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The Demographic Challenge:
Myths and Realities

NOTE JULY 2018

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“There are three important things in history: first, numbers; second, numbers; and third, numbers.¹”

¹ *The Decline of the American Empire*, film by Denys Arcand, 1986.

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INTRODUCTION

The demographic challenge is not what it used to be.

In the early 1980s, the “population explosion” was the main focus of discussion. Since then, all our references have been shaken. The developing countries’ entry into demographic modernity occurred earlier than expected, but the future growth of Africa’s population was revised upwards. Industrialized countries’ aging has become a growing concern, and America seems to be the only lasting exception remaining.

At the time, there was concern about the capacity of the Earth to feed humanity in the 21st century. Today, the various consequences of climate change are inseparable from the debate on population and resources.

At the time, many European countries saw the “Arab immigrant” as the root of all evil. Today, the “Muslim refugee” is the one who crystallizes fears.

At the time, questions were raised about the way to return to full employment after what was called “the crisis”. Today, the future of welfare states in aging countries is being discussed.

In its broadest sense, the demographic issue is at the heart of all major contemporary societal issues: resources, climate, conflicts, migration, urbanization, growth, education, employment, pensions, health... Demography is a political combat sport in which data and forecasts are weapons.

The following text presents the facts, the challenges and the geopolitical consequences of the demographic changes taking shape, at a time when the evolution of the world population is reaching an unprecedented point in human history.

Rejecting both angelism and catastrophism, it describes the looming demographic revolution (Chapter I), the change in the hierarchy of powers that could result from it (Chapter II), and the challenges some preconceived ideas on the question of resources pose (Chapter III). Focusing on Europe and its environment, this note then attempts to portray the predictable evolution of crises (Chapter IV), crucial issues such as migration (Chapter V), and the societal implications of future demographic changes. It draws conclusions for Europe from this analysis (Chapter VI), but also proposes a optimistic outlook on the long-term consequences of changes in the world population.

Are population forecasts reliable?

The characteristics of population forecasting are well known. Developments are slow, the effects of inertia are significant. It often takes several generations to reverse a demographic situation (see the cases of Russia and China discussed below). This makes forecasting less uncertain than it can be in other areas.

However, two elements temper the extent to which this principle applies. On the one hand, changes can be dramatic on the long term (several decades). This is the case with the collapse of fertility in modernizing countries, such as Brazil, Tunisia, or India, where the Total Fertility Rate (TFR²) was divided by three since the early 1960s. On the other hand, large migratory waves can significantly alter the demographics of a country or a region in a few years (see the case of Italy for instance, *infra*).

Moreover, the evolution of populations over the long term is characterized by what one would call in physics a strong sensitivity to initial conditions. Population size is, after several decades, very sensitive to small changes in the fertility rate. This makes some forecasts more uncertain in the very long term (say, arbitrarily, beyond 2050).

For these reasons, and because the data on which forecasts are based are often uncertain, particularly for developing countries, the reference scenario used here (UN, 2017, median forecast) should be considered as a set of likely trends rather than as a forecast³. Not to mention, of course, that forecasting in this field, like others, can affect political decision-making - and thus prevent the forecast from becoming a reality.

Demographic analysis is not physics. In the field of migration, for example, one must be wary of mechanistic reasonings underpinning notions such as “valve” and “air suction”. And causal links are rarely one-way. For example, the impact of population growth on the economy can either be positive or negative: it depends on the age pyramid, the labour market situation, as well as the institutional, political, legal and cultural environment.

² The TFR is the sum of the age-specific fertility rates for a year.

³ Unless indicated otherwise, data are from United Nations, *World Population Prospects: the 2017 Revision* (hereinafter: UN 2017), median projection.

Demography is not deterministic either, but rather probabilistic. It is not “destiny”, as a saying too often quoted would have it⁴. It is rarely the main deciding factor of political developments. The wars in Lebanon, Rwanda and Syria were not “caused” by demographic changes.

Finally, at the risk of stating the obvious, it should be remembered that initial data (censuses, assessments of migratory flows) are sometimes very uncertain, even if demographers have tools at their disposal to evaluate them as well as possible.

⁴ “*Demography is destiny*”: an aphorism often attributed to French philosopher Auguste Comte, but forged by an American political scientist in 1970 - who wrongly predicted that the centre would dominate the US political spectrum.

A TURNING POINT IN HUMAN HISTORY

The first decade of this century was a turning point in human history. Senior citizens (over 60 years old) now outnumber children (0-4 years old). Urban dwellers outnumber rural ones.⁵ And the global average TFR is now approaching the level needed to replace generations.⁶ The world is getting older, the global demographic transition is coming to an end. Moreover, the European environment is changing: the east of the continent is emptying, part of the Middle East has entered the age of demographic modernity, and African youth is expanding rapidly.

The aging of the world

Population growth today is 1.1 percent per year. According to the latest UN forecasts, the world population, 7.55 billion people in 2017, is expected to be 8.55 billion in 2030, 9.77 billion in 2050, and possibly 11.18 billion in 2100.⁷

This picture conceals important disparities between two universes: on the one hand, that of aging powers (mainly Eurasia), and on the other, that of the youngest countries (in Africa in particular). In the coming decades, half of the world's population growth will come from the contribution of approximately 10 countries: India, Nigeria, the Democratic Republic of Congo, Pakistan, Ethiopia, Tanzania, the United States, Uganda and Indonesia.⁸

Overall, however, as a result of longer life expectancy and declining birth rates, humanity can be said to be *“entering adulthood”*.⁹ The proportion of people aged 60 or over has now reached 13 percent, as a result of both longer life expectancy and the fall of fertility in many countries.

Populations of about 50 countries will decline in the coming years, particularly in Eastern Europe and East Asia, which have the lowest fertility rates in the world (e.g.

⁵ Joel E. Cohen, *“How many people can the planet hold?”*, *Aspenia*, No. 43-44, 2009, p. 40.

⁶ The threshold for generation renewal is theoretically two, but its exact value varies according to countries and time: it depends on the balance of births between men and women (on average 105/100) and female mortality. Broadly speaking, half of humanity now lives in a country where the total fertility rate is lower than this rate.

⁷ With a 95% confidence interval, between 9.6 and 13.2 billion.

⁸ UN 2017.

⁹ Joel E. Cohen, *“Human population grows up”*, *Scientific American*, September 2005.

1.2 in Taiwan). Japan, with 127 million inhabitants in 2017, could see, according to the United Nations' low hypothesis, its population decline by nearly 40 million by 2065. Only 941,000 Japanese children were born in 2017, the lowest figure since 1899.¹⁰

The “P Bomb” has been defused

In the Hobbesian world, in which lived most of humanity for centuries – life was “*nasty, brutish and short*”, according to the 17th century philosopher – a very high mortality was balanced by a very high birth rate. Indeed, the replacement of generations happened at about six children per woman.

Today, the end of what we call the demographic transition - the transition from one balance (high fertility and mortality) to another (low fertility and mortality), first because of the decrease in mortality, then because of the decrease in fertility - is looming. The peak in the world population growth rate has been reached (over 2.05% per year between 1965 and 1970). This rate has since decreased (1.19% between 2010 and 2015). The global average TFR was 3.9 in the years 1975-1980; it is estimated at 2.4 for the years 2015-2020 and could reach 1.9 in the years 2095-2100.¹¹

This decline, swifter than anticipated by demographers, who were too focused on the European experience and expected a longer transition, has multiple causes: economic development (there is a decrease in fertility around a GDP per capita of 1,000-2,000 USD¹²), public health (a drop in infant mortality), a more productive and less demanding agriculture, women's education¹³... Yet it is more of a virtuous circle than a simple, one-way causal relation: development is not essential to fertility decline, and fertility decline can drive modernization.

Remember the “P Bomb”? The population bomb announced in Paul Ehrlich's eponymous best-seller published in 1969, the “explosion” which would inevitably cause a world famine due to lack of resources? Unfortunately for Ehrlich, the decline of the average TFR in the world began just as he was publishing his book. 50 years later, it can be said with certainty that it has not exploded. Hundreds of millions of women,

¹⁰ Philippe Messmer, “*La population du Japon poursuit son inquiétant déclin*”, Le Monde, 9 January 2018. With an unchanged evolution (which is unlikely to happen), the “last Japanese” would die around the year 3000.

¹¹ UN 2017.

¹² “*Go forth and multiply a lot less*”, The Economist, 31 October 2009.

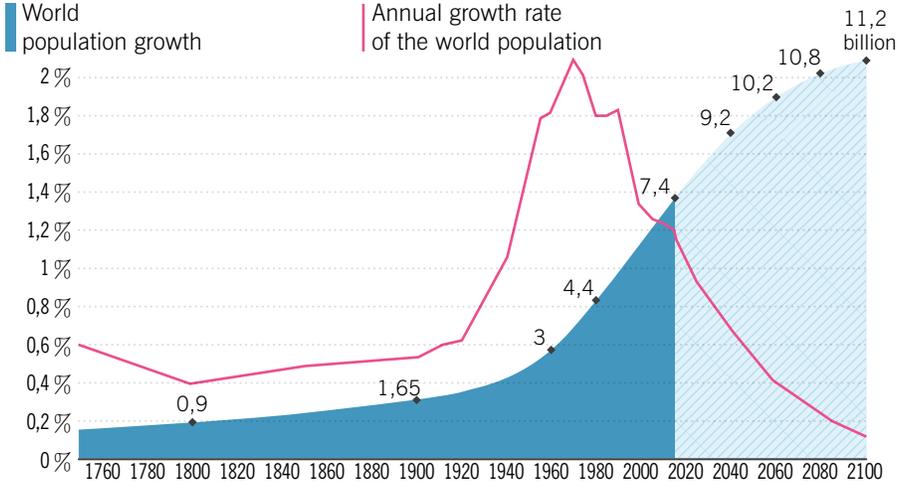
¹³ Girls' education is both an opportunity to learn the basics of family planning and, often, a protection against early marriage. Hervé Le Bras (interview) in “*10 milliards d'humains, et alors ?*”, Le Monde, 7 December 2017.

by choosing the number of children they would have, contributed to deactivating it.¹⁴ Improving living conditions in developing countries first led to a dramatic decline in child mortality. Then came the fall of fertility - itself partly due to this decline - which resulted in a gradual flattening of the world population growth curve. In 1950-55, a woman gave birth to an average of five children. Today, this average has been divided by two, and could amount to less than two by the end of the century.

