

THE IMPACT OF ECONOMIC SECTORS ON LOCAL ECONOMIC DEVELOPMENT (LED): THE CASE OF THE CAPRICORN REGION, LIMPOPO PROVINCE, SOUTH AFRICA

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-Abstract-

The birth of democracy in South Africa in 1994 guided the introduction of local economic development (LED) to improve local and regional economies. Accordingly, the objective of this study was to analyse the impact of key economic sectors on LED in the Capricorn District Municipality over the period 1996 to 2016. The study also included the development of a LED index for measurement that could contribute to the diverse literature on Development Economics. The methodology included the development of an index to measure LED and also an econometric analysis of the impact of economic sectors on the LED index. The study employed a panel autoregressive distributed lag (ARDL) model. A LED index was composed of economic growth, employment and poverty alleviation. The results show how the productivity of key sectors influence economic growth, employment and poverty alleviation. It is noteworthy that the community service, trade, construction, finance and electricity sectors are positively related to LED. The main economic base sectors, such as agriculture and manufacturing, surprisingly had less of a positive impact on the local economy. Specific aspects have a negative impact on economic sectors, and should be minimized. Thus, the study formulated a strategy for policy implications such as restructuring of the agricultural, manufacturing and

infrastructural development sectors, ensuring capacity of all essential services, improving production methods, and investment in technical skills development. It was therefore be concluded that LED is a process and tool in improving local economic growth, employment and poverty alleviation. In light of this finding, key sectors need to play a significant role to improve local economic growth and employment, and alleviate poverty.

Key Words: ARDL model, Capricorn region, Economic sectors, LED, South Africa.

JEL Classification: R11, R58.

1. INTRODUCTION

The chronicle surrounding the economy of South Africa during the apartheid era finally came to an end after an extensive series of negotiations amongst political parties which led to the first-ever free elections. Consequently, the 1994 elections gave birth to democracy in South Africa (Nel, 2001). The apartheid regime's economic policies were deemed unfair because of race-based segregation. Nevertheless, the end of that system introduced the concept of local economic development (LED) in South Africa and was included in the functions of local government in Section 153 of the Constitution (RSA Constitution, 1996). This shifted the prerogative from the national to the local government, suggesting that societies and local governments have a duty in local development. By definition, LED is an economic process whereby government, private institutions and communities join to facilitate job creation, alleviate poverty and improve economic growth at the local level (Trousedale, 2005; World Bank, 2016). To achieve job creation, economic growth and poverty alleviation, all the institutional resources should be channelled to key economic sectors to enable economic development.

Despite the introduction of LED, high levels of poverty and unemployment have remained common to the majority of South Africans. This is exemplified by the statistic that the unemployment rate is recorded at approximately 26.7 percent (Stats SA, 2018). While the unemployment problem is common to South Africa as a whole, it is particularly dominant in the Limpopo province. Statistics South Africa (2018) identifies the province as one of the regions with the highest unemployment rates and low income. Within the province, the Capricorn District Municipality has the highest unemployment rate of 51 percent and 41 percent of people are living in poverty (Capricorn District Municipality, 2018). Thus, the

amalgamation of high levels of poverty and unemployment has resulted in stagnant economic growth in the district. The average annual economic growth rate for the region is recorded at 0.5 percent and this has stalled economic development in the region (Global Insight, 2017).

Although stagnant economic growth and high levels of poverty and unemployment are prevalent in the abovementioned municipal region, the key economic sectors should act as catalysts for LED. There are a number of studies that have engaged in the relationship between LED and key sectors. For instance, Binns and Nel, (2002), Kirsten, Van Zyl and Vink, (2010), Nel (2005) & SALGA (2010) used interviews and surveys to investigate the impact of key economic sectors on LED in South Africa. The authors found that tourism, manufacturing, community service, mining, agriculture, trade, business and finance are the key sectors that contribute to local development. Mbeba (2005) pointed out that tourism is the primary contributor to job creation, economic growth and poverty alleviation, particularly in more rural regions. Furthermore, the Human Sciences Research Council (2003) used interviews to assess the impact of key economic sectors on LED. Results revealed that tourism, community service and agriculture were the major contributing sectors.

