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Macroeconomic Policy Reform and Economic Growth in Zambia

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Abstract: The paper discusses the role that government policies and macroeconomic reforms played in influencing economic growth in Zambia during the period 1964-2013. The study identifies two economic systems that guided the implementation of policies and reforms in Zambia. The first relates to a command-driven economy, where economic growth patterns were influenced by nationalist ideologies and administrative controls. The second relates to a market-driven economy where economic growth patterns were influenced by market-oriented fundamentals with some degree of administrative controls. The study concludes that economic policies and reforms were instrumental in influencing the performance of major macroeconomic drivers of economic growth in Zambia such as the accumulation of physical capital, human capital development, international trade, real exchange rate determination and inflation.

Keywords: Macroeconomic Policy Reforms; Economic Growth; Zambia

JEL Classification: E01

1. Introduction

Recent neoclassical economic growth models such as the endogenous growth models we study today have relaxed the assumption that the accumulation of savings and capital are exogenous (Romer, 1990). This has allowed efficiency gains in an economy to be influenced by policy and institutions that are driven by government policies and reforms to determine the growth trajectory of an economy (Bassanini *et al.*, 2001). This relaxation of the traditional neoclassical growth model assumption allows growth performance between countries to be distinguished from what economists now call ‘proximate’ versus ‘fundamental causes of growth’ (Snowdon and Vane, 2005). A number of economists have extensively studied the proximate sources of economic growth relating to the accumulation of physical capital (Solow, 1956; Cheng and Feng, 2000), human capital development (Barro and Lee, 2011), international trade (Chang *et al.*, 2009), the real exchange rate (Elbadawi *et al.*, 2011) and inflation (Guerrero, 2006).

However, much as these growth investigations determine the relationships between economic growth and these macroeconomic drivers, economists are still stuck with finding reasons why some economies are well advanced while others lag behind (Mankiw *et al.*, 1995). Some prominent economists have argued for the need to investigate the fundamental drivers of economic growth as well. Such fundamental sources of economic growth relate to a specific economy’s capability to influence the macroeconomic drivers of growth. These include the accumulation of physical capital, investing in the production of knowledge, ensuring macroeconomic stability

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through financial sector liberalisation, trade reforms, fiscal policy, wealth distribution, political environment and good governance (Easterly and Wetzel, 1989; World Bank, 1990; Temple, 1999; Barro 1999, 2003).

The focus of this paper, therefore, is to examine the policy and institutional reforms that were implemented in Zambia and how they influenced the growth patterns of the main macroeconomic drivers of growth. The rest of the paper is discussed as follows. The second section examines all development plans and reforms that were implemented in Zambia covering the period 1964-2013. The third section discusses the growth performance of selected macroeconomic drivers within specific periods where significant policy changes were made in Zambia. Lastly, the fourth section concludes.

2. Economic Development Policies and Reforms in Zambia

Figure 1 below illustrates a chronology on the history of political events that occurred and development policies and reforms that were and are being implemented in Zambia between 1964 and 2030.

