The impact of urbanisation on poverty reduction in South Africa: A non–linear ARDL approach

Mercy T. Musakwa [1,*] and Nicholas M. Odhiambo [1]

[1] University of South Africa, Pretoria, Republic of South Africa

ARTICLE TYPE
Preliminary communication

ARTICLE INFO
Received: August 17, 2024
Accepted: October 26, 2024
DOI: 10.62366/crebss.2024.2.002
JEL: D63, I31, J60

SUMMARY

The asymmetric impact of urbanisation on poverty reduction was examined for South Africa employing data from 1990 to 2022. The study was motivated by the need to establish the effects of positive and negative shocks on poverty reduction. The study used the non–linear autoregressive distributed lag model (NARDL). The study is timely as it is conducted at a time when most countries, including South Africa, are trying to recover from the COVID–19 global pandemic, which led to a surge in poverty levels. The study found that positive and negative shocks of urbanisation are only instrumental in poverty reduction in the short run. In the long run, positive and negative shocks of urbanisation have no significant effect whatsoever on poverty reduction. The study also found that the effects of positive shocks were more dominant than negative shocks on poverty reduction. The findings of the study point to the importance of urbanisation in poverty reduction in the short run. Policy implications are discussed.

KEYWORDS

household expenditure, NARDL, poverty reduction, South Africa

1. Introduction

The drive to sustainable development has been on the cards for the past decade, spearheaded by the United Nations. This has been expressed in the *Millennium Development Goals* (MDGs) that expired in 2015 and the subsequent programme the *Sustainable Development Goals* (SDGs). The extension of the MDGs through the SDGs reflects key development aspects that were not fully accomplished during the MDGs. One of the goals that has recurred from the MDGs to the SDGs is poverty eradication. Although eradication of extreme poverty was achieved under the MDGs at an aggregate level, some countries remained with extreme poverty. Under the SDGs progress was made to eliminate poverty. However, COVID–19 has largely derailed the progress that was made. Most countries have witnessed a surge in poverty owing to economic activity restrictions during the COVID–19 pandemic that resulted in some companies closing and some families losing breadwinners. At a national level, the government lost the capacity to support struggling families, leading to elevated poverty levels. This has happened at a time when most countries have experienced urbanisation, characterized by rural

*Corresponding author

populations moving into cities in search of better opportunities. Looking past the COVID–19 period, South Africa is among the countries that witnessed an increase in poverty as measured by poverty headcounts and poverty gaps. Several studies have been undertaken on the relationship between poverty reduction and urbanisation, assuming a linear relationship between the two. However, in the recent past, the asymmetric impact of one variable to another has become more informative to policy makers. Against this background, this study aims to relook at the asymmetric impact of urbanisation on poverty reduction in South Africa.

Numerous studies have examined the impact of urbanisation on poverty, assuming a linear relationship, i.e. the negative and positive changes in urbanisation have the same effect on poverty reduction (Ahimah–Agyakwah et al., 2022; Calì and Menon, 2013; Ha et al., 2021; Khan et al., 2016; Mahumane and Milder, 2022; Ravallion, 2002).

This study diverts from the current literature by exploring the asymmetric impact of urbanisation on poverty reduction. This approach is more informative regarding poverty reduction policies associated with urbanisation. The study employs the non–linear autoregressive distributed lag approach (NARDL) to examine the nature of the relationship between poverty reduction and urbanisation. In this study, poverty is captured by household consumption expenditure, a proxy that captures income poverty.

South Africa makes a good case study because it is among the countries that have experienced an increase in poverty in recent years despite government policies targeting poverty alleviation. For instance, the poverty headcount and poverty gap at 2.15 USD per day increased from 18% to 20.5% and from 5.5% to 6.9%, respectively, between 2010 and 2014 (WBG, 2023). Furthermore, policymakers acknowledge poverty to be among the triple challenges that the country is facing, as spelt out in the *National development plan* 2030 for South Africa (NPC, 2014). Given that South Africa is part of the SDGs, the reduction of poverty remains a national goal. Moreover, some countries in Africa look up to South Africa as one of the upper middle–income countries in Africa.