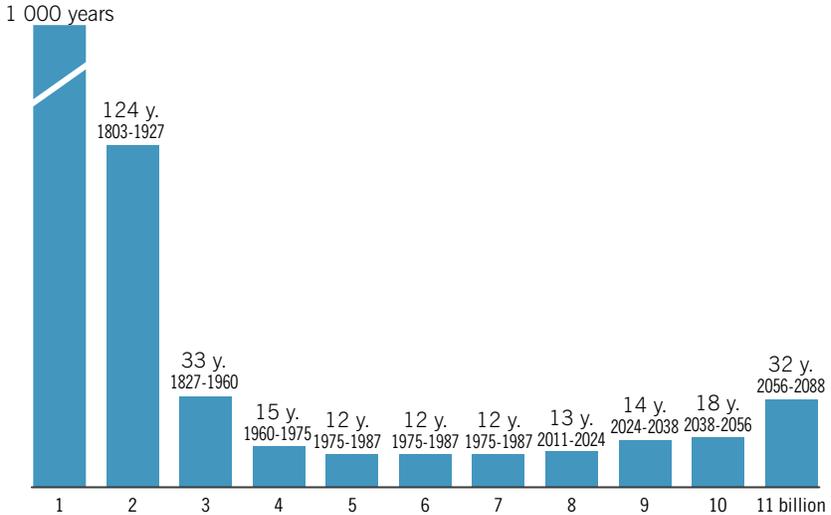
The next 40 years of rapid world population growth could be the last ones. From then on, the world population will only grow very slowly.

¹⁴ Fred Pearce, *Peoplequake. Mass Migration, Ageing Nations and the Coming Population Crash*, London, Eden Project Books, 2010, p. 143.

GROWTH OF THE WORLD POPULATION



Time needed throughout history to reach one more billion of inhabitants

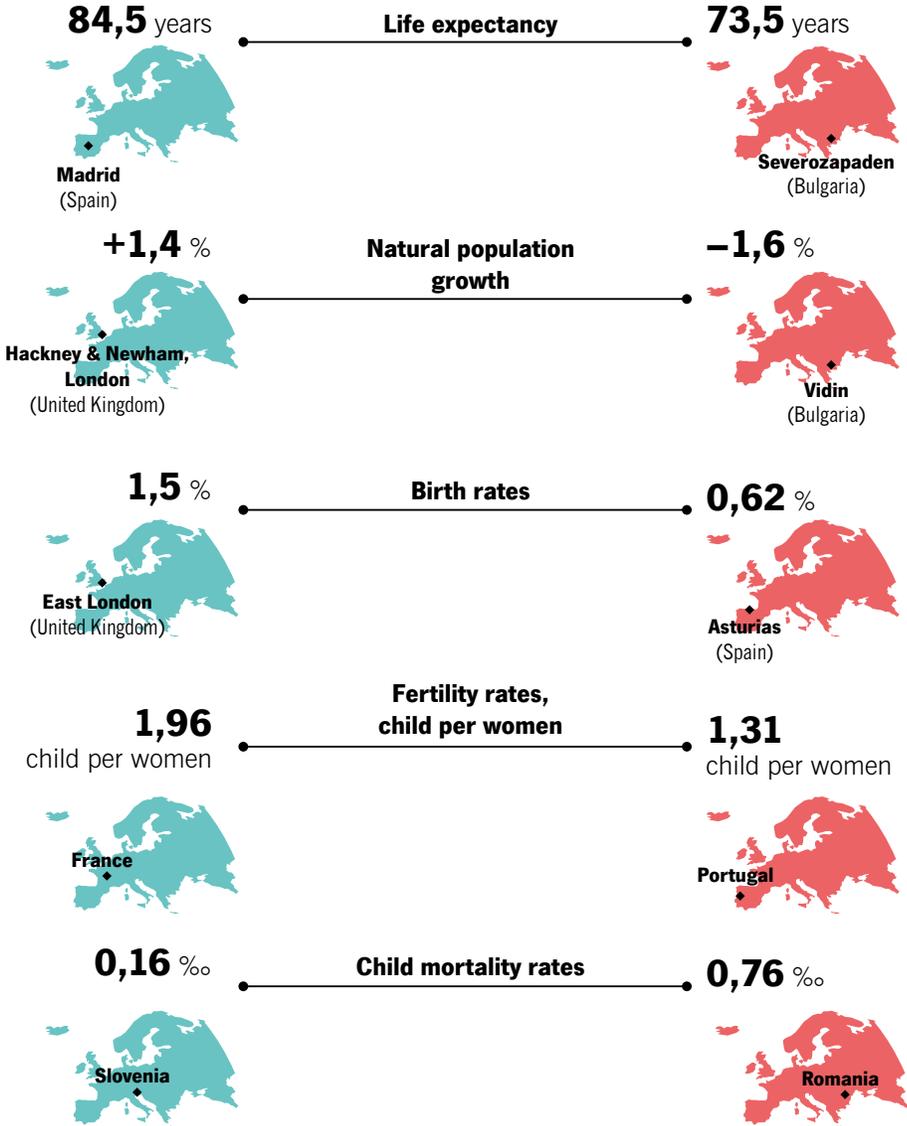


The collapse of *Mittleuropa*

In 2015, Europe was confronted to a real demographic turning point. In spite of good birth rates in France and in the United Kingdom, Europe entered a phase of depopulation that year (the number of deaths was higher than the number of births), and its demographic growth is now solely due to immigration.¹⁵ After hitting rock bottom at the beginning of the century (more than 15 countries in the Union had a TFR of less than 1.4), European fertility rose briefly, but this growth phase was short-lived.

¹⁵ Gérard-François Dumont, “L’Union européenne entre ‘hiver démographique’ et crise des migrants”, Les grands dossiers de Diplomatie, no 36, January 2017.

DEMOGRAPHIC RECORDS IN EUROPE



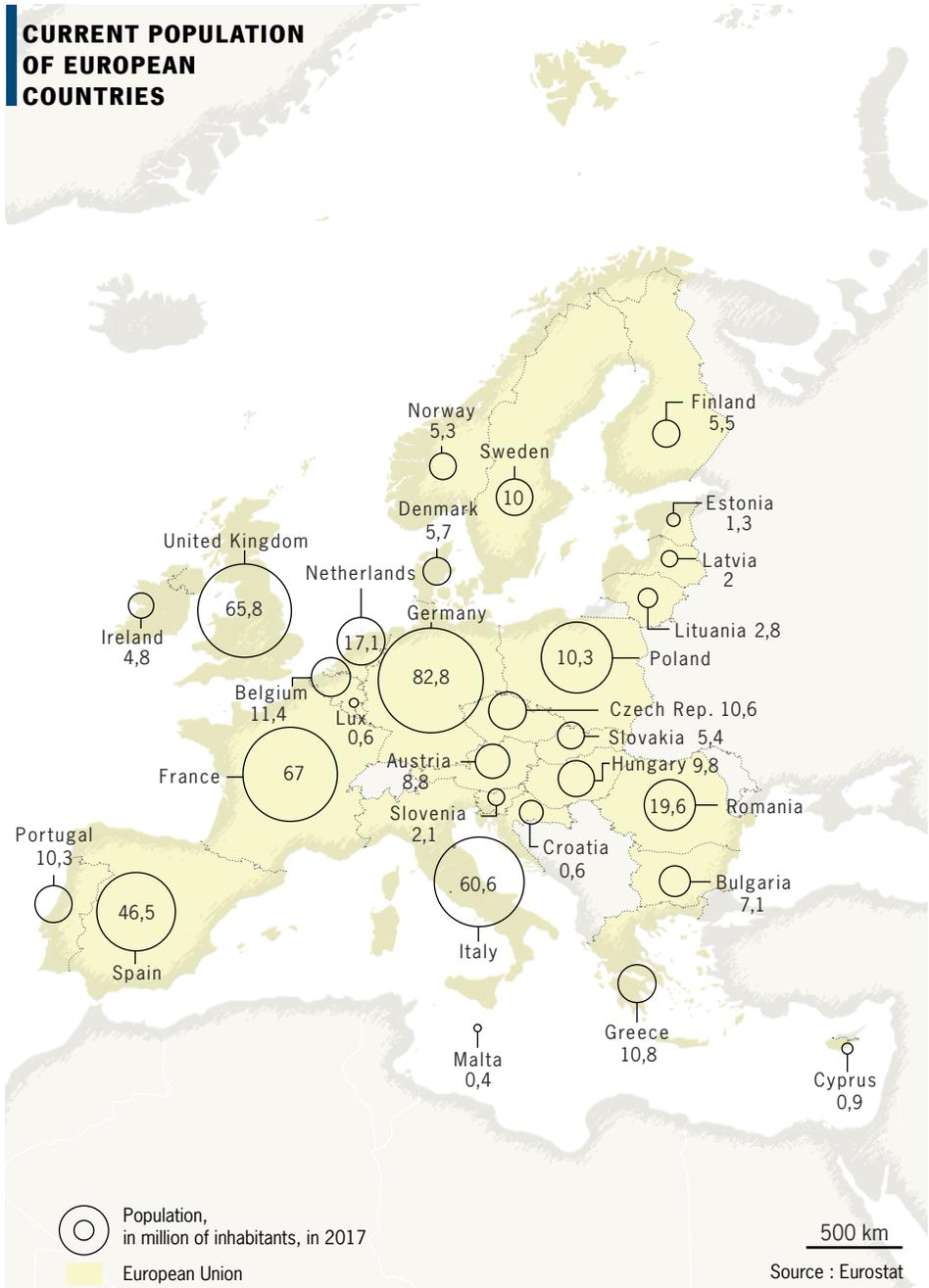
The new German Länders had once beaten the world record for infertility (0.8) after the unification. The impact this had is still visible today in the eastern part of the country, where many regions seem empty or seem to have been affected. Today, the entire eastern part of the continent is affected. From a demographic standpoint, Ukraine used to mirror France, but has entirely shifted since its independence. Due to high mortality, an often high emigration rate - in the 2000s, about two million Poles left their country - and a very low birth rate, *Mitteleuropa* is a world exception. 10 of the 11 countries that are most likely to lose over 15% of their population by 2050 (except for massive and lasting immigration) are in Central and Eastern Europe: Bulgaria, Latvia, Moldova, Ukraine, Croatia, Lithuania, Romania, Serbia, Poland, Hungary.¹⁶ Only the small “core Balkan” states (Albania, Bosnia, Kosovo, Macedonia, Montenegro) will balance their emigration with a still high fertility rate.

One must emphasize the collapse of Bulgaria, a relatively unknown European story. The country has lost 20% of its population in 20 years because of extremely high mortality (15/1,000) and persistent emigration (accelerated by the country's integration into the Union). It is about, according to UN forecasts, to lose 23% of its population between 2017 and 2050.¹⁷ As in the eastern Länder of Germany, the visitor is struck by the country's state of dilapidation. This is why, at the time when Sofia was president of the Union (2018), Eastern Thrace (Turkey) seemed much more modern than this southeastern tip of Europe...

¹⁶ The British Virgin Islands are the eleventh.

¹⁷ It is closely followed by Latvia (-22% by 2050, although it has already lost 27% of its population since 1989).

