IGC International Growth Centre

IGC Growth Forum
Lecture by Professor Paul Collier

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Paul Collier, CBE, is a Professor of Economics and Director for the Centre for the Study of African Economies at the University of Oxford. From 1998-2003 he was the director of the Development Research Group of the World Bank. He is the author of three books; *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It*, published in 2007; *Wars, Guns and Votes: Democracy in Dangerous Places*, published in March 2009; and his most recent book, entitled *The Plundered Planet: How to reconcile prosperity with nature*, which was published in May of 2010. His research covers the causes and consequences of civil war; the effects of aid and the problems of democracy in low-income and natural-resources rich societies. Paul Collier is one of the Academic Co-Directors of the International Growth Centre (IGC). Here are notes IGC Rwanda Economist Laura Collinson made from his lecture.

Professor Collier highlighted the government actions required to move from a low-income economy, where worker productivity is $1 per day, to middle-income, where worker productivity is $10 per day. These actions can be classified under two broad themes, creating and encouraging effective organizations, and generating a high rate of investment.

Creating and encouraging effective organizations

People are effective if their activities are structured in organizations – organizations deliver higher productivity, allowing people to produce $10 per day (middle income), and even $100 per day (high income). In this sense, small farms and small firms are not beautiful. While there is a romanticism about the micro, organizations can be too small to reap economies of scale.

To give an example, work being done by the IGC in Ethiopia has highlighted that 50-person firms are 10 times more productive than four person firms. This work stands in contrast to the 'acorns to trees' hypothesis that small firms should be nurtured because they grow into large firms. In fact, large producers in Ethiopia either started large, or grew out of investments by trading companies By starting in the business of trading, companies learned marketing skills, which are arguably more difficult to learn than production skills. The productivity of an organization depends on motivation, but how do effective organizations motivate their people? Akerlof and Kranton's new book 'Identity Economics' suggests that effective organizations persuade workers to internalize the objectives of the firm. One firm in Silicon Valley offers employees US$10,000 to leave the firm after six months, on the argument that those who remain are likely to be suitably motivated.

Public sector reform programs in Africa have largely been ineffective because they used an inappropriate European model (eg, post-war Denmark) in which the public sector self-motivates with few incentives and little monitoring. As a result, most African countries have unproductive public sectors.

Generating a high rate of investment

In many ways Rwanda's high growth rate has been the result of putting things right in a place where so much was wrong, similar to Uganda in the 1990s. However, Rwanda will be unable to maintain high growth rates with an investment to GDP ratio that is far below fast growing emerging markets, whose investment to GDP ratios are in the 30 per cent to 40 per cent range.

While countries with high investment rates grow faster than countries with low growth rates, if we look at the history of investment booms, many investment booms have not produced faster growth. How can this paradox be explained? As investment increases without being managed properly, the rate of return falls apart – short, sharp investment booms produce chaos. For example, Kenya's coffee boom in the 1970s produced revenue for investment, however the coffee boom marked the end (not the beginning) of Kenya's growth acceleration because of the low quality of investment.

To get to a 30 per cent investment to GDP ratio that sustains high growth rates, governments must 'invest in investing'. In others words, they must develop the capacity to invest wisely and at scale. There are three components to investing in investing:

1. The public sector must select and implement projects well. This means developing institutional mechanisms to protect projects from being contaminated by political influence.
2. The environment must be conducive to private sector investment. The rate of return of public investment is dependent on private investment, and vice versa. For example, the rate of return on a public road investment is dependent on private sector investment in trucks. As such, a useful measure of the investment environment is the presence of new private investment.
3. The unit cost of investment (particularly the cost of construction and equipment) must be low. Both the public sector and private sector buy capital goods, both tradables (eg, equipment) and non-tradables (eg, structures produced by the construction sector). The unit cost of non-tradables in Africa is three-times higher than world levels. Essentially, even if a country's investment to GDP ratio is 30 per cent, if they are paying three times more than the world price for their investments, their equivalent ratio is only 10 per cent.

African countries often pay far more than the border prices for tradable capital goods because importation is often controlled by monopolies and cartels. It is no surprise that the richest individual in Africa is a cement producer in Nigeria – the price of cement in Nigeria is three times the world price. As such, the barriers to the trade of capital goods must be reduced through regionalism.

