Original Paper

The Role of Small Business in Economic Growth and Poverty Alleviation in Northwest Nigeria

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Abstract
The great aim of this research is to empirically assess small business-critical roles in economic development and poverty reduction in northwest Nigeria. There is a positive relationship between small enterprise and economic growth in the OLS regression analysis. There is also a clear inverse association between poverty incidence, small business and economic growth. The empirical result thus established the connection between small business, economic growth and poverty incidence.

Keywords
SMEs, poverty alleviation, economic growth, Nigeria

1. Background of the Study
The Nigerian government remained occupied to fostering growth and development of the SMEs sector in its efforts to recognize its (SMEs’) contribution in the region. This initiative was thus demonstrated by setting up some agencies that could assist, including National Directorate of Employment (NDE), NAPEP (National Poverty Eradication Program), etc. This has also been suggested as concerning SME as a significant contribution to the economy of the country, the policies and strategies for promoting the creation of SME have been established fundamentally in most policy development plans to promote growth in the sector, a strong effort towards establishment has been shown ten years ago. In Nigeria, the top ten problem areas for SMEs in decreasing intensity range include management, access to financing, infrastructure, policy of government inconsistency and bureaucracy, environmental factors, multiple taxes and levies, access to new advancement, unfavorable competition, marketing issues and the lack of local raw materials. Thus, administrative issues constitute the biggest issue facing SMEs in Nigeria while the least issue is the limited or scarce resources locally. There is tremendous potential
and ability for SMEs in Nigeria to recover and play the important role of the engine of growth, development and industrialization, wealth creation, poverty alleviation or reduction, and job creation. Realizing this involves a particular change from paying a particular activities to a practical progressive approach and the government’s pragmatic emphasis on this all-important economic sector addressing the defined issues. Although, there is need for change of habit and attitude for SMEs themselves regarding the growth of entrepreneurship, governments (Federal, State and Local) need to embark SMEs for full impact in policy implementation and formulation. In addition to emphasizing scientific, practical, and technical educational system at all levels of our studies, there is also a desperate need to incorporate vocational programmes in our colleges and universities especially entrepreneurial studies. SME promoters should therefore, ensure that managerial ability and acumen are available or possessed before accessing financial capital for the growth of the respective enterprise.

2. Introduction
Like other developed and emerging countries, Nigerian SMEs have not overcome the militant constraints faced by SMEs. Virtually, if not all, the majority of countries support their SMEs given the important roles they have played in economic growth and development. The Structural Adjustment Program (SAP) has helped to broaden the SME sector simply because largescale companies cannot easily adjust to the SAP’s newly adopted policies, as SMEs, small and medium-sized companies continue to carry out the large-scale activities and fill the produced gap in industrial consumer goods (Ololorunshola, 2013). Therefore, the presence of a large gap in the industrial development cycle in Nigeria many years ago has been the lack of robust and virile SMEs subsector, which is exacerbated by financial constraints represented by high loan levels, huge amount requirements of loan and weak or no viable entrepreneurial skills. Besides, insufficient collateral by SMEs operators integrate some of the SME’s disadvantages in Nigeria, low facility for SMEs, the rigidity of banks to transfer, or extend the credit span available to them. Nevertheless, as a result of the traumatic devaluation of Naira (₦) which Nigeria faced during the Structural Adjustment Program (SAP) era, the little good output reported from the efforts of courageous indigenous industrialists was almost gone, if not completely varnished. Having seen these constraints and to provide them with the requisite solutions and to reap the potential benefits in the economy of SMEs small and medium-sized enterprises, the Central Bank of Nigeria (CBN) remained committed to ensuring that its efforts are geared towards Nigerian growth and development with respect to SMEs (Kayanula, 2014).
3. Stated Problem

Nigerian SMEs have not wonderfully performed well and therefore have not displayed the crucial and important roles expected on them towards the growth and the development of Nigerian economy. This situation was of great and also cut the attention of managers, residents, government, professionals and organized groups of the private sector. Year after year, governments at the Local, State and Federal levels, through budget allocations, pronouncements and policies, have shown interest and appreciation in the crucial position of the economy’s SME subsector and thus rendered policies to energize it. Fiscal incentives, grants, funding and assistance for multilateral and bilateral agencies as well as specialist organizations all aimed at making the SME subsector vibrant have also been given. There is no question that the problems and difficulties faced by SMEs are immense, but, it is interesting to learn that they can be solved by certain SMEs. That ensure confidence and should provide an avenue for optimism that a way out is possible. There must be some survival techniques, which many SME promoters don’t know about. The goal of this research is also to explore and unravel some of the main business survival techniques that have worked for a few successful SMEs. This could have enormous benefits in that other SMEs facing extinction risks, as well as existing and potential new ones could equally learn from them.

