



Received: 09 April 2018
Accepted: 01 November 2018
First Published: 04 December 2018

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GENERAL & APPLIED ECONOMICS | RESEARCH ARTICLE

Effectiveness of the Co-operative Grant Incentive Scheme (CIS) on beneficiary firms' job creation capacity in South Africa

Timothy O. Aluko¹ and Paul Kibuuka^{2*}

Abstract: This paper investigates the effect of Co-operative Incentive Scheme (CIS) on beneficiary firms' job creation capacity and presents empirical evidence generated from operation of the CIS aimed at supporting co-operative enterprises in South Africa. The paired-sample t-tests were applied in determining the effectiveness of the CIS grant incentive programme by comparing employees before and after implementation of the programme. Two employment (job creation) models were formulated based on OLS regression models. Our results suggest that the CIS grant funding programme in South Africa has not effectively contributed to beneficiary firms' employment capacity between the financial periods of 2011/2012 and 2015/2016 under study. We found that the amount approved made a significant contribution to the number of employment opportunities created in beneficiary firms. Within the same period, the beneficiary firms' employment creation was lower with respect to the employment figure recorded by the beneficiaries' firm at application. This may be due to overestimation of the employment figure that was recorded at application by the CIS beneficiary firm. This observation is consistent with other studies, which observed that beneficiary firms of grant incentives overstated their declared employment targets at application to influence their chances of benefiting from such grant schemes.

ABOUT THE AUTHORS

Mr Timothy O. Aluko is a development finance expert and trained professional Accountant and Tax Practitioner. He has more than 16 years of relevant work experience in the public and private sector. He is currently a PhD Development Finance student at the University of Stellenbosch, Cape Town. The paper title, *Effectiveness of the Co-operative Grant Incentive Scheme (CIS) on Beneficiary Firms' Job Creation Capacity in South Africa* is part of his PhD study.

Prof. Paul Kibuuka has worked for a total of almost 30 years for government; 9 years served in the Civil Service and 20 years in a Development Finance Institution up to the level of Managing Director. He is currently an Associate Professor of Economics and Public Finance at the University of South Africa and a visiting Associate Professor at the University of Pretoria and the University of Stellenbosch, respectively. He is a director of Droids Engineering and the chairperson of Liberty Community Trust Fund.

PUBLIC INTEREST STATEMENT

The South Africa economy has not reached the level of economic growth required to achieve the targets set in the National Development Plan. As a result, government has come up with various initiatives to stimulate economic growth through the establishment of grant empowerment programmes for small business. These initiatives are aimed at enhancing economic inclusion and the redistribution of resources through job creation among the previously disadvantaged population. However, several years later, no information or records are available to show whether the programmes are delivering on the mandate. The study aims, to assess and evaluate the impact of such programmes focussing specifically on the CIS programme. This will assist policy-makers to determine whether the programme has successfully achieved its objectives and to identify areas for review and turn around in order to achieve the desired impact.

Subjects: Development Studies; Sustainable Development; Economics and Development; Economics; Business, Management and Accounting

Keywords: CIS; job creation; beneficiary firm and South Africa

JEL classification: G3; O2

1. Introduction

South Africa is characterised by a high unemployment rate, particularly among the youth. Figures released by Statistics South Africa (StatsSA) for the second quarter of 2017 showed that the unemployment rate remained unchanged at a worrying 27.7% from the previous period's 13-year high (Statistics South Africa [SA], 2017). The figures released also indicate that the annual growth rate declined to minus 0.7% during the same period. Unemployment has therefore been, and still remains, one of the key development challenges facing South Africa. Given the scale and significance of this challenge, policy recommendations were put in place to tackle South Africa's high unemployment rate. The response from the government so far has been the establishment of various incentive and grant programmes to support small and medium enterprises as a measure to grow the economy and create jobs.

