Access to credit increases the pace of export diversification through the provision of capital needed for entrepreneurial activities while infrastructure is found to be crucial accelerator of a regions export diversification. This result corroborates the earlier findings of Alaya, (2012). Exchange rate policies, especially the over valuation of a currency can deter export diversification by inflating prices of exports. This is further buttressed the concave shape recorded. Similar result is recorded in official development assistance and human capital.

IMPLICATION TO RESEARCH PRACTICE

The extent of export diversification and economic growth of any region is highly dependent on the existing circumstances of the nature of governance and institutional arrangements in the country. The results strongly support the significance of institutions and policies that promote structural changes in production and exports. West African region requires high technology and industrial policies that facilitate export diversification.

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Table 2" T-Test table[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	86.184	61.608		1.399	.297					
	pci	-10.815	7.970	-1.384	-1.357	.308	-.008	-.692	-.496	.129	7.773
	Hc	-.193	.447	-.184	-.431	.708	.024	-.292	-.158	.739	1.353
	inv	-703.476	362.360	-2.320	-1.941	.192	-.256	-.808	-.710	.094	10.668
	gel	10.865	5.613	2.358	1.936	.193	-.063	.807	.708	.090	11.089
	temt	-1.996	1.471	-1.381	-1.357	.308	-.220	-.692	-.496	.129	7.732
	pop	.376	.488	.432	.772	.521	.059	.479	.282	.428	2.337
	exr	-.165	.412	-.237	-.401	.727	.209	-.273	-.147	.382	2.615

a. Dependent Variable: xp

CONCLUSION

This study sought to assess the determinants of export diversification on economic growth in Africa with special interest on West African sub- region. 17 countries of West African sub- region are used. While data were extracted from three sources namely UNCTAD data base, Africa Development indicator database and World Governance Indicator data base spanning from 1995 to 2014. Africa continent is made up of five regions; East Africa, Middle Africa, North Africa, southern African and Western Africa regions. Out of these five regions, West African region seems to be the most populous, naturally endowed, less developed and highly specialized. Aside the obstacle facing the region, opportunities and possibilities are available if primary issues are taking care of.

The means to addressing this is to have a development plan that is anchored on realizing an inclusive and sustainable growth. The all inclusive and sustainable

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growth can be achieved with conscious efforts to break the chain of being monolithic economies where most African countries depend more on imported goods. The empirical findings identified per capital income, human capital, investment, population, geographical location, terms of trade and encourage rate as the main determinants of export diversification in western African sub – region.
Sequel to the findings and conclusion, it is recommended that:

There should be good governance effectiveness and credibility in the formulation and implementation of sound economic policies.

The region should come up with investment friendly policies that attracts both domestic and foreign investors

The region should aggressively pursue the process of export diversification. This will result in buoyant and robust economy which will reduce the dependent on imported goods.

FUTURE RESEARCH

The researchers suggest further research to be carried on how investment can promote export diversification and sophistication in an emerging economy.

REFERENCE

Adeel, M. and Temple, W. (2009). The Geographical of Output Volatility. *Journal of development Economics* Vol. 90(2), pp. 163 – 178.

Agosin, M. (2007).“Export Diversification and Growth in Emerging Economies”.SerieDocumentos de Trabajo N233, University de Chile, Santiago.

Agosin, R. Alvarez, R. and Caludio Bravo-Ortega, (2012). Determinants of Export Diversification around the World 1962 – 2000, The World Economy.

Ali, R., Alwang, J. and Siegel, P. (1991). “Is export diversification the best way to achieve export growth and stability? A look at three African Countries” Policy Research working paper series, No 729, Washington, D.C.

Binti, F. (2011). Export Diversification in East Asian Economies: Some factors Affecting the scenario, International Journal of Social Science and Humanity.

Brenton, P and Newfarmer, R. (2009). Watching more than the Discovery Channel to diversify exports Breaking into New Markets: Emerging lessons for Export Diversification, pp. 114 – 124. Washington, D.C.: The World Bank.