CURRENT POPULATION OF EUROPEAN COUNTRIES



Uncertainties regarding Middle Eastern demography

After having long distinguished itself from the rest of the world (with the exception of Sub-Saharan Africa) with some of the highest growth and fertility rates in the world, the Middle East entered the demographic transition at full speed in the 1970s. In the Muslim world overall, the TFR fell from 6.8 to 3.7 between 1975 and 2005.¹⁸

In Morocco and Tunisia, the TFR fell down, in 30 years, to the threshold for generation replacement. Maghreb thus seemed like it was importing the European demographic model.

In Iran, a particularly effective policy encouraging family planning reduced the TFR by more than a half in 20 years. It followed a radically opposed policy: after the Iraqi invasion in 1980, Ayatollah Khomeini wanted to have an army of young warriors who could be sacrificed for the country. The country's demographic transition is thus one of the fastest in the region.¹⁹ This transition was supported by an increase in school enrolment (especially among women), of the number of working people, of the savings rate, etc.

These developments were among the root causes of the Middle Eastern revolutions. The questioning of the traditional family model contributed to that of political governance. As Youssef Courbage points out, the “*demographic revolution*” undoubtedly paved the way towards the “*democratic revolution*”.²⁰

Yet an unpleasant surprise was waiting just around the corner. The premises of a possible counter-transition emerged in recent years for various reasons: the development of practices linked to the religious renewal, the decline in the employment of women, who marry younger (in Egypt in particular), and, in the Algerian case, perhaps the end of a birth boom delayed by the civil war.²¹ In about 10 Arab countries, the fertility transition has thus been reversed or slowed down, with TFRs significantly exceeding the replacement rate. In fact, the countries in which fertility is low or steadily declining now account for only a fifth of the total population of the Arab world. This could be a transitory phenomenon - major demographic changes are rarely linear over the long

¹⁸ Youssef Courbage & Emmanuel Todd, *Le Rendez-vous des civilisations*, Paris, Seuil, 2007. With certainly very large variations between Sahel and Central Asia.

¹⁹ Richard Cincotta & Karim Sadjapour, *Iran in Transition: The Implications of the Islamic Republic's Changing Demographics*, Carnegie Endowment for International Peace, 2017.

²⁰ Youssef Courbage, *Où en est la transition démographique dans le monde arabe ?*, iReMMO, undated.

²¹ In Algeria, the number of births in 2016 was twice the annual average of the early 2000s.

term. But it is in any case too early to say that the Arab world has definitely entered the age of demographic modernity.

The African particularity

While the rapid decline in fertility in Asia and Latin America had not been anticipated by demographers, they had overestimated Sub-Saharan Africa's ability to begin its demographic transition rapidly. It is thus the only continent for which the United Nations has revised its population forecasts upwards since the 1980s.

Child mortality dropped considerably, and that is where we find all the youngest countries in the world. The average TFR was 6.6 in the years 1975-1980: it is falling, but rather slowly, and is estimated at 4.7 for 2010-2015 by the United Nations. There are still very high TFRs, with Niger holding the record at 7.4 in 2010-2015, followed by Somalia (6.6), DRC (6.4), Angola and Burundi (6.0), Uganda (5.9) and Nigeria (5.7). It is in the intertropical zone that two-thirds of the world population growth will occur by 2050. From Senegal to Niger, there are 65 million inhabitants. By 2100, there could be 400 million.

The African continent is thus, and by far, the youngest one. This is where we find the lowest values for the median age (15 years in some countries) and the highest proportions of youth under 15 in the population (over 40% in several countries). The world fertility record is in southern Niger, with a local TFR of 8.4 children per woman.²²

Very significant life expectancy gains at birth were also achieved on the continent between 2000-2005 and 2010-2015 (+6.6 years). Africa's annual growth thus only slowly decelerates from +2.6% in 2016 to +1.7% in 2050, and perhaps +0.63% in 2100.²³ Its population (1.25 billion) could reach 2.52 billion in 2050, and perhaps 4.47 billion in 2100.²⁴ Although it represents only 17% of the world population today, Africa could, at the end of the century - a time for which forecasts are uncertain of course - have a population almost equal to that of Asia, i.e. 40% of the planet.²⁵ The

²² Morgane Witz, "Niger : Maradi, cette ville championne du monde des naissances", Le Point, 20 February 2018.

²³ The TFR could decline from 4.7 (2010-2015) to 3.1 (2045-2050), and possibly 2.1, by 2095-2100 (2.0 globally).

²⁴ UN 2017.

²⁵ UN 2017. Asia has 4.50 billion inhabitants today and will have 5.25 billion by 2050. This figure will then decline to perhaps 4.78 by 2100, or 43% of the world population.

populations of Angola, Burundi, Niger, Somalia, Tanzania and Zambia could be at least five times larger than today.²⁶

On this continent, the maintenance of high TFRs is rarely due to the refusal of contraception, but rather to the fact that national birth control programs “*are not very effective, have insufficient means, and, above all, suffer from a lack of motivation on the part of their managers and the staff in charge of implementing them in the field*”.²⁷ It is estimated that 130 million African women have no modern means of contraception.²⁸ Religious traditions and beliefs also contribute to this phenomenon.²⁹ Indeed, at the global level, the fertility of Christian and Muslim women is, on average, higher than that of women who have embraced another religion or who are not affiliated to any religion.³⁰ However, regional family planning initiatives (e.g. Ouagadougou Partnership) have reduced fertility in some countries.

The transformations of human society

The world population is now older, but also more urban: for the past 10 years, the majority of the world population has been living in cities. Some of these cities, such as Los Angeles, Dubai or Sydney, are already true global cities, home to a large number of communities of foreigners or foreign-born individuals. Even if some large cities in developing countries are in fact more often urban villages, or slums with little or no common infrastructure, there is, more than a rural exodus, a real “*urban magnetism*” (Stephen Smith), which plays a massive role in Asia and Africa. In the coming years - around 2020 - the rural population is expected to begin to decrease in absolute terms. Today, there are about 30 megacities of more than 10 million inhabitants in the world: there could be about 40 in 2030, most of them in East Asia (China, Japan) and South Asia (India, Pakistan, Bangladesh). The great coastal city is the future of human habitation: the majority of the 20 largest metropolises in the world in 2030 will be located by the sea (Bangladesh, China, India, Pakistan, Philippines). This could require important adaptation efforts if sea levels continue to rise. As for African cities, they will experience spectacular growth. Lagos could even be the largest city in the world by 2100, with 80 to 100 million inhabitants.

²⁶ UN 2017.

²⁷ Gilles Pison, “Sept milliards et demi d’humains aujourd’hui, combien demain ?”, *Études marines*, no 12, June 2017, p. 21.

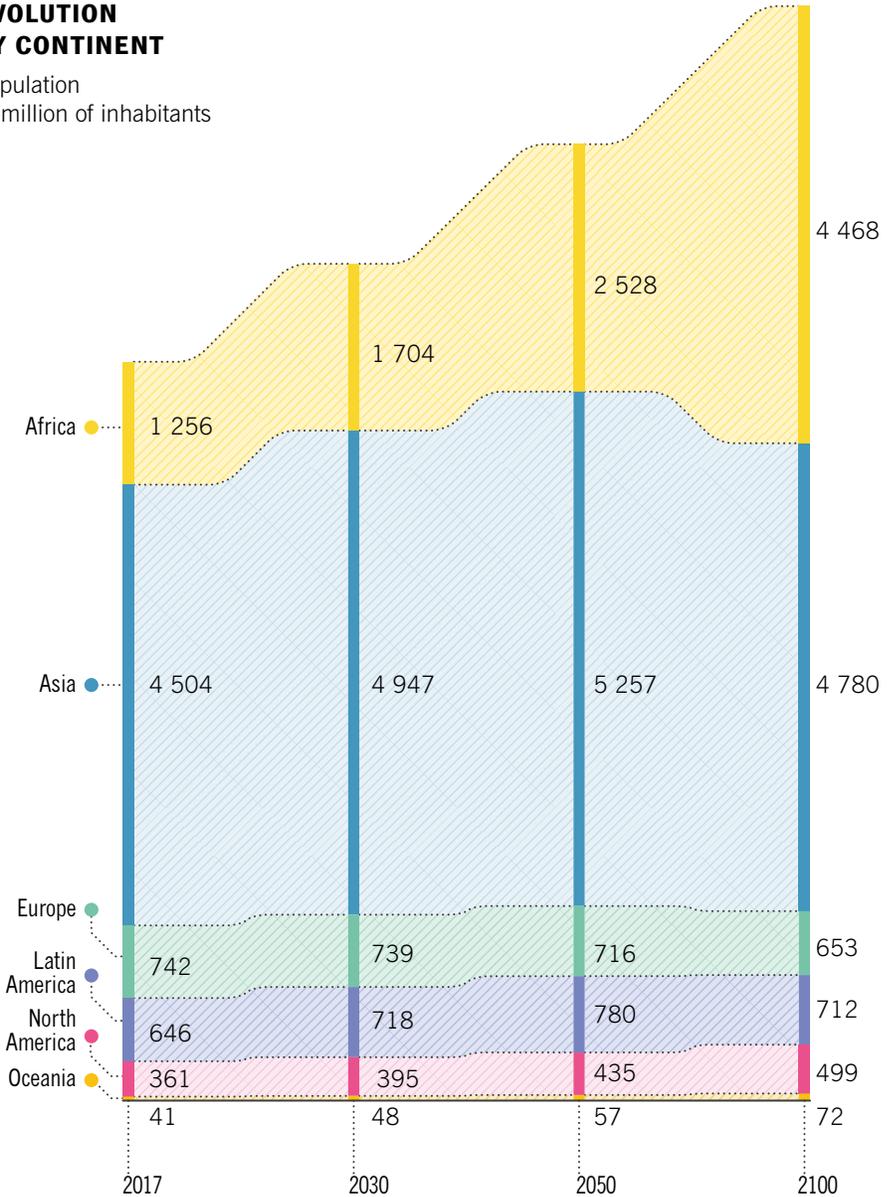
²⁸ Jean-Paul Moatti & Jean-Marc Châtaigner, “La question démographique, épée de Damoclès du développement africain”, *Le Monde*, 8 July 2017.

²⁹ It would be difficult to emphasize the particular role of a major religion or another in this field. Moreover, some local churches may encourage birth control (e.g. in Mexico).

³⁰ *The Changing Global Religious Landscape*, Pew Research Center, April 2017.

DEMOGRAPHIC EVOLUTION BY CONTINENT

Population in million of inhabitants



Source : UN

The numerical distribution of the main religions will evolve.³¹ Christianity will remain, in the foreseeable future, the first religion in the world, particularly because of the fertility of Sub-Saharan Africa. Indeed, the region, which was home to 26% of Christians in 2015, could host up to 42% in 2060. Add to this trend the growing power of the socially conservative evangelicals (Latin America, Africa, North-East Asia...). Yet the share of the world population of Muslim faith should gradually catch up with that of the Christian population, with a possible growth of 70% by 2060. According to the Pew Research Center, the number of “Muslim births” will exceed that of “Christian births” around 2035.³² In terms of the proportion of the population affiliated with a religion or another, Christianity and Islam could be equal by 2060.