From the studies done on LED in South Africa, there is no agreement on which economic sectors really impacts most on LED. Some researchers list the number of projects, and some the number of people employed after completion of the project as the main contributors to LED (Machala, 2012; Nghonyana, 2011). This study employed a different methodology in the analysis of LED by developing a new LED measurement to capture development at the local and regional level in analysing key economic sectors promoting LED. Thus, the study tested the new LED measure and employed a panel Autoregressive Lag (ARDL) econometric model in analysing the relationship between LED and various sectors.

2. LITERATURE REVIEW

The literature available on key economic sectors and LED offers a plethora of views on Development Economics. The information studied included theories and previous studies that link poverty, economic growth, employment and key economic sectors. The development theories that link key economic sectors and local economic development include: traditional theories, classical theories and location theories. The traditional theorists, including the 18th century Scottish economist and moral philosopher (Smith, 1776), recommend the agricultural sector as the major contributing sector in economic development. It is still pivotal

for rural communities to engage in the agricultural sector. Every local municipality should develop agricultural projects for sustenance. This ought to be one of the many strategies to reduce the number of poor people in a region. When agriculture is undertaken on a large scale, it will create employment and improve the local economic growth (Sloman, 1994). In contrast to the abovementioned traditional theorists, the classical theorists of economic development deviate from the traditional theorists. In their structural change model, these theorists shift the emphasis from agricultural activities to modern sectors (Todaro & Smith, 2006). This implies that some of the factors of production should be moved from the primary sectors to modern sectors. The modern sectors include: the finance sector, the community service sector and the transport sector as well as the tourism sector, just to name a few (Dang & Pheng, 2015). The sectors mentioned are classified as the high-productivity, modern sectors. Thus, capital and labour should be shifted to the high-productivity sector for poverty alleviation, employment creation and improved economic growth. For local government to alleviate poverty, solve unemployment and improve economic growth, the modern sectors should be promoted to attract investment and accumulate capital in the region.

In addition, providing a different perspective on the theories supporting job creation and economic growth at the local level, the location theories specifically focus on the growth pole theory. The former was formulated by Perroux around the 1950s; he stated that local growth takes place in one place at a time, known as a growth point (Perroux, 1955). Growth will then spread out to different places, for instance if one sector improves significantly, all other sectors will eventually increase. Monsted (1974) further outlined that growth will occur in a sector where there is high interaction compared to other sectors. Generally, growth is experienced in sectors such as automobile, electronics, steel and agriculture (Garidzirai, 2017). Therefore, the growth of other industries means improved economic growth, employment and a reduction of poverty.

The impact of key economic sectors on LED cannot be isolated from the previous literature. Moreover, there is limited literature that makes a direct link between economic sectors and LED. However, a few studies focused on this phenomenon (Mogalakwena Local Municipality, 2006; Musakwa, 2009; Nel & Binns, 2003; Notre Europe, 2011; Pedrana, 2013; Triegaardt, 2014; Valdes & Foster, 2005). For instance, Pedrana (2013) conducted a study in Europe to investigate the impact of tourism on LED in 2012. The study used the Pike, Pose and Tomaney (2006) development model and found that tourism makes a positive impact on

LED. Valdes and Foster (2005) obtained conflicting results and they used a survey to investigate the impact of key economic sectors on poverty. The study revealed that agriculture does contribute to poverty alleviation. However, it is important to note that the two authors concluded that agriculture alone cannot sustain economic development.

To further the Valdes and Foster (2005) idea, a research institute, Notre Europe (2011) conducted a survey in Ireland on how to improve LED using a theoretical model. The results of the study revealed that the service sector, transport sector and community service sector contribute significantly to LED. Later on, the same study was conducted by the International Labour Organisation (2015) in Bangladesh. The study utilised a different approach by using a desktop analysis and found that trade, agriculture, tourism and forestry and fisheries all promoted LED.

In South Africa, Triegaardt (2014) using interviews and surveys, investigated local economic sectors to determine which sector contributes most to LED. The author found tourism to be the sector that contributed most to LED. On the other hand, the Mogalakwena Local Municipality (2006) used a Local Economic Potential Analysis and found that the government sector and transport sector are the major contributors to employment in that region. The same study was conducted in the Molemole local Municipality (2006); it was discovered that the agricultural sector, finance, wholesale and retail sector were the major sectors influencing local development in that area. Various stakeholders in the public sector, the private sector and non-profit organisations investigated the key economic sectors in the Stellenbosch Municipality in 2006. The study aimed at formulating strategies for the improvement of these key economic sectors and activities. All these stakeholders collaborated to improve the services, tourism, agriculture, manufacturing and construction sectors in the region (Stellenbosch Municipality, 2008).