Costas, A. Demidova, S. Klenow, P and Rodriguez-Clare, A. (2008). “Endogenous variety and the gains from trade” *American Economic Review Papers and Proceedings*, 98 (2), pp. 444 – 450.

Dawe, D. (1996). “A new look at the effects of Export Instability on Investment and Growth” World Development Vol. 24 (12): 1905 – 1914.

Djankov, S., Rafael La Porta, Florencio Lopez-De-Dilaries and 5hLeifer, A. (2002). The Regulation of Entry, *Quarterly Journal of Economics*Vol 117 (1), pp 1-37.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Dodaro, S. (1991). “Comparative advantage, Trade and growth: Export-led growth revised” World Development, Vol. 19 (9) pp. 1153 – 1165.

Edwards, J. (2009). “Trading Partner Volatility and the Ability for a country to cope: A panel GMM Model, Applied Econometrics and International Development, Vol. 9.(2).

Elhiraika, A. Adam, B, Mbate and Micheal, M. (2014). Assessing the
Determinants of Export Diversification in Africa: Applied Economics and International Development, Viol. 14(1), pp. 148 – 162.

Elhiraika, A., Mahamaat, O, and Muhammed, K. (2013). Promoting Manufacturing to accelerate economic growth and reduce growth volatility in Africa, *Journal of Developing Areas*.

Gelb, A and Sina, G. (2010). How should Oil Exporters Spend their rent? Center for Global Development Working paper No. 221.

Gullstrand, J. (2000). Country Specific Determinants of Vertical Intra-industry Trade with Application to Trade Between Poland and EU, [in] B. Wawrzynjak (Ed.), Globalisation and change – ways to future, Leon Kozminski Academy of Entrepreneurship and Management, Warsaw.

Hanrigan, J and Zakrajsek, E (2000). Factor supplies and specialization in the world economy” NBER working paper No. 7848, Cambridge (Mass).

Hausman, R., Hwang, J. and Rodrik, D. (2006). “What you Export Matters”. Working Paper. Centre for International Development, Harvard University.

Hausman, R., J. Hwang, and D. Rodric (2006). “What you Export Matters,” Working Paper. Centre for International Development, Harvard University.

Hausmann, R., Hwang, J. and Rodrik, D. (2007). What you export Matters”. *Journal of Economic Growth*, 12 (1); pp1 – 25.

Herzer, D. and Nowak – Lehmann, F. (2006). “What does Export diversification do for growth? An Economic Analysis” *Applied Economics*, Vol. 38 (15), pp 1825 – 1838.

Hesse, H. (2009). Export Diversificaiton and Economic Growth” in Breaking into New Markets, Emerging lessons for Export Diversification, R. Newfarmer, W.Shaw, and P. Walkenhorst (eds.) Washington D.C: The World Bank, pp. 55-80.

Iwamoto, M. and Nabeshima, K. (2012). Can FDI promote Export Diversificationand Sophistication in Host Countries? Dynamic Panel System GMM Analysis, Institute of Developing Economics.

Krugman, P. and Venables, A. (1990). Integration and the Competitiveness of peripheral industry. [in] Bliss C. and J. Braga de Macedo (Eds.) Unity with diversity in the European economy: the Community’s Southern Frontier. Cambridge University Press Cambridge.Maloney (eds), Palo Alto: Stanford University Press.

Manuel, H. C. and Paul, V. (2010). Determinants of Export Diversification and sophistication in Sub-Saharan Africa’s Mimeo.

Mattee, M. anadNaude, W. (2008). “Export diversity and regional growth in a developing country context: empirical evidence, paper submitted to the regional studies Association International Conference: “Regions: The dilemmas of Integration and Competition”. Pragne, pp. 27 – 29.

Matthee, M. and Naude, W. (2008).Export diversify and Regional Growth:

Empirical Evidence from South Africa, WIDER Research Paper RP 2008/11, United Nations.

Melitz, M. J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity" *Econometrica*,71.6 1695 – 725

Mevel, S. and Karingi, S. (2013). "Deepening Regional Integration in Africa: A Computable General Equilibrium Assessment of the Establishment of a Continental Fee Trade Area followed by a Continental Customs Union", A paper presented at the African Economic Conference, Kigak.