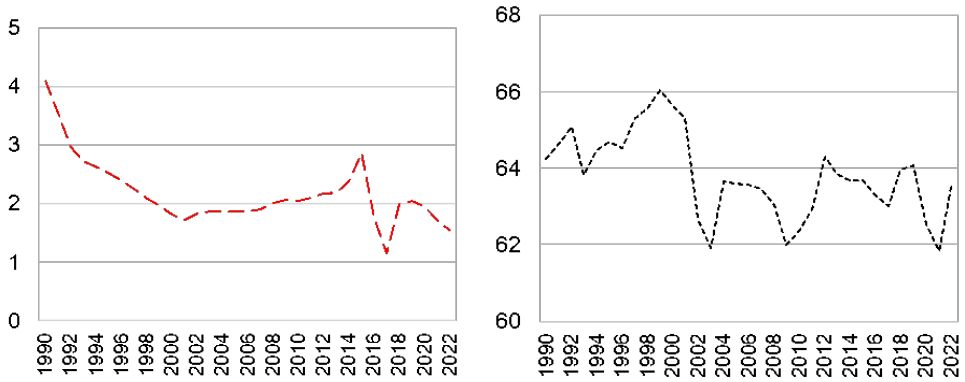
The study is structured as follows. Along with introduction, Section 2 provides insights into urbanisation and poverty dynamic in South Africa, while Section 3 covers empirical literature review. Section 4 outlines the estimation methodology. Data analysis and discussion of results are presented in Section 5. Section 6 concludes the paper.

2. Urbanisation and poverty dynamics in South Africa

According to the World Bank, over 50% of the world's population lives in urban areas, and by 2025, the urban population is projected to increase by 1.5 times (WBG, 2023). South Africa is not an exception. The PMG (2024) highlighted that 63% of the South African population lives in urban areas and this proportion will increase to 71% by 2050. Given this rapid urbanisation, South African policymakers have put in place policies to minimize the negative impact of the movement of people to urban areas. Urbanisation, although it brings many positive benefits to those moving to urban areas, puts pressure on social services. This has negative consequences, especially if policymakers do not anticipate urbanisation or the speed of urbanisation. Challenges of urbanisation include environmental factors, unemployment, crime, urban congestion and an increase in the cost of living, among other factors (PMG, 2024).

The South African government has come up with an *Integrated urban development framework* (IUDF). The IUDF was adopted in 2016 to spell out the policies, principles, and programmes to achieve the *National development plan* by addressing spatial issues and developing a shared understanding of how to manage urbanisation (IUDF, 2024). The IUDF rests on levers, namely spatial planning, sustainable finances, empowered communities, urban governance, economic development, land governance, urban infrastructure, transport and mobility, and human settlements (IUDF, 2024). Apart from the IUDF, some sectorial policies have been developed to support service provision and infrastructure development that consider urbanisation. For example, a *White paper for human settlements* was developed to guide and call for a partnership between the private and the public sector and a coordinated effort between the three tiers of government to address housing challenges in South Africa. Other initiatives include the *Cities support programmes*, *District development model* and *Intermediate cities municipalities*.

The annual growth in urbanisation was highest in 1990 at 4%, and it eased in subsequent years until 2006, when a surge in urbanisation was recorded (WBD, 2024). This trend continued until 2015, before the growth slowed down, except for 2019 when 2% was recorded. The year coincided with the recovery period of the financial crisis, and this could have motivated several South Africans to move to urban areas in search of greener pastures. The average annual growth in urbanisation in South Africa over the study period was 2% (WBD, 2024). Urbanisation growth rate (URBGR) and household consumption expenditure (HHC as a proxy for poverty rate) seem to have had a general downward trend during the observed period in South Africa (Figure 1). However, downward trending behavior of HHC exhibit poverty increasing.