The South Africa LED literature has grown over the past two decades. From the literature archive, most of the studies undertaken on LED were based on surveys, interviews and analysis of specific projects. Furthermore, the majority of these studies were national studies and just a few were local case studies. Relatively few studies were undertaken at the district level and the studies were more inclined to a qualitative approach than a quantitative approach. This study bridges this gap by providing a quantitative approach to the measurement of the relationship between the key economic sectors and LED.

3. RESEARCH METHODOLOGY

The study employed a quantitative approach to investigate the impact of key economic sectors on LED in the Capricorn region situated in Limpopo Province. The study used data from the Global Insight (2017) to investigate key economic sectors promoting LED. The data consists of four cross-sectional dimensions: four local municipalities and twenty time-series dimensions, allowing for eighty observations. Panel data analysis was chosen because it provides more precise results of parameters (Heckman, Ichimura & Todd, 1998; Hsiao, 2006). The study appraised the productivity of LED and key economic sectors. LED was used as the dependent variable while productivity of key economic sectors was used as the independent variables. The LED measurement included: economic growth, employment and poverty alleviation. These three variables were chosen to measure LED because this is in line with the definition of LED (Meyer, 2016; World Bank, 2005). Meyer (2016) defined an LED index (LEDI) as a measure of local development in a particular local area to capture its socio-economic aspects.

The first element of LEDI is economic growth. Economic growth is the total number of goods and services in the economy considering population of the region (Boulhol, De Serres & Molnar, 2008). It is measured by gross domestic product per capita. The second constituent is employment, which is defined as the total number of people in a region who are working in both the formal and informal sector (Belle & Bullock, 2011). The last element is poverty alleviation which is defined as the number of individuals in a region living above the poverty line or non-poor people (World Bank, 2015). The calculation of the LEDI is shown below in Equation (1)

$$\sum_{it=1}^3 X_{it} = 1$$

Where X_{it} = Local Economic Development Index, i i at time.

Equation (1) shows the LEDI computation. The computation is made up of three variables: economic growth, employment and poverty. Combined, these variables make one variable that is the LED Index (LEDI). The selection of the variables that measured LEDI are strongly linked to the LED definition, which relates to economic growth, poverty alleviation and employment (Rodríguez-Pose; Seduma, 2011; Tijnstra, 2005). There are other studies that have created indexes in development economics too, such as Notre (2011), Rives and Heaney (1995) and Victor (2010). These studies used variables such as income, employment, GDP,

small business, infrastructure development, education and population. The literature of composition of an index gives a consensus that an index should be composed of two or more variables. Therefore, this paper agrees with the literature and Equation (2) shows the mechanisms that were used to make up the LEDI measure.

$$\text{LEDI}_{it} = f(X_{1it} + X_{2it} + X_{3it})$$

Where LEDI_{it} is the LED Index, X_{1it} is the economic growth (growth), X_{2it} is the employment (employ) and X_{3it} is poverty alleviation (non-poor). Equation (3) further shows the weights of the LEDI

$$\text{LEDI}_{it} = f(X_{1it} * 0.4 + X_{2it} * 0.3 + X_{3it} * 0.3)$$

It is conjectured that economic growth, employment and non-poverty rate are mechanisms of a single model. The study attached weights to each component of the LEDI. Economic growth was allocated a weight of 0.4 whereas employment and poverty alleviation were allocated weights of 0.3 each. Economic growth weighed more because mechanism is the first step to development. Furthermore, Krongkaew (2016) confirms that economic growth ultimately leads to employment and reduction of poverty. Thus, a region with good economic growth reduces the poverty rates and create more jobs. After the formulation the LEDI, the study pooled panel analysis and equation (4) shows the equation with economic sectors.

$$\ln\text{LEDI} = f(\ln\text{Comus}, \ln\text{Trade}, \ln\text{Manufac}, \ln\text{Constr}, \ln\text{Agric}, \ln\text{Finance}, \ln\text{Mining}, \ln\text{Tourism}, \ln\text{Electr})$$

