РАЗДЕЛ 1
НАУЧНЫЕ ИССЛЕДОВАНИЯ И КОНЦЕПЦИИ

SECTION 1
ACADEMIC INVESTIGATIONS & CONCEPTS

IS THE SAVINGS-LED GROWTH HYPOTHESIS VALID FOR ZIMBABWE?

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Abstract

This study investigates the long run relationship between economic growth and gross domestic savings for Zimbabwe during the period 1980 to 2011. The causality relationship between savings and economic growth has been a subject of extensive debate for almost half a century now. There are currently two dominant views regarding the relationship between savings and economic growth. The first view maintains that it is the growth of savings that drives economic growth. The second view argues that it is economic growth that spurs savings expansion. Using the case study methodology, the study revealed that GDP per capita had a significant positive influence on the quantity and level of gross domestic savings and not the other way round. Policies that are targeted at boosting GDP per capita should be accelerated in order to promote long-term and sustainable growth gross domestic savings for in Zimbabwe.

Keywords: Zimbabwe, Gross Domestic Savings, Economic Growth, Case Study Methodology

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1 Introduction

Many researchers have so far concentrated their investigations with regard to the dynamic relationship between savings and economic growth on Asia and Latin America leaving sub-Saharan African countries with little or no attention at all (Odhiambo, 2009). Specifically, no savings-led growth study has been devoted on Zimbabwe.

Various empirical researchers have so far investigated the causality relationship between savings and economic growth using different methodologies and data sets but the results are still mixed, inconclusive and far from reaching consensus. For example, DeGregorio (1992), Bacha (1990), Otani and Villanueva (1990), Ciftcioglu (2010), Oladipo (2101) and Masih and Peters (2010), among others established that domestic savings leads to economic growth. However, Solow (1956) and Romer (1986) discovered that savings can only spur economic growth indirectly via capital formation. Lin (1992) concurred with Solow (1956) and pointed out that the savings-led growth perspective can only be achieved if savings mobilized have been translated into capital formation. Studies by Johnson (2011), Mphuka (2010), Shahbaz and Khan (2010) and Lean and Song (2009), among others suggested that it is economic growth that positively impact on savings. The other perspective is that there is no relationship at all between savings and economic growth. An example is a study by Baharumshah et al (2003) for Asian countries that discovered no relationship at all

between savings and economic growth in South Korea, Malaysia, Thailand and Philippines.

It is against this background that this study aims to investigate whether or not gross domestic savings rate as measured by gross domestic savings (% of GDP) has an influence on economic growth in Zimbabwe. The study is of paramount importance for formulation of policy purposes. Findings from this research will help Zimbabwe economic policy makers to design correct savings policy that is going to have long run positive impact on the economy of Zimbabwe. The major question that the current study seeks to address is whether or not the traditional perspective of growth that gross domestic savings spur economic growth is valid for Zimbabwe.

The remaining portion of the study is structured as follows: Section 2 presents the theoretical and empirical literature review. Section 3 provides an overview of savings and economic growth in Zimbabwe while section 4 concludes the study.

2 Savings and economic growth: Theoretical and empirical overview

There are many models that have been used to explain the relationship between savings and economic growth. In this study, however, two dominant views, namely the neo-classical and endogenous growth models are discussed.

Studies whose findings are consistent with neo-classical growth model include those undertaken by Solow (1957), Kaldor (1961), Ciftcioglu (2010), Oladipo (2010), Tang and Ch'ng (2012), Singh (2010), Romer (1986) and Lucas (1988), among others. According to Solow (1957), savings only positively influence economic growth for a temporal period under conditions of zero movement of capital between the domestic economy and other countries. Higher savings increases the productivity per employee during the transition phase of the economy only, argued Solow (1957). Contrary to the findings by Solow (1957), Singh (2010) argued that higher amount of savings have a long term permanent and positive impact on real GDP. However, according to Romer (1986) and Lucas (1988), savings lead to long term economic growth through stimulating investment activities. A study by Kaldor (1961) also revealed findings that are consistent with Solow (1957).

Using Hausman and Lagrange multiplier tests, Ciftcioglu (2010) discovered that savings had a statistically significant impact on real GDP among the selected Central and East European countries. A study by Oladipo (2010) supported the savings-led growth hypothesis that stipulated a uni-directional causality relationship running from savings to economic growth in Nigeria. The same study further established that savings and economic growth were positively co-integrated to each other, hence a stable long run relationship between the two variables in the case of Nigeria.