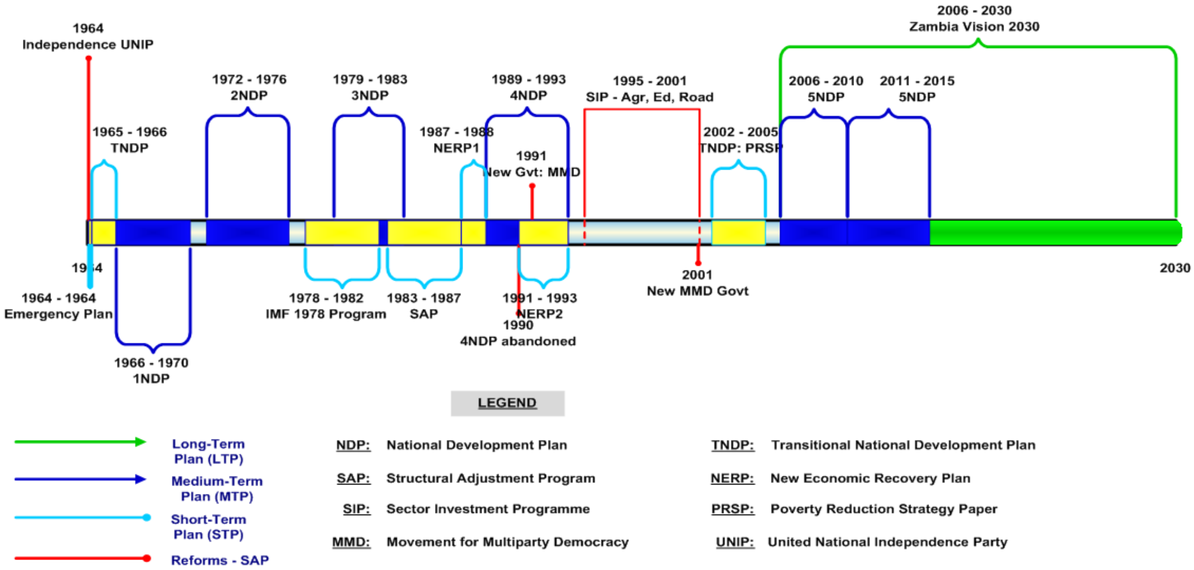

Figure 1. Zambia Development Plans, Reforms and Political Events: 1964 - 2030

Source: the chronology of events was combined by the author using the six National Development Plans, transitional plans, and political milestones experienced in Zambia as follows: Medium-Term Plans: First National Development Plan (NDP1): 1966-1970; Second National Development Plan (NDP2): 1972-1976; Third National Development Plan (NDP3): 1979-1983; Fourth National Development Plan (NDP4): 1989-1993; Fifth National Development Plan (NDP5): 2006-2010; and the Six National Development Plan (NDP6): 2011-2015. Short-term plans: the Emergency Plan 1964-1965; the TNDP 1965-1966; the IMF 1978 program; the Structural Adjustment Program: 1983-1987; The TNDP: first New Economic Recovery Program: 1987-1988; the TNDP: second New Economic Recovery Program: 1991-1993; and the TNDP: Poverty Reduction Strategy Paper (PRSP): 2002-2005. Long-Term Plan: the Zambia Vision 2030.

Since independence in October 1964, the Zambian economy has been guided by medium-term national development plans supported by reforms in the form of short-term or transitional national development plans. Sub-sections 2.1 and 2.2 below give an overview of the national development plans and reforms implemented in Zambia during the period 1964-2015.

2.1. National Development Plans in Zambia

As illustrated in Figure 1, during the period 1964-2013, the Government of Zambia has implemented long-medium- and short-term development plans to support the growth of the economy. These include medium-term plans: First National Development Plan (NDP1): 1966-1970; Second National Development Plan (NDP2): 1972-1976; Third National Development Plan (NDP3): 1979-1983; Fourth National Development Plan (NDP4): 1989-1993; Fifth National Development Plan (NDP5): 2006-2010; and the Six National Development Plan (NDP6): 2011-2015 (Republic of Zambia, 1966, 1972, 1979, 1989, 2006b, 2011). The national development plans were also supported by Transitional National Development Plans (TNDP) that were implemented for a period of less than three years (short-term). The TNDPs implemented since 1964 included the following: The Emergency Development Plan (1964); The TNDP 1965-1966; the IMF 1978 Program; the Structural Adjustment Program: 1983-1987; The TNDP: first New Economic Recovery Program: 1987-1988; the TNDP: second New Economic Recovery Program: 1991-1993; and the TNDP: Poverty Reduction Strategy Paper (PRSP): 2002-2005 (Republic of Zambia, 1964, 1965, 2002; World Bank, 1993). Between the periods 1995-2001, the Government of Zambia abandoned the formulation of National Development Plans and focused on Sector Investment Programmes targeting the agricultural, education and road sectors. In 2006, the Government of Zambia moved away from medium-term planning to long-term development planning where the first long-term development plan – the Vision 2030 – was launched (Republic of Zambia, 2006a). The medium-term strategies thereafter continued driven by the Vision 2030.

In 1924 Zambia, then called Northern Rhodesia, was under the colonial rule of the British Government. The mining of copper became the modern sector of the economy, largely driven by transnational interest led by companies from Britain, North America and South Africa. In order to ensure the supply of cheap labour to mining industries, the traditional sectors such as agricultural, social (education and health) and other economic sectors (for example, manufacturing) were left underdeveloped (Andersson *et al.,* 2000). In 1974 the adult literacy rate was 43% and mining dependence had influenced the migration of labour from rural to urban communities. During this period, about 35% of Zambians lived in urban areas, compared to 20% in 1963 (World Bank, 1977a).

The Zambian authorities inherited a dual economy. The first economic sector was mining, largely driven by modern technological advances and capital-intensive equipment used to mine copper. The copper mining industry has been the mainstay of the Zambian economy, contributing approximately 75% of all foreign exchange earnings. It is also the main contributor to government revenues. The second economic sector that the Government inherited was based on agriculture, comprising a mix of commercial agriculture and smallholder agriculture, the latter being largely labour-intensive using mostly traditional technologies. Commercial and smallholder agriculture contribute about 15% of real GDP. Manufacturing contributes about 10% of GDP and makes a similar contribution towards exports. All development plans since independence have, therefore, focused on improving copper mining and traditional sectors such as agriculture, which employs about 85% of the labour force (Republic of Zambia, 2013).

