Transformative Industrial Policy for Africa

Chapter 2 From 'African growth tragedy to 'Africa rising

In May 2000, The Economist devoted a special edition to Africa, under the headline "The hopeless continent". The main thrust was that Africa's outlook is gloomy because of brutality, despotism and corruption – "acts not exclusively African (...) but African societies, for reasons buried in their cultures, seem especially susceptible to them" (The Economist, 2000, p. 1). Culture is difficult to change in a short period of time (some may say it never changes), so assuming that The Economist's arguments are still valid, it would seem that Africa is doomed for underdevelopment in the near future.

The line of argument that deems Africa's performance and prospects slim because of deeprooted 'meta-structural' factors is not just confined to culture. Climate, geography and history are equally emphasised by many of today's world leading economists – whether it's being stuck in a tropical climate prone to more diseases and lower agricultural productivity; lack of access to the sea or navigable rivers; or a history of 'too much' ethnic diversity and negative experiences with European colonisation.

While these 'African growth tragedy' arguments remain popular to date, an alternative, more positive narrative on Africa has emerged. Interestingly, once a champion of the 'tragedy' narrative, The Economist is now a leading proponent of the narrative that Africa is now on the 'rise', thanks to a more stable political environment, less macroeconomic imbalances (e.g. reduction of public debt) and improvements in the quality of institutions, among other things. In light of the change in discourse, it is worth exploring in greater detail the extent to which economic development of the continent is happening, or if the 'rise' is just a hype.

Now, in discussing these arguments, we would like to emphasise that, although in many instances we talk of Africa as if it is a homogeneous entity, we are well aware that it is a continent of 54 countries with very varied natural and human conditions. Insofar as most African economies look rather similar to each other economically, it is not because they are in the same continent but because all economies – in whichever continent they are – at low levels of development look rather similar to each other, due to the lack of specialisation and diversification in the production structure, which then leads to high degrees of homogeneity in occupational structures, social organisations, and lifestyles.

Bearing this important point let us analyse in greater detail the arguments that claim Africa's development to be bound by 'meta-structural' factors, or, in contrast, that the continent is on the 'rise'.

2.1. THE AFRICAN GROWTH TRAGEDY

2.1.1. The arguments

Arguably the most popular of the meta-structural explanations of the African growth 'tragedy' in the recent period has been those based on climate (most importantly, see Diamond 1997, 2012; Sachs, 2003). Most importantly, their proximity to the equator make African countries suffer from tropical diseases, such as malaria. Tropical diseases (mostly parasitic diseases) are worse than temperate diseases, it is argued, because a tropical climate doesn't kill as many parasites outside our bodies as a temperate climate does. These diseases hold back economic development by reducing worker productivity and raising healthcare costs. It is not just the diseases. It is also pointed out that agricultural

productivity in the tropics is lower than in temperate areas when measured by nutritional value, for several reasons. First, higher average rainfall in tropical areas means more nutrients are being leached out of the soil by rain. Second, temperate plants store more energy in parts edible by humans. Third, glaciers repeatedly advanced and retreated over temperate areas, creating more nutrient rich soils.

In terms of geography, it has been emphasised that many African countries are landlocked and thus are disadvantaged in integrating into the global economy through international trade (most importantly, see Collier 2007; Bloom and The continent's unique colonial history is argued to have produced low-quality institutions, such as weak protection of private property rights, which have impeded economic development.

Sachs, 1998; Sachs, 2012). Many of them are also said to be in 'bad neighbourhoods': they are surrounded by other poor countries that have small markets, which restricts their trading opportunities; many of them suffer from violent conflicts, which often spill over into neighbouring countries, with obvious negative consequences for economic development.

Ethnic diversity (see Easterly and Levine, 1997) and colonialism (see Acemoglu et al., 2001; Acemoglu and Robinson, 2012) are two aspects of African history that are said to be obstacles to the continent's economic development. Most African nations are made up of diverse ethnic groups. Ethnic diversity makes their people distrust each other, raising transaction costs while encouraging violent conflicts, especially if there are a few ethnic groups of similar strengths rather than many small groups, which are more difficult to organise. The continent's unique colonial history is argued to have produced low-quality institutions, such as weak protection of private property rights, which have impeded economic development. Most importantly, it is said that the European colonisers did not settle in large numbers in Africa due to the high risk of often fatal tropical diseases and thus

only installed minimal institutions designed to extract income and wealth from society to benefit a governing elite ('extractive institutions' of Acemoglu et al., 2001). It is also pointed out that institutions in Africa are worse than elsewhere because, generally, evidence shows us that a long history of government permits good institutions while a short history of government does not (Acemoglu and Robinson, 2012).