In a study of five ASEAN (Indonesia, Malaysia, Philippines, Singapore and Thailand) countries for the period 1970 to 2010, Tang and Ch'ng (2012) revealed findings that are in line with the savings-led growth hypothesis. Using Bartlett-Corrected Trace Test for co-integration tests and bootstrapping approach to test causality, Tang and Ch'ng (2012) discovered that savings Granger caused economic growth in all the five ASEAN countries.

Studies whose results resonates with the endogenous growth model include those undertaken by Johnson (2011), Mphuka (2010), Shahbaz and Khan (2010), Lean and Song (2009), Agrawal and Sahoo (2009), Sahoo et al (2001), Odhiambo (2009), Mohan (2006), Sajid and Sarfraz (2008), among others. According to Johnson (2011), the savings rate increased directly in response to the economic growth changes in Nigeria during the period ranging from 1970 to 2007. Mphuka (2010) also found out that GDP per capita Granger caused savings growth both in the short and long run without any feedback in Zambia. Economic growth is critical in boosting savings especially for countries that are still at an infant stage of development, argued Mphuka (2010). The findings by Shahbaz and Khan (2010) concurred with those revealed by Mphuka (2010). The uni-directional causality relationship running from economic growth to domestic savings in the long run in Pakistan was revealed by Shahbaz and Khan (2010). Moreover, Lean and Song (2009) established that savings in China recorded a phenomenon increase in direct response to rapid economic growth during the period 1955 to 2004. Their study recommended that China should implement economic growth policies and strategies in order to boost savings and capital accumulation.

According to a study carried out by Agrawal and Sahoo (2009), savings were predominantly determined by GDP growth rate, dependency ratio, interest rates and bank density in Bangladesh. The same study further revealed to a lesser extent some bi-directional causality relationship between savings and economic growth in Bangladesh. The study by Sahoo et al (2001) repudiated the classical growth model and but established the existence of a uni-directional causality relationship running from economic growth to savings in India. Sahoo et al (2001) also suggested that authorities have to boost the economic growth capacity in order to attract any meaningful savings into the India economy.

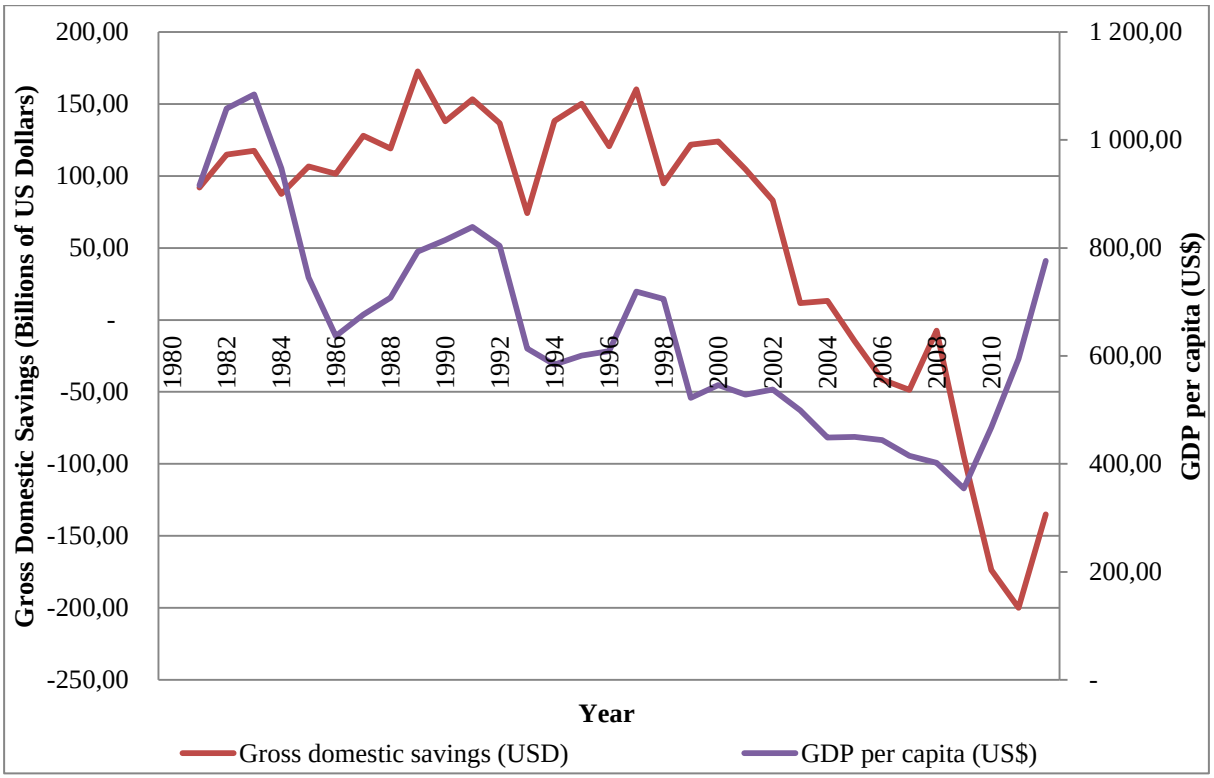
A study by Odhiambo (2009) using the multivariate causality test established a uni-directional relationship running from economic growth to savings in the long run in South Africa. Odhiambo (2009) even suggested that South Africa should accelerate the formulation and implementation of policies aimed at stimulating economic growth in order to grow domestic savings. The findings by Mohan (2006) are consistent with Odhiambo (2009). Mohan (2006) established that economic growth determined the