At independence, the dual economy that the government of Zambia inherited was highly capital-intensive and could not absorb the employment that the economy desperately needed to improve the distribution of wealth among Zambians. Smallholder agriculture, which was expected to be the solution, was underdeveloped due to the agricultural policies that the colonial government implemented to promote commercial agriculture (Auty, 1991). This led the country to face a deficit in human capital development, where in 1965 it is recorded that only 100 Zambians had university degrees and about 7500 Zambians had secondary school qualifications (World Bank, 1977b). To compensate for this problem of human capital deficit, there were over 30 000 expatriates holding professional, technical, administrative and managerial positions in government and the private sector. The major problems that the government of Zambia faced at independence, therefore, revolved around the shortage of manpower and a segregated education system that favoured the provision of good quality education to expatriates and not the local populace (World Bank, 1977b; Andersson *et al.*, 2000).

2.2. Economic Reforms in Zambia

The institutional and economic reforms that the Zambian economy went through since independence are described in this paper based on two states: a command economy that was driven by administrative and economic controls; and a market-oriented economy where the economy was liberalised to eliminate any controls on economic performance and macroeconomic drivers of economic growth.

2.3. The Command Economy: 1964-1991

The economy of Zambia during the period 1964-1991 has been driven by the mining sector led by copper production. Figure 2 illustrates the movement of real copper and crude oil prices during the period 1960-2013. The left hand side vertical axis presents copper prices in metric tonnes and the right hand side vertical axis present crude oil prices per barrel.

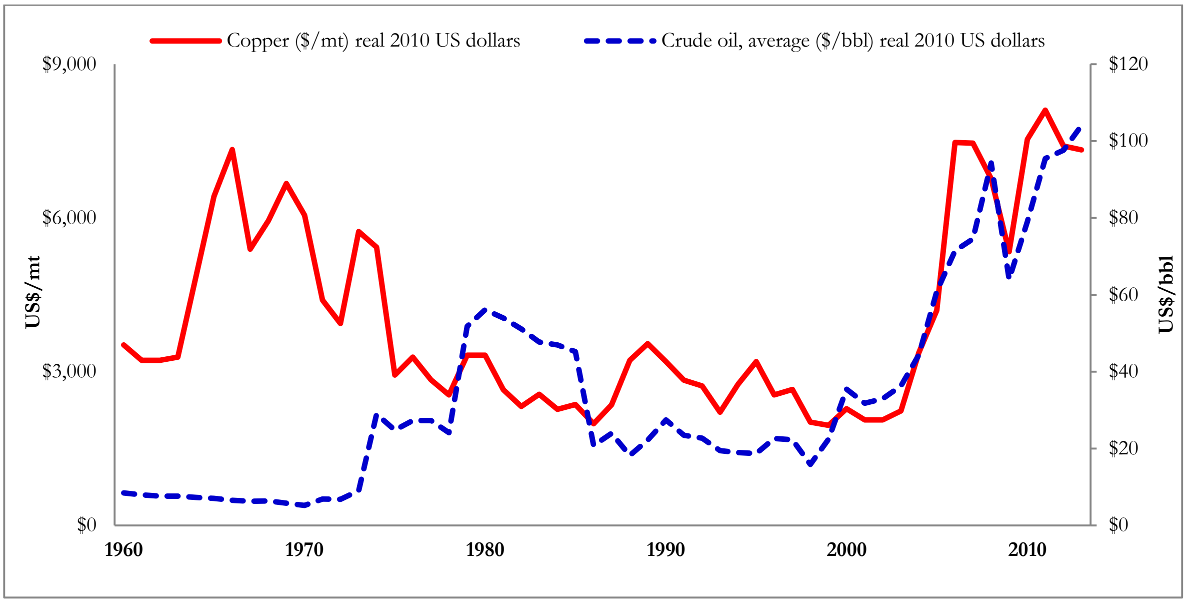

Figure 2. World Copper and Crude Oil Price Movements: 1960-2013

As illustrated in Figure 2, during the period 1964-1974, the Zambian economy benefited from favourable international copper prices that averaged US$5,653 per metric ton p.a. growing at an average rate of 7.6% p.a.; and low crude oil prices that averaged US$6.71 p.a. during the same period. The economy also experienced economic growth rates that averaged 4.7% p.a., a real GDP per capita averaging US$989 and an investment share level that averaged 29.3% of real GDP (World Bank, 2015a; 2015b).