Forecasts of the Pew Research Center

	2015	2060
Christianity	2.28 billion (31.2%)	3.05 billion (31.8%)
Islam	1.75 billion (24.1%)	2.98 billion (31.1%)

³¹ *The Changing Global Religious Landscape*, Pew Research Center, April 2017.

³² The Pew Research Center takes methodological precautions: it assumes that children’s religious identity is generally the same as that of their mothers until adolescence, and takes into account the foreseeable rate of conversions or secularization.

TOWARDS A NEW HIERARCHY OF POWERS

The picture painted in the previous chapter will have significant consequences on the hierarchy of global powers.

Does size matter?

The wise have long told us that power does not necessarily depend on the population. *“What makes a city great is not that it is populous”,* said Aristotle.³³

At the United Nations General Assembly - the world's Senate - the voice of Tuvalu, which has less than 10,000 inhabitants, weighs as much as China's.³⁴ There are many examples of small states whose importance on the world stage is disproportionate to their population, for geographical, political, economic or fiscal reasons (Luxembourg, Panama, Switzerland, Singapore, Vatican...).

At the military level, while there is often a direct link between the size of the population and that of a country's armed forces (especially for those who still have conscript armies), the latter's size rarely says much about its real capabilities, especially in an era when external military operations are more a matter of projecting power than of invading neighbours. Similarly, there is no mechanical link, be it in a direction or another, between demographic decline on the one hand and a propensity for intervention or even military aggression on the other - see the cases of contemporary Germany and, conversely, of Russia.

As for the relationship between population growth and economic growth, it is not univocal. In the least developed countries of Africa, a very high fertility rate is rarely combined with significant economic growth - even if it may be optically significant due to the export of raw materials, particularly to China. Countries that have begun their demographic transition are emerging from the Malthusian trap (absorption of GDP per capita gains by population growth) and can benefit under certain conditions - notably the level of education - from a demographic “dividend” or “bonus”, a transitional situation in which a large population of working age does not have to support a large inactive population, which is what happened to the “Asian dragons”. Finally,

³³ Aristotle, *Politics*, VII, 4.

³⁴ The least populous state in the world is of course the Vatican, with less than 1,000 inhabitants.

in modern countries, maintaining a sufficient level of fertility to ensure the regular renewal of the labour force could guarantee a stronger economic growth: this is indeed how some economists explain the growth differential between the United States and Europe in the modern period.³⁵

Yet the population size is obviously not insignificant. If the United States had 30 million inhabitants and China 100, their strategic and economic positions in the world would evidently not be the same as they are today. Demographic size also has a direct impact on the political weight of states, sometimes in an institutionalised way, as is the case within the European Union, for example.

Psychology also plays an important role in the hierarchy of powers. India is very proud to become very soon the first country in the world, demographically speaking. Canada has set itself the goal of reaching the symbolic threshold of 100 million inhabitants by 2100.³⁶ And it is not inconsequential for France to be close to catching up with Germany (70 against 79 million) by 2050.³⁷ Conversely, the feeling of demographic decline, all other things being equal, can affect a population's morale, or even the diplomacy of its government, especially in authoritarian states. Mr Putin wants to do everything in his power to place his country's demography at the level of the most developed countries. Mr Orbán has labeled the "demographic issue" as his priority. Mr Erdogan, concerned about the decline in fertility in his country (2.1 children per woman in 2015), which jeopardizes his neo-Ottoman dream, has urged Turkish women to have three children each.

³⁵ Jean-Michel Boussemart & Michel Godet, *Europe 2050: Demographic Suicide*, European Issues No. 462, Robert Schuman Foundation, 13 February 2018. However, the authors' calculation is disputed: taking into account all the countries of the European Union (including Central and Eastern Europe) would give the opposite results, i.e. the increase in GDP would be correlated with a decrease in population (Eric Le Bourg, "Suicide démographique ou délire démographique ?", L'Humanité, March 9, 2018.)

³⁶ This was the goal set by an advisory commission appointed by the government in the Fall of 2016. To this end, it recommended increasing the annual immigration quota from 300 000 to 450 000 (a threshold of 340 000 was finally agreed on).

³⁷ UN 2017.

A new global hierarchy

Only three countries will account for one third of global population growth by 2030: India, Nigeria and China. China and India are expected to cross paths in 2024 (1.44 billion each), if this has not already happened by then.³⁸

In 2030, the hierarchy of powers will reveal three giants - India, China and the United States - with a population well below the first two - and three countries that could be described as mega-emergents: Indonesia, Nigeria and Pakistan. Europe will have declined: at that time, its population could be of only 739 million (742 million today), and Russia could see its population decrease from 144.3 to 141 million.

20 years later, India could have 1.65 billion inhabitants, China 1.36, Nigeria 410 million, the United States 389, Indonesia 321, Pakistan 306, Brazil 232, and Bangladesh 201. These eight countries alone would account for half the world's population.³⁹ China will then increase the gap separating it from its neighbor (in 2100, India could have a billion and a half inhabitants... against a billion for China).

China is following Japan's path, yet with a delay of approximately 20 years. But unlike the latter, and as is now well known, the former will age before it gets rich, particularly because of the effects of the one-child policy.⁴⁰ In recent years, Beijing has gone through a demographic malus. Moreover, the evolution of the urban society there is worrying for the future of its population. Indeed, not only are Chinese youth much less worried than their elders were about forming a family and producing offsprings, but they must also welcome their parents at home or at least take care of their elders. The 4-2-1 family model (four grandparents, two parents, one child) thus seems to have a bright future ahead, and the recent authoritarian takeover does not seem likely to encourage the country's youth to reverse the trend.

The conversion of the Chinese economy is all the more necessary: the country can no longer be the workshop of the world. India could be an important vector of global economic growth, because it will have a large pool of educated young people of working age, just like in Southeast Asia (Thailand, Vietnam...), without yet having the burden of a large retired age group.⁴¹

³⁸ UN 2017. Some demographers suspect Beijing is overestimating the size of its population. It is true that this can also be an issue of competition between regions for central government subsidies and investments.

³⁹ UN 2017.

⁴⁰ The impending end of this policy - largely relaxed in practice for a long time - was announced in October 2015. It should be noted that Chinese fertility had begun to decline before the introduction (in 1979) of the one-child policy

⁴¹ Between 2015 and 2035, it will "gain" 220 million young people, while China will "lose" 90 million, for an equivalent average level of education (between 6 and 9 years). *US National Intelligence Council, Global Trends 2035, 2017*, p. 9.

Dynamism of the United States, decline of Eurasia: the return of American supremacy?

The United States will thus continue to benefit from an exceptional demographic dynamism within the developed world and could count 447 million inhabitants in 2100 according to the UN median scenario.⁴² This dynamism is due both to a relatively high birth rate (which accounts for three-fifths of the annual population growth) and to continued immigration, which has been predominantly Asian for about 10 years. The thesis of an American exceptionalism, based on the country's structural assets – geographical location, natural wealth, institutional stability, cultural diversity and patriotism, aptitude for innovation – is thus strengthened. This also raises questions regarding the form the “return of competition among major powers” will take and the inevitability of the world's shift towards Asia. The other main geopolitical players will indeed have to manage their premature aging (China), their backwardness of development (India) and, for Japan, Russia and Europe, their demographic decline. By 2050, the working age population could decrease by 20 million in Japan, 22 million in Russia and 195 million in China, while it would increase by 20 million in the United States.⁴³

Even if Russia's TFR has risen (1.25 between 1995 and 2000, 1.70 between 2010 and 2015), the country's population will indeed continue to decrease.⁴⁴ It will take two or three generations to gauge the real effects of Putin's policy in this area.⁴⁵ He boasts of having increased life expectancy to 73 years (in fact 70.3 between 2010 and 2015 according to the UN - and it is by no means “one of the highest in the world”, despite what he claims).⁴⁶ His goal is to increase it to over 80 years, as in most advanced countries. Nevertheless, the UN estimates that Russia will continue its slow descent into demographic hell (144 million inhabitants today, perhaps only 124 in 2100). The cause: the demographic shock of the post-Cold War period (emigration, falling birth rates, increased male mortality due to a high number of suicides, alcoholism, road accidents and homicides). Moreover, while 80% of the country's population lives west of the Urals, the Russian Far East has emptied itself dramatically. What used to

⁴² The United Nations projection assumes a net immigration reaching one million per year on average from 2025 to 2050, then declining to reach 500 000 net entries at the end of the century.

⁴³ Jean-Michel Boussemart & Michel Godet, *Europe 2050: Demographic Suicide*, European Issues No. 462, Robert Schuman Foundation, 13 February 2018.

⁴⁴ It had fallen to exceptionally low rates by the late 1990s. The recovery observed since then could be a natural catch-up. See Dorling & Gietel-Basten, *op. cit.*, p. 39.

⁴⁵ In 2007, when the Russian population was 141 million, Putin set a target of 145 million by 2025. His policy was based on the granting of a family allowance.

⁴⁶ Address by President Vladimir Putin to the Federal Assembly, Moscow, 1 March 2018.

be historically a region of settlement and expansion of Russian power, has become a land of emigration. And China's growing expansion (economic and human) in the region, which is already today a point of contention between Moscow and Beijing, could become a cause of significant tensions between the two countries. Indeed, their current rapprochement is essentially circumstantial and structurally unbalanced.

As for Europe, it will be the only large region in the world to see its population decrease with, as previously mentioned, a particularly important decline in the eastern part of the continent (Poland, Hungary, the Balkans, the former USSR). Germany will suffer from low fertility, unless massive immigration is accepted. In Italy, fertility collapsed between the 1960s (2.65 children per woman in 1965) and the 1990s (1.19 in 1995). But the TFR then increased to reach 1.46 in 2010 due to immigration (thus curbing the fall in the number of births).⁴⁷

Eurasia might be the centre of gravity of world history, as Halford McKinder and some excellent modern historians put it. Besides, its importance could increase due to the growing economic interconnection of its constituent entities (including the One Belt One Road project in China).⁴⁸ But it would then be a centre of gravity... which tends to lose its inhabitants.

In a book published in 2010 exalting America's demographic vitality, Joel Kotkin foresaw an America that had become a "*transcendent superpower*", with a demographic evolution allowing the country to fully exploit its assets.⁴⁹ The picture it painted was perhaps overly optimistic given the country's political (the growing bipartisan divide with consequences on governance) and societal (weakness of its health system, increase in drug consumption, end of the melting pot, etc.) travails.⁵⁰ But there is little doubt that the United States has the capacity to retain its place of *primus inter pares* in the hierarchy of great powers by 2030-2050.