Where $\ln\text{LEDI}$ represents log of LEDI, $\ln\text{Comus}$ is the log of productivity in the community service, $\ln\text{Trade}$ is the log productivity in trade, $\ln\text{Manufac}$ is the log of productivity in manufacturing, $\ln\text{Constr}$ is the log of productivity in construction, $\ln\text{Agric}$ is the log of productivity in agriculture, $\ln\text{Finance}$ is the log of productivity in finance, $\ln\text{Electricity}$ is the log of productivity in electricity, $\ln\text{Tourism}$ is the log of productivity tourism, and $\ln\text{Mining}$ is the log of productivity mining. The variables in this study are all converted to logarithm form. The logging of variables is a vital process as it eliminates misspecification and heteroscedasticity problems (Mongale, 2012). Furthermore, it allowed the use of percentages in the analysis of the relationships.

The estimation of results includes: panel unit root testing, panel ARDL model and cross-dependency tests. The unit root test is the first step of the estimation of

Table 1: Panel unit root tests

Variables	Level & Difference	LLC	IPS	ADF	Fisher/P	Decision
LnAgric	Level	0.0004	0.0179	0.0131	0.0053	1(0)
LnComus	Level	0.6830	0.9723	0.8838	0.9199	1(1)
	1st difference	0.0000	0.0000	0.0000	0.0000	
LnConstr	Level	0.9175	0.9929	0.9780	0.9601	1(1)
	1st difference	0.0437	0.0000	0.0000	0.0001	
lnElectr	Level	0.0697	0.7469	0.6112	0.6201	1(1)
	1st difference	0.0000	0.0004	0.0010	0.0001	
lnFinance	Level	0.6964	0.9596	0.6766	0.7859	1(1)
	1st difference	0.0023	0.0047	0.0122	0.0115	
lnManufac	Level	0.2365	0.9129	0.9102	0.7827	1(1)
	1st difference	0.0000	0.0000	0.0000	0.0000	
LnTrade	Level	0.1158	0.7332	0.4023	0.6653	1(1)
	1st difference	0.0032	0.0000	0.0002	0.0493	
LnLEDI	Level	0.2931	0.8192	0.8306	0.4903	1(1)
	1st difference	0.0000	0.0000	0.0000	0.0000	

Source: Own compilation

Note: 1(1) shows stationarity at first difference.

1(0) shows stationarity at levels.

Since the unit root test indicates a mixture of 1(0) and 1(1) variables, a panel ARDL model is estimated. The literature describes a panel ARDL model as a cointegration procedure, allowing for the estimation of both short-run and long-run relationships between key economic sectors and the LED index (LEDI). The results of the panel ARDL are shown in the long-run equation (Equation 6) and Table 2.

Table 2: Local economic development long run analysis

Variable	Coefficient	Probability
LnComus	0.0157	0.6034
LnTrade	0.4227	0.0000*
LnAgric	-0.0973	0.0000*
lnFinance	0.0231	0.3010
lnConstr	0.0434	0.0033*
LnElectr	0.1688	0.0000*
lnManufac	-0.4872	0.0000*
C	1.1553	0.0000*

Source: Own compilation.

Note: * indicates 1% significance.

In analysing the relationship between the LED index (LEDI) and key economic sectors, the following long-run equation (Equation (6)) was established with LEDI as the dependent variable:

$$\text{Local Economic Development (InLEDI)} = 1.1553 + 0.0157\ln\text{Comus} + 0.4227 \ln\text{Trade} - 0.0973\ln\text{Agric} + 0.0231\ln\text{Finance} + 0.0434\ln\text{Constr} + 0.1688\ln\text{Electr} - 0.4872\ln\text{Manufac}$$

The LEDI long-run Equation 6 was estimated using a lag structure of (2, 1, 1, 1, 1, 1, 1, 1). The estimation was based on Akaike Information Criterion (AIC). The results from Table 2 and Equation (6), indicate that the productivity of the community service sector, trade sector, construction sector, the finance sector, electricity sector and LEDI are positively related. Thus, a one percent increase in the productivity of the above-mentioned sectors leads to an increase, according to the coefficients in Table 2, in LEDI in the region. These results are consistent with the export base theory and studies by Dang and Pheng, (2015) and Giordani, (2012). On the other hand, LEDI was found to be inversely related to the agriculture and manufacturing sector. An inverse relationship implies that a one percent increase in the productivity of the agriculture and manufacturing sectors leads to a decline in local development. It is important to note that similar conclusions were reached by Borooh (2003) and Van Rooyen (2007).