savings growth rate not only in most low to medium income countries but in all high income countries as well. However, Mohan (2006) argued that income class of a country plays a very insignificant part in influencing the direction of causality between economic growth and savings. Sajid and Sarfraz (2008) identified a uni-directional relationship running from gross national product (GNP) and gross domestic product (GDP) to domestic savings in the short run in Pakistan. Sajid and Sarfraz (2008) further argued in the same study that the amount of domestic savings relies to a greater extent on the stage of a country's economic growth.

3 Overview of Savings and Economic Growth Trends in Zimbabwe

Figure 1 trends shows that there is some kind of relationship between gross domestic savings (US$) and GDP per capita (US$). The two trend lines show some kind of influence on each other (see Figure 1).

Figure 1. Gross Domestic Savings (Billion US Dollars) and Gross Domestic Product per capita (US$) trends for Zimbabwe -1980 to 2011



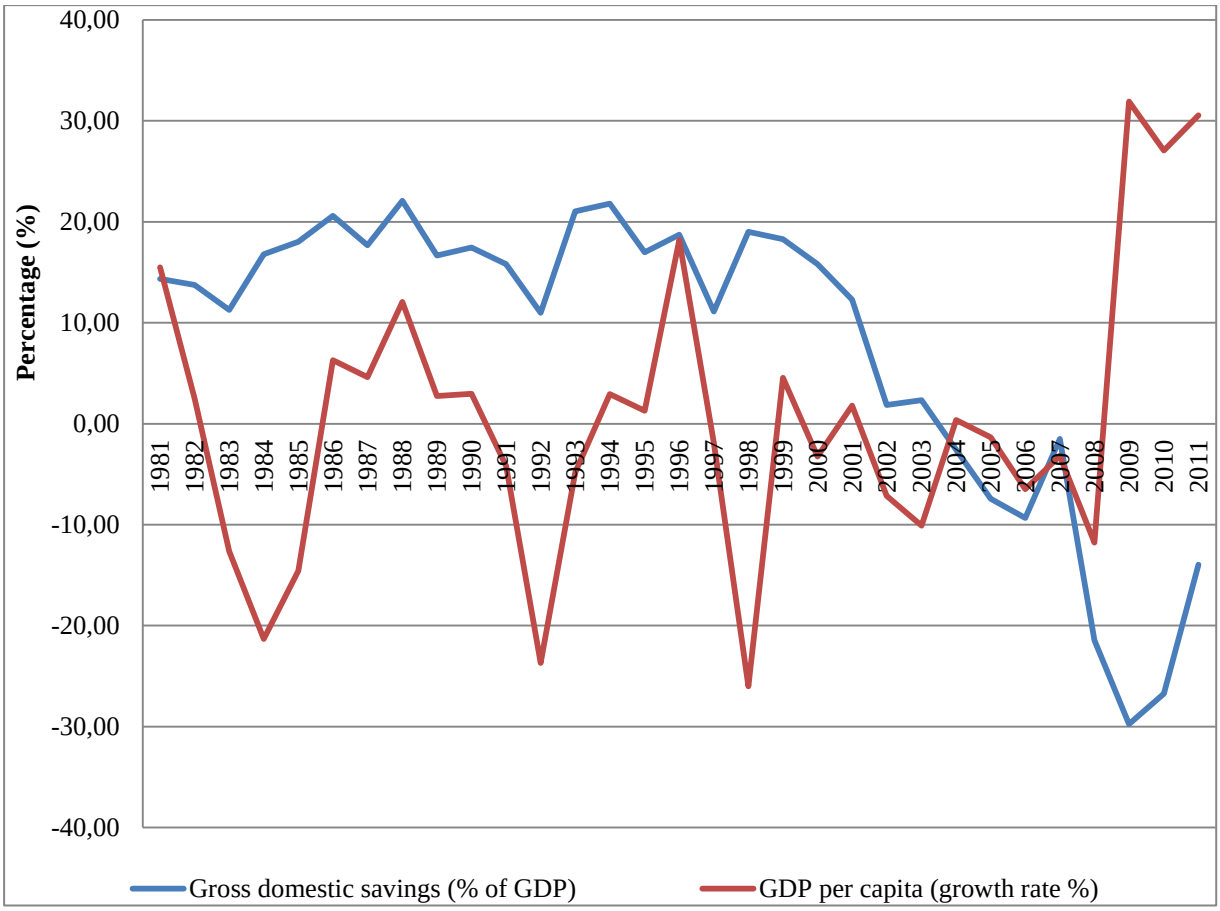
Source: World Bank (2011)

