

Louvain School of Management

South Africa: Risk Analysis of an Emerging Economy

Research Master's Thesis submitted by
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With the view of getting the degree in
Master 120 crédits en sciences de gestion, à finalité spécialisée

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Academic Year 2017-2018

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I do not believe that there is any better feeling than the one you have while achieving something you have worked on for months. The accomplished work, however, is the outcome of much more than individual labour. The first person that comes into my mind while thinking about the contributors to this work is my supervisor, Professor Jean Christophe Defraigne. I could not thank you enough, not only for your great advice and sharing of knowledge but also for giving me the opportunity to get the best out of myself. Professor, your expertise on this subject but also on a wide range of social, political and economic issues always impressed me. More than just a source of expertise, you inspired me, as I am sure you inspired many others.

I would also like to thank the other many contributors to this final master's thesis. Firstly, a special thought is directed towards all the professors that I have had the chance to meet, whether at ICHEC or during my exchange semester in McGill. Particularly, I would like to thank Professor Rick Stapenhurst, without whom I would probably have not developed a devotion towards emerging economies neither chosen to work on South Africa. Secondly, I would not missed the occasion to thank my family for their support, whether psychological or financial. I do realize that all those great opportunities only became "*opportunities*" because you believed in me and pushed me out of my "*little comfort zone*". I hope I will have the wisdom to keep listening to you and your advice while I grow up. Thank you for believing in me more than I will ever do. Last but not least, I would like to thank all the people, whether academics or friends that have always been present when the most needed.

Thank you.

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INTRODUCTION

According to recent trends, private capital flows into developing countries had expanded from an annual pace of \$200 billion in 2000 to nearly a trillion dollars a year in 2010. This impressive capital flows' increase is even more staggering when thinking that, even as late as 2002, big investors (such as pension funds and college endowments) identified those emerging markets as too small to move the needle on multibillion dollar funds or simply as too dangerous (Sharma, 2012). Today, emerging economies seem to be where significant returns on investment can be made. Yet not all emerging economies are likely to flourish the same way, as we will discuss in the end of the first section (*Ibid.*). It may not have mattered a decade ago, when developing economies represented less than 20 percent of the global economy and merely 5 percent of the world's stock market capitalization. However, as of 2017, emerging markets account for more than 75 percent of global growth in output and consumption (in market exchange rate terms) (IMF, 2018) and just under 15% of the total value of the world's stock markets according to the MSCI Emerging Markets Index (MSCI, 2018). These economies are therefore becoming too important to be lumped into one marginal class and must be understood as individual nations.

Within the framework of this thesis, the focus will be on a specific emerging economy: South Africa. The country became part of the BRICS (Brazil-Russian Federation-India-China-South Africa) in 2010, being considered as one of the largest emerging markets economies. Those economies were indeed expected to grow faster and play an increasingly important role in the world. And so they have. Together the BRICS's nominal GDP is similar to that of the European Union or the United States and is likely to overtake both in the coming years (Guriev, 2015; World Bank, 2017e). Understanding to what extent South Africa can be a motor of development for the global economy is thus important and will probably give insight about the future world order and distribution of labour. The significance of South Africa's economy is even more striking while looking at the African continent: the country is the most developed economy of Africa and accounts for more than 40% of total GDP in Sub-Saharan Africa (World Bank, 2017e). As a member of the G20, it has a leadership role to play in making the voice of Africa heard. Putting into perspectives its growth prospects and the country's future position towards the whole continent is thus crucial to analyse further economic and social development in Africa. Can South Africa become the next China of Asia?

Firms and private investors invest more and more in emerging markets, assuming that riskier investments will inevitably lead to higher returns. Even if growth has been impressive in most of those economies within recent years, various crisis have also proven how instable those can be. Furthermore, by relying solely on indicators and ratios, most of investors and international institutions have not managed to predict some of the biggest crises, such as the 2008 financial crisis. For instance, Thailand, the Philippines and Korea's (or Spain and Greece more recently in 2008) all experience sudden currency collapses in mid-1997 while the three countries still had robust growth in the absence of major fiscal imbalances and inflation, and enjoyed stable credit ratings. In order to correctly and exhaustively assess country's risk, a more qualitative analysis is needed, tackling the structures of a country's development process which will allow to identify the underlying strengths and weaknesses. This is particularly important in the case of South Africa given its colonial and apartheid history, influencing current development issues. Therefore, the complexity associating with analysing a country such as South Africa is useful to understand structural developments and risks in many other similar emerging economies, particularly countries that have been under colonial rule.

This research Master's thesis will be divided in three main parts. Firstly, emerging markets economies in general will be discussed. Particularly, ranking criteria used to classify them as well as actual trends and prospects will be further reviewed. We will conclude this first section by emphasizing on the reasons why some economies flourish and other do not. As Sharma (2012) reminds us: *"even if in the last decade, emerging markets did grow altogether, it is more than probable that it is the last time we ever see such a golden age"*. In the second section of this research Master's thesis, historical factors that have led to current development issues will be highlighted. Industrialization of the country, colonial and apartheid backgrounds will lay the foundations for the third and last section of this paper, the country risk analysis. As previously implicitly mentioned, the methodology used to conduct the risk analysis will be a qualitative approach, using mainly literature review and indicators as well as some macro-economic fundamentals. Many limitations were yet encountered while analysing South Africa's risks. Incomplete governmental statistics as well as uncertainty concerning the procedures used to generate those statistics restricted the depth and certainty of the analysis. Available data were thus analysed while adopting constant critical view. We will finally conclude this research Master's thesis by highlighting and linking the main sources of risks for the country over the short and longer term. An international perspective will also be taken and recommendations for further analysis will be given.

PART A

EMERGING MARKETS ECONOMIES (EMEs)



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In the first part of this paper, we will look at the classification of world economies and understand which benchmarks or criteria are used to make these classifications, using concrete country examples. We then analyse what is meant by Emerging Market Economies (EMEs) or developing economies. Finally, the focus will be on understanding why some countries become great economic powers while others are still developing.

1. Introduction to Emerging Market Economies (EMEs)

1.1. Classification of the world economies

Different entities have different ways of classifying the world economies as there are, indeed, no hard and fast rules for arrangements. However, all those institutions agree on two broad basic groups: the developed (or advanced), and developing or emerging economies. The composition of the groups might slightly differ regarding the indicators used to classify the economies one against another but the configuration remains relatively similar (See Appendix 1).

According to the United Nations (2018a), a third category needs to be added to classify the world economies: the economies in transition (See Appendix 2/3/4). Hoskisson *et al.* (2000) expands even further, claiming that emerging economies actually fall into two different categories: developing countries in Asia, Latin America, Africa, and the Middle East and the transition economies in the former Soviet Union and China. In the latter classification, transition economies are thus considered as a sub-group of the broader “emerging economies” category. Those transition economies appeared with the collapse of Communism in 1989, which created a new group of rapid-growth countries in Central and Eastern Europe, committed to strengthening their market mechanisms through liberalization, stabilization and the encouragement of private enterprise (Hoskisson *et al.*, 2000).

Besides these three broad categories, some other institutions such as the MSCI add the notion of “*frontier market*” as a particular sub-category (See Appendix 5). This term usually refers to a subset of emerging markets, deemed too small or illiquid to be included in MSCI’s flagship EM Index. Frontier markets have indeed lower market capitalisation and liquidity than the more developed emerging markets. Therefore, flows into those markets (Argentina, Kuwait, Pakistan, Vietnam, and Morocco for example) remain negative despite positive trend flows into emerging economies as a whole (see below for trends in emerging economies) (Johnson, 2017). As Mobius (2011) explains, “*If you start to feel confident it’s always easier to buy [a large emerging market like] Brazil because you can sell Brazil. You cannot do that with Nigeria or Pakistan. They don’t trade as much as the more liquid emerging markets do.*”

Yet, Mobius also affirms that those markets are actually not more risky than emerging markets or developed markets. They are markets surrounded by uncertainties as investors lack general knowledge about them but the actual risks are not significantly different from that of other markets. The majority of investors has not yet discovered most of those frontier markets. However, based on economic growth since 2012, 8 out of the 10 fastest-growing countries in the world (all are emerging markets) are frontier markets (Mobius, 2011).

1.1.1. Ranking criteria

Broadly speaking, the world countries are mainly classified regarding basic economic conditions. Indeed, the United Nations report (2018) indicates that the term “emerging economies” refers to mainly middle-income developing and transition countries that are integrated into the global financial system, using mainly GNI per capita to determine the level of development (World Bank thresholds are used). According to Hoskisson *et al.* (2000), emerging economies are low-income, rapid growth countries using economic liberalisation as their primary engine of growth. The IMF’s current World Economic Outlook (2018) states that their classification is “not based on strict criteria, economic or otherwise, and it has evolved over time.” However, earlier editions seem to reflect criteria for advanced status: “per capita income levels well within the range indicated by the group of industrial countries, well-developed financial markets and high degrees of financial intermediation, and diversified economic structures with relatively large and rapidly growing service sectors” (IMF, 1997). Within the World Trade Organization, “there are no definitions of ‘developed’ and ‘developing’ countries; members announce for themselves whether they are ‘developed’ or ‘developing countries’” (WTO, 2018). Finally, the World Bank classifies the world economies by geographic regions, income groups and operational lending categories of the World Bank Group. Concerning the income groups, there are currently four income groupings: low, lower-middle, upper-middle, and high; using the GNI per capita as a measure (World Bank, 2018g).

However, classifying countries based solely on levels of economic development (or simply on no criteria) is itself politically sensitive. Based on this statement, the economist Pankaj Ghemawat introduced the “CAGE” framework in 2001. This framework is primarily used to identify and prioritize the differences between countries that companies must address when developing cross-border strategies (Ghemawat, 2018). More particularly, it measures the influence on the distance between the headquarters and the target country based on four dimensions: **C**ultural, **A**dministrative, **G**eographic and **E**conomic.

Ghemawat & Altman (2016) apply thus the **CAGE** framework to analyse and characterize emerging economies compared to advanced economies (Ghemawat & Altman, 2016). Starting with the **cultural** differences; there are statistically significant differences on three of Hofstede's dimensions of national culture (Hofstede, 1980; Hofstede & Bond, 1988): greater power distance, collectivism, and long-term orientation. These all imply for executives to vary leadership practices. They used the data from the World Values Survey to determine that people in emerging economies rank work as a high priority in their lives but that they also have lower levels of trust in foreigners, which can complicate international business activities in particular. **Administratively**, emerging economies are systematically doing worse than advanced economies on indicators of institutional quality such as rule of law, political stability and control of corruption. According to Shang-Jin Wei (2000, p. 1), *"an increase in the corruption level from that of Singapore to that of Mexico would have the same negative effect on inward FDI as raising the tax rate by fifty percentage points."* Lack of institutional quality in emerging economies can thus impede international business activity and investment. Furthermore, emerging economies also require more documents and procedures to conduct international trade as suggested by the World Economic Forum's Enabling Trade Index ranking (2016). Emerging economies rank indeed lower than advanced economies. As a matter of fact, Belgium, Finland and Germany ranked all in the top 10 whereas the BRICS countries were all ranked 55 and more (out of 136 economies) (World Economic Forum, 2016a). Surprisingly and despite administrative weaknesses, publics in emerging economies express greater confidence in their governments. **Geographically** speaking, some differences are worth being notified as well such as the lower levels of urbanisation, which impact both demand patterns and supply chains. While emerging economies' higher likelihood of being landlocked is not statistically significant, the shortages of adequate infrastructures make landlocked emerging economies far less accessible than landlocked advanced economies. Last but not least, the obvious **economic** differences are the lower per capita incomes and faster real growth rates for emerging economies. However, even those collectively agreed characteristics fail to apply to every single emerging economy. For example, the IMF lists Qatar and Yemen as emerging or developing countries (See Appendix 1) although they both had the world's third highest GDP per capita and lowest real growth rate in 2015. Furthermore, there is also a lower R&D intensity in emerging countries, which is although essential to enable firms to become multinationals and expand. Finally, the high proportion of GDP coming from the industrial sector in emerging economies entails that it is no longer appropriate to use the term "industrialized countries" as a synonym for "advanced economies". To conclude, the CAGE framework shows us that the differences between advanced and emerging economies for multinational firms extend well beyond obvious ones such as lower income levels and faster growth.

1.2. Actual trends and prospects

According to the estimates of Angus Maddison, the United States was the world's largest economy throughout the twentieth century (Maddison, 2001). However, in the twenty-first century, the balance of the world economy is shifting, generating a new world order dominated by the emerging economies of Asia, especially China and India.

As a matter of fact, if we look at the World Bank's International Comparison Programs; the 2005 ICP shows that China has indeed overtaken Japan already more than a decade earlier in terms of purchasing power parity and that its output achieved parity with the United States in 2014 (World Bank, 2005; World Bank, 2014). As far as India is concerned, it had overtaken Japan by 2012 and has since then continued to grow much more rapidly (Jorgenson & Vu, 2016).

World economic growth has accelerated during the 21st century. However, the recovery of advanced economies from the Great Recession that began in the United States has been slow. In the emerging economies of Asia, the most significant impact of the Great Recession was the collapse of the trade in late 2008 and early 2009. Nonetheless, this was quickly reversed and the leading Asian economies have continued to grow more rapidly than the world economy (*Ibid.*).

The global growth is set to expand by 3.1% in 2018, slightly up from 3% in 2017 and making the first year since the 2008 Great Recession that it will near or achieve full growth potential (Wroughton, 2018). However, it is also projected that most of the growth will be driven by emerging economies, in particular commodity exporters, with growth rates for the group as a whole rising to around 4.5% in 2018 and 4.7% on average in 2019 and 2020. Adversely, growth rate in developed economies will slow down to 2.2% in 2018, from 2.3% in 2017. This is probably due to central banks progressively removing the post-crisis adaptations (*Ibid.*). Overall, the members of the G7 will grow more slowly than the world economy, while China and India will continue to increase in relative importance (although at lower levels than those they managed to achieve before) (Jorgenson & Vu, 2016). Indeed, despite the few last years of economic slowdown in emerging markets, the IMF still projects these economies to deliver 72% of global growth from 2015 to 2020 in purchasing power parity terms (IMF, 2018).

After almost a decade-long decline, the growth differential between developed and developing countries is rising again (UN, 2018a). Together with more favourable global financing conditions and the upward trend for some commodity prices such as metals and oil, there has been a recovery in capital inflows in emerging economies, also facilitated by the improving economic outlook in several large emerging economies. Indeed, the non-resident capital inflows in emerging economies exceeded \$1.1 trillion in 2017 (*Ibid.*).

Among emerging economies, some countries such as Brazil and the Russian Federation are progressively recovering while others went through major macroeconomic adjustments in reaction to the lower levels of commodity prices and capital flows observed between 2014 and 2016 (World Bank, 2018f). For example, current accounts deficits have cramped significantly in India and South Africa; so has inflation in several emerging economies. The resilience of emerging markets to external shocks has also been improved by greater exchange rate flexibility *in some cases* (nonetheless, other emerging economies such as China apply a peg currency policy and growth records do not demonstrate a poorer resilience to external shocks), high levels of reserves and in many cases, improved policy frameworks (like the use of countercyclical policies). Thanks to the rebound in capital inflows, financial spreads have been reduced and the domestic currencies have globally appreciated in emerging economies. In developing countries in Asia and Europe, sovereign and corporate bonds spreads have, for example, reached historically low levels. The exchange rates have also recovered in Brazil, Mexico, the Russian Federation, South Africa and Turkey. Prospects of future levels of capital inflows in emerging and developing economies are quite favourable according to the UN (2018) but remain dependent on the ongoing growth recovery in these economies, the risk of monetary normalisation in major economies as well as global policy uncertainty and geopolitical risks.

1.3.Risks in Emerging Markets Economies

Despite the numerous financial crises disrupting emerging economies these last two decades (external debt crises in most developing countries between 1982-1985; exchange rate crises in Brazil and Russia in 1998 or in Argentina and Turkey in 2001-2002; and banking crises in the Asian countries in 1997-1998), these economies generate half of today's global economic activity (Zhu, 2014). However, because of ramification and contagion effects those economies are often reduced to a single asset class in investors' portfolios, although having finally very little in common. Are those economies riskier than the developed ones? Is the wariness of investors justified?

Investments within emerging markets are undoubtedly exposed to additional risks such as exchange rate fluctuations, accelerated inflation, macroeconomic and political distress as well as adverse repatriation laws and fiscal measures (Goedhart & Haden, 2003). However, as Henisz and Zelner (2010) explain; *"elections and other political events, economic crises, and changing societal attitudes can disrupt the best-laid plans in both emerging and advanced economies"*. They expand further: historically, the main concern about investing in emerging economies was the *"expropriation risk"* because of immature or volatile political systems. Today this risk has largely disappeared thanks to stronger international laws but host countries have learned that *"more value can be extracted from foreign enterprises through the more subtle instrument of regulatory control rather than outright*

seizures” (Henisz & Zelner, 2010). Policy risk (uncertainty), or the risk that a government will unfairly change the laws, regulations or contracts dictating investments (or will fail to enforce them), reducing the investor’s financial returns is thus now considered as the biggest risk (*Ibid.*). The face of risk is thus changing in emerging economies.

In 2003, a study was conducted by Goedhart & Haden to compare the actual risks involved with investing in emerging and developed economies. According to them, international investors are probably unnecessarily cautious when assessing potential investments in emerging economies. The outcome of the study is that, while individual risks in each country may be high, those countries and risks have low correlations with each other. As a result, the overall performance of an emerging-market portfolio can be quite stable if the investments are spread out over several countries (Goedhart & Haden, 2003). These countries are actually analogous to “start-ups” companies in terms of performance and provide portfolio diversification opportunities. We definitely believe that a solid country risk assessment is needed, however to the same extent as developed economies necessitate it as well; country risk will be present whatever the level of development.

A last aspect to take into account when considering expanding operations into an emerging economy is the strategy to adopt. An investment in a new emerging market can indeed be risky if companies in developed countries take for granted the critical role that “soft infrastructure” plays in the execution of their business models at home (Khanna *et al.*, 2005). Because of institutional voids (absence of specialized intermediaries, regulatory systems and contract enforcing mechanisms) in emerging markets, globalisation strategies cannot be implemented. This is where many multinationals failed or fared poorly in those markets.

2. Why do some economies flourish and others do not?

“Despite these massive investments in emerging markets, one should not lose out of sight that a nation can climb the ladders for a decade or several only to hit a snake and fall back to the bottom where it must start over again while rivals pass it by” (Sharma, 2012, p. 8). The point made here is that growth is not an easy game. There is this general perception that every country can become a winner. However, this is not how a game is supposed to be played; losers also need to be part of it. In the end, only a few nations beat the game by growing faster than rivals in their own income class. Therefore, even if in the last decade, emerging markets did grow altogether, it is more than probable that it is the last time we ever see such a golden age (*Ibid.*). Many researchers have tried to identify the exact mix of reasons that make a nation grow or fail to grow. However, no one can claim with certitude that he

or she has found the perfect recipe to make any nation in the world flourish. Here are some key elements that could answer the question “*why do some economies flourish and others do not?*”.

The first argument presented in this paper is made by Hausmann (2014), former minister of planning of Venezuela. According to him, learning to master new technologies and tasks lies at the heart of the growth process now. The economic expansion of the last two centuries has been based on an explosion of knowledge about what can be made and how. Therefore, countries that have a greater variety of capabilities can make more diverse and complex goods and services. In other words, the techies get techier, and the laggards fall further behind. Another phenomenon is also at the origin of this virtuous circle that allows the techies to get even techier (and to keep this dominant position over the long run): the Marshallian districts. Almost every advanced economy has (intentionally) created high-tech Marshallian districts: the Silicon Valley for the ICT; London, Paris and Frankfurt as financial centres; Bordeaux and Toulouse for the aerospace; Stuttgart and Munich for the automotive industry or the Pearl delta river for electronics. According to Krugman *et al.* (2012), it is often the case that concentrating production of an industry in one or a few locations reduces the industry’s costs even if the individual firms in the industry remain small. By creating high-tech Marshallian districts, technological clusters of firms, universities and centres of research form and generate external economies of scale, benefitting not only the firm but also the whole cluster. Marshall argued that there are three main reasons why a cluster of firms may be more efficient than an individual firm in isolation: the ability of a cluster to support specialized suppliers; the way that a geographically concentrated industry allows labor market pooling; and the way that a geographically concentrated industry helps foster knowledge spillovers (Krugman *et al.*, 2012). For instance, thanks to the clustering of a broad community within limited geographic boundaries, informal exchange of best practices will occur. Different regulations can also be adopted to foster a culture of knowledge sharing and to smooth labour laws in order to allow high turnover of qualified workers. Those technological clusters will often attract students and qualified workers and researchers as these offer the best career perspectives and self-development opportunities, emphasizing the phenomenon of “*brain gain*”.

The Economic Complexity Index provides a good insight of a nation’s capabilities to diversify and intensify its products’ development. However, globalization has also helped poorer countries to grow as it has split up value chains. It allows countries to participate earlier, when they still have few locally available capabilities, which can then be expanded over time. Countries that will probably flourish (and grow) according to this theory are the ones capable of implementing a highly open trade policy since many goods are sent across borders many times. However, it also calls for activist policies in many areas such as education and training, infrastructure, R&D, business promotion and the development of links to the global economy (Hausmann, 2014). All of this will allow these developing countries to

move up the global value chain and ultimately become technological standards settlers. Colm (2013) affirms that policy formulation delivering societal outcomes, which reflect global connectivity and interdependence, is the key to growth. This leads us to the next discussion point: *could the governments then be the engines of growth?*

More and more analysts say that economic freedom (*"let the markets do the work"*) is the main driver of economic development. The editors of the 1997 *Index of Economic Freedom* write that *"although there are many theories about the origins and causes of economic development, the findings of this study are conclusive: Those countries with the most economic freedom have higher rates of economic development than those with less economic freedom."* Yet, some experts argue that in the case of newly prospering countries, economic freedom is more often the result than the cause of development (Scott, 1997). Indeed, many analysts claim that several successful countries owe their economic development mainly to the quality of their government. The Nordic countries, which are considered as economic successes based on economic indicators like productivity and innovation as well as social ones like inequality and crime, seem to be the perfect example. What makes the Nordic government so special is its honesty and transparency. They have also added two other important qualities to transparency: pragmatism and tough-mindedness. Nonetheless, although the Nordic model seems to be key to growth, it is hard to see the Nordic model of government spreading quickly. The main reason is that the Nordic government arose from a combination of difficult geography and benign history providing them with two powerful resources: trust in strangers and belief in individual rights (The Economist, 2013). This seems to corroborate with the findings of Professor Putterman from Brown University (2016). The latter found out that the differences in economic performances among countries has mainly to do with the quality of their political and economic institutions. However, he also points out that separating the quality of institutions from culture, and especially from the norms which underlie aspects of social interaction is difficult, implying that it may in fact be that norms influence the effectiveness of institutions as much as the reverse (Putterman, 2016).

The last point made here is that what has worked for one economy may not work for another, or simply could not be implemented. Some current conditions are specific to a country history and geography or climate. As Sharma (2012) claims, all the rules for identifying breakout nations flow from understanding the current economic regimes, recognizing the pace of change; determining whether it is going in productive or destructive directions, and whether it is creating balanced growth across income classes, ethnic groups, and regions, or hazardous imbalances. The main rule for identifying the next "growth game" winners, is to keep in mind that the factors driving growth in any given country at any given time are in constant flux. In other words, *"different operating rules apply in different nations, depending on rapidly changing circumstances"* (Sharma, 2012, p.19).

PART B

INTRODUCTION TO SOUTH AFRICA, LAND OF CONTRASTS



In the second part of this paper, we will look at South Africa *history of colonialism* and *apartheid* in order to analyse the development challenges the country is currently facing. Understanding African heritages is indeed essential in a post-colonial, post-apartheid context, where political power is in African hands. Firstly, a brief introduction about South Africa will be given in order to understand the basic components of the country and the elements that have led to the system of apartheid. Secondly, the focus will be on figuring out the reasons why South Africa became one of the most industrialized country in Sub-saharan Africa. Finally, we will identify the legacies of apartheid and colonialism on South Africa's current economy. This will allow to recognize any dependency path that South Africa may be following as well as the structural characteristics of its economy. While analysing the structural character of its economy, we will then emphasize the current development challenges that might be difficult to overcome in the short run. A diagram will be provided at the end of this second part in order to synthesize the identified legacies of apartheid and colonialism on the South African society and economy.

3. South Africa: introduction

South Africa, officially named Republic of South Africa (RAF) is the southernmost country in Africa. It is also the largest country in Southern Africa as well as the 26th largest country in the world. Considered as a whole, the area of South Africa is more than 1,000,000 square feet, which corresponds to more than twice the size of France for example. Its exact localisation, bordering countries, climate and topography will be discussed in details below (in "*Industrialization of South Africa*") as these have been crucial in explaining the industrialization of the country (see Appendix 6, "*Localisation of South Africa and the provinces*"). The country has three cities serving as capitals: Pretoria (executive), Cape Town (legislative) and Bloemfontein (judicial) (Lowe *et al.*, 2018). This results from the negotiations between the British Empire and the defeated Boer republics at the end of the second Anglo-Boer war (see below, "*Colonial and Apartheid backgrounds*") (Campbell, 2016).