In April 1968, based on socialist principles and the philosophy of humanism aimed at increasing Zambian participation in the economy, the government of Zambia announced the nationalization of major companies and the associated industries included textiles, chemicals, construction, and manufacturing, including rural industries such as canning and cotton ginnery. In 1969, new reforms were introduced covering the mining sector for government to own majority shares of up to 51% in all copper mines. In 1970, the nationalization reforms extended into retail and trading and in 1972 the government had declared that only genuine Zambian organisations and individuals could only participate in these sectors. Furthermore, any businesses that were foreign-owned were limited to prescribed designated areas in ten major urban centres (Republic of Zambia, 1971, p. 28). In 1971, for instance, two main foreign mining firms, the Anglo-American Corporation and the Rhodesia Selection Trust, were publicly owned with a majority share of 51% creating two parastatals the Nchanga Consolidated Copper Mines and Roan Consolidated Mines, respectively (Republic of Zambia, 1971). In 1982, these two mining companies were consolidated and became to be known as the Zambia Consolidated Copper Mines (Auty, 1991). The nationalization concept also trickled down to other sectors of the economy such as manufacturing, transportation, retail and wholesale, distribution and to a lesser extent, financial institutions (Saasa, 1987).

The 1968 Mulungushi Reforms that the Government of Zambia instituted, however, met with a number of problems in the 1970s. The economic success was halted in 1974 when the Zambian economy was hit by two international shocks. The first shock resulted from falling copper prices, when prices fell by half (51.4%) in just two years during 1974-1975, and cumulatively by a total of 78.3% between 1974 and 1986. The second shock resulted from two huge crude oil price increases in 1973, when the crude oil price per barrel rose by 221%, followed by another in 1979 when the price rose by 115%. The copper and oil price shocks hit the Zambian economy severely between 1974 and 1991, when the economy grew at an average rate of only 1.0% p.a. and real GDP per capita almost halved from US$1,070 per capita in 1965 (middle-income economy) to US$651 per capita in 1991 (low-income economy). The Mulungushi Reforms also contributed significantly to the fall in gross domestic investment from 50.9% of real GDP in 1969 to an all-time low of 0.3% of real GDP in 1992 (World Bank, 2015a; 2015b).

The economic performance during the period 1964-1974 also came with affluence which increased Zambia's trade deficit to an average of -8.5% of real GDP p.a. between 1966 and 1974. In order to solve the trade deficit problem, the Zambian authorities introduced a system of import licencing and foreign exchange allocation in 1975 (Colclough, 1988, Auty, 1991). The new trade policy helped reduce the trade deficit from -6.0% of GDP in 1975 to a trade surplus for the period 1976-1991 that averaged 4.2% of real GDP p.a., and made Zambia a net producer (World Bank, 2015b). However, this also contributed to exchange rate misalignments as the exchange rate was managed through a number of devaluations introduced in 1976. The exchange rate controls thus led to the creation of parallel markets for foreign exchange as a result of the arbitrage (Aron and Elbadawi, 1992).

The falling copper prices reduced the contribution of copper towards government revenues leading to large fiscal deficits. The mining sectors' contribution towards government revenues fell from 71% in 1965 to 13% in 1975. Though efforts were made by the Government to increase taxes the government revenues continued to dwindle which increased government borrowing thereby increasing the public debt. Such avenues of financing the fiscal deficit were inflationary and inflation increased from an average of 8% in 1975 to an average of 16% p.a. during the period 1976-1980 (Andersson *et al.*, 2000). To contain the effect of such inflationary pressures, the Zambian authorities introduced a number of price controls and introduced consumer and producer subsidies on a number of basic commodities throughout the 1970s. This represented on average 10% of Government revenues which resulted in increased Government's dependence on foreign aid (Blitzer, 1979). In 1980, 25% of the government budget was allocated to the provision of subsidies and the subventions to state-owned enterprises increased and in total government subsidies and subventions accounted for 80% of total government revenues (Andersson *et al.*, 2000).

The structural problems that the Zambian economy faced during the 1970s led the government to seek financial assistance from the International Monetary Fund in 1978. Dubbed the Action Programme, the agreement aimed at providing budgetary support to assist the government to reduce the balance of payments deficit in order to control inflation. In 1983, the programme was expanded to include a comprehensive structural adjustment programme. The programme came in with conditionalities, whereby the Government was expected to introduce interventions that aimed at stabilising the economy and reducing its dependence on copper. These included: abolishing price controls, devaluation of the local currency, eliminating government control on interest rates, terminating government expenditure on subsidies as well as subventions to parastatals, and increasing producer prices in order to boost agricultural production (Ndulo and Sakala, 1987).

The massive switch to accommodate these institutional reforms brought in economic hardships during the 1980s. The removal of food subsidies led to massive increases in the prices of basic foodstuffs. This resulted from the devaluations that the Government made, averaging 51.3% p.a. during the same period. Copper prices, meanwhile, continued to decline: during the period 1980-1986 they dropped by 46%. Inflation increased considerably at an annual average of 49.6% p.a. during the period 1981-1990. Gross domestic savings declined considerably from 19.3% of real GDP in 1980 to 3.8% of real GDP in 1989 (World Bank, 2015a; 2015b).