Some of the measures include the establishment of the Co-operative Incentive Scheme (CIS) as part of the government's Broad-Based Black Economic Empowerment (BBBEE) intervention programme stipulated in Act 53 of 2003. In terms of the Act, the codes of good practice for BBBEE enterprises are divided into three categories, namely: generic enterprises with an annual turnover greater than R50 million; qualifying small enterprises with an annual turnover between R10 million and R50 million; and exempted micro enterprises with an annual turnover of less than R10 million. Each of these categories has a different set of measurement criteria.

The CIS was established in 2005 to support rural co-operative enterprises through the provision of 100% grants to the tune of R350,000. This amount could be accessed once or through multiple applications. The grant is interest-free with a non-repayment obligation for the beneficiary co-operative enterprise. For a co-operative enterprise to qualify for the grant, it must be formally registered as co-operative entity under South African law (see Aluko & Kibuuka, 2016), have minimum of five members with black South Africans as majority members, and operate principally in rural areas.

2. Theoretical model for economic development

Over the last two decades, various grant schemes for co-operative enterprise have been implemented in both developed and developing countries, and South Africa is no exception. According to Dupont and Martin (2006), some of these grant schemes are non-repayable grants, interest-free and subsidised equity participation incentive schemes, which is seen as some of the most adopted tools in developing countries. Assessing the effectiveness of these financing tools is an essential step to orientate policy- and decision-makers on how best they could optimise the use of taxpayers' money for such purposes (Cerqua & Pellegrini, 2014). The fundamental premise underpinning the establishment of the CIS in South Africa is firstly a need for additional investment to foster more rapid economic growth in South Africa; and, secondly, the idea that an incentive scheme can be effective in stimulating public investment in communities where economic activity is stagnant (Department of Trade and Industry [DTI], 2007).

According to Seidman (2005, p. 5), "economic development is the process of creating and utilising physical, human, financial, and social assets to generate improved and broadly shared economic wellbeing and quality of life for a society". On this note, finance has a key role to play as an input process that generates the desired outcomes of employment creation and increased incomes and quality of life (Seidman, 2005, p. 5).

Economic development, therefore, is about using the resources of the state to spearhead the process of improving a society and increasing its economic activity. Under the auspices of economic development, there is a need for new investment, innovation and redistribution of resources, which undoubtedly would affect domestic economic activities. Governments around the world have been innovative in their economic development by creating new investments and redistributing resources through programmes that could help restructure their economies (Seidman, 2005). According to Schumpeter (2008), economic development is not only a means to reduce poverty, but an alternative method to redistribute resources within an economy. Schumpeter's argument was that there is a need to transfer the "surplus" wealth or income through the creation of economic opportunity for the poor; particularly in unequal societies such as developing countries.

This approach has become very popular in the last decade, particularly in middle-income countries with relatively large amounts of resources and where income was concentrated in the hands of few individuals who have better economic opportunity. As a result, governments created programmes to help restructure their economies. Many governments used intervention and incentive programmes, such as grants, revolving funds and credit guarantee schemes to advance their economic development agendas. This can be seen in South Africa, where the government has invested a lot of resources into the economic development programmes with the expectation of translating the goals of such programmes into positive developmental realities. For example, the growth of small enterprises could lead to employment creation, thus reducing poverty and income inequality.

3. Literature review

Grants funding scheme can be described as an alternative means of addressing the lack of access to capital usually experienced by small businesses (Kransdorff, 2010; Laffont & Martimort, 2001). In developed countries, grants funding scheme have a strong effect on investment (Barbour, 2005). However, in developing countries, such as South Africa, the majority of grant funding programmes suffer from some form of implementation deficiency (see, Barbour, 2005). For example, the application and approval process is cumbersome and administratively demanding to the extent that targeted beneficiaries often do not even bother trying to access a grant programme (Mazanai & Fatoki, 2011). Furthermore, studies on the assessment of performance of government support programmes for small and co-operative enterprises are very limited in developing countries (Bezboruah & Pillai, 2015), South Africa included. Moreover, the evaluation of the effectiveness of CIS on beneficiary firms' job creation capacity in South Africa has not been tested, let alone documented since the scheme started.