⁴⁷ The number of legal foreign residents in Italy had increased from one million in 1997 to four million at the end of the decade 2000. Lucas Seinaudi, "*Demography Watch*", *Aspenia*, n° 43-44, 2009.

⁴⁸ John Darwin, *After Tamerlan. The Global History of Empire since 1405*, New York, Bloomsbury, 2008; Bruno Maçães, *The Dawn of Eurasia: On the Trail of the New World Order*, London, Allen Lande, 2018.

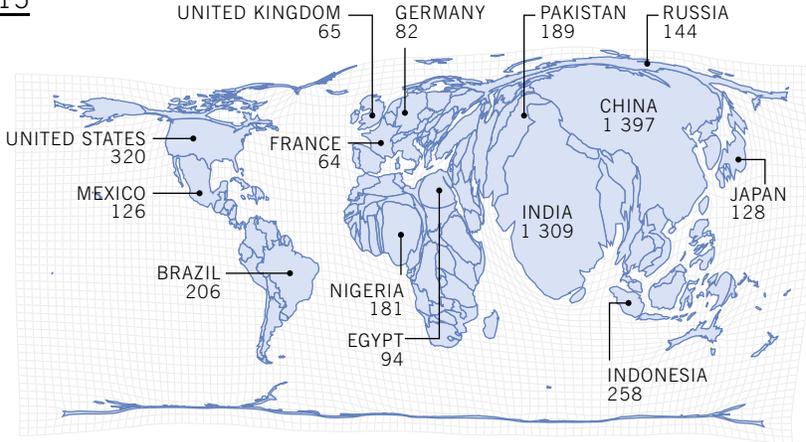
⁴⁹ Joel Kotkin, *The Next Hundred Million. America in 2050*, New York, The Penguin Press, 2010.

⁵⁰ Life expectancy at birth remains lower than in other industrialized countries and tends to stagnate, in particular due to the sharp rise in opioid overdoses.

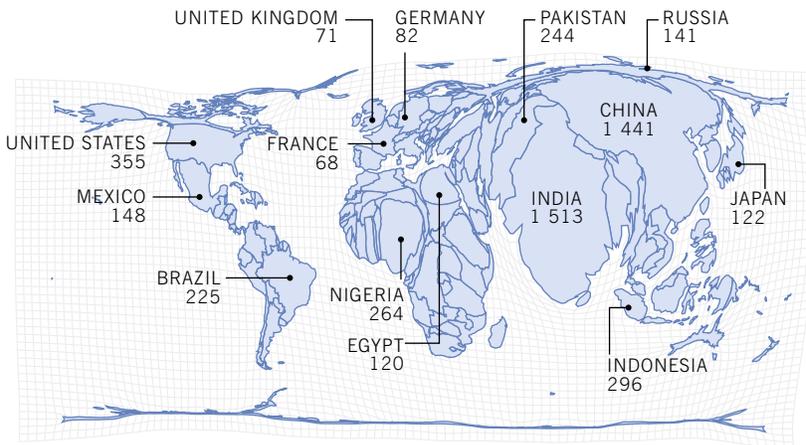
**POPULATION'S
EVOLUTION
THROUGHOUT THE CENTURY**

Population
in million of inhabitants

2015



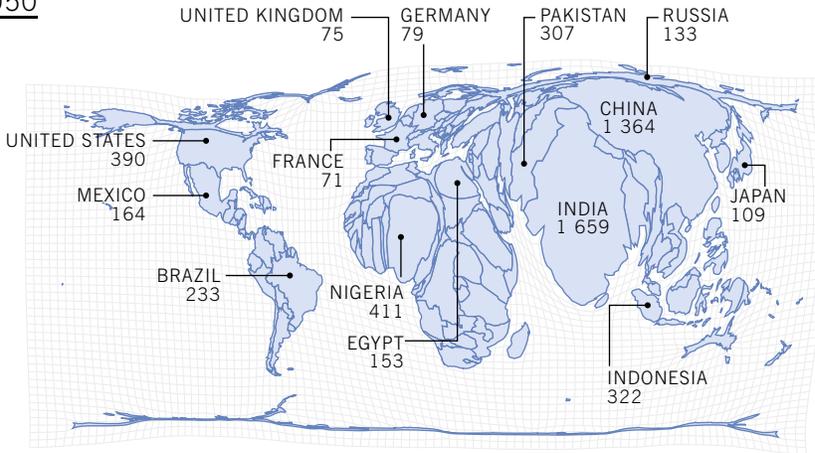
2030



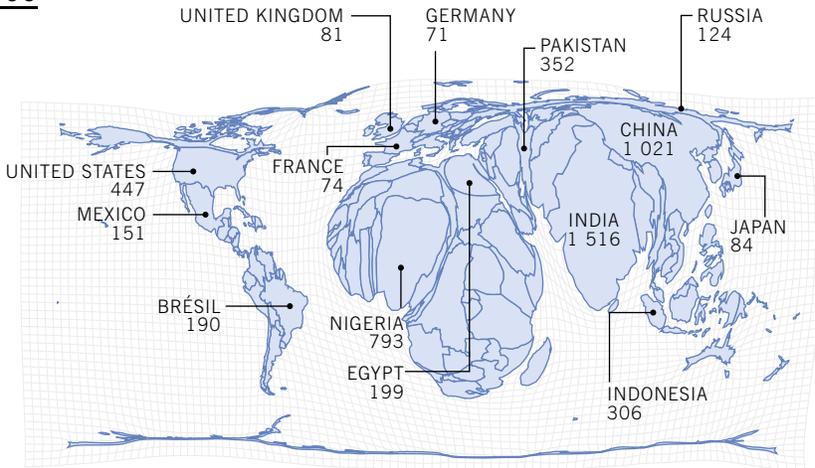
Source : UN

Population
in million of inhabitants

2050



2100



A LACK OF RESOURCES?

Should we be concerned about the consequences of the continued growth of the global population?

In many respects, such a concern is a characteristic feature of a neo-Malthusian approach that can be considered largely outdated. According to this view, population growth is always more of a problem than a solution, the newborn more of a burden than an opportunity. But thinking that “*population growth amplifies all problems*” is a short-sighted perspective.⁵¹ Young people are a force of imagination, invention and creation. In developing countries, they also still provide a livelihood for the family. Population growth can, if conditions are right, contribute to economic growth. As mentioned above, the demographic dividend, combined with education and public health, was key to the take-off of the Asian dragons in the 1970s and 1980s.⁵² Let us also remember that along with the global population boom beginning in the middle of the 19th century came a spectacular enrichment of the world’s inhabitants. At that time, the vast majority of them (more than 80%) survived with the equivalent of less than a dollar a day. Today, it is the case for only 10 to 20% of the population.⁵³ Overall, if one follows the population economist Julian Simon, a child is more likely to be a net contributor to the economy and society - even to culture and civilization - than to be a net debtor.

⁵¹ Henri Leridon quoted in Grégoire Allix, “*Limiter les naissances, un remède au péril climatique?*”, Le Monde, 18 November 2009.

⁵² David Bloom et al, *The Demographic Dividend. A New Perspective on the Economic Consequences of Population Change*, The Rand Corporation, Santa Monica, January 2003.

⁵³ Max Roser & Esteban Ortiz-Espina, *Global Extreme Poverty*, ourworldindata.org, 2017.

The errors of “collapsology”⁵⁴

In 1972, the Club of Rome’s report inaugurated the era of pessimistic forecasts on the state of available resources. Since then, world-famous authors, such as Paul Ehrlich and Lester Brown, have vowed to announce an impending resource crisis. More recently, the idea of a “finite” Earth, unable to provide resources for its inhabitants has taken over contemporary debates.

But the question of resources is, to a large extent, a false problem. We intuitively see the Earth as a vessel containing a finite amount of resources, to which we help ourselves without counting and without seeing that one day it will be empty. Yet the way we use these resources is determined by many factors. For many of them (hydrocarbons, minerals, etc.), the estimated number of remaining years of consumption tends to *increase* due to discoveries, technical progress or changes in consumption habits. All other things being equal (speculation), price is an extraordinarily effective adjustment factor. Its increase both makes the exploitation of hard-to-reach reserves profitable (as we see for oil and shale gas) and changes our behaviour by inciting us to conserve, recycle, find substitutes. We are probably not going to “run out of oil”, but it is possible that oil will one day become so expensive that developed societies will be encouraged to accelerate their energy transition. Pessimists’ static vision of resources is out of step with the reality of their exploitation by humans.

Will there be more conflicts over resources? On the contrary, such conflicts have largely disappeared today. When the capture of resources (oil, minerals, precious wood...) is a central issue, it is because of their local abundance, which arouses covetousness, not because of their scarcity. Similarly, there are no “wars for water” or “wars of hunger”. In 1993, Rwanda was one of the best nourished countries on the continent. Although malnutrition still exists, famines have almost disappeared on a historic scale. Those that do occur, particularly in Africa, are the *consequence* and not the cause of wars. Arab revolts did not follow from a lack of resources: the price of cereal products was, in Egypt or Syria, one of the factors explaining the revolt, but these high prices had more to do with poor economic governance and speculation than with the scarcity of the resource.

In short, technology, the market and the adaptability of human activity explain why the “lack of resources” thesis makes little sense, especially in a globalized economy.

⁵⁴ We use here an analysis developed in Bruno Tertrais, *L'Apocalypse n'est pas pour demain. To end catastrophism*, Paris, Denoël, 2011.

As Sheikh Yamani, Saudi Oil Minister in the 1970s, said: *“The Stone Age didn’t end for lack of stone, and the oil age will end long before the world runs out of oil”*.

Does the Earth have a predetermined “carrying capacity”?

Current UN forecasts predict the land population to be between 8.4 and 8.7 billion in 2030, between 9.4 and 10.2 billion in 2050, and between 9.6 and 13.2 billion in 2100⁵⁵.

Even if the population were to stabilize at around 10 to 12 billion people, could the Earth provide for us? On this topic, commentators do not hesitate to be alarmist. *“In 2050, nine billion humans will share a confined and polluted space... (...) The planet is overflowing. Can it manage? Will it crack?”*⁵⁶ It may even be too late: since the mid-1980s, the planet’s population has allegedly exceeded its carrying capacity.⁵⁷ This expression appeared in the 1930s, but the debate it suggests is as old as civilization. The Babylonians feared the world was overpopulated. And Tertullian wrote in the year 200: *“We are a burden to the world, resources are barely enough to meet our needs, which require great efforts on our part (...), while nature no longer manages to feed us”*.⁵⁸ One of the first to try to scientifically measure this hypothetical capacity was the American demographer Raymond Pearl, who predicted in 1925 that the world population would stabilize at 2.6 billion men around 2100. But his results was based on... the evolution of populations of drosophila flies.⁵⁹ These forecasting attempts multiplied in the 1960s and 1970s. Commander Cousteau thus claimed he had calculated that the Earth could feed only 600 to 700 million inhabitants. (He concluded: *“The world population must stabilize, and for that to happen, 350 thousand people would have to be eliminated every day”*).⁶⁰ Estimates of the Earth’s “carrying capacity” made by various authors since 1945 range from one billion to... one trillion inhabitants.⁶¹ Two methods are used. One is based on renewable resource estimates, the second on local production capacities (used by some international organizations). The first underestimates the impact of technologies, and the second the virtues of trade. As Ester Boserup demonstrated in the 1970s, population growth encourages productivity far more than it leads to famine.