With 55.7 million people living in South Africa, it is the world's 25th most populous nation (Stats SA, 2018a). This constitutes an extremely large domestic market. The potential of this domestic market will be further analysed in the third part of this paper (see *Part III, Country Risk analysis*). Among these 55.7 million South Africans, black South Africans represents more than 80% of the total population. They are mainly descendants of the Bantu-speaking Africans who entered the area of South Africa, previously occupied by the Khoisan people, from the North approximately 1,800 years ago (Lowe *et al.*, 2018). In addition to the black South Africans, the population formerly classified as "Coloured" constitutes 8.8% of total population. Coloured people are the result of unions between "whites" and "blacks" (Khoisan or Bantu-speaking Africans) or with slaves imported by the Dutch from Madagascar,

and what are now Malaysia and Indonesia. White South Africans represents 8.4% of the South African population and are predominantly descendants of European settlers. Asian or Indians, originally imported as workers to South Africa by the British to the former Natal colony, form a minority of the population (2.5%) (See Appendix 7, *“Ethnic repartition of the South African population”*) (*Ibid.*). The multi-ethnicity of the South African society, encompassing a wide variety of cultures, languages, and religions testifies from the colonial history of the country. This plurality of cultures is reflected in the Constitution, which recognizes 11 official languages, among the highest number of any country in the world. Among these 11 languages, two are of European origin: Afrikaans, developed from Dutch and which serves as the first language of most white and coloured South Africans; English, reflecting the legacy of British colonialism. The latter is often used in public and commercial life (Encyclopedia, 2018).

According to Sharma (2012), South Africa is now a *“middle-income emerging market with an abundant supply of natural resources; well-developed financial, legal, communications, energy, and transport sectors; and a stock exchange that is Africa’s largest and among the top 20 in the world”*. Using the Gross Domestic Product as a measure of the size of an economy, South Africa is considered by the World Bank (2017e) as the second-largest economy in Africa after Nigeria, and the 34th-largest in the world. South Africa has a mixed economy, with substantial government intervention and a number of state-owned enterprises existing jointly with a strong private sector. The latter is characterized by a high concentration of ownership by a small group of integrated conglomerate structures (Encyclopedia, 2018).

As far as South Africa’s political development is concerned, it was also shaped by its colonial past and the apartheid era as further explained below (in *“Legacies of apartheid history affecting current development”*). Nonetheless, it now enjoys a democracy and a new Constitution defining South Africa as a sovereign democratic state founded on the principles of human dignity, non-racialism and non-sexism and the achievement of equality and advancement of human rights and freedoms (Lowe *et al.*, 2018). The following sections of this paper will analyse and discuss the practical application of these principles within the South African society.

4. Colonial and apartheid backgrounds

(see Appendix 8, *“South Africa history timeline”*)

The history of South Africa is characterized by successive waves of European expansion. African people have indeed, been deeply affected by colonisation over two centuries (Beinart, 2001). Two European settlers will have great influence on South Africa’s future historic developments: the Dutch, settling at the Cape in 1652 on behalf of the Dutch East India Company and the British, then invading

this same Dutch colony in 1806 (UNESCO, 1989). The main arguments for both settlements were the access to key resources (human and natural) and the strategic control of the sea route around Southern Africa.

The South African colonialism will be marked by fights for territories. As a consequence of the British invasion of the Dutch Colony of the Cape, the “Boers” (Dutch settlers) will left their former colony during the Great Trek, disliking both the official British interference and the anti-slavery pressures (fundamental part of the Dutch settler society, abolished by the British in 1834) (Anti-apartheid movement, 1974). The fights for territories will occur mainly between the British and the Boers during the two Anglo-Boers wars which were mainly motivated by the discovery of gold and diamonds within the self-proclaimed Boers republics (Orange State and Transvaal); but also between the Boers and some southern Bantu-speaking groups which had created diverse conglomerates into the Zulu Kingdom (Beinart, 2001).

The British won the second Anglo-Boer war but serious economic and psychological damages were made (Pretorius, 2011). Indeed, in order to isolate the Boer commandos, the British gathered their women and children and placed them in camps. Black people were also locked in these concentration camps to deprive the commandos of yet another means of getting to food producers, and to obtain black labour for the gold mines that had been re-opened by mid-1901 (*Ibid.*). In his classic History of South Africa, Walker states that 200 000 women and children died in these camps. Overall, the war served only to “*exacerbate Anglo-Boer dissension and, more strongly, to embitter the Boer community for generations to come*” (Anti-apartheid movement, 1974).

Despite its victory, the British Empire had been shaken by its efforts to force two small nations into submission (Pretorius, 2011) and quickly realized that it was of its best interest to create a unified country within its Empire; one which could support and defend itself. Indeed, although the Anglo-Boer war left deep scars, the British government was convinced that both white groups could collaborate to strengthen their control over the entire population (Anti-apartheid movement, 1974), being both opposed to racial equality. Therefore, British government first accepted limited self-government in the four colonies (Cape, Natal, Orange state and Transvaal). Thanks to good political relationships between British and Afrikaners, and the guarantee by the latter that British capitalists could have access to larger supply of black cheap labour for their gold-mining industry, British government encouraged negotiations between the white representatives of the four self-governing colonies. Together, they wrote a Constitution laying down the foundations for what was to happen next: the Apartheid. Indeed, according to the new Constitution, the Union of South Africa would be a unitary state in which political power would be won by a simple majority and in which parliament would be sovereign. The question

of voting rights for Blacks was left to the self-governing colonies: in Transvaal and Orange state, all blacks were denied the right to vote; in Cape and Natal, blacks could vote depending on property qualifications.

Within 8 years, the Union of South Africa came into being with the Boers once again ruling what they saw as their own country (Anti-apartheid movement, 1974). In May 1910, Louis Botha became the first prime minister of the newly established Union of South Africa, a dominion of the British Empire, and Jan Smuts became his deputy (Marais, 2011.). The new state was now free from British interference as the Imperial conference of 1926 describes dominions as *“autonomous Communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown, and freely associated as members of the British Commonwealth of Nations”*.

The new state owed its conception to centralizing and modernizing forces generated by mineral discoveries. Efficient administrative structures were created and the economic dominance of gold was ensured through the relationship between Afrikaner politicians and mining capitalists (Lowe *et al.*, 2018).

Within the years following the creation of the Union of South Africa, racial segregation was further developed and solidified through policies such as Land appropriation by whites in the Native Land Act of 1913 where the whites gave themselves 86% of the total land. By the end of the Second World War, Africans were demanding greater participation though an extension of the system of voting as well as the end of the pass system and the recognition of their trade unions. Those demands were minimal but enough to pose to the white electorate the question as to where South Africa went after the war. The answer of a new political party created in 1914, the Nationalist Party, was clear and simple: separate development or *apartheid* (Anti-apartheid movement, 1974).

The Nationalist Party won the elections in 1948. However, this victory meant something more to the Afrikaners: it was the victory of the Afrikaner nationalism nurtured in 200 years of fighting against Africans and the British for control of the land, and against the humiliations of feeling themselves to be poor whites in an industrializing economy (Anti-apartheid movement, 1974). The newly formed government immediately set about implementing a rigorously codified racist project. According to Marais (2011), race would become *“the definitive criterion for South Africans’ access to privilege and opportunity, further restricting the social and economic mobility of black South Africans through a battery of legislative, administrative and other coercive measures”*. The black South Africans suffered the most from those policies, being deprived of political rights and full citizenship as they were assigned to specific nations in “Homelands” on the 13% of land accredited to them (*Ibid.*).

The broad aims of the apartheid were; to ensure the continuation of white supremacy (while also controlling the pace and direction of African nationalism) and to guarantee the expansion and competitiveness of South African business (especially Afrikaners) thanks to a low-paid, docile and highly mobile reserve of black South African workers (Anti-apartheid movement, 1974).

5. Industrialization in South Africa

In this sub-section of “*Part II: South Africa, land of contrasts*”, the goal is to emphasize the importance of the process of industrialization in an economy’s growth and therefore to understand how South Africa’s past history and natural elements have helped in this context.

Comparing African countries is not an easy task as they differ in many aspects. However, if we focus on the criterion of industrialization, African countries are lagging behind their other developing nations counterparts: manufacturing output per person remains at a third of the average for all developing countries (Sow, 2016). Among sub-Saharan countries, many economists yet acknowledge that South Africa clearly stands out as the largest and most industrialized country of the region. As a matter of fact, this assertion can be justified by looking at the average share of manufacturing as a part of the Gross Domestic Product (See Appendix 9), standard measure of industrialization, and the structure of manufactured exports (See Appendix 10) (World Bank, 2018e; African Development Bank Group; 2018). The Indexes of Product and Economic complexity constitute good indicators as well and rank South Africa at the 63rd place (OECD, 2016). Despite being in a decline, the share of manufacturing as part of the GDP is higher than most of other African countries at approximately 13% of GDP and almost 50% of the manufactured export are considered medium or high technology.

African leaders have repeatedly emphasized the importance of industrialization for the African continent’s inclusive and resilient growth as “*it boosts productivity by introducing new technologies and techniques, generates employment, increases the skills of the workforce, support formalization of the economy, diffuses improvements into the wider economy and tends to underpin social stability*” (African development bank group, 2018). Indeed, there is consensus that industrialization plays a key role in the process of a nation’s economic development (Martorano *et al.*, 2017). As far as emerging economies are concerned, both the data and the existing empirical evidence seem indeed to support the industrialization-growth nexus (*Ibid.*). As a matter of fact, Rodrik (2007) emphasizes that episodes of growth acceleration are often associated with an increasing role of manufacturing in the economy. Industrialization is indeed important as more value will be created in the economy through the generation of activity further along value chains, from raw materials to finished products.

5.1. Colonialism in South Africa, a different story from the rest of the continent

Many argue that the discovery of diamonds and gold at the end of the nineteenth century is responsible for the rise of South Africa as the most industrialized sub-Saharan country (Ashman and Newman, 2013). In this paper, we do not disagree with the view that these discoveries can be considered as a catalyst to what were to follow. However, the argument made below presents another factor as being as important to South Africa's future development.

The presence of mineral wealth in South Africa is crucial as it not only funded the process of industrialization but also facilitated the shift towards an industrial economy; thanks notably to the high level of labourers needed in the mines which in turn accelerated urbanization (*Ibid.*). Likewise, the wealth provided by mining allowed for capital investments in industrialization. Overall, mineral wealth supported the creation of an economic environment that was conducive to industrial growth and modernization.

However, it must also be reminded that reserves of gold and diamonds mainly belonged to the British settlers who had fought for the control of those resources during the Anglo-Boer wars (See above, "*Colonial and Apartheid backgrounds*"). As the extension of European colonization took place during the Great Depression (1873-1895), protectionism was rising all over the globe (Bénichi, 2008). This means that for European governments, colonization was considered as means to access key raw materials for their national manufacturing industries and secure new outlets (Béaud, 1985). Since the main goal of the British was to exploit the mines, investment was restricted to infrastructures facilitating the extraction of the minerals and did not benefit the locals in the forms of investments in public services or other industries (Defraigne, 2017). Likewise, since their prime interest was to harvest the mines and bring the minerals back to England, the transport infrastructure was mostly developed to facilitate the transport of the minerals and personnel to their home country. This created a network clearly favouring extra-regional trade over intra-regional trade (Adedeji, 1984). This is still visible on the continent and constitutes a major barrier to regional integration projects (Englebert *et al.*, 2013).

South Africa's growth and industrialisation were triggered by the commercial development of its mineral resources. However, the view shared in the paper is that the emergence of Afrikaner nationalism contributed in greater part to build South Africa's own industry as well as to develop a secondary and tertiary industry. When the nationalist government took power in 1948, it set out protectionist industrial policies in order to support a transition into early stage manufacturing and build an industry for its own (Feinstein, 2005). For example, the South African government created the National Finance Corporation in 1949, mainly to promote interests in mining and invest in the South

African economy. Nattrass (1981) points out that the mining-oriented economy of South Africa could easily have been trapped in that phase of development if the control of foreign capital over the industry had not gradually been forced by strong local politics to invest part of its surpluses locally. It is only when the surpluses of the primary production are utilized locally that an economy can develop to the next stage of secondary industries (Nattrass, 1981). As Marais (2011) states: the exception of the South African industrialization after World War II occurred precisely because the nationalist white government wanted to gain more economic autonomy vis-à-vis Britain and distance itself from the division of labour of the imperial preference system prevailing in the Commonwealth in order to develop its own domestic industrial base.

As a result of mining development and consequent industrialization in South Africa, it also became economical to establish factories of all kind, along with banking and numerous other services. Financial services particularly developed, thanks to the rent of the mineral sector (Bhorat *et al.*, 2014). Investors indeed needed a central facility to access primary capital. Furthermore, as the apartheid regime was suffering from international sanctions, the financial sector developed fuelled by surpluses from the mining industry that were “trapped” as a result of these sanctions (Ashman and Newman, 2013). Apartheid-era isolation and protectionism will also lead to the creation of other industries – such as autos and electronics– which formed the roots of South Africa’s autos and white good industries (TIPS, 2016).

To conclude, the mining of diamonds and gold clearly helped engage the process of industrialization, but it is only after Afrikaner nationalism emerged that South Africa was able to develop its own industry. In the end, mining stimulated not only agriculture but also the secondary and tertiary sectors of the economy (Kane-Berman, 2017).

5.2. The external factors benefiting South Africa

Through the brief historic analysis of industrialization, it appears clear that “South African industrialization, unlike that of Britain and the United States, was driven by resource wealth and an abundance of labour, not technological innovation” (Ashman & Newman, 2013). Indeed, in addition to the factors cited above (colonialism and different industrial policies), external factors such as geography and topography also play an essential role in South Africa’s development.

5.2.1. Strategic position

South Africa is located at the southern tip of the African continent. This lack of centrality, whether it is for intra-African or extra-regional trade, keeps the country away from the main economic power centres. For instance, New York, London and Shanghai are all more than 10,000 kilometres away from South Africa. However, being at the southern tip of the continent also allows the country to possess shores on both the **Atlantic** and **Indian** Oceans. Since more than 80% of global trade in volume is done via maritime transport, South Africa's 3000 kilometres coastlines on both oceans is thus an unneglectable asset (UNCTAD, 2017). It can indeed easily be reached by cargo ships coming from the cores of the world economy, including Brazil (South America), China and India (Asia) (Draper and Scholvin, 2012). By looking at Appendix 11, the strategic trade position of South Africa can be observed by the density of the container ships movements. The fact of not being landlocked is therefore an important element in South Africa's development as it does not have to rely on bordering countries for international trade. This, of course, constitutes a major geographical advantage compared with several landlocked African countries.

South Africa's strategic localisation also played an important role in attracting European settlers as they were heading towards the East Indies. As a matter of fact, the Dutch considered Cape Town as a convenient fuelling station "en route" to the East Indies. Of course, the opening of the Canal Suez diminished this role as the route to Mumbai through the Canal Suez was reduced by some 8200 kilometres (from 19,800 km through South Africa to 11,600 through the Canal Suez). However, given the numerous times the Canal Suez was closed, the route through the Southern tip of Africa was still largely exploited (Suez Canal Authority, 2018). South Africa's strategic positioning on the route to India and its subsequent European colonization played an important role in building the transport infrastructures of South Africa. It is indeed to be mentioned that geographic and topographic settings are important but without human intervention and the right policy decisions, those might not be used to their full potential (Draper and Scholvin, 2012). Geography provides the setting but humans must see the potential in it and develop it.

Thanks to the development of transport infrastructures in South Africa, the country not only created strong global connections, it also acquires the status of "gateway to Africa", interlinking many of its neighbouring countries globally (*Ibid.*). For instance, if we look at maritime transport, South Africa is far more important than any other coastal country from Southern Africa. This can be observed in Appendix 12 in which the transport infrastructure in Southern Africa is depicted. Even Kenya (the most important economy of the East African Community) is not even close to South African dimensions of maritime transport in terms of container cargo handled. The Liner Shipping connectivity Index (LSCI) of the UNCTAD which gives an indication on the international connectivity of harbours, ranks South

Africa relatively high. This also hints at the fact that South African harbours often serve as hinge joints between other regional harbours and the rest of the world (UNCTAD, 2017).

As a matter of fact, non-South African harbours are much smaller and suffer from poor transport infrastructure (mainly roads) in their hinterland which is why they remain a second choice (Draper and Scholvin, 2012). Adversely, the World Bank's Logistics Performance Index (LPI) reveals that South Africa offers better conditions for transport than other regional countries. The report indeed indicates that South Africa plays on the same level as New Zealand and South Korea and Turkey in terms of logistics efficiency (World Bank, 2016c). Furthermore, data on the quality of roads confirms the LPI's assessment: 88% of South Africa's roads are in good condition (SADC's average is 47%). As far as the airlines are concerned, Appendix 13 shows the possibility of international flight connections. Once again, it proves that South Africa allows regional trade partners to connect globally (Draper and Scholvin, 2012).

However, good transport infrastructures are not sufficient to be considered as a gateway. In addition to have become a regional hub for transport, South Africa has also managed to position itself as a regional hub for services. Thanks to South Africa doing relatively well in terms of logistics, Johannesburg (and to a lesser extent, Cape Town) has become the key location for overseas companies that set up regional headquarters for their business in sub-Saharan Africa. Moreover, Johannesburg also serves as financial hub for regional markets, channelling overseas capital to the region. (*Ibid.*)

5.2.2 Topography, climate and geology

South Africa has a mean altitude of about 1,200 m and at least 40% of the surface is at higher elevation. A plateau covers indeed the largest part of the country, dominating the topography. The interior plateau is separated from the narrow coastal plains by the Great Escarpment (Lowe *et al.*, 2018). The Great Escarpment confines the continental interior and the features of the coasts in Southern Africa make it very difficult to connect the region to the World Markets. Coastal waters tend indeed to be shallow and because of alongshore drifts, there are few bays but many sandbars. South Africa benefits from steep cliffs which provide some bays suitable for harbours. For example, the port of Beira in Mozambique can only be accessed by larger cargo at high tide. This implies that a channel has to be dredged continuously. (Draper and Scholvin, 2012)

Another important point which favoured the economic development of South Africa is the climate. South Africa has a wider variety of climates than most of other sub-Saharan countries as it can be observed in Appendix 14. However, almost the entire country lies within the temperate zone, implying that extremes of heat and cold are rare. Furthermore, its climate is more similar to that of northern

latitudes (thus much colder) because of its surrounding waters and high elevation in the hinterland (Encyclopedia, 2018).

Temperatures are indeed more influenced by variations in elevation, terrain and ocean currents than latitudes (Benhin, 2006). The country is predominantly semi-arid, with the climate varying from desert and semi-desert in the dry North-western region to sub-humid and wet along the eastern coastal area (*Ibid.*). The average rainfall for the whole country is about 464 mm, much below the world average of 860mm. However, there is a wide regional variation in annual rainfall, the amount of precipitation gradually declining from East to West. In other words, 21% of the country receives less than 200 mm average annual rainfall whereas 31% gets more than 600 mm (CIA, 2018). To illustrate this, whereas the KwaZulu-Natal coast receives more than 1 000 mm annually, Alexander Bay on the West coast receives less than 50 mm (Lowe et. al, 2018). Prolonged droughts are thus a serious restriction on farming in such areas. This typical South African climate is important as agriculture is at the foundation of all economies in South Africa. The diverse agro-climatic zones allowed for huge diversity of agricultural production (Goldblatt, 2010).

Last but not least, the high age of the continental interior has resulted in abundance of mineral resources in South Africa as shown in Appendix 15 (Draper and Scholvin, 2012). Despite the huge quantities that have been extracted since the exploitation of the first mines some 150 years ago, South Africa's mineral deposits are still the richest in the world (if oil is not taken into account) according to a report of Citigroup in 2010 (Kane-Berman, 2017). With the world's largest reserves of manganese and platinum group metals (96% of the known world reserves) and among the largest reserves of gold (11%), diamonds, chromite ore and vanadium, Bloomberg estimated that South Africa's mineral wealth amounted to \$3.3 trillion in 2014 (Crowley and van Vuuren, 2014). Altogether, South Africa produces 53 different minerals from 1 700 mines and quarries. The country is also one of the world's largest coal miners. Furthermore, many scientists are convinced that there is considerable potential for the discovery of other world-class deposits in areas yet to be exhaustively explored (Draper and Scholvin, 2012). As explained in the first part on this sub-section (*"Colonialism in South Africa, a different story from the rest of the continent"*), mineral reserves in South Africa have played a big role in engendering the process of industrialization. As of today, the relative contribution of the mining sector to national output has shrunk to 8% of GDP but remains the backbone of the economy with mining accounting for about a third of South Africa's commodity exports.

6. Legacies of apartheid history on South Africa's current development

The purpose of this particular sub-section is to identify any “*path dependency*” that South Africa might be undertaking and which could explain some of the issues the economy is currently facing. The “*path dependency*” concept, in part popularized by the Nobel Prize-winning economic historian Douglas North, describes the way the patterns of the past tend to shape the future (North, 1990). According to political analyst Professor Friedman, South Africa is a great illustration of this theory as “the democratic breakthrough” of 1994 did not manage to change the strong patterns of the past (Hoeane, 2014). To conclude this sub-section, a final diagram will be drawn in order to summarize the analysis and highlight the key structural elements that will have significance importance in our risk analysis (*PART III*).

6.1 A poor, unequal and racist society

To describe South Africa's market today, the expression used by R. Sharma in its book *Breakout Nations* (2012) seems to be appropriate: “*South Africa is a developed market wrapped inside an emerging market [...] where economic justice remains a distant hope*”. As a matter of fact, the overall ratio of cars to people perfectly illustrates this assertion: at 109 per 1000 people, it is considered as quite high. However, this is only because most white families have two cars; the ratio being much lower in the black population. Black South Africans are indeed about as likely to own a car as Indians are, even though South Africa's average income level is five times higher than that in India (Sharma, 2012).

Perhaps one of the biggest and most visible legacy of the apartheid is that it has created a poor and unequal domestic market. Although the Colonial Government passed many discriminatory laws against the black South Africans, the Natives' Land Act (1913) certainly had the most far-reaching impact on the black South African society as it ensured that access to land and other resources depended upon a person's racial classification. The direct consequences of this legislation were: extreme pressure on the land, endemic overcrowding in the townships and poverty (Hall, 2014). The black South Africans, which constituted a majority of the population, were indeed dispossessed from all of their assets. Under the apartheid, wage levels, jobs, land and housing are all instruments used to ensure the capital ownership remains in white hands. As Appendix 16 illustrates, not only were black South Africans restricted to specific jobs, but they were also paid systematically less than other racial groups. Furthermore, access to finance was complex as black investment depended upon the government-controlled Bantu Investment Corporation (BIC), which made loans to Africans wishing to invest in the “homelands” or Bantustans (only). According to estimates, capital investment was extremely small (Anti-apartheid movement, 1974). The apartheid government further controlled the housing by constructing townships composed of single-room dormitories for migrant workers who had a permit

to work in the city but did not have permanent settlement rights (Hyatt, 2016). Those migrant workers were most of the time separated from their families and wives living in the Bantustans, possessed literally nothing and had no possibility for saving the little money they were making (*ibid.*).

Since the end of the apartheid, South Africa has seen a moderate reduction in poverty levels combined with a sharp rise in income inequality. Furthermore, persistent low growth has led to the stagnation of GDP per capita compared to other fast growing emerging market economies (See Appendix 17) (OECD, 2017a). Low growth and unemployment rates are indeed weighing on social progress. Thanks to the OECD Better life Index, we observe that low growth and high unemployment affect the South Africans well-being and that its score lags behind the OECD emerging markets average (See Appendix 18) (*ibid.*).

Although South Africa has made progress in reducing poverty since 1994, the trajectory of poverty reduction was reversed between 2011 and 2015, threatening to erode some of the gains made since 1994 (Sulla *et al.*, 2018). Progress has indeed been slowing in recent years due to structural challenges and weak global growth since the global financial crisis of 2008 (World Bank, 2018a). When applying the upper-bound poverty line (R992/ +/- \$75 per person per month (pppm) in 2015 prices), we observe that more than one out of every two South Africans were poor in 2015 (55.5%). This translates into over 30.4 million South Africans living in poverty. However, South Africans are still better off compared to the country's poverty situation from a decade earlier when it was estimated that 66.6% were living below the UBPL (Lehohla, 2017). If we consider the food poverty line (extreme poverty), approximately 13.8 million South Africans were living below the FPL in 2015 (*ibid.*). Furthermore, a survey conducted by Sulla *et al.* (2018) highlights that poverty is consistently highest among black South Africans, the less educated, the unemployed, female-headed households, large families, and children. As a matter of fact, although the average income of black households has increased by 169 percent in the last 10 years, the average white household still earns six times more than its black equivalent in 2015 (Grantcraft, 2015). The survey also demonstrates that poverty has a strong spatial dimension in South Africa (evidence of the enduring legacy of apartheid): poverty remains concentrated in previously disadvantaged areas, such as the former homelands (Sulla *et al.*, 2018).