Culture is another popular meta-structural factor that is said to explain Africa's growth tragedy. Bordering on racism, the argument is that Africans possess cultures that are inimical to economic development; they do not work hard, do not plan for the future, and cannot cooperate with each other. The explanation of the economic divergence between South Korea and Ghana, two countries that were at similar levels of economic development in the 1960s, offered by Samuel Huntington, of The Clash of Civilizations fame, is typical: "Undoubtedly, many factors played a role, but ... culture had to be a large part of the explanation. South Koreans valued thrift, investment, hard work, education, organisation, and discipline. Ghanaians had different values, in short, "cultures count" (Huntington, 2000, p. xi). Daniel Etounga-Manguelle (2000), a Cameroonian engineer and writer, observes: "The African, anchored in his ancestral culture, is so convinced that the past can only repeat itself that he worries only superficially about the future. However, without a dynamic perception of the future, there is no planning, no foresight, no scenario building; in other words, no policy to affect the course of events" (p. 69). And then he goes on to say that "African societies are like a football team in which, as a result of personal rivalries and a lack of team spirit, one player will not pass the ball to another out of fear that the latter might score a goal" (p. 75). More recently, a viral video on YouTube called Why Some Countries Are Rich and Others Poor points to the fact that most people in African countries are overwhelmingly religious, and that in general, religiosity is connected with passive acceptance of current conditions.

2.1.2. The criticisms

There is nothing wrong with meta-structural arguments per se. Indeed, it will be strange if things like climate, geography, culture, and history did not affect the course of economic development at all. However, the meta-structural arguments used as explanations of Africa's growth tragedy have serious problems, as we will discuss below (see Chang, 2010, Ch. 11, for further details).

Before we start picking individual arguments apart, let us point out two common problems with all the arguments based on meta-structural factors.

The first is that all those factors – 'bad' history, disadvantageous geography, crippling climate, and anti-developmental culture – have existed throughout Africa's post-independence period but the continent's growth performance fluctuated substantially. In the 1960s and 1970s, GDP per capita in Africa grew at an annual rate between 1 and 2 per cent, at a negative rate of 0.4 per cent in the 1980s and 1990s, and then at above 2 per cent since the 2000s. These kinds of dramatic reversals should not have happened if meta-structural factors were the explanation of Africa's growth performance.

The second is that the experiences of individual African nations fly right in the face of these meta-structural arguments, sometimes in dramatic ways. For example, in the last decade, of all countries in Africa not dependent on exports of minerals or oil, the two best growth performers, namely, Ethiopia and Rwanda, have been landlocked countries. Ethiopia has confounded the meta-structural argument even further by growing faster since it became landlocked after the secession of Eritrea in the 1990s.

(a) Climate

Against the climate argument, it should be pointed out that many of today's rich countries used to suffer from their climates.

First of all, a number of today's countries have suffered from tropical diseases, if not necessarily from agricultural conditions. Singapore, which is bang in the middle of the tropics, is an obvious case, but the US, Italy, Japan, and South Korea all had significant incidences of malaria and other tropical diseases – at least in parts of the country and during the summer. These diseases do not matter in those countries anymore because their incidences have fallen dramatically due to improved sanitation and because the treatment of the cases that still occur have become more effective due to enhanced medical capabilities. Both improved sanitation and enhanced medical capabilities have mainly been the results of economic development.

Second, several rich countries – Finland, Sweden, Norway, Canada, and the US (in parts) – have frigid and arctic climates, which can be as debilitating for economic development as tropical climate.³ In such climate, machines seize up, fuel costs skyrocket, and transportation is blocked by snow and ice. Due to freezing of the sea, the Scandinavian countries used to be effectively landlocked for half of the year, severely restricting their abilities to trade with the outside world, until the advent of the ice-breaking ship in the late-19th century. Once again, few people even think of cold climate as being a potential obstacle to economic development in these countries because they have acquired the money and the technologies to deal with it.

Thus seen, blaming Africa's under-development on climate is to confuse the cause of underdevelopment with its symptoms. Adverse climate does not cause under-development. A more accurate way to see the relationship between climate and economic development is to view a country's inability to overcome the constraints imposed by its adverse climate as a symptom of under-development. Blaming Africa's underdevelopment on climate is to confuse the cause of underdevelopment with its symptoms. Adverse climate does not cause under-development.

Indeed, when you think about it, there is no a priori reason to believe that cold climate is better than hot climate for economic development. Indeed, in Politics (Book VII, chapter 7), Aristotle argued that the European societies are not very developed because their climate is too cold, which makes their people, well, stupid. He said: "Those who live in a cold climate and in Europe are full of spirit, but wanting in intelligence and skill; and therefore they retain comparative freedom, but have no political organization, and are incapable of ruling over others. Whereas the natives of Asia are intelligent and inventive, but they are wanting in spirit, and therefore they are always in a state of subjugation and slavery. But the Hellenic race, which is situated between them, is likewise intermediate in character, being high-spirited and also intelligent. Hence it continues free, and is the best governed of any nation, and if it could be formed into one state, would be able to rule the world." (Aristotle, 2001, p. 1286

(b) Geography

It is true that quite a few African countries are landlocked. It is also true that, in a world with low sea freight costs, other things being equal, it is more expensive for landlocked countries to trade with the outside the world.