(a) Urbanization growth rate (%) (b) Household consumption (% GDP)

Figure 1. *Trends in urbanisation and household consumption expenditure 1990–2022*

Looking at poverty, South Africa is a signatory to the SDGs, which automatically obliges the South African government to work towards achieving the 17 SDGs. Among the SDGs, goal 1: "End poverty in all its forms everywhere", calls for the government to roll out policies that eliminate poverty in all its forms in South Africa. In addition, the South Africa *Naional development plan* (NDP) was designed to take the SDGs into account (NPC, 2014). In the NDP, the government highlighted the triple challenge of unemployment, inequality and poverty. South Africa has been battling with high poverty and inequality levels since independence. Some of these challenges originated in the apartheid error, owing to the policies that were

pursued. The government has adopted a three–pronged approaches to poverty reduction in South Africa. First, the government made social services available to those who are unable to afford them ensuring that they are available and accessible to every South African. For example, there are free primary schools where parents do not have to pay for tuition and free primary health for most South Africans. The second approach entails empowerment of the poor and integrating them into the economic stream, through small, medium and micro enterprises (SMME), *Black economic empowerment programmes*, *Employment equity and funding programmes* that target specific categories of the population, like the youth. The third approach is through social safety nets, where government transfers are made to alleviate poverty in families that cannot afford basic meals and other social services. Some of the grants include the social relief of distress grant, foster care, care dependency, child support, social relief and pension, among other programmes. The Social Security Agency (SASSA) of South Africa is responsible for the administration of the grants in South Africa and is under the Department of social development. In December 2023, SASSA paid a total of R18.9 million in grants distributed across old age, war veteran, foster care, disability, child support and care dependency grants (SAASA, 2023). Among the disbursements that were made, child support received the highest total payment, followed by old age, while the least paid went to care dependency (SAASA, 2023). The province with the highest grant payout is KwaZulu Natal, followed by Gauteng. The province with the least payments is the Northern Cape (SAASA, 2023). The trends in poverty levels measured by poverty headcount and poverty gap for South Africa are reported in Table 1.

Table 1. *Poverty headcount and poverty severity 1990–2020*

Year	poverty headcount (2.15 USD per day)	poverty gap (2.15 USD per day)	poverty headcount (6.85 USD per day)	poverty gap (6.85 USD per day)
1993	33.5	12.0	71.1	42.7
2000	36.8	14.3	74.3	45.7
2005	28.3	9.3	71.8	41.6
2008	18.7	5.4	62.4	32.8
2010	18.0	5.5	60.9	31.9
2014	20.5	6.9	61.6	33.4

Source: World Bank Database – World Development Indicators

The data reported in Table 1 indicate a decline in poverty between 2000 and 2010, before taking an upward trend from 2014 across all the measures (WBD, 2024). The trend in poverty levels in 2014 reveals a reversal of the gains that were made from 2000 (WBD, 2024), and thus, calling for more coordinated efforts to address the scourge of poverty in South Africa.

3. Empirical literature review

Urbanisation can have an impact on poverty through different channels: i) through an increase in employment opportunities, ii) through access to better social services, and iii) through an increase in the demand for agricultural products (Ahimah–Agyakwah et al., 2022). In this section, previous studies that have investigated the impact of urbanisation on poverty reduction have been reviewed. There is also a dearth of studies that have investigated the asymmetric impact of urbanisation on poverty reduction.

Ahimah–Agyakwah et al. (2022), for example, while using panel data from 29 urbanising countries in sub–Saharan Africa from 1985 to 2019, within two–step generalised methods of moments GMM, found urbanisation to reduce poverty gap and poverty headcount. Wang et al. (2022) investigated the impact of urbanisation on rural and urban area poverty in China using panel data from 2000 to 2017. The study found that urbanisation increased urban and rural per capita income levels. In addition, a U–shaped relationship between urbanisation and poverty was found to exist. Ha et al. (2021) studied the impact of urbanisation on poverty reduction in Vietnam using panel data from 63 provinces and data from 2006 to 2016. Employing difference GMM estimator, the study found a U–shaped relationship between poverty level and urbanisation. This finding aligns with the results of Wang et al. (2022) in their study on China. According to Ha et al. (2021) the estimated threshold for urbanisation on poverty reduction was 40.1% and 43.68% for static and dynamic models, respectively.