OECD/United Nations (2010). Economic Diversification in Africa: A review of selected countries, OECD Publishing.

OECD/United Nations (2011). Economics Diversification in Africa: A review of selected countries, OECD Publishing.

Ofa, S. V., Spence, M, Mevel, S, and Karingi, S. (2012). Export diversification and intra-industry Trade in Africa, Selected Paper for the African Economic Conference, Kigali.

Parateka, A. and Tamberi, M. (2011). Export Diversification and Development-empirical assessment, UniversitaPolitecnicadelle Marche, working paper 359.

Parteka, A and Tamberi, M. 92008). Determinants of Export Diversification: An Empirical Investigation, working paper 327 (Ancona: UniversitaPolitecnica de Le Marche (1), Dipartamento di Econonua).

Parteka, A. and Tamberi, M. (2011). Export diversification and development – empirical assessment, UniversitaPoliticadelle Marche, Working Paper, 359.

Parteka, A. and Tamebri, M. (2008). "Determinants of Export diversification: an empirica investigation" Quaderno di Ricerca (Working paper), No. 327, PolitelhiCadelle Marche, Dipartimento di EconomiaUniversita.

Pineres, A. and Ferrontino, M. (1997). "Export Diversification and Structural Dynamics in the Growth Process.The Case of Chile".*Journal of Development Economics* Vol. 52(2), pp 375 – 91.

Plekhanoc, A., Guriev, S., and Sonin, K., (2011). Development based on commodity revenues, working papers 108, *European Bank for Reconstruction and Development.*

Radelet, S. and Sachs, J. (1998). "Shipping Costs, Manufactured Exports, and Economic Growth:. Draft paper presented at the American Economic Association Meetings, (January)

Starosta de Waldemar (2010). How costly is rent seeking to diversification: an empirical approach, proceeding of the German Development Economics Conference, Hannover 2010, Verein fur Socialpolitik, Research Committee Development Economics.

Venables, A. and Limao, N. (2002). "Geographical disadvantage: a Hecksher – Ohlin – von Thunem model of International Specialization" *Journal of International Economics*, Vol. 58 (2), pp. 239 – 263.

Vera, S. and Deborah W. (2015). Exports and Export Diversification in Sub-Saharan Africa: A Strategy for post-crisis Growth.

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APPENDIX 1

Correlations

		xp	pci	Hc	Inv	gel	temt	pop	exr
Pearson Correlation	xp	1.000	-.008	.024	-.256	-.063	-.220	.059	.209
	pci	-.008	1.000	.265	-.796	-.414	-.493	-.658	-.659
	Hc	.024	.265	1.000	-.414	-.227	-.197	-.262	.041
	inv	-.256	-.796	-.414	1.000	.760	.752	.491	.332
	gel	-.063	-.414	-.227	.760	1.000	.916	.043	.115
	temt	-.220	-.493	-.197	.752	.916	1.000	.127	.126
	pop	.059	-.658	-.262	.491	.043	.127	1.000	.498
	exr	.209	-.659	.041	.332	.115	.126	.498	1.000
Sig. (1-tailed)	xp	.	.491	.474	.238	.431	.270	.435	.281
	pci	.491	.	.229	.003	.117	.074	.019	.019
	Hc	.474	.229	.	.117	.264	.293	.232	.456
	inv	.238	.003	.117	.	.005	.006	.075	.174
	gel	.431	.117	.264	.005	.	.000	.453	.376
	temt	.270	.074	.293	.006	.000	.	.363	.365
	pop	.435	.019	.232	.075	.453	.363	.	.071
	exr	.281	.019	.456	.174	.376	.365	.071	.
N	xp	10	10	10	10	10	10	10	10
	pci	10	10	10	10	10	10	10	10
	Hc	10	10	10	10	10	10	10	10
	inv	10	10	10	10	10	10	10	10
	gel	10	10	10	10	10	10	10	10
	temt	10	10	10	10	10	10	10	10
	pop	10	10	10	10	10	10	10	10
	exr	10	10	10	10	10	10	10	10

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