But if being landlocked is such an obstacle to economic development, how do we explain that Uzbekistan, the most successful post-Soviet republic (and at that using very 'heterodox' policies), is one of only two countries in the world that are double-landlocked (the other is Liechtenstein) (see section 4.3.3 below)? Equally puzzling are the economic successes of Switzerland and Austria. These are two of the richest economies in the world, but they are both landlocked. Some may retort that those two countries could develop despite being

But if landlockedness is such an obstacle to economic development, how do we explain that Uzbekistan, the most successful post-Soviet republic, is one of only two countries in the world that are double-landlocked (the other is Liechtenstein). landlocked because they had good river transport, but many landlocked African countries are potentially in the same position; e.g. Burkina Faso (the Volta), Mali and Niger (the Niger), Zimbabwe (the Limpopo), and Zambia (the Zambezi). As in the case of climate, the argument is based on confusion between the cause and the symptom – it is the lack of investment in the river transport system due to lack of resources and policy vision, rather than the geography itself, that is the problem.

Being in a 'bad neighbourhood' may not be as disadvantageous as it may seem. India is a good counter-example. In the last couple of decades, it has grown fast, despite being in one of the worst neighbourhoods in the world. South Asia, where India is located, is literally the poorest region in the world

– poorer than Africa (excluding North Africa). South Asia is also a highly conflict-ridden region. India's own Hindu-Muslim tension, which frequently erupts in violent clashes, and its perennial military conflict with Pakistan, are well known, but the country also hosts one of the largest guerrilla forces that remain in the world today – the so-called Naxalites, a Maoist group. Neighbouring Nepal also suffered from a civil war with the Maoist guerrillas between 1996 and 2006, while the Tamil-Sinhalese ethnic war in Sri Lanka lasted 26 years, between 1983 and 2009.

(c) History

Most African countries are ethnically diverse, not least because of their unfortunate colonial history. However, it is not true that Africa is uniquely saddled with ethnic diversity.

Even ignoring ethnic diversities in immigration-based societies like the US, Canada, and Australia, many of today's rich countries in Europe have suffered from ethnic divisions based on linguistic, religious, and ideological differences – especially of the 'medium-degree' (i.e. a few, rather than numerous, groups) that are supposed to be most conducive to violent conflicts. Belgium has two (and a bit, if you count the tiny German-speaking minority)

ethnic groups. Switzerland has four languages and two religions, and has experienced no less than four mainly-religion-based civil wars between the 17th and the 19th centuries. Spain has serious ethnic tensions with the Catalans and the Basques, which have even involved terrorism. Due to its 560-year rule over Finland (from 1249 to 1809, when it was ceded to Russia), Sweden has a significant Finnish minority (around 5 per cent of the population) and Finland a Swedish one of similar proportion. The examples can go on.

Even more striking are the East Asian countries, like Japan, Korea, and Taiwan, which are often believed to have uniquely benefited from their ethnic homogeneities. These countries in fact have had serious ethnic and other divisions. People think Taiwan is ethnically homogeneous, as its citizens are all 'Chinese'. However, to begin with, there is actually a tiny native population of Polynesian origin (the so-called Kaoshan people). Moreover, even the 'Chinese' population, who have settled since the 17th century, consist of two (or four, if you divide them up more finely) ethnic groups (the 'mainlanders' vs. the Taiwanese) that are hostile to each other. Japan has serious minority problems with the Koreans, the Okinawans, the Ainus, and the Burakumins. South Korea may be one of the most ethnolinguistically homogeneous countries in the world, but that has not prevented it from having deep internal divisions. For example, people from the Southeast and the Southwest have had a history of mutual distrust and hate, so much so that at the nadir of their relationship in the mid- to late 20th century, there were people who would not allow their children to marry someone from 'the other place' for the simple reason that he/she is from there. In this regard, it is very important to note that Rwanda, where the 1994 genocide took place is actually nearly as homogeneous in ethno-linguistic terms as Korea is. The examples of Korea and Rwanda show that 'ethnicity' is a political, rather than a natural, construction.

The above examples show that countries suffer from ethnic heterogeneity not only because they have it but because they have failed to create a sense of unity through what is known as 'nation-building', which, we should note, may be an unpleasant and even violent process. Indeed, Tanzania is a great example of this (on the examples of nation-building, see Hobsbawm and Ranger (eds.), 1995; Weber, 1976). It is genetically the most heterogeneous country in the world, but it has not had any serious ethnicity-based conflicts because it has succeeded in building a sense of Tanzanian nationhood.