Datt et al. (2016), using poverty data spanning over 60 years for India, found urbanisation to reduce poverty through several channels. These channels include urban consumption that brought gains in the rural sector and a change in the composition of the urban primary, secondary and tertiary sectors. Similarly, Zhang (2016), in a study on China using survey data, found urbanisation to reduce the rural—urban gap. Calì and Menon (2013), in a study on Indian districts using data from 1983 to 1999, found urbanisation to contribute to a reduction in rural poverty. The spillover effect of urbanisation was found to be a major contributor in comparison to the movement of people to urban areas. Urbanisation resulted in an increase in agricultural products and urban–rural remittances. The results from this study are consistent with the findings by Ahimah–Agyakwah et al. (2022), Wang et al. (2022) and Zhang (2016). Deichmann et al. (2009) investigated the importance of rural–urban linkage for non–farm employment in Bangladesh, and found that people get more well–paying jobs in non–farm employment, and the closer they are to urban areas, the more opportunities increase.

The previous studies reviewed here point to a positive relationship between urbanisation and poverty reduction. However, most of them assume that there is a symmetric relationship between the two variables. This study, therefore, adds value to the body of knowledge by decomposing the impact of positive and negative changes in urbanisation on the poverty.

4. Data and estimation technique

The variables of interest in this study are poverty reduction, proxied by household consumption expenditure (HHC) as a percentage of GDP, and urban population growth rate (URBGR) as annual percentage. Other control variables included in the model are education (EDU), unemployment (UNE) as annual %, domestic credit to the private sector (DCPS) as a percentage of annual GDP, and household debt (HHDEPT) as a share of household disposable income. The data for all variables were observed from 1990 to 2022, and retrieved from World Bank Database, i.e. World Development Indicators (WBD, 2024), except for the household debt to disposable income (HHDEPT) which was extracted from the South African Reserve Bank Quarterly Bulletin (SARB, 2024).

This study uses a non–linear autoregressive distributed lag (NARDL) model to investigate the asymmetric impact of urbanisation on poverty in South Africa. The approach was selected based on the growing literature projecting that negative and positive changes in an independent variable have a different impact on the dependent variable.

The NADRL model specification is given in Equation 1.

$$\begin{aligned}\Delta HHC_t = \theta_0 &+ \sum_{i=1}^{p} \theta_{i1}\Delta HHC_{t-i} + \sum_{i=0}^{q1} \theta_{i2}\Delta URBGR^{+}_{t-i} + \sum_{i=0}^{q2} \theta_{i3}\Delta URBGR^{-}_{t-i} \\ &+ \sum_{i=0}^{q3} \theta_{i4}\Delta EDU_{t-i} + \sum_{i=0}^{q4} \theta_{i5}\Delta UNE_{t-i} + \sum_{i=0}^{q5} \theta_{i6}\Delta DCPS_{t-i} \\ &+ \sum_{i=0}^{q6} \theta_{i7}\Delta HHDEPT_{t-i} + \beta_1 HHC_{t-1} + \beta_2 URBGR^{+}_{t-1} + \beta_3 URBGR^{-}_{t-1} \\ &+ \beta_4 EDU_{t-1} + \beta_5 UNE_{t-1} + \beta_6 DCPS_{t-1} + \beta_7 HHDEPT_{t-1} + \varepsilon_t\end{aligned} \tag{1}$$

where $\Delta URBGR^{+}_{t}$ is a positive change of urbanisation, $\Delta URBGR^{-}_{t}$ is a negative change of urbanisation, p, $q1$, $q2$, $q3$, $q4$, $q5$ and $q6$ are time lags associated to every differenced variables on the right hand side, while β_1, β_2, β_3, β_4, β_5, β_6 and β_7 are the long run coefficients.