Many policy evaluators have focused their research endeavours on the effectiveness of credit incentives schemes on employment growth, but the empirical evidence is mixed (Kangasharju, 2007). For example, some studies suggested that credit incentive schemes can induce and contribute additional employment in beneficiary firms (Koski & Pajarinen, 2013), while others claimed that the effects of employment contribution, vis-à-vis the credit incentives schemes, are temporal (Erastus, Stephen, & Abdullai, 2014). Moreover, the employment effect of credit incentive schemes is unconvincing (Erastus et al., 2014).

According to Koski and Pajarinen (2013), the empirical findings on the relationship between firm support, funding programmes and employment are confusing. However, literature reveals that employment promotes social integration, intergenerational dialogue, citizenship and solidarity (Betcherman, Daysal, & Pagés, 2010). In the estimation study conducted in Italy by Colombo, Giannangeli, and Grilli (2013), 536 beneficiary firms were observed between 1994 and 2003. The study utilised augmented Gibrat law-type dynamic panel data models using different techniques aimed at controlling for the potentially endogenous nature of public financing, such as the generalised method of moments system, a fixed effect instrumental variable and inverse probability treatment weight estimators. The results showed that the support

funding schemes investigated had a larger impact on employment growth, but only if they were awarded in the very early period of the beneficiary firm's life. Also, using panel data at firm level to measure the effects of credit guarantee on employment in Korea between 2000 and 2003, Kang, Heshmati and Choi (2006) concluded that credit guarantees do have positive effect on firm employment growth.

Koski and Pajarinen (2013) used data from 15,508 firms to determine the relationship between employment growth and the endogenous determinant of business subsidy types (i.e. employment subsidy), between the years 2003 and 2008 and also found a positive relationship between firm subsidy programmes and employment growth. Moreover, the findings suggest that research and development (R&D) subsidies contribute more to the sample firms' employment for a year after benefiting from the programme. The outcome of the study is consistent with Ebersberger's (2004) study that found a significant positive relationship between R&D subsidies and employment in their various studies. Bernini and Pellegrini (2011) showed evidence of higher growth in employment in firms that received grant subsidies than in unsubsidised firms. The positive effect of grant incentives schemes on beneficiary firms' employment growth is also consistent with most of the literature based on different evaluation approaches. However, Gabe and Kraybill (2002) observed that firms receiving grant incentives overestimated their declared employment targets more than firms that did not receive grant incentives. Conversely, the study concluded that the output effect of incentive schemes on employment is greater than the substitution effect, while Adorno, Bernini, and Pellegrini (2007) highlighted a negative relationship between the number of grant subsidies received by a firm and employment growth.

4. Research objective

This study investigated the effect of CIS on beneficiary firms' job creation capacity and presented empirical evidence generated from 5 years of operation (2011–2015) of the CIS programme aimed at supporting co-operative enterprises in South Africa.

5. Research question

The research question that this study sought to answer is; what is the effect of the CIS grant funding scheme on the beneficiary firms' capacity to generate additional jobs in South Africa.

6. Hypotheses of the study

Based on the research question, the two hypotheses for this study regarding the effect of CIS grant funding scheme on the beneficiary firms' capacity to generate additional jobs in South Africa are outlined below:

H0: There is no effect of the CIS grant funding scheme on the beneficiary firms' capacity to generate additional jobs in South Africa.

H1: There is an effect of CIS grant funding scheme on the beneficiary firms' capacity to generate additional jobs in South Africa.