The findings of this research are expected to go in join variation with the Nigeria’s SME subsector. The study will come up with a set of implementation guidelines for many stakeholders. With the joint efforts of all, including all levels of government.

This study is very important simply because, to the best of our knowledge, there are few or no previous studies in this region despite the efforts of SMEs to address many of the unemployment in different communities, and especially in the Northwest of Nigeria, which ranked first in terms of poverty in the country.

The specific objectives of this research are:

i). To identify the major problems, obstacles, and constraints that have been militating against SMEs by playing the vital role in Nigerian economic growth and development; many SME promoters said the government is not doing enough to enable, stimulate and protect Nigerian SMEs. Some observers think the issue is with SME promoters and managers adding that they (SME promoters) are not only unbusinesslike in their approach but are also deficient in certain aspects of operating or managing a profitable business or a business. ii). To find out the main causes of SMEs’ low utilization or patronage of the Small and Medium Industries Equity Investment Scheme (SMIEIS) fund, currently at ₦28.8 billion (as at 31st December 2016) representing 10 percent of the pretax income that banks have set aside for Small and Medium Enterprises equity investment.
4. Literature Review

Poverty has become a threat to socio-economic stability in Nigeria because a large proportion of the country’s population lives below the internationally accepted poverty line, which indicates possible underutilization of human capital (World Bank, 1993). The term of SME has a relative significance depending on the intent of serving those policies regulating the sector that a description is required. In most cases, countries apply three major factors in the classification and description of enterprises in the industry, i.e., investment in plant and machinery capital; number of working employees and level of production or company turnover (Aremu & Adeyemi, 2011). In general, the concept and categorization of SMEs depends largely not only on the scale of the economy but also on its natural endowments. CBN describes SME in Nigeria based on the asset base and the number of employees working. The requirements are an asset base of ₦5 million to ₦500 million and a workforce strength of 11 to 300. The Small and Medium Industries Equity Investment Scheme (SMIEIS) in Nigeria describes SME as companies with a total capital of not less than ₦1.5 million but not exceeding ₦200 million, including working capital but excluding not less than 10 and not more than 300 workers strength. SMEs in Nigeria are characterized by high labor intensity, easy entry and exit, limited startup and operating resources, low labor ability requirements and cause entrepreneurial and indigenous development of technology (Mukras, 2003). SMEs’ job creation capabilities have also created two strands of argument among scholars in this area. The first line of reasoning is those like (Owualah, 1999; Nnanna, 2001; Nigerian Investment Promotion Commission, 2003) who claim that small firms are more labor-intensive than big firms. Therefore, in the light of this understanding, these scholars believe that policies aimed at promoting SME growth should be an important package in any action to alleviate poverty, especially in a developing mixed economy. The second literature section holds the opposite view. Large firms are better at generating more and better employment, as their large size encourages productivity and economies of scale, according to the advocates of big firms (Kayanula & Quarrey, 2000; Beck et al., 2005). The presumption here is that policies aimed solely at promoting SMEs may be counterproductive without giving greater attention to large firms (Sanda, Dogondaji, & Abdullahi, 2006). The scholars who advocate special treatment provided to SME came up with counter-arguments as to why policies would prioritize SMEs. Compared with large businesses, they say that SMEs are more common and cover many rural and semi urban areas as well. This helps them to make significant contributions in these areas in many ways, including job development, supporting local resource use and indigenous technology transformation among others. Successive governments in Nigeria have launched various initiatives for growing the SME sub-sector. The theoretical basis for the analysis is based on the recent classical theory of employment and production, which implies that a country’s aggregate production depends on the capital and labor working at any given time (Dwivedi, 2009). The peculiar nature of these undertakings as labor-intensive, ease of entry and exit, low labor ability requirements, and the limited startup and operating capital naturally lead one to believe that they will contribute significantly to economic growth and well-being in nations.
Within the Nigerian context, small and medium sized companies are required to acquire or receive their funds from the following sources: debt and equity. Debt, businesses protect their funds for expansion utilizing foreign borrowing. Such external debts may either be collected officially or in an informal manner. Cooperative groups, friends, credit unions or even relatives, etc. Although from the formal sources; banks and government agencies occasionally. Considering the level of people’s attitude towards saving or saving tendency is therefore relatively small, especially from the small level of income; therefore, borrowing from the informal source is relatively minimal. Likewise, in terms of formal source accessibility, it’s a little higher than the informal one. That is because they don’t increase the loan size for the SMEs given the banks that the fund suppliers are. On the other hand, due to high service costs or interest, SMEs are afraid of obtaining loans and often the facility’s maturity is not favorable. The barriers to the issue of funds had long existed, though many initiatives were set up by the government to assist the SME sector intentionally. The government’s foundation and other credit systems had been on the ground since 1970. SMEs for example provides 70 percent of industrial jobs in Nigeria and 60 percent of jobs in the agricultural sector (Usman, 2013; Odunbanjo, 2014). There is, however, a complete misunderstanding based on the aforementioned point, much of the Ojo statement (2013) is if not all, the government’s assistance programs for small and medium-sized companies have struggled to achieve its goal. Similarly, another researcher supported it as the many initiatives set up to achieve the desired targets, they could not because of various obstacles including; lack of oversight and inadequate project assessment, which in turn led to abuse of public funds to promote private sector companies Tumkella (2013).

