



Hypercapitalism in a developing country

The “new economy” of South Africa: economic performance, time and social sustainability

Nicolas Péjout

PhD Candidate, Ecole des Hautes Etudes en Sciences Sociales (EHESS, Paris)
Research Officer, French Institute of South Africa (IFAS, Johannesburg)

Most of the scientific literature and development projects about Information and Communication Technologies (ICTs) in developing countries¹ deal with the ways and means of promoting *access* to end-users (Rallet & Rochelandet, 2003). They often solely focus on the *use* of these technologies by disadvantaged populations. Much attention is thus paid to their *consumption*, often considered as a passive process². Another way to look at the policies and modes of appropriation of ICTs in developing countries is to consider how some actors, in these countries, do participate in the very *production* of these technologies, from their conceptualisation and design to their assembling and distribution on the one hand and their professional use on the other. This approach therefore lays the emphasis on whether and how developing countries contribute to the performances of the ICT sector and more generally to those of the “new economy”. Such a bias provides the valuable opportunity to consider the digital divide in a different way.

South Africa is a relevant country to be considered in this regard. Indeed, numerous national and regional initiatives, both public and private, are striving to promote an information / knowledge society and economy in the country. Some of them aim at strengthening the South African “new economy”. They pursue two main objectives: on the one hand, connecting the South African firms to global economic trends based on the intensive use of ICTs; on the other, contributing to the solution of local socio-economic challenges. As we will see, the balance to be found between these two imperatives seems particularly difficult, given the characteristics of the “new economy”. Indeed, the high-level requirements of such economy that may act as barriers to entry on one side and the socio-economic problems encountered by the bulk of the population on the other question the relevance of the “new economy” scenario as a sustainable social and economic strategy for South Africa. Although one shall not reduce the debate to a mere alternative between two paths (the one towards the “new economy” and the other towards the satisfaction of basic socio-economic needs), the South African government seems to be well aware of the intrinsic limitations of the “new economy” scenario regarding the most pressing needs of the

¹ Although we use the terms “developing countries”, “developed countries” and “middle-income countries” as convenient labels, we do so bearing in mind Rist’s critique of the “development” concept (Rist, 1996).

² Though we differentiate between the consumption and the production of ICTs, de Certeau (1990) has rightly shown how consumption is a production process.



population. Focusing on the South African case invites to assess the socio-economic and political appropriateness of the “new economy” scenario for developing or middle-income countries.

In order to grasp these issues with most acuteness, the first section of the paper considers the “new economy” as an embedded and total social fact. It then gives a state of the art of such economy in South Africa. It depicts its level of advancement, its size and nature, and its contribution to the national economy. The second section looks at the regional dimensions of the South African “new economy” and the local policies striving to strengthen such economy. As we will see, two South African provinces claim to be Africa’s “Silicon Valley”. Building on the documentation of these quite unknown South African realities, the third section of the paper explicitly addresses the issue of the socio-economic relevance of the “new economy” scenario for a developing country like South Africa. Such economy is considered in the context of South Africa’s “two economies” and the balance to be found between short-term and long-term socio-economic requirements. The argument aims at questioning the social sustainability of the “new economy” for societies of developing countries and identifying how such a scenario can be relevant for these societies. The conclusion of the paper suggests that scientific research pay particular attention to the nature of the “new” social contract required or promoted by the “new economy”, especially in developing countries.

1. South Africa: an emerging “new economy”

The “new economy”: definition, diffusion and appropriation of a model

The “new economy”: definition of an embedded and total social fact

Defining the “new economy” is a challenging task since it covers at least three realities. It firstly depicts a sectoral reality – the boom of the ICT sector. Secondly, it can describe the shift towards an innovative economic configuration based on these generic technologies and their pervasiveness throughout all economic sectors. Thirdly, it can mean a new way of looking at one economy using different concepts and methodologies. The second meaning of the term “new economy” refers to a deep economic transformation notably characterised by the following features: the global reach of economic activities, the rapid pace of technological change (cf. Moore’s law and Amdahl’s law), the networking coordination of intra-firm and inter-firm activities, the highly flexible labour arrangements, the requirement of high-skilled, polyvalent and mobile professionals, and the weight and high complexity of financial markets. Such an economic angle nevertheless omits some other characteristics and invites to develop a broader look in order to consider this transformation as a *total social fact* (Mauss, 1927)³. By considering the “new economy” as such, one does not reduce the nature of this reality to an economic status but takes into account its *embeddedness* into specific types of societies, cultures and discourses (Polanyi, 1944). As such, the “new economy” is notably interlinked with a network society (Castells, 2000), a business political philosophy (Péjout, forthcoming) and a comprehensive ideology, i.e. hypercapitalism (Rifkin, 2000) or a merely disguised economic neo-liberalism (Gadrey, 2000).

³ See particularly Mauss, 1927, p.11.