7. Research methodology

The data used in this study was extracted from the CIS database over the financial period 2011/2012–2015/2016, covering a total of 448 firms. The variables considered included turnover at reporting (in South African rand (ZAR)), current grant amount approved (in South African rand (ZAR)), employees and members at application and at reporting, and number of CSI grant recipient companies. Natural logarithmic transformations were applied to the data series to avoid spurious regressions and to obtain elasticity coefficients of the independent variables and the dependent variables.

The paired-sample *t*-tests were applied in determining the effectiveness of the CIS grant incentive programme by comparing employees before and after implementation of the programme. The statistical formula for the paired-sample *t*-test provided below was used for the computation of estimates.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2 + S_2^2 + S_1^2 - 2rS_1S_2}{N}}}$$

where \bar{X}_1 = Mean of the sample from the first population.

\bar{X}_2 = Mean of the sample from the second population.

S_1 = Standard deviation of the sample from the first population.

S_2 = Standard deviation of the sample from the second population.

N = Number of pairs.

r = Pearson's Product Moment Correlation Coefficient between the pairs.

Regression analysis was performed using Stata 12 software for Windows. Ordinary least squares (OLS) linear regression models were used in assessing the effectiveness of the CIS grant programme in terms of the impact the programme had on firms' employment or job creation. Two employment (job creation) models were formulated as specified below. The models produced estimates of the effect of turnover during the reporting period and current amount approved on employment based on the OLS regression approach.

8. Model specifications for OLS regression

As indicated earlier, 448 firms focusing on four data variables, namely: turnover at reporting, current amount approved, employees and members at reporting, were considered and two employment (job creation) models were formulated as specified below.

$$\text{Model 1: } \log \text{Empl}_t = \beta_1 \log T_t + \beta_2 \log \text{Amt_app}_t + \mu_t$$

where Empl denotes employees at reporting; T represents turnover at reporting; Amt_app denotes current amount approved; while t represents time; and μ denotes the residual.

$$\text{Model 2: } \log \text{Empl}_t = \beta_1 \log \text{Amt_app}_t + \beta_2 \log T_t + \beta_3 \log \text{Memb}_t + \mu_t$$

where Empl denotes employees at reporting; Amt_app denotes current amount approved; T represents turnover at reporting; Memb represents members at reporting; while t represents time; and μ denotes the residual.

9. Study research results

This section provides an empirical analysis to test the hypothesis that significant differences exist between employees at reporting versus employees at application. Statistically significant negative differences between employees at reporting versus employees at application were found among firms which were the beneficiaries of the CIS grant within the period under study. Insignificant and negative paired differences in this regard suggest that the CIS grant programme was ineffective in enhancing additional employment generation capacity of the respective firms. The effectiveness of the CIS grant programme was measured by the paired difference between employment at reporting and employment at application. Similarly, statistically negative paired differences in this regard suggest that the CIS grant programme was ineffective in ensuring employment or job creation by the grant beneficiary firms.

Results presented in Table 1 show that for the 448 firms that benefited from the CIS grant, the average number of employees at reporting ($n = 6$) was lower than the average number of employees at application ($n = 7$) in each firm, suggesting that job creation was not realised as hoped.

The results in Table 2 show that the paired differences between employments at reporting versus employment at application were negative and statistically insignificant. The computed p -values and paired difference for employment at reporting versus employment at application ($t = -1.497$; $p > 0.05$) show that there was a statistically insignificant drop in the number of employees that were employed at the CIS grant beneficiary firms between the period the grant amounts were approved and the period at which reporting was done. The standard deviation for the paired difference in turnovers ($SD = R2549654.71$) and employees ($SD = 12.7$) suggests variations in the numbers of employees working in the grant beneficiary firms.

Before carrying out the regression analysis we tested for multicollinearity of the variables and they had variance inflation factors of less than 10, indicating no problem of multicollinearity. The Breusch-Pagan test for heteroscedasticity had a p -value = 0.08, which was greater than the 5% level of significance, indicating that the residuals or errors were constant (homoscedasticity). After that, this proceeded to estimate the OLS regression models without robustness. The results for models 1 and 2 are provided in Tables 3 and 4, respectively.