The transition from a command economy driven by administrative controls to one driven by market forces was problematic as most influential members of the ruling Government still wanted to control the economy (Andersson and Kayizzi-Mugerwa, 1989). This eventually led the Government to abandon the IMF-supported structural adjustment programme in May 1987 and a new program called the New Economic Recovery Program (NERP) was introduced, which ran from 1987-1988. The NERP was a complete departure from the structural adjustment reforms whose aim was to return to the principles of a command economy driven by the Mulungushi reforms (Andersson *et al*., 2000). This was also driven by a temporal rise in copper prices during the period 1987-1989, which gave the government the confidence that economic recovery was in progress. The 1987 NERP, therefore, advocated for the old policies such as a fixed exchange rate regime, price controls on strategic commodities, fixed interest rates and a debt service ceiling of not more than 10% of total export earnings (Andersson *et al*., 2000).

Unfortunately the NERP was not successful. Major bilateral and multilateral donors had frozen their development assistance. As a result, the depreciation of the exchange rate continued averaging 25.4% p.a. and inflation continued to rise significantly, averaging 74% p.a. during the period 1987-1989. The Government, therefore, had no choice but to shift its policy stance and reintroduced the structural adjustment programme with tighter fiscal and monetary policies. The privatisation of parastatals was introduced in order to stabilise the economy. The new programme, however, was short-lived. The IMF programme was once again abandoned in 1991 as the government of Zambia did not honour its pledges to eliminate maize and fertiliser subsidies, privatise the mining sector and control the growth of money supply (Andersson *et al.,* 2000). By this time the one-party state was no longer in favour and in 1991, fresh elections were conducted.

In summary, the command-driven economic period in Zambia experienced two growth episodes during the period 1964-1974 and during the period 1975-1991. The former was characterised by favourable economic growth patterns that averaged 4.5% p.a. and affluence due to increased government expenditure that led to a trade and current account deficit, making the Zambian economy a net borrower. The second growth episode represented slow growth that averaged 1% p.a. and was characterised by an unstable economic environment with high inflation, exchange rate misalignments and low domestic investment (Auty, 1991; World Bank, 2015b).

The accumulation of physical capital and of human capital development were identified as the two most important traditional macroeconomic drivers of economic growth in Zambia during these periods. Gross domestic savings declined from an average of 40.1% of GDP p.a. during the period 1960-1970 to an average of 13.8% of GDP p.a. during the period 1981-1990. This ensued from restrictive reforms that nationalized most of the foreign-owned companies especially in the copper industry and resulted in a decline in gross domestic savings from an all-time high of 50.9% of GDP in 1969 to 0.3% of GDP in 1992 (World Bank, 2015b). Human capital development was the second important macroeconomic driver of economic growth. The National Development Plans that were implemented during this period also emphasised human capital development by improving the education system in the country. Enrolment in all levels of education increased significantly during the period 1964-1991 (Republic of Zambia, 2011).

Additional macroeconomic drivers during this period included international trade, exchange rate and inflation. International trade represented the third key macroeconomic driver of economic growth in Zambia where during the period 1964-1974, the Zambian economy benefited significantly from favourable copper prices. However, when copper prices on the international market dropped significantly in 1974, the Zambian economy faced lower growth rates that averaged 1.0% p.a. during the period 1975-1991. The fourth factor was the exchange rate, which benefitted from a fixed exchange rate regime during the period 1964-1991. During the period 1964-1974, the exchange rate appreciated against the US Dollar from ZK0.71/US$ in 1974 to ZK0.65/US$ in 1974. However, by 1991, the exchange rate had closed at an average of ZK64.64 to the US Dollar as a result of currency devaluations initiated by the Government. Inflation was the fifth important macroeconomic driver that affected the Zambian economy especially during the 1980s. In 1974, inflation averaged 8% p.a. but had increased significantly to a hyperinflation in 1989 averaging 123.4% p.a. (World Bank, 2015b).

2.4. An Economy Driven by Market Fundamentals: 1991 Onwards

On 31 October 1991, Zambia went through its first multiparty elections since independence and a new Government was ushered into power. The new Government quickly reintroduced the stabilization reforms that the UNIP Government failed to implement for over two decades through a second New Economic Recovery Program (NERP2) that was agreed with the IMF in 1992 (World Bank, 1993). To support such radical market-oriented reforms, the Government reduced its expenditures considerably during the period 1991-2000. In 1993, the government of Zambia eliminated all government subsidies from its budget as well as reduced the real wage for civil servants (Adam *et al*., 1993a).