Gross domestic savings went up by 10.35%, from US$92.04 billion in 1980 to US$101.57 billion in 1985 whilst Gross Domestic Product (GDP) plummeted by 15.60% during the same period (World Bank, 2011). The five year period from 1985 to 1990 saw both gross domestic savings and GDP recording positive growth rates. Gross domestic savings went up from US$101.57 billion in 1985 to US$153.30 billion in 1990, representing a surge of 50.92% whilst GDP increased from US$5.64 billion in 1985 to US$8.78 billion in 1990. The subsequent three-five year periods from 1990 to 2005 recorded a gradual decline in both gross domestic savings and GDP in Zimbabwe. Gross domestic savings decreased from US$153.30 billion in 1990 to US$120.72 billion in 1995 whilst GDP also went down by 19.04% to record US$7.11 billion by year end 1995. Furthermore, gross domestic savings went down by 13.42% between 1995 and 2000 before experiencing another decline by a further 139.64%, from US$104.53 billion in 2000 to a negative US$41.44 billion in 2005. GDP also plummeted from US$7.11 billion in 1995 to US$6.61 billion in 2000, representing a downfall by 7.10%. GDP further declined by 15.49% during the subsequent five year period to finish at US$5.58 billion by end of 2005. Whilst GDP showed an increasing trend from 2005 to 2011, gross domestic savings were negative during the same period. In year 2005, gross domestic savings was a negative US$41.44, declined to a negative US$199.99 billion by end of 2010 before slightly going up by 32.50% to record a negative of US$134.99 billion by end of 2011.

Gross domestic savings (% of GDP) increased by 4.24 percentage points between 1980 and 1985 before recording a downward trend during the five year periods, from 1985 to 2010 (see Figure 2). A closer

look at Figure 2 shows that both gross domestic savings (% of GDP) and GDP per capita (% growth) follow the same trend and pattern.

Figure 2. Gross domestic savings (% of GDP) and GDP per capita (growth rate %) trends for Zimbabwe from 1981-2011



Source: World Bank (2011)

Gross domestic savings (% of GDP) increased by 4.24 percentage points, from 13.78% in 1980 to 18.78% in 1985. The subsequent five year periods from 1985 to 2010 recorded a steady but continuous decline in gross domestic savings (% of GDP). The latter decreased by 0.57 percentage points, from 18.02% in 1985 down to 17.45% in 1990 whilst GDP per capita plummeted by 30.52% during the same period. Gross domestic savings (% of GDP) went down by 0.48 percentage points during the period 1990 to 1995 before further declining by another 1.15 percentage points, from 16.98% in 1995 down to 15.82% in 2000. GDP per capita also went down by 13.22%, from US$608.60 in 1995 to US$528.12 in 2000. The two- five year periods from 2000 to 2010 was characterised by negative gross domestic savings (% of GDP) whilst GDP per capita showed a downward trend during the same period. Although the adoption of the multi-currency regime coupled by the formation of the inclusive government in 2009 economically stabilised Zimbabwe as shown by an upward trend in GDP per capita (see Figure 1), gross domestic savings (% of GDP) continued to be on the negative (see Figure 2).