Comparing to other emerging economies, poverty remains high with the top quintile earning 40 times more than the lowest, which is four times more than in Chile or Mexico (See Appendix 19) (OECD, 2017a). This comparison with Mexico and Chile points out to another striking reality: South Africa is one of the most unequal countries in the world. Inequality is high, persistent, and has increased since 1994, perpetuating exclusion (Sulla *et al.*, 2018). The Gini coefficient, introduced by Italian statistician Corrado Gini in 1921, has been used in a wide variety of resource allocation contexts to measure inequality including income, wealth, credit availability, health care, and energy (Berndt *et al.*, 2003).

Depending on the variable used to measure inequality, the time period, and the dataset, South Africa's Gini coefficient ranges from about 0.660 to 0.696. This would make South Africa one of the most consistently unequal countries in the world (Bhorat, 2015) (See Appendix 64 for comparison of Gini coefficient among selected economies). The population group with the highest level of inequality are black South Africans; adversely the white population has the lowest levels of income inequality. In addition, there is little difference between male and female inequality levels. In 2015, the Gini coefficient reached 0.69 based on income data meaning that the poorest 20% of the South African population consume less than 3% of total expenditure, while the wealthiest 20% consume 65% (World Bank, 2018a). Furthermore, one key omission in the measurement of inequality (and poverty) is that they are income-based. Hence, we do not account for non-income welfare among individuals and households. Access to public services such as energy and water together with a specific measurement of the accumulation of private assets are excluded from the standard measures of inequality and poverty (Bhorat, 2015).

The United Nations' Human Development Index (HDI) is one attempt at trying to incorporate some of these non-income dimensions into the measurement of welfare. It assesses progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. According to the United Nations Development Programme (2018), the HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. South Africa's HDI value for 2015 is 0.666 (on a scale from zero being the lowest to one being the highest) positioning the country at 119 out of 188 countries. Between 1990 and 2015, South Africa's HDI value only increased from 0.621 to 0.666, an increase of 7.3%. However, when the value of HDI is discounted for inequalities, it falls to 0.435, a loss of 34.7% due to inequality in the distribution of the HDI dimension indices (UNDP, 2016). This demonstrates once again that socio-economic development in South Africa is highly unequal, benefiting those that have always been at a structural advantage and condemning the majority of the historically marginalised to lives that are still far removed from the promise of material dignity contained in the Constitution (Gumede, 2011). Based on the same principles as the Human Development Index, the World Economic Forum introduced the Inclusive Development Index. The IDI is designed as an alternative or complementary index to GDP, measuring the level and rate of improvement in shared socioeconomic progress. The framework identifies 15 areas of structural economic policy and institutional strength that have the potential to contribute simultaneously to higher growth and wider social participation in the process and benefits of such growth (See Appendix 20). Out of the 103 ranked economies, South Africa is classified 69th; being particularly penalized by its unemployment, health, and inequality levels (World Economic Forum, 2018).

Another important legacy of apartheid is racist discrimination. However, as D. Welsh (2009) reminds us, racial segregation does not find its root in the apartheid system in 1948. It had indeed been present since decades. As a matter of fact, Governor van Riebeeck had ordered that a fence be built between blacks and whites in Cape Town in 1659. The NP's policies did not represent a rupture in the country's historical narrative. They certainly intensified levels of oppression and dispossession, but proceeded along paths staked out over the preceding half-century (Marais, 2011). Although there are now laws in place targeting racism, it is still seen as a post-apartheid obstacle. According to the National Association of Democratic Lawyers, *"racism in the current context has a different meaning to what it was during apartheid; and although the context is different the notion of non-racial activist is still the same as it was in the old days"* (Dano, 2016). In other words, laws regarding racism have changed but the attitudes and thinking of the people have not changed that much (Harris, 2016). The Dean of the faculty of law at the University of Cape Town, P. Andrews, claims that people still unconsciously responded to different races the same way they did under apartheid (Dano, 2016). Still according to P. Andrews, it is the economic inequality and the poor governance that increase the racism issue. However, according to Sulla *et al.* (2018), the role of skills and labor market factors have grown in importance in explaining poverty and inequality while the role of gender and race, though still important, has declined. This presents an opportunity for policy to influence poverty and inequality outcomes.

Another poverty/inequality related apartheid legacy is the welfare state that the government has put in place afterwards. As mentioned above, under apartheid, most South Africans were denied access to certain financial services including credit, through either direct policies or systemic barriers. At the end of the apartheid system, there was a desperate need to reform the social system and the barriers to financial inclusion. To do so, the government created a welfare state by making credit accessible for most of the population and redistribute money to the poorer through the means of social transfers. The consequences are severe as South Africans are still deeply indebted (despite a slightly improved household debt to household income ratio) and rely more and more on those social transfers to survive (Ferreira, 2017).

South Africa's social assistance system is, as of now, one of the government's most direct means of combating poverty. The South African government is indeed keenly aware of the political and ideological value of social protection schemes for *"repairing state legitimacy and fostering political consent"* (Marais, 2011). With total expenditure on social protection (mainly linked to the provision of social grants) of R178.3 billion (\$13.4 billion) during the 2017 financial year (projected to increase to R207.8 billion (\$15.6 billion at current exchange rates) by 2019/20), the South African social assistance system is among the largest in Africa (ILO, 2017).

Total social protection expenditures amounted to 16% of government spending in 2016 or about 5% of total South African GDP (given a low government spending as a share of the GDP at 35%)(National Treasury, 2018). It is to be noted that, as shown in Appendix 65, the expenditure for the support of old people will become the fastest area of spending within the social protection system. This will be further developed in the part considering the socio-political analysis. Those numbers are yet relatively low compared to developed countries standards, with average social protection expenditure representing about 20% of GDP in European countries (social protection accounting for more than 40% of all government expenditures) (Eurostat, 2018). However, they are still important since they represented the main source of household income for the bottom three quintiles as well as a sizeable share of household income for the fourth quintile in 2014 (See Appendix 22) (OECD, 2017).

Given low growth perspectives in the coming years and limited fiscal space for further expansion of the social assistance system, prospects of eliminating poverty by 2030 as envisaged in the National Development Plan remain poor. Looking ahead, accelerating poverty and inequality reduction will require a combination of policies that seek to unlock the full potential of labor markets and promote inclusive growth through skilled job creation (Sulla *et al.*, 2018). As Sharma (2012) explains, South Africa is the only major country with more people receiving social grants than holding down jobs. Soon, South Africa will spend more on welfare than on education—or, put another way, more on cushioning citizens from joblessness than preparing them for jobs.

Another area lacking significant progress and suffering from the legacy of the apartheid system is health. The health and well-being of most South Africans remain *“plagued by a relentless burden of infectious and noncommunicable diseases, persisting social disparities, and inadequate human resources to provide care for a growing population with a rising tide of refugees and economic migrants”* (Mayosi *et al.*, 2014).

When extreme poverty affects a large proportion of the population (as it is the case in South Africa), health is predominantly affected by a lack of access to the basic requirements for life. If South Africa’s health-status indicators are far worse than those of most other middle-income countries (McIntyre *et al.*, 2007), it reflects legacies of poor nutrition, unhealthy working and living conditions and perfunctory or inaccessible healthcare (Marais, 2011). Indeed, many placed much emphasis on legislation and biomedicine as the dominant routes to improved health, without consideration of the social determinants of health. Appropriate responses to South African health care challenges would be to address the social determinants of health (which lie outside the health system) as a national priority, strengthen the health care system, and facilitate universal coverage for health care. Efforts to achieve sustainable improvements in health with limited resources and much reduced prospects for economic

growth call for improved health care management and governance and widespread shifts in attitude to “doing better with less.” (Mayosi *et al.*, 2014)

According to the South African Constitution’s Bill of Rights, everyone has the right to have access to health care services (Bonorchis *et al.*, 2017). However, the healthcare sector in South Africa mirrors the deep inequalities of the country as well as the heritages of the past (Paradath *et al.*, 2017). Under the apartheid, health sector structure had been designed to fit the apartheid mould. The health system had been segmented along several lines: racial, geographic, public/private and curative/ preventive (Marais, 2011). Today, the healthcare system is more resolutely split: annual per capita expenditure on health can vary between \$1400 in the private sector and \$140 in the public sector, and disparities in the provision of healthcare continue to widen (Mayosi *et al.*, 2014). Indeed, approximately 84% of the national population is uninsured and relies thus on the national public health sector which is staffed by only 30% of the doctors in the country. The country’s poorest people have access to free services and medicines at about 4,200 public clinics, but these facilities have been badly managed resulting in broken equipment and medicine shortages (Bonorchis *et al.*, 2017). On the other hand, about 8 million of South Africans have a private health insurance providing them with access to health care from the remaining 70% of doctors working full-time (Mayosi *et al.*, 2014). Furthermore, in recent years, permission for senior full-time staff in the public sector to spend a limited proportion of their time working in the private sector has diluted their public-service activities (*Ibid.*). In addition, with increasing urbanization, the issue of migration (in all forms) of health personnel has become a critical factor in the debate about social justice in health, especially access and equity in the provision of health services (Mahlathi *et al.*, 2015). Doctors leaving South Africa’s public sector mention the poor working conditions as the biggest reason for their departure (Bonorchis *et al.*, 2017). As a result, South Africa’s doctor-patient ratio is 0.8 per 1000, lower than Brazil, Russia, India and China, Egypt and Mexico (*Ibid.*). Besides lowering the number of available doctors even further, those South African doctors leaving the country constitute a huge loss on investment for South Africa.

In order to cover all its citizens, the government proposed the National Health Insurance plan in 2009. The National Health Insurance (NHI) is a “*financing system that will make sure that all citizens of South Africa (and legal long-term residents) are provided with essential healthcare, regardless of their employment status and ability to make a direct monetary contribution to the NHI Fund*” (Health Department, 2018). The government would be buying services from public and private providers for the country’s almost 55 million people. The cost is forecast to be \$20 billion when it is due to start in 2026 with the money coming from higher taxes and the fusion of government-linked medical-insurance plans which will be folded into an NHI Fund (Bonorchis *et al.*, 2017). However, as miraculous as the NHI solution looks like, it seems like change will not happen anytime soon. In order to make all

the legislative changes required to enable the plan, South Africa will need to add at least 10 years to the agenda. Although the introduction of National Health Insurance still dominates the health policy space in South Africa, there is little evidence of legislative action in this regard since the comment period on the White Paper ended in 2016 (Paradath *et al.*, 2017). Furthermore, the NHI plan is lacking precise details concerning its effective implementation: it says the current needs to be reorganized but it does not outline how it will better distribute the nation's doctors or train new ones. The same is true on how to overcome shortages and poor administration. At the same time, the ANC is fading in popularity and the economy may worsen. However, without funding and political will, the NHI might not be implemented under its current form (Bonorchis *et al.*, 2017).

According to Mayosi *et al.* (2014), health-related challenges overwhelm the country, in particular HIV and AIDS. Indeed, with 0.7% of the world's population, South Africa accounts for 17% of the global burden of Human Immunodeficiency Virus (HIV) infection. After much governmental debate and denial about the funding of HIV and AIDS, local and international pressure resulted in the government introducing an ambitious program to provide antiretroviral therapy (ART) to all patients with HIV infection. Today, 2 million HIV-positive South Africans out of 6 million receive ART. Prevention is widely accepted as the most cost-effective strategy to curtail the epidemic, yet only 11% (\$695 million in U.S. dollars) of the planned expenditure on HIV from 2011 to 2016 is allocated to prevention. Consequently, driven by the spread of HIV infection, South Africa has also one of the worst tuberculosis epidemics in the world (*Ibid.*).

6.2. A malfunctioning labour market

When the newly elected government settled its 1996 structural adjustment plan (the Growth, Employment and Redistribution policy or GEAR), economic growth and job creation did not turn out to be what the government had expected. Between 1970 and 1995, South Africa's labour force grew by almost four million people while only one more million employment opportunities were created (Terreblanche, 2002). After that, this trend continued for much of the first post-apartheid decade, causing consternation in the government (Marais, 2011). More jobs were being created after 2003, but the average wage was declining (Mohamed & Roberts, 2007). On average, official unemployment rates have hardly fluctuated since the ANC was elected, stagnating around 25%. Furthermore, it is to be noted that lots of the variations occurring in the official unemployment rates over the past decade had more to do with an alteration of survey methodologies and the definitions of employment than progress in any kind (Marais, 2011).

Indeed, critical perspective is needed when it comes to analysing official unemployment rates. In fact, official rate does not take into account as “unemployed” anyone who has not taken active steps to find work in the four weeks prior to being surveyed. Likewise, those persons who report earning an income from hunting, begging or growing their own food are considered as “employed” (Marais, 2011). By looking at the official unemployment rates during the recession, the misleading nature of the official definition is even more noticeable. Unemployment was still being considered as relatively stable at 23.6% in the second quarter of 2009, compared to 23.5% in the first quarter (Statistics SA, 2009). However, the number of people described as not economically active rose by nearly 419 000 people in 3 months (three quarter of them being too desperate to even keep searching for jobs). Therefore, by the end of the year, the expanded (that is, the actual one) unemployment rate stood at 34.2% (Marais, 2011).

According to the latest Quarterly Labour Force Survey, the official unemployment rate in Q1 2018 has remained unchanged since the end of 2017 at 26.7%. Yet, the official unemployment rate increased in 7 of the 9 provinces and it only decreased in two of them (See Appendix 23). The expanded unemployment rate increased by 0.4 of a percentage point to 36.7% in Q1 2018 (Statistics SA, 2018b). These percentages indicate that out of the 37.7 million people of working age in South Africa (15-64 years old), 16.4 million are actually employed and 6 million are unemployed. Those two groups constitute the labour force. The 15.3 million people left are considered as not economically active and include 2.8 million of discouraged work seekers (See Appendix 24) (*Ibid.*). Those numbers are even more alarming as international standards set out the average unemployment rate for middle-income countries (between US\$ 1,026 and US\$ 12,475) between 5 and 10% (Marais, 2011).

As represented in Appendix 25, the official unemployment rate increased practically every year since the global financial crisis of 2008 (The World Bank, 2017a). Furthermore, it seems like unemployment is a scourge affecting more particularly some groups of the society. According to the World Bank (2018d), among young people the number of unemployed is even higher, reaching almost 50%. Besides, according to a study conducted by the IMF (2016), women have lower job finding rates compared to men (Anand *et al.*, 2016). Race plays also an important role and remains a significant indicator of income level in South Africa. According to DA leader, Mmusi Maimane, “*the reality is that unemployment among black South Africans stands at 39% compared to 8.3% among whites*” (BusinessTech, 2015). Furthermore, it has been proven that prior work-experience (even more important for young job seekers) plays an important role in determining the employability of individuals with education playing a minor role (potentially due to poor quality) (Anand *et al.*, 2016).

6.2.1. Former educational system as an explanation

This skewed repartition of unemployment (youth and black South Africans) can be seen as a direct consequence of the apartheid system of education. Indeed, under the apartheid, the government established a different system of Bantu education. It was thought that each culture should develop depending on its own capacity development; black South Africans were deemed to be destined primarily for manual labor undertone that an advanced education was not appropriate or useful for them (Welsh, 2009). The principles governing the education policy of the government were formally pronounced by the former Prime Minister, Dr. Verwoerd, in Parliament in 1953: *“Native education should be controlled in such a way that it should be in accord with the policy of the State [...] If the Native in South Africa today is being taught to expect that he will live his adult life under a policy of equal rights, he is making a big mistake.”*

By looking at Appendix 26, a cluster of black South African labour in mining, construction and retail trade can indeed be observed. On the contrary, there is a particularly low black South African representation in Finance, which is understandable regarding the small percentage of the African population being enrolled at school (Appendix 27) (Anti-apartheid movement, 1974). Furthermore, as previously mentioned, black South Africans were also limited by custom and sometimes by law to lower grades of employment, certain jobs being reserved for specified races (Anti-apartheid movement, 1974). There was thus no other means than education to acquire “knowledge”.

Therefore, brain drain occurred during apartheid and is still a phenomenon that can be observed today as a result of poor employment prospects and high entrepreneurial barriers (further discussed in “*PART III: Risk Analysis of South Africa*”) (Statistics South Africa, 2011; Tati, 2008). In addition, the General Assembly in 1969 requested all States *“to discourage the flow of immigrants, particularly skilled and technical personnel, to South Africa”* (Anti-apartheid movement, 1974); further limiting the formation of social capital in the country.

During apartheid, the type and quality of education provided to black South Africans, in particular, was both limited and limiting (Marais, 2011). Today, education is more widely available, but the quality of schooling is poor and the level and variety of skills being taught has not improved significantly (*Ibid.*). According to Freund (2007:174), the education bureaucracy is “spectacularly inefficient by comparative standards”. As a matter of fact, the Progress in International Reading Literacy Study (Howie *et al.*, 2016) found out that 78% of South African Grade 4 students (equivalent to 10 years old) are unable to read. Comparing with the rest of the world, in America for example, this number is only 4%. Furthermore, the report shows that, while there was a significant improvement from 2006 to 2011, things stagnated over the last 5 years with no real improvement. The trend is also applicable to

Mathematics and Sciences: the latest Trends in International Mathematics and Science Study (TIMSS), a quadrennial test sat by 580,000 pupils in 57 countries, had South Africa at or near the bottom of its various rankings with South African children being behind those in poorer parts of the continent (The Economist, 2017). Dropout rates are also a problem with only 37% of children starting school going on to pass the matriculation exam (Grade 12, 18 years old) and just 4% earning a degree (*Ibid.*). Many children experience indeed a broken journey through school, interrupted by irregular attendance, absent teachers, teenage pregnancy and school-related abuse and violence (UNICEF South Africa, 2018).

Not only are overall education performances poor, but the prospects of receiving a good-quality education are distributed along highly discriminatory class and racial lines (Marais, 2011). According to Lemon (2004), the new “system offer neither equality of opportunity nor significant redress to compensate for the injustices of apartheid education”. Inequalities are indeed being reproduced. The post-apartheid government replaced a school system segregated by race with one divided by wealth. Schools in poorer areas receive more state funding but schools in richer areas can charge fees on top (The Economist, 2017). As shown in Appendix 21, the states that receive the biggest share of government spending in education are also the ones that have the smaller real expenditure per student (UNICEF, 2017). For instance, the Northern Cape exceeds the national average of R16,500 per student by more than R2,600 while the poorest province of Eastern Cape spends R1000 less than this national average (basic education) (*Ibid.*). Great effort has gone toward building an integrated new system that, officially, is now racially integrated. Each learner has the right to attend a school of choice. In reality, however, a small minority of the schools are integrated in any meaningful sense of the word (Marais, 2011).

South Africa spends a bigger share of its GDP on education than any other country in Africa (UNICEF South Africa, 2018). According to the National Treasury (2018), more than half of government spending will be allocated to basic education, community development, health and social protection over the next three years. Public spending on education is thus around 6.5% of GDP in South Africa (4.7% of GDP is for basic education and only 1.8% for higher education), compared to 4.8% being the average share in EU countries (The Economist, 2017). A “No-Fee Schools” policy has abolished school fees in the poorest primary and secondary schools across the country, helping to attract poor, orphaned, disabled and vulnerable children to school. On average, 65% of South Africa’s school pupils (primary and secondary) did not pay fees in 2016; fees being paid at about 5000 of the 25 000 schools in the country (UNICEF South Africa, 2018). However, there is maybe more important than money: the lack of accountability and the quality of most teachers. Central to both failures is the South African Democratic Teachers Union (SADTU), which is allied to the ruling ANC. In a report published in May

2016 by a team led by John Volmink, the role of SADTU was analysed and the results found widespread corruption and abuse. This included teachers paying union officials for plum jobs, and female teachers being told they would be given jobs only in exchange for sex. In a study in 2007, maths teachers of 11 and 12 year olds were asked to take the similar tests as the one they were giving to their class; with 79% of teachers scoring below the level expected of the pupils, an average 14-year-old student in Singapore would have done better (The Economist, 2017). Widespread improvement in quality of education will require loosening the grip of SADTU.

The government also acknowledges the importance of tertiary education as a means of boosting employment and thus unlocking higher growth. This includes an allocation of R57 billion (US\$ 4.3 billion at current exchange rate) for fee-free higher education and training for poor and working class students over the medium term, as announced in December 2017 (National Treasury, 2018). Post-school education and training and debt-service costs are indeed the fastest-growing areas of spending. However, given the limited government resources, the country needs to design a sustainable financing scheme for higher education.

Currently, the National Student Financial Aid Scheme (NSFAS) is the main instrument for providing financial assistance to poor students through means-tested loans (OECD, 2017a). For 2018, the government will establish a new fund (the Ikusasa Student Financial Aid Programme) intended to replace the NSFAS (DHET, 2016). It will be close to the current scheme but with greater coverage of students from the middle class (DHET, 2013; DHET, 2016). The government has already increased its financing of higher education but the financing sources of the new scheme remain uncertain as it relies partially on private donations and bank participation (OECD, 2017a).

However, access to finance is not the only reason for the limited take-up of higher education. Poor performance of primary and secondary schools are the main reasons for the limited access to higher education with only about 40% of initial students graduating from secondary school (DHET, 2016). Perhaps the biggest challenge is to fix the basic education system and, further, to expand post-school training opportunities in colleges and universities (Bhorat *et al.*, 2014).

6.2.2. Trade unions and industrialization as another explanation

During apartheid, black South Africans did not have access to trade unions to protect themselves and strikes were made illegal. Therefore, most of them were working in poor conditions and had no job security as they were totally dependent on their employers; the ones giving them the “pass” they needed to be allowed to travel to the city and live in the townships. Progressively, black South African workers started to organize to protest, and quickly trade unions formed and took the lead. Those trade unions will ultimately play a significant role in shaping the future political landscape

of South Africa (Webster, 2017). This is one of the reasons why South Africa's trade unions are unusually well represented in the workplace today compared with other middle-income countries: about 33% of male and 27% of female workers belonged to trade unions in 2006 (Casale & Posel, 2009). However, despite their fundamental role in saving the country from apartheid, trade unions are now being pushed into retreat and we question the extent of their participation in exacerbating (and thus not solving, as they assert) the situation of unemployment in South Africa. Firstly, we will analyse South Africa's largest federation of trade unions (COSATU) and its link with the ANC. Secondly, we will consider the structure of the economy as another explanation to unemployment.

Because of high involvement of trade unions within the fight against apartheid and the subsequent tripartite alliance that followed (ANC, COSATU and South African Communist party), the social accord created at the end of apartheid (what Nattrass and Seekings (2015) call the "*post-apartheid distributional regime*") saw trade unions became part of this deal. From this moment, and by choosing to secure gains for their own members; they entered a compromise that has perpetuated unemployment. Indeed, as further explained in the next section, within this new "*post-apartheid distributional regime*", it became clear that the most of the economic power would stay to those who have always been at an advantage. The ANC thus used its close ties with the trade unions to ensure and enlarge a base of support, implementing a clientelist system by offering specific positions and work conditions to trade unions' members. It looks indeed like trade unions have become "*insiders*" of the very system they first criticized, poverty and thus corruption being some of the reasons. However, by becoming "*insiders*", they have contributed to shutting doors on "*outsiders*": the organised labour, or the working people with skills, has received economic benefit at the expense of the poor and unemployed ("*outsider*"). Much of COSATU analysis and rhetoric argues that the wage struggles of the employed are where the battle for the redistribution of wealth is fought; the poor and marginalized who are not part of this equation should be looked after by the state, it is asserted (Hassen, 2011).

Some also argue that the victory of democratisation have turned trade unions from activist organisation into more bureaucratic organisations, unable to cope with labour market changes such as the segmentation between workers in permanent positions and a peripheral workforce made up of workers in precarious forms of employment (Paton, 2011). The view shared in this paper is that trade unions representing mainly full-time workers (in *regular employment*), entrench their advantaged position and in doing so, replicate an economic system characterized by high inequality and unemployment (Webster, 2017).

Observers claim that this has allowed for the emergence of a "structurally divided working class" in which workers are "locked in a competitive battle for survival against each other" (Appolis, 2006).

Tension is thus rising between the growing ranks of the unemployed and those who have secured protected union jobs, called the “Black Diamonds” (emerging black middle-class) (Sharma, 2012).

However, as previously announced, this paper emphasizes a nuanced view while analysing the issue of unemployment, the reasons being also deep and historical. They cannot be attributed to any one cause or the actions of any one social actor.