Diffusion and appropriation of the “new economy” model in developing countries

Considering the “new economy” as an embedded and total social fact seems particularly important when one looks at its development in developing countries. Such economy conveys specific non-economic features that are culturally and socially embedded. It also sets an agenda that may suit developed countries’ trajectories but may not be as much relevant for developing countries’ priorities. Such assertion does not promote a simplistic culturalist perspective. It rather aims at locating the “new economy” in the debate around the diffusion of a model from its main source and its modes of appropriation by its “receivers”. Historically, the first case revealing the coming of such economy is the United States during the second half of the 1990s (Fondeur, 2002). From this source, drawing solely on the performances of the American case and of some Asian Dragons consequently, an international consensus has pushed developing countries to reproduce a similar scenario (UNDP, 2001; Péjout, 2003).

Rather than merely importing and trying to imitate such a scenario, it sounds more reasonable to assert that, though the “new economy” might produce favourable economic results, it may also not fit into the specific realities of developing countries and actually not respond to most pressing needs of the bulk of the population in those areas, unless the model is amended, appropriated and customized to local challenges.

Documenting the South African “new economy”

Definition and history

Although the broader definition of the “new economy” as a pervasive – though not comprehensive – phenomenon is more relevant to analyse the socio-economic transformation at work since the beginning of the 1990s, the focus is here put solely on the ICT sector. Following the contextual definition provided by the 4th Draft of the ICT Black Economic Empowerment (BEE) Charter⁴, the ICT sector gathers four sub-sectors: information technology (IT), telecommunications, electronics and broadcasting (including some aspects of the advertising industry). The South African ICT training authority, the Information Systems, Electronics and Telecommunications Technologies Education and Training Authority (ISETT SETA) is using the OECD definition of the ICT sector to target its interventions: it comprises manufacturing and services industries that capture, transmit and display data and information electronically (OECD, 2002).

The relative strength of the “new economy” of South Africa, comparing to other African countries’ economic profile, is partly due to the historical development of the country. Indeed, the apartheid period, especially during the sanctions era, encouraged the State to strengthen its domestic research and development capacity. Three other factors contributed to lay the foundations of the South African “new economy”: its capital-intensive mining industry, its high investment in military equipment and technology and its use of control electronics (Péjout, 2004).

⁴ <http://www.ictcharter.org.za>



Scope and contribution

The ISETT SETA identifies about 5 000 firms classified in the ISETT sectors, of which 48% (2 400) are based in the Gauteng Province (Johannesburg-Pretoria) and 94% (4 700) employ less than 50 people (Botha, 2004). In 2003, the output of the ICT sector was representing 2,5% of the South African GDP, while the ICT sector's sales value was reaching 7 to 8% of the GDP. The value of e-commerce activities was estimated at 13,3 billion Rands⁵ in 2000 and between 56 and 87 billion Rands in 2002, with a figure between 200 and 300 billion Rands forecasted for 2005 (Moleke & al., 2003). Between 1994 and 2001, the exports of telecommunications, financial services and information services have grown by 28% and the IT and telecommunications sub-sectors have registered the highest share of foreign direct investment (FDI) in the country, i.e. 16 billion Rands. Despite this high level of foreign investment, the growth of the ISETT sector is driven by domestic consumption rather than by exports and by telecommunications and IT services more than by software development and hardware supply. The government is the biggest buyer of ICTs in the country with a total purchase amounting to 10,2 billion Rands in 2002 (Moleke & al., 2003).

In 2001, the South African ICT sector was employing about 63 800 people, out of a total employment of 8,7 million (SSA, 2001; McCord & Bhorat, 2003). The financial and business services and the manufacturing industry were then employing most ICT workers. 52,2% of ICT workers were holding higher qualifications (undergraduate and postgraduate degrees or diplomas). Race and gender profiles still reveal white male dominance in the sector (Moleke & al., 2003).

A comprehensive set of national policies

Since 1995⁶, the South African government has been developing a comprehensive set of national policies, involving all national and provincial departments, to ensure that the country embraces the dynamics of the information / knowledge economy and society. All departments can indeed either intervene directly in the development of such economy or act more indirectly by creating an environment that is conducive to this process. For instance, some projects are: the Department of Science and Technology's ICT Technology Roadmap⁷, the Department of Communications' Info.com 2025 Programme, the Department of Education's *Dinaledi* Project and Advanced Institute of Information and Communication Technology (AIICT), the Department of Science and Technology and Department of Trade and Industry's Godisa programme⁸, and the Department of Public Service and Administration (DPSA)'s Government Gateway project⁹. The diversity of these initiatives explains the creation of the Presidential National Commission on Information Society and Development (PNC-ISAD) that aims at developing a coherent and comprehensive “Information Society National Plan”¹⁰.

⁵ On the 26th August 2004, 1 euro = 7.97 Rands.

⁶ Mandela, 1995.

⁷ <http://www.ictroadmap.co.za/>

⁸ <http://www.godisa.net/>

⁹ <http://www.gov.za/>

¹⁰ Mokwining Nhlapo, Head of Research Unit, PNC, 26th July 2004, Pretoria, interview.



2. The Gauteng and Western Cape provinces: Africa’s own Silicon Valleys?

This national overview of the South African “new economy” is hiding some striking regional differences. The nine provinces of the country are not equally endowed with resources needed to make the most of such economy. Actually, two of these provinces aim to become Africa’s Silicon Valley: the Gauteng and Western Cape provinces. Each province develops a set of public policies to position itself as the “hub” of the (South) African “new economy” (Gordon, 2000; *Engineering News*, 2003).

The Gauteng province: building a “smart province”

The Gauteng Province is the leading economic region of South Africa. Covering only 1,4% of the country’s land area, it generates 10% of the African GDP and 33,8% of South Africa’s GDP. The city of Johannesburg itself generates 40% of Gauteng’s and 16% of South Africa’s GDP (GEDA, 2004). As far as its “new economy” is concerned, the province hosts 66% of the South African ICT industry (with 85% of the telecommunications industry sub-sector and 65% of the IT industry sub-sector). Gauteng gathers 3 541 ICT firms, of which 1 681 belong to the software development sub-sector, 1 020 to the computer industry, 400 to the telecommunications segment, 360 to the media industry and 80 to the electronics (Botha, 2004). The knowledge-intensive sectors represent 15% of the Gauteng economy that gathers 70% of South Africa’s hi-tech workforce. The ICT sector contributes 6,4% of the provincial gross geographic product¹¹ (GEDA, 2004; Comins, 2003).

Although the province is the leading area for the South African (and, to a large extent, African) “new economy”, some issues are yet to be addressed: the lack of commercialisation of innovations, the lack of ICT clusters, the lack of business value chains, the lack of economies of scale, the fear of cooperation between companies, the lack of a competitive telecommunications framework, low and highly expensive bandwidth, inadequate seed funding and support for start-ups and, finally, the brain drain (Comins, 2003).

The “new economy” is placed high on the provincial government’s agenda. In 1997, the Gauteng Department of Finance and Economic Affairs’ Trade and Industrial Strategy (TIS) diagnosed the inability of the provincial economy to sustain a long-term job-creating growth if it was relying solely on its historically favoured primary production industries (mostly gold, iron and steel). The province could neither rely on its low value-added and internationally uncompetitive manufacturing sector inherited from the sanctions era marked by self-sufficiency and import substitution. The strategy therefore identified three ways to grow the GGP and employment in the province: develop “smart industries”, move toward high value-added manufacturing and enhance the service sector (from financial and business services to tourism). This re-engineering of the provincial economy led to the creation of the Blue IQ programme by the Gauteng Department of Finance and Economic Affairs. Among the 11 mega-projects implemented by Blue IQ, the Innovation Hub, an incubator and science park,

¹¹ The gross geographic product (GGP) of a particular area amounts to the total income or payment received by the production factors – (land, labour, capital, and entrepreneurship) – for their participation in the production within that area (<http://www.environment.gov.za/Enviro-Info/nat/ggp.htm>, accessed 21st August 2004).



and the Gauteng Automotive Cluster embody the push for the province to become the “smart province” of South Africa¹².

The Western Cape province: becoming the “ICT African Hub”

The Western Cape province strives to challenge the dominant position of Gauteng. It is hosting about 1 200 ICT companies, among which three quarters are located in the city of Cape Town. A survey run in 2003, involving 566 ICT companies, reveals that most firms are owned by South Africans and restrict their activities to South Africa. 12% have overseas offices. Out of 334 firms responding on this item, 58% have a turnover lower than 2 million Rands. The two main activities of Western Cape-based ICT firms are ICT services (consulting, HR recruitment, education and training, maintenance and repair) and software activities with respectively 28% and 25% of firms involved in these sub-sectors (Miller & *al.*, 2003). The main markets for future expansion are, by decreasing importance: foreign markets (United States, Europe, United Kingdom), South African government, African governments, international financial markets, the manufacturing industry and the cell phone industry.

The Western Cape provincial government, along with the Municipality of Cape Town, are implementing a set of various policies aiming at enhancing the profile of the local “new economy”. Some initiatives are directly focusing on the strengthening of the ICT sector. In that regard, the Cape Information Technology Initiative (CITI)¹³ was launched in June 1998. Registered as a Section 21 company (association incorporated not for gain, with no shareholders), it is an independent development agency supporting the growth of the ICT cluster of businesses in the Western Cape. Now gathering 35 members, using an annual budget of 1 million Rands¹⁴, the mandate of the agency is to position the Western Cape as a global ICT hub and the ICT gateway to Africa. For that, it focuses on: ICT Cluster Marketing and Networking, ICT Business Development, ICT Skills Development and Research and ICT Policy. Interestingly, the promotion of the local “new economy” is considered as closely interdependent with the promotion of e-government, in a broader move towards the establishment of a “smart” province¹⁵. For this economy to grow on a sustainable basis, the constitution of an adequate human capital is promoted through several initiatives such as Khanya¹⁶ and Smart Cape Access projects.

3. Hypercapitalism in a developing country: a sustainable scenario?

Looking at the South African “new economy” as an embedded and total social fact would not be possible without locating such economy in the broader socio-economic environment of the country. By doing so, one can adequately approach the debate about the social sustainability of the “new economy”. The development of hypercapitalism (Rifkin, 2000) indeed poses some serious challenges to the social contract in South Africa for the next few years, particularly in the interaction to be set between the “two economies” of the country and

¹² <http://www.blueiq.co.za>

¹³ <http://www.citi.org.za>

¹⁴ Odette Potter, Bandwidth Barn CEO, 15th June 2004, Cape Town, interview.

¹⁵ Harold Wesso, Head of e-Innovation Center, Western Cape Provincial Government, 18th June 2004, Cape Town, interview.

¹⁶ <http://www.khanya.co.za>



the balance to be found between its economic performance and its social sustainability, in both long and short term time spans. However, against the simplistic view of the “new economy” as an elitist and socially non-affordable perspective for South Africa, it should be considered that some sectors of such economy could be both highly value-adding and socially sustainable.

The “two economies” of South Africa

A two-nation country

Talking of the “two economies” of South Africa is embedded in a national political debate about contemporary inequalities characterising the country, in the legacy of the Apartheid regime. Indeed, the “two economies” first appeared, in a more racialised consideration, in May 1998 with the assertion that South Africa was a “two nation” country. Then Deputy President Thabo Mbeki described South Africa as a country made of two nations: “the one black and the other white”.

“One of these nations is white, relatively prosperous, regardless of gender or geographic dispersal. It has ready access to a developed economic, physical, educational, communication and other infrastructure. This enables it to argue that, except for the persistence of gender discrimination against women, all members of this nation have the possibility to exercise their right to equal opportunity, the development opportunities to which the Constitution of 1993 committed our country. The second and larger nation of South Africa is black and poor, with the worst affected being women in the rural areas, the black rural population in general and the disabled. This nation lives under conditions of a grossly underdeveloped economic, physical, educational, communication and other infrastructure. It has virtually no possibility to exercise what in reality amounts to a theoretical right to equal opportunity, with that right being equal within this black nation only to the extent that it is equally incapable of realisation. This reality of two nations, underwritten by the perpetuation of the racial, gender and spatial disparities born of a very long period of colonial and apartheid white minority domination, constitutes the material base which reinforces the notion that, indeed, we are not one nation, but two nations” (Mbeki, 1998).

Characterisation of the two economies

Building on this characterization of South Africa as a two-nation country, Thabo Mbeki further developed the idea of “two economies” for the first time in 2003: South Africa is presented as being split between a “first world economy” (the first economy) and a “third world economy” (the second economy). The first one is “the modern industrial, mining, agricultural, financial, and services sector of [the] economy that, everyday, becomes ever more integrated in the global economy. [...] It is this sector of our economy that produces the wealth [South Africa] need[s] to address the many challenges [it] face[s] as a country” (Mbeki, 2003a). The “new economy” is clearly part of this economy. In the government’s *Ten Year Review*, the situation is characterised as such: ““two economies” persist in one country. The first is an advanced, sophisticated economy, based on skilled labour, which is becoming more globally competitive. The second is a mainly informal, marginalised, unskilled



economy, populated by the unemployed and those unemployable in the formal sector. Despite the impressive gains made in the first economy, the benefits of growth have yet to reach the second economy, and with the enormity of the challenges arising from the social transition, the second economy risks falling further behind if there is no decisive government intervention” (RSA, 2003). The first economy is “modern, produces the bulk of [the] country’s wealth and is integrated within the global economy. The second economy (or the marginalised economy) is characterised by underdevelopment, contributes little to the GDP, contains a big percentage of [the] population, incorporates the poorest of [the] rural and urban poor, is structurally disconnected from both the First and the global economy, and is incapable of self-generated growth and development” (Mbeki, 2003b). The second economy “constitutes the structural manifestation of poverty, underdevelopment and marginalisation in [the] country” (Mbeki, 2004a). This portraying of South Africa illustrates the ambivalence of the country gathering contrasting features of first and third world economies.

The dynamic interaction between the two economies

Beyond the characterisation of both economies, it is their interaction that determines the balance to be found between economic performances and social (therefore political) sustainability. The understanding of this interaction by the South African government is not fully coherent: on the hand, they are depicted as disconnected from each other, evolving as parallel realities, the second economy suffering from a “structural disjuncture”; on the other, they are intrinsically linked because the successes gained within the first economy are expected to provide the resources needed to attend the problems of the second economy (Mbeki, 2003b; Mbeki, 2004a). The government however does not consider that the two economies are linked through a “trickle-down effect that would allegedly impact on the “third world economy” as a result of a stronger “first world economy”: the reality is that those who would be affected positively [...] would be those who, essentially because of their skills, can be defined as already belonging to the “first world economy”” (Mbeki, 2003a).

A blueprint for the next decade

The characterisation of each economy and the nature of their interaction will influence the macro-economic strategy in terms of growth and job creation. Though the first economy provides some resources to be used for the development of the second economy, specific public policies are designed for each of those. The final objective is that the second economy becomes part of the first world economy (Mbeki, 2003a). For the development of the first economy, specific interventions are being planned to raise the rate of investment, reduce the cost of doing business in the country, grow the SMMEs sector, speed up the process of skills development, increase export performance and augment scientific research and development. As for the second economy, policies involve an Extended Public Works Programme, support of agricultural activities, Adult Basic Education and Training, broad based BEE, a social security framework and, interestingly, the use of ICTs as tools of public service delivery. Whereas the first decade of democracy in South Africa was primarily focused on the state of the first economy, “the second decade of liberation will be decisive for [the] country because it will determine whether we succeed to meet the challenges posed by the existence of the second economy” (Mbeki, 2004b).



The tension between the two economies reveals the intermediate position of South Africa as a middle-income developing country: indeed, it combines first world-type infrastructures (roads, telecommunications, financial services...) and third-world like realities (widespread poverty, mostly unskilled labour...). Due to this duality, the country cannot follow the low-cost economic strategies adopted by some South Eastern Asian countries, notably because of its higher labour costs. It can neither broadly compete with developed countries. It therefore has to invest in some niches.

“New economy”, timing and social sustainability in South Africa

In this context of a “double economy”, the “new economy” scenario seems highly problematic and its implementation demands some careful thinking about the combination of various policies, some focusing on the “first economy”, some on the “second”. Another way of looking at these issues is to weigh up the challenges with timing consideration: although the “new economy” scenario seems reasonable in a long-term perspective, it does not seem to be the most appropriate answer to address urgent local socio-economic needs such as unemployment (37% in general and 43% for Blacks in 2001, see SSA, 2001¹⁷), the improvement of infrastructures and poverty alleviation. However, it would be exaggerated to dismiss the “new economy” as a macro-economic scenario for South Africa: some sub-sectors hold indeed a good potential of growth and job creation, which might help designing a “new economy” that is more sustainable for developing countries.

The long-term perspective: can South Africa sustain the “new economy” scenario?

The focus put by the South African government on the “new economy” is highly understandable: it aims at shifting the economic profile of the country to most profitable industries and moving the country up the value-chain. Among these industries, the ICT sector is identified as a key sector notably because it is a pervasive industry. Although a wide set of policies is being implemented in order for this scenario to be realised, the country still faces some structural constraints that may delay such a perspective and make it so time-consuming that it may lose (some of) its legitimacy to the population. South Africa has to take up to or strengthen its existing commitment with four pressing challenges in order to implement its “new economy” scenario: improved access to and enlightened (educated) use of ICTs, lasting R&D effort in the field of ICTs, a sufficient quantity of relevant human resources and the acceleration of BEE dynamics.

The mainstreaming and sustainability of the South African “new economy” firstly implies an improved *access to and enlightened (educated) use of ICTs*. As shown in table 1, the accessibility of the very basic infrastructures required for business operations in the “new economy” is still very low and most biased in disfavour of the Black population.

¹⁷ These figures are based on the broad definition of unemployment and therefore includes “discouraged” workers not actively seeking work.



Percentage of households with phones and computer by population group of the household head (% , 2001)

	Black African¹⁸	Coloured	Indian / Asian	White	Total
Telephone in dwelling	12.0	43.2	74.8	78.6	24.4
Cellphone	24.6	31.0	58.9	74.6	32.3
Computer	1.8	9.4	27.9	46.0	8.6

Source: SSA, 2003.

In order to increase the access to ICTs, a wide set of initiatives exist throughout the country, implemented by both public and private actors, at national, regional and local levels, in both rural and urban areas. The improved accessibility of ICTs is a basic though insufficient condition for the South African “new economy” scenario to be fulfilled. ICTs must also be seen as business tools. In this regard, education about ICTs as economic resources still lacks and a special consideration needs to be given to the time sequence that ICT end-users experience: they see Internet as a business tool only when they have secured middle- to long-term access to it, gained knowledge about its potential and got over the initial excitement. In this regard, access to ICTs seems best when it involves intermediaries who guide, advise and enlighten about the diversity of usages to be experienced with ICTs, one of those being for business activities.

The second condition required for a sustainable development of the South African “new economy” is a *lasting R&D effort in the field of ICTs*. In this regard too, many initiatives are being implemented. Among those, a particular focus is put on the strengthening of local, “indigenous” technological capacities, with the promotion of Open Source Software (OSS). Though occasionally lacking of some coherence, the National Advisory Council on Innovation (NACI), the Government Information Technology Officers’ (GITO) Council and the Centre for Scientific and Industrial Research (CSIR)¹⁹ implement specific OSS policies aiming at reducing the dependency on imported technical and human capitals, nurturing the local capacities, developing technologies that suit local needs and, *in fine*, promoting South African goods and services that could be exported and might set new continental and international standards.

The third condition is the constitution of a *sufficient quantity of relevant human resources*. By “relevant human resources”, we mean the people qualified with the appropriate skills that suit the needs of the “new economy”. The requested labour force would be working in all sectors since such economy is pervasive. In this context, between 2001 and 2006, the communications sector is expected to have the highest average annual growth rate, i.e 7%. To evaluate the replacement demand for computer-related professionals, data from retirements, net migration, movement into other occupations and in-service mortality are compiled:

¹⁸ Although statistics based on “racial groups” have been misused by the Apartheid regime, they are still officially used by Statistics South Africa, as a way to measure inequalities and change over time.

¹⁹ See <http://www.meraka.org.za>



between 2001 and 2006, 15 600 computer-related professionals would be required to meet new and replacement demand. The financial services sector would explain most of this trend. On the supply side, in 2000, only 12,3% of schools reported the use of computers for teaching and learning purposes and only 2% of all SASCE candidates (South African Senior Certificate Examination) enrolled for computer studies for their exam. Nevertheless, in 2001, public and private training institutions produced about 17 000 people who passed ICT-related courses. 79% of those graduated from private institutions that offer courses at the pre-graduate level (Woolard & *al.*, 2003).

The fourth and last requirement is the acceleration of *BEE dynamics* in the “new economy”. Whereas the Black population represents 79,0% of the overall population (Stats SA, 2003), Blacks are still a minority in the “new economy”. For it to be rooted in sustainable foundations, one key perspective is the BEE strategy implemented in the ICT sector aiming at increasing the number and share of black professionals in the industry. This dynamic is underway with the current preparation of the ICT BEE Charter. Professional bodies are drafting the Charter that will set a standardised scorecard to rate ICT firms regarding their BEE practices (in terms of employment, equity ownership, skills development, preferential procurement...). The increasing participation of Blacks in the “new economy” conditions the support given to such economy by the population and therefore its social legitimacy.

The short-term imperative: the conditional social sustainability of the “new economy”

As seen in the previous section, the “new economy” scenario is a challenging perspective for South Africa. It is all the more the case if the country does not manage to gather the required resources in terms of access to ICTs, R&D, human capital and BEE. Nevertheless, even if such conditions are satisfied, this economic strategy sets itself in a long-term framework and does not help much in addressing the most pressing needs of the bulk of the population. Most of the “new economy” sectors do not employ high numbers of workers: in that sense, they are not labour-intensive. Indeed, in Gauteng, 71,4% of ICTE firms employ 5 people or less (Botha, 2004). In the Western Cape, in roughly equal proportions nearly 90% of ICT firms are “micro,” “very small,” or “small” with fewer than 5, 10 and 50 employees respectively (Miller & *al.*, 2003).

It would however be caricatured to portray the “new economy” as an irrelevant strategy for South Africa because some of its sub-sectors might be both quite high on the value-chain and contribute to urgent local problems such as economic output and job creation. Selecting the most labour-intensive sub-sectors of the “new economy” – relying on high numbers of workers – would be a balanced exercise that enables the country to move up the value-chain while simultaneously satisfying short-term socio-economic challenges. The “new economy” would therefore be socially sustainable. In this regard, the ICT hardware manufacturing, the offshore Business Process Outsourcing (BPO) and the call centre (or contact centre) industries are potential niche markets for South Africa.

The *ICT hardware manufacturing* industry is the first relatively labour-intensive sector that South Africa could focus on to combine economic performance and social sustainability through job creation. The country does not yet enjoy a strong ICT hardware manufacturing sector, although some assemblage, small hardware remanufacturing and refurbishment is done in the Western Cape. The province thus hosts some noticeable ICT hardware manufacturing companies like Tellumat, Psitech, Avitronics, Prism and Trax Interconnect. This sector is not a special focus of South African national and regional economic policies.



The second sector that could be focused on is the *offshore BPO industry*. The offshore BPO sector can be defined around the following set of activities: “the transfer of non-core business process, by a buyer, to a supplier” partnering over a long distance (TBDS, 2002). These non-core processes are accounting functions, customer contact management, back office processing, etc. South Africa is an emerging candidate in the global BPO market that is still dominated by India. The Gauteng Provincial Government, through its Blue IQ initiative, is targeting the offshore BPO sector as a major growth area and investigating the possibility to make Gauteng, and more generally South Africa, the African BPO hub. In this regard, the government is evaluating the case for an export-oriented BPO Outsourcing Hub, housing companies performing a range of services for offshore clients (TBDS, 2002). The Western Cape is also investing in the BPO industry (Infonomics & Shoretec, 2003).

The third and last industry would be the *call centre* (or, more widely, the contact centre) sector. South Africa hosts about 410 call centres of more than 20 seats, as many as in Belgium. 58% of those are based in the greater Johannesburg (Mital, 2002). Two regional initiatives aim at increasing the number of call centres operating in Gauteng (ContactInGauteng²⁰) and in the Western Cape (CallingTheCape²¹). Though India still dominates the industry worldwide, South Africa intends to take advantage of its comparative advantages: a location in time with European countries, its English-speaking population and its reliable infrastructures (electricity and communications).

One of the most important common requirements to the success of these three sectors is the creation of a sufficient pool of *intermediate skills*. Kraak (2003) identifies three “skills bands: high, intermediate and low”. These bands are “associated with three differentiated economic sectors, which are structurally separated by their differing production regimes, technology needs, product markets and skills utilisation”. The ICT hardware manufacturing, BPO and call centre industries seem to require more intermediate skills than other sectors of the “new economy” mostly using high skills. They could thus enhance the social sustainability of such economy, especially because “for countries like South Africa, the stability and expansion of middle society is a key political goal”. It primarily concerns the rising Black working/middle class (Kraak, 2003). Indeed, in 2001, 45,1% of ICT workers held non-degree qualifications, illustrating the importance of intermediate ICT skills mostly provided by private training providers and in-house training (Moleke & al., 2003). A *multi-layered* human resources development strategy might thus help South Africa to generate a socially sustainable model “new economy” in which a wide range of skills is used at best.

*
* *

By looking at how South Africa implements its “new economy” scenario and what the profile of the country is in this regard, this paper invites to take an innovative look at the much debated “digital divide”. Rather than focusing on the access to and consumption of ICTs, it provides an analysis of the production and participation characteristics of South Africa in such economy. Understood as an embedded and total social fact, the “new economy” strategy is a highly contentious scenario for South Africa. Indeed, although it is legitimate for the country to target high-technology high added-value sectors in order to

²⁰ <http://www.contactingauteng.co.za/>

²¹ <http://www.callingthecape.org.za/>



achieve economic performances in the long term, the socio-economic situation of the bulk of the population might make this scenario socially unsustainable in the short term. Moreover, whereas the “second economy” depends on the successes of the “first economy” (that comprises the “new economy”), the latter is self-sustainable and does not rely on the former. The most pressing needs (first and foremost, job creation, poverty alleviation and the improvement of basic infrastructures) would therefore not be addressed if the focus is solely put on this “first economy” while the “second economy” would be left aside and the South African social contract disrupted. However, some sectors of this “new economy” can conciliate economic performance and social sustainability, through job creation: ICT hardware manufacturing, BPO and call centre industries. For this scenario to occur, some conditions are nevertheless required: a better access to ICTs, a lasting effort for R&D in the field of ICTs, the creation of a sufficient pool of suitable human capital and the acceleration of the BEE dynamics within the industry.

These issues illustrate the fact that the push for the “new economy” in developing countries must not be taken for granted. The adoption of such strategy cannot merely consist of the reproduction of models conceptualised and experienced in developed countries and replicated, without alteration and appropriation, in developing countries. The “new economy” scenario is most relevant if it is customised to address local socio-economic challenges.

Bibliography

- BOTHA, J.P., 2004, *An Analysis of the Size and Profile of the Entrepreneurial Community Falling Within Softstart's Target Market and Their Associated Needs for Incubation Services*, Pretoria, Technoscene, June.
- CASTELLS, M., 2000, *The Information Age: Economy, Society and Culture*, vol.1, The Rise of the Network Society, Oxford, Blackwell, 2nd Ed.
- COMINS, N., 2003, “The Innovation Hub – Business Concept”, Smart Partnerships Conference, Johannesburg. Available at: http://www.theinnovationhub.com/pdf/2003_biqw_comins.pdf, accessed 2nd July 2004.
- DE CERTEAU, M., 1980, *L'Invention du Quotidien, tome 1. Arts de Faire*, Paris, 10/18.
- ENGINEERING NEWS, 2003, “Building starts at Gauteng's answer to Silicon Valley”, 16th November.
- FONDEUR, Y., 2002, “Etats-Unis – "Nouvelle Economie" et Emploi: Fin des Illusions”, *Chronique Internationale de l'IRES*, n°78, September, p.55-69.
- GADREY, J., 2000, *Nouvelle Economie, Nouveau Mythe ?*, Paris, coll. Champs, Flammarion.
- GAUTENG ECONOMIC DEVELOPMENT AGENCY (GEDA), 2004, *Gauteng Continues Leading SA's Economic Boom*, available at: <http://www.geda.co.za/default.asp?index=9913&ID=257&sub=2>, accessed 4th August 2004.
- GORDON, G., 2000, “Cape Town Lifestyle is the Number One Attraction”, *Business Day*, 2nd October.
- INFONOMICS SOUTH AFRICA, SHORETEC INTERNATIONAL, 2003, *The Market for Business Process Outsourcing in the Western Cape*, Cape Town, CITI, December.



- KRAAK, A., 2003, "HRD and the Skills Crisis", *Human Resources Development Review*, Pretoria, Human Sciences Research Council.
- MANDELA, N., 1995, *Address at opening ceremony of Telecom 95*, 3rd October.
- MAUSS, M., 1927, "Divisions et Proportions des Divisions de la Sociologie", *Année Sociologique*, news series, 2.
- MBEKI, T., 1998, Statement of Deputy President Thabo Mbeki at the Opening of the Debate in the National Assembly, on "Reconciliation and Nation Building", 29th May.
- MBEKI, T., 2003a, "Characteristics of South Africa's First and Third World Economies", Johannesburg, *ANC Today*, 28th August.
- MBEKI, T., 2003b, *Address to the National Council of Provinces*, Cape Town, 11th November.
- MBEKI, T., 2004a, *State of the Nation Address*, Cape Town, 6th February.
- MBEKI, T., 2004b, *State of the Nation Address*, Cape Town, joint sitting of the Houses of Parliament, 21st May.
- McCORD, A., BHORAT, H., 2003, "Employment and Labour Market Trends", *Human Resources Development Review*, Pretoria, Human Sciences Research Council.
- MILLER, ESSELAAR & ASSOCIATES, INFONOMICS SA & RADIAN, 2003, *First Census of Western Cape ICT Companies*, Cape Town, September.
- MITIAL RESEARCH, 2002, *South Africa 2002/2003 – Call Centre Country Report*, October.
- MOLEKE, P., PATERSON, A., ROODT, J., 2003, "ICT and Associated Professionals", *Human Resources Development Review*, Pretoria, Human Sciences Research Council.
- OECD, 2002, *Measuring the Information Economy*, October, available at: http://www.oecd.org/document/5/0,2340,en_2649_33757_2765701_1_1_1_1,00.html, accessed 27th August 2004.
- PEJOUT, N., 2003, "Les Nouvelles Techno-logies de l'Information et de la Communication en Afrique du Sud. Les Mots de la Fracture ou la Rhétorique du Numérique", *Netsuds*, n°1, Paris, L'Harmattan, Talence, CEAN, août.
- PEJOUT, N., 2004, "Big Brother en Afrique du Sud? Gouvernement Electronique et Contrôle Panoptique sous et après l'Apartheid", in GUILLAUME, P., PEJOUT, N., WA KABWE-SEGATTI, A., 2004, *L'Afrique du Sud Dix Ans Après – Transition Accomplie?*, Paris, Karthala, Johannesburg, IFAS.
- PEJOUT, N., forthcoming, "Batho Pele – Putting People First? A Critical Look at e-Government in South Africa", in CALISE, M. (ed.), *Electronic Government*, Milan, Apogea.
- POLANYI, K., 1944, *The Great Transformation*, New York, Rinchart.
- RALLET, A., ROCHELANDET, F., 2003, "La Fracture Numérique: une Faille sans Fondement?", available at: <http://www.jm.u-psud.fr/~adisrob/robi/fracture.pdf>, accessed 26th August 2004.
- REPUBLIC OF SOUTH AFRICA, 2003, *Towards a Ten Year Review: Complete Report*, Synthesis report on implementation of government programmes: Discussion document, October, available at: <http://www.10years.gov.za/review/documents.htm>, accessed 24th August 2004.
- RIFKIN, J., 2000, *L'Ere de l'Accès – La Révolution de la Nouvelle Economie*, Paris, La Découverte.



- RIST, G., 1996, *Le Développement – Histoire d’une Croyance Occidentale*, Paris, Presses de Sciences Po.
- STATISTICS SOUTH AFRICA (SSA), 2003, *Census 2001*, Pretoria, SSA.
- STATISTICS SOUTH AFRICA (SSA), 2001, *Labour Force Survey*, February, Pretoria, SSA.
- TRAIL BUSINESS DEVELOPMENT SERVICES (TBDS), 2002, *Offshore Business Process Outsourcing and South Africa – An Investigation into the Business Case for Gauteng-based Companies*, Johannesburg, Blue IQ, October.
- UNDP, 2001, *Mettre les Nouvelles Technologies au Service du Développement Humain – Rapport Mondial sur le Développement Humain 2001*, Bruxelles, De Boeck Université, 2001.
- WOOLARD, I., KNEEBONE, P., LEE, D., 2003, “Forecasting the Demand for Scarce Skills, 2001-2006”, *Human Resources Development Review*, Pretoria, Human Sciences Research Council.