To test for cointegration on variables in Equation 1, a null hypothesis of no cointegration $H_0 : \beta_1 = \beta_2 = \cdots = \beta_7 = 0$ is tested against an alternative of the presence of a long run relationship by utilizing an $F-$statistic. If $F-$statistic is greater than the upper bound critical values (at 10%, 5% or 1% significance level), cointegration is confirmed.
The ECM (Error Correctoin Model) specification of Equation 1 is given in Equation 2.

$$\begin{aligned}\Delta HHC_t = \theta_0 &+ \sum_{i=1}^{p} \theta_{i1}\Delta HHC_{t-i} + \sum_{i=0}^{q1} \theta_{i2}\Delta URBGR^{+}_{t-i} + \sum_{i=0}^{q2} \theta_{i3}\Delta URBGR^{-}_{t-i} \\ &+ \sum_{i=0}^{q3} \theta_{i4}\Delta EDU_{t-i} + \sum_{i=0}^{q4} \theta_{i5}\Delta UNE_{t-i} + \sum_{i=0}^{q5} \theta_{i6}\Delta DCPS_{t-i} \\ &+ \sum_{i=0}^{q6} \theta_{i7}\Delta HHDEPT_{t-i} + \lambda EC_{t-1} + \epsilon_t\end{aligned} \tag{2}$$

where θ_i are short run coefficients, and λ is parameter associated with error correction term.

5. Empirical results

The study uses the Dickey–Fuller Generalized Least Square and the Phillip–Perron (PP) to test for stationarity of the variables included in the model. The results reported in Table 2 confirm that the variables are stationary in the first differences (whenever the unit root hypothesis is rejected).

Table 2. *Unit root tests*

Variable	Dickey–Fuller GLS statistic		Phillips–Perron statistic	
	levels	differences	levels	differences
HHC	−2.405	−4.929***	−2.333	−6.988***
EDU	−1.606	−3.378**	−1.655	−3.323**
UNE	−0.422	−8.633***	−0.372	−10.709***
DCPS	−1.932	−5.161***	−1.506	−6.928***
HHDEPT	−2.963	−3.600*	0.171	−2.607**
URBGR	−2.144	−6.129***	−4.446***	−5.297***

Note: *, ** and *** denote statistical significance levels at 10%, 5% and 1%

The test for cointegration confirms the presence of a long run relationship between the variables included in the model according to reported $F-$statistic in Table 3, which has been found to be greater than the upper bound of the asymptotic critical value at 1% significance.

Table 3. *Cointegration test*

$F-$statistic		Cointegration status			
7.823***		Cointegrated			
Asymptotic critical values					
10%		5%		1%	
I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
2.457	3.797	2.970	4.500	4.270	6.211

Notes: *** denotes statistical significance at 1% level

In the first part of Table 4 short run and long run estimates are reported, while the second part includes commonly used goodness–of–fit measures and diagnostic tests (for checking the error terms normality, independency and homoskedasticity), along with short run and long run asymmetric tests, $\text{Wald}_{LR}-$statistic and $\text{Wald}_{SR}-$statistic, respectively.

Table 4. *Non–linear ARDL results*

Long run results		Short run results	
Variable	Coefficient	Variable	Coefficient
$URBGR_t^+$	-2.642	$\Delta URBGR_t^+$	1.573^{***}
$URBGR_t^-$	-0.909	$\Delta URBGR_{t-1}^+$	3.135^{***}
EDU_t	-0.115	$\Delta URBGR_t^-$	-1.535^{**}
$DCPS_t$	-0.113^{*}	$\Delta URBGR_{t-1}^-$	0.807
$HHDEPT_t$	-0.218^{**}	ΔEDU_t	-0.049
UNE_t	0.383	ΔEDU_{t-1}	-0.223^{***}
		$\Delta DCPS_t$	0.019
		$\Delta DCPS_{t-1}$	0.067^{***}
		$\Delta HHDEPT_t$	-0.043
		ΔUNE_t	-0.393^{***}
		ΔUNE_{t-1}	-0.451^{***}
		ECM_{t-1}	-0.764^{***}
R^2	0.899		
R^2 adjusted	0.828		
$F-$statistic	12.647^{***}		
Normality test	0.818		
Serial correlation	1.418		
Heteroskedasticity	1.097		
$\text{Wald}_{LR}-$statistic	5.787^{**}		
$\text{Wald}_{SR}-$statistic	45.549^{***}		