As for the other main history-based argument, namely, the argument that bad institutions are holding back Africa, it should be put into perspective. Between the 18th and the early 20th century, when their levels of material development were similar to those of Africa today, the institutions of today's rich countries in Europe and North America were in much worse shape than those of today's African countries: they didn't even have basic transparency in market exchange (e.g. firms selling their shares didn't even have to publicise their balance sheets); they protected property rights, especially intellectual property rights, very poorly; they didn't even pretend to recruit their government officials through competitive processes; many of them openly sold government offices and the sale of legislative votes was an open secret (for further details, see Chang, 2002, Ch. 3; Chang (ed.), 2007a). For more recent examples, in the 1960s and 1970s, the governments of South Korea and Taiwan operated with poor formal institutions, oiled by plenty of corruption. The fact is that today's rich countries built the good institutions not before but after, or at least in tandem with, their economic development. This suggests that high-quality institutions are as much outcomes as they are the causes of economic development.

(d) Culture

Most of those who blame Africa's development problems to 'bad' cultures do not even realize that all those 'negative' cultural traits of Africa cited today are the ones that used to be attributed to many of today's rich countries when they were poor themselves (Chang, 2007 b, Ch. 9).

Until the mid-19th century, when German economic development started, British visitors to German states would often describe the Germans as being mentally slow, laid back, dishonest, and excessively emotional. For example, John Russell, an early-19th century British traveller in Germany remarked: "The Germans are a "plodding, easily contented people ... endowed neither with great acuteness of perception nor quickness of feeling ... It is long before [a German] can be brought to comprehend the bearings of what is new to him, and it is difficult to rouse him to ardour in its pursuit" (Russell, 1828, p. 394). When travelling in Germany, Mary Shelley, the author of Frankenstein, complained that "the Germans never hurry" (Shelley, 1843, p. 276). Commenting on excessive German emotion, Sir Arthur Brooke Faulkner, a physician serving in the British army, observed that "some will laugh all sorrows away and others will always indulge in melancholy" (Faulkner, 1833, p. 155). Sir Arthur also described the Germans as dishonest: "the tradesman and the shopkeeper take advantage of you wherever they can, and to the smallest imaginable amount rather than not take advantage of you at all ... This knavery is universal" (p. 57). The list can go on, but the point is that the picture emerging from these observations is the exact opposite of the German national stereotype today – highly skilled, coldly rational, ruthlessly efficient, and rule-abiding people – and exactly the sort of things that people would use to describe the Africans.

The Japanese have often been derogatorily described as worker ants. However, in the 19th and the early 20th century, they were typically described as lazy. When he visited various factories in Japan in 1915, at the request of the Japanese government to advise it on how to improve the country's industrial productivity, an Australian engineer remarked: "My impression as to your cheap labour was soon disillusioned when I saw your people at work. No doubt they are lowly paid, but the return is equally so; to see your men at work made me feel that you are a very satisfied easy-going race who reckon time is no object. When I spoke to some managers they informed me that "it was impossible to change the habits of national heritage." (Japan Times, 18 August, 1915). Even Sidney Gulick, an American missionary who lived in Japan for 25 years and later became a champion of Asian-American human rights when he went back to the US, had to admit that many Japanese "give an impression … of being lazy and utterly indifferent to the passage of time" (Gulick, 1903, p. 117).

Samuel Huntingdon may peddle Korea as a country that has succeeded because it had the 'right' culture, but back in 1912, the Koreans were described as "12 millions of dirty, degraded, sullen, lazy and religion less savages who slouch about in dirty white garments of the most inept kind and who live in filthy mud huts". What is particularly shocking about this comment is that it came from one of the most progressive personages of the time – Beatrice Webb, one of the founders of the Fabian movement (Webb and Webb, 1978, p. 375).

Thus seen, the cultures of Germany, Japan, and Korea seem to have been transformed beyond recognition over the last couple of centuries. This reveals a very important point about the relationship between culture and economic development. Cultural transformations of these countries happened mainly because of economic development, which created societies in which people have to behave in more disciplined, rational, and cooperative ways than in agrarian societies (for more detailed arguments, see Chang, 2007 b, Ch. 9). If anything, culture is more of an outcome, rather than a cause, of economic development. Therefore, it is highly misleading to blame Africa's (or any region's or any country's) poor economic performance on its culture.

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2.2. AFRICA RISING

2.2.1. The arguments

While some people continue to emphasise the 'meta-structural' factors to explain persisting underdevelopment in Africa, others have recently adopted a new discourse presenting a bright outlook for the continent. After the 'lost' decades of the 1980s and 1990s (in which GDP was declining), economic growth in Africa has picked up. Between 2000 and 2014, annual GDP growth in Africa has been 4.6 per cent on average (UNCTAD STAT, 2015). A debate about the sustainability and the developmental impacts of this growth experience has taken hold, most notably sparked by some positive narratives in the media, such as The Economist article, "The sun shines bright", in 2011 and Time magazine's piece, "Africa Rising", in 2012. Backed up by more analytically rigorous accounts (e.g. McKinsey, 2010; Radelet, 2010; Robertson et al, 2012; Andersen and Jensen, 2013), a number of reasons have been offered to explain why this time around the growth has come to stay.