Researchers tend indeed to point to a cluster of factors to explain South Africa’s issue of unemployment, such as: low rates of economic growth, restructuring of production in an increasingly globalised economy, skills shortages, a misshapen manufacturing sector, the increased entry of women into the labour market and population growth (Marais, 2011). However, the argument made in this paper is that the unemployment situation in South Africa also has historical and structural roots. Indeed, according to Rodrik (2007), the deeper cause of South Africa low growth and high unemployment is the result of the shrinkage of the non-mineral tradable sector since the early-1990s; particularly, the weakness of export-oriented manufacturing. Other analyses from the National Planning Commission (NCP), the National Treasury, the International Panel on Growth (“*the Harvard Group*”) and the OECD all outlined a similar picture while describing South Africa’s economic and unemployment weaknesses. South Africa’s colonial economy was shaped by the extraction of minerals and the development of agriculture, which produced large volumes of cheap, black labour to work in the mines and farms. The apartheid’s education system (as explained in the previous section) supported that trend of low-skilled black workers. However, while the country’s development path created masses of low-skilled labour, employment opportunities for this group began to decline from the 1980s. Furthermore, the loss of jobs in mining and agriculture was not compensated for by the growth of manufacturing, which during apartheid was highly protected and capital intensive (not labour intensive). Employment in manufacturing actually declined by 21% between 1982 and 2004 (Paton, 2011). If we compare South Africa with Malaysia (two countries that shared lots of common features in 1980s), the main difference lies in the fact that Malaysia was able to pull an increasing share of its workforce into manufacturing (the sector with the highest labour productivity in the economy) while in South Africa manufacturing lost ground to the tertiary sector, requiring highly-skilled workers. It is thus the relative shrinkage of manufacturing (along with economy-wide skill upgrading) has entailed a collapse in demand for relatively unskilled workers (Rodrik, 2007).

If we follow this reasoning, it would mean that a possible *short-term* solution to the unemployment issue in South Africa would be to encourage the growth of industries as well as firms that can employ large numbers of people with relatively low skills (manufacturing sector). This also means, acknowledging to lower wages as the production costs need to be lower for export competitiveness of

the goods produced. However, even if the manufacturing wages are high by developing country standards (NPC notes that South Africa's hourly manufacturing wage is five times that of Sri Lanka, Philippines, China and India as well as three times that of Russia, Brazil, Turkey and Hungary), the average wage of an unskilled worker (covered by bargaining council agreement) is below what is estimated to be necessary to provide nutrition and other basic needs. Therefore, the role of the government in providing access to quality public services is important to sustain a theory of lower wage as a solution to unemployment (Hassen, 2011). Several mechanics such as wage subsidies for youth could prevent the workers from becoming poorer but they first need to be accepted by the government and COSATU. This solution in particular would be advantageous for another reason. Because of union power and collective bargaining, entry-level wages are particularly high and problematic (62% of the average formal sector wage while within the OECD it amounts to 37%). Since workers with or without experience cost about the same to employers, the youth is systematically put at a disadvantage, the employer opting for the experienced worker (and at risk of a lifetime unemployment). (Paton, 2011)

South Africa's high unemployment rate is one of the several structural challenges its economy is facing. According to Marais (2011), access to paid employment is the single most important factor affecting poverty status in South Africa. It is obviously one key to solve the poverty issue but it is certainly not the only one. This assertion makes sense when observing the vast numbers of *workers* earning low wages and doing so on such insecure terms that *in fine* their "job" does not protect them against poverty (Marais, 2011). In this paper, we believe that the main reason for South Africa's extraordinarily high unemployment levels lies in the underlying structure of the economy, which remains centred on minerals, energy and large capital-intensive ventures (Webster & Bezuidenhout, 2005). However, the role of trade unions is also evident and we are of the opinion that they prevent any improvement from happening. For instance, a proposed minimum wage was introduced in 2018 in order to reduce inequalities and "in-work poverty". Fears are that the adjustment to the higher minimum wage might be complicated mainly because of the labour market inflexibilities as well as the weak skills matching (Donishi, 2017). Tackling the issue of unemployment requires participation and efforts from businesses, government and trade unions. Trade Unions particularly should be ready to engage rather than object any new policies for abstract ideological and political reasons.

6.3. A ruling ANC since the end of the apartheid and corruption

South Africa is a real democracy with a progressive constitution, an independent judiciary and free media (See further analysis in *Part III: South Africa Risk analysis*). In spite of the dominance of a single party, the African National Congress (ANC), there is no censorship, no vote rigging and no suppression of debate in the Parliament or press (Sharma, 2012). According to the Economist Intelligence Unit's Democracy Index, South Africa is ranked as a "*flawed democracy*", along with countries such as the United States, Italy, France or Spain (See Appendix 28) (The Economist Intelligence Unit, 2017).

During the last elections of 2014, the ANC won for the fifth time since the end of the apartheid in 1994 with 62.2% share of the vote, down from the 65.9% it won in the 2009 elections, according to the National Election Commission (Smith, 2014). For a very long time, there was no real opposition to the ANC. However, in 2014 the leading opposition party, the Democratic Alliance, had achieved its best ever result, topping 4 million votes. Often criticised as white dominated and redolent of the apartheid era, the party said it gained 1.1 million new voters, including 700,000 votes from black South Africans (*Ibid.*). In August 2016, the country held the most competitive Local Government Election since 1994 in which the ANC lost majority support in four of the metropolitan cities. Political parties thus negotiated coalition deals that saw the ANC unseated in the cities of Johannesburg, Pretoria and Nelson Mandela Bay (World Bank, 2018a).

The resilience of the ANC government, despite the numerous scandals of corruption among its leaders, is probably due to immense gratefulness of the black community for overcoming the apartheid. Therefore, it may take another generation to adopt a critical view of ANC leadership or the departure of some of its strongest leaders. A similar situation occurred in postcolonial India where the Congress Party led the fight for independence and used that victory to remain in power for almost 30 years, bringing no economic gain to the country (Sharma, 2012). Leaders such as Zuma clearly benefited from the South African political culture being very much leader-focused. This leader-focused political culture can be easily understood as black South Africans suffered from political exclusion during apartheid. Once they began to be heard, thanks to leaders like Nelson Mandela, those people became the heroes that would save them and talk on their behalf.

However, the recent experience of democracy means that it is also probably naïve. Many saw the resignation of Zuma, and thus in turn, the election of Cyril Ramaphosa as a chance to create a new political dawn (The Economist Intelligence Unit, 2018a). However, there many reasons to doubt the capabilities of Ramaphosa in transforming the political and economic landscape, starting with the

eradication of the biggest scourge among the South African government: corruption. The main reasoning is that corruption is anchored in South Africa's history.

In South Africa, society's confidence in transparency, accountability and fairness has plummeted, in large part because of ongoing and widespread "state capture" (Kingston, 2018). In the World Economic Forum's Global Competitiveness Report 2017-2018, South Africa dropped 14 places to 61st, with company executives ranking corruption as the most problematic factor for doing business. Furthermore, 83% of South Africans have seen corruption getting worse over the last few years - the highest rate of any country in Africa (*Ibid.*). In the generation since apartheid ended in 1994, tens of billions of dollars in public funds, intended to develop the economy as well as improve the lives of black South Africans, have been siphoned off by leaders of the ANC, the very organization that had promised them a new, equal and just nation (Onishi *et al.*, 2018). Corruption has enriched ANC leaders and their business allies — black and white South Africans, as well as foreigners.

Schemes of corruption can be identified very early in time, back when the Boers lost the second "Anglo-Boer" war in 1902. The latter managed to reach an arranged settlement with the British (they formed the Union of South Africa in 1910) thanks to close ties between Afrikaners political leaders and gold-mining capitalists (British). Corruption then continued to evolve and to spread across the future South African governments, starting with the Mandela government. Despite his ethos of ethical leadership and clean governance (Kingston, 2018), Mandela and other top leaders of the ANC who had nothing else than savings, received some gifts in the form of houses, vehicles and money from white business leaders (many considered already those as bribes). Other few influential figures, such as the now president Ramaphosa, gathered extraordinary fortunes. They were indeed allowed to buy shares of white-owned companies on very generous terms and invited to sit on corporate boards. They were the conduits between the ANC and the clearly white-dominated business world. The other ANC leaders, who were left out of that bargain, found another way to wealth: lucrative government contracts. Corruption began thus to flower under his administration, particularly in the infamous arms deal of 1999 (Johnson, 2018). Under Mbeki, corruption became structural as part of the vast ANC patronage network. Even when cadres were found stealing, no one was punished (Onishi *et al.*, 2018). Finally, there was the scandal-plagued President Jacob Zuma, under whom a corrupt mafia took over the entire state. His close ties with the Gupta family, once the most powerful family in the country, outraged voters. The deal with the Gupta family was simple: while working with fraudulent (whom they had previously appointed), they made sure members or close friends of the family were appointed on the boards of all the state-owned enterprises who then redirected contracts to Gupta companies. Zuma would of course report to them after every cabinet meeting and in return, they would redirect money

towards the Zuma Family (Johnson, 2018). The three Gupta brothers, along with one of Zuma's son, Duduzane, are now fugitives from justice. They may have stolen as much as \$5 billion or even more.

Endless scandals have also raised concerns about the complicity of major Western companies. Multiple investigations now analyse to which extent they may have played a role in enabling corruption and weakening the country's institutions. For example, a South African court has frozen the \$83 million McKinsey was paid for a contract involving a state-owned utility and the firm says it will return the fee. Likewise, KPMG is also under great scrutiny for its work for the national revenue service in 2015. KPMG already offered to pay back its consulting fees as well (Onishi *et al.*, 2018).

Many recognize also the deep roots of corruption as a fundamental flaw in South Africa's transition from white rule to democracy a generation ago. Mandela was seen as a visionary peacemaker but many still consider today that the deal back then was reached on "*Pyrrhic*" terms: the black majority was allowed to control politics, but much of the country's economic resources, including land, has remained in the hands of white South Africans and a small group of other elites (*Ibid.*).

Cyril Ramaphosa proudly claimed that fighting corruption would be his top priority as the new President of South Africa. In addition to the path dependency that has been described above, there are further reasons to doubt his words. Firstly, he is a veteran ANC insider. Having been appointed party leader by a narrow margin, he has tried to keep together an already fractured ANC by moving prudently: the new cabinet now gathers some well-respected officials but also allies previously accused of corruption (Onishi *et al.*, 2018). Secondly, Ramaphosa is committed to his corporatist path. For several years now, the biggest global organizations such as the IMF, the World Bank and the OECD have all agreed that South Africa needed some serious structural reforms: for the education system which is the weakest in Africa, for its labour market which currently works to the advantage of a few privileged, for its public service which needs to be reduced in effective number of personnel and wage and finally for the SOEs which have been mismanaged by corrupt leaders for years. The big problem here is that reforms in each of the previously cited cases necessitate confrontations with trade unions, which are part of the ANC's alliance (Johnson, 2018). Instead of jeopardizing its alliance with the trade unions, the government promises to bring down the budget deficit. It appears to be complicated to implement the necessary structural reforms through consensus-seeking corporatism. Ramaphosa wants indeed to re-industrialize South Africa by forging a social pact between labour and industry. However, if he succeeds, a democratic developmental state might emerge as Mauritius did in early 1970s and Ireland in 1980s. Last but not least, agreeing to structural reforms means also admitting that the trajectory of the ANC government since 1994 was wrong (*Ibid.*).

Ramaphosa is undoubtedly a great improvement on Zuma but he seems committed to the same failed ANC policies. In fact, he wants to stop corruption and the stealing in SOEs but also assumes that these will remain state-owned. However, it is true that confidence, both by business and the citizenry, in a competent and capable state are essential and prerequisite ingredients for creating an environment that is not only conducive to investment, but that can enable people to fulfil their economic potential (Kingston, 2018).

Government is currently strengthening its efforts to eradicate corruption and to ensure good governance throughout the public sector. In recent months' new boards and executive managers have been appointed at Eskom and South African Airways. During 2017, Parliament passed the Financial Intelligence Centre Amendment Act, ensuring South Africa's continued alignment with global standards to combat money laundering and the financing of terrorism (National Treasury, 2018).

Perhaps the most important short-term challenge of government is to win back credibility in its economic policymaking and implementation. The combination of the decreasing credibility of government's economic plans with regulatory uncertainty and confusion about the role of government in the economy has weakened the credibility of government plans and has reduced investors' confidence in the leadership of the South African economy. The challenge to roll back poverty, unemployment and inequality becomes all the more difficult in this context (Bhorat *et al.*, 2014).

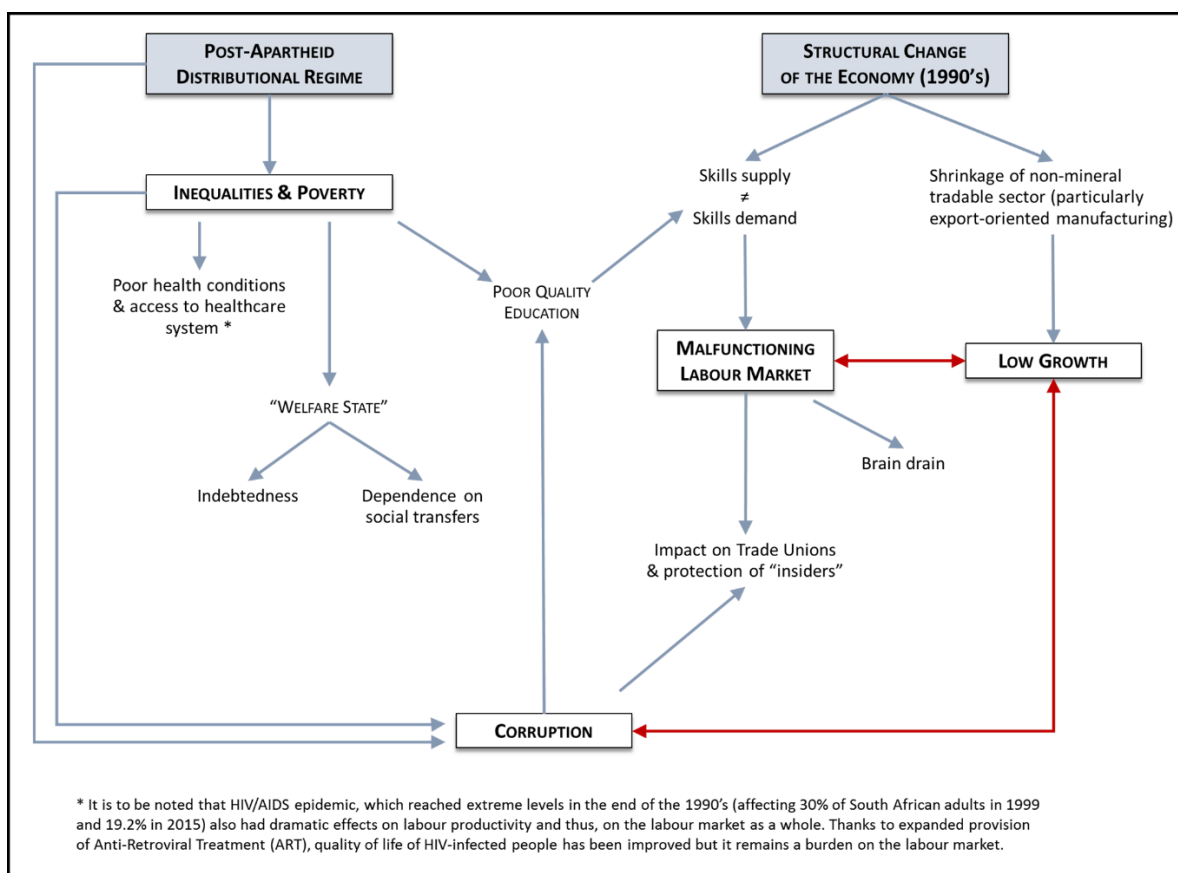
6.4. Legacies of apartheid and colonialism: conclusion and diagram

The end of apartheid in 1994 promised a new beginning for South Africa, with political freedom and inclusive development for all South Africans. There was an assumption that the country would make effortless progress. According to many, all we had to do was abolish the apartheid laws that prevented South Africa's development and soon prosperity will come back for all (Mbeki, 2012). A start has been made and the public policies and legislative interventions that have been implemented since 1994 can be said to have been deliberate attempts to broaden the concept of liberty to include human development and socio-economic justice (Gumede, 2011). South Africa has indeed accomplished enormous social progress by bringing to millions of citizen's access to key public services such as education, health, housing and electricity (OECD, 2017a).

However, the efforts to change the lives of South Africans for the better are running up against menacing hindrances. Some are *"legacies of history, some emanate from specific policy choices and others derive from malfunctioning systems or spring from misjudgements, bad management or sheer bad luck"* (Marais, 2011). We conclude this second part by highlighting the inter-relationships between

South Africa's current challenges (See diagram below), demonstrating thus that most of them are non-surmountable over the short-term because of their structural nature.

Because of discriminatory laws that were implemented during the system of apartheid, deep **inequalities** emerged between racial groups during this period. Today, these inequalities are further entrenched as access to **healthcare**, good quality **education** and **basic services** do not depend on race but on wealth, which black South Africans could not accumulate during years of white-minority rules. Particularly, since the **post-apartheid distributional regime**, it seems like the only way to make money is via **corruption** and rent seeking. Inequalities, poverty, and constant low growth have exacerbated the issue of corruption. **Trade Unions**, by participating to the social accord that led to the end of the apartheid regime, appear today to be as corrupt as the ANC leaders, focusing only on the interests of the "**insiders**" in order to perpetuate the clientelist system of the ANC. By consistently imposing wage increases, which do not correspond to a rise in labour productivity, and specific working conditions, Unions make the labour market inflexible and prevent the creation of new jobs to some extent. In addition to the trade unions' influence and bargaining power, poor education during apartheid led to a huge **supply** of **low-skilled** workforce that do not match the demand for more skilled workers.



PART C

Risk Analysis of South Africa



Globalisation and the search for higher yields, especially after the 2008 financial crisis, have driven corporations and private investors to invest into unfamiliar and uncertain markets. The investors' purpose is indeed to cash in where the growth is, and as of today, emerging markets are clearly the growth game's winners. For instance, thanks to the implementation of market reforms in 1978, China's GDP growth has averaged nearly 10% a year since then. More recently, countries such as India and Pakistan registered a GDP growth of respectively 7.1% and 5.7% in 2016; compared to only 1.6% in the United States (World Bank, 2016d).

Various economic and political crisis have also proven how instable emerging markets could be: crash of the Mexican peso in 1994, default of the financial institutions in Bangkok due to a real estate bubble in Thailand between 1997 and 1998, and during the same period, the devaluation of the Brazilian real as well as the collapse of the Indonesian government and Malaysian economy. However, even more risky than those crises are the ramifications and contagion effects that have resulted into more global crises (Asiri and Hubail, 2014). For instance, the continued political unrest in Syria, Yemen, Bahrain and Tunisia has had economic and political consequences on all countries in the Middle East as demonstrated by their re-rating by global rating agencies. Likewise, the financial crisis of 2008 spilled over the United States and hit Europe as well, with impacts being also felt in emerging markets. The latter example proves that country risk analysis should not be a process exclusively set aside for investments in emerging markets. Political, social and economic events can also disrupt the best-laid plans in developed economies.

Given growing geopolitical tensions rising all over the globe as well as globalisation and its subsequent contagion effects, country risk analysis in developing and developed countries has become an essential *tool* to make rational decisions while minimizing the risks and increasing the profitability of investments. Prediction of intense periods of instability within a country is therefore the country risk analysis's primary goal.

7. Methodology of the risk analysis

A study conducted by Oetzel *et al.* (2001), demonstrates that commercial country risk measures (country risk ratings) are actually very poor at predicting actual realized risks. More specifically, another more recent study supervised by the Financial Times (2018), shows that the International Monetary Fund (a renowned institution) demonstrates poor track record at forecasting recessions, using mainly quantitative and ratings analyses to assess country risk (Romei and Fray, 2018). As a matter of fact, they found out that *"over the last 27 years, the IMF has predicted every October that an average of five economies will contract the following year. In practice, an average of 26 have*

contracted" (*ibid.*). In the 2018 forecast, the IMF predicted that six countries will be in recession (IMF, 2018). If the Financial Times' study reveals truth, this suggests that 31 countries should be in recession in 2018. David Turner, head of the economics department at the OECD yet affirms that these poor results in forecasting futures crises are not unique to the IMF. According to him, "*all macroeconomic forecasters are poor at predicting downturns*" (Romei and Fray, 2018).

Purely quantitative and rating analyses discriminate between very high and very low risk but they seem to experience difficulties in assessing the countries situated in the medium range. However, determining those countries' dynamics in order to know whether they are likely to move in the low or the high-risk zone is critical (Bouchet *et al.*, 2003). Furthermore, by aggregating a country's risk into a single rating, one misses the actual opportunity to determine which variable is actually correlated with risk. For all these reasons, the methodology used to conduct South Africa's risk analysis is a qualitative method.

The qualitative analysis will be mainly divided into three parts: the economic and financial risks, the socio-political risks and finally the exogenous risks (factors on which direct control is not possible). The analysis will be done mainly through a personal assessment of the literature available on the various topics (especially for the socio-political and exogenous factors analyses) and the use of macroeconomic fundamentals and ratios/ indicators (mainly for the economic and financial analysis). This approach does not ignore numerical data but the latter are merely inputs to feed the global analysis. Ratios are indeed extremely useful but they must be used with caution. Therefore, those will be interpreted by the use of trend analysis as well as by comparison with other selected countries. Good judgement is particularly essential and critical in this analysis as we cannot confirm the exactitude of the data found. Likewise, some (recent) data are sometimes missing and prevent from following a rigorous scientific approach. Within the framework of this analysis, the following data sources will be privileged: International Monetary Fund, the OECD data bank, the World Bank, the South African Reserve Bank, the Bureau of Economic Analyses, the United Nations and Statistics South Africa.

By conducting a qualitative analysis, not only the current risks are identified but also the economic, socio-political, financial and institutional structures of the country's development process. The aim is, therefore, to tackle the structures of a country's development process to shed light on the underlying strengths and weaknesses (Bouchet *et al.*, 2003).

8. Economic and financial risks

According to Bouchet *et al.* (2003), the economic risk of a country refers to “*developments in the national economy that can affect the outcome of an international economic or financial transaction*”. A country’s financial risk is the “*ability of the national economy to generate enough foreign exchange to meet payments of interests and principal on its foreign debt*” (Bouchet *et al.*, 2003).

In order to analyse South Africa’s economic and financial risks, we are going to make use of previously selected macroeconomic variables and ratios. These will be analysed and given relative importance based on South Africa’s economic history. While analysing the economic and financial situation of South Africa, it is indeed important to note that some of the precarious situations emerging today find their deep roots in systems and policies implemented years earlier.

In this part of the risk analysis, we assume that political mismanagement may be the reason of economic risk but, contrary to socio-political risks (discussed *below*), it is not the explicit consequence of a political choice. Furthermore, it is to be mentioned that the reliability of these ratios in signalling South Africa’s financial and economic position will depend on how accurate some macroeconomic variables are in presenting the state of the economy’s health.

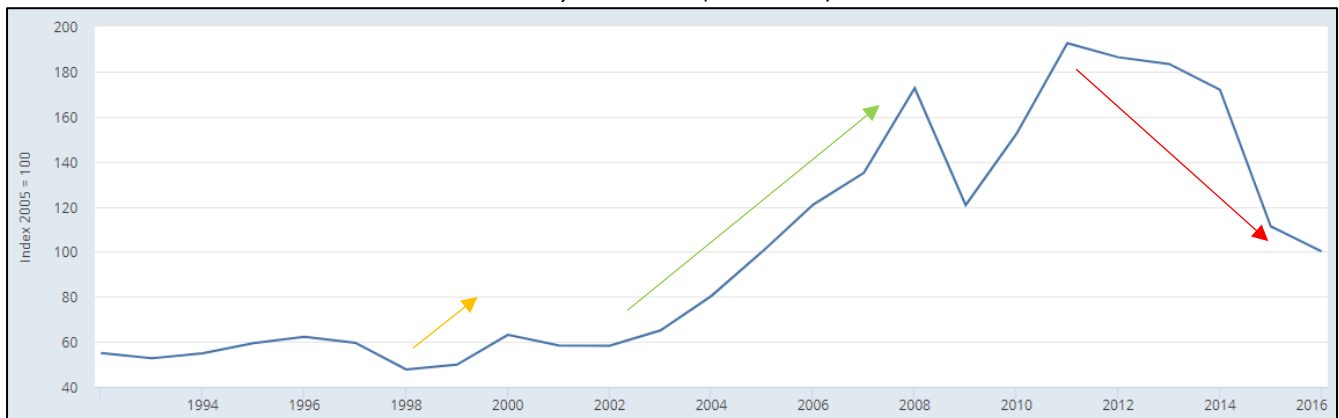
8.1 A growth driven by commodities export

At the end of the apartheid era, the South African government set to implement policies to open up markets globally (trade liberalisation) and undertake an export-driven growth, implying industrial policies boosting manufacturing sector to enhance productivity and competitiveness. The purpose was to move away from dependency on primary commodities. This worked relatively good as South Africa has seen its manufacturing sector expanding to dominate the South African export basket at 59% of total exports in 2015. However, the economy remains heavily reliant on primary commodities as 6% of its total exports are made of agricultural goods, 33% are made of mining and most of its manufacturing exports require imported commodities such as petroleum (2015) (see Appendix 29 & 30 for the evolution of the South African exports basket and the evolution of its manufacturing exports).