5. Hypotheses
We expect that SMEs contribute to poverty reduction more than large enterprises. This is based on the following hypotheses:

i). SMEs create more jobs than large enterprises; ii). SMEs encourage the use of local capital and contribute more to developing indigenous technology than big companies. Our strong hope is that the findings of this study would show that SMEs are reducing poverty more than large enterprises in the North-West region of the country where poverty is stated to be endemic (See Nigeria Poverty Profile, NBS, 2011).

6. Methodology
The analysis followed a sample method for the survey. The study region is Nigeria’s northwest zone comprising seven states: Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara. The methodology used in this paper involves a macroeconomic analysis of the linkages between small business development, economic growth and poverty incidence in Northwest. The study’s great aim is to identify the impacts of small business (Small and Medium Enterprise) expansion on the growth rate
of Gross State Product and the incidence of poverty while simultaneously accounting for other macroeconomic factors that influence economic growth and poverty level. A priori, a shift in small business jobs results in a change which in turn contributes to a change in the incidence of poverty, given certain factors remain constant. But a change in the jobs of small businesses will lead to a change in poverty without necessarily affecting the rate of growth in GDP. To evaluate these interrelationships, the econometric models is specified as:

\[
LGDP_t = \alpha + \beta_1 LTSMERTN_t + \beta_2 LTSMELOAN_t + \beta_3 LTNEMPL_t + \epsilon_t
\]

(1)

where: LGDP signifies logarithm of GDP, LTSMERTN signifies logarithm of Turnover of SME Return, LTSMELOAN signifies logarithm of Turnover of SME Loan and LTNEMPL signifies logarithm of Turnover of employment. \(\beta_1 - \beta_3\) are the parameters that captures the rate of change between dependent and independent variables, \(t\) signifies time series and \(\epsilon\) is signifies the Gaussian error term.

7. Types of Data and Sources

Economic growth factor was used as dependent variables in the empirical study. The increase in the GDP is used as a metric for economic growth rate for Northwest Nigeria. The type of data employed was time series data. This study used data from the 1997 to 2018, the choice of the time frame was because of the availability of data. The data were sourced from National Bureau of Statistics (NBS) of Nigeria.

8. Results and Analysis

Small Business Development and Economic Growth

Table 1 below, depicts the outcomes of OLS and their p-values. Since the equation is specified in log form, the coefficients represent elasticity of the dependent variable concerning each of the explanatory variables. The log of GDP is the dependent variable.

| Variable    | OLS Equation/Coefficient | P-Value |
|-------------|--------------------------|---------|
| LTSMERTN    | 0.370462                 | 0.0106  |
| LTSMELOAN   | 3.227959                 | 0.0000  |
| LTNEMPL     | -0.359456                | 0.1880  |