First, it is argued that, after the end of the Cold War and the apartheid regime, the political domain in Africa has become more open and authoritarian or even dictatorial regimes have been forced to give way to more democratically accountable regimes. Between 1989 and 2003, the number of democracies in Africa increased from 3 to 23 (Radelet, 2010).

Second, there has been a significant drop in the level of violence. Between 2002 and 2011, Africa's share of worldwide violent conflict dropped from 55 per cent to 24 per cent (Africa Progress Panel, 2012). Especially West Africa and the Great Lakes region have become more peaceful.

Third, lessons have also been learned from the policy mistakes of the 1960s and the 1970s. By the mid-2000s, median inflation had been halved from that of the mid-1990s (Devarajan and Fengler, 2012) while fiscal deficits had been slashed by more than half from their levels in the 1980s and the 1990s. Trade policy has also been considerably liberalized and the business environment has become friendlier towards foreign investors.

Fourth, some claim that a technological revolution has taken hold across the continent, most dramatically illustrated by an increase in the use of cellular phones. In the mid-2000s, few people in Africa had cellular phones. By 2013, there were more cellular phones than adult people on the continent (Fengler and Rowden, 2013). The increased availability of cellular phones and other information and communication technology (ICT) devices has made it easier for people to participate in social and political life, especially in remote villages. These devices have also had big impacts on people's economic lives by, for example, increasing the efficiency of storing and spending money and making it easier for farmers to market their crops. The increase in the availability of educational tools for children that

ICT devices bring and the consequent improvement in the quality of education, it is argued, will change the nature of economic and social life in Africa for the better in the long run.

Fifth, there has been a significant improvement in social indicators. Malaria death rates, child mortality rates and infant mortality rates have fallen. Immunization and vaccination rates have improved. People are becoming better educated – between 2000 and 2008, secondary school enrolment increased by nearly 50 per cent (Ibid). It is natural that healthier, more educated, and longer-living people generate more growth.

Sixth, spatial and demographic developments are supposed to bode well for the future of African economic growth. Today, over 41 per cent of Africans live in cities, a figure which is increasing by about one percentage point every two years. Sustainable economic growth has historically been positively correlated with increasing urbanization because cities provide better operating environments for businesses and provide better services for people than rural areas. Africa also looks to be reaping a demographic dividend in the foreseeable future, with an increasing ratio of people in the working population per 'dependent'. In 2010, Africa's share of the population eligible for work (ages 15 - 64) was estimated at 42 per cent (460 million out of a total population of 1.1 billion). This share is predicted to increase to 50 per cent in 2030 (Devarajan and Fengler, 2012).

Many of these developments are decidedly good, especially the improved state of health and education and the reduction in violent conflicts, even though the impacts of some others, such as trade liberalisation, are more debatable. However, a more nuanced analysis shows that that the 'Africa rising' narrative misses out a number of important aspects.

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2.2.2. The criticisms

(a) Putting recent African GDP growth performance into perspective

Recent growth performance in Africa may seem impressive, but it pales in comparison when we put it against developing countries in East Asia and Pacific (EAP) – another group of countries that has grown particularly fast in recent years. **Figure 2.1** compares GDP growth rates in Africa and EAP during 2000-2014 (the period of Africa's 'rise'), excluding high-income countries in both regions⁴.

Per capita growth rates provide the best comparison, given that birth rates in Africa have been considerably higher than that in East Asia. Over the period under consideration, per capita growth in developing countries in EAP averaged 7.71 per cent, whereas developing countries in Africa registered 2.09 per cent. In other words, developing countries in EAP have been growing over three times faster. One might, of course, point out the average growth rate for Africa obscures the fact that some countries have grown exceptionally fast. This is correct – to an extent. The average per capita growth rate in the five fastest growing economies in Africa for the period under consideration⁵ (Angola, Ethiopia, Mozambique, Nigeria, and Rwanda) at 5.0 per cent (WDI, 2015) differs significantly from the average continental performance. And some of these countries, like Rwanda and Ethiopia (whose industrial policy experiences will be addressed in detail in chapter 4) are growing at these impressive rates without being dependent on natural resources. Still, the average growth rate of these five fast-growing economies falls well short of that of the EAP region by roughly ³ percentage points.