This pattern provides one reason for the growth rate registered by the country these past 2 decades. A closer look, made possible by the two graphs below, demonstrates the correlation between the Commodity Prices Index and the South African growth rates in the 2000s. The post-apartheid liberalization of the economy led indeed to particularly high growth rates in the 2000s, more particularly in the period 2005-2007 with annualized real GDP growth rates exceeding 5% in each consecutive year. This corroborates with the commodity Supercycle of the 2000s. Since 2011, however,

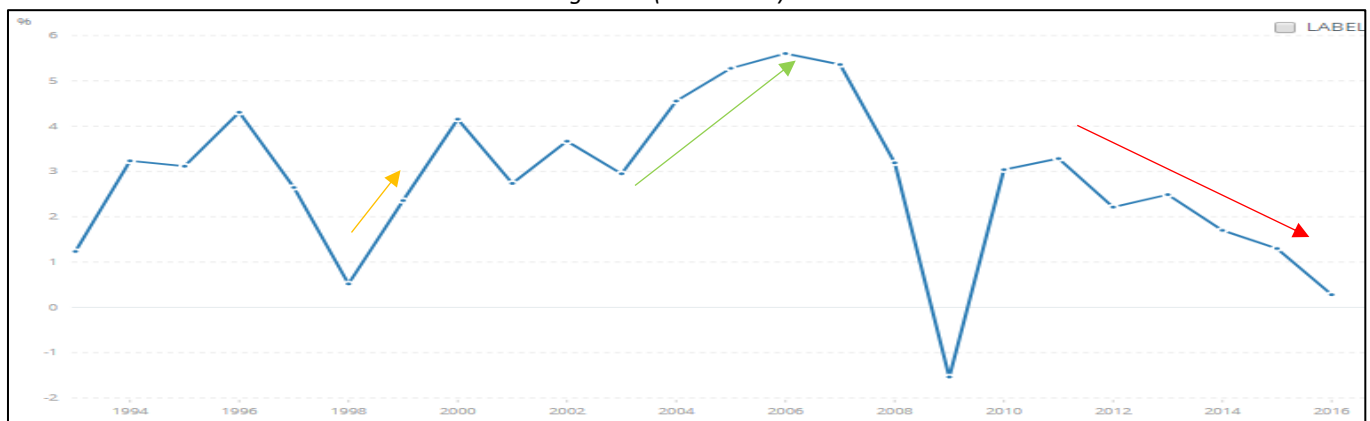
South Africa is particularly affected by low growth rates, which contrasts with regional peers and trading partners (See Appendix 31 for growth evolution in selected economies). Among several factors, we believe that South Africa's growth was largely driven down by the slowdown of China's demand (first destination for South African exports) for commodities (as real estate and financial bubbles as well as overcapacities affected the growth sustainability of the Chinese economy) and the continuing low growth of the US and, in particular, the European economies.

Commodity Price Index (1994-2016)



Source: IMF, 2016.

GDP growth (1994-2016)



Source: World Bank, 2016.

Commodity prices have started to rebound since 2016 (See Appendix 32 for evolution of main South African exports). These trends have improved the near-term outlook for commodities exporters (explaining the recent surge in growth in many emerging economies) such as South Africa, being a leading exporter of gold and platinum. The recent recovery in South Africa's growth prospects is thus mainly attributable to higher commodity prices and stronger growth among South Africa's trading partners (external demand).

This high dependence on commodities makes South Africa sensitive to any variation in commodity prices, which are highly volatile. Furthermore, the country also suffers from the “*Dutch disease*”, meaning that an increase in the price of one of its leading export commodity (for instance gold) will make its currency appreciate (as well as the wage levels) to a level rendering the other industries uncompetitive. This is because inflation and productivity will not rise as fast as the appreciation of the currency and the increase in wages.

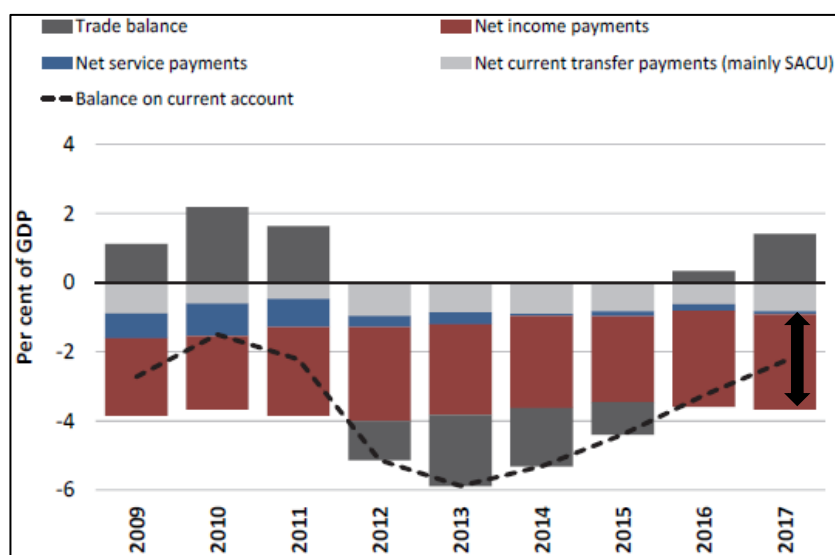
8.2. Dependency on international capital inflows

South Africa’s growth being highly dependent on commodity prices (as seen *above*), and those being extremely volatile and uncertain, international capital flows easily go in-and-out of the country according to the latter (among other factors). This is even more risky for a country such as South Africa, which is mainly reliant on external capital inflows to fund its investments.

Part of the explanation for this heavy reliance on international capital to fund investment is linked to a “*path dependency*”. Foreign investments in South Africa have indeed a long and complex history. As briefly mentioned earlier, in the 1990s the policy regime (largely influenced by a “*Washington Consensus*” way-of-thinking) became far more liberal and outward-oriented with the aim of attracting foreign direct investments (FDI) within the country. However, South Africa’s history of FDI goes back way before this moment: it dates back to the discovery of gold and diamonds. The exploitation of these discoveries led to large capital-intensive operations that were made possible thanks to both direct and portfolio investments flows from Europe, particularly London. International capital will continue to flow in the country, firstly nurturing the mining industries and then moving on to the manufacturing and financial and business sectors. Even during the period related to apartheid sanctions, there were still 450 firms with foreign direct investments in South Africa. Another explanation for the dependency on external capital is the low domestic savings rate at only 19.6% of GDP in 2017 (World Bank, 2017).

The reliance on external capital inflows can be seen by looking at the current account deficit. The latter demonstrates a structural deficit on the income account, meaning the country owes more money to foreign investors that have invested in South Africa than it receives from its own investments abroad.

Even if the current account deficit has shrunk to a level last seen in 2011, it remains high at 2.2% of GDP in 2017. Moreover, this decline is mainly due to a slower import growth. Imports have indeed been decreasing at an annualized rate of -7.5% from \$111 bn in 2011 to \$77 bn in 2016 (OEC, 2016). This



seems logical given the procyclical nature of import demand with GDP and investment. Investment in fixed capital amounted to 18.7% of GDP, having progressively declined since 2015. As evidence suggests, gross fixed-capital formation is although an important factor of economic growth, especially for fast growing economies (Ongo *et al.*, 2014). Private investment, which accounts for more than 60% of total domestic investment, has indeed also been declining since 2015 mostly because of slowing business confidence (see Appendix 33). Furthermore, according to a World Bank survey (2017f), private investment has increasingly gone into less productive sectors, reducing thus capital productivity. Since 2008, there has been a considerable deterioration in the South African economy's capacity to direct private investment toward sectors with growing economic potential; the manufacturing sector in particular. The significant relative decline in investment in manufacturing, contrasting with a symmetric increase in investment in electricity and water. Over the longer 1994–2015 period, transport and other services saw their shares in total capital stock grow steadily, while the opposite can be observed for agriculture (See Appendix 66 for detailed number and other sectors). Finance (including the financial sector and business services) is by far the largest destination of private investment but is more difficult to analyse from a productive capacity and employment perspective, as reflected in the very deep and diverse intermediation activities of South Africa's financial markets. The analysis of the current Investment Tax Incentives (ITI) framework also suggest that it may have contributed to such misallocation of capital. Compared with the industrial sector, lower marginal tax rates for the mining and construction sectors make private investment in these sectors equally remunerative despite much lower growth and job creation returns for the economy at large (World Bank, 2017f). Private investments are important since through appropriate investments, industrial development can seek to expand production in sectors where comparative advantage already exists, or alternatively develop new comparative advantages through technological upgrading.

Given the structural deficit caused by the income account, we expect current deficit to widen in the near future as economic growth is likely to recover thanks to, among other factors, higher commodity prices. Even if South Africa has made progress in attracting FDI in 2017, the numbers remain low compared to historical standards and, in particular, compared to portfolio investments in the country. A trend is indeed emerging since the 1970s regarding the composition of international capital flows. There has been a shift from foreign direct investments towards portfolio investments. As shown in Appendix 34, from the total inward investments, 55% (2018) came as portfolio investments while only 30% (2018) came from direct investments. This would constitute a risk for South Africa as it increases its reliance on more volatile portfolio flows (which remain strong until now though).

As already mentioned in this paper, investors tend to consider emerging markets as a single market place. Therefore, capitals very often move from one country to another according to the investor's sentiment. However, commodity price is not the only factor impacting capital inflows and outflows. As a matter of fact, a broad range of global and national factors influence the investors' sentiment. The risk of capital outflows may materialize in a very near future. Indeed, in developed economies, monetary policy has remained broadly supportive of growth. However, those countries may retreat from the exceptional measures adopted in the wake of the financial crisis, which could result in global financial conditions tightening. Capital flows to developing countries, notably in South Africa, may decrease as a result.

8.3. Rising government and external debt

An IMF study points out the important role of debt in increasing the likelihood of financial crisis and in making the ensuing recession longer and deeper. Even more interesting, some of these effects are more marked in EMEs as compared to AEs (Advanced Economies): the higher the pre-crisis private and public debt build-ups in EMEs the lower the available external financing when a crisis hits (Bernardini *et al.*, 2017). Therefore, analysing South Africa's public debt seems more than relevant, given that it has soared in recent years compared to household and corporate debts.

In 2017, South African government debt represented 53.3% of the GDP. In comparison with other emerging markets, the government debt is not considered high (See Appendix 35). According to Fall *et al.* (2015), "*sustainable levels of public debt in emerging markets range from 40-55% of GDP, depending on ability to raise revenue, growth potential and the types of fiscal risks a country faces*". In light of that definition, we suggest that the government debt is sustainable but *vulnerable*. First and foremost, we observe the tax base as a percentage of GDP, which stands at 29% of GDP in 2015 (OECD, 2015).

This makes the government debt at 53.3% of GDP rather sustainable. Then, we look at the **composition** of the public debt, which is mainly made of domestic currency denominated loans with a long-term

maturity. Foreign currency denominated loans composed less than 10% of total government debt in 2017 (of whom 75% is denominated in US dollars), reducing exposition to exchange rate volatility. It is, however, important to note that more than 30% of local currency loans are actually held by foreigners, meaning that the financing of the government is also sensitive to global investors' sentiment. By looking solely at the debt composition, the situation seems rather *sustainable*.

Composition of Public Debt

End of period R billion	2016/17 Outcome	2017/18 Estimate	2018/19	2019/20	2020/21
			Medium-term estimates		
Domestic loans²	2 020	2 286	2 502	2 712	2 940
Short-term	277	310	324	347	377
Long-term	1 743	1 976	2 178	2 365	2 563
Fixed-rate	1 300	1 449	1 584	1 700	1 818
Inflation-linked	443	527	594	665	745
Foreign loans²	213	220	269	271	310
Gross loan debt	2 233	2 506	2 771	2 983	3 250
Less: National Revenue Fund bank balances	-225	-221	-244	-215	-220
Net loan debt	2 008	2 285	2 527	2 768	3 030
<i>As percentage of GDP:</i>					
Gross loan debt	50.7	53.3	55.1	55.3	56.0
Net loan debt	45.6	48.6	50.3	51.4	52.2

Source: National Treasury, 2018.

Thirdly, we observe its **evolution**, both in local and foreign currency loans, as well as the fiscal risks being related. If the composition of the debt was reassuring, its evolution is nonetheless alarming. As shown in Appendix 36, public debt has been soaring since the global financial crisis of 2008. To analyse the possibility of further evolution of the public debt, we start by looking at fiscal risks.

South Africa's fiscal framework demonstrates the tension between two constitutional obligations: the country's vast service-delivery needs, and the need to manage government's finances sustainably and prudently. Since the 2008 crisis, South Africa has been trying to reduce a structural budget deficit, which stands at 4.3% of GDP in 2017. If South Africa keeps spending more than it collects revenues, public debt will inevitably continue to rise in the future. As a matter of fact, printing money cannot be considered as a solution given the out-of-control inflation that it would bring with it and its subsequent impact on South Africa's exports competitiveness.

The first concerns about the deficit reduction capacity are related to the spending, and more particularly to the final cost of the fee-free higher education programme which is still uncertain, the still "en-cours" negotiations about the future wage bills (which already represent 35% of total expense) and the future debt-service costs (representing 10% of total spending). Indeed, there have already been two downgrades by the ratings agency Fitch and S&P in 2017. South Africa is therefore now rated sub-investment grade for both local and foreign currency debt. If Moody's were to follow the "sub-investment" downgrade, South Africa would be excluded from Citi World Government Bond Index

which would more than probably trigger a sell-off of South African debt. This would also increase future borrowing and debt-service costs.

In addition to consolidated spending, tax policy measures which are the government most important source of revenue (90% of total revenue and almost 27% of GDP) are designed to raise R36 billion in additional revenue in 2018/19. However, we raise questions about the ability of the government to raise such revenues. Indeed, as we will develop further below, many South African are already heavily indebted and, even if household credit growth has slowed down since the end of the credit boom in 2010, it remains high at 35% of GDP. Significant shortfalls from personal income tax in 2017 suggest that they might not yield the required revenue to stabilize the public finances in 2018 either. Furthermore, given falling corporate tax rates in advanced and middle-income countries affecting South Africa's businesses competitiveness, there is little room to increase or even maintain those tax rates (See Appendix 37 for a comparison of corporate tax rates). In fact, within OECD countries, only companies in Chile contribute a higher share. Finally, the lack of trust in the effectiveness of government spending also undermines revenue collection. According to the United Nation development report (2018), only 58% of all South African responded that they trusted their government. Even if a contingency reserve has been set aside over the medium term to caution for unexpected economic and fiscal developments, we estimate that the budget deficit will be hardly reduced in the near-term and therefore, higher level of debt will occur (probably at a higher cost).

In addition to the fiscal and credit rating-related risks mentioned above, the most direct and urgent risk to public debt sustainability is the growing government exposure to state-owned entities (See below). The guarantees made by the government are not increasing but so is their exposure as recently published reports show governance issues and inadequate liquidity, which progressively require the use of government guarantees. This increases the government debt burden even more and could lead to further credit rating downgrades. Financial stability of the country is centred on SOEs and their ability to roll over debt and achieve financial consolidation. Indeed, the stability of the government finances have a direct impact on its debt holders, which in South Africa's case are mainly pension and provident funds, insurers and banks.

Government guarantee exposure (as a % of GDP)

	2013/14		2014/15		2015/16		2016/17	
	Guarantee	Exposure	Guarantee	Exposure	Guarantee	Exposure	Guarantee	Exposure
Public Institutions	13	6	12	6	11	6	11	7
Of which Eskom	10	3	9	4	8	4	8	5
Independent power producers			5	2	5	3	5	3
Public-private partnerships	0	0	0	0	0	0	0	0
Total	23	10	27	12	25	13	24	15

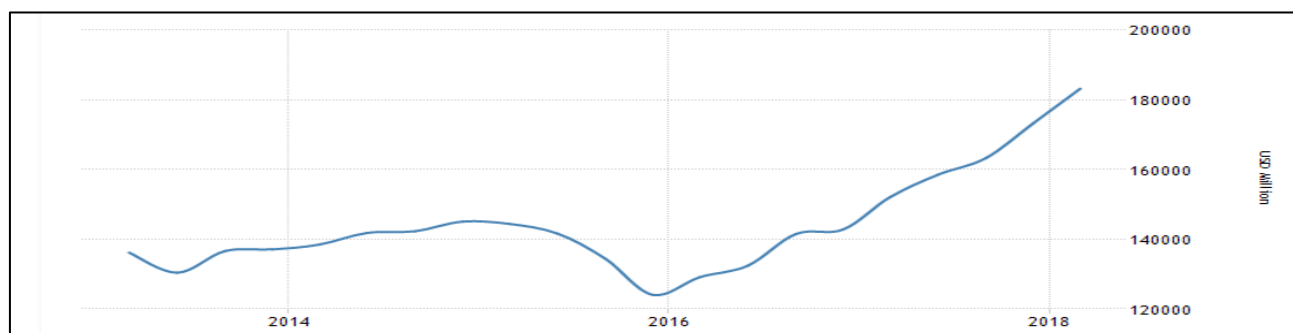
1. Total amount of borrowing and accrued interest for the period made against the guarantee.

Source: National Treasury, 2018.

8.3.1 Total external debt

Amounting to more than \$183 billion in the first quarter of 2018 (48.8% of GDP), the total gross external debt is quite high compared to other emerging economies but even more alarming is the evolution of the latter which represented only 38.3% of GDP back in 2013 (See below for the evolution of total gross external debt). Most of the external government debt is actually local currency denominated, which is less risky than the public corporation, banks and other private debtors which have their debt mainly denominated in foreign currency. Even if the Rand as well as lots of emerging-country currencies have been appreciating against the dollar since the beginning of last year (See Appendix 38), benefited from US dollar weakness, the search for higher yields by international investors and rising global commodity prices; one should not forget the high volatility of the exchange rate for commodities exporters countries such as South Africa. Furthermore, as already mentioned, the Rand might quickly depreciate as US monetary policy continues to tighten. This would result in higher debt service costs. Furthermore, SOEs are required to hedge their foreign currency risk but with further possible downgrades in the South Africa sovereign credit ratings, the cost of hedging/required collaterals might increase. The fact that there are many external factors largely outside of South Africa's control impacting the exchange rate makes it even more risky.

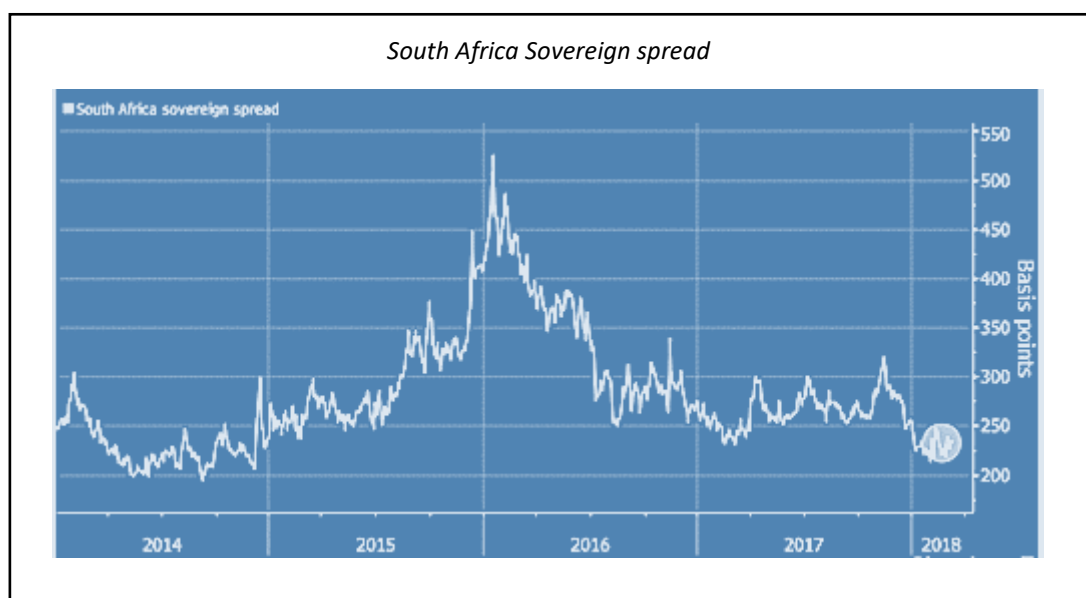
Evolution of South Africa gross External Debt



Source: South African Reserve Bank, 2018a.

This increasing percentage of external debt is mainly due to low domestic savings rate as already explained in the sub-section “*dependency on international capital inflows*”. South Africa must indeed rely on foreign investment to fund excess spending and reduce the investment-savings gap. By looking at the net national income and comparing it with the gross domestic product, we are also able to identify the significance of remittances and profit repatriation, which if important, affect South Africa’s dependence on new capital inflows. At \$639 billion (at current prices and PPP), the net national income differs from the gross domestic product (at current prices and PPP) by \$127 billion, which constitutes a loss of 16.54% from the GDP at current prices and purchasing power parity (OECD, 2017a; World Bank, 2017g). Given that part of profit repatriation is often underestimated and “*hidden*” through mechanisms such as transfer pricing and licenses, the impact on South Africa’s dependence on capital inflows to fund its investment can be considered as rather significant, the difference between the GDP and the NNI nearly matching the domestic savings rate of 19.6% of GDP (World Bank, 2017h).

Another reason why external debt has been increasing is the external demand for South African government debt, which remains robust despite two sovereign credit rating downgrades during 2017. This is illustrated by low sovereign spreads, near a four-year low (See *below*). The South African government is therefore planning to issue \$3 billion bonds next year to take advantage of these low borrowing costs, further increasing its external debt (and thus its exposure to risk).



Source: Bloomberg, 2018.

8.4. Evaluation of the domestic financial system

While analysing the domestic financial system, we found out that there are some vulnerabilities but that they remain rather low as financial institutions and transactions are under close supervision.

By looking at total loans and advances, we observe that total non-performing loans remain quite low and stable as demonstrated in Appendix 39. Furthermore, banks maintain capital adequacy and liquidity ratios well above international minimum regulatory requirements as shown in the graph below. The impaired advances to gross loans and advances, which is a good indicator of credit risk, displays a little increase but remains quite low and stable compared to previous years. It is also to be noted that exit-procedures seem to be well functioning as the African Bank, which went bankrupt in 2014, was wound down without significant systemic repercussions (Giamporcaro, 2017).

Selected indicators for the Banking sector

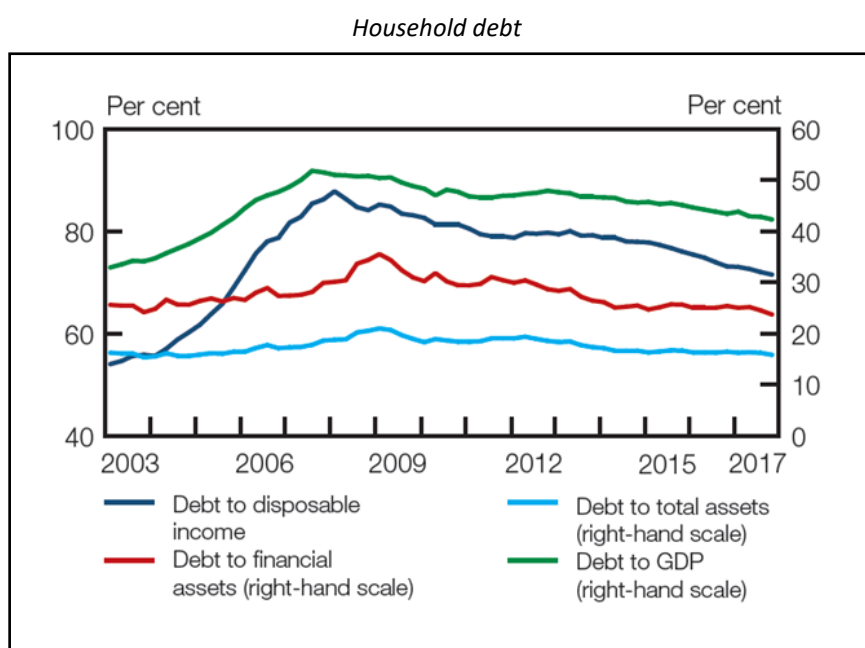
	janv-13	janv-14	janv-15	janv-16	janv-17	janv-18
Balance Sheet						
Total assets (R billions)	N/A	N/A	N/A	4,859.8	4,889.7	5,140.0
Y-o-Y % change	N/A	N/A	N/A	13.4	1.0	5.10
Total loans and advances (R billions)	2,754.0	3,015.3	3,253.6	3,674.4	3,725.7	3,801.0
Y-o-Y % change	N/A	N/A	N/A	12.9	1.4	2.0
Capital Adequacy						
Total capital adequacy ratio	15.21	14.85	14.53	13.90	15.90	16.10
Tier 1 capital adequacy ratio	12.12	12.02	11.77	11.30	12.90	13.30
Common Equity Tier 1 capital adequacy ratio	11.44	11.45	11.31	11.00	12.50	12.80
Liquidity						
Liquid assets to total assets (liquid asset ratio)	8.93	7.94	9.80	9.07	9.64	10.00
Liquid assets to short term liabilities	18.61	15.91	17.77	17.22	18.93	20.00
Liquidity coverage ratio (LCR)	N/A	N/A	76.89	83.41	110.30	120.30
Profitability						
Return on assets	1.27	1.08	1.09	1.15	1.32	1.30
Return on equity	17.63	14.45	14.85	16.23	17.50	16.00
Credit risk						
Impaired advances (R billions)	112.5	108.3	106.7	113.4	107.5	117.0
Impaired advances to gross loans and advances (R billions)	4.09	3.59	3.28	3.10	2.90	3.10

Source: South African Reserve Bank, 2018a.