In the next section, the error correction model (ECM) is estimated to capture all the economic shocks on the dependent variable. Table 3 reports the results of the LEDI error correction model. The results indicate a short-run relationship in percentages by which the equilibrium can be restored in the upcoming period. The results reveal a negative error correction term of -0.6857 and a significant p-value of 0.0002, thus 69 percent of disequilibrium in the region will be restored in the upcoming period solely if the productivity of these sectors improves. Therefore, it takes about 1.45 (1/0.6857) years for LEDI to adjust to change in the productivity of the key sectors. Banerjee, Dolado and Mestre, (1998) mention that the higher the error correction term (ECT) the more stable the relationship between LEDI and key economic sectors in all the municipalities. In other words, the higher the ECT, the shorter the period for equilibrium to be restored. Five independent variables were statistically significant at one percent and five percent: agriculture sector, trade sector, construction sector and manufacturing and community service sector.

Table 3: LEDI error correction model (ECM)

Variable	Coefficient	Probability
ECT	-0.6857	0.0000*
LnComus	0.3249	0.0007*
LnTrade	0.1893	0.0000*
LnAgric	0.0639	0.0000*
lnFinance	-0.0598	0.4992
LnConstr	-0.0803	0.0157**
LnElectr	-0.0492	0.3145
lnManufac	0.0986	0.0000*
C	1.1553	0.0000*
@TREND	0.0119	0.0000*

Source: Own compilation.

Note: *, ** indicates 1%, 5% significance respectively.

This study employed the cross-section dependency test to check for whether serial correlation had been achieved or whether the model had produced spurious results. The tests used the Breusch-Pagan Chi-Square, Pearson LM normal and the Pearson CD to test for cross dependence. Table 4 indicates the results of the cross-section dependency test. According to Table 4, the model is stable and did not produce any spurious results.

Table 4: LEDI cross-sectional dependence index

Test	Probability
Breusch-Pagan Chi-Square	0.1373
Pearson LM	0.9339
Pearson CD	0.1545

Source: Own compilation

5. CONCLUSION AND RECOMMENDATIONS

The main objective of this study was to examine the contribution of the key economic sectors on LED in the Capricorn region of Limpopo Province. The study used a panel ARDL model using data from Global Insight over the period 1994 to 2016. The study contributes to the existing literature on LED in the study region and in South Africa as a whole. The economic sectors are vehicles to achieve development in the region. Moreover, the LED index, as used in this study as a measure of LED, is envisaged to play a significant role in development economics methodology to measure development at the local and regional level. The results of the study have shown that trade, construction and electricity sectors have contributed significantly to LED in the Capricorn District Municipal region.

Conversely, sectors such as agriculture, manufacturing, community service and the finance sector were lagging behind. This was caused by low productivity in these sectors as well as drought and inefficiency in the respective sectors. Therefore, the Capricorn District Municipality should develop drought resistant methods and restructure the agricultural sector for better productivity. Furthermore, the District municipality needs more community service projects which will create employment, reduce poverty and eventually improve economic growth.

REFERENCES

- Banerjee, A., Dolado, J. & Mestre, R. (1998). Error-correction mechanism tests for cointegration in a single-equation framework. *Journal of Time Series Analysis*, 19(3), 267-283.
- Belle, D. & Bullock, H.E. (2011). *SPSSI Policy Statement: The psychological consequences of unemployment*. <http://www.spssi.org/index.cfm>. Accessed 2017/08/10.
- Binns, T. & Nel, E.T. (2002). Tourism as a local development strategy in South Africa. *The Geographical Journal*, 168(3), 235-247.
- Borooah, V. (2003). *Market failure: An economic analysis of its causes and consequences*. <https://www.researchgate.net/publication/266350206>. Accessed 2017/02/15.
- Boulhol, H., De Serres, A. & Molnar, M. (2008). *The contribution of economic geography to GDP per capita*. https://scholar.google.co.za/scholar?hl=en&as_sdt=0%2C5&q=Boulhol. Accessed 2018/07/03.
- Breitung, J. (2000). The local power of some unit root tests for panel data. *Advances in Econometrics*, 15, 161-178.
- Capricorn District Municipality. (2018). *Capricorn District Municipality IDP*. www.cdm.org.za/attachments/.../Draft%202016-17%20-%202020-21%20IDP-Budget. Accessed 2018/06/07.
- Dang, G. & Pheng, L. (2014). Theories of economic development. *Infrastructure Investments in Developing Economies*, 1(3), 11-26.