Note: *, ** and *** denote statistical significance at 10%, 5% and 1% levels

The results reported in Table 4 show that there is a positive association between the positive shock of urbanisation and poverty reduction in the short run, but not in the long run. In the long run, the positive shock of urbanisation is found to have no impact on poverty

reduction. This has been confirmed by the coefficient of $URBGR_t^+$ which has been found to be statistically insignificant. In contrast, the coefficients of $\Delta URBGR_t^+$ and $\Delta URBGR_{t-1}^+$ have been found to be positive and statistically significant in the short run, thereby confirming a positive association between the positive variation in urbanisation and poverty reduction. Likewise, the negative shock of urbanisation has also been found to be statistically significant in the short run but not in the long run. The insignificant impact of negative variation in urbanisation on poverty reduction, in the long run, has been confirmed by the coefficient of $URBGR_t^-$, which was found to be statistically insignificant. Conversely, the coefficient of $\Delta URBGR_t^-$ in the short run has also been found to be negative but statistically significant.

Overall, the results indicate that, in the short run, positive shocks to urbanization and poverty reduction are positively associated, while negative shocks to both urbanization and poverty reduction show a negative association, as reflected in the signs of their coefficients. However, in the long run, both positive and negative shocks have no impact whatsoever on poverty reduction. The results also show that positive shocks of urbanisation are more dominant than negative shocks in poverty reduction. This has been corroborated by the cumulative dynamic multiplier graph (Figure 2), which shows the asymmetric adjustment patterns following positive and negative shocks to the explanatory variables. Indeed, the results reported in this figure exhibit that the positive shocks of uncertainty have a deeper effect than the negative shocks on poverty reduction. These findings are consistent with the theory that the movement of households living in poverty to urban areas is expected to increase their chances of getting better–paying jobs and higher incomes.

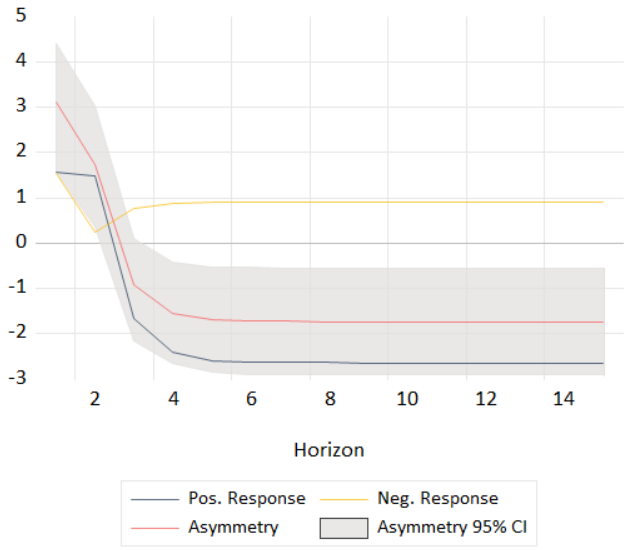
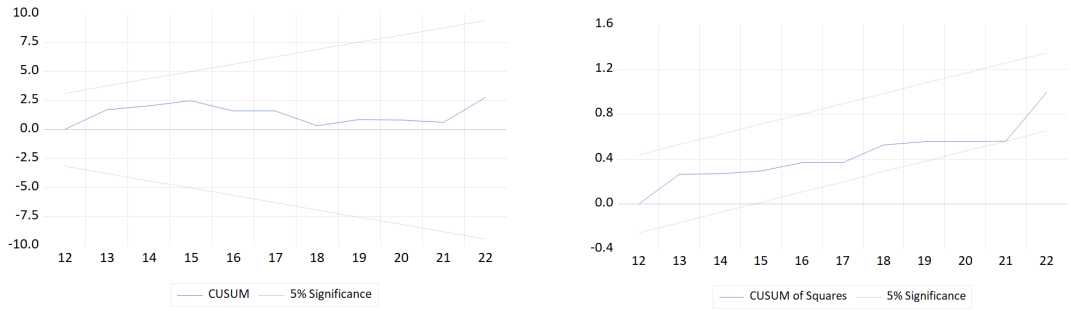


Figure 2. *Cumulative dynamic multiplier of urbanisation on poverty reduction shock*