Given the weak economic climate, banks are nonetheless exposed to increasing risk of credit default. These remain low but have been increasing since January 2016 especially for retail exposures such as mortgages, small- and medium-sized enterprises and retail revolving credit (SARB, 2018a) (See Appendix 40). This led to a decline in the number of mortgages being granted in 2017 while 51.39% of total credit applications by households were rejected (SARB, 2018a).

We also give weight to the evolution of household debt as banks constitute the main lenders to the household sector. The higher the household debt, the higher the probability of default and as a result, the higher the financial instability caused by banks in distress. The household debt remains high at 41%

of GDP in 2017 compared to other emerging economies (See Appendix 41). However, household debt has historically been much higher because of the debt-driven consumption that was implemented by the post-apartheid regime. Household debt as part of the GDP has indeed been slowing down considerably since 2008. Likewise, by looking at South Africa households' debt-to-income ratio, we observe that this ratio has also been continually decreasing since 2008 reaching 71.9% in 2017. This shows that the affordability of household debt continues to improve, household debt growing at a slower pace than disposable income. The TransUnion Consumer Credit Index (CCI), which measures the ability of consumers to meet their credit obligation given the constraint of their household budget, goes in the same direction climbing in the first quarter of 2018 (TransUnion, 2018). This implies an improvement in consumer credit health in the context of a difficult economic environment. Furthermore, despite a debt-service cost at 9.10% of total disposable income, the FNB Household Debt-service Risk Index (assessing the vulnerability of the country's household when it comes to being able to service its debt) considers that the debt-service risk is declining. At 5.4, it is considered as medium risk (See Appendix 42).



Source: South African Reserve Bank, 2018a.

As far as non-financial institutions are concerned (corporates), the main risk comes from the foreign currency denominated debt amounting to \$10.1 billion in 2017 (US dollar being the most used currency at 70%). Yet, non-financial corporates remain under pressure on default concerns as they recorded an Expected Default Frequency (EDF) of 3.1% in March 2018 (implying that there would be a less than 3% probability that these corporates would be unable to honour their debt obligations in the following year) implying a debt rating of Caa2. (SARB, 2018a)

Furthermore, analysing government finances is also important as it directly affects its debt holders. In the case of South Africa, it makes even more sense as the share of government debt holding by the banks has been considerably increasing since 2014, reaching a little bit more than R300 billions in 2016 (SARB, 2018a). As we already explained above, the main risks to government debt sustainability remains its growing exposure to state-owned entities and the further credit rating downgrades, which would make the cost of borrowing even higher.

In order to deal with the volatility and credit market risks, the government is taking measures to modernize prudential regulations and financial service consumer protection as shown by the implementation of the Twin Peaks regulation as of the 1st April of 2018. The latter is based on two pillars: prudential regulation in order to verify that banks act in a prudent manner and consumer protection to ensure that market players do not engage in market misconducts such as the ones that led to the global financial crisis of 2008. The aim is thus to provide a clear demarcation of supervisory responsibilities and consumer accountability as well as to consolidate banking and non-banking (for example insurance) regulation. However, even if the regulatory architecture of the Twin Peaks seems more adapted to the current financial infrastructures, there is still a margin between architecture and implementation. It is too early to assess any impacts but this will require further investigation. Furthermore, there has been some other regulation introduced such as the *Affordability Assessment Regulation* in mid-2016 requiring more stringent standards when extending credit. These new regulations should cushion the transmission of external shocks to the financial system.

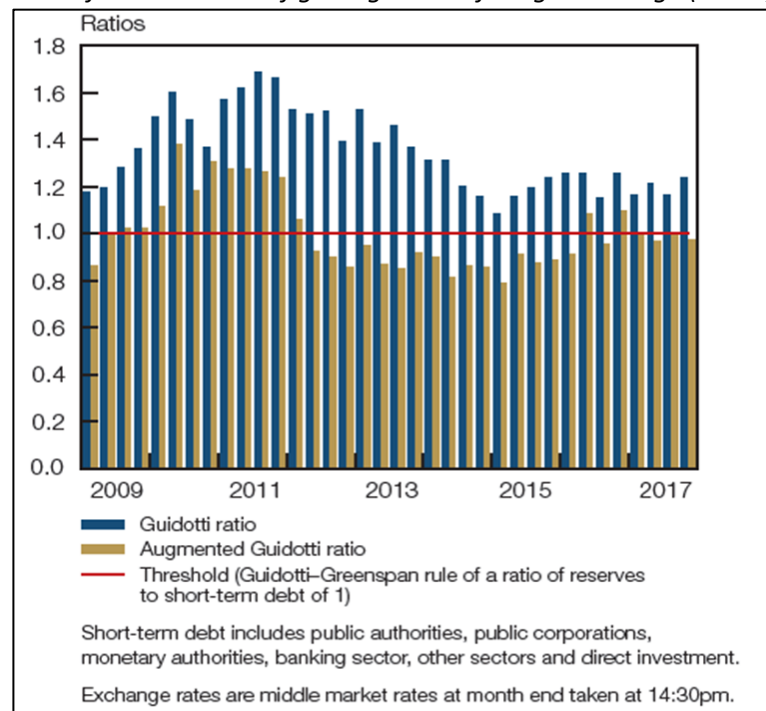
However, many uncertainties that could have tremendous impacts on the country's financial stability cannot be seen by only assessing ratios. For example, the normalisation of the US monetary policy which could lead to a repricing of premiums, particularly in overvalued markets. This would weaken confidence as earnings and credit performance might change abruptly. This could thus result in higher financial volatility and losses in asset prices. Finally, there is also much concern and uncertainty about the exposure of the banking sector in case of the expropriation of mortgaged land without compensation takes place.

8.4.1. Adequacy of foreign exchange reserves

To analyse the adequacy of foreign exchange reserves, we are going to test three different ratios. The first one is the **Guidotti-Greenspan** ratio (GR). According to the following, the South African reserves should equal short-term external debt (one year or less maturity). The ratio of reserves to short-term external debt should then be equal to one. By considering this ratio, South Africa's reserves have always been sufficient to service short-term external debt due within the next year. The second ratio used for this analysis is the augmented Guidotti ratio (AGR) as it considers the current account as a proxy to determine the external financing needs. This ratio recently slipped under the rule level of one by reaching 0.97 in the 4th quarter of 2017. This indicates that there might be a shortfall in funding should an unexpected capital flight situation arise. This is mainly explained by the widening of the current account deficit.

Finally, the import coverage ratio states that reserves should be sufficient to cover 3 months of imports worth. The latter amounted to 4.86 months in the fourth quarter of 2017, meaning that South Africa could endure almost 5 months of imports should there be a sudden stop of inflows. Foreign exchange reserves, comprising gross gold reserves, have been relatively increasing since 2016, to US\$50.5 billion in January 2018. This corroborates with the appreciation of the rand against the US dollar since the beginning of 2016. Foreign reserve holdings are important to maintain liquidity and investor confidence. (SARB, 2018a)

South African reserves of gross gold and foreign exchange (ratios)



Source: South African Reserve Bank, 2018a.

8.5. Constraints on business environment

In this sub-section, we briefly review the factors that might have an impact on starting and running a business in South Africa. The purpose is to provide a brief risk analysis focusing on the firm-level. These constraints prevent local firms to operate to their full capacity and deter private investment by new entrepreneurs. According to the World Economic Forum's Executives Opinion Survey (2018a), the three most problematic factors for doing business in South Africa are corruption, crime and theft, and government instability. The three factors will be discussed in the "*Socio-political risks*" sub-section hereafter; this rapid analysis must indeed be assimilated as complementary to the socio-political risk analysis made below.

8.5.1. Barriers directly related to starting a business

- *Regulatory barriers*

Complex and burdensome regulatory environment constitutes barriers for businesses. Local governments add to the burden, requiring multiple inspections to obtain licence and permits. The South African government has tried to ease the business registration system through automatization but other processes remain more time consuming and bureaucratic than in other countries. According to the World Bank (2018c), while the costs associated with the procedures of starting a business are low at 0.2% of income per capita, procedures are complex resulting in an average of seven procedures required, usually in a time lapse of 45 days. In comparison, starting a business in one of the OECD countries usually takes 8.5 days. Adding other procedures such as dealing with construction permits, getting electricity and registering property, an average of 10 months is usually required to complete the formalities (World Bank, 2018c). Those long and complex procedures should nonetheless become less constraining within the following years as the government is planning to open one-stop shops in each province, facilitating coordination at all levels.

- *Low competition*

Competition policies in South Africa are at part with best practices in the OECD countries. However, their wide-ranging and all-encompassing "*public interest clause*" undermines the enforcement of those policies. Competition can thus be significantly (or totally) reduced on the grounds of public interest. In this particular context, competition policy in South Africa is not only ensuring economic efficiency, it must also maintain employment and support black economic empowerment. This is even more problematic as there are no clear methods for balancing public interests and competition assessments.

State monopolies and private oligopolies dominating the South African economy illustrate its lack of openness, with policies favouring incumbents. These old and large firms are also the ones controlling the current employment dynamics, preserving their monopolies and hampering competition. However, more competition would contribute to higher innovation and productivity as well as provide incentives to invest. Overall, this could ultimately lead to greater global competitiveness.

- *Skills shortage*

Starting a business requires some skills; some have to be learned, other are gained through personal life and work experience. In South Africa, both types of skills are difficult to acquire. First, because of the unequal access to quality education. Secondly, the high rate of unemployment makes job experience difficult to obtain. This affects entrepreneurial activity.

However, this lack of skills does not only limit entrepreneurial activity, it will also become a barrier as business expands its operations. Indeed, we believe that skilled workforce will be more than ever necessary as we progressively enter a Fourth Industrial revolution, characterized by fast-paced technological progress. We will analyse South Africa's ability to become a knowledge-driven economy and, therefore, its equally important capacity to produce (meaning invest in higher education and training), retain and attract talents in the next section ("*South Africa's longer-term development prospects*").

- *Labour rigidities*

The World Economic Forum consistently ranks South Africa labour market among the least efficient in the world, despite very low non-wage labour costs (such as social insurance expenditure). However, we must interpret these results carefully as they only reflect the opinion of a small group of local business leaders.

According to the OECD Employment Protection Legislation (2012), the procedures and costs involved in dismissing individuals or groups of workers are not especially longer or more costly in South Africa compared with other OECD countries and emerging economies. However, the procedures within the Commission for Conciliation, Mediation and Arbitration on labour issues are perceived as too long (OECD, 2017a). Regarding wage determination flexibility, once again there are subtleties as an empirical study conducted by Professor von Fintel (2015) points out that factors such as the size of the firm, the unionization and the type of contract (long-term vs. short-term) all have an influence on wage flexibility. We believe that reducing rigidities in the labour market could offset the

potential negative impact of the national minimum wage on employment, productivity and competitiveness.

- *Lack of policies coordination*

There are a range of governmental and non-governmental programmes providing financial or non-financial support for small businesses and entrepreneurs. However, those programs lose their efficiency mainly because of a lack of awareness and a lack of coordination. Responsibilities are spread across several ministries, preventing the full efficiency of the policies implemented. Furthermore, national and local governments need to act in more consistent, committed and coordinated way in order to support the small and medium businesses sector. Providing a broad mapping of all opportunities available would help both government officials and entrepreneurs to clarify the range of solutions.

As a result from all those barriers, the rate of early-stage entrepreneurial activity (planning or starting a business in the formal or informal sector) is low compared to other emerging markets (See Appendix 43). Entrepreneurial activity and small businesses are although essential to growth and could boost job creation as well as private investments. A study conducted by the Global Entrepreneurship Monitor (2017), demonstrated that 32% of those involved in TEA (total entrepreneurial activity) expect to create 6 or more jobs within 5 years (whereas the global average is only 19%). Furthermore, 30% consider offering something « *new* » and thus contributing to innovation (Global Entrepreneurship Monitor, 2017). This is why we believe that creating a more dynamic business environment could partially unlock growth and reduce unemployment.

8.5.2. Barriers related to running a business

- *Regional trading*

A business established in South Africa with the aim of using its position to take advantage of a broader regional market (for its imports as well as its exports) might find some tariff and non-tariff barriers while trading across regional borders.

As far as the **tariff barriers** are concerned, these are supposed to be eliminated on 85% of the goods traded among 13 of the 15 members of the SADC (Southern African Development Community) as a result of the implementation of a free trade area. However, some SADC countries have raised import tariffs on products originating from the region, violating trade liberalisation commitments (OECD, 2017a). Furthermore, SADC countries usually face higher tariffs on external trade compared to other regional trade groups, which is in turn

detrimental to intra-trade when these imported goods serve as intermediate goods in the value chain (See Appendix 44).

The World Bank's Doing Business report (2018c) ranks South Africa 147th out of 190 economies with regards to the time required and the costs related to documentary and borders compliance while trading across borders (excluding tariffs). In this respect, the World Bank positions the "*trading across borders*" category as South Africa's biggest weakness for doing business. Even if the World Bank report takes into account an international trade dimension, it is important to mention that inter-regional trade remains even more complex within Southern Africa. **Non-tariffs barriers** are indeed as important as tariffs barriers for intra-regional trade. Customs procedures are very complex, mainly because of the multiple memberships of most of SADC countries in several trade areas. Therefore, it becomes burdensome for customs officers to establish the preferential tariffs applicable to each product. Furthermore, there is a lack of compatibility in the Southern Africans customs systems which in turn raises costs (Vilakazi and Paelo, 2017; UNCTAD, 2015). Custom corruption is also an endemic issue (Shayanowako, 2015). A report published by the South African Institute of International Affairs (2012) stated that goods transported along the entire North–South Corridor spend about one-third of their total transport time waiting at borders (See Appendix 45 for a typical transport description) (Draper & Scholvin, 2012). In addition to the complex and corrupt custom procedures, quality of transport infrastructure (including roads, railroads, ports and air transport) is also highly unequal among Southern Africa countries. While South Africa's quality transport infrastructure is rather close to OECD countries, when considering the Index of transport infrastructure of the World Economic Forum, most of SADC countries lag far behind (See Appendix 46) (World Economic Forum, 2018a).

Currency conversion costs can also be high as most countries still have restrictive exchange and capital control in place with transactions facing different regulatory frameworks. The Integrated Regional Electronic Settlement System (SIRESS) was introduced in 2013 to ease the financial transactions within SADC but is based on the South African Rand only (at the moment) (SARB, 2018a). Last but not least, restrictions on foreign provision of services prevent firms to access cheaper and better services (OECD, 2017a).

However, it must be noted that South Africa's GDP represents more than 50% of total GDP of the SADC countries and has the fourth highest GDP per capita (See Appendix 67) (World Bank, 2015a). What this implies for businesses is that South Africa remains the biggest

market with a relatively high purchasing power. The “*regional trading*” barrier is thus more a longer-term oriented obstacle with the perspective of high growth in these SADC countries.

- *Unstable power supply*

Despite an impressive increase in the electrification of the country (See Appendix 47), power supply is unstable and remain a substantial risk for businesses as well as the entire South African economy.

The main reason for these power outages was an energy demand that was outstripping Eskom’s (state-owned utility generating 95% of all electricity in South Africa) supply during certain peak times. This has led to several periods of load-shedding, first in 2008 and then in 2014 and 2015. According to a presentation by the Department of Public Enterprises to Parliament in 2015, those power outages cost the South African economy between \$1.7 billion and \$6.8 billion a month (Reuters, 2015). However, more recent power cuts are now due to a problem of maintenance of the distribution network. The Financial and Fiscal Commission (FFC) notes that “*for at least seven years, municipalities have spent only 60% of the benchmarks for maintenance across municipal infrastructure countrywide*”, skills and funding being the main issues (Nevin, 2017). In addition to this lack of maintenance, Eskom must also face labour unrest at its power plants because of future wage cuts. This has led to further power outages. Given the current financial position of Eskom, we hardly believe that frequent power outages will all of a sudden cease.

As a result of power outages and increases in tariffs, the World Bank Index for the “*Reliability of supply and transparency of Tariff*” is the lowest possible at 0 out of 8 (World Bank, 2018c). Adversely, countries of the BRICS such as India and China, respectively score 7 and 6 (*Ibid.*).

8.6. South Africa’s longer-term development prospects

In this last section discussing economic and financial risks, we will focus on the country’s ability to flourish and become one of these breakout nations; slowly progressing towards becoming an “advanced” economy.

The first important observation derives from the structure of its economy. As shown in Appendix 54, the manufacturing share contributing to South Africa’s GDP has been drastically declining since the end of apartheid, illustrating a process of de-industrialisation. At 13% of total GDP in 2017, it is nearly

10% less than the average upper middle-income economy's manufacturing share in 2013 (World Bank, 2013). Manufacturing is yet considered, from a broad range of structuralist perspectives, as particularly important for economic growth and development (Tregenna, 2011). Besides its poor contribution to GDP, the South African manufacturing sector is also a weak contributor to employment as shown in Appendix 59. In addition to this fragile manufacturing sector, South Africa remains heavily reliant on commodities exports. More particularly, most of South Africa's manufactured exports are aimed at intra-regional trade, supplying mainly Southern African countries; while commodities exports are mainly directed towards developed economies. This makes South Africa rather well-integrated into the global value chain (at 57% GVC participation rate), but mainly as a downstream component (its exports constitute inputs to the more technologically advanced exports of other countries, higher in the GVC) (UNCTAD, 2018). South Africa's ranking in the Economic Complexity Index (ECI), measuring the relative knowledge intensity of an economy, reflects both the relative diversity of the export base as well as the significant importance of commodities. As a result the country ranked 63rd out of 214 economies in 2016 (OECD, 2016). However, the evolution of this ranking from 1990 until 2016 depicts another striking reality: no progress in the product complexity can be observed since the end of the apartheid period (a decline in the ranking can even be observed since 2006) (See Appendix 57). The ECI has yet been validated as a relevant economic measure by showing its ability to predict future economic growth (Hartmann *et al.*, 2017). It is also important to understand that this stagnation is not only the result of *absolute* poor evolution in South Africa's product complexity, it also undermines that South Africa's evolution has been poor in comparison to other economies, which have been performing *relatively* well. In comparison, China has progressed from the 45 position in 1995 to 26th as of 2016. The same progression can also be observed for Malaysia (now 28th) or Thailand to a lesser extent (36th). The fact that South Africa's manufacturing exports are inherently directed towards other African countries instead of developed economies also illustrates the non-competitiveness of its manufactured products within the global trade arena.

The second point of observation will be the investments in higher education and research.

Investment in education as a part of GDP is relatively important at more than 6% in 2017 (See Appendix 49 for comparison of government investment in education in other economies). However, given the low education base from which South Africa must start, this does not seem to be sufficient. Among investment in education, 25% is related to post-school education (or 1.76% of total GDP in 2017). Post-education investments represent the fastest growing spending category in the Medium-Term expenditure Framework, mainly due to the fee-free higher education programme (See Appendix 61). In 2015, tertiary education enrolment remained fairly low at only 20% compared to other fast growing economies; China was at 40%, Brazil almost 50% (See Appendix 49 for comparison with other

countries). Fee-free higher education offers new prospects concerning future enrolment rates but, as already mentioned in this paper, this will also depend on government's ability to fulfill its pledge. However, what this enrolment rate does not tell is the repartition of students by field of study. With the world entering a Fourth Industrial revolution, characterized by high technological processes such as artificial intelligence, South Africa needs future engineers and young talents in information and computer technology. By looking at Appendix 58 we observe that the favoured fields of study are management and human sciences; subjects that do not support the need in business for science, technology, engineering and maths (STEM) as well as future-oriented skills (World Economic Forum, 2016b). South Africa needs to reverse its relative lack of skilled workforce and focus on shifting demand in skills. In addition to incentives directed towards studies in technology and engineering, South Africa must also focus on an upgrading of its universities in order to create the human capital necessary to increase the technological capacities of its domestic economy; only two national universities are present in the top 300 Times Higher Education ranking. This is low compared to China (7) or other advanced economies such as the United Kingdom (38) (The Times Higher Education, 2018).

With government's finances under pressure, it is cutting some of the research funds. As observed in Appendix 63, the "innovation, science and technology" expenditure is the category of government spending which is expected to grow the least over the medium term expenditure framework. At only 0,723% of total GDP in 2015, research and development is low (and stagnating) compared to countries such as China, which invested more than 2.06% of its GDP in Research and Development in 2015 (see table p. 63). The domestic private sector clearly does not improve the investment in R&D either, as no South African firm can be found within the top 1000 Global Innovation, which ranks firms that invest the most in R&D worldwide (Pwc Strategy, 2017). As a comparison, Denmark which has a rather similar GDP, spent (in 2013) more than 3% of its GDP in R&D and has 7 national firms in the top 1000 Global Innovation. The small number of PCT patents applications in South Africa corroborates with the little investment in R&D: only 7210 patents filled compared to more than 17 000 patents for Germany (2013) and more than 20 000 in China (Wipo, 2016). Furthermore, the amount of royalties received from South African patents demonstrates little interest from global and national perspectives: only \$118, compared to more than \$4.7 billion for China's patents. Adversely, South Africa paid more than \$2 billion dollars in 2017 to make use of international and national intellectual property rights (World Bank, 2017d). Another important feature of South African patents is that only less than 10% of total patents applications are filled by residents, the other 90% being filled by non-residents (Wipo, 2016). This, once again, illustrates the poor investments in R&D by South African firms and the country's reliance on international firms' R&D investments within the country. When looking at technology clusters in the world (that we assess by looking at the number of PCT patents filled as well as the

scientific publishing activity) (See Appendix 55 and 56), it becomes evident that innovation is the key to climb the global value chain and stand at the top of it: most of the top science and technology clusters are located in the U.S., China, and Germany. Brazil, India, and Iran also make the top 100 list (Dutta *et al.*, 2018). Several studies also showed that a country's ability to produce sophisticated products (underpinning the knowledge intensity of an economy) also critically depends on the ability of people to form social and professional networks and clusters (Fukuyama, 1996; Hidalgo, 2015).

This brings us to our last point of discussion: foreign direct investments. Both foreign direct investments inflows and outflows, depending on their nature, can be essential to capture technological knowledge and take advantage of marketing and management know-how spillovers. With regards to the analysis of South Africa's FDI inflows and outflows, we lack some precise and recent information concerning their nature and destination. However, some particular trends can be observed.

Both FDI stocks in South Africa and abroad reflect colonial history: the two main trading partners being the United Kingdom and the Netherland (the UK still had 45% of total FDI within South Africa in 2014) (UNCTAD, 2014). Despite the lack of official information, we assume that these foreign direct investments occur mainly in sectors related to mining and financial services. The United States, and China in particular, have also become FDI important partners (inbound and outbound). From an inward perspective, those FDI are mainly perceived as strategic positioning to enter the Sub-Saharan region; South Africa being considered as one of the most economically and politically stable country within Southern Africa. A good illustration of this is the purchase by China's biggest lender ICBC (Industrial and Commercial Bank of China) of South Africa's biggest lender by assets, Standard Bank in 2007 (The New York Times, 2007). This Chinese acquisition facilitates the numerous financing of Chinese diverse infrastructure investments within the whole continent. As a matter of fact, Standard Bank recently launched a subsidiary in Ivory Coast where China is planning on investing \$7.5 billion over the next few years. This beneficiates both China, thanks to an easy access to funding, and South Africa's Standard Bank which can expand and create a regional hub within West French-speaking Africa (Bavier, 2018).

From an outward perspective, South Africa has been slowly but surely increasing its stock of FDI within the African continent, becoming the fifth largest investor in Africa (UNCTAD, 2018). We assess those investments mainly as market and rent-seeking investments. Those FDI constitute mainly retailers expanding in African markets that other multinational consider as too risky because of a lack of regulatory authorities for instance or not worthy because of the low purchasing power. Aside from those retailers, "giant" South African companies (in African standards), such as Naspers (media and communication) also take advantage of their dominant position within the continent and the low competition authorities to expand and establish monopolies in other African countries.

Despite many policies to attract FDI (Foreign Investment Grant, Skills Support Programme and the Industrial Policy project for instance), South Africa's FDI inflows have fallen to levels not seen since 2010 (See Appendix 62). Even more alarming, both FDI inflows and outflows do not seem to contribute to create higher level of technological capabilities through management know-how spillovers; nor are they the sign of greater efficiency and innovation capabilities but rather the aptitude to exploit corrupt environments with weak regulatory policies.

In South Africa, there are no "National champion" (See table *below*), meaning that South African firms are unable to impose a global brand, they lack marketing, branding and technological know-how. The government needs to implement supportive policies fostering horizontal and vertical (strategic assets seeking) industrialisation which would eventually lead to transfer and acquisition of technological capabilities and management skills. The lack of political will is problematic as we stand in a global economy where the fight is about production chains and technology. The production system has been globalized and the winner is the economy capable to climb the highest in the global value chain. The economy mastering technological processes has control and bargaining power over the entire production chain. The higher in the global value chain, the higher the value added and thus the margin. The long-term goal of South Africa should be to become the technological standards settler, not the commodity provider.