The fact that recent African growth, especially in per capita terms, has not been as spectacular as the advocates of the 'Africa rising' story make it out to be is problematic enough, but the bigger problem is that even this relatively modest growth performance is unlikely to be sustained in the long run in most countries. As Arbache and Page (2009) rightly point out, the improved economic performance in Africa after 1995 can be mainly attributed to the reduction in the frequency of growth declines and the increase in growth accelerations of resource-dependent countries (with a few notable exceptions, as mentioned in the above paragraph).^{6,7} The problem is that, with the end of China's super-growth and

⁴ Excluding high-income countries in Africa hardly makes any difference (as there are none apart from the Seychelles, which has a tiny population - roughly 100,000). It makes a difference in EAP as it excludes Japan, Singapore and South Korea. The rest of the EAP are Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Papa New Guinea, the Pacific Islands (10 countries with a total of 2.3 million people), Philippines, Thailand, Timor Leste, and Vietnam

⁵ Disregarding Equatorial Guinea, whose per capita income increased 56-fold in 15 years (between 1995 and 2010 from \$371 to \$20,703) due to the finding of a massive (considering that, at around 0.7 million, it has the smallest population on mainland Africa) oil reserve.

Arbache and Page classify a country as resource-rich if: (a) a country's income from energy, minerals and forests exceeds 5 per cent of GNI (this is called the 'initial year'); (b) the forward moving average of such income exceeds 10 per cent of GNI; (c) the share of primary commodities in its exports exceeds 20 per cent for at least a 5-year period following the initial year. Apart from being overly elaborate (we get almost identical classification, if we just use a slightly different version of the export indicator – 25 per cent instead of 20 per cent - as we show in table 2.1), this definition is problematic in that it confuses 'resource dependence' and 'resource abundance'. A resource dependent country may be abundantly endowed with natural resources or not. Despite being very poorly endowed with natural resources, South Korea was highly dependent on natural resources in the 1950s – over 80 per cent of it's at the time were natural resources (e.g. tungsten ore, fish), because it produced very little of other things. Similarly, many natural resource-dependent African countries are not very well endowed with natural resources (see Chang, 2006b).

⁷ We should make a note of the fact that a boost in services output (most importantly in wholesale, retail, tourism and transport) and increases in agricultural productivity has also contributed moderately to accelerating growth in Africa (see ECA (2015)).





Source: Authors' calculations from WDI 2015

thus the current commodity price boom, the prospect for growth in those economies is dimming, and, together with it, the prospect for the whole continent. These resource-dependent economies account for over 60 per cent the continent's total GDP, with the combined GDP of the two largest economies on the continent, Nigeria and South Africa, alone accounting for roughly 30 per cent (IMF, 2015).⁸ Furthermore, some of the really large resource-dependent economies, like Angola, Algeria, Nigeria and Sudan, are close to entirely resource dependent (see note 2 to table 2.1). Given all these, the continent's good growth performance can easily evaporate.

b) Quality of growth: Impacts on employment and poverty

Even if Africa can sustain its recent growth performance, the poor quality of recent growth in Africa in terms of employment and poverty makes it doubtful that it will have significantly positive impacts on the lives of most people.

Because much of the recent economic growth in Africa has been the result of a boom in the prices and exports of natural resources, its effect on decent employment generation has been marginal. Most people who enter the labour market in Africa end up in vulnerable jobs, such as informal jobs and undeclared work. In 2013

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Algeria (\$209 billion), Angola (\$124 billion), and Sudan (\$66 billion) are the other large resource-dependent economies.

Table 2.1 The manufacturing idiosyncrasies of African economies

Country	1990 MVA per capita, \$	2010 MVA per capita, \$	2013 GDP per capita, \$	Resource- dependent	2014 Population, Thousands
Seychelles	622	1300	15,186	0	91
Mauritius	522	803	9,483	0	1,200
South Africa	551	567	6,889	1	54,000
Swaziland	311	496	3,474	0	1,200
Tunisia	253	501	4,316	0	11,000
Egypt	177	370	3,204	0	83,300
Namibia	92	363	6,038	1	2,300
Morocco	180	239	3,160	0	32,400
Libya	319	230	10,702	1	6,200
Gabon	163	201	10,965	1	1,700
Botswana	124	184	7,117	0	2,000
Cameroon	126	179	1,334	1	22,800
Algeria	179	175	4,633	1	39,900
Cape Verde	108	147	3,631	0	503
Cote D'Ivoire	112	99	1,403	0	20,800
Lesotho	44	97	1,201	0	2,000
Rep. Congo	62	67	3,222	1	4,500
Angola	26	62	5,245	1	22,100
Sao Tome and Principe	34	61	1,567	0	197
Senegal	57	56	1,047	0	14,500
Mozambique	15	47	604	1	25,800
Kenya	49	46	1,321	0	45,500
Tanzania	19	45	944	0	50,700
Zambia	36	44	1,845	1	15,000
Burkina Faso	26	39	720	0	17,400
Sudan	19	37	1,838	1	38,700
Zimbabwe	106	36	1,028	0	14,600
Madagascar	30	28	462	0	23,500
Ghana	20	26	1,900	0	26,400