In the monetary sector, the advent of financial liberalisation under the NERP2 assisted the government to reduce the growth of money supply in the Zambian economy. In June 1991, the Zambian government introduced a freely floating exchange rate regime which was further supported by the establishment of foreign exchange bureaus in October 1992 and the elimination of all exchange rate controls on both capital and current accounts by 1994 (Mungule, 2004). In September 1992, interest rates became more market-determined and a new banking legislation was enacted in 1994 (Adam *et al.,* 1993b). The privatisation of state-owned enterprises, especially in the mining industry, was also an important milestone in liberalising the goods sector, and in 1999 the Zambia Consolidated Copper Mines (ZCCM) Limited was privatised. After reaching the Highly Indebted Poor Countries – Completion Point in April 2005, the government of Zambia continued its privatisation drive, especially the commercialisation of the power utility – Zambia Electricity Supply Commission (ZESCO) – and the Zambia National Commercial Bank. The government of Zambia sold 49% of its shares in the latter after reaching its HIPC completion point (Bull *et al.,* 2006).

The cancellation of debt in 2005 also helped reduce the current account deficit, which declined from -19.1% of real GDP in 2001 to as low as -3.7% of real GDP in 2013. However, the trade balance continued to increase considerably and in 2013 the trade deficit recorded an average of -22.0% of real GDP from -3.2% of real GDP in 1999. Both inflation and the exchange rate stabilized during the period 2001-2013 with a growth average of 13.5% and 5.2% p.a., respectively. The depreciation of the nominal exchange rate declined considerably from 162.5% in 1993 to a single-digit depreciation rate of 4.8% in 2013. Similarly, the average annual inflation rate declined significantly from 183.3% in 1993 to a single-digit inflation rate of 7.0% in 2013. All these developments led to a sustained economic growth rate that averaged 5.9% p.a. during the same period reaching a maximum of 10.3% in 2010 (World Bank, 2015b).

The reforms initiated since 1991 paid off during the period 2001-2013, when copper prices increased significantly by 162% in just four years (2003-2006). Copper production recovered sharply from as low as 200 000 tonnes per annum in the late 1990s to over 800 000 tonnes in 2012 (Zambia Development Agency, 2013). Both gross domestic investment and net foreign direct investment increased considerably, averaging 22.4% p.a.

of real GDP and 7% p.a. of real GDP respectively during the period 2001-2013. The Zambian economy also became less dependent on donor inflows – where net official development assistance and official aid received declined sharply from an all-time high of 61.4% of real GDP in 1995 to 9.5% of real GDP in 2012 (World Bank, 2015a; 2015b).

The key macroeconomic drivers of economic growth during the period 1991-2013 remained the same as in the command-driven economic system. The accumulation of physical capital started to improve as a result of the liberalisation of the market and saw gross national investment increase from 5.1% of GDP in 2001 to 63.1% of GDP in 2010. As a result of increased copper prices during the period 2001-2013, the current account deficit declined from -19.1% of GDP in 2001 to -3.7% of GDP in 2013. Both inflation and the exchange rate growth stabilised during the period 1991-2013. Inflation reduced significantly from 165.7% in 1992 to an annual average of 7% in 2013. The exchange rate growth, on the other hand, declined significantly from 166.4% in 1992 to 4.8% in 2013 (World Bank, 2015b).

3. The Influence of Government Policy and Reforms on Economic Growth in Zambia

The Zambian economy has undergone major policy changes since attaining independence in October 1964. Two economic systems have existed that have contributed significantly to the performance of economic growth in the country. The first economic system that affected the performance of economic growth was a command economy driven by nationalist ideologies that ran from 1964-1991. This period was characterised by frequent policy reversals related to administrative controls of the economy. The genesis of such administrative controls arose from the Mulungushi Reforms of April 1968, where the Government of Zambia declared its intention to nationalise almost all privately owned foreign firms (Andersson *et al.*, 2000). The performance of the economy during this period varied and went through two phases. The first period was a golden age for Zambia that ran from 1964-1974, where the economy grew at an average annual growth rate of 4.7% p.a. with an average per capita income of US$989 p.a. at 2005 constant United States Dollar prices. The second period from 1975-1991 represented a period of economic hardship, where the Zambian economy was affected by nationalist policies adopted from the Mulungushi Reforms of 1968, which were exacerbated by declining copper prices throughout the entire period and oil shocks that hit the economy hard in 1974 and 1979. During this period the economy grew at an average rate of 0.6% p.a. and per capita income declined from US$988 in 1974 to US$651 in 1991 (Andersson *et al.,* 2000; World Bank, 2015b).