Other results reported in Table 4 confirm that education has a negative impact on poverty reduction in South Africa in the short run, which is contrary to expectation. However, the cost of funding education could result in the poor being in a worse position, given the limited resources they have access to. Domestic credit to the private sector has a negative impact on poverty reduction in the long run and a positive impact in the short run. Thus, domestic credit to the private sector provides relief to those living in poverty only in the short run,

while in the long run, credit could become a burden to the same people experiencing poverty, resulting in a debt trap. The study found household debt to disposable income to have a negative impact on poverty reduction in the long run and to be insignificant in the short run. Unemployment has a negative impact on poverty reduction only in the short run. The results corroborate the findings of a study by Tregenna and Tsela (2012), which found that South Africans depend on income earned to support their needs, and a decrease in income results in deprivation of some social services.

The NARDL model is a good fit with an R–square of 90% and the error correction term with an expected negative sign (-0.764). The diagnostic results reported in Table 4, show the model passed normality test, independency test (no serial correlation) and homoskedasticity test (no heteroskedasticity). In addition, the stability of the model is confirmed at the 5% level of significance by the cumulative sum plot (CUSUM) and cumulative sum of squares plot (CUSUMQ), both exhinited in Figure 3.



(a) CUSUM plot

(b) CUSUMQ plot

Figure 3. *Stability plots*

6. Conclusion

The asymmetric impact of urbanisation on poverty reduction was examined for South Africa using data from 1990 to 2022. The study was motivated by the need to establish whether positive and negative shocks on urbanisation have the same effect on poverty reduction. This comes at a time when most countries, including South Africa, where poverty levels have surged, are trying to recover after COVID–19. The study used household consumption expenditure to capture income poverty. Employing the NARDL, the study found positive (negative) changes in urbanisation to be positively (negatively) associated with poverty reduction in South Africa in the short run.

However, the study found no significant association between positive and negative variations in urbanisation on poverty reduction in the long run. The study also found that the effects of positive shocks were more dominant than negative shocks on poverty reduction. This shows that urbanisation shocks are only instrumental in poverty reduction in South Africa in the short run. Based on these findings, the government needs to have a two–pronged approach. First, it should continue with the expansion of social services in urban areas to accommodate the increase in population living in urban areas. Second, it should implement developmental projects in rural areas aimed at alleviating poverty, thereby reducing unplanned migration from rural to urban areas in the long run.

Although measures were taken to ensure the scientific rigour of the study, a few limitations can be highlighted: i) availability of long time–series data restricted the sample study period, and ii) only one proxy was used to capture the poverty. Future studies could benefit from extending the study period and incorporating additional variables into the model to more effectively capture the multidimensional nature of poverty.

References

Ahimah–Agyakwah, S., Nketiah–Amponsah, E. & Agyire–Tettey, F. (2022). Urbanization and poverty in Sub–Saharan Africa: Evidence from dynamic panel data analysis of selected urbanizing countries. *Cogent Economics and Finance*, 10(1):2109282. doi: 10.1080/23322039.2022.2109282

Calì, M. & Menon, C. (2013). Does urbanization affect rural poverty? Evidence from Indian districts. *World Bank Policy Research Working Paper*, 6338, 1–50. doi: 10.1596/1813-9450-6338

Datt, G., Ravallion, M. & Murgai, R. (2016). Growth, urbanisation and poverty reduction in India. *National Bureau of Economic Research Working Paper Series*, 21983, 1–45. doi: 10.3386/w21983

Deichmann, U., Shilpi, F. & Vakis, R. (2009). Urban proximity, agricultural potential and rural non–farm employment: Evidence from Bangladesh. *World Development*, 37(3):645–660. doi: 10.1016/j.worlddev.2008.08.008

Ha, N. M., Le, N. D., Trung–Kien, P. & Tajani, F. (2021). The impact of urbanisation on poverty reduction: An Evidence from Vietnam. *Cogent Economics and Finance*, 9(1):1918838. doi: 10.1080/23322039.2021.1918838

IUDF, (2024). Integrated Urban Development Framework. https://iudf.co.za/ [accessed April 19, 2024]