Garidzirai, R. (2017). Analysis of key sectors contributing to local economic development in the Capricorn region, Limpopo Province. PhD thesis. Vanderbijlpark, South Africa: North West University.

Giordani, P.E. (2012). Food prices and the multiplier effect of export policy. World Trade Organization economic research and statistics division. Staff Working Paper ERSD-2012-08. Economic Research Division, WTO; Columbia Business School - Economics Department; International Monetary Fund (IMF).

Global Insight. (2017). Global Insight Regional Explorer data base. Pretoria: IHS Markit.

Hadri, K. (2000). Testing for stationarity in heterogeneous panel data. *Econometric Journal*, 3, 148–161.

Heckman, J.J., Ichimura, H. & Todd, P. (1998). Matching as an econometric evaluation estimator. *The Review of Economic Studies*, 65(2), 261-294.

Hsiao, C. (2006). Panel data analysis: Advantages and challenges. *Sociedad de Estadística e Investigaci'on Operativa*, 1–63.

Kirsten, J.G., Van Zyl, J. & Vink, N. (1998). The agricultural democratization of South Africa. 1st ed. Cape Town: IPA Publishers.

Krongkaew, M. (2016). *Thailand's industrialization and its consequences*. www.palgrave.com/us/book/9780333625194. Accessed 2017/02/24.

Levin, A., Lin, F. & Chu, C. (2002). Unit root tests in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics*, 108, 1-24.

Machaka, E.S. (2012). Local economic development (LED) challenges facing the local government in the Limpopo Province: The case of Motumo trading post in the Molemole local municipality of the Capricorn district municipality. (PhD Thesis-PhD). University of Limpopo.

Mbeba, R.D. (2005). An assessment of the impact of Local Economic Development on urban poverty alleviation: The case of Buffalo City Metropolitan. (PhD Thesis) Durban: University of KwaZulu-Natal.

Meyer, D.F. (2016). Formulation and testing of a local economic development potential assessment tool. Paper presented at the 13th International Economic and Social Development Conference organized by the ESD Organization, 14 to 16 April, Barcelona, Spain.

- Mogalakwena Local Municipality. (2006). *Local economic development strategy*. <http://www.mogalakwena.gov.za/mogalakwena-admin/pages/sites/mogalakwena/documents.pdf>. Accessed 2018/06/12.
- Molomole Local Municipality. (2006). Molemole land use scheme. <http://www.molemole.gov.za/docs/framework/Molemole%20Spatial%20Development%20Framework,%202013.pdf>. Accessed 2018/06/07.
- Mongale, I.P. (2012). The financial crisis and household savings in South Africa: An econometric analysis. (Thesis-PhD.) Mafikeng: North-West University.
- Monsted, M. (1974). Perroux's theory of growth pole and development pole: A critique. *Antipode*, 6(2), 106-113.
- Musakwa, W. (2008). Local economic development as a poverty alleviation tool: A case study on the urban renewal program in KwaMashu. (MA Dissertation). Durban: University of KwaZulu-Natal.
- Maddala, G.S. & Wu, S. (1999). A comparative study of unit root tests with panel data and a new simple test. *Oxford Bulletin of Economics and Statistics*, 61, 631-652.
- Nel, E.T. (2001). Local economic development: A review and assessment of its current status in South Africa. *Urban Studies*, 38(7), 1003-1024.
- Nel, E.T. & Binns, T. (2003). Putting 'developmental local government' into practice: The experience of South Africa's towns and cities. *Urban Forum*, 14, 165-184.
- Nghonyama, M.G. (2011). The sustainability of local economic development projects in Thulamela Municipality in the Vhembe District of the Limpopo Province. (MA Dissertation) Mankweng: University of Limpopo.
- Notre Europe. (2011). Cohesion policy support for local development: Best practice and future policy options. Final report. <https://blogs2.uef.fi/relocal/wp-content/uploads/sites/8/2017/01.pdf>. Accessed 2018/06/08.
- Pedrana, M. (2013). Local economic development policies and tourism: An approach to sustainability and culture. *Regional Science Enquiry Journal*, 5(1), 91-99.
- Perasan, M.H. & Shin, Y. (1998). An autoregressive distributed-lag modelling approach to cointegration analysis. *Econometric Society Monographs*, 31, 371-413.