⁵⁵ UN 2017.

⁵⁶ Émilie Lanez, *“Neuf milliards et 2050, et moi, et moi, et moi...”*, Le Point, 11 February 2010, pp. 53-54.

⁵⁷ *World Wildlife Fund*, Living Planet Report 2008.

⁵⁸ Quoted in Robert Nisbet, *History of the Idea of Progress*, New York, Basic Books, 1980, p. 52.

⁵⁹ Commonly known as “fruit flies”.

⁶⁰ Joel E. Cohen, *How Many People Can the Earth Support*, New York, W.W. Norton, 1995.

⁶¹ Interview with Jacques-Yves Cousteau, Le Courrier de l’Unesco, November 1991.

To say that “the Earth will not be able to support 11 billion human beings if they live according to current Western standards” is tantamount to reasoning as the commercial managers of the Kodak firm did in the 1980s, imagining the profit this company would make if every Chinese bought a roll of film a year. Which obviously never happened - Kodak disappeared. Yet the same type of metaphor continues to be used by catastrophists. In particular regarding China, which seems to be an inexhaustible subject of fascination and fantasies.⁶²

In fact, the concept of carrying capacity is only relevant in a cultural sense. If the Earth were home to several hundred billion people, population concentrations would probably be such that they would be difficult to bear. But that will not be the case.

Can the planet feed us all?

In 2009, FAO announced that the world had reached a sad milestone: for the first time, more than one billion men, women and children would suffer from hunger. It is obviously unacceptable that in the 21st century hundreds of millions of human beings still suffer from hunger. But the bleak picture painted by FAO at the time must be corrected: never before in the history of mankind has the proportion of men and women that are properly nourished been so high. Not only has the total number of human beings suffering from hunger increased much less rapidly than that of the total population, but it now tends to decline (815 million in 2016). In relative terms, malnutrition is now decreasing (14 per cent in 2000, 11 per cent in 2016). And this happy regression is by no means the prerogative of developed countries.⁶³ Actual famines have become extremely rare, and are almost always the result of wars.

It is true that the Westernization of lifestyles (the explosion in meat and milk consumption in Asia, for example) is leading to the expansion of land reserved for livestock and their food (and an increase in water consumption)⁶⁴. Arable land is already becoming scarce in some parts of Asia, particularly in Northern China. However, a more nuanced approach to this question is needed.

⁶² Lester Brown, for example, who proposes the image of China consuming as much paper and oil as the United States, and concludes that forests and oil will soon disappear (Lester Brown, *Plan B 3.0. Mobilizing to Save Civilization*, Earth Policy Institute, 2008).

⁶³ FAO, *The State of Food Insecurity in the World*, annual report.

⁶⁴ It takes 10 to 100 times less water to produce one kilo of potatoes, one of the most nutritionally complete foods, than it does to produce one kilo of beef.

Agriculture is becoming more efficient. The growth in cereal yields - particularly for the main cereals consumed, rice, wheat and maize - continues. More slowly than in the past, but sufficiently for production to keep pace with population growth. And progress in agrobiolgy will continue to improve the varieties of food available. At the global level, the production of cereals per year and per person (more than 300 kilos) is today well above the needs (200 kilos for a normal diet). The number of calories per household available for consumption continues to increase, even in Africa⁶⁵.

Today, a little over 10% of the world's land is cultivated. With the same productivity, it may take twice as much to feed the world's population by 2050. Yet several billion hectares of arable land remain unused in the world. According to FAO calculations, there are - especially in developing countries, where the needs will be the greatest in the coming decades - huge areas of land suitable for rainfed agriculture, in the former USSR, in Latin America and the Caribbean, and especially in Sub-Saharan Africa, where only 60% of the arable land is used. It will be retorted that the cultivation of hundreds of millions more hectares may be a threat to biodiversity. However, a steady but modest increase in productivity - in the range of 1% per year - is enough to significantly reduce the need for new land.⁶⁶ (The possible use of GMOs would make it possible to reduce the area currently being cultivated.) Moreover, the use of the most modern techniques makes it possible to reduce at the same time the cultivated surface, the quantities of fertilizers used, and soil erosion.

There is a nutrition problem specific to Africa - but it is more human than natural. Indeed, it follows from conflict, poor governance, and inadequate transport, which forces farmers to rely on their own communities. Local elites take an excessive share of agricultural exports, hampering rural development. Much of the crop on the continent is lost at the production stage. The weight of traditions (patriarchal land management, community sharing, etc.) does little to increase yields. African agriculture has remained very unproductive, yet the development of irrigation and a more intensive use of fertilizers could transform the situation. Geographic (population density) and cultural (role of the state) factors may explain why Asia was able to exploit the Green Revolution much better than Africa.

The planet will have no problem feeding 10 or 12 billion people, and even more. On the condition, of course, that waste be limited, that transport infrastructures and electricity (refrigeration) be developed, that deforestation in regions where it has, indirectly,

⁶⁵ FAO, *Daily caloric supply per capita*, 2017.

⁶⁶ Indur Goklany, *The Improving State of the World*, Washington, DC, The Cato Institute, 2007, p. 244.

devastating effects on agriculture (e.g. the Lake Chad region) be stopped, that new land be cultivated, that the most economical irrigation techniques be developed, that the share of crops intended for animal feed be limited (today, 80% of plant protein production is devoted to it), and that progress in agrobiolgy be embraced.

In this field as in others, Nature pleads not guilty. As geographer Sylvie Brunel, expert on the matter, says, *“hunger is not a problem of production, but a problem of distribution”*.⁶⁷ If reducing the question of malnutrition to a single economic problem would undoubtedly be excessive, the formula has the advantage of emphasizing the benefits of actions boosting local agriculture.

Are we running out of water?

We are evidently not going to “run out of water”. The resource is abundant throughout the planet, and it is renewable. The lack of water is a flow problem, not a stock problem. But aquifers are often overexploited. And many countries, particularly in the Middle East and Asia, could experience “water stress” situations in the coming decades: a lack of access to clean water to respond to agricultural and daily life needs.

Lack of water is a tragedy, but also a problem that can be perfectly solved without any radical changes in lifestyle. 71% of the world population now has immediate access to safe drinking water, and 89% within 15 minutes of where they live.⁶⁸ Water consumption for agriculture, which represents 70% of freshwater withdrawals, has become more efficient.

Accessible solutions exist to reduce consumption. In developing countries, the waste of water used for agriculture due to leaks is enormous - at least 40%. While traditional irrigation is very inefficient, microirrigation, the techniques of which have been perfected in Israel in particular, is a very interesting option. It reduces needs while increasing yields.

In many developing countries, drinking water resources are abundant: they are simply misused. In many regions of Africa, Asia and Latin America, less than 5% of renewable water is used. As for the quality of water intended for individual consumption, it could easily be improved by the rehabilitation of pipelines and the distribution of

⁶⁷ Sylvie Brunel, *“La Terre peut nourrir douze milliards d’hommes”*, Le Point, 11 February 2010.

⁶⁸ WHO website, July 2017.

decontamination tablets. Not to mention the desalination of seawater, the cost of which tends to decrease and is becoming accessible to developing countries with a coastline.

As with the food deficit, water stress is above all a problem of local management, and not of global scarcity.

There is therefore no reason to believe that population growth will automatically lead to a major resource problem, poverty or famine.

A “CRESCENT OF CRISIS” AROUND EUROPE

The same is not true of political violence. Not so much because of population growth itself, but because of the way population growth is taking place in some parts of the world.

Demography and conflicts

The distribution of crises and conflicts reveals what could be called a “crescent of crisis” that goes, roughly speaking, from Sub-Saharan Africa to South Asia.⁶⁹ The majority of countries that have not completed their demographic transition are also located within this crescent. More than a correlation, there is a causal relationship between the two.

In the study of the links between demographic factors and political violence, Malthusian theories are hardly considered relevant today. It is no longer necessary to send cohorts of young men to conquer new wealth to feed a growing population. On the other hand, the more recent theory, which links a “surplus” of young people (youth bulge) to an increase in political violence, is much more fruitful. It refers to a very high proportion of young adults in the population. This is an area of research that has proven particularly successful over the past 20 years. Predictive indicators are the proportion of young people in the total population, or in relation to the adult population alone, and the median age. For example, countries with more than 20% of 15-24 year-olds, or the age group of which represents more than 35-40% of the overall adult population, or the median age of which is less than 25.5 years, are much more likely to experience episodes of gang violence.

It is worth noting that the vast majority of civil wars since the 1970s have indeed occurred in countries experiencing such situations. The cases of Northern Ireland, Sri Lanka, Lebanon, Algeria, Chechnya, Kosovo, Rwanda, Congo, to cite but just a few examples, fall into the category of countries or regions the age pyramid of which shows a youth surplus. The same goes for several countries impacted by the Arab revolutions (Tunisia, Libya, Egypt).⁷⁰

⁶⁹ Including French territories such as Mayotte, La Réunion.

⁷⁰ Demographic trends in North African countries were considered, as early as 2008, to be likely to support the emergence of democratic societies in the region (Richard P. Cincotta, “How Democracies Grow Up”, Foreign Policy, March-April 2008).

Moreover, there is a vicious circle of armed conflict: countries at war are those least able to build the institutional, political, economic and societal conditions to reduce the risks of collective violence. The same is true of fertility: while fertility, when translated into a surplus of young people, can encourage the emergence of collective violence, conflicts prevent societies from developing and modernizing.⁷¹ The median age is a fairly strong indicator of a country's political development (a state the median age of which is below 25.5 years is unlikely to be a liberal democracy)⁷². As a result, the likelihood that countries such as the Sahel states, Egypt, Jordan, Iraq, Yemen, or Pakistan will become democracies in the next 20-25 years remains low. And Stephen Smith is not wrong to suggest that *"the exceptionally young demographic profile of Sub-Saharan societies diminishes their chances of consolidating democratic systems"*.⁷³

Youth bulges and other indicators of political violence

The table below includes the main countries that have experienced major and sustained episodes of political violence in recent years:⁷⁴

	TFR 1990-1995	TFR 2005-2010	% 15-24 year old in 2017	TFR 2015-2020 (rank)
Yemen	8.20	5.00	21.3%	3.79 (12)
Somalia	7.53	7.10	20.0%	6.12 (1)
Afghanistan	7.48	6.37	21.4%	4.25 (10)
Mali	7.15	7.70	19.3%	5.92 (2)
DRC	6.77	6.63	18.9%	5.66 (3)
Sudan	6.65	5.60	20.3%	4.43 (8)
Palestinian Territories	6.60	4.60	21.2%	3.91 (11)
Nigeria	6.37	5.91	19.1%	5.42 (4)
South Sudan	6.00	5.00	20.4%	4.74 (7)
CAR	5.70	5.30	20.8%	4.75 (6)
Pakistan	5.67	3.98	19.3%	3.38 (13)
Irak	5.65	4.55	19.5%	4.27 (9)
Libya	4.22	2.43	16.8%	2.21 (15)
Syria	4.80	3.35	20.8%	2.84 (14)

⁷¹ This is all the more true as some non-state actors (Boko Haram, Taliban...) deliberately seek to reduce girls' access to education.

