



ECONOMY

Beyond 2020: A vision of a prosperous South Africa

Graduates and immigrants have built some of the largest tech companies in the US. South Africa should catch up quickly.

Every new year allows us to dust off our crystal balls and look to the future. The arrival of 2020 feels like a particularly opportune time to do so.

Predictions, though, are always based on the present, and the South African economy finds itself in dire straits. Growth remains lacklustre, if not negative. Load-shedding continues unabated, hurting investment that is crucial for job creation, tax revenue and improved living standards. Debt is spiralling. And on the more fundamental things, like education, health and crime, there seems to be little progress.

The reasonable person would predict, bar a miracle, that a difficult decade lies ahead for South Africa.

In times of crisis, however, it is often useful to go back to the basics. Economic historians study why some countries are rich and others are poor. Although consensus is not common in our discipline, almost all of us would agree that the most fundamental thing to higher living standards is, as Joel Mokyr writes in *A Culture of Growth*, innovation: Our knowledge to understand nature and our environment, and our ability to direct this knowledge toward productive ends.

It is two things, Mokyr argues, that make us innovative: The belief that knowledge and our understanding of nature can and should be used to advance the material conditions of humanity, and the belief that power and government are there not to serve the rich and powerful, but society at large.

The latter is important. For millennia, humans have innovated. But elites either expropriated these innovations for their own vanity, or, most often, crushed it, as it threatened their privileged position. Consider the many inventions of the Sumerians, or Romans, or Chinese. It would only be in the centuries after 1500 that Western Europe, of all places, would take a different route.

Mokyr explains in his book how this happened. Much of this was due to a "transformation of elite cultural beliefs", an "intellectual change" that created a new market – the market for ideas. Letter writers across Western Europe started sharing their theories and experiments. The printing press gave a much wider audience access to knowledge about the world and how it worked. Rulers realised the benefits of these new innovations and encouraged scientists to settle in their cities. Those rulers that did not, lost prestige and wars to those that did.

None of the other factors typically cited as reasons for the Industrial Revolution are enough to understand its emergence: Coal, cotton, and colonialism had existed in many places before, with little improvements in general living standards. Even the printing press was not a new invention. But in China, where it had been invented at

least 600 years earlier, books were limited to the government elite; in Europe, it circulated widely.

How do we apply these lessons to SA in the next decade? For one thing, we need to start investing in science and technology. SA has nine of the top ten African universities. Although most undergraduate students now study for free, it is at the graduate levels that new research is undertaken. Expanding the National Research Foundation would be a good start. But several universities now produce start-ups with products that can compete internationally; a facewash product from the Stellenbosch Nanofiber Company, a spinoff from Stellenbosch University, was listed, for example, on *Time Magazine's* list of 100 best inventions of 2019.

Sadly, science is low on the priority list of the current government. According to the 2019 medium-term budget policy statement, innovation, science and technology spending will only grow by 3.9% over the next three years, compared with 6.3% of overall spending. In 2019, we spent six times more on the police force than on innovation.

But even if the government cannot afford to spend more given its fiscal constraints, it can do two things: Support private sector investment in research and make it easier for innovators to settle in SA. Releasing spectrum is a no-brainer, for example: 5G will revolutionise the way we transact, exposing millions of (unemployed) South Africans to new goods, services and, importantly, labour markets.

Second, let's make it easier for innovators to move here. A diversity of ideas is the bedrock of innovation. Just look at recent US history: Almost all of the world's most exciting companies – Google, Tesla, Apple, Amazon – were started by immigrants or the children of immigrants.

Whizz-kids are happy to experiment in the basements of dilapidated buildings, if they have a fast Wi-Fi connection and a steady supply of expensive coffee. We need more of these kids. Lots more. Where can we find them?

There are many African students, many who already study at South African universities, with fantastic ideas and abilities. Give them residency and make it easy to appoint them. SA should become the gateway for African innovators.

The power of ideas has transformed humanity from surviving just above subsistence to living prosperous and meaningful lives. Not all in SA are there yet and, if history is any guide, we will only get there if we cultivate a culture of science and technological innovation that allows us to do more with less. ■

editorial@finweek.co.za

Johan Fourie is associate professor in economics at Stellenbosch University.

Let's make it easier for innovators to move here. A diversity of ideas is the bedrock of innovation.