The Table 1 above shows that, a percentage change in LTSMERTN will lead to 0.370 percentage increase in LGDP and a percentage change in LTSMELOAN will lead to 3.227 percentage increase in LGDP. Similarly, a percentage change in LTNEMPL will lead to -0.359 decrease in LGDP. Therefore,
having gotten our VECM value (C1 -0.527499) as negative and significant, we can say that there is long-run causality running from GDP, TSMERTN, TSMEOAN, and TNEMPL. The correlation between poverty level and LGDP growth rate is stated. An expansionary rate of economic growth is expected to result in a maintained increase in the economy’s productive potential, which in turn contributes to expanded job opportunities. This mechanism makes the progressive absorption and integration of the unemployed and underemployed with high productivity rates into the growing economic activities. In the meantime, the poor may be able to gain higher income in their current job or move to new employment with better skills and higher salaries. Consequently, LGDP is expected to have a positive effect on the incidence of poverty. Even a one-year lag in GDP is used because it takes some time before the mechanism mentioned above works out.

There is a connection between the poverty level and the growth of small businesses. It is conceptualized that the expansion of jobs in small businesses contributes to higher production efficiency and higher wage expenditure. Rising production capacity in the small business sector affects the economic growth rate as outlined in equation, which in turn affects the incidence of poverty as outlined. Small business workplace expansions also provide job work prospects for the unemployed and the underemployed. The poor will gain incomes in the process, raising their poverty status. Equation which involves both SMEs and LGDP as explanatory variables, is defined to test the differential impact of the relative size of small businesses on the incidence of poverty.

9. Conclusions

The relationship between SMEs creation, economic growth, and poverty alleviation in Northwest Nigeria is examined in this study using time series data from the 1997 to 2018, the choice of the time frame was because of the availability of data. Using OLS, inlog form econometric equations was regressed. The results of those regressions show the following:

1). There is a stable, positive relationship between the relative size of SMEs and economic development, even when accounting for a variety of other development determining variables as well as for the simultaneous bias; i). Any organization’s job generating capabilities are essential for minimizing the incidence of poverty within the agents of the economy. Among the key findings of the study is that SMEs’ potential to minimize poverty lies to some degree in their potential to sustainably engage workers. This validated the research NBS (2012) conducted. The idea is that it is the creation of the privately owned business activities (which comprises the growth of SMEs) that generates and funds the employment available for low income individuals to engage and gain the income required to purchase goods and provide factor services.

2). There is a clear inverse relationship between the relative size of SMEs and the incidence of poverty. Originally, microenterprises employ more workers than medium-sized businesses, but compared to large enterprises, the latter offers more employment and more opportunities because of their resources.
and asset base, which gives them greater efficiency. Therefore, SMEs’ capital and asset bases need to be strengthened to provide more jobs particularly in rural areas.

3). The autonomous effect on the poverty rate of the relative size of small enterprises is negligible, suggesting that the strong inverse relationship given, through economic growth rather than direct growth. Consequently, the antipoverty effect of small business creation is primarily due to its effects on economic growth as set out in (i). The result empirically establishes the connection between the production of small businesses, economic growth and the alleviation of poverty.

The image is the same when it comes to using indigenous technology. Though micro-enterprises continue to use several indigenous resources and technology than medium-sized enterprises, because of their asset holding and corporate capabilities, large enterprises dominate the SMEs. The use of indigenous production to raise local demand should also be promoted by large enterprises. Most SMEs are in the sole proprietorship category, and the majority of entrepreneurs have no proprietary right to prevent property intellectual for them. Nigeria’s Standard Organization should play its part and effective policy measures should be put in place to protect intellectual property.

Poor financing, insurance shortages, and policy contradictions are within the main limiting factor for SMEs in the field of study. This limits their ability to compete as large companies.

10. Recommendations

By stressing the power of the poor and their productive potential and not their limitations, the government should make a realistic approach to poverty reduction. The nation, for example, has an active agile population, productive land, good markets, social structures that could demand these SMEs’ products. All that’s required is to invest in these poor properties.

Among the constraints facing SMEs, there should be immediate and realistic measures to address the shortage of funding and inadequate infrastructure. In this regard, the government should be appropriate and consistent to prevent policy summersaults in its policies relating to SMEs. Periodic policy evaluation and expert interaction can assist in policy formulation.

Policy support is required that specifically target high growth of knowledge-intensive SMEs. Such support may be in the form of policies that stimulate the creation of new productive enterprises or those which promote the growth of existing ones. An example of help that can be provided to them is the ease of paperwork, seed funding, advisory services and capacity building, and the provision of public facilities such as high ways, electricity and water. The new reform program embarked on by the current government is a cogent step towards building an atmosphere that allows SMEs to prosper if they are followed vigorously with a clear commitment.