⁷² Richard Cincotta, "8 Rules of Political Demography That Help Forecast Tomorrow's World," New Security Beat, 21 June 2017. The correlation is much less clear for "small" states (less than 5 million inhabitants).

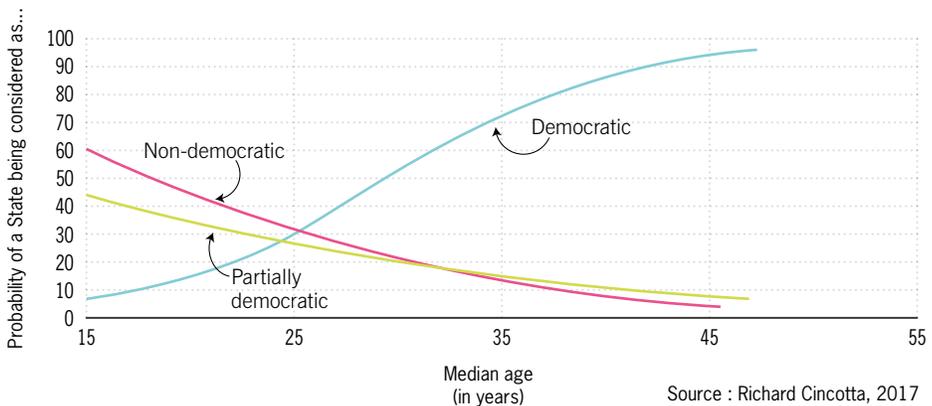
⁷³ Stephen Smith, *La Ruée vers l'Europe. La jeune Afrique en route vers le Vieux Continent*, Paris, Grasset, 2018 (electronic version).

⁷⁴ UN 2017.

One can see here that the vast majority of the states concerned were in a youth bulge situation. In all these countries - with the exception of Libya - the proportion of 15-24 year olds is around 20%. And the share of 15-24 year-olds among 15-54 year-olds is particularly high: it is generally between 35 and 40%.

DEMOCRACY AND DEMOGRAPHICS

Link between a population's age and its political regime



Of course, the causal link is not absolute: many states that have a youth bulge do not experience large-scale political violence. For this indicator to be a useful predictive tool, other demographic (including a detailed analysis of demographic differentials between minorities in the same country)⁷⁵, political or macroeconomic factors thus need to be taken into account at the same time.⁷⁶

By 2025, three-quarters of the countries with youth surpluses will be in Sub-Saharan Africa, following the fertility rates of the years 2005-2010 (see above). Africa is not the only continent concerned, as the Afghanistan case shows. These countries are thus highly likely to experience episodes of violence and political instability.

⁷⁵ Richard P. Cincotta, "Minority Youth Bulges and the Future of Intrastate Conflict", Wilson Center, 13 October 2011.

⁷⁶ Moreover, the evolution of this indicator in countries undergoing a demographic transition is not linear: throughout this transition there are "demographic echoes" that can raise or lower the share of the young population.

Other variables can be taken into account. While the urbanization rate in itself does not seem to be particularly high, several studies have shown that rapid urban population growth is a strong indicator of the risk of civil war. In the 1990s, countries experiencing urban population growth of more than 4% per year would have been twice as much at risk of undergoing a civil war.⁷⁷

Fertility differentials and political crises

Within the same country, fertility can be a real weapon for the parties involved, and/or a threat to others. This was the case, for example, in the Balkans, the Middle East and South Asia. Along this often came a fear of the rise in power of Muslim populations, which aroused Serbian, Jewish, Hindu, or Burmese nationalisms.

In the 1970s, the strong growth of the Muslim population in Lebanon led the Maronite elite to adopt defensive reactions. The massive influx of Palestinian refugees also contributed to the destabilization of the country and to the civil war that ensued.

Today, the violence of the Syrian conflict is partly rooted in the divergence of demographic changes between communities (the demographic decline of the Alawites and the Druze, and the rise in power of others).⁷⁸

The Israeli-Palestinian question reveals how important this factor can be. Until the 2000s, Israel was concerned about the large fertility differential that existed between the two populations.⁷⁹ This is one of the reasons why Prime Minister Ariel Sharon decided to withdraw from the Gaza Strip - which once had the highest birth rate in the world. Today, the situation, if not reversed, has become more complex. Palestinian fertility, still high, has declined (3.91), while that of Israeli women is 2.92 - a high rate for a modern country - and even tends to increase slightly.⁸⁰ It can be explained in particular by the very high fertility of the Orthodox. Between the Mediterranean Sea and the Jordan River, the TFR tends to harmonize around 3. The Jewish and Arab

⁷⁷ Richard P. Cincotta et al, *The Security Demographic: Population and Civil Conflict after the Cold War*, Population Action International, 2003.

⁷⁸ Youssef Courbage, "Ce que la démographie nous dit du conflit syrien", Slate, 15 October 2012.

⁷⁹ The large increase in the Palestinian population was partly due to support from the United Nations Relief and Works Agency for Palestine Refugees, as well as partial access to the Israeli health system (hospitals).

⁸⁰ UN 2017.

populations are now roughly equivalent (6.5 million on each side⁸¹). Israel no longer fears the “Arab demographic bomb”. Yet the composition of its population is changing rapidly - as is that of the West Bank - with a strong growth of the Orthodox population.

The weight of this factor as a direct cause of violence should not be exaggerated. More often than not, it is actually the perception of differentials in population growth that matters the most politically. And fertility differentials can also be a product, not a cause, of tensions between communities – a defensive behavior of a population feeling threatened.

In any case, as far as countries that are multi-ethnic or have a heterogeneous population are concerned, the evolution of the respective fertility rates of various communities must therefore be monitored carefully as a possible predictor of tensions.

In conclusion, demographic data thus suggest that persistent turmoils can be expected in the Sahelian regions, in parts of the Middle East, and in Central Africa.

⁸¹ According to official Israeli statistics released in 2018, the Palestinian population in the West Bank is between 2.5 and 2.7 million (3 million according to Palestinian estimates, only 1.8 million according to settlers), to which are added 1.84 million Israeli Arabs and 2 million Gazans. Jeffrey Heller, “*Jews, Arabs nearing population parity in the Holy Land: Israeli officials*”, Reuters, 26 March 2018.

ARE MIGRATIONS UNAVOIDABLE?

The answer to the question above is obviously “yes”. Humanity is becoming increasingly mobile. Transport costs are falling, access to information often gives a positive image of foreign countries, and international emigration has become an effective strategy for social mobility because of inequalities in development.⁸² 257 million people now live outside their country of origin.⁸³ The amount of emigrants has thus tripled since the 1970s, even if it remains relatively low compared to the world population (2.2% in 1975, 3.3% in 2015). The largest immigrant populations are in the United States (50 million), Saudi Arabia, Germany, and Russia. Yet if the continuation and the amplification of the migratory phenomenon is probably inevitable, its intensity and its form still raise important questions.

Difficult forecasts

According to the UN, between 2015 and 2050, the main host countries for immigration will be the United States, Germany, Canada, the United Kingdom, Australia, and Russia, and the major emigration countries will be India, Bangladesh, China, Pakistan, and Indonesia.⁸⁴ This outlines a slightly different hierarchy from the one we know today.

But foresight in this field is complex. The major structural flows depend as much on “push” as on “pull” factors. On the one hand, there is the perceived attractiveness of host countries in terms of employment and community clustering. Diasporas have a magnetic effect on immigration, especially when they include large numbers of graduates and students. On the other hand, there is the lack of economic opportunities, political repression, insecurity and criminality,⁸⁵ and so on. The notion of a suction effect - suggesting that social benefits offered to immigrants would play a major role in the decision to emigrate or to choose a particular country - is more suspicious.

⁸² Branko Milanovic, “Global Inequality: From Class to Location, from Proletarians to Migrants”, *Global Policy*, 22 May 2012.

⁸³ *UN International Migration, Report 2017*.

⁸⁴ UN 2017.

⁸⁵ See Christian Dustmann & Anna Okatenko, *Out-migration, Wealth Constraints, and the Quality of Local Amenities*, Discussion Paper Series No. 13/13, Centre for Research and Analysis of Migration, University College London, 24 May 2013.

As for extreme poverty, it is more of an obstacle than a factor of emigration: the Central African Republic, the Democratic Republic of Congo and Niger, which are among the poorest and least developed countries in the world, see very few of their citizens leave⁸⁶. *“Migrants are more educated urbanites than illiterate rural dwellers. You have to have a minimum of income and a certain vision of the world to be able to envisage a new life on another continent”*, Stephen Smith rightly writes.⁸⁷ Contrary to what is intuitively thought, development thus tends to increase, not decrease, migratory flows.⁸⁸ The relationship between the two can be described as an inverted U-shaped curve: the propensity to emigrate only decreases when a certain level of development (measured in GDP per capita) is reached. This leads to a dose of scepticism as to the reasoning - too often heard - on the need for development aid as an instrument to prevent emigration.⁸⁹

⁸⁶ Less than 3% of their population lives abroad.

