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Harnessing Africa’s oil wealth: Lessons from Ghana

Kenya’s Rift Valley is famous for exporting some of the world’s best runners. Recently the world has run to the Rift Valley because of a new export – oil.

In the past two years over 1.7 billion barrels of proven oil reserves have been discovered beneath the Rift Valley, in the Lokichar basin, by a joint venture between Ireland’s Tullow Oil and Canada’s Africa Oil. Estimates vary widely, but there have been reports of up to 20 billion barrels in final reserves. If confirmed these would take Kenya from being one of Sub-Saharan Africa’s most resource-poor countries to one of its richest, with oil reserves second only to Nigeria’s 37 billion barrels. At the same time Uganda has discovered 3.5 billion barrels, and Tanzania has found vast gas deposits.

Kenya, Tanzania and Uganda now must decide how to harness these resources, and avoid the well known ‘resource curse’. This curse has a variety of causes, including de-industrialisation or ‘Dutch disease’ (Corden and Neary 1982), oil price volatility (Poelhekke and van der Ploeg 2009), political instability and corruption (Salai-Martin and Subramanian 2003, Acemoglu et al. 2004), environmental degradation, and absorption constraints (van der Ploeg and Venables 2013), as reviewed by van der Ploeg (2011).

Each country will need to address a host of policy issues. These range from capturing and harnessing the resource revenues, to whether they are spent, saved abroad or invested in the domestic economy, and how monetary and exchange rate policy should respond. They would also be wise to learn from Ghana’s recent experience.

Capturing the resource revenues is crucial. Resource extraction in Africa usually employs foreign capital and labour, and the rents accrue to foreign shareholders. A system of taxation and co-ownership is key (Daniel et al. 2010). Taxing profits or rents may be efficient, but raises the risk of multinational firms using transfer-pricing to realise profits elsewhere (Collier and Venables 2008). Royalties on easily observed production can avoid this. It is important to have good risk-sharing arrangements in place, so that the government shares in the additional profits when commodity prices go up and exploration companies take part of the hit when commodity prices tumble.

Spend, save or invest?

The primary decision then is whether to spend, save or invest the revenues. Developed countries have good access to international capital markets and are advised to save the revenues in a sovereign wealth fund (SWF) (van der Ploeg and Venables 2012). This has two benefits: saving for future generations according to the permanent income hypothesis (Friedman 1957), and building up a buffer stock against volatile oil prices (Kimball 1990, van den Bremer and van der Ploeg 2013). The SWF should primarily save abroad if capital is abundant, because any profitable projects should already be financed by debt, according the separation theorem (Fisher 1930). However, some should be invested in the non-traded sector to limit any real appreciation.

In developing countries the recommendations differ. A SWF should still be used to save for the future and manage volatility, but relatively more should be invested at home (van der Ploeg and Venables 2011, . This is because developing countries have scarce access to capital, so oil windfalls are a relatively cheap way to finance investment. If the oil windfall is large, there may be a problem absorbing all this investment at once, so a temporary offshore parking fund can be used to spread it over time (van der Ploeg 2012). Public capital should not be the only focus, as private borrowing may be constrained as well. This can be relaxed by directing some of the oil revenues through the domestic banking sector to private investment.

Monetary policy is also important. While Kenya, Uganda and Tanzania currently have managed, floating exchange rates, they are quickly moving towards the East African Monetary Union in 2015. This may bring challenges. Spending new oil income will require the real exchange rate to appreciate in each country, differing with the size of the windfalls and the way they are spent (Wills 2013). If monetary union goes ahead, any relative appreciation between members will have to come entirely through domestic inflation, which will be costly. Monetary union will also reduce each country's ability to respond if government spending fluctuates with the oil price, making volatility and parking funds even more important.

Lessons from Ghana

Some lessons can be learned from Ghana's recent experience. Tullow Oil discovered around 4 billion barrels of oil in Ghana's offshore Jubilee field in 2007, and began production in late 2010. Ghana's tax, spending and monetary policies were all designed well, but have suffered in their implementation.

In 2011 an IGC project analysed how Ghana should manage its oil revenues (van der Ploeg et al. 2011). The findings were presented to the Deputy Minister for Finance and the Minister for Energy, and were generally consistent with the final policies. Taxation was a combination of royalties, part-ownership of the Ghana National Petroleum Corporation and income taxes. Spending was allocated by the Petroleum Revenue Management Act (2011) between a heritage fund (10%), a stabilisation fund (20%), investment in 11 prioritised areas (50%) and current spending (20%). Monetary policy followed an inflation target – one of the few in Africa.

Since 2011 Ghana's fiscal policy has not been implemented well, due partly to an election in 2012. Oil production boosted real GDP growth to 20% per year in September 2011 (IMF 2013), but the fiscal deficit also rose to 12% of GDP, directly financed by the Bank of Ghana. This was due to heavy fuel subsidies and a public sector wage bill which rose 47% in nominal terms in 2012. Loose spending during an election year is likely to blame, as also seen in Ghana's democratic transitions in 2004 and 2008. Monetary policy sharply tightened, but inflation still edged above the 10% target to 10.8% (IMF 2013).

Ghana's experience provides a number of important lessons for East Africa's newly energy-rich nations. The first is in designing policy, which was closely linked to the latest economic thinking. The second is in implementation. Despite the best-laid plans, oil revenues have still been spent quickly. Stronger legal structures and independent budget oversight could help. The third is in monetary policy. Despite rapid growth and a large fiscal expansion, inflation has remained relatively stable; particularly compared to inflation of 25% in 2010. This can be attributed to the successful inflation targeting regime, something that would not be available to the East African Community if monetary union goes ahead.

The East African Community is facing a transformative period. They have been moving towards monetary and fiscal union since 2000, which may happen as early as 2015. More recently, huge hydrocarbon discoveries have changed the outlook for Kenya, Tanzania and Uganda significantly. Monetary union alone is likely to create problems, and they must be careful to avoid Ghana's recent fiscal profligacy. It may be worthwhile to remember the words of Keynes: 'When the facts change, I change my mind. What do you do, sir?'.

Further reading

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