Technological Gap (BRICS)

Countries	Pop. In 2017 (million)	GDP in 2017 (\$Billion)	Nb of domestic firms in the Fortune Global 500 (2017)	Per millions of people	R&D spending in 2000 (% of GDP)	R&D Spending in 2015 (% of GDP)	Number of National Universities in the THE 300 (2017)	Per millions of people
South Africa	56.7	349.4	0	0.000	0.758 (2003)	0.723 (2013)	2	0.03500
Brazil	209.3	2,055.5	7	0.033	1.000	1.168 (2014)	1	0.00480
Russian Fed.	144.5	1,577.5	4	0.028	1.049	1.132	1	0.00690
India	1,339.2	2,597.5	7	0.005	0.743	0.831 (2011)	1	0.00075
China	1,386.4	12,237.7	109	0.079	0.896	2.060	7	0.00500

*Population: World Bank, 2017 ; GDP (current US\$): World Bank 2017 ; R&D Spending: World Bank 2017;
Education: Times Higher Education Ranking ; Firms: Fortune Global 500.*

9. Socio-political risks

In this second part of the country risk analysis, the focus will be on identifying social and political factors affecting the risk profile of South Africa. Managers that seek overseas investment opportunities have now realized that having an in-depth knowledge of a country's economics is not sufficient in itself. Understanding the dynamics that shape the country's political and social developments is also essential. This is even more relevant in emerging economies where *"markets outcomes are influenced at least as much by policies as by economic factors"* (Corchado et al., 2011).

In order to analyse the social and political risks surrounding South Africa, we will also make use of statistics and indicators complementing and testing the findings of our analytical review.

9.1. Post-apartheid democracy and development of human rights

Moving ahead from a tough past, South Africa built the post-apartheid society based on a progressive Constitution embracing the concepts of people-centred democracy, mutual respect, trust and human dignity (Marais, 2011). Economic policies were all elaborated with those concepts in mind, promoting the redistribution of wealth to those who had been deprived of it and ensuring an inclusive growth. Furthermore, it made sure to build a robust and independent judiciary, which was essential for respect of the rule of law. The independence of the judiciary has indeed been observed recently through the reinstated charges against J. Zuma. However, after more than two decades into democracy, the post-apartheid record looks mitigated.

On the one hand the country has seen remarkable political, social and human developments. The Constitutional rules now ensure, or at least on paper, political and social rights that can compete with the ones found in the most developed countries. According to the "Freedom in the World" Index, South Africa is considered a "free" country in 2018 based on criteria such as guarantee of free and fair elections, the rights of minorities, the freedom of the press and the rule of law (Freedom, House, 2018) (See Appendix 48 for map of the world). Likewise, the center for systemic peace recognizes South Africa as an institutionalized democracy (Center for Systemic Peace, 2017). From a social and human perspective, access to basic services has been improved. South Africa has indeed been able to achieve universal access to basic primary education, with an enrolment rate reaching 100% for the primary school age population and the equivalent 94% for secondary school in 2016 (See Appendix 49) (UNDP, 2016). Access to electricity has increased from 58.2% in 1996 to 90.3% in 2016 and national statistics show that 83.5% of households have access to piped water (60.8% in 1996) while 60.6% of all households have access to flush toilet compared to 49.1% in 2001 (Stats SA, 2017b). Still according to the estimates of Statistics South Africa, poverty levels have notably declined since the end of apartheid,

reaching 55.5% of total population in 2015 (Upper Bound Poverty Line) compared to 66.6% in 2006 (*Ibid.*). The success of the “social wage” can also be assessed by looking at the “*South African Multidimensional Poverty Index*” (SAMPI, poverty levels measured by looking at education, health, living standards and economic activity) as it reduced from 17.9% in 2001 to 7% in 2016 indicating the efficiency of the government spending in basic services (*Ibid.*).

On the other hand, despite South Africa’s major developments and strong constitutional protection for human rights, the country remains plagued with historical trends of endemic corruption, clientelism and a high level of crimes and violence. With only 58% of South Africans trusting their government according to the Human Development Report (2016), public confidence in the government and its willingness to tackle corruption (discussed below under “*corruption and political uncertainty*”) and the respect for the rule of law has declined. South Africans also question the ability of the government in solving structural social issues such as unemployment and inequalities, which have been constantly increasing. By looking at the Gini coefficient (based on income data), which stands at 0.69 in 2015, South Africa is indeed the most unequal country in the world (World Bank, 2015a). The International Labour Organization states in its “Global Wage Report 2016/2017” that the highest paid 10% of total workers received 49.2% of all the wages paid within the country (ILO, 2017). However, inequalities are not just confined to incomes, but rather expanded to a whole spectrum of area including education quality, housing and health care (more information in “*Part II: Legacies of Apartheid*”). As a matter of fact, access to formally recognized rights and freedoms remains restricted to wealthy and politically influential minorities, which have control on most of the economic and political capital.

Corruption and the social climate of poverty, inequality and high unemployment have engendered social tensions leading to crime-related violence and insecurity in South Africa. According to the Human Development report of the UNDP (2016), only 40% of South African were feeling “safe” within their own country in a survey conducted through 2014 and 2015. This corresponds to about the same share of the total population as in Mexico or Brazil. And this ratio seems justified given that South Africa has one of the highest rates of violent crime in the world at 33 homicides per 100,000 people in 2014, implying an average of 52.1 people murdered each day (UNDP, 2016). Furthermore, anxiety in the labour market due to high unemployment has amplified the violence rates and has led to “Community justice” or vigilantism. Immigrants, refugees and asylum seekers are numerous in the country, representing 5.8% of the total population in 2015 (*Ibid.*). The majority of the documented migrants comes from the SADC region, and 50% of those SADC migrants were from Zimbabwe in 2011 because of the political unrest and economic instability prevailing in the country since 2008 (Stats SA, 2011). With 31.3% of the youth (15-24 years old) not in school nor in employment, social tensions are severe and migrants are generally perceived as the ones stealing South Africans’ jobs, as illustrated by

the “Mamelodi Concerned Residents” march in February 2007 (UNDP, 2016). Several xenophobic attacks against migrants have taken place since then, such as the Durban violence in 2015 that displaced thousands of foreign nationals or the 2008 attacks, which resulted in the death of more than 60 people across the country. However, we doubt that violence might ease following Johannesburg Mayor reckless public statement blaming illegal immigrants for crime and calling on them to leave the city. The government has yet to finalize the national plan to fight racism as well as to implement the mechanisms for justice and accountability for xenophobic crimes. At the moment, it looks like the authorities are reluctant to even publicly acknowledge xenophobia and take decisive action to combat it (Human Rights Watch, 2018). However, xenophobic attacks are not the only form of violence occurring in South Africa. Rape also remains an underreported issue. A survey conducted by the Medical Research Council found out that more than 25% of South African men have raped, and half of them, more than once (Medical Research Council, 2009). The study also found a correlation between high rape rates and the HIV prevalence which stood at 19.32% of total adults between 15 and 49 years old in 2015 (UNDP, 2016). According to the “Centre for the Study of Violence and Reconciliation”, 1 in 5 women older than 18 has experienced physical violence, and three women die at the hands of their partner every day in 2016 (Centre for the Study of Violence and Reconciliation, 2017). This is five times more than the global average (*Ibid.*). Rape and violence are also a cause for many broken journeys in primary or secondary schools, girls being forced to stay at home to be safe. Marais (2011) reveals indeed that one in two woman is too afraid to go outside at night and that one in five woman does not dare to go outside their home whatever the moment in the day. The insecurity and high violence climate restrict human freedom and limit the full potential of women entry on the labour market. There is currently no national strategy to combat this high rate of violence against women in South Africa and given the example given by ex-President Zuma who was charged with rape himself but then defended himself by claiming that the woman was dressed provocatively; a change in the mentalities is not likely to happen anytime soon. In addition to an already violent environment, police brutality adds another layer and makes the police authorities losing credibility among the population. In the annual report of the Independent Police Investigate Directorate (IPID) for 2016-2017, it recorded 696 reported deaths either in police custody or as a result of police action, 112 *reported* rapes by police officers, 173 reports of torture and 3827 reports of assaults (IPID, 2017). Perhaps the Marikana massacre in August 16, 2012 illustrates best how a corrupt government and police are ready to use violence and brutality to prevent workers to fight for their rights.

The recent xenophobic attacks show how a social climate already affected by poverty, inequality and high unemployment can quickly escalate into insecurity and violence. The current social environment is dangerous and might rapidly lead to violent contests if social reforms are not rapidly taken by the government, as demonstrated by the recently growing popular protests in Tunisia.

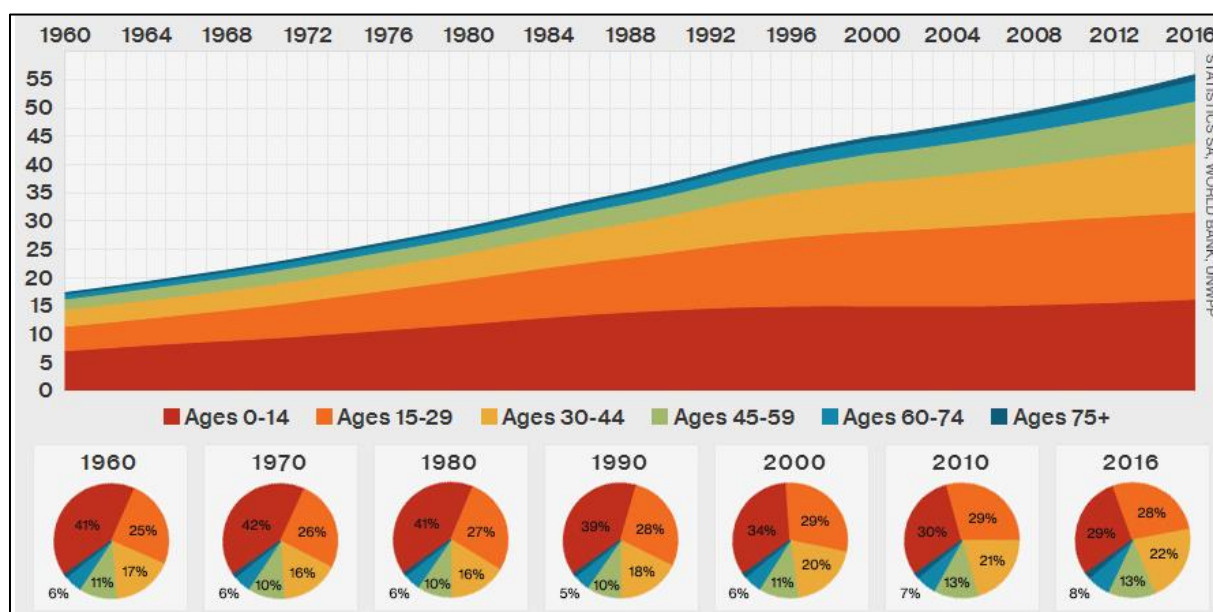
An economic consequence of this climate of social insecurity and poverty, is the phenomenon of brain drain. With a net migration rate of 2.3 per 1000 people, immigrants clearly outnumber South African emigrants. However, the level of education varies between international migrants with only 39% of total immigrants having completed secondary or higher education in 2011 (Stats SA, 2011). Adversely, a 2015 report by *InterNations* shed some light about the profile of emigrants from South Africa, half of them being skilled employees or managers in the UK, Australia, United States of America and New Zealand mainly. Still according to this same report, 66% of all South Africans expats had at least a bachelor degree while moving from their own country, researchers composing 16% and academics representing 16% of the total expats. Many skilled South Africans are thus leaving in order to reach better living standards, 63% of them earning higher income than in South Africa (InterNations, 2015).

9.2. Threat of demographics

Even if South Africa's growth has been slowed by the incidence of AIDS in the late 1990s, it still drastically increased from 27 million people in 1985 to more than 57 million people in 2018 (World Population Review, 2018). As of today, there are no clear indicators pointing out to a sudden stop in South Africa's growth. Estimates by the United Nations "*World Population Prospects*" in 2017 show that South Africa's total population might reach 60 million people when the next population census is conducted in 2021 and more than 72 million people by 2050 (United Nations Population Division, 2017). This population growth poses a threat to the sustainability of the government finances. First, as illustrated in Appendix 50, most of South Africans heavily rely on social transfers to survive. These represent the second largest expenditure item for the government as of 2017 (See Appendix 51) (National Treasury, 2018). In the case of population increasing more than the job opportunities and the wages, we wonder how the government will be able to finance those growing social transfers given the already wide budget deficit. Secondly, the government has committed itself to the implementation of future social reforms such as the National Health Insurance to provide health care for all South Africans and the fee-free higher education and training for poor and working class students (which will account for 90% of all students). For both schemes, real final costs are still uncertain and will increase with population growth. Once again, we question the capability of the government to raise enough revenue to cover those spending.

Population growth is a reality. However, another reality is that South African population is growing older as well, with the proportion of elderly (60 years and older) reaching 8.1% of total population in 2017 (or 4.6 million South Africans) compared to only 5% in 1990 (See graph below) (Statistics SA, 2017c). This ageing of the population is mainly due to a lower total fertility rate (TFR) in South Africa (see Appendix 52) and a higher longevity. The former is the consequence of many factors such as the use of contraceptives to control birth, the poor economic conditions influencing the desire and the capacity for big family size or the empowerment of women in education and work-life. This has led to a decline from about 6 children per woman in the 1960s to roughly 2.4 children per woman in 2018. This contrasts with the rest of sub-Saharan Africa where the TFR remains higher than other parts of the world but is similar to fertility trends in South Asia, the Middle East, and North Africa. Regarding the longevity of South Africans, the World Health Organization (2016) states that the life expectancy in South Africa was about 63 years in 2016. This is much lower than the world average of 72 years but still way better than the 53 years of life expectancy South Africa was facing in 2010 (See Appendix 53). In 2010, the country had indeed reached a life expectancy level not seen since 1965 but thanks to extension of health programmes and the improved access to antiretroviral treatment (ART), much advancement has been made since then.

South Africa's Population & Age structure (millions) from 1960 to 2016



Source: Stats SA, World Bank, UNWPP (2017).

The phenomenon of ageing in South Africa can also be observed by looking at the dependency ratios below. Dependency ratios indicate the potential dependency burden of *children* and the elderly on those who are of economically productive ages in the South African population. As the former definition implies, we need to take account of those who are economically “*productive*” to calculate

the following ratios. Although the typical range usually falls between 15 and 65 years old, we decided to use a narrower range (15-59 years). Indeed, according to the WHO (2016), South Africans can expect to live a healthy life up to the age of 55 on average. This clearly has an impact on labour productivity as the same statistics for an advanced economy such as Belgium is 72 years. Therefore, we decided that South African could be considered as economically productive up to the age of 59 years old.

Even if we observe a decreasing dependency ratio from 1970 until 2016, it is mainly the result of the ageing of the former “0-14 years old” group, which has become part of the “economically productive” part of the population. The “young” dependency ratio has indeed been decreasing over time. Adversely we observe that the dependency ratio for the 60 years and older has started to increase significantly since 2010, implying a growing burden of the elderly on the economically productive population.

Dependency Ratios

	TOTAL dependency ratio	Dependency ratio by groups	
	Working population: 15-59 years	Young (0-14 years)	Old (60+ years)
1960	88.68	77.36	11.32
1970	92.31	80.76	11.53
1980	88.67	77.36	11.32
1990	80.35	69.64	10.71
2000	66.67	56.66	10.00
2010	60.31	47.61	12.70
2016	60.31	46.03	14.29

Source: World Population Review, 2018.

This ageing of the population in South Africa will have an impact on its labour productivity, as economically productive South Africans will gradually represent a smaller proportion of the total population. The growing proportion of elderly is alerting as it does not only mean that the country is on demographic and health transitions; it also indicates that new social, health and financial demands will face a country already struggling to consolidate its total budget as spending pressures grow and revenues fall. However, as one of the primary goal of the Sustainable Development goals is to leave “no one behind”, South Africa will have no other choice than to adapt, at least on the longer run.

9.3. Corruption and political uncertainty

In the Global Competitiveness Report 2017, businesses rank corruption as the most problematic factor for doing business in South Africa. Illustrating those claims, the Corruption Perception Index (CPI) in South Africa equals 43 (0 being the most corrupt and 100 being the least) positioning South Africa 71st out of 180 countries worldwide. Although this ranking is better than the average for Sub-Saharan Africa (32), corruption perception in South Africa has been getting much worse these five past years according to the CPI, acknowledging a progressive lack of political trust by the South Africans in their government. As a matter of fact, South Africa has lost 33 places since 2001 with more than half of the decline happening since 2009, corroborating with the election of former President Zuma. The latter was indeed the personification of corruption and state-capture that flourished during his time in office, surviving the numerous corruption scandals by building a loyal network of ANC lawmakers and officials. In recent years, the ruling African National Congress has been accused of undermining state institutions in order to protect corrupt officials and preserve its power as its support base is starting to deteriorate. According to a study by the “Centre for Communication and Reputation Management” (2017), 77% of South Africans said that they thought *“the country was going in a negative direction”* and that *“their basic needs were not being met as a result of state capture and the high levels of corruption”* in South Africa. Widespread corruption is thus undermining the political legitimacy of the South African government.

South Africa disposes although of a robust anti-corruption framework, with comprehensive anti-corruption laws and several agencies (comprising mechanisms to coordinate the functions of these agencies). The Courts seem to act independently in regards with the latest developments and its decisions in which executive and legislative branches of the government were held accountable, but the same cannot be said about national anti-corruption institutions. Laws are indeed inadequately enforced as a result of a politicisation of the judicial system as a whole. Established at the end of the apartheid, the Public Protector is one of the numerous institutions supposed to ensure a more vigorous democracy and track corruption, holding political figures accountable. Its new (2017) head inspector, Busisiwe Mkhwebane, is already facing harsh critics as she failed to include the Gupta family as well as other ANC high officials in several corruption reports regarding dairy farms scandals (Estina and Vrede). Likewise, National Prosecuting Authority’s (NPA) director since 2015, Shaun Abrahams is currently fighting for its job as his appointment is said to be invalid due to his lack of independence in cases involving Zuma. These two appointments greatly illustrate how the entire political and judicial systems are being corrupt by timely and appropriate connections. Other examples, such as the former Public Protector’s report pointing out to massive corruption and “State capture” in 2016, show that even

when anti-corruption institutions do the job they are required to, no corrective legal action is necessarily taken.

Several corruption-related arrests were made following Zuma's resignation. However, until now authorities have not been focusing on officials who were central to corruption cases, arresting mainly some low- and midlevel government officials as well as foreign executives. Furthermore, Ramaphosa has until now shown little appetite to go after those ANC figures, naming to his cabinet several people accused of corruption in the past.

Corruption can also be found at private level but we believe that in order to eradicate corruption, the leading example must first come from the top, from the leaders of this country. Therefore, we are of the opinion that by showing the whole country that even a former president can be held accountable for his actions, positive developments could ensue. It is in the hands of Ramaphosa now to lead the way. Once changes come from the top, then the political game is changing as well. Zuma's trial is certainly matter to follow in order to investigate the potential subsequent effects on corruption at the private and public levels.

Widespread and endemic corruption added to a social climate of poverty, inequalities and unemployment lead to growing political uncertainty in South Africa, which in turn gives rise to a general climate of political instability. The broad concept of political uncertainty encompasses three types of uncertainties: about the policies that will be implemented, about their effects and finally about the leader who will implement those policies.

Given the next legislative elections in 2019, the uncertainty about South Africa's future President should be resolved rather quickly. The ANC has been in power since the end of the apartheid in 1994 but has progressively lost support in some municipalities at the expense of the main party opposition "Democratic Alliance" (DA). Despite some tensions within the ANC party, there has been positive sentiment since the resignation of Zuma in February and the subsequent nomination of Cyril Ramaphosa as new President. Adversely, the DA is still suffering from the image of a "white party", remnant of the apartheid, and racial tensions within the party dynamics impede "*complete*" trust from the South Africans. Furthermore, the party's policy agenda is still unclear. Consequently, a poll conducted by Ipsos from April until June 2018, showed that ANC currently has 60% of support. This places thus the party comfortably ahead in the race to next year's general election. However, more than half of South African participants (54%) "Strongly agreed" or "agreed" with the following statement: "*The future of the ANC is uncertain because of the leadership issues within the party*" (Ipsos, 2018). This clearly demonstrates that despite a probable victory in the next national legislative elections, long-term sustainability of the ANC is threatened.

The Policy Uncertainty Index of the North-West University Business School and Governance rose to 51 (baseline = 50) in the second quarter of 2018, increasing from 49.6 in the first quarter of the year (University of North-West, 2018). There is great chance that this will decline in future months given political developments. However, this increasing index is also the result of the potential implementation of some reforms that could have significant, but still unclear, impacts: industrial reforms (about progressive nationalisation of mines for instance and increased minimum thresholds for black ownership), social reforms (about fee-free higher education, for instance) and a land reform.

The latter particularly worries investors as previous land reform by former President Mugabe in neighbouring country, Zimbabwe, led to economic ruin. Land reform is part of addressing the spatial legacy of apartheid and has been on the table for years within the ANC. Cyril Ramaphosa has recently confirmed that the South African Constitution allowed land expropriation without compensation “*when of public interest*”. He therefore announced that the Constitution would be amended in order to “*make it more explicit*”. Even if the land reform in South Africa is Constitutional, and will be following the procedures, risks are substantial given the social tensions rising in the country. South Africa mainly feeds itself and is the continent’s largest maize producer as well as the second biggest exporter of citrus fruits in the world. Furthermore, even if agriculture accounts for less than 3% of total national output, it also employs 5% of total workforce. A mismanagement of production could also lead to food inflation, hurting lower-income households. However, social and political contexts in Zimbabwe back in the 2000s and in South Africa today are very different. First, the ANC is still the ruling party and is likely to remain as such for a few years. Secondly, most of South African population is already urbanized and has no experience in the agriculture field. Last but not least, several big industries, such as the wine industry, are already well-developed and we question the capacity of inexperienced, small cultivators to compete with those giants (except maybe by forming collective production systems).

The main danger for the ANC (and thus the general political stability) is its loss of legitimacy. Historically, dominant parties and leaders tend to break down due to a crisis of legitimacy. The recent examples of Tunisia and Zimbabwe illustrate this assertion. Zimbabwe in particular should be looked at carefully as many similitudes between South Africa’s ANC and Zimbabwe’s ZANU-PF can be found: both emerged from the abolition of the white minority rule, both have been in power for decades and both have inflicted enormous damages to their economies. Finally, both have seen their leaders fallen as a consequence of a loss of legitimacy. At the time of writing, both parties still govern both countries but their long-term viability is in danger, especially ZANU-PF’s. The Zimbabwe “*coup d’état*” should be a warning bell for South Africa.

If Zimbabwe's story tells us something it is that if South Africans' demand for land and wealth redistribution remain unaddressed for too long, it will only take the right political entrepreneurs to consolidate power in the face of widespread dissent.

The ability of the ANC to prove its willingness to tackle corruption and to implement social and land reforms while ensuring opportunities for South Africa's economy to grow (in an inclusive way) are thus key to its resilience as the South African ruling party and for the stability of the country as a whole.

10. Exogenous risks

In this last part of South Africa's risk analysis, the focus will be on exogenous factors. These are called exogenous factors either because national policies can only have a limited influence on them due to their structural characteristics or because they mainly spring from natural events.

10.1 Environmental threats & epidemics

Because of its natural climate (see Part II: *Introduction to South Africa, land of contrasts*), South Africa is, by essence, a highly water insecure country particularly sensitive to climate shocks. Starting in 2014 and lasting until 2017, the drought affecting Cape Town in Western Cape materialized this risk of water scarcity and was classified as a "national disaster". Even if the drought was limited to one province, it has catalysed a national conversation and has brought water security into the policy debate (Donnenfeld *et al.*, 2018). This drought indeed highlighted the vulnerabilities of the water system within the country as well as the magnitude of the challenge.

South Africa is currently overexploiting its renewable water resources: at 235 litres per capita per day, it clearly surpasses the global average of 175 litres (Donnenfeld *et al.*, 2018). Furthermore, water withdrawals are forecast to increase in all three sectors of the economy (industrial, agricultural and municipal) as observed in Appendix 60. Population growth and urbanization puts indeed more pressure on water reserves as illustrated by the growing share of municipal consumption of water forecast in 2035 (Appendix 60). In the meantime, the Intergovernmental Panel on Climate Change anticipates a decline in average precipitation levels in the western part of the country, as well as an increased risk of severe drought in the entire south-western region throughout this century (Niang *et al.*, 2014). This is likely to upset the balance between water use and supply even more.

The country needs to invest in basic water infrastructures. A report from "The Water Project" (2018) states that 35% of total municipal water withdrawals is non-revenue water, meaning that water is lost because of leaking pipes or simply being stolen or given out through illegal connections (The Water Project, 2018). Despite being on par with the global average, the level of non-revenue water in South

Africa is significantly higher than in other water-stressed countries. If we take Australia, which managed to limit its non-revenue water to roughly 10%, as an example; it would mean that South Africa would be able to save the equivalent of 75% of total estimated industrial withdrawals in 2017, or 1.1km³ (Donnenfeld *et al.*, 2018). Reducing non-revenue water is not the only challenge to counter water scarcity; maintaining and investing in wastewater treatment facilities is also crucial. Currently, only 50% of the renewable water is being treated (ISS, 2018). To provide a comparison, Israel, which is considered an arid country, treats about 90%. Furthermore, investing further in water infrastructure would also mean training more people to do these jobs and therefore address in some way the unemployment issue. Restoring stability to South Africa's water system is possible but it will take significant financial investment and political will. New regulations and policies about consumption patterns of South Africans will also be key. Infrastructures are key but a permanent change of lifestyle is, at least, as important.