Similarly, the need for SMEs to have funding available through the microfinance banks is also present. This will ensure their efficient capabilities and competitiveness on the market are improved. The recommendations go in joint variation with the ones made by Ayanda and Laraba (2011) in their review of SME in Nigeria reporting financial provision as capable of promoting growth for SMEs in
Nigeria. Besides, open disbursement of funds by these banks and other SMEs should include funding and support agencies, as well as strict means of compliance with specified guidelines and procedures. If the central authority can encourage interest-free banking even at microlevel or community level, it would go a long way in encouraging those in cottage businesses to increase their funding sources as well as their business potential. It also have strong ground to encourage Islamic finance with the acceptance of opportunities for Islamic banks to operate and the subsequent emergence of non-interest bank.

Central authority should also promote the purchase of products and services produced in Nigeria by patronizing them themselves rather than simply advertising in the media as is now the norm. Furthermore, an established and/or maintained a partnership with the private sector on this and other issues such as the consumption of SME products should also be established.

Establishing fair practices promotes the involvement of women in SMEs and enshrines consistency in the conduct of SME matters. Efforts should be made to create policies that integrate disabled, mentally challenged and unprivileged entrepreneurs in society.

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**Appendix**

| Table 2. Augmented Dickey Fuller (ADF) Test of Unit root |
|-----------------------------------------------------------|
| Augmented Dickey Fuller (ADF)                            |
| Level                                                    |
| Variable | Intercept only | Trend & Intercept | No trend no intercept |
| GDP      | -2.064309**    | -2.757493**        | 0.343909**            |
| TSMERTN  | -0.970170**    | -1.782861**        | -0.967106**           |
| TNEMPL   | -1.232602**    | -1.643596**        | -0.555218**           |
| TSMEOAN  | -2.473281**    | -2.429294**        | -0.095914**           |
| GDP      | -5.270501**    | -5.198227**        | -5.291503**           |
| TSMERTN  | -5.262279**    | -5.272624**        | -5.291503**           |

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| Series      | Trace Test | Proportional Test |
|-------------|------------|-------------------|
| TNEEMPL     | -5.196175 ** | -5.613247 **      |
| TSMELoAN    | -5.205267 ** | -5.940866 **      |

Note: *** & ** denotes significance at 1% and 5% level of significance respectively.

### Cointegration Test

Date: 01/11/20   Time: 09:41
Sample (adjusted): 1989 2017
Included observations: 29 after adjustments
Trend assumption: Linear deterministic trend
Series: GDP TSMERTN TSMELoAN TNEEMPL
Lags interval (in first differences): 1 to 1

| Hypothesized | Trace Test | Proportional Test |
|--------------|------------|-------------------|
| None *       | 0.677108   | 32.78264          |
| At most 1    | 0.372985   | 13.53674          |
| At most 2    | 0.334885   | 11.82605          |
| At most 3    | 0.021716   | 0.636699          |

Trace test indicates 1 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level

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**MacKinnon-Haug-Michelis (1999) p-values**

| Hypothesized | Trace Test | Proportional Test |
|--------------|------------|-------------------|
| None *       | 0.677108   | 32.78264          |
| At most 1    | 0.372985   | 13.53674          |
| At most 2    | 0.334885   | 11.82605          |
| At most 3    | 0.021716   | 0.636699          |

Max-eigenvalue test indicates 1 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values**

Unrestricted Cointegrating Coefficients (normalized by $b^*S11*b=I$):

|         | GDP   | TSMERTN | TSMELOAN | TNEMPL |
|---------|-------|---------|----------|--------|
| 5.12E-06 | -2.30E-06 | 0.072968 | 0.000132 |
| -1.80E-06 | 8.00E-07  | 0.197802 | -0.000553 |
| 3.40E-06  | 5.34E-06  | 0.008933 | -0.000789 |
| -1.41E-07 | 2.28E-06  | 0.050509 | 0.000267 |

Unrestricted Adjustment Coefficients (alpha):

|         | GDP     | TSMERTN | TSMELOAN | TNEMPL  |
|---------|---------|---------|----------|---------|
| D(GDP)  | -35674.14  | 23485.28 | -56956.17 | 9077.226 |
| D(TSMERT) | -504.5968  | -25015.75 | -49315.93 | -11473.75 |
| D(TSMELO) | -2.263925  | -1.641367 | 1.089582  | 0.012332  |
| D(TNEMPL) | -282.1212  | 294.0161  | 17.56077  | -67.46913 |