Khan, A., Saboor, A., Ali, I., Malik, W. & Moamood, K. (2016). Urbanisation of multidimensional poverty: Empirical evidence from Pakistan. *Quality and Quantity*, 50(1):439–469. doi: 10.1007/s11135-014-0157-x

Mahumane, G. & Mulder, P. (2022). Urbanization of energy poverty? The case of Mozambique. *Renewable and Sustainable Energy Reviews*, 159:112089. doi: 10.1016/j.rser.2022.112089

NPC, (2014). National development plan 2030: Our future–make it work. *National Planning Commission Publication*, 1–484. https://www.gov.za/sites/default/files/gcis_document-201409-ndp-2030-our-future-make-it-workr.pdf

PMG, (2024). Parliamentary Monitoring Group. Urbanisation. https://pmg.org.za/page-Urbanisation [accessed April 19, 2024]

Ravallion, M. (2002). On the urbanization of poverty. *Journal of Development Economics*, 68(2):435–442. doi: 10.1016/s0304-3878(02)00021-4

SARB, (2024). *Quarterly Bulletin*, South African Reserve Bank. https://www.resbank.co.za-en/home/publications/quarterly-bulletin1 [accessed April 19, 2024]

SASSA, (2023). *Fact Sheet*. Social Security Agency, No. 12. https://www.sassa.gov.za-statistical-reports/Documents/FACT%20SHEET%20%20December%202023.pdf [accessed April 19, 2024]

Tregenna, F. & Tsela, M. (2012). Inequality in South Africa: The distribution of income, expenditure and earnings. *Development Southern Africa*, 29(1):35–61. doi: 10.1080/0376835x.2012.645640

Wang, X., Yan, H., E, L., Huang, X., Wen, H. & Chen, Y. (2022). The impact of foreign

trade and urbanization on poverty reduction: Empirical evidence from China. *Sustainability*, 14(3):1464. doi: 10.3390/su14031464

WBG, (2023). Urban Development. *World Bank Group*. https://www.worldbank.org/en/topic-urbandevelopment [accessed April 19, 2024]

WBD, (2024). *World Development Indicators*, World Bank Database. https://databank-worldbank.org/source/world-development-indicators [accessed April 19, 2024]

Zhang, Y. (2016). Urbanisation, Inequality and poverty in the People's Republic of China. *Asian Development Bank Institute Working Paper Series*, 584:1–33. https://www.adb.org-sites/default/files/publication/189132/adbi-wp584.pdf

Utjecaj urbanizacije na suzbijanje siromaštva u Južnoj Africi: nelinearni ARDL pristup

VRSTA ČLANKA
Prethodno priopćenje

INFORMACIJE O ČLANKU
Primljeno: 17. kolovoza 2024.
Prihvaćeno: 26. listopada 2024.
DOI: 10.62366/crebss.2024.2.002
JEL: D63, I31, J60

SAŽETAK

Asimetrični utjecaj urbanizacije na suzbijanje siromaštva istražen je za Južnu Afriku koristeći podatke od 1990. do 2022. godine. Studija je motivirana potrebom da se utvrde učinci pozitivnih i negativnih šokova na smanjenje siromaštva. Korišten je nelinearni autoregresijski model s distribuiranim pomacima (NARDL). Studija je pravovremena jer se provodi u trenutku kada se većina zemalja, uključujući Južnu Afriku, pokušava oporaviti od globalne COVID–19 pandemije, koja je dovela do porasta razine siromaštva. Studija je pokazala da su pozitivni i negativni šokovi urbanizacije korisni za suzbijanje siromaštva samo u kratkom roku. Dugoročno, pozitivni i negativni šokovi urbanizacije nemaju značajan učinak na siromaštvo. Također je utvrđeno da su učinci pozitivnih šokova bili izraženiji od učinaka negativnih šokova. Nalazi studije ističu važnost urbanizacije u smanjenju siromaštva u kratkom roku. Diskutirane su i implikacije za nositelje politika.

KLJUČNE RIJEČI

potrošnja kućanstva, NARDL, suzbijanje siromaštva, Južna Afrika