From a population of 448 firms, a sample size of 196 was considered based on completeness of data. The regression estimates for model 1 show that the amount approved had a statistically significant and positive impact on employment (job creation), while turnover at reporting had a

Table 1. Paired-sample statistics for employees at reporting and employees at application

	Employees at reporting	Employees at application
Mean	6.37	7.27
Standard deviation	12.097	13.766
Standard error mean	0.571	0.650
N	448	448

Table 2. Paired-sample test for employees at reporting and employees at application

Mean	-0.895
Standard deviation	12.677
Standard error mean	0.598
t-statistic	-1.497
N	448

Table 3. Regression results—employment (job creation) model 1

Dependent variable: Log_employment	Coefficient	Standard error	t-statistic
Log (Amt_app)	0.1007*	0.02471	4.07
Log (turnover)	0.0428	0.02539	1.69
R-squared	0.9240	Mean-dependent variable	1.7892
Adjusted R-squared	0.9232	S.D. dependent variable	0.5540
F-statistic	1179.57		
Prob (F-statistic)	0.0000		

*denotes 1% significance level

Table 4. Regression results—employment (job creation) model 2

Dependent variable: Log_employment	Coefficient	Standard error	t-statistic
Log(Amt_app)	0.1002*	0.02617	3.83
Log(turnover)	0.0411	0.02602	1.58
Log(memb)	1.0179	0.05476	0.33
R-squared	0.9212	Mean-dependent variable	1.7892
Adjusted R-squared	0.9199	S.D. dependent variable	0.5540
F-statistic	717.34		
Prob (F-statistic)	0.0000		

*denotes 1% significance level

positive but statistically insignificant impact on employment. With other factors remaining constant, a 1% increase in current amount approved led to about 0.10% increase in employees that were employed by the CIS grant recipient firms. The calculated F -statistic (3, 15) (= 1179.57; $\text{prob} > F = 0.0000$) rejected the null hypothesis that all model coefficients, excluding the constant are equal to zero. Based on the adjusted R -square, of 0.9240, about 92% variation in employment was explained by the amount approved and employees during the sample period.

Model 2 was based on a sample size of 187 firms. The regression estimates showed that the amount approved had a statistically significant and positive impact on employment (job creation), while turnover at reporting and members at reporting had a positive but statistically insignificant impact on employment. *Ceteris paribus*, a 1% increase in current amount approved led to about 0.10% increase in employees that were employed by the CIS grant recipient firms. The calculated F -statistic (3, 184) (= 717.34; $\text{prob} > F = 0.0000$) rejected the null hypothesis that all model coefficients excluding the constant are equal to zero. The adjusted R -square shows that about 92% variation in employment was explained by the amount approved, employees at reporting period and members at reporting during the sample period.

10. Conclusions and implications for South Africa

The aim of this paper was to investigate the employment effectiveness of the CIS grant funding programme in South Africa. The analysis focused on the correlation between employment at grant application versus employment at reporting and on the cumulative effects of turnover, number of members at application versus at reporting, and the approved amount. The study followed the processes from application to disbursement to determine the jobs created by the CIS beneficiary firms, taking into consideration other variables that influence such a contribution. The results suggest that the CIS grant funding programme in South Africa has not effectively contributed to beneficiary firms' employment capacity within the period of the 2011/2012–2015/2016 financial years under study. Moreover, within this period, the amount approved, number of co-operative members, and turnover at application and at reporting have insignificant contribution to the number of employment opportunities created in beneficiary firms. Within the same period, the beneficiary firms' employment capital was lower with respect to the employment figure at application and this may be due to overestimation of the employment figure that was recorded at application by the CIS beneficiary firm. This observation is consistent with the study by Gabe and Kraybill (2002) and observed that grant incentive beneficiary firms overstated their declared employment targets at application compared to the number of employees at reporting.