4 Conclusion

This study investigated the savings-led growth hypothesis for Zimbabwe using annual data ranging from 1980 to 2011. The causality relationship between savings and economic growth has been a subject of extensive debate for almost half a century. There are currently two dominant views regarding the relationship between savings and economic growth. The first view is the savings-led growth whilst the second is the growth-led savings hypothesis. Contrary to previous studies, this study employed the case study methodology to investigate the validity of the savings-led growth hypothesis in Zimbabwe. It clear from both Figure 1 and Figure 2 that there is some degree of co-movement between GDP per capita and gross domestic savings, though the extent of relationship could not be ascertained in this study. What is coming out from this study is that GDP per capita has a significant positive influence on the quantity and level

of gross domestic savings and not the other way round. Policies that are targeted at boosting GDP per capita should be accelerated in order to promote long-term and sustainable growth gross domestic savings for in Zimbabwe.

References

1. Agrawal, P. and Sahoo, P. (2009), 'Savings and growth in Bangladesh', The Journal of Developing Areas, Vol. 42, No. 2, pp. 89-110.
2. Bacha, E.L. (1990), 'A three-gap model of foreign transfers and the GDP growth rate in developing countries', Journal of Development Economics, Vol. 32, No. 2, pp. 279-296.
3. Baharumshah, A.Z. Thanoon, M.A and Rashid, S. (2003) 'Savings dynamics in the Asian countries', Journal of Asian Economics, Vol. 13, No. 6, pp.827-845.
4. Ciftcioglu, S. (2010) 'Are domestic savings and economic growth correlated? Evidence from a sample of Central and East European countries', Problems and Perspectives in Management, Vol. 8, No. 3, pp.30-35.
5. DeGregorio, J. (1992), 'Economic growth in Latin America', Journal of Development Economics, Vol. 39, No. 1, pp. 59-84.
6. Johnson, A.O. (2011), 'The nexus of private savings and economic growth in emerging economy: A case for Nigeria', Journal of Economics and Sustainable Development, Vol. 2, No. 6, pp. 31-45.
7. Lean, H.H. and Song, Y. (2009), 'The domestic savings and economic growth relationship in China', Journal of Chinese Economic and Foreign Trade Studies, Vol. 2, No. 1, pp. 5-17.
8. Lin, S.Y. (1992), 'Malaysia: Savings-Investment Gap, Financing needs and capital market development', Malaysia Management Review, Vol. 27, No. 4, pp. 26-53.
9. Masih, R. and Peters, S. (2010), 'A revisitation of the savings-growth nexus in Mexico', Economic Letters, Vol. 107, No. 3, pp. 318-320.
10. Mohan, R. (2006), 'Causal relationship between savings and economic growth in countries with different income levels', Economics Bulletin, Vol. 5, No. 3, pp. 1-12.
11. Mphuka, C. (2010), 'Are savings working for Zambia's growth?', Zambia Social Science Journal, Vol. 1, No. 2, pp. 175-188.
12. Odhiambo, N.M. (2009), 'Savings and economic growth in South Africa: A multivariate causality test', Journal of Policy Modeling, Vol. 31, No. 5, pp. 708-718.
13. Oladipo, O.S. (2010), 'Does saving really matter for growth in developing countries? The case of a small open economy', International Business and Economics Research Journal, Vol. 9, No. 4, pp. 87-94.
14. Otani, I. and Villannueva, D. (1990), 'Long term growth in developing countries and its determinants: An empirical analysis', World Development, Vol. 18, No. 6, pp. 769-783.
15. Romer, P. (1986), 'Increasing returns and long-run growth', Journal of Political Economy, Vol. 94, No. 2, pp. 1002-1037.
16. Sahoo, P. Nataraj, G. and Kamaiah, B (2001), 'Savings and economic growth in India: The long run nexus', Savings and Development, Vol. 25, No. 1, pp. 67-80.
17. Sajid, G.M. and Sarfraz, M. (2008), 'Savings and economic growth in Pakistan: An issue of causality', Pakistan Economic and Social Review, Vol. 46, No. 1, pp. 17-36.
18. Shahbaz, M. and Khan, R.E.A. (2010), 'Old wine in new bottles: Saving-growth nexus: Innovative accounting technique in Pakistan', Theoretical and Applied Economics, Vol. 17, No. 7, pp. 49-60.
19. Singh, T. (2010) 'Does domestic savings cause economic growth? A time series evidence from India', Journal of Policy Modeling, Vol. 32, No. 2, pp. 231-253.
20. Solow, R.M. (1957) 'Technical change and aggregate production', Review of Economics and Statistics, Vol. 39, No. 3, pp. 213-320.
21. Tang, C.F. and Ch'ng, K.S. (2012) 'a Multivariate analysis of the nexus between savings and economic growth in the ASEAN-5 economies', The Journal of Applied Economic Research, Vol. 6, No. 3, pp. 385-406.
22. World Bank (2011). World Development Indicators published by the World Bank, Washington D.C.