

Lewis Turning Point or "Labor Surplus" in Cameroon: Socio-Cultural Realities of the Labour Market and Conditions of Economic Development

Gervais Beninguissé & Claude Mbarga

Demography, IFORD, Cameroon

DOI: <https://doi.org/10.51244/IJRSI.2025.12020069>

Received: 09 December 2024; Accepted: 14 December 2024; Published: 18 March 2025

ABSTRACT

Cameroon is a lower-middle-income country that has been experiencing an average population growth of about 2.79% per year since 1990 (WDI 2024)¹. This country, which is in its second phase of the demographic transition, is experiencing weak economic development, reflecting the socio-cultural context of its labor market. This chapter presents an analysis of the level of exploitation of the working-age population and the conditions for economic development in developing countries. The analysis is based on the theories of demographic transition and development economics to **theorize the demo economic transition**. The study is then based on the NTA methods, descriptive, prospective analysis and regression and on data from the Cameroonian Household Surveys (ECAM 2, 3 and 4), data from the NTA database, the World Population Prospect (WPP 2004) and World Urbanization Prospect (WUP 2018) to determine the conditions for Cameroon's economic development.

Keywords: Demographic transition, economic development, labor surplus, Turning the Lewis urban and rural economy.

INTRODUCTION

Lewis' (1954) theory of economic development² presents a model of structural change in the economy, in the context of a "surplus labour economy" of the large traditional rural and agricultural sector, in the face of a small, industrialised urban sector and a modern, service-based economy. As a result of "disguised unemployment" in the agricultural sector, there is a virtually unlimited supply of labour available to the urban and industrialised sector at a constant wage determined by minimum subsistence levels in traditional family farming. At a later moment in the history of the dual economy, the supply of labor is exhausted, whereas only an increase in the wage rate will make it possible to draw more labour from agriculture into the modern industrial sector. In this context, the "surplus of workers" (or sometimes disguised unemployment) means the existence of such a large population in the traditional agricultural sector that an additional unit of workers does not add any value to overall production. Thus, if a few workers are removed from the land, the total product remains unchanged. The essence of the development process in such an economy is "the transfer of labour resources from the traditional rural and agricultural sector, where they add nothing to production, to the more modern, urban, industrial sector, where they create a surplus that can be used for growth and development" (Todaro and Smith 2020³).

But Lewis's classic theory, specific to the historical experience of economic development in Western countries, is difficult to observe in developing countries where socio-cultural realities are different (Huynh Cao 1981, Deléchat and Leandro 2021), or even reversed, i.e., that there is rather significant unemployment in urban areas, but almost no surplus labour in rural areas, open to agriculture, and regardless of behaviour relating to

¹ <https://data.worldbank.org/indicator/SP.POP.GROW?locations=CM>

² Lewis, W.A. (1954). Economic development with unlimited labour supply. The Manchester School, 22, 139-191. <https://doi.org/10.1111/j.1467-9957.1954.tb00021.x>

³ Todaro, Michael P, & Smith, Stephen C. (2020) Title: Economic Development. Thirteenth edition. Hoboken: Pearson, 2020. ISBN 9781292291154 (paperback), ISBN 9781292291192 (epub) <https://lccn.loc.gov/2019035607>

the evolution of labour wages in both settings (Todaro and Smith 2020). In all cases, the development process requires a transition of stages or stages of growth in which "the transfer of labour or labour power" is more than vital (Rostow 1991)⁴, it would then be necessary to clearly define what can be called "surplus population", "surplus of workers" or simply "unemployment" and the sector(s) concerned for a real modernization of the economy.

In a historical analysis of the evolution of the world's surplus populations between 1949 and 2010, Benanav (2015)⁵ examines the term "unemployment", which he believes is a category of "overpopulation", taken from the political economy of the 19th century, to describe the various situations of these unemployed and marginally employed individuals. For the latter author,

"The category of unemployment is difficult to apply precisely at the global level, because in most countries there is either no unemployment insurance or this insurance covers only a small part of the unemployed. As a result, the unemployed have to work even if they cannot find regular employment. Some of these unemployed people find themselves unemployed in the formal sector of the economy. Globally, many more end up in the informal sector."

For UN-HABITAT (2015)⁶ "Unemployment is part of the formal labour market, i.e. people who are actively looking for work and who are unable to find it. **It is largely irrelevant in countries where the informal sector is important, because virtually everyone, even children, are involved in a number of economic activities to make a living, and the conceptual separation of workers and non-workers makes no sense.**"

Unemployment is therefore an inadequate category for developing countries like Cameroon, where many people end up taking jobs that underemploy in various ways, to make ends meet. Indeed, in these countries, if the unemployed cannot depend on others or the state to support them, they must work, even if there is little work available for them. They turn to the underemployed, who are forced to build up a meagre income thanks to all the opportunities that present themselves, permanently or periodically in the labor market. **In contrast, among informal employees, there is a tendency towards diversification: people take on multiple jobs, sometimes including self-employment on the side, in order to make ends meet** (Benanav 2015). Informal employees are likely to change jobs from month to month, or even from day to day, depending on the work available. In rural areas, it is common for people to describe their main occupation as "farmer", if they own a little land, when in fact the majority of their income comes from other sources and, often, many different sources, changing throughout the year. (Benanav 2015). This reality raises the issue of the nature and existence of a population surplus in the context of developing countries such as Cameroon and the impact on capturing the demographic dividend.

What is the real structure of the Cameroonian economy from the perspective of the labour market, according to the approach discussed by Lewis?

How is the labour force used in Cameroon? Does this use guarantee the capture of the demographic dividend (benefit of the Demographic Dividend window of opportunity)?

What are the challenges for Cameroon's economic development in terms of employment?

In this article, we will address the socio-cultural realities of Cameroon's labor market in order to identify the conditions for capturing the demographic dividend. The study is based on the descriptive, decomposition and multivariate regression analysis of data from the second, third and fourth Cameroon Household Survey

⁴ Rostov WW. *The Stages of Economic Growth: A Non-Communist Manifesto*. 3rd ed., Cambridge University Press; 1991. *The Stages of Economic Growth: A Non-Communist Manifesto*, 3rd Edition by W. W. Rostow. Copyright © 1960, 1971, 1990 Cambridge University Press. Reprinted with permission. <https://doi.org/10.1017/CBO9780511625824>

⁵ Benanav, Aaron Seth 2015. *A Global History of Unemployment: Surplus Populations in the World Economy, 1949-2010*. UCLA Electronic Theses and Dissertations. <https://escholarship.org/uc/item/7r14v2bq>

⁶ United Nations Human Settlements Programme, *The Slum Challenge: Global Report on Human Settlements 2003* (London: Taylor & Francis, 2012), 98. <https://unhabitat.org/the-challenge-of-slums-global-report-on-human-settlements-2003>

(ECAM 2, 3 and 4), data from the ECAM 4 Complementary, and the Survey on Employment and the Informal Sector (EESI), data from the first, second and third General Population and Housing Census (RGPH), data from the World Bank's World Development Indicators (WDI) 2014 and data from the United Nations' World Population Prospect (WPP) 2024.

THEORETICAL REVIEW

Population surplus and demographic dividend

Kuhe (2019),⁷ shows that a high population provides a high labor force that will eventually lead to strong economic growth, provided that this labor force engages in economic activities. A typical example is China that uses its high labor force in the production process and has achieved tremendous growth that has made the economy so strong and developed. But the author does not hesitate to point out the limits of this theory in Nigeria and then notes that the problem associated with a high labor force is the unemployment rate. Somewhat rather, Ali et al. (2013)⁸ empirically tested the impact of population growth on economic development in Pakistan for the period from 1975 to 2008 using the ARDL technique. The result of the model shows that population growth has positive effects and significant impact on economic development in Pakistan, but that this result is negatively affected by the unemployment rate.

After mobilizing a large literature, including Furuoka (2009), Akinbode et al. (2017), Degu (2019), Tsen and Furuoka (2005) and Chang et al. (2017), to show the relationship between population growth and economic growth, Suluk (2021)⁹ concludes that the source of a nation's labor force is its population and that it contributes to economic growth through its active participation in production, that is to say, a low rate of unemployment and underemployment. Generally speaking, supply-side models assume that production is constrained by the availability of labour power. Dumont and Mesplé-Somps (1993) state that "activity therefore evolves in proportion to productivity", thus placing the participation of the labour force at the centre of economic growth. The available labour force must therefore actually work, in which case it becomes harmful to the economy. Moreover, Malthus' (1798) model states that a workforce that does not contribute to overall production rather participates in diluting the per capita product, thereby leading to an increase in poverty, as does Solow's (1956) model (Mesple-Somps and Dumont 1999).

This reality is clearly visible in several developing countries, especially in Asia, whose remarkable growth has been the result of an economic dynamism of the population, in an economic structure that absorbs the surplus of available labour. Barjot (2018, 2020), for example, presents the prowess of Asian countries in terms of economic development and justifies their rise through economic factors and models, which include population and the structure of the labour factor market. The author shows that the weight of the working population of China, India, dragons and Asian tigers explains the rise of Asia in the world economy¹⁰. Indeed, China and India, for example, had total populations of 1.39 billion and 1.34 billion inhabitants in 2017, with active populations of 778, 674 million and 510.055 million respectively, i.e. 78.94% and 56.76% of the population aged 15-64 respectively (World Bank 2024). Between 1991 and 2023, this active population grew from 85.12% to 80.41% of 15-64 year olds in China and 57.97% to 61.09% of 15-64 year olds in India (World Bank 2024). As a result, Barjot (2018) shows that China's National Product grew at an average rate of 10% per year

⁷ Kuhe, David. (2019). A cointegration and causality analysis based on the residual of population growth and real output in Nigeria. 6. 55-61. https://www.researchgate.net/publication/337673250_A_Residual-Based_Cointegration_and_Causality_Analysis_of_Population_Growth_and_Real_Output_in_Nigeria

⁸ Ali, S., Ali, A. and Amin, A. (2013) The impact of population growth on economic development in Pakistan. Middle East Scientific Research Review, 18(4): 483-491. 10.5829/idosi.mejsr.2013.18.4.12404. https://www.researchgate.net/publication/290160021_The_impact_of_population_growth_on_economic_development_in_Pakistan

⁹ Suluk, Seher. (2021). The relationship between population growth and economic growth: the case of Singapore. International Journal of Academic Research in Business and Social Sciences. 11. 10.6007/IJARBS/v11-i12/11702. https://www.researchgate.net/publication/357483863_The_Relationship_between_Population_Growth_and_Economic_Growth_The_Case_of_Singapore

¹⁰ The ranking of the world's major economic powers in 2017 places China and India in 2nd and 7th positions in the world, with GDP per capita of 11,938 billion and 2,439 billion US dollars respectively. The other countries have joined the most developed countries on the planet, some of which are among the top 20 economies in the world.

at constant prices before 2008 and has remained around 7% since, all other things being equal. Yiping et al (2013), shows that China's exceptional economic development (miracle) between 1980 and 2012, ranging from a per capita income of US\$220 to US\$6,000 between the two dates, is due to a favorable age structure and a labor market structure that absorbs the surplus of labor or the unlimited supply of labor in the agricultural sector, typically as in Lewis' (1954) model of double economics.

The Lewis Turning Point "Lewis Turing Point (LTP)"

The Lewis turn was an **economic development situation where surplus rural labour was absorbed entirely by the manufacturing sector**. This usually leads to higher real wages in agriculture and unskilled industry. The term is named after the economist W. Arthur Lewis (1915-1991).

This situation can be broken down into four major stages based on Lewis' (1954) model:

- In the traditional agricultural economy, the workforce is abundant and the real wage of the agricultural worker is low, because agricultural workers are unskilled and very numerous;
- As industrialization develops, labor is drawn from the traditional agricultural sector to the modern industrial sector where it is in demand, thus leading to a shortage of labor in the original agricultural sector. Something that will cause an increase in wages in the agricultural sector and even the price of agricultural products;
- The **Lewis Turning Point** came when the supply of labor became limited and wages on the plantations began to rise. This increase in wages leads to high agricultural production costs, which leads to an increase in agricultural products;
- as a result of this situation, the modern industrial sector becomes more competitive, as it produces goods at lower cost than in the agricultural sector (Lewis 1954).

Cai (2010), Ranis and Fei (1961) and Lewis (1972) define the Lewis turning point as the period during which the demand for labour exceeds the demand for supply. It is a situation of disappearance of surplus labor or the end of unlimited labor in a context where the wage rate of ordinary workers begins to rise, while the wage of the agricultural sector is not yet determined by its marginal labor productivity and the difference in marginal labor productivity between the agricultural and non-agricultural sectors remains.

Ranis (2004) shows that this specific situation of economic dualism can be analysed by the transformation of populations in the rural sector, where they practice the rural economy, essentially agricultural, in favour of urbanisation, where they aim to practise modern jobs. The United Nations statistics from World Urbanisation Prospect (2018) show a global movement of population change from rural to urban areas, which presents a global structure of the world population in 2018, as follows: Out of 7.6 billion inhabitants, 4.2 billion (55.3%) are in urban areas, compared to 3.4 billion (44.7%) in rural areas. Ranis (2004) then shows that the relevance of this theory of the Lewis model lies in the fact that its empirical and practical validity is identified in the urban-rural dynamics, specific to developing countries.

Urban-rural economic dualism and demographic transition.

Cai (2010)¹¹ analyses the phases of the demographic transition in the dual economy model. He establishes the link between demographic change and the structural change in the economy that led to Lewis' turning point, through the evidence of an empirical analysis of China's economic development.

Indeed, the author settles in a textbook debate on the arrival or not of a Lewis turning point in China, by the argument of the demographic transition and the evolution of the age structure of the population. For Cai (2010), the unlimited supply of labor experienced in China over the last 40 years was the result of the demographic dividend and that this dividend is coming to an end, hence the advent of a Lewis Turning Point in (2013), due to the transition to the phase of population aging. He expresses himself as follows:

¹¹ Cai, Fang (2010). Demographic transition, demographic dividend and Lewis turning point in China. *China Economic Review*, 3(2), 107–119. <https://doi.org/10.1080/17538963.2010.511899>

"Specifically, most researchers are unaware of the fact that China's working-age population growth has slowed and the demographic base of unlimited labor supply has therefore shrunk, and so they are unwilling to accept the claim of an ongoing Lewis turn coupled with a diminishing demographic dividend." (Cai 2010, p 4).

The demo-economist Cai Fang (2013a, 2013b, 2008, 2017, 2018) then presents the mechanisms for capturing the demographic dividend that enabled China's strong growth, until the beginning of the aging of the population for the advent of what he calls the "Lewis Turning Point (LTP)". The author expresses himself as follows:

China's unprecedented economic growth over the past 30 years can be attributed in large part to the demographic dividend. In other words, the increase in the working-age population ensures an adequate supply of labour; the fall in the dependency ratio (ratio between the dependent population and the working-age population) contributes to maintaining a high savings rate, a condition for capital formation; and an unlimited supply of labor prevents the return on capital from falling, making heavy investment the main source of GDP growth (Cai and Zhao 2012, Cai and Lu 2013, P 55).

This unlimited supply of labor was initially in the rural world but has migrated to the urban world (Cai and Wang 2008, Cai 2010, Cai and Lu 2013a, Yiping et al 2013).

The author shows that the availability of an unlimited supply of labor exists in countries with large populations, compared to capital and natural resources. In these countries, there is a sector of the economy where marginal labour productivity is zero or even negative. He therefore hypothesizes that this state of the economy corresponds to the second phase of the demographic transition, i.e., that of the capture of the demographic dividend. He thus affirms,

As agriculture is the primary sector of the sectoral chain, it is the first place where the abundant population and surplus labour are found (Cai 2010, P6).

This angle of analysis allows a new look at the benefit of the demographic dividend in a developing country. This is because it emphasizes the age structure of the population and **the absorption of the job supply generated**, for a benefit in terms of economic growth and defines the initial structure of the economy at the beginning of the window of opportunity. Indeed, for this author, the window of opportunity to capture the demographic dividend generally only occurs when there is an unlimited workforce in the primary sector of the economy.

This analysis thus makes it possible to place the demographic dividend theory in the development of the economy of developing countries. It therefore becomes important to define the contours of the model.

This means that SD is not achieved in full employment, but in the conditions of an unlimited supply of labor (surplus), which makes it possible to:

- an increase in production;
- an increase in high yields, because there is production at the lowest cost, which leads to heavy investments which are a source of economic growth;
- a high savings rate; (ratio between the dependent population and the working-age population) contributes to maintaining a high savings rate, a condition for capital formation; and an unlimited supply of labour prevents the return on capital from falling, making heavy investment the main source of GDP growth

Beninguissé and colleague (2018), and Eloundou-Enyegue et al 2018, show that the demographic dividend is the "Process of change in the structure of a country's population as it **develops economically and socially**. This transition is characterized by the transition from a demographic regime with high mortality and birth rates to a regime with low mortality and birth rates, leading to a gradual decrease in population growth,"

This definition of the demographic dividend links the demographic transition with economic and social development, and shows that socio-economic development is preceding, and even simultaneous, the

demographic transition. Moreover, these authors show that the phase of capturing the demographic dividend only reaches one phase of economic life, even if it is expressed by the progress of medicine (reduction in mortality) and the improvement of the standard of living of the populations,

The simultaneous analysis of this demographic evolution and that of the economic structure makes it possible to appreciate the elements

We can therefore summarize **the demo-economic transition model of development economics** in Figure 1, the following diagram.

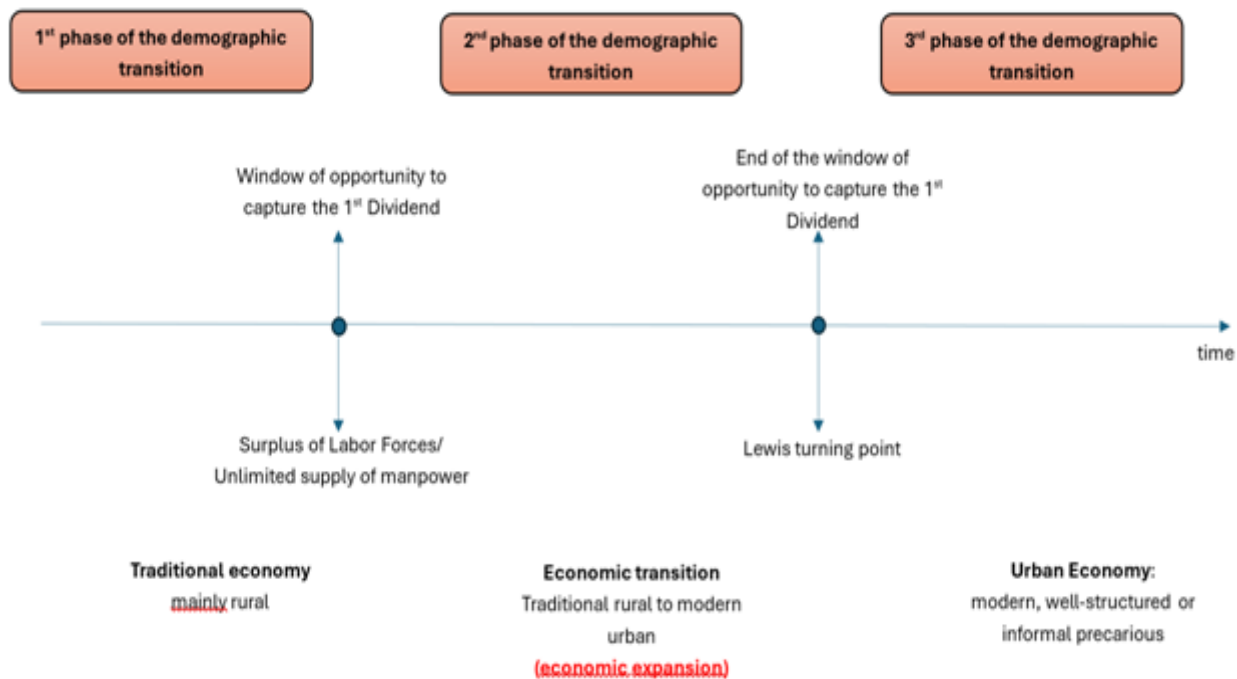


Figure 1: Demoeconomic transition.

Sources: Authors.

Table 1: Demoeconomic transition.

Phase	Pre-dividend	Dividend	After dividend
Demographic phase	- 1st phase of the demographic transition; - Very young population	- Window of opportunity - 2nd phase of the demographic transition. - Swelling of the working population.	- Ageing population - 3rd phase of the demographic transition; - The second demographic dividend can be captured.
Economic phase	- Traditional economy, predominantly rural; - Economy essentially based on the agricultural sector.	- Economic transition from the traditional rural economy to the modern urban economy; - Potential for strong economic growth.	- Lewis' turning point has been reached; - a decline in economic growth; - modern economy essentially urban.

Structure of the economy	- traditional, predominantly rural economy - unlimited supply of labor; - low wages of labor; - low qualification of the workforce; - increase in corporate profits.	- economic transition from a predominantly rural dual economy to a modern urban economy; - (This is a period to be capitalized, to achieve a good economic transition). - transition from surplus labour to lack of labour; - improvement of labour wages.	- Modern economy, essentially urban; - high labour prices; - an economy that requires strong labour skills; - a high-capital economy; - economy with high savings. - a well-structured economy with high human development; - high level of per capita income. Or - precarious, informal economy; - high unemployment rate; - economy of city cans; - precarious structure of the labour market; - increase in poverty; - Increasing inequality.
Characteristics	- high demographic dependence; - High economic dependence - first phase of the demographic transition; - Traditional economy, poor - large proportion of 0-14 year olds. - unlimited supply of labour in the primary agricultural sector;	- Window of opportunity to capture the HD; - 2nd phase of the demographic transition; - large proportion of the population aged 15-64. - migration of the labour force from the primary agricultural sector to the secondary and tertiary sectors; - shift from the predominance of rural areas to that of urban areas; - exode rurale ; - transition from the predominantly rural economy to the predominantly urban economy and the existence of an industrial economy, services with a need for labour; - Attraction of the workforce from the	- the ageing of the population has been reached; - 3rd phase of the demographic transition; - Lewis' turning point has been reached; - the second demographic dividend can be captured; - a decline in economic growth. - Declining population growth. - Increase in the number of people aged 65 and over; - Possibility of large savings; - Possibility of a qualified workforce.

		agricultural and primary sectors to the secondary and tertiary sectors. - Strong economic growth possible - Strong population growth	
Example country	Niger, Mali,	Cameroun, Ghana, Côte d'Ivoire,	China, Germany, USA, Taiwan, Japan, India, South Africa;

Sources: authors.

Some examples of demographic and economic transition.

This section presents an analysis of the demographic and economic transition of a few countries, including China, India, South Africa and Pakistan.

1. China.

The miracle of China's economic growth deserves special attention. Golley and Tyers (2012) present the evolution of China's demographic transition and show "Perhaps no country has benefited as much from this transition as China: according to some estimates, demographic change can explain up to a quarter of China's record pace of economic growth in the last two decades of the twentieth century (Cai and Wang, 2005, Feng and Mason, 2005)» (Golley and Tyers 2012) P 2. Indeed Cai, Ross et al. (2018), Cai (2010) and Barjot (2018) show that China's reforms initiated in 1978¹² have made it possible to make better use of the surplus labour available in the traditional economy and to make a transition to a modern economy, with strong economic growth over the last 40 years. For the latter authors, and for Garnaut et al (2013), Yiping et al (2013) and Cai et Lu (2013), China waited for its Lewis turn towards the years 2013 when its population moved to the 3rd phase of the demographic transition "The end of China's demographic dividend: the prospect of potential GDP growth» (Cai and Lu 2013) and is starting to age, hence the need to "**China: a new model for growth and development** » (Garnaut, Fang et al. 2013).

2. India.

Barjot (2018) shows that India now appears to be a country undergoing profound transformation. Golley and Tyers (2012) illustrates India's demographic transition, which began in the 1950s. For the latter authors, India's demographic transition has been quite slow, with the country's total demographic dependence falling between 1970 and 2030 when it reaches the peak of its working population in 2035, 25 years after China. The country achieved an average economic growth rate of 7.67% of GDP between 2004 and 2017, following a series of reforms encouraging the market economy, and the transition from the traditional to the modern economy, including the demonetization of the economy in November 2016, which increased the number of taxpayers by 50% and the number of electronic transactions by 80% (Golley and Tyers 2012)¹³.

¹² For China, the demographic transition culminated in the controversial one-child policy, which is estimated to have prevented between 250 and 400 million births since its introduction in the early 1980s Golley, J., & R. Tyers (2012). "Demographic dividend, dependencies and economic dynamism in China and India." CAMA Working Paper Series, Australian National University.
<http://cama.anu.edu.au> **6/2012** (macroeconomic analysis <https://ssrn.com/abstract=2006069>).

¹³ This policy has paved the way for a major social transformation, the objective of which is to allow all Indians to have an identity number (the Aadhaar) and a bank account operating from their mobile phone (1 billion mobile phones and 350 million smartphones). R. Loukil, "150 million smartphones sold in India in 2017", L'Usine digitale, 29 December 2015, URL:
https://www.usine-digitale.fr/article/150-millions-de-smartphones-vendus-en-inde-en-2017_N371090.

3. South Africa.

South Africa recorded a growth rate of 3.1% in the first ten years of its independence from 1994 to 2004. This growth has gradually slowed to around 2.8% between 2005 and 2015, with sharp declines in recent years, and a rate of less than 1% projected for 2016. As a result, real GDP per capita declined gradually from \$8,090 in 2011 to \$5,696 in 2015 (Nations Unies, 2017). According to Oosthuizen (2019), South Africa has fully entered its demographic transition and is currently entering the phase of population ageing. This transition was strongly impacted by apartheid, hindering its chances of capturing the first demographic dividend. The United Nations (2017) shows that the main factor in this economic underperformance is the low absorption of the large pool of available labour (capturing the first economic dividend). In a context of unequal economy, the two-sector sector has two sectors: a sophisticated modern high-income sector and an informal low-income sector, Statistics South Africa, (2014)¹⁴ has unemployment rates in 2014 of 25.2% and 35.1% for people not looking for work.

4. Le Pakistan

Durr e (2008) presents the importance of absorbing the available labour bulge as the basis for the "economic miracle" of East Asian countries. With a labour force participation rate ranging from 40% to 45% between 1992 and 2005, respectively, Pakistan has an unemployment rate ranging from nearly 5.3% to 8.3% between 1995 and 2006 (IMF 2021¹⁵). For PBS¹⁶ (2018), the participation of the overall labour force varies from 52.5% to 51.9% between 2006 and 2017, with a peak of 53.5%. Nevertheless, the number of people who are no longer actively looking for work is increasing and the level of underemployment remains very high. Pakistan's economy is largely informal (with a level of informality of 71.5% in 2006-2007, up from 71.4% in 2017-2018 (PBS 2018). The low labour force absorption is much more dependent on the low participation of women (the female labour force participation rate was 21.3% in 2006-2007 and 22.8% in 2017-2018). Durr e (2008) shows that Pakistan has shortened its demographic transition, and is in the potential window of opportunity since 1990 when the 15-64 age group is more numerous. The growth rate of this working-age population peaked in 2000 at a rate of about 3.3%. Durr e (2008) shows that this window of opportunity is not sufficiently capitalized for the country's economic development because of the low absorption of available labor. insufficient participation of the working-age population. I therefore recommends taking salutary political decisions in order to capitalize on this dividend capture window that extends until 2045 (Hard in 2008).

Context Evolution of The Economic And Demographic Development In Cameroon

The Cameroonian economy is presented by Touna Mama (2008) as an evolution of the Cameroonian economy between 1950 and 2007 in three phases, namely: economy with three sectors, primary, secondary and tertiary. The author describes:

- A long period of remarkable growth between 1950 and 1986;
- A period of crisis between 1987 and 1995;
- A period of timid economic recovery between 1995 and 2024.

The country has been lagging behind in economic development over the past 40 years due to weak policies implemented since the 1970s (Mom 2008). Monchy and Roubaud (1991) show that the country went from a phase of harmonious economic growth to an economic slump and concludes that until 1985: "Cameroon was off to a good start".

The period of growth 1950-1986.

For Monchy and Roubaud (1991), the decades of take-offs are characterized by the following elements:

¹⁴ Quarterly Labour Force Survey (2014Q1), dataset. Pretoria: Statistics South Africa.

¹⁵ IGF - World Economic Outlook Database, October 2021,

¹⁶ Pakistan Bureau of Statistics, 2018

https://www.pbs.gov.pk/sites/default/files/labour_force/publications/Pakistan_Employment_Trend_2018.pdf

- **from 1965 to 1977**, the country grew at an average rate of about 4%, allowing a slow improvement in GDP per capita. At the sector level, agriculture accounts for 30% of GDP, industry accounts for 20% and the tertiary sector for 50%. The contribution of each sector) growth is proportional to its share in total GDP;
- **From 1977 to 1981**, growth accelerated and exceeded 13% on average, with a maximum of 15% in 1980. This surge corresponds to the discovery of oil and its development. The oil boom increased the average annual growth rate by 44%, which increased the contribution of this branch, this voucher had a knock-on effect in the other two sectors (growth tripled in the agricultural and manufacturing sectors and doubled in services). The three sectors are around 10% annual growth over the period.
- **1982 to 1985**, growth is maintained at a steady pace (around 8%), although significantly lower than the rates recorded during the boom years, after a marked slowdown in 1982. The agricultural sector is collapsing globally while the service sector continues to rise to an average growth rate of 13% per year. He then speaks of a phenomenon of "**Tertiarization of the economy**» (Monchy and Roubaud 1991).

Throughout the decade of take-off (1977-1985), real GDP per capita increased rapidly, placing the country in the category of middle-income countries classified by the World Bank. The high pace of growth is reflected in a significant improvement in living standards, which can be measured indirectly through the rise in per capita private consumption.

The period of crisis 1987-1995.

Thaddeus, Ngong et al. (2024) show that between 1986 and 1994, the country's GDP fell by 60%. This decline has led to balance of payments deficits, a very rapid increase in the external debt and the fiscal deficit. Monchy and Roubaud (1991) show that during this period, the main workings of the Cameroonian economy were disrupted by external shocks, leading to a sharp recession in most productive sectors. These external shocks are mainly,

- the loss of the price of oil by 42.1% in national currency;
- the fall in export prices by 27.8% (-38.6% for oil, -44.8% for refined products, -31.3% for market services and -16.6% for export agriculture);
- the contraction of the terms of trade by 24.5% in 1985/86 and 19.1% in 1987.

Between 1985/1986 and 1986/1987, the rate of GDP growth slowed to about 4% per annum. Thaddeus, Ngong et al. (2024) and the World Bank (2020), reveal that Cameroon's annual GDP growth has evolved from 6% in 1986 to 2.14%, 7.82%, 1.82%, 6.10%, 3.80%, 3.1% and 7.93% in 1987, 1988, 1989, 1990, 1991, 1992 and 1993, respectively. Overall, the 1986-1995 crisis had negative consequences on the Cameroonian economy (accumulation of arrears, insolvency of public enterprises and the banking system, liquidity crisis) (Monchy and Roubaud 1991).

This is despite the improvement in the balance of payments due in part to cash crop exports, which increased from 11.4% to 12.5%. Molua (2015) then shows that agriculture, with a contribution of 25% of GDP, constitutes the basis of the GDP of the Cameroonian economy, even if the sharp reduction in producer prices between 1989 and 1990 led to a certain pessimism about the possibility of seeing the cash crop sector drive growth. The statistics of the study conducted by SOFRECO count a total of 630,000 coffee and cocoa farmers (we approach 800,000 if we add cotton, rubber, palm oil, etc.). This means that speculation contributes to the income of about 5 to 6 million inhabitants (Monchy and Roubaud 1991).

The period of timid recovery of the economy from 1995 to 2024.

Thaddeus, Ngong et al. (2024) shows that Cameroon's GDP growth has evolved from 2.12% in 1994 to 4.29% in 1999. This rate decreased from 4.23% in 2002, increased again to 6.7% in 2006 and decreased to 2.19% in 2009 before rising to 5.65% in 2015. MINEPAT (2022) shows that in 2019, the growth rate of the economy increased from 3.5% to 0.5% in 2020, rising to 3.5% in 2021. This performance was mainly driven by activity in the primary and tertiary sector with rates of 4.6% and 3.6% in 2021, respectively. During this third phase, Cameroon committed to achieving the Completion Point of the Heavily Indebted Poor Countries Initiative (HIPC) in 2006, the implementation of the Poverty Reduction Strategy (PRS) of the Implementation of the

Growth and Employment Strategy Paper (GESP) between 2010 and 2019 and that of the NDS 30, between 2020-2030.

The analysis shows that the renewed growth driven by the primary sector is mainly due to the industrial agriculture branch, with 6.3% and the forestry and logging branch, with 7% in 2021. In the tertiary sector, the catering and hotel branches, trade and vehicle repair, transport and maintenance, ICT, banking and financial organization, respectively recorded 3.7%; 5,1% ; 3,2% ; 5.4% and 6.0% in 2021.

Demographic transition in Cameroon

Ondoua (1992) shows that Cameroon has been engaged in demographic transition since 1976. Indeed, during the period 1976-87, the mortality rate fell from 20.4% to 11.8%. This transition, which is beginning, has led to remarkable population growth, which brought the total population of Cameroon to 10,493,655 inhabitants in 1987 with an annual growth rate of 2.9%. For this author,

"The demographic growth of Cameroon is at the origin of various problems: - rural exodus - uncontrolled urbanization for example Yaoundé. - economic problems, e.g. unemployment. - problems relating to health and education. The solution to all these problems does not seem to be sought in authoritarian action to reduce fertility, but rather in the adoption of the policy of responsible parenthood."

Béninguissé, Eloundou-Enyegue et al. (2014) show that Cameroon, like any country in sub-Saharan Africa, has experienced significant upheavals in its demographic transition, in contradiction with the classical theories of demographic transition, in particular by the increase in mortality during the years 1990-2000, due to the economic slowdown caused by structural adjustments. Overall, the latter authors establish a close link between the demographic transition and the socio-economic level of the population through several factors such as: the macro-political level, social mobility, standard of living, development of the health system and show that the increase in child mortality that occurred between 1991 and 1998 in Cameroon is the result of the increase in the proportion of children living in poor households. In the same vein, Béninguissé and Mbarga (2023) specify that the health transition (reduction in mortality) leads to a socio-economic increase in populations, through a cause-and-effect mechanism. Thus showing that the demographic transition is influenced by the socio-economic status of individuals through structural influences such as living conditions, urban or rural living environment and the political context of the country, vice versa.

"Thus, socio-economic theories differ depending on whether they emphasize selection or causal effects. Selection means systematic filtering during the process of social mobility: healthier people are more likely to climb the socioeconomic ladder. Selection can be straightforward, with healthy people moving upwards and unhealthy people downwards."

The latter authors therefore confirm a reversal of the trend (increase) in child mortality in Cameroon between 1990 and 2010 and recommend investments in the field of health. Tomorrow as a global country, Cameroon is currently in its second phase of demographic transition (Notestein, 1945) where it can capture the demographic dividend (Figure 2). This phase, which began in 2019, could be opened until 2060, according to WPP 2024 estimates.

Tenikué, Yao et al (2018) then specify that Cameroon will enter its window of opportunity to capture the demographic dividend between 2018 and 2021, depending on the low or high fertility assumptions respectively. The latter authors, as well as the UN (2024), also show that the age structure of the population is characterized by its youth, with a median age varying between 15.7 and 17.8 years between 1990 and 2023. The under-15s represent 41.76% in 2023; 44.91% in 2000 and 46.17% in 1990. 15-64 year olds represent 55.18% in 2023; 51.77% in 2000 and 50.20% in 1990. The TFR remains high and has increased from 6.36 children per woman in 1990 to 4.32 children per woman in 2023 (WPP 2024). Despite the difficulties encountered by the economy between 1990 and 2010, there was a slight increase in employment among the working-age population (83.33% in 1991; 77.03% in 2010 and 71.46% in 2022) but a significant drop in productivity (-10%) between 1990 and 2010. This decline contributed to the slight increase in GDP per capita

over the period between 1990 and 2022, the Gross Domestic Product (GDP) per capita increased slightly by 2% from \$2197 in 1990 to \$2233 in 2022 (Tenikue, Yao et al. 2018, Nations Unies 2024).

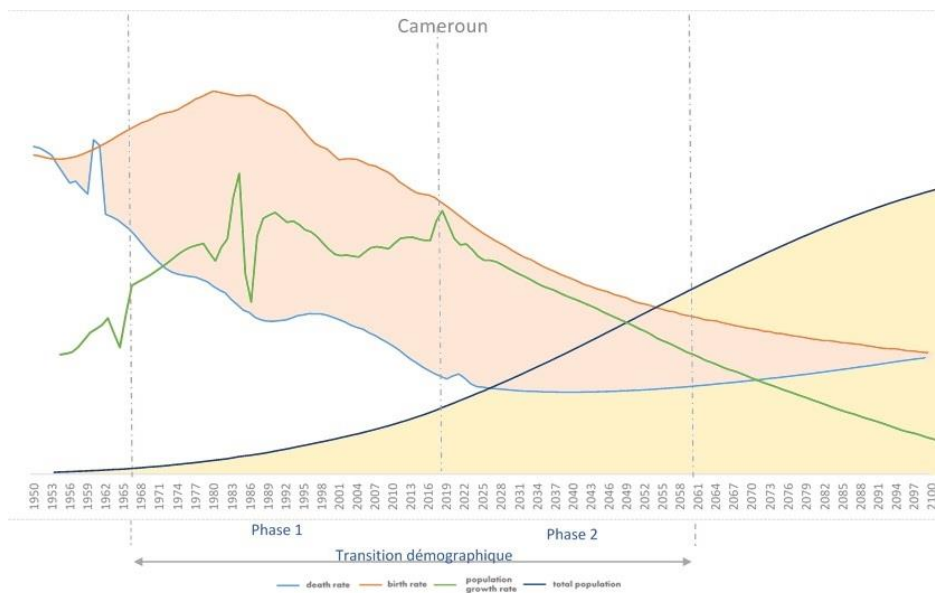


Figure 2: Demographic transition of Cameroon

Sources: Authors, WPP 2024.

METHODOLOGY

To analyze the socio-cultural realities of the labor market for Cameroon's economic development, our analysis relies on the mechanisms of capturing the demographic dividend. To do this, the study is based on the NTA method, which is better suited to labour economics, and descriptive and prospective methods.

The NTA method.

The objective of the National Transfer Accounts (NTA) project is to improve the understanding of the influence of population growth and changes in the age structure of the population on economic growth, gender and generational equity, public finances and other important characteristics of the macroeconomy. Social, political and economic impacts of population ageing (NTA 2024¹⁷)

The NTA project highlights many areas of importance to policymakers:

- Public policies on pensions, health care, education and reproductive health;
- Social institutions, such as the extended family;
- Women's full economic contribution (NTA 2024)

Abio et al (2017) present the NTA method, based on the definition of the demographic dividend. According to these authors, the "demographic dividend" is the term generally used in the literature to refer to the positive impact of the demographic transition on economic growth. The concept of the demographic dividend arose from Bloom and Williamson's (1998) analysis of the relationship between the age structure of the population and economic growth, based on the following distribution of per capita income:

$$\frac{Y_t}{N_t} = \frac{L_t}{N_t} \frac{Y_t}{L_t} \quad (1)$$

¹⁷ base NTA 2024 data collection, <https://ntaccounts.org/web/nta/show>

= (1) where Y_t is the income, N_t is the total population and L_t is the active population of each period t . The first term on the right of this equation is the support rate (SR, proportion of the labour force to the total population) while the second term reflects productivity (l , income per worker) (Olaniyan, Soyibo et al. 2012, Abío, Patxot et al. 2017). Using logarithms and drifting with respect to time, we can obtain equation (1) expressed in growth rate (g):

$$g\left(\frac{Y_t}{N_t}\right) = g(SR_t) + g(l_t) \quad (2)$$

= () + () (2) Equation (2) implies that the evolution of per capita income depends on both the evolution of the support rate and the rate of productivity growth. Mason (2005) and Mason and Lee (2006) formalize and measure the first demographic dividend as the growth rate of the support ratio, but define it in a slightly different way. Specifically, these authors calculate the support ratio by weighting demographic variables with economic age profiles estimated from the NTA (Abío, Patxot et al. 2017). In particular, the total population in the denominator (N) of the first term of equation (1) is transformed into the number of actual consumers (EC), while the numerator is estimated in terms of actual producers (EPs) as follows:

$$EC_t = \sum_x N_{x,t} \cdot \theta_x \quad (3)$$

$$EP_t = \sum_x N_{x,t} \cdot \rho_x \quad (4)$$

The NTA estimates the flows of resources between age groups in an economy in a given year, in accordance with NA. Each NA aggregate is imputed by age, if there is an available microdata source that allows it. The resulting age profiles provide information on how resources are transferred from one generation to the next through family transfers, public sector reallocations and capital markets. The NTA starts from the following transformation of the NA identity:

$$YL + YA + TG^+ + TF^+ = C + S + TG^- + TF^- \quad (7)$$

where YL is labour income, YA is income from assets, C is consumption (public and private), S is saving, and TG and TF represent public and private transfers, inflows (+) and outflows (-), respectively. The left-hand side of equation (7) represents the sources of income (income and transfers received), while the right-hand side represents its uses (consumption, savings, and transfers made). This term applies both to the economy as a whole and to each age group in a given year (time and age indices are omitted for simplicity). By rearranging ourselves, we can get the main identity of the NTA:

$$C - YL = (TG^+ - TG^-) + (TF^+ - TF^-) + (YA - S) \quad (8)$$

The left-hand side of equation (8) is the life-cycle deficit (LCD), defined as the excess of consumption relative to labor income at each age. The LCD screen can be positive or negative for each age group. In general, the consumption profile by age is virtually stable – for some countries it increases with age – while labour income is concentrated in working-age terms. A deficit is therefore to be expected for children and the elderly, with a surplus for a significant part of the working period. In any case, LCAs should be financed in three possible ways, as expressed on the right-hand side of equation (8): government transfers (GPs), private transfers (TFs), or asset-based reallocations (ABRs, the difference between income from assets and savings, meaning that consumption can be financed by income from assets or dissaving); It's:

$$LCD = TG + TF + ABR \quad (9)$$

Abío, Patxot et al. (2017) also present the profiles of three countries as examples broken down between consumption and labour income, as shown in the left-hand side of equation (8) for three selected countries: Spain, Sweden and the United States. Consumption and labour income are normalised using the average labour income for 30-49 year-olds in each country, as is generally the case in the NTA for ease of comparison (Abío, Patxot et al. 2017). Some notable differences can be observed. Firstly, the age profile of consumption is fairly stable throughout the life cycle in the case of Spain, while for the United States and especially Sweden, a sharp increase takes place in old age. Second, when it comes to the labour income profile, Sweden and the United States have higher levels than Spain after age 45 and, interestingly, the United States has a delayed retirement age (Abío, Patxot et al. 2017).

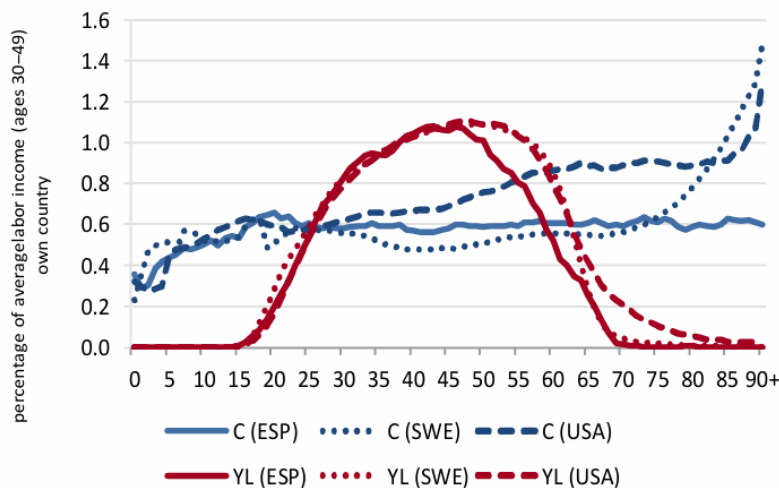


Figure 3 : Per capita consumption and income, profile (Spain, Sweden and the United States.)

Sources: (Abío, Patxot et al. 2017), based on NTA data 2024.<http://www.ntaaccnts.org>.

Analytics Data.

The analysis data for the NTA method are available directly on the NTA data 2024 website via <http://www.ntaaccnts.org>. This site provides all the data from more than 60 countries building accounts and measuring how people of every age produce, consume and share resources, and save for the future. These accounts are designed to complement the United Nations System of National Accounts, demographic data and other important economic and demographic indicators.

For the other analyses, the data used are those of the second, third and fourth Cameroon Household Survey (ECAM 2, 3 and 4), data from the ECAM 4 Complementary, and the Survey on Employment and the Informal Sector (EESI), data from the first, second and third General Population and Housing Census (RGPH). data from the World Bank's World Development Indicators (WDI) 2014 and data from the United Nations' World Population Prospect (WPP) 2024. Data from the INS Open data 2024.

ANALYSIS RESULT

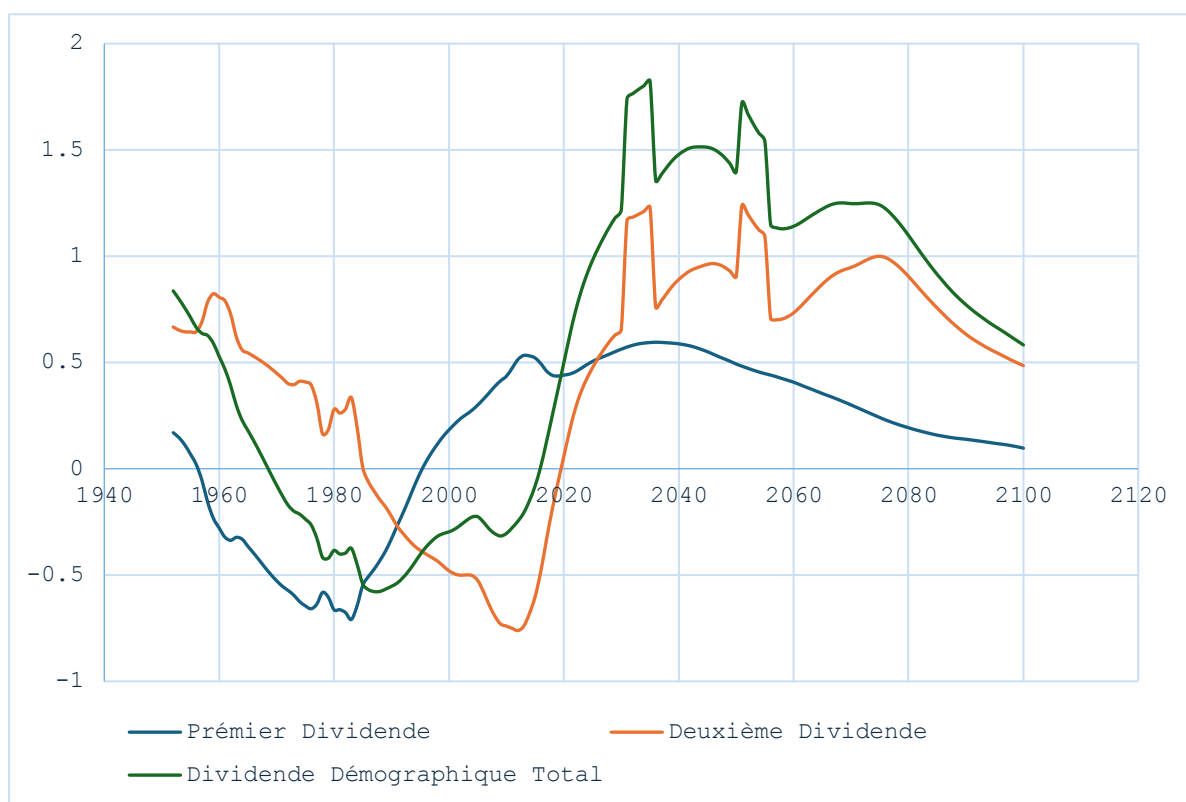
Figure 2 presents the results of the analysis of the demographic dividend between 1950 and 2100, based on NTAs. This analysis shows that Cameroon is marked by two major periods of capture of the Demographic Dividend, namely:

- **The period 1950 to 1984**, where the country captures positive first, second and total dividends, notably with a positive total dividend between 1950 and 1969 and a very short period of labour dividend capture (almost 6 years). This period of strong growth is more characterized by the savings dividend, which occupies the longest period (from 1950 to 1984). This can be explained by the growth gains of the period when Cameroon discovered oil and put it into service. It was also the period of creation and initial organization of the country. The weakness of the 1st dividend or dividend of the "workforce" expresses the presence of an

essentially rural, agricultural economy, at the beginning of the first phase of its demographic transition (Figure 2). (Monchy and Roubaud 1991, United Nations 2024).

- **Periods from 1996 to the present day**, where the "labour" dividend becomes positive again from 1996, the 2nd dividend becomes positive again from 2020 and the total dividend from 2016. This resumption of the 1st can be justified by the resumption of cash crops by farmers, which represented more than 25% of GDP and was then one of the engines of growth in times of crisis (Monchy and Roubaud 1991, Molua 2015). On the other hand, the period of economic crisis does not allow for a real savings dividend, it is only from the years 2016-2020 that we can begin to feel the effects of the economic recovery initiated in 2006, at the end of the HIPC. But as for the total dividend, it becomes positive again at the threshold of the window of opportunity, planned between 2018 and 2021, depending on the low or high fertility assumptions, respectively (Tenikue, Yao et al. 2018).

However, the prospective analysis of these results shows a peak in the capture of the demographic dividend in 2035. This period corresponds to the peaks of the 1st and 2nd dividends respectively. This means that this is the period of full capacity of **labour supply** and the availability of workers' savings (Chart 2).

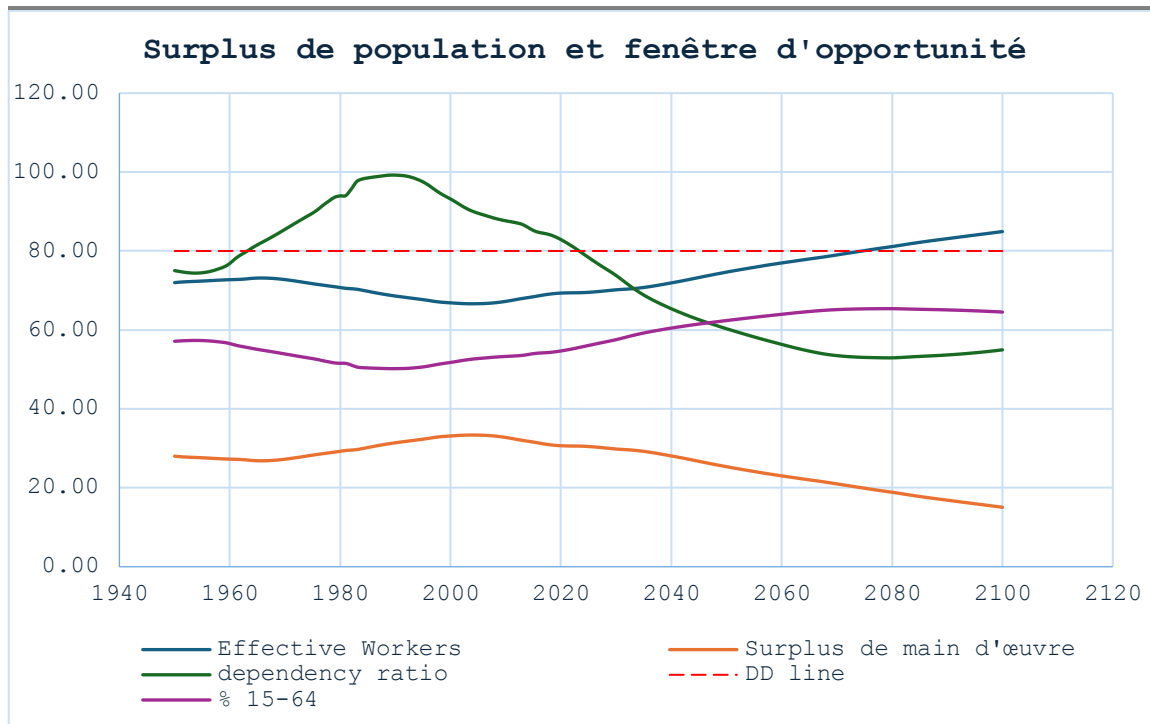


Graph 2: Evolution of the Capture of the Demographic Dividend between 1950 and 2100.

Sources: Authors, NTA 2024.

If the supply of labour has really begun to present a dividend from 1996, it will begin to be depleted from the 2060s when the country will enter the third phase of the demographic transition and will begin to experience the ageing of the population (Nations Unies 2024). In relation to this workforce, Tenikue et al (2018) raise two major concerns: **employability and productivity of employed persons**.

Indeed, Chart 3 presents the evolution of the employability of Cameroon's workforce between surplus labor between 1950 and 2100. The results show that the country recorded an overall decline in the proportion of effective workers in the working-age population, ranging from 75.03% in 1950 to 69.42% in 2023, a drop of 5.61 points. This decline was most pronounced between 1986 and 2018 (69.52% and 69.09%), when it reached a low point in 2004 with a value of 66.63% of people of working age. We can thus observe a surplus of 33.37% of the working-age population in 2004, this unexploited segment of the population constitutes an additional dependence, increased to those of 0-14 years old and 65 years and +, still located at 83.72% in 2001 and 88.96% in 2014 (Chart 8). (INS 2001, INS 2007, INS 2014).



Graph 3: Evolution of the population surplus (labour force) and window of opportunity between 2050 and 2100.

Sources: Authors, NTA Database¹⁸, WPP¹⁹ 2024.

Labor surpluses and the demographic dividend (are negatively correlated, at a rate of -0.502. The linear regression model shows that an additional unit of labor decreases the total demographic dividend by 0.0697 points at the 1% threshold.

Table 2: Dividend reduction due to labour surplus.

Source	SS	df	MS	Number of obs	=	149
Model	19.9740432	1	19.9740432	F(1, 147)	=	49.69
Residual	59.0858238	147	.401944379	Prob > F	=	0.0000
				R-squared	=	0.2526
				Adj R-squared	=	0.2476
Total	79.059867	148	.53418829	Root MSE	=	.63399

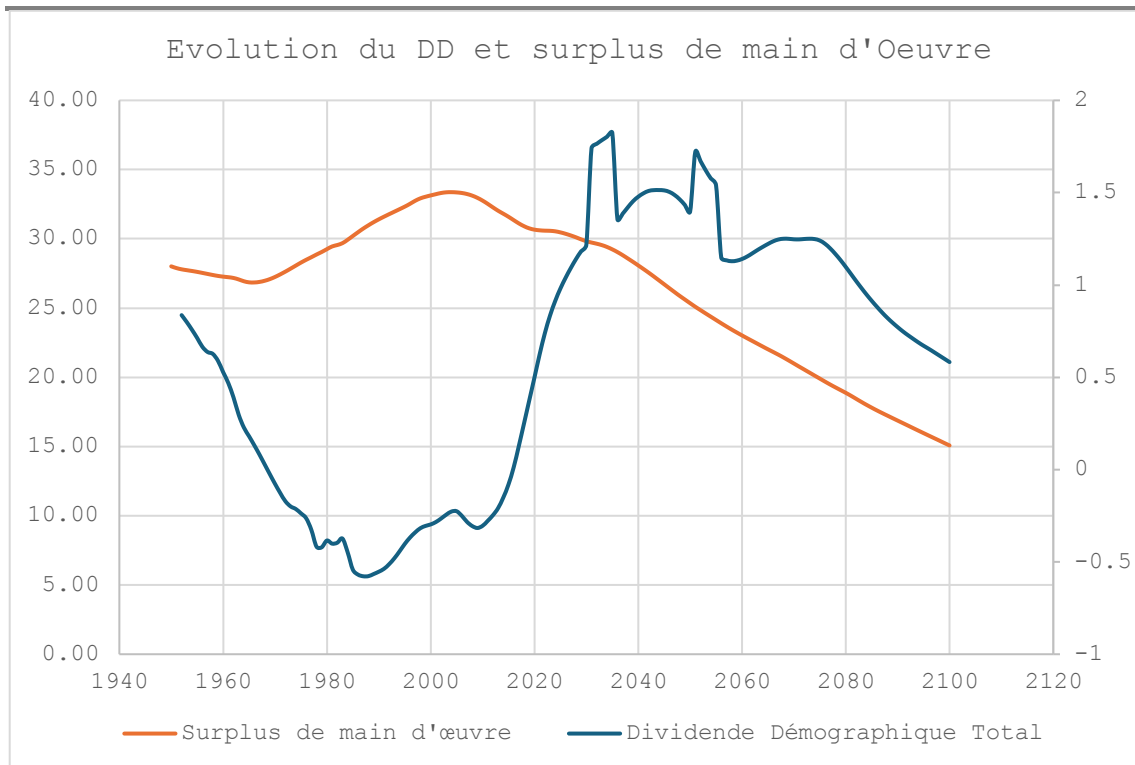
dd	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
surplus	-.069705	.0098881	-7.05	0.000	-.0892462	-.0501637
_cons	2.428954	.2659229	9.13	0.000	1.903429	2.95448

Sources: Author, NTA database, WPP 2024.

These results show that the surplus of labor contributes to curbing the effect of the population to drive the country's economic growth, to the tune of 0.0697 points, or 11.80% of the average value of this dividend located at 0.5904. Chart 4 shows that the more the surplus of labour increases, the less the demographic dividend increases, and vice versa. This negative effect could extend to other non-population shares of growth.

¹⁸ <https://ntaccounts.org/web/nta/show/Indicators>

¹⁹ World Population Prospects 2024. <https://population.un.org/wpp/Download/Standard/Population/>



Graph 4 : Evolution of the Capture of the Demographic Dividend between 1950 and 2100

Sources: Authors, NTA Database, WPP 2024.

The surplus of labour is a problem for the country's economic development.

This surplus of labour or overpopulation (not used) added to the low productivity presented by Tenikue et al (2018), would justify the country's weak economic growth. Low productivity can be explained by the low productivity of sectors employing a large number of people, such as the informal sector, the precarious sector or the agricultural sector. We also note the development of disguised unemployment within public and private companies and structures, which is manifested by the large presence of executives and workers officially present in the government, but which does not bring any productive added value, but which can be non-productive costs in the public services of the State. This phenomenon can also be verified within certain private companies whose recruitments are motivated by non-objective reasons, friendships, families, etc. This global structure of the labour market, characterized by the behaviour of poor workers, does not allow for optimal productivity, and even frustrates economic growth (everyone wants to work in the government, so as not to work in fact and to have a fixed salary without working) a culture of the disguised unemployed or the false worker.

Structural changes in the labour force and the labour market.

At a time when the demographic transition and the economy are evolving, it is important to scrutinize the structural evolution of the workforce and the labor market in Cameroon. This will allow us to identify the type of economic development model in Cameroon. Is it a dual economy in the Lewis sense? How this economy is evolving in the labour market. Given the overall evolution of the labour force presented in the previous section, it is important to see how this evolution is taking place within sectors, as well as the mechanisms of labour force mobility within the economy. Our analysis will be inspired by the traditional rural and modern, urban economic models of Lewis (1954) and the structure of sectors in the sense of Colin Clark (1940).

Figure 5 shows the evolution of Cameroon's population in rural and urban areas. This evolution shows that the urban and total populations grow at exponential rates between 1950 and 2050, while the rural population evolves at a decreasing rate over time. While the urban population grew from 4,307,000 to 14,942,000 between 1950 and 2020, the rural population grew from 402,000 to 11,017,000 between 1950 and 2020 (Chart 5).

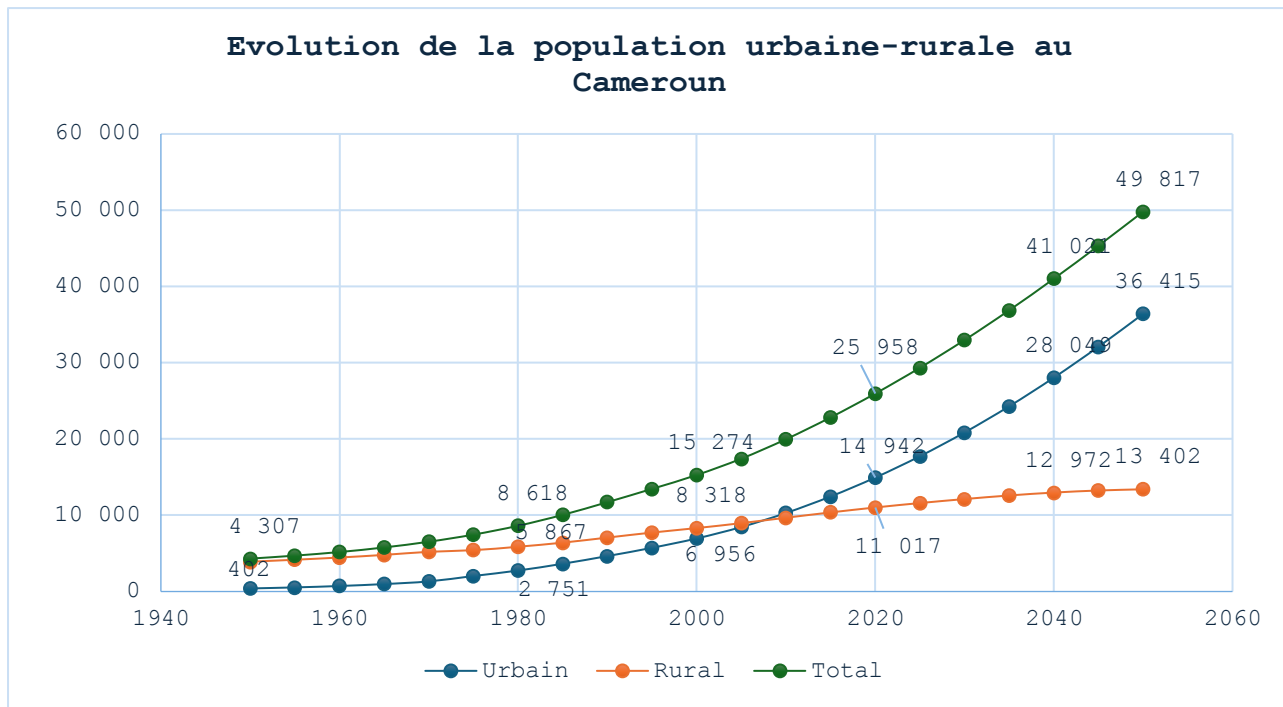


Figure 5: Evolution of the urban rural population between 1950 and 2060

Sources: Authors, WUP²⁰ 2018.

The urban population grew quite rapidly from 13.94% to 54.58% between the two dates, and the rural population decreased from 86.06% to 45.42% (Graph 6). This spatial change is also synonymous with the transition from a traditional rural economy to a more modern urban economy. But is this evolution of the population also verified at the level of the active population (available workforce)?

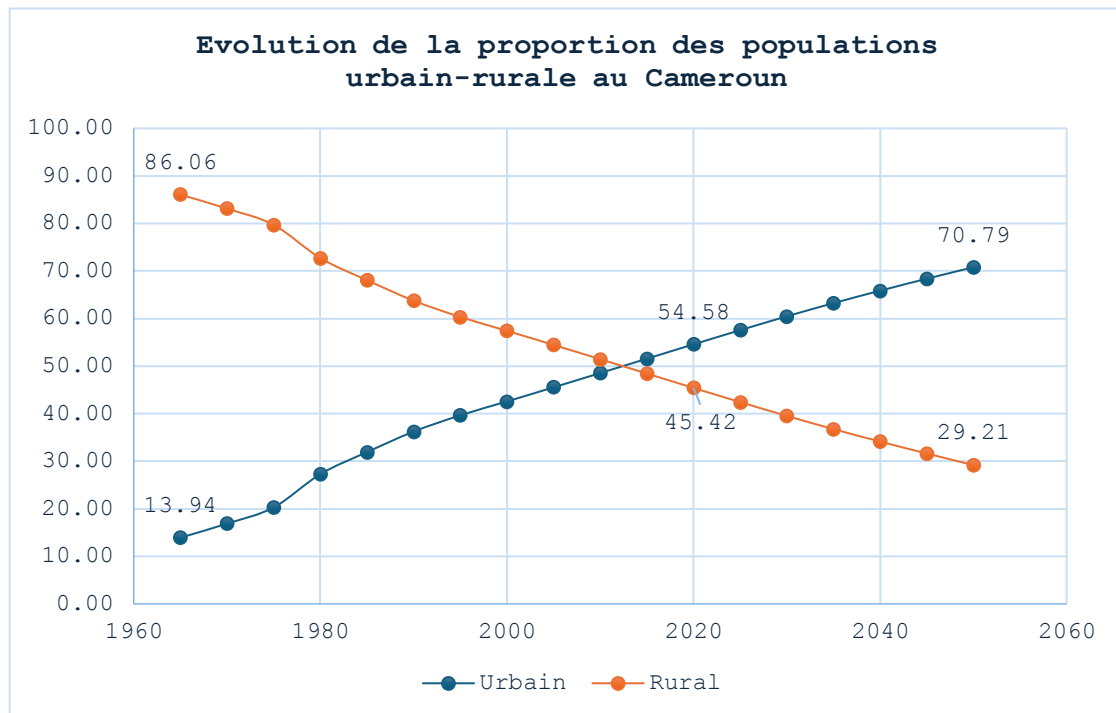


Figure 6: Evolution of the proportion of rural urban population in Cameroon.

Sources: Authors, WUP²¹ 2018.

Figure 7 shows that the working-age population is not following the same trend as the total population. Indeed, between 2001, 2007 and 2014, the working-age population has rather decreased, by 59.07%; 58.90% to 57.73% respectively on the different dates. During the same period, the rural working-age population also decreased by 50.62%; 50.11% to 48.11%, respectively. But overall,

- The working population is larger in urban areas than in rural areas
- The ageing population is more numerous in rural areas. (where is the savings?)
- The young population, under 15 years old, is more numerous in rural areas.
- There was a decline in the working population between 2007 and 2014, regardless of the place of residence.

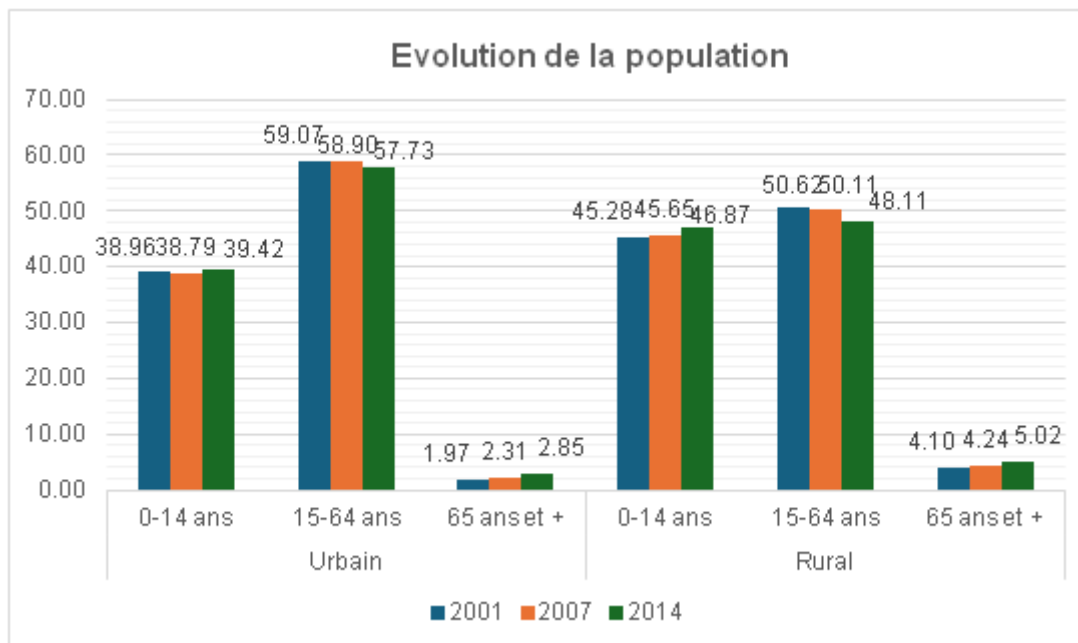


Chart 7: Population change by place of residence in 2001, 2007 and 2014.

Sources: Authors, NSI, ECAM 2, 3 and 4.

It would therefore be difficult to speak of a transfer of labour from the rural population to the urban population in terms of urban labour, but rather of a phenomenon of urbanisation of rural areas, i.e. a transformation of the area of residence of the worker or the workforce, conditioning him to change his work or to modernise it. This phenomenon is justified by the transfer of labour between sectors of activity. Indeed, Table 3 shows the evolution of the workforce between sectors of activity, and the status of activity. The following results can be appreciated:

- Overall, there was a decline in the proportion of the agricultural sector's workforce, in favour of other sectors between 2001 and 2014. We go from 71.23% of the active population to 69.25% in rural areas and from 48.15% to 42.84% overall between the two dates. Even though there was a slight increase in the proportion of workers in the primary sector in urban areas between 2001 and 2014. This may be justified by the modernization of the activity of agricultural and livestock workers in urban areas (development of poultry farming, pigsty, fish farming).
- an increase in industrial activity in urban areas (from 11.61% to 21.90%) and rural areas (from 3.48% to 10.04%), between 2001 and 2014.
- Trade and services decreased slightly in terms of proportion, regardless of the place of residence, ranging overall from 18.08% to 16.80% for trade and 27.11% to 24.80% for services.

It is generally understood that the Cameroonian economy is in a trend of industrialization.

Table 3: Evolution of the labour force according to the economic characteristics of Cameroon in 2001, 2007 and 2014.

	2001					2007			2014		
	URB AN			RURA L	TOTA L	URBA N	RURA L	TOT AL	URBA N	RUR AL	TOTA L
Industry											
primary sector	12.2			71.23	48.15	22.51	79.41	52.19	12.52	69.25	42.84
industry	11.61			3.48	6.66	17.9	6.61	12.01	21.9	10.04	15.56
commerce	28.46			11.42	18.08	21.22	5.36	12.95	25.57	9.16	16.8
service	47.72			13.87	27.11	38.38	8.62	22.86	40.02	11.55	24.8
Total	100			100	100	100	100	100	100	100	100
Situation of informality											
FORMULA	37.34			11.01	21.34	17.66	4.31	10.7	19.53	5.86	12.22
INFORMAL	62.66			88.99	78.66	82.34	95.69	89.3	80.47	94.14	87.78
Total	100			100	100	100	100	100	100	100	100
Carries out an activity											
YES	41.56			56.94	49.7	60.88	78.76	68.79	50.67	57.22	53.89
NOT	58.44			43.06	50.3	39.12	21.24	31.21	49.33	42.78	46.11
Total	100			100	100	100	100	100	100	100	100
Employment status											
OCCUPIED ASSETS	49.35			67.47	58.8	66.19	86.26	74.61	60.8	73.78	66.87
UNEMPLO YED BIT	9.98			2.29	5.97	4.29	0.73	2.79	4.06	0.9	2.58
UNEMPLO YED DEC.	11.35			7.59	9.39	3.31	0.87	2.29	2.56	1.68	2.15

INACTIVE	29.32			22.65	25.84	26.21	12.14	20.31	32.58	23.65	28.4
Total	100			100	100	100	100	100	100	100	100
Population by age group											
0-14 years old	38.96			45.28	42.43	38.79	45.65	41.87	39.42	46.87	43.15
15-64 years old	59.07			50.62	54.43	58.9	50.11	54.96	57.73	48.11	52.92
65+ years old	1.97			4.1	3.14	2.31	4.24	3.17	2.85	5.02	3.93
Dependency	69.3			97.55	83.72	69.77	99.55	81.95	73.22	107.85	88.96
Population size											
Population totale (*1000)			7231	8441	15672	9151	9244	18395	12004	10236	22240
Percentage of population		46.14		53.86	100	49.75	50.25	100	53.97	46.03	100

Sources: Authors, NSI: ECAM 2, 3 and 4, WUP 2018.

On the other hand, there was a strong computerization of the economy between the two dates, regardless of the place of residence. This computerization is more pronounced in rural areas (88.99% to 94.14%) than in urban areas (62.66% to 80.47%). Labour force participation has increased overall, although this increase is small. However, there is still a high proportion of non-active people between the two areas (49.33% and 42.78% in urban and rural areas respectively).

DISCUSSION AND CONCLUSION

Cameroon's population is considerable entered the window of opportunity to capture the demographic dividend in which the working-age population is considerably large. The analysis shows that this population is not only in surplus in the various sectors, within the residential settings and in the various services. This surplus of labour represented by unemployment and underemployment and even disguised unemployment which is very common in the country can be increased if nothing is done, perhaps not in terms of proportion (percentage of people who are under-employed among people of working age), but rather in terms of volume (total number of people who are actually under-employed), in view of the evolution of the total population and even that of the active population, which will evolve from 15,737,000 to 22,442,330 between 2023 and 2035 and by 31,873,800 in 2050 (NU 2024). In concrete terms, there will be twice as many people of working age and therefore open to economic activity. In a context of informalization of the economy, and socio-economic inequality, this surplus of labor is a brake on the growth and economic development of the country. This is what Eloundou-Enyegue (2018) calls a "time bomb", capable of undermining current economic growth efforts (Sourna Loumtouang 2016). The harmful effects of this surplus of labour can be qualified. These are mainly:

violence, Sourna Loumtouang (2016) shows that an unused population, in addition, can lead to political instability, through acts of violence. The author takes the example of the Arab Spring and the rise of the "y'en a marre" movements in Senegal. Jongman (1983) also establishes the relationship between unemployment and the increase in crime and shows that the underemployment of the population leads to an increase in insecurity and banditry. The same goes for Fougère, Pouget et al. (2009) who demonstrate this in a study of youth underemployment and crime in France between 1990 and 2000.

Emigration and the brain drain. The surplus of labour is generally directed towards other horizons, in search of better opportunities, regardless of the level of education. Thus absorbing all the country's potential workforce, equipped in important sectors such as education and health. This phenomenon is on the rise in Cameroon, which is one of the largest exporters of labor in Africa, to Canada, Europe and other African countries. The African Union (2018) shows that this emigration of young people to Africa is a source of amplification of informal activity. Indeed, this report shows that migrants are more likely to be involved in informal trade due to the obstacles they face upon arrival in the destination country. This surplus of labour also led to the rise of the rural exodus.

The increase in dependency. Indeed, the surplus of labour leads to an increase in real economic dependence (Beninguisse and colleagues 2018). This real dependence is a brake on the country's growth and economic development.

In order to avoid the rise of these various scourges, economic losses and the loss of income from the surplus of labor before the Lewis Turning Point in Cameroon, envisaged around 2060, adequate policies are necessary:

country must take measures, in particular by regulating informal activity towards the formal sector. The orientation of teaching towards promising sectors with many opportunities, such as agriculture and services.

The supervision of informal activity towards the formal sector by better organization of the economy, which will lead to an increase in jobs (absorb the surplus of labor) and increase the tax base.

- Promote employment opportunities in rural areas to support local development and limit rural exodus and improve land policy to encourage the development of agriculture, which can absorb this additional workforce.
- Promote an environment that encourages the creation of job-generating enterprises and competitive export activity on international markets.
- Create employment-based education oriented towards promising sectors. Invest in a coordinated manner in basic socio-economic infrastructure and in infrastructure that allows for the development of economic activity in rural and urban areas.
- Promote policies to finance young people's activities by facilitating access to credit.

BIBLIOGRAPHY

1. Abío, G., Patxot, C., Sánchez-Romero, M., & Souto, G. (2017). The welfare state and demographic dividends. *Demographic Research*, 36, 1453-1490. <http://www.jstor.org/stable/26332171>
2. Barjot, D. (2018). The economic rise of Asia: what factors? What models? *Asia's economic rise: what factors? What models?* Business and History, 90(1), 6. <https://doi.org/10.3917/eh.090.0006>
3. Barjot, D. (2020). China's economy today. *Mondes et Cultures: comptes rendus trimestriels des séances de l'Académie des sciences d'outre-mer*, Tome LXXX(1-2-3-4), p. 401-411. <https://hal.sorbonne-universite.fr/hal-04001484>
4. Benanav, A. S. (2014). A Global History of Unemployment: Surplus Populations in the World Economy, 1949-2010. UCLA Electronic Theses and Dissertations.
5. Béninguissé, G., Eloundou-Enyegue, P., Nsoa, M. P., & Tanang, T. P. (2014). Trends in child mortality by socio-economic status in sub-Saharan Africa: composition or performance effect? *Centre for Research in Demography and Societies, IACCHOS, (demography)*, pp. 235-256. https://www.researchgate.net/profile/Bruno-Masquelier/publication/262788376_Ralentissements_resistances_et_ruptures_dans_les_transitions_de

mographiques/links/53f323820cf2dd48950c9354/Ralentissements-resistances-et-ruptures-dans-les-transitions-demographiques.pdf#page=236

6. Beninguisse, G. and Mbarga, C. (2023). Socio-economic conditions and infant mortality: the recent experience of French-speaking Africa. In the case of Mr. E.-E. Parfait (ed.), Population and Development in the 21st Century (p. Ch. 7). IntechOpen. <https://doi.org/10.5772/intechopen.1002675>
7. Bodier, M. (2000). The divergence in the evolution of the German and European labour markets. *Economie et statistique*, n°332-333 (Marchés du travail), 65-82. https://www.persee.fr/doc/estat_0336-1454_2000_num_332_1_7540;
8. Cai, F. (2010). Demographic transition, demographic dividend and Lewis turning point in China. *China Economic Journal*, 3(2), 107-119. <https://doi.org/10.1080/17538963.2010.511899>
9. Cai, F. (2013). Reports on Population and Labour in China (No. 14) Subtitle: From the Demographic Dividend to the Institutional Dividend. Academic press in the social sciences.
10. Cai, F. (2016). China's economic growth prospects: from the demographic dividend to the reform dividend. Edward Elgar Editions. <https://books.google.cm/books?id=C4leCwAAQBAJ>
11. Cai, F. (2017). China's Economic Growth Prospects: From the Demographic Dividend to the Reform Dividend, . Edward Elgar Publishing, 234+xii pages.
12. Cai, F. (2021). The Lewis turning point for the big countries. In F. Cai (ed.), Understanding the Chinese Economy: The Turning Point and the Path of Transformation of a Great Country (pp. 83-97). Springer, Singapore. https://doi.org/10.1007/978-981-33-6322-9_5
13. Cai, F. (2021). Understand the stages of economic development. In F. Cai (Ed.), Understanding China's Economy: The Turning Point and the Path of Transformation of a Great Country (pp. 3-25). Springer, Singapore. https://doi.org/10.1007/978-981-33-6322-9_1
14. Cai, F. and Lu, Y. (2013). The end of China's demographic dividend: the prospect of potential GDP growth. Dans C. Fang, R. Garnaut et L. Song (Eds.), China : A New Model for Growth and Development (Vol. China Update 2013, pp. 55-74). Presse anu. <http://www.jstor.org/stable/j.ctt46n2zv.10>
15. Cai, F. and Lu, Y. (2013). The End of China's Demographic Dividend: The Prospect of Potential GDP Growth, in Ross Garnaut, Cai Fang and Ligang Song (eds)China: A New Model for Growth and Development. E Press Australian National University (Economic Development - China. China - Economic conditions. China--Economic Policy. China--Commerce.).
16. Cai, F., Ross, G., & Ligang, S. (2018). 40 Years of China's Reform and Development: How Reform Captured China's Demographic Dividend. (<https://www.researchgate.net/publication/326492510>). <https://doi.org/10.22459/CYRD.07.2018.01>
17. Cai, F. A. D. Y. (2009). The directory of population and work in China. Vol. 1, Lewis' Approach to the Turning Point and Its Policy Implications. Yearbooks of the Chinese Academy of Social Sciences Population and Labor; , v. 1. (Population and Labor Force;), 286 pages).
18. Deléchat, C., and Leandro, M. (2021). The Global Informal Workforce: Priorities for Inclusive Growth. International Monetary Fund.
19. Durr e, N. (2008). Demographic dividend or demographic threat in Pakistan? *Pakistan Development Review*, 47(1), 1-26. <http://www.jstor.org/stable/41260816>
20. Garnaut, R., Fang, C., & Song, L. (2013). China: A New Model for Growth and Development (Vol. China update 2013). Presse anu. <http://www.jstor.org/stable/j.ctt46n2zv>
21. Golley, J., & Tyers, R. (2012). Demographic dividend, dependencies and economic dynamism in China and India. CAMA Working Paper Series, National University Australian.<http://cama.anu.edu.au> 6/2012 (Macroeconomic Analysis <https://ssrn.com/abstract=2006069>
22. Gubry, P., & Wautelet, J.-M. (1993). Population and development process in Cameroon. In. https://www.researchgate.net/publication/235889452_Population_et_processus_de_developpement_au_Cameroun_Population_and_development_process_in_Cameroon
23. Huynh Cao, T. (1981). Cultural Identity and Development: Scope and Significance [Programme and Meeting Paper]. (Reports and Studies (for Development Studies), STY.15 [449]).
24. INS. (2001). 2nd Cameroon Household Survey INS, <https://ins-cameroun.cm/>, ECAM 2. <https://ins-cameroun.cm/>
25. INS. (2007). 3rd Cameroon Household Survey <https://ins-cameroun.cm/>, ECAM 3. <https://ins-cameroun.cm/>

26. INS. (2014). 4th Cameroon Household Survey INS, <https://ins-cameroun.cm/> ECAM 4. <https://ins-cameroun.cm/>
27. Lewis, A. (1972). Reflections on Unlimited Work in Di Marco, L. (ed.) International Economics and Development, . New York, Academic Press, pp. 75-96.
28. Mama, T. (2008). The Cameroonian economy: for a new start. Afrédit. <https://books.google.cm/books?id=jgPEPgAACAAJ>
29. Mesplé-Somps, S. D., Jean-Christophe. (1999). Demo-economic modelling in macroeconomics. History, growth model and approach to migration phenomena [Working paper / Document de travail]. IRD (migration, demography), 27.
30. Molua, E. L. (2015). Assessing the Trade Facilitation and Competitiveness of the Coffee Sector in Cameroon: Implications for Trade Liberalization.
31. Monchy, G., & Roubaud, F. (1991). Cameroon: Retrospective Economic Developments and Macroeconomic Prospects for 1995. 104. https://horizon.documentation.ird.fr/exl-doc/pleins_textes/divers10-09/010006191.pdf
32. United Nations. (2017). Country Profile, South Africa. Economic Commission for Africa.
33. Ndoye, O. and Kaimowitz, D. (2000). Macroeconomics, Markets and Rainforests of Cameroon, 1967-1997. Journal of Modern African Studies, 38(2), 225-253. <https://www.jstor.org/stable/161650>
34. Olaniyan, O., Soyibo, A., & Lawanson, A. (2012). Demographic Transition, Demographic Dividend and Economic Growth in Nigeria. Etude de la Population Africaine, 26, 159-176. <https://doi.org/10.11564/26-2-211>
35. Ondoua, O. (1992). The Demographic Transition in Cameroon and the Special Case of Yaoundé, Bordeaux Montaigne University]. Microfiches. - (Lille-thèses). <https://www.sudoc.fr/01280844X>
36. Oosthuizen, M. J. (2015). Bonus or mirage? South Africa's demographic dividend. The Journal of the Economics of Aging, 5, 14-22. <https://doi.org/https://doi.org/10.1016/j.jeoa.2014.08.007>
37. Ranis, G., & Fei, J. C. H. (1961). A theory of economic development. The American Economic Review, vol. 51, no. 4, 533-565.
38. Roser, M. (2023). Demographic transition: why is rapid population growth a temporary phenomenon? Published online at OurWorldinData.org.
39. Statistics South Africa. (2014). Quarterly Labour Force Survey (Q1 2014).
40. Tenikue, M., Yao, S. K., Mouté, N. C. E., & Zinvi, D. D. F. (2018). The Demographic Dividend in Africa: First Signs and Estimation by the IUSSP 102 Decomposition Method.
41. Thaddeus, K. J., Ngong, C. A., Nebong, N. M., Akume, A. D., Eleazar, J. U., & Onwumere, J. U. J. (2024). Selection of macroeconomic and economic growth determinants in Cameroon (1970-2018): "dead or alive", an ARDL approach. Journal of Business and Socio-Economic Development, 4(1), 1-19. <https://doi.org/10.1108/JBSED-05-2021-0061>
42. United Nations. (2024). World Population Prospects 2024. Department of Economic and Social Affairs,
43. Population Division, online edition. <https://population.un.org/wpp/Download/Standard/MostUsed/>
44. Yiping, H., Cai, F., Peng, X., & Gou, Q. (2013). The New Normal of Chinese Development, in Ross Garnaut, Cai Fang, and Ligang Song (eds) China: A New Model for Growth and Development, Australian National University, E Press. ANU E Press, Australian National University. China Update 2013. <http://www.jstor.org/stable/j.ctt46n2zv>

ANNEX.

Table 4: Population trends by age group and region of residence.

REGION	AGE GROUP	2001			2007			2014		
		URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL
Cameroon	0-14 years old	38.96	45.28	42.43	38.79	45.65	41.87	39.42	46.87	43.15
	15-64 years old	59.07	50.62	54.43	58.9	50.11	54.96	57.73	48.11	52.92
	65+ years old	1.97	4.1	3.14	2.31	4.24	3.17	2.85	5.02	3.93
	Dependency	69.3	97.55	83.72	69.77	99.55	81.95	73.22	107.85	88.96
Duala	0-14 years old	33.27	-	33.27	32.46	-	32.46	35.03	-	35.03
	15-64 years old	64.92	-	64.92	65.85	-	65.85	62.9	-	62.9
	65+ years old	1.81	-	1.81	1.69	-	1.69	2.07	-	2.07
	Dependency	54.03	-	54.03	51.87	-	51.87	58.99	-	58.99
Yaoundé	0-14 years old	36.46	-	36.46	35.54	-	35.54	37.7	-	37.7
	15-64 years old	62.14	-	62.14	63.31	-	63.31	59.97	-	59.97
	65+ years old	1.41	-	1.41	1.15	-	1.15	2.33	-	2.33
	Dependency	60.94	-	60.94	57.96	-	57.96	66.75	-	66.75
Adamawa	0-14 years old	41.87	49.39	46.87	40.6	48.51	44.56	39.65	48.35	45.65
	15-64 years old	55.42	46.8	49.69	57.25	48.44	52.84	57.29	47.99	50.88
	65+ years old	2.71	3.81	3.44	2.15	3.05	2.6	3.06	3.66	3.47

	Dependenc y	80.44	113.68	101.25	74.66	106.43	89.24	74.54	108.36	96.54
Centre	0-14 years old	42.72	44.39	43.97	42.81	37.49	39.61	41.84	41.83	41.83
	15-64 years old	55.03	51.18	52.15	54.99	56.99	56.2	54.22	53.27	53.68
	65+ years old	2.25	4.44	3.89	2.21	5.51	4.2	3.94	4.9	4.49
	Dependenc y	81.73	95.4	91.77	81.87	75.45	77.95	84.43	87.71	86.3
East	0-14 years old	42.25	47.87	45.97	42.87	47.21	45.3	44.16	48.53	47.05
	15-64 years old	56.76	49.75	52.13	56.06	50.15	52.76	54.28	47.43	49.75
	65+ years old	0.99	2.38	1.91	1.07	2.64	1.95	1.56	4.04	3.2
	Dependenc y	76.17	101.02	91.84	78.37	99.4	89.55	84.23	110.82	100.99
Far North	0-14 years old	46.03	46.61	46.42	45.53	49.86	48.09	46.29	50.68	49.12
	15-64 years old	50.73	48.84	49.46	52.08	45.82	48.38	51.43	44.64	47.05
	65+ years old	3.24	4.55	4.11	2.39	4.32	3.53	2.27	4.68	3.82
	Dependenc y	97.12	104.75	102.16	92.01	118.24	106.7	94.42	124	112.53
Littoral	0-14 years old	37.14	37.14	37.14	36.08	36.83	36.37	41.11	41.49	41.31
	15-64 years old	59.52	56.62	57.73	57.77	58.18	57.93	53.82	52.79	53.29
	65+ years old	3.33	6.25	5.13	6.15	5	5.7	5.07	5.72	5.41
	Dependenc y	68	76.63	73.22	73.11	71.89	72.62	85.8	89.44	87.67
North	0-14 years old	44.65	47.02	46.45	42.67	48.68	45.78	41.06	51.97	48.41
	15-64 years old	53.92	50.31	51.17	54.44	48.81	51.53	56.04	44.4	48.19

	65+ years old	1.43	2.67	2.37	2.89	2.51	2.7	2.9	3.63	3.39
	Dependency	85.45	98.77	95.41	83.69	104.86	94.08	78.43	125.23	107.5
North West	0-14 years old	38.75	45.65	43.28	37.7	44.92	41.85	38.19	44.74	42.44
	15-64 years old	58.84	49.67	52.82	59.01	50.45	54.09	58.45	48.88	52.24
	65+ years old	2.41	4.68	3.9	3.29	4.63	4.06	3.35	6.38	5.32
	Dependency	69.96	101.35	89.34	69.46	98.21	84.89	71.07	104.59	91.43
West	0-14 years old	41.76	47.28	45.08	44.14	46.72	45.45	44.31	48.39	46.54
	15-64 years old	56.46	48.46	51.66	53.61	47.68	50.6	52.08	44.02	47.67
	65+ years old	1.77	4.26	3.26	2.25	5.6	3.95	3.62	7.58	5.79
	Dependency	77.11	106.35	93.58	86.53	109.74	97.61	92.02	127.15	109.78
South	0-14 years old	43.01	44.23	43.79	38.97	45.83	42.61	41.41	41.81	41.64
	15-64 years old	55.02	50.21	51.93	59.2	49.89	54.26	55.63	52.2	53.68
	65+ years old	1.97	5.57	4.28	1.83	4.28	3.13	2.96	5.99	4.69
	Dependency	81.75	99.17	92.56	68.92	100.44	84.28	79.76	91.56	86.29
Southwest	0-14 years old	35.12	39.16	38.27	33.39	41.78	37.37	30.87	39.03	35.51
	15-64 years old	63.7	58.11	59.35	64.25	54.56	59.65	65.44	55.61	59.85
	65+ years old	1.18	2.73	2.38	2.36	3.67	2.98	3.69	5.36	4.64
	Dependency	57	72.09	68.5	55.64	83.29	67.65	52.82	79.82	67.08

Sources : Authors, INS. ECAM 2, 3 and 4.

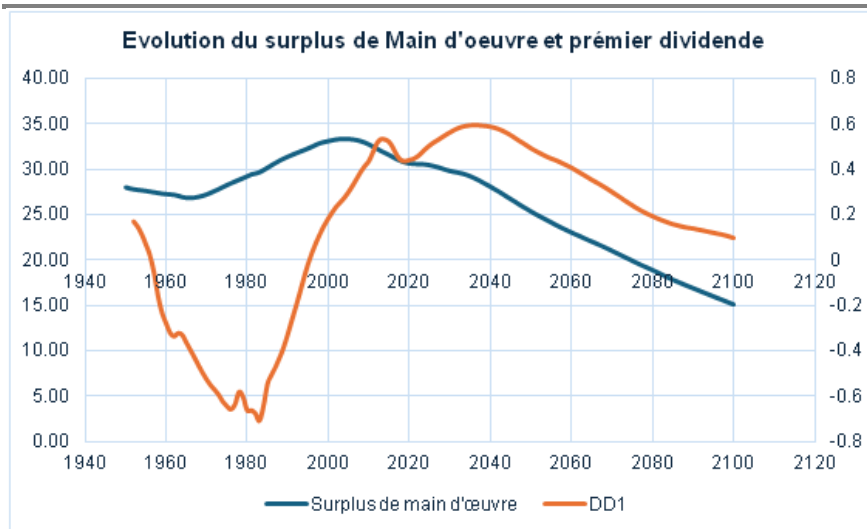
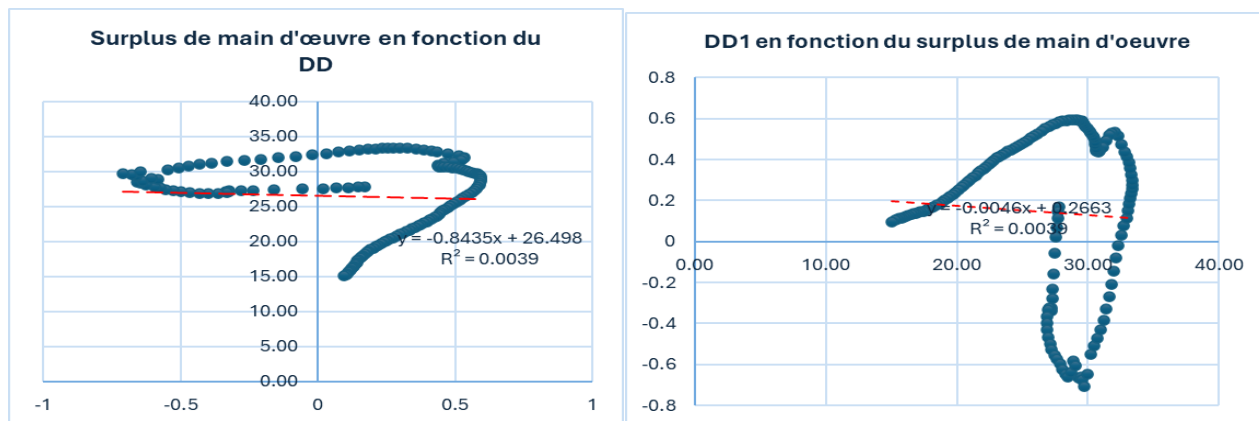


Figure 8: Evolution of the labour surplus and capture of the 1st demographic dividend between 1950 and 2100

Sources: Authors, NTA Database, WPP 2024.



Graph 9: Evolution of the Capture of the Demographic Dividend between 1950 and 2100

Sources: Authors, NTA Database, WPP 2024.

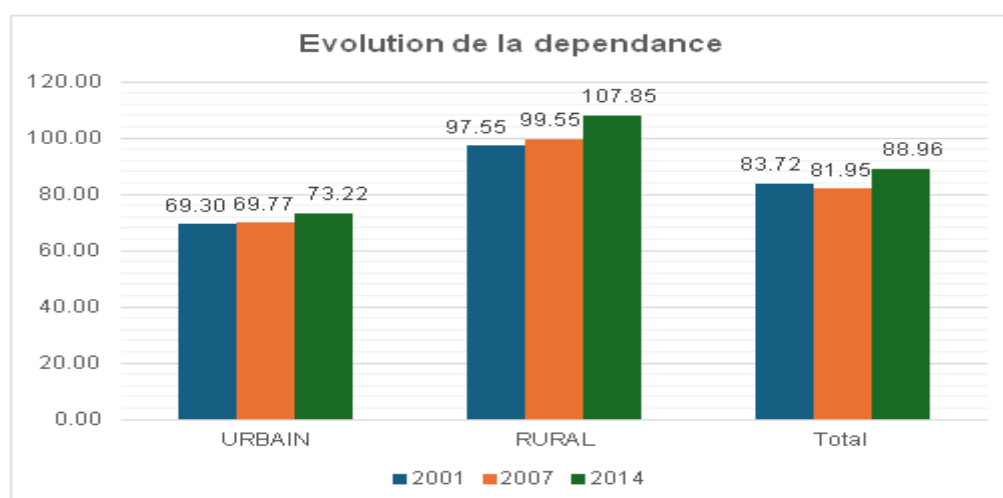


Figure 10: Evolution of demographic dependence in 2001, 2007 and 2014.

Sources: Authors, NSI, ECAM 2, 3 and 4.