By observing the implications of “*Day Zero*” in Cape Town, we can only imagine the consequences for businesses. Firstly, tariffs are expected to nearly double within 2020: 27% rise from July 1 2018, 30.45% rise in 2019 and 22% rise in 2020 (Chambers, 2018). Given that most of energy production depends on coal and that the latter heavily requires water to extract wash and cool the steam; the price of energy is likely to steadily rise as well. Therefore, we believe that such increases will also further entrench inequalities, ensuring access to basic needs to those having the economic and political power. Ultimately, further inequalities could lead to growing social tensions and even more insecurity within particularly sensitive areas (See part about *socio-political risks*).

At the moment, droughts are only affecting specific areas of the country, keeping agriculture relatively on track. However, we question the impact of prolonged and more extensive droughts on the long-term agricultural production and thus on future national food security since South Africa mostly feeds itself (food inflation inevitably hurting the poor). Some exports are already suffering such as wine production, for which the area around Cape Town is world famous, being down by 20% in 2018. South Africa is the seventh biggest wine producer in the world and with value export of more than \$686 million in 2016, a sustained decrease in production could have further consequences on the South African economy. Meanwhile, fruit and vegetable production – including onions, potatoes and tomatoes – has dropped by 15 percent year on year as farmers planted less due to water shortages (Crabtree, 2018). Agriculture accounts for 6% of total employment (See Appendix 59), further impacts on the sector could have subsequent consequences on unemployment in South Africa (TIPS, 2016).

Water scarcity is not only a purely economic issue; it also amplifies the risk of outbreak of communicable diseases already largely present because of a sanitation crisis. As a matter of fact, the

overexploitation of water from the rivers results in a reduced amount of water flowing downstream. This affects the capacity of the river ecosystem to absorb properly the by-products associated with human life such as industrial discharge or fertilizer run-off (Donnenfeld *et al.*, 2018).

A study conducted by the OECD in 2013 shows that more than 1/3 of disease in children under the age of 5 is mainly due to lack of safe water and sanitation services. The four million people living in informal settlements are particularly affected because of the inadequate provision of basic services such as safe access to water and waste collection management (OECD, 2017a).

Dr. Jo Barnes from the Department of Global Health at Stellenbosch University identified factors that might lead to disease outbreaks. These are alarming as all the conditions leading to epidemics seem to be gathered in South Africa at the time of writing: *“quality and quantity of the water supply in a community, the sanitation facilities and standards, the quality and cleanliness of food, the climate and the vulnerabilities of the population in that area”* (Wilke, 2017). Furthermore, people suffering from chronic disease such as HIV/AIDS are even more prone to catch the disease as those particular conditions weaken their immune system. The availability of health services is also a key factor but given the already overwhelmed public health services, those would not be of great help to stop the spread. Within a country such as South Africa, where health system is highly unequal and treatment prevails over prevention, we assess the risk of disease outbreak as being high. The example of the Chinese epidemic of SARS yet illustrates the far reaching consequences of a public health problem: *“its outbreak caused the most severe socio-political crisis for the Chinese leadership since the 1989 Tiananmen crackdown as it fuelled fears among economists that China’s economy was headed for a serious downturn”* (Huang, 2004). Thanks to a relatively well-managed emergency crisis, the scale of the SARS impact on affected economies was far smaller than suggested by contemporary media reports and model estimates (Keogh-Brown & Smith, 2008). However, for several reasons, we question the ability of South Africa in managing such epidemics. First, the HIV/ AIDS epidemic demonstrated that corruption had a direct effect on political will and intervention. Even if some lessons might have been learned since then, limited directly available resources restrict efficient interventions, whether human or financial. Secondly, according to the World Bank (2018a), as much as half of South Africa’s urban population lives in townships and informal settlements, accounting for 38% of working-age citizens, and home to nearly 60% of its unemployed. The high demographic concentration in those townships, reaching 7,500 people per square kilometres in the most populous township in South Africa (Soweto), coupled with a sanitation problem and a lack of access to fresh water make the containment of an outbreak disease even more difficult. Inequalities and poverty will, once again, predict which part of the population is the most at risk.

10.1.1 Towards a green economy?

According to the definition of the UNECE, a “*green economy is an economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities*” (UNECE, 2018). In this sub-section, we will focus on the environmental sustainability of South Africa within its development.

The South African Government’s approach has been to focus on a transition to low-carbon economy, recognising the need for the economy to be “decoupled” from environmental degradation (United Nations Economic Commission for Africa, 2015). In order to do so, the national government has been implementing a series of frameworks and actions plans. In 2011, the South African Government, together with business, trade unions and civil society organisations adopted the Green Economy Accord. Besides, the country’s National Development Plan (NDP) also sets out the ambitious strategy of “*reforming the economic system through the transition to a low-carbon, climate resilience and just society*”.

In practice, however, results are mitigated. South Africa still relies mainly on coal as the basic energy source as it provides $\frac{3}{4}$ of total primary energy supply (calculated as energy production plus energy imports, minus energy exports). In addition to this heavy reliance on coal as energy source, the structure of its economy implies a high-energy intensity economy (as measured by the total energy supply) compared to the OECD average, which is half as high (See Appendix 68) (OECD, 2016). This explains the high carbon intensity of the South African GDP (OECD, 2017a). Relying mainly on coal as main energy source threatens the already low reserves of water as well as its quality. Many power stations are indeed situated in areas of water stress, making them vulnerable to overexploitation and soil contamination. Coal power plants are large drivers for industrial water demand (for cooling especially) and the International Futures’ Current Path forecast that coal will remain the dominant fuel source for South Africa until 2035 (Donnenfeld *et al.*, 2018). This amplifies even more the issue of air pollution in South Africa, killing 20 000 people every year and costing the economy nearly R300 million (\$22.5 million at current exchange rate). Although many sources contribute to this pollution, industry is the largest source: with Eskom and Sasol (chemical industry), being the country's biggest polluters.

Municipal waste collection remains a challenge with services that are not well-developed especially in the informal settlements, where waste is collected from only half the homes. In addition, less than 5% of household waste is recycled, compared with the OECD average of around 35% (*Ibid.*).

The economy is taking further steps to achieve its goal; it will implement a carbon tax as soon as 2019 in order to stimulate carbon intensive industries to innovate and invest into new eco-friendly technologies. Furthermore, recent developments around renewable energy is inspiring: significant

investment has been made in renewable energy, with more than R200 billion (\$15 billion at current exchange rate) of investment over the 2011-2017 period. However, the energy sector still lacks a level playing field and the country remains far from achieving a strong and long-term commitment to developing renewable energy technologies.

We believe that moving the country away from coal-based energy and increasing the share of renewables will reduce industrial water demand and free up water for use in other sectors. However, South Africa seems to stand at a crossroad with policies lacking coordination. At the moment, national plans are focused on economic growth rather than environmental development, despite many policies mentioning the importance of aligning social well-being, environmental protection and economic development. In conclusion, the existing policy framework falls short of integrating the environmental sustainability transition in its vision, connecting the various elements of sustainable development, and addressing the inevitable trade-offs.

Conclusion

To conduct South Africa's risks analysis, we decided to split the qualitative research in three main parts. Firstly, we started by an assessment of economic and financial risks, comprising the investigation of general (economic) business constraints, at the firm-level. Secondly, we analysed the various socio-political risks ranging from the respects of human rights to the threat of demographics and corruption. Finally, we looked at factors exogenous to the economy such as climate change shocks and the threat of epidemic outbreak of disease. In this conclusion, we present our main results regarding those three broad categories of risks and propose an answer to the question originally formulated: to what extent can South Africa become a motor of development for the global economy and for Africa? Furthermore, a diagram linking these main identified risks will be provided at the end of this conclusion, for clarity and simplicity.

The first observation deriving from the economic analysis is that South Africa is highly dependent on international capital inflows to fund its investment. This is demonstrated by the persistent structural deficit on the income account of the current account. We analysed that the main reasons for this dependence on international capital flows are the low domestic savings rate, standing at 19.6% of GDP in 2017, as well as the relatively high levels of remittances and profit repatriation, which reduce the Gross Domestic Product by 16.5%. Furthermore, domestic private investment, which accounts for 60% of total domestic investment has been significantly declining since 2015 (due to low business confidence) and has gone into less productive sectors, such as financial services. At 18.7% in 2017, the ratio of investment to GDP is still well below the NDP target of 30% in 2030. Despite South Africa's need for foreign direct investment, the country has been attracting less and less FDI over the years, being quickly caught up by other African countries in terms of capital inflows (not in terms of stocks). Besides, the growing share of portfolio flows within the composition of total inward investments is worrying as the latter constitutes about 55% of total international inflows in 2018. This increases South Africa's reliance on more volatile portfolio investments.

The second important risk stemming from the economic risk analysis is the alarming evolution of the government debt. Public debt has been soaring since the global crisis of 2008, and even if a tax base of 29% of GDP in 2017 makes the 53.3% of public debt as a part of GDP rather sustainable, the fiscal risks (spending pressures and tax revenues in a weak growth environment) being related are numerous and make the debt level of South Africa risky and likely to further increase. The growing government exposure to state-owned entities remains the most direct and urgent risk to public debt sustainability. Increasing use of government guarantees by the state-owned entities (as a result of mismanagement and corruption) could expand the government debt burden and lead to rating downgrades, further

increasing the debt-service cost, already representing 10% of total government spending. Furthermore, even if most of government debt is local currency denominated (90%), most of public corporations (which are guaranteed by government), banks and other private debtors have their debts denominated in foreign currency. With external debt expanding from 38.3% in 2013 to 48.8% of GDP in 2018, increasing exposure to higher debt service cost, due to rand depreciation, has increased. Furthermore, future government plans to issue more foreign currency debt, taking advantage of low spreads is seen as very risky as the normalization of the US monetary policy increases the exposure of external debt, the Rand being highly responsive to the US interest rates and therefore exposed to their increases. Finally, while analysing the domestic financial system, we found out that there are some vulnerabilities but that they remain rather low as financial institutions and transactions are under close supervision. Banks maintain indeed capital adequacy and liquidity ratios well above minimum regulatory requirements and total non-performing loans remain quite low. Furthermore, household debt which has been historically high is declining since 2008 and so has the debt-to-disposable income ratio, demonstrating a greater affordability and a smaller risk of credit default. In order to deal with volatility and credit market risks, the government has also taken measures to modernize prudential regulations and financial service consumer protection as shown by the adoption of the Twin Peaks regulation.

While analysing the business environment, we found out many constraints related to the activity of starting a business as well as the running of a business. Regarding the specific obstacles to *starting* a business, a complex and burdensome regulatory environment often deter investors. Based on estimates from the World Bank's report "Ease of Doing business" (2018), we calculated that an average of 10 months was required to complete all the formalities related to starting a business. Furthermore, low competition (due to state monopolies and private oligopolies), skills shortages, labour rigidities and a general lack of coordination between government policies all create strong barriers to entrepreneurship. Entrepreneurship is yet identified as essential to growth and could boost job creation as well as private investments. This has been demonstrated by a study conducted by the Global Entrepreneurship Monitor (2017). According to that study, 32% of those involved in TEA (total entrepreneurial activity) expect to create 6 or more jobs within 5 years (*whereas the global average is only 19%*) and 30% consider offering something « *new* » and thus contributing to innovation (Global Entrepreneurship Monitor, 2017). Regarding the general management of the business, difficulties with the trading across borders as well as an unstable power supply were considered as the main obstacles. However, for the former, the currently relatively small size of neighbouring domestic markets as well as their purchasing power limit the negative impact of regional trading barriers.

The second part of the risk analysis focused on socio-political risks in South Africa. Despite South Africa's major developments and strong constitutional protection for human rights, the analysis concluded that the country remains plagued with historical trends of endemic corruption, clientelism and a high level of crimes and violence. Corruption perception in South Africa has indeed been getting much worse this 5 past years according to the CPI (Corruption Perception Index). With only 58% of South Africans trusting their government according to the Human Development Report (2016), a progressive lack of political trust by the South Africans in their government and its willingness to tackle corruption and the respect for the rule of law has installed. In recent years, the ruling African National Congress has indeed been accused of undermining state institutions in order to protect corrupt officials and preserve its power as its support base is starting to deteriorate. According to a study by the "Centre for Communication and Reputation Management" (2017), 77% of South Africans said that they thought *"the country was going in a negative direction"* and that *"their basic needs were not being met as a result of state capture and the high levels of corruption"* in South Africa. Widespread corruption is thus undermining the political legitimacy of the South African government as well as its stability. The main danger for the ANC (and thus the general political stability) is its loss of legitimacy. Historically, dominant parties and leaders tend to break down due to a crisis of legitimacy (the case of Zimbabwe, for instance).

Corruption and the social climate of poverty, inequality (the Gini coefficient based on income data stands at 0.69 in 2015, making South Africa the most unequal country in the world) and high unemployment have engendered social tensions leading to crime-related violence and insecurity in South Africa. With 33 homicides per 100,000 people in 2014, South Africa has one of the highest rates of violent crime in the world. Particularly, anxiety in the labour market due to high unemployment has amplified the violence rates and has led to "Community justice" or vigilantism. Immigrants, refugees and asylum seekers are numerous in the country (representing 5.8% of the total population in 2015) and often prosecuted, generally perceived as the ones stealing South Africans' jobs. Rape also remains an underreported issue and a cause for many broken journeys in primary or secondary schools. A survey conducted by the Medical Research Council found out that more than 25% of South African men have raped, and half of them, more than once (Medical Research Council, 2009). The insecurity and high violence climate restrict human freedom and limit the full potential of women entry on the labour market.

The current social environment is dangerous and might rapidly lead to violent contests if social reforms are not rapidly taken by the government. An economic consequence of this climate of social insecurity and poverty, is the phenomenon of brain drain. Assessing emigrations and more particularly the phenomenon of brain drain is rather difficult, as the official South African organization conducting the

population Census (Statistics SA), ceased taking emigrants into account. However, a 2015 report by *InterNations* shed some light about the profile of emigrants from South Africa, half of them being skilled employees or managers in the UK, Australia, United States of America and New Zealand mainly. Still according to this same report, 66% of all South Africans expats had at least a bachelor degree while moving from their own country, researchers composing 16% and academics represent 16% of the total expats. To offer a more precise analysis of the phenomenon, it would have been interesting to gather data about the number of South Africans who left and then came back (as well their educational achievements or work experience). Unfortunately, we have no access to this type of information.

Another identified socio-political threat concerns the demographics. First, estimates by the United Nations “World Population Prospects” in 2017 assume that total South African population might reach more than 72 million people in 2050. This poses a threat to the sustainability of the government finances as most South Africans still rely on social transfers to survive (second biggest government spending area in 2017 and 5% of GDP). In addition to those transfers, the government has committed itself to social reforms such as fee-free higher education and the implementation of the National Health Insurance, at final costs still uncertain. With government spending being already under pressure and a possible increase in the level of debt due to higher government exposure to state-owned entities, we question the sustainability of the government spending and debt level within the context of a growing population. Another demographics-related risk is the ageing of the population, with the elderly (60 years and older) reaching 8.1% of total population compared to 5% in 1990. The ageing of the South African population will have an impact on labour productivity but it also indicates that new social, health and financial demands will face a country already struggling to consolidate its total budget.

In addition to these economic and socio-political risks, we identified exogenous risks, consisting mainly of climate change shocks and the threat of epidemics. South Africa being by nature, a highly water insecure country and the Intergovernmental Panel on Climate Change anticipating a decline in average precipitation, cannot continue its current overexploitation of renewable water resources. At 235 litres per capita per day, it surpasses the global average of 175 litres per capita. Furthermore, the drought that has affected Cape Town in 2014/2015 also shed light on the magnitude of the challenge and the vulnerabilities of the water system. Restoring stability to South Africa’s water system is possible but it will take significant financial investment and political will. New regulations and policies about consumption patterns of South Africans will also be key. Consequences of water scarcity are already being felt: tariffs are expected to nearly double within 2020: 27% rise from July 1 2018, 30.45% rise in 2019 and 22% rise in 2020. With coal-powered plants to produce electricity, water-related needs are

significant. As a consequence, increase in electricity tariffs are also likely to occur. Therefore, we believe that such increases will also further entrench inequalities, ensuring access to basic needs to those having the economic and political power. We also question the impact of prolonged and more extensive droughts on the long-term agricultural production and thus on future national food security since South Africa mostly feeds itself. Some exports are already suffering such as wine production, being down by 20% in 2018. With value export of more than \$686 million in 2016, a sustained decrease in production could have further consequences on the South African economy. Finally, we found out that the consequences were not only economic, but also social, as the lack of access to water coupled with an inefficient management of the health public sector increases the (already present) risk of outbreak of diseases.

Despite a disappointing growth and numerous domestic challenges, South Africa remains the world's economic gateway to Southern Africa, or at least over the short-term. Colonial and apartheid history both provided part of the backgrounds to the country's evolution as such. Therefore, thanks to a strategic location, favourable physio-geographical conditions and a historical path assisting industrialization and economic development (as well as transport infrastructure), South Africa became this hub of transport and financial services, a sourcing hub for regional markets all of which fostering the settlement of multinationals' headquarters. Even if its current dominance in Sub-Saharan Africa is non-contestable, the longer-term development prospects of South Africa within Africa and as an international player is more questionable.

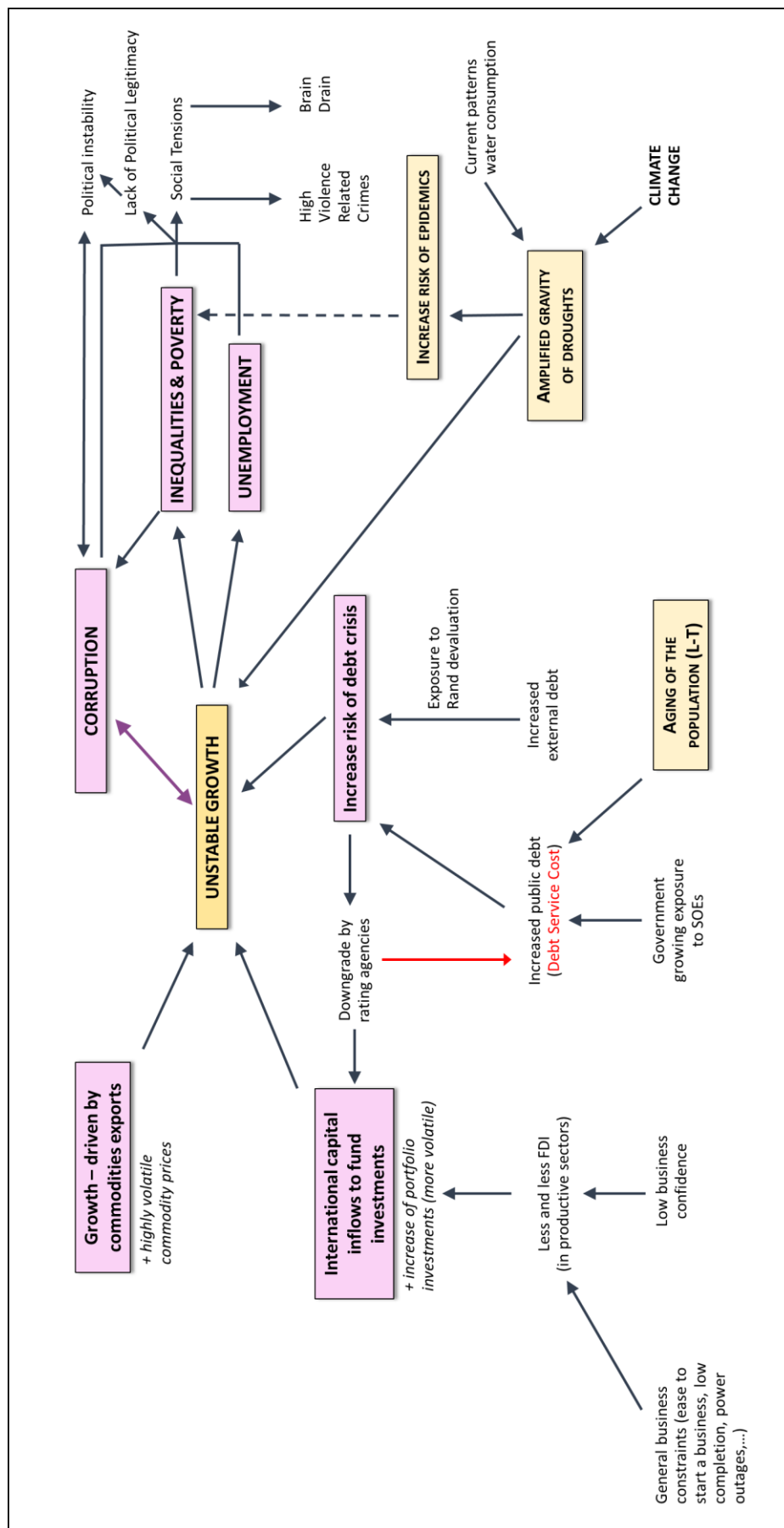
First, South Africa remains an economy mainly based on commodities, the share of manufactured exports being uncompetitive globally and thus restricted to the Southern Africa area. For South Africa to move up the global value chain, a growth relying mainly on high value-added manufactured goods is needed to stimulate a more stable global demand, as the potential for stimulating higher domestic demand though debt financing is progressively being exhausted for households and the government. However, South Africa's ability to re-industrialize and progress towards a knowledge-driven economy is running up against menacing hindrances. Private investment is declining since 2015 and directed towards sectors that are less productive and not favouring technological spillovers. The same can be said about FDI, despite lacking precise information. It was indeed not possible to gather data about the precise nature (project) and destination of inward and outward FDI (this is also indicative of the government priorities). However, some particular trends can be observed. From an inward perspective, the FDI are mainly perceived as strategic positioning to enter the Sub-Saharan region; South Africa being considered as one of the most economically and politically stable country within Southern Africa. From an outward perspective, South Africa has been slowly but surely increasing its stock of FDI within the African continent, becoming the fifth largest investor in Africa. We mainly assess

those investments as market and rent-seeking investments, South African firms taking advantage of their dominant position within the continent and the low competition authorities to expand and establish monopolies in other African countries. In other words, both FDI inflows and outflows do not seem to contribute to create higher level of technological capabilities through management know-how spillovers; nor are they the sign of greater efficiency and innovation capabilities but rather the aptitude to exploit corrupt environments with weak regulatory policies.

Furthermore, government spending's share in direct research and development is low and constrained by an already high budget deficit. Investment in higher education, which is crucial to supply skills matching future demand for highly skilled workforce, is supposed to be increased significantly through the fee-free higher education system. However, we observe that the favoured fields of study are management and human sciences; subjects that do not support the need in business for science, technology, engineering and maths (STEM) as well as future-oriented skills. Government policies to stimulate an education system producing young with expertise in maths, science, engineering and management will indeed be necessary to produce the technological experts of tomorrow able to deal with new types of risks arising with technological upgrading, such as cyber-attacks. Finally, we observe no "National champion" in South Africa, meaning that the country's firms are unable to impose a global brand; they lack marketing, branding and technological know-how. The lack of political will is problematic as we stand in a global economy where the fight is about production chains and technology. The production system has been globalized and the winner is the economy capable to climb the highest in the global value chain.

Given challenging social, economic and environmental (climate change shocks) future developments, the role of the government in implementing coordinated structural reforms is essential. The effective implementation of those reforms and their concrete impacts on solving some of South Africa's biggest challenges will be a significant driver towards broader trust in national institutions and renewed political legitimacy. Although global economic growth is at its highest level since 2014 and provides a supportive platform for South Africa, global risk factors remain elevated. At the time of writing, geopolitical risk indexes all point out towards a climate of tensions. Over the longer-term, if South Africa manages to get mainly involved as an upstream component in the global value chain, a rise in protectionism could result in trade barriers that constrain exports, production and growth (as well as raising political and military tensions). This raises the question of sustainable growth in a more instable global economy.

Analysing a country's risks requires many exogenous factors to be taken into account. Within the framework of this Master's thesis we did not have the opportunity to study and forecast the impact of major global events such as Brexit (the United Kingdom being South Africa's largest European trading partner) on the South African economy. Likewise, the evolution and outcome of Zuma's trial will surely be an event to follow and subsequent effects on private and public corruption will have to be analysed. Furthermore, it must be reminded that, no matter how well-analysed a country's risks are, some events remain unpredictable and so are investor's behaviours. Assessing country's risks is an ongoing process and globalization has led to strong interconnectedness between countries, making crises more likely to easily spread. Country risk analysis should, therefore, remain a field of study that does not brag about predicting future developments but rather prepare and warn the various stakeholders against possible and uncertain scenarios.



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