'Investing in investing' also involves planning carefully for the work force that will increase the economy's productivity. This involves training people in the skills that will become bottlenecks. A cautionary tale is Zambia, which currently flies welders into the country from East Asia because of domestic skills shortages.

Government investment in 'arrival cities'

One way that government can encourage the development of productive organizations is by facilitating the smart growth of cities. There are efficiency gains from larger cities – when the size of a city doubles, productivity increases by six per cent. If government proactively builds infrastructure ahead of population growth within a city, these productivity gains can be harnessed. Most importantly, cities should be developed as 'arrival cities' that are specifically designed to provide first time urban dwellers with what they need to contribute to economic growth – mixed-use zoning (places where people can live and work), affordable and relatively dense housing (apartment blocks 4-5 stories high – since these provide density without the need for lifts which are expensive), security, and connectedness (decent transport services to the city centre).

Investing in services: Rwanda as the Dubai of Central/East Africa?

Unlike Singapore, Rwanda is not surrounded by the opportunities of East Asia. However, perhaps Rwanda can be better compared to Dubai. Like Dubai, Rwanda has few natural resources, but is surrounded by resource rich neighbours with governance constraints. If Rwanda can serve as a haven for its neighbours it could develop into a poor region's Dubai. Essentially, this involves investing in the development of services sectors, such as retail and business services.

Managing natural resource discovery

Most African countries have more resources than they realize. As such, geological surveys are critical. It is important to compile public geological data before private sector firms begin prospecting, to mitigate the problem of asymmetric information. Then a country can attract 3-4 respectable companies and hold an auction. The country's prospecting rights should be auctioned off gradually, as exploration will affect the value of other plots, and it is important to capture this value. It is additionally important to insist that companies invest in exploration so that they do not sit on prospecting rights. Finally, benefitting from mineral resources requires investing in the capacity to monitor private sector activities, and a good taxation system for minerals.

Investing in an educated workforce

A study to determine why 10-year-olds in Nigeria are often illiterate found that it was because their teachers were illiterate. In Tanzania, the average working day for a teacher is 1 hour 20 minutes. Under these circumstances, it is impossible to produce an educated workforce.

What might a country do under these circumstances? It may be easier to make use of organizations that are already highly motivated than to turn around motivation in extremely dysfunctional institutions. One option is to provide education and health services through the organizations outside of the public sector that have solved the problem of motivation, such as churches, NGOs, etc.

How to finance investment?

Borrow. Rwanda still has some borrowing headroom because of its low debt to GDP ratio and a respectable fiscal position. However, there is a difference between safe and unsafe borrowing –

1. Make sure money borrowed is ring-fenced for investment;
2. Invest in investing, ie. Make sure rigorous processes are in place to ensure investments have a decent rate of return.

Ideally, the World Bank would set up a new concessional borrowing fund for low-risk, low-income countries like Rwanda, such as an IBRD 2.

About the International Growth Centre

The IGC offers independent advice on economic growth to governments of developing countries. Based at the London School of Economics and in partnership with Oxford University, the IGC is initiated and funded by the UK Department for International Development (DFID).

The IGC has active country programmes in Bangladesh, Ethiopia, Ghana, India, Pakistan, Sierra Leone, Tanzania, Mozambique, Zambia and Rwanda and supports over seventy individual research projects on issues of governance, human capital, agriculture, infrastructure, trade, firm capability, state capacity, macroeconomics and political economy.

The IGC is directed by a Steering Group consisting of an Executive Director (Gobind Nankani) in collaboration with a Deputy Executive Director (Mark Henstridge) and two Academic Directors, one from LSE (Robin Burgess) and one from Oxford University (Paul Collier). The Steering Group also includes Chang-Tai Hsieh from the University of Chicago, Timothy Besley at LSE and Stefan Dercon at Oxford University.

The organisational structure of the IGC spans a London hub, country offices in partner countries, a group of 10 research programmes with participation from academics in world-class institutions, a network of policy stakeholders in the developing world and a range of public, civil society and private sector partners.

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