1 Cointegrating Equation(s): Log likelihood -1061.409

Normalized cointegrating coefficients (standard error in parentheses)

|         | GDP        | TSMERTN       | TSMELOAN     | TNEMPL     |
|---------|------------|---------------|--------------|------------|
| 1.000000 | -0.449628  | 14244.63      | 25.80796     |            |
|          | (0.17595)  | (6096.56)     | (27.9766)    |            |

Adjustment coefficients (standard error in parentheses)

|         | GDP            |              |
|---------|----------------|--------------|
| D(GDP)  | -0.182742      | (0.13327)    |
| D(TSMERT) | -0.002585    | (0.13083)    |
| D(TSMELO) | -1.16E-05    | (3.9E-06)    |
| D(TNEMPL) | -0.001445    | (0.00074)    |

2 Cointegrating Equation(s): Log likelihood -1054.640
| Normalized cointegrating coefficients (standard error in parentheses) | GDP       | TSMERTN | TSMEOAN | TNEMPL  |
|---------------------------------------------------------------|-----------|---------|---------|---------|
| 1.000000                                                     | 0.000000  | -10576483 | 24055.85  |
|                                                              |           | (2809435) | (9509.03)  |
| 0.000000                                                     | 1.000000  | -23554443 | 53444.33  |
|                                                              |           | (6250826) | (21157.0)  |
| Adjustment coefficients (standard error in parentheses)      | D(GDP)   | 0.000000 | 0.000000 | 0.000000 |
|                                                              | -0.225010 | 0.100948  | (0.13873) | (0.06230) |
|                                                              | D(TSMERT) | 0.042438 | -0.018844 | (0.13575) | (0.06096) |
|                                                              | D(TSMELON)| -8.64E-06 | 3.90E-06  | (3.7E-06) | (1.6E-06) |
|                                                              | D(TNEMPL) | -0.001974 | 0.000885  | (0.00071) | (0.00032) |

3 Cointegrating Equation(s): Log likelihood -1048.727

| Normalized cointegrating coefficients (standard error in parentheses) | GDP       | TSMERTN | TSMEOAN | TNEMPL  |
|---------------------------------------------------------------|-----------|---------|---------|---------|
| 1.000000                                                     | 0.000000  | 0.000000 | -5.029287  |
|                                                              |           |         | (19.5322)  |
| 0.000000                                                     | 1.000000  | 0.000000 | -140.6563  |
|                                                              |           |         | (28.7927)  |
| 0.000000                                                     | 0.000000  | 1.000000 | -0.002275  |
|                                                              |           |         | (0.00079)  |
| Adjustment coefficients (standard error in parentheses)      | D(GDP)   | -0.418911 | -0.203406 | 1533.521 |
|                                                              |           | (0.14498) | (0.13288) | (4773.90) |
|                                                              | D(TSMERT)| -0.125453 | -0.282371 | -5425.534 |
|                                                              |           | (0.14604) | (0.13385) | (4808.93) |
|                                                              | D(TSMELON)| -4.93E-06 | 9.72E-06  | -0.480126 |
|                                                              |           | (4.1E-06) | (3.7E-06) | (0.13446) |
|                                                              | D(TNEMPL) | -0.001915 | 0.000979  | 37.72776  |
|                                                              |           |          |          |          |
VECM Test

Dependent Variable: LGDP
Method: Least Squares
Date: 01/09/20 Time: 18:06
Sample: 1987 2017
Included observations: 31

| Variable    | Coefficient | Std. Error | t-Statistic | Prob.  |
|-------------|-------------|------------|-------------|--------|
| LTSMERTN    | 0.370462    | 0.135268   | 2.738732    | 0.0106 |
| LTSMELOAN   | 3.227959    | 0.479718   | 6.728865    | 0.0000 |
| LTNEMPL     | -0.359456   | 0.266398   | -1.349318   | 0.1880 |

R-squared    52.070083  Mean dependent var 14.12441
Adjusted R-squared 47.003661  S.D. dependent var 0.147044
S.E. of regression 0.550262  Akaike info criterion 1.734921
Sum squared resid 8.478072  Schwarz criterion 1.873694
Log likelihood -23.89128  Hannan-Quinn criter. 1.780158
Durbin-Watson stat 0.488582

Number of coefficients 44