From the descriptive analysis, it became clear that some new long term and casual jobs were facilitated, although the sustainability of these new and casual facilitated jobs is of great concern. Our estimation was based on the total number of jobs facilitated by the programmes per year compared to the annual targeted jobs. For example, during the years under study, an estimated 2500 new jobs were to be facilitated each year by the beneficiary firms. The assumption was based on the number of jobs recorded at application. However, only 1387 new and casual jobs were created within this period,

representing 12% of 12,500 expected jobs to be facilitated within 5 years of disbursed grants to the beneficiary firms. The regression analysis results also showed that the average number of employees at reporting ($n = 6$) was lower than the average number of employees at application ($n = 7$) in each firm, suggesting that job creation was not realised as expected. This is also consistent with the results of the paired analysis, which showed negative and statistically insignificant correlation between employments at reporting versus employment at application.

The study also found that the significant effect of the amount approved as CIS grant on employment is greater than the turnover at reporting effect, which had a positive but statistically insignificant impact on employment. However, the increase in employment as a result of the amount approved at reporting does not necessarily mean that the scheme was efficient and productive in terms of employment and recorded insignificant development impact as discussed in the theory. Such results might be temporal and more so derive from the early beneficial period of firms that received the grant. In fact, firms are tempted to overestimate the number of employees at reporting in order to benefit from the CIS grant. However, this conduct can affect the long-run effectiveness of the scheme.

In summary, the lack of capacity to create more employment through the beneficiary firms of the CIS might also be influenced by the fact that the whole general performance of the South African economy during the period under study could be a major factor that contributed to the performance of CIS beneficiary firms, thus affecting their ability to create more employment. Therefore, the effect of CIS on the competitiveness of beneficiary firms in South Africa might be an interesting topic for future research.

11. Recommendations

Arising from the findings of this study, it was crucial for the CIS programme administrator and policy-makers to have put structured mechanisms and measures in place that would have improved disclosure of information at application for the targeted beneficiary firms. These were important to serve as a guide for preparing an effective planning framework and job implementation strategy for creating jobs through the CIS programme. CIS was established without being guided by any strategy and currently does not have a guiding principle on how it will deliver the targeted employment opportunities and this may thwart the goal of promoting sustainable jobs and economic development in the rural areas. Hence, policy-makers may need to take note of the need to review the design and implementation of the CIS grant funding programme. In this regard it is recommended that the line government department puts in place integrated policy guidelines on operationalising grant-funded job creation programmes by the public sector in South Africa. The policy guidelines should cover, amongst others, the requirements for an effective business plan, an implementation strategy for creating the jobs but also a logical framework for monitoring the performance against the business plan. Finally, programme review and implementation should preferably focus on sectors, such as manufacturing, retail and agriculture to facilitate more jobs, both on a medium- and long-term basis.

Funding

The authors received no direct funding for this research.

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Citation information

Cite this article as: Effectiveness of the Co-operative Grant Incentive Scheme (CIS) on beneficiary firms' job creation

capacity in South Africa, Timothy O. Aluko & Paul Kibuuka, *Cogent Economics & Finance* (2018), 6: 1545740.

References

- Adorno, V., Bernini, C., & Pellegrini, G. (2007). The impact of capital subsidies: New estimations under continuous treatment. *Giornale degli Economisti*, 66(1), 67–92.
- Aluko, T. O., & Kibuuka, P. (2016). Factors determining co-operative small enterprises access to co-operative grant scheme in South Africa. *Journal of Public and Municipal Finance*, 5(3), 22–31.
- Barbour, P. (2005). *An assessment of South Africa's investment incentive regime with a focus on the manufacturing sector* (ESAU Working Paper 14). London. Overseas Development Institute, Economic and Statistics Analysis Unit.