1990 MVA per capita, \$	2010 MVA per capita, \$	2013 GDP per capita, \$	Resource- dependent	2014 Population, Thousands
22	25	638	0	6,900
9	25	694	0	38,800
37	22	1,592	0	900
27	22	1,438	0	3,900
21	22	805	0	10,600
15	21	3,082	1	178,500
56	21	696	0	12,100
21	17	223	0	16,800
34	16	480	1	4,300
19	16	479	0	1,900
21	15	335	0	4,700
22	15	1,176	1	13,200
12	15	559	1	12,000
26	14	557	0	1,700
14	12	872	0	752
13	9	451	0	18,500
16	7	303	0	10,400
8	9	524	0	96,500
9	7	544	0	6,500
13	6	723	0	15,700
8	5	N/A	N/A	10,800
9	3	802	1	6,200
16	1	410	1	69,300
	per capita, \$ 22 9 37 27 21 15 56 21 34 19 21 24 19 21 34 19 21 22 12 26 14 13 16 8 9 13 8 9 13 8 9 13 9 13 8 9 13 8 9 9 9 9 9 9 9	per capita, \$per capita, \$22259253722272221221521562121173416191621152215121513916789971368593	per capita, \$per capita, \$per capita, \$222563892569437221,59227221,438212280515213,0825621696211722334164801916479211533522151,17612155591412872139451167303895249754413672385N/A93802	per capita, \$per capita, \$dependent22256380925694037221,592027221,43802122805015213,0821562169602117223034164801191647902115335021155591191647902115559112155591141287201394510895240975440136723085N/AN/A938021

Source: Authors' calculations based on UNIDO and UNCTAD (2011), UNIDO (2013), IMF (2015) and WDI (2015).

Notes

1. The data for Equatorial Guinea is not available. South Sudan's data are included in Sudan's.

 We classify a country as resource dependent, if 25 per cent or more of its exports have been made up of fuels and/or mining products since the year 2000. Some countries in the table have extremely high resource dependence (over 80 per cent of exports are in natural resources). These countries include Angola, Algeria, Guinea, Libya, Nigeria, and Sudan. the vulnerable employment rate in Africa (excluding North Africa) was estimated at 77.4 per cent of all jobs, the highest of all developing regions in the world, and only 2.3 percentage points lower than in 2001 (ILO, 2014). All other developing regions showed a larger reduction in the vulnerable employment rate over the same period, including those who have experienced slower economic growth, such as Latin America and The Caribbean (ibid).

From 2000 to 2011, the population share in Africa (excluding North Africa) living on less than \$2 a day (PPP) was reduced from 77.5 per cent to 69.5 per cent. However, over a longer period of time, this figure has shown almost no improvement – in 1981 (earliest data available) it registered 72.2 per cent. The Economist recently published a report on the dismal state of 'decent' job creation in Africa, noting that a given firm in Africa typically has 24 per cent fewer people on its books than equivalent firms elsewhere because so many are informally employed in African firms (The Economist, 2014). The coming wave of young people eligible for work might simply not be able to find jobs other than dubious ones in the informal sector or toiling for their families. The supposed demographic dividend awaiting Africa might therefore turn out to be a demographic disaster.

Africa's recent growth was also of poor quality in terms of its impacts on poverty. It is true that the poverty situation has improved (slightly) since the dawn of Africa's 'rise'. From 2000 to 2011, the population share in Africa (excluding North Africa) living on less than \$2 a day (PPP) was reduced from 77.5 per cent to 69.5 per cent. However, over a longer period of time, , this figure has shown almost no improvement – in 1981 (earliest data available) it registered 72.2 per cent (WDI, 2015).

Comparison across developing regions in the world gives a cause for even greater concern. Developing countries in EAP have steadily reduced this rate, from 92.4 per cent in 1981 to 22.7 per cent in 2011. The same goes for developing countries in Latin America and the Caribbean, where it stayed above 20 per cent until 2002, before falling dramatically to 9.3 per cent up until 2011 (Ibid). In 1999, Africa accounted for 21 per cent of the world's poverty. By 2008 that figure had reached 29 per cent (Africa Progress Panel, 2012), despite the fact that the continent accounted for only 15 per cent of the world's population in the same at year. From 2002 to 2010, Africa's share of the world's middle-class⁹ has remained unchanged at about 2 per cent, while other developing regions are gaining shares (ibid.).

Given these meagre impacts on poverty of Africa's recent growth, it is questionable whether its continuation is going to have significant positive impacts on the lives of most people on the continent – that is, even if it can be sustained.

The 'global middle class' – a term invented by the Brookings Institution – includes those who have between \$10 and \$100 (PPP) per day.

c) The state of African manufacturing and its implication for Africa's future development

What largely explains why GDP per capita growth has been so low compared to those of the developing countries in East Asia and why employment generation and poverty reduction has been far slower than in other developing regions is Africa's negligible manufacturing base (see Szirmai and Verspagen, 2011; Noman and Stiglitz, 2011; and ECA, 2015).