- Perroux, F. (1955). A note on growth poles. *Growth and Change*, 5(2), 43-49.
- Pike, A., Tomaney, J. & Rodriguez-Pose, A. (2006). *Local and Regional Development*. London: Routledge.
- Republic of South Africa. (1996). *Growth, employment and redistribution*. www.polity.org.za/govdocs/policy/growth.html. Accessed 2017/03/16.
- Rives, J.M. & Heaney, M.T. (1995). Infrastructure and local economic development. *Regional Science Perspective*, 25(1), 58-73.
- Rodríguez-Pose, A. (2001). *The role of the ILO in implementing local economic development strategies in a globalized world* http://learning.itcilo.it/entdev/LED/pub/Eng/Precourse_readings/Rodriguez_Pose_2001.pdf. Accessed 2018/04/25.
- Seduma, M.P. (2011). The impact of local economic development on the livelihood of communities in Ba-Phalaborwa municipality, Mopani, Limpopo province, South Africa: (MA Dissertation), University of Limpopo.
- Sloman, J. (1994). *Economics*. 2nd ed. Hertfordshire: Harvester Wheatsheaf.
- Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. Oxford: Clarendon Press.
- South Africa Local Government Association (SALGA). (2010). Key issues in local economic development in South Africa and a potential role for SALGA. <https://www.salga.org.za/Documents/.pdf>. Accessed 2018/06/09.
- Statistics South Africa. (2018). *Gross domestic product*. Statistics South Africa, Pretoria: Government Printer.
- Stellenbosch Local Municipality. (2008). Investment incentive and retention policy framework. Cape Town: Urban-Econ. <https://www.stellenbosch.gov.za/documents/socio-economic-data/1723-investment-incentive-and-retention-policy-framework-30-june-2014/file>. Accessed 2018/06/19.
- Todaro, M. & Smith, S.C. (2006). *Economic development*. 9th ed. London: Addison-Wesley.
- Triegaardt, J.D. (2014). Assessing local economic development and social welfare benefits in a globalised context. Web access: www.dbsa.org/Research/Documents/Assessing%20local. Accessed 2017/09/12.

Trousdale, W. (2005). Promoting local economic development through strategic planning: The local economic development series, Volumes 1 to 5. *Nairobi, Kenya. UN-Habitat.*

Valdés, A. & Foster, G. (2005). Making the labour market a way out of rural poverty Rural and agricultural labour markets in Latin America and the Caribbean. Background paper for the World Development Report. https://scholar.google.co.za/scholar?hl=en&as_sdt=0%2C5&q=Vald%C3%A9s%2C+A.+%26+Foster%2C+G.+%282005%29. Accessed 2017/10/12.

Van Rooyen, J. (1997). Challenges and roles for agriculture in the Southern African region. *Agricultural Economics*, 36(2), 37-41.

Van Rooyen, E. (2007). *Facilitating sustainable rural development. The quest for sustainable development.* Cape Town: Juta.

Victor, O. 2010. The construction industry and its linkages to the Ghanaian economy-polices to improve the sector's performance. *International Journal of Development and Economic Sustainability*, 1(1), 555-576.

World Bank. (2005). New report calls for urgent action to cut Global poverty and win better development results for poor countries. <http://go.worldbank.org/>. Accessed 2017/06/05.

World Bank. (2015). Local Economic Development: Quick Reference, Urban Development Division. Washington DC: The World Bank.

World Bank. (2016). Doing Business: Economic Profile 2016 South Africa, Washington DC: The World Bank. <https://openknowledge.worldbank.org/handle/10986/23404>. Accessed 2017/07/10.