- Bernini, C., & Pellegrini, G. (2011). How is growth and productivity in private firms affected by public subsidy? Evidence from a regional policy. *Regional Science and Urban Economics*, 41(3), 253–265. doi:10.1016/j.regsciurbeco.2011.01.005
- Betcherman, G., Daysal, N. M., & Pagés, C. (2010). Do employment subsidies work? Evidence from regionally targeted subsidies in Turkey. *Labour Economics*, 17(4), 710–722. doi:10.1016/j.labeco.2009.12.002
- Bezboruah, K. C., & Pillai, V. (2015). Exploring the participation of women in financial cooperatives and credit unions in developing countries. International society for third-sector research. *Voluntas*, 26, 913–940. doi:10.1007/s11266-014-9467-9
- Cerqua, A., & Pellegrini, G. (2014). Do subsidies to private capital boost firms' growth? A multiple regression discontinuity design approach. *Journal of Public Economics*, 109, 114–126. doi:10.1016/j.jpubeco.2013.11.005
- Colombo, M. G., Giannangeli, S., & Grilli, L. (2013). Public subsidies and the employment growth of high-tech start-ups: Assessing the impact of selective and automatic support schemes. *Industrial and Corporate Change*, 22(5), 1273. doi:10.1093/icc/dts037
- Department of Trade and Industry (DTI). (2007). [Online]. Retrieved July 25, 2014, from http://www.dti.gov.za/sme_development/docs/smme_report.pdf
- Dupont, V., & Martin, P. (2006). Subsidies to poor regions and inequalities: Some unpleasant arithmetic. *Journal of Economic Geography*, 6, 223–240. doi:10.1093/jeg/lbi019
- Ebersberger, B. (2004). *Labour demand effect of public R&D funding* (VTT Working papers 9). Finland: VTT Technology Studies.
- Erastus, Y. E., Stephen, A., & Abdullai, I. (2014). Institutional framework for promoting small and medium scale enterprises in Ghana: Perspective of entrepreneurs. *Australian Journal of Business and Management Research*, 3(10), 28–45.
- Gabe, T. M., & Kraybill, D. S. (2002). The effect of state economic development incentives on employment growth of establishments. *Journal of Regional Science*, 42(4), 703–730. doi:10.1111/1467-9787.00278
- Kang, J.-W., Heshmati, A., & Choi, -G.-G. (2006). *The effect of credit guarantees on survival and performance of SMEs in Korea* (IDEAS Working Paper Series from RePEc). Ratio Working Papers 92. Stockholm: The Ratio Institute.
- Kangasharju, A. (2007). Do wage subsidies increase employment in subsidized firms? *Economica*, 74 (293), 51–67. doi:10.1111/ecca.2007.74.issue-293
- Koski, H., & Pajarinen, M. (2013). The role of business subsidies in job creation of start-ups, gazelles and incumbents. *Small Business Economics*, 41(1), 195–214. doi:10.1007/s11187-012-9420-5
- Kransdorff, M. (2010). Tax incentives and foreign direct investment in South Africa. *The Journal of Sustainable Development*, 3(1), 68–84.
- Laffont, J. J., & Martimort, D. (2001). The theory of incentives I: The principal-agent model. [Online]. Retrieved February 10, 2015, from <https://gnunet.org/sites/default/>
- Mazanai, M., & Fatoki, O. (2011). The effectiveness of business development services providers (BDS) in improving access to debt finance by start-up SMEs in South Africa. *International Journal of Economics and Finance*, 3(4). doi:10.5539/ijef.v3n4p208
- Schumpeter, J. A. (2008 of (1934)). *The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle*. (Translated from the German by Redvers Opie). New Brunswick, NJ: Transaction Publishers.
- Seidman, K. F. (2005). *Economic development finance*. California: Sage Publications, Inc.
- Statistics South Africa. (2017). Retrieved from <http://www.statssa.gov.za/?m=201708>



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