In fact, in 1980-2013, the share of manufacturing in economic output on the continent declined from more than 12 per cent to around 11 per cent, currently the lowest of all developing regions in the world (ECA, 2015). Page (2012) interestingly compares the state of value addition across all sectors in African countries to that of a range of countries in Asia – China, India, Indonesia, Korea, Malaysia, Philippines and Thailand – when they reached lower middle-income status, set as a benchmark of \$996 in 2009¹⁰. The most striking finding is in the manufacturing sector, whose share both in employment and in value added in a 'typical' low-income African country is about half of the benchmark value. Furthermore, a majority of manufacturing firms in African countries are small, informal, and produce natural resource-based goods. These are characteristics typically associated with low productivity manufacturing firms.

Against this, it may be pointed out that manufacturing performance has been heterogeneous across countries. **Table 2.1** indeed shows that per capita MVA in Africa in 2010 ranged from \$1,300 (Seychelles) to \$1 (DRC). However, this diversity is rather deceptive, if we focus on Africa (excluding North Africa).

If we exclude North African countries (Tunisia, Egypt, Morocco, Libya, and Algeria) and South Africa, all the countries with high MVA scores have very small population – Botswana (2 million), Gabon (1.7 million), Mauritius (1.2 million), Namibia (2.3 million), Seychelles (91,000) and Swaziland (1.2 million) (all as of 2014). If we exclude these very small countries, the country with the highest MVA per capita in Africa (excluding North Africa and South Africa) is Cameroon, with a MVA of \$179 per capita. To put it another way, if we exclude South Africa, roughly 95 per cent of the population in Africa (excluding North Africa) – over 800 million people – reside in countries that in 2010 registered MVA per capita that is lower than \$100. To put this in perspective, MVA per capita in 2010 was \$622 in Brazil, \$820 in China, \$3,162 in the UK and \$5,222 in the United States.¹¹. In other words, if we exclude North Africa and South Africa, the dismal state of the manufacturing sector in Africa is strikingly homogenous.

Another prominent feature observable from **figure 2.2** is the sound correlation between MVA per capita and GDP per capita. Apart from Cape Verde - a small service-oriented economy - no countries in Africa, except for Botswana, with MVA per capita less than \$200 have managed to exceed GDP per capita of \$1,900 without being exceptionally rich in minerals or oil.

¹⁰ Lower middle-income status is defined by the World Bank as falling in the range \$996 – \$3,945, at 2009 prices.

¹¹ These four countries have been chosen as they all have big populations, but differ in geography, income and manufacturing performance.

Figure 2.2 African countries MVA and population



Source: Authors' calculations based on UNIDO and UNCTAD (2011), UNIDO (2013), IMF (2015) and WDI (2015).

2.3. CONCLUSION

This chapter has argued that 'bad' climate, geography, history and culture, are insufficient to explain the poor economic performance of Africa. Many countries in the 19th and 20th century defied these meta-structural factors to achieve economic development. Singapore has developed well despite its tropical climate, while the Scandinavian countries, Canada, and the US have developed despite their arctic and frigid climates, which can be as hostile to economic development as tropical climate. Landlocked Switzerland and Austria have become two of the richest countries in the world. Ethnic divisions in Switzerland, Belgium, and other European countries did not prevent their economic development. All of today's developed countries in the past and China today have had many of the same 'bad' institutions that a history of colonisation is supposed to have created in Africa. Germany, Japan, and Korea defied those who had thought they have cultures that are hostile to economic development and went on to engineer economic 'miracles'. Economic development has enabled all the above-mentioned countries to overcome these conditions. In other words, correlation and causation have been confused in the arguments emphasising meta-structural factors.

Given the reversal of sluggish growth and improved political and economic climates in most African countries, some people have enthusiastically embraced a new discourse, claiming that Africa is 'rising'. And in many ways Africa is doing better – compared to 15 years ago, fiscal deficits have been reduced, there are fewer violent conflicts, people are healthier, and public access and use of ICT devices has grown rapidly. However, in terms of the development of productive capabilities¹² – the essence of economic development – we have shown that the 'rise' is mostly hype. Per capita GDP growth is in fact quite low, poverty rates and vulnerable employment rates haven't improved much, and industrialisation is not happening, making the sustainability of the recent growth doubtful.

All countries that have defied meta-structural impediments to growth have done so by increasing their productive capabilities: they reorganised and transformed their production activities. Historically, this has happened through an expansion of the manufacturing sector, which has higher productivity and greater scope for productivity growth than do other sectors. Moreover, the manufacturing sector in an economically backward country cannot develop without an intelligent and coherent industrial policy, as various economic theories and historical experiences show. The theories and the history of industrial policy are the issue that we respectively turn to in the next two chapters.

¹² Productive capabilities refer to the skills, productive knowledge and experience that are embedded in physical agents and organisations (see Andreoni (2011) for a more detailed taxonomy of productive capabilities). The development of productive capabilities includes not only the development of capabilities of firms to produce more technologically advanced goods but also the infrastructure (e.g. roads and electricity) and institutions (e.g. financial system) to support this.