The second economic system that affected the performance of the Zambian economy was a market-oriented economy that commenced during the period 1991 to date. When a new government was ushered into power in 1991, major economic reforms ensued whereby almost all controls on prices and exchange rate determination were removed. The government also reduced its expenditure significantly by cancelling all subsidies on basic commodities such as food and fertilisers (Adam *et al.*, 1993a). Furthermore, towards the end of the 1990s, the government privatised and commercialised loss-making state-owned enterprises, particularly in the copper mining industry and the banking sector (Bull *et al.,* 2006). The economy experienced a J-Curve effect, which covered two decades from 1974 to 2013. The first period of the J-Curve, 1974-2000, was characterised by continued economic hardships faced during the command economy era, where copper prices continued to decline, the exchange rate depreciated sharply leading to hyperinflation, and the foreign sector continued to worsen. During this period, the Zambian economy grew at an average rate of 0.9% p.a. with a per capita income that declined from US$988 in 1974 to US$554 in the year 2000. The second period of the J-Curve, 2001-2013, was characterised by a period of sustained economic growth. The key contributing factor for this growth was the rise in copper prices during the period 2003-2013, which grew at an average rate of 15.5% p.a. Major macroeconomic drivers such as inflation and the real exchange rate stabilised, and the economy grew at an average rate of 5.9% p.a. At 2005 constant US Dollar prices, the per capita income also increased sharply from US$554 in 2000 to US$810 in 2013. Gross domestic investment also increased sharply from 2.7% of GDP in 2000 to 29.2% of GDP in 2013 (World Bank, 2015b).

4. Conclusion

This paper has examined the influence of macroeconomic policy and reform conditions on selected macroeconomic drivers of economic growth in Zambia that were implemented by the Zambian authorities during the period 1964-2013. The focus of the paper was to discuss the relationship between the fundamental causes of economic growth that were guided by the various National Development Plans and reforms in Zambia. Two prominent economic systems have been identified as having been implemented during the period of study: a command-driven economic system that covered the period 1964-1991, and a market-driven economic system that covered the period 1991-2013.

The study concludes that policy influences had both direct and indirect effects on the performance of selected macroeconomic drivers of economic growth in Zambia. The study reveals that the command-driven economic system in Zambia was characterised by government administrative controls that affected the performance of key macroeconomic drivers such as the accumulation of physical capital, human capital development, inflation, exchange rate determination and international trade. During this period, these macroeconomic drivers performed dismally, characterised by low accumulation of domestic investment, low human capital development that largely focused on the provision of primary education, and macroeconomic instability that resulted from high inflation and exchange rate misalignments. The policy influences, however, changed during the implementation of the market-driven economic system that covered the period 1991-2013. During this period, accumulation of physical capital, control of inflation and exchange rate determination were left to market forces and improved over time as a result of the market reforms implemented by the Zambian authorities. This led to less Government administrative controls, the floating of the exchange rate to be determined by market forces, and privatisation of non-performing government enterprises, especially in the copper mining industry. The study concludes that macroeconomic drivers that influence economic growth in Zambia perform well in an environment driven by free market policies in the long run, compared to a command-driven economic system. The evidence provides support to the theory that government involvement in an economic system needs to be reduced; if not controlled, this may lead to a situation where economic growth is impeded.

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6. References

Adam, C., Bevan, D., McBrady, M. (1993a). *Macroeconomic performance in Zambia 1991–1993 part I: A review of the rights accumulation programme 1991–93*. Mimeo, CSAE, University of Oxford.

Adam, C., Bevan, D., McBrady, M. (1993b). *Macroeconomic performance in Zambia 1991–1993 part II: The fiscal implications of stabilization and liberalization measures*. Mimeo, CSAE, University of Oxford.

Andersson, P., Bigsten A., & Persson H. (2000). *Foreign Aid, Debt and Growth in Zambia*. Research Report No. 112, Uppsala: Nordiska Afrikainstitutet.

Andersson, P., & Kayizzi-Mugerwa S. (1989). Mineral Dependence, Goal Attainment and Equity: Zambia's experiences with structural adjustment in the 1980s. *Macroeconomic Studies 4/89*, SIDA, Stockholm.

Aron, J., & Elbadawi I. A. (1992). Parallel Markets, the Foreign Exchange Auction and Exchange Rate Unification in Zambia, Country Economics Department. *WPS 909*, May.

Auty, R. M. (1991). Mismanaged Mineral Dependence: Zambia 1970-90. *Resources Policy*, 17(3): 170-183.

Barro, R. J. (1999). Determinants of Economic Growth: Implications of the global evidence for Chile. *Cuadernos de Economía*, 36(107): 443-478.

Barro, R. J. (2003). Determinants of Economic Growth in a Panel of Countries. *Annals of Economics and Finance*, 4(2): 231-274.

Barro, R. J., & Lee J. W. (2011). *A New Data Set of Education Attainment in the World 1950-2010, Department of Economics*. Harvard University, Cambridge: Massachusetts.

Bassanini, A., Scarpetta S., & Hemmings P. (2001). Economic Growth: The role of policies and institutions. Panel data evidence from OECD countries. *Economics Department Working Papers*, No. 283.

Blitzer, C. R. (1979). Development and Income Distribution in a Dual Economy: A dynamic simulation model in Zambia. *Journal of Development Economics*, 6(3): 407-429.

Bull, B., A., Jerve M., & Sigvaldsen E. (2006). *The World Bank's and IMF's use of Conditionality to Encourage Privatization and Liberalization: Current issues and practices*. Oslo Conditionality Conference, November.

Chang, R., L. Kaltani, & Loayza N. V. (2009). Openness can be good for Growth: The role of policy complementarities. *Journal of Development Economics*, 90(1): 33-49.

Easterly, W. R. & Wetzel. D. L. (1989). Policy Determinants of Growth: Survey of theory and evidence. *Policy, Planning and Research Working Papers Series No. 343*, Washington D. C., World Bank: 1-41.

Elbadawi, I. A., Kaltani L., & Soto R. (2011). Aid, Real Exchange Rate Misalignment and Economic Growth in Sub-Saharan Africa. *World Development*, 40(4): 681-700.

Guerrero, F. (2006). Does Inflation cause poor Long-term Growth Performance? *Japan and the World Economy*, 18(1): 72-89.

Mankiw, N. G., Phelps E. S., & Romer P. M. (1995). The Growth of Nations. *Brookings Papers on Economic Activity*, 1995(1): 275-326.

Mungule, K. O. (2004). The Determinants of the Real Exchange Rate in Zambia. *AERC Research Paper 146*, African Economic Research Consortium, Nairobi, December.

Ndulo, M., & Sakala M. (1987). Stabilization Policies in Zambia: 1976-1985. *Working Paper No. 13*, World Employment Programme Research, ILO, Geneva.

Republic of Zambia. (1964). *Emergency Development Plan 1964-1965*. Office of the President: National Commission for Development Planning, Lusaka.

Republic of Zambia. (1965). *Transitional National Development Plan 1965-1966*. Office of the President: National Commission for Development Planning, Lusaka.

Republic of Zambia. (1967). *The First National Development Plan 1966-1970*. Office of the President: National Commission for Development Planning, Lusaka.

Republic of Zambia. (1973). *The Second National Development Plan 1972-1976*. Office of the President: National Commission for Development Planning, Lusaka.

Republic of Zambia. (1979). *Third National Development Plan 1979-1983*. Office of the President: National Commission for Development Planning, Lusaka.

Republic of Zambia. (1989). *Fourth National Development Plan 1989-1993*. Office of the President: National Commission for Development Planning, Lusaka.

Republic of Zambia. (2002). *Poverty Reduction Strategy Paper*. Ministry of Finance and National Planning, Lusaka, July.

Republic of Zambia. (2006a). *Vision 2030: A prosperous middle-income nation by 2030*. Ministry of Finance and National Planning, December.

Republic of Zambia. (2006b). *Fifth National Development Plan 2006-2010*. Ministry of Finance and National Planning, December.

Republic of Zambia. (2011). *Sixth National Development Plan 2011-2015*. Ministry of Finance and National Planning, January.

Republic of Zambia. (2012). *Census of Population and Housing 2010: National analytical report*. Central Statistical Office, December.

Republic of Zambia. (2013). *Zambia Review: 14th edition*. Ministry of Commerce, Trade and Industry.

Romer, P.M. (1990). Endogenous Technological Change. *Journal of Political Economy*, 98(5): S71-S102.

Saasa, O. S. (1987). Zambia's Policies towards Foreign Investment. *Scandinavian Institute of African Studies*, Research Report No. 79, Uppsala.

Snowdon, B., & Vane H. R. (2005). *Modern Macroeconomics: Its origins, development and current state*. Edward Elgar, Northampton: Massachusetts.

Temple, J. (1999). The New Growth Evidence. *Journal of Economic Literature*, Vol. XXXVII, March: 112-156.

World Bank. (1977a). *Zambia – A Basic Economic Report: Main Report*. Eastern Africa Regional Office, October 3.

World Bank. (1977b). *Zambia – A Basic Economic Report Annex 3: Education and Training*. Eastern Africa Regional Office, October 14.

World Bank. (1990). *Adjustment Lending Policies for Sustainable Growth*. Policy and Research Series, Washington D. C., World Bank.

World Bank. (1993). *Project Completion Report: Zambia Second Economic Recovery Credit*. Report No. 12437, Nov 2.

World Bank. (2015a). *Commodity Price Data (Pink Sheet) 2015*. Retrieved from www.worldbank.org. Last accessed on May 5, 2015.

World Bank. (2015b). *World Development Indicators 2015*. Retrieved from www.worldbank.org. Last accessed on May 5, 2015.

Zambia Development Agency. (2013). *Mining Sector Profile*. June.