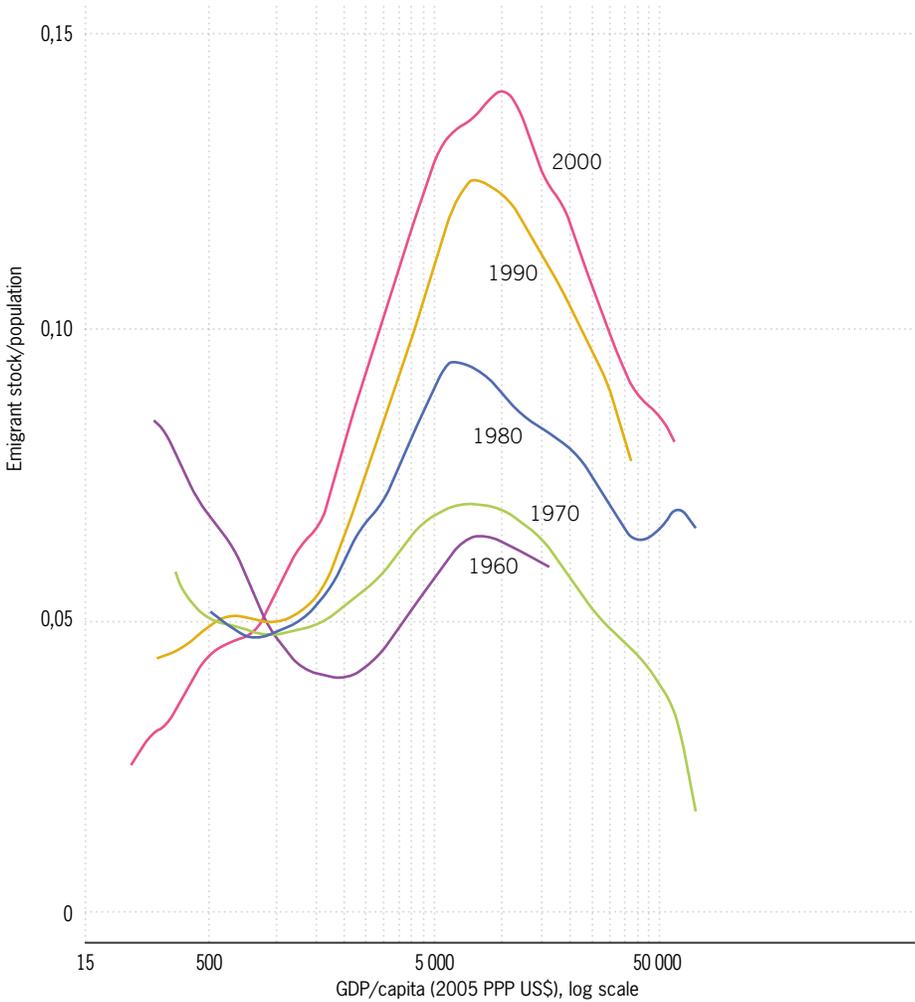
⁸⁷ Smith, *op. cit.*

⁸⁸ Michael A. Clemens, *Does Development Reduce Migration?* Discussion Paper Series No. 8592, Forschungsinstitut zur Zukunft der Arbeit, October 2014; and United Nations Economic Commission for Africa, *Patterns, levels and trends of African migration*, 2017, p. 3 (hereinafter: UNECA 2017).

⁸⁹ The Khartoum process launched by the European Union in 2014 aims to provide financial assistance to some 20 African countries to “keep” their potential migrants.

GDP PER CAPITA AND EMIGRATION

Relation between a country's GDP per capita and the share of emigrants within its population, 1960-2010



Source : Source : Michael Clemens, 2014

Is the *massive* increase of migratory flows inevitable? Many states increasingly limit the access to their territory and control their borders better than in the past. Yet in so doing, they also make circular migrations more difficult (and can thus have the perverse effect of encouraging permanent emigration). And if emigration is facilitated by the decrease of transport costs, the argument is reversible: it makes the return journey just as easy.⁹⁰ It is worth noting that the annual net intercontinental migration rate, after having increased between 1980 and 2010, decreased in the years 2010-2015.⁹¹ This confirms the Gallup consulting company estimates of the number of people who say they want to emigrate (14% of the world population in 2013-2016, against 16% in 2007-2009).⁹²

Sudden emigration flows are even less predictable. They result from the collapse of a state or a group of states (cf. the great eastward movement of European populations following the disintegration of the Soviet Union in the years 1990-1995), or, as is most often the case, repression or war: the Near East in the 1950s, Southeast Asia in the 1970s, Central Asia in the 1980s, the Balkans in the 1990s, the Middle East since the 2000s... In 2017, the Office of the High Commissioner for Refugees counted 65.6 million “persons of interest”, including 40.3 million displaced persons, 22.5 million refugees (including 5.3 million Palestinians dependent on UNRWA, the UN specialized agency) and 2.8 million asylum seekers. Among the refugees depending on the UNHCR, by far the largest contingents were Syrians, Afghans and Southern Sudanese. The main host countries were Turkey, Pakistan, Lebanon, Iran and Uganda.⁹³

⁹⁰ Restrictions can have the unwanted effect of encouraging permanent migration by reducing “circular” migration. UNECA 2017, p.11.

⁹¹ UN 2017. This might be an effect of the financial crisis.

⁹² Neli Esipova et al, “*Number of Potential Migrants Worldwide tops 700 Million*”, Gallup News, 8 June 2017.

⁹³ UNHCR (data of 2016).

Barbarians at our doorstep

In 1973, a novel was published which, over the years and the different re-releases, became one of the greatest successes in the modern history of French publishing. Long before the prophets of the 1990s who announced the confrontation of “the West” against the “Rest”, Jean Raspail in *The Camp of the Saints* (reference to the Apocalypse of John, 20:8) described the arrival of a million poor people on the French Riviera, fleeing the famine raging in South Asia.⁹⁴

A year later, Algerian President Houari Boumediene seemed to agree with the novelist when he warned the UN General Assembly in a famous speech: *“One day, millions of men will leave the Southern hemisphere to go to the Northern hemisphere. And they won’t go there as friends, because they will go there to conquer it. And they will conquer with their sons. Our women’s wombs will give us victory.”*

However this famous anti-colonialist speech does not include this passage, nor any other with a similar meaning⁹⁵. Not more than any other public speeches of the former Algerian President. Until further notice, this quote has been made up. Yet it has been quoted hundreds of thousands of times on the Internet, a success as enduring as that of Raspail’s book (which is, for example, one of the bedside books of the influential Steve Bannon, former advisor to Donald Trump).

The fear of a discharge of surplus population from the “South” to the “North” is recurrent. The metaphor seems appealing at first sight: the North is empty, the South overflows, so massive immigration is inevitable. This mechanistic vision does not reflect reality.

In 1987, a European think tank predicted that the population of North Africa would soon equal that of Europe.⁹⁶ (The same year, the great French demographer Alfred Sauvy published a book entitled *L’Europe submergée*.⁹⁷) Yet its definition of North Africa was as broad as can be, whereas that of Europe was on the contrary particularly narrow. Another example: in 2003, an expert estimated that the population differential between Europe and its “*hinterland*” (sic) would increase from 1.4 today to 2.75 in 2050. But the hinterland in question went as far as Senegal, Sudan, Yemen and... Pakistan⁹⁸.

⁹⁴ Jean Raspail, *Le Camp des saints*, Paris, Robert Laffont, 1973.

⁹⁵ UN Official Records, *UNGA Sixth Special Session*, 2208th Plenary Meeting, 10 April 1974.

⁹⁶ Thierry de Montbrial (dir.), *Mondes en mouvement*. RAMSES 1987-1988, Paris, Economica, 1987.

⁹⁷ Alfred Sauvy, *L’Europe submergée. Sud-Nord dans trente ans*, Paris, Dunod, 1987.

⁹⁸ Paul Demy, “Population policy dilemmas in Europe at the dawn of the twenty-first century”, *Population and Development Review*, vol. 29, no. 1, 2003.

Nevertheless, Europe experienced, for the second time in less than three decades, a “perfect storm” in the years 2010, with the conjunction of the massive arrival of Syrians and Iraqis, the pursuit of old flows from Afghanistan and the Balkans, and, to a lesser extent, an influx of Africans taking advantage - if one may say - of the Libyan chaos and the spectacular boom in the transit market that came along with it. Germany thus received over a million of asylum applications, many of which were accepted⁹⁹. By 2015, at the peak of the refugee crisis, 1.3 million asylum applications had been lodged in Europe.¹⁰⁰ For the years 2015-2017, nearly three million applications were submitted. The vast majority came from Syria, Iraq and Afghanistan, but also from Pakistan, Nigeria, Iran, Eritrea, Albania and Russia.¹⁰¹ About a million cases were treated each year, more than half of them in Germany¹⁰². The rate of positive responses has varied from year to year, but is close to half of the total of responses (between 40% and 60%).¹⁰³ The annual stock of pending applications at the end of the year remains high: from 1,094,100 at the end of 2016, it was still 927,300 at the end of 2017 (half of which was in Germany). In 2017, FRONTEX counted 204,000 illegal arrivals at European borders (now a majority of Africans), compared with 511,000 in 2016 and 1,822,000 in 2015.¹⁰⁴

Despite the extraordinary scale of the phenomenon, which has contributed to the rise of populism in Europe, our societies have so far not been deeply destabilized - at least much less than some omens had feared. And despite Germany’s very welcoming policy - by far the first country concerned - Angela Merkel is still Chancellor of the Federal Republic.

However, the future looks unclear, and we must, without nevertheless adopting a pessimistic approach, take the migration issue very seriously.

⁹⁹ From 2015 to 2017, Germany received 1,330,000 asylum applications. 700,000 have been accepted, 60,000 are on hold, 570,000 applicants have been rejected (115,000 have left voluntarily, 68,000 have been expelled, for a balance of about 300,000). EUROSTAT.

¹⁰⁰ The previous record was 672,000 in 1992 (due to the Balkan wars). Since the end of the Cold War, the main flow of immigration has gone from East to West (about 20 million in the last 25 years).

¹⁰¹ EUROSTAT. In 2017, 705,000 asylum applications were made (including 605,000 first applications), the majority in Germany (198,000 or 31%), followed by Italy and France.

¹⁰² 1.1 million in 2016, 0.9 million in 2017.

¹⁰³ In 2017, 46% of decisions were positive, which led to 444 000 people being authorized to remain on the European territory for refugee status (222 000), subsidiary protection (159 000) or humanitarian reasons (63 000). The acceptance rate of applications has doubled (from a quarter to half), reflecting the influx of citizens from countries at war.

¹⁰⁴ FRONTEX, *Risk Analysis for 2018*.

Will Africa invade us?

Beyond the current debate on refugees, a spectre haunts Europe: that of a massive “exodus” of Africans to the Old Continent, the biblical metaphor being here used at least as much as geophysical images (“tsunami”, “submergence”, etc.).

Africa’s population (2.52 billion) in 2050 will be more than three times that of Europe. In 2006, then-French President Jacques Chirac warned: *“if we do not develop this Africa, and therefore if we do not implement the means necessary for its development, these people will flood the world”*.¹⁰⁵ Cheerfully imagining 2100 for the sake of the cause, a group of specialists did not hesitate to call their short collective piece: *Africa: the demographic nightmare. Could the 4.2 billion Africans submerge Europe?*.¹⁰⁶

Let us take a deep breath. The natural increase of the African continent’s population will not automatically translate into an increase of migrations to Europe in the same proportions, and Sub-Saharan Africa is not preparing its invasion of Europe.

Africans emigrate relatively little. Africa is thus the continent with the lowest migration flows in proportion to its overall population. The proportion of Africans living abroad was 1.1% in 1990 and 1.4% in 2015¹⁰⁷. Africans represent 16.6% of the world population, but only 14.1% of immigrants in the world, or 36.3 million people¹⁰⁸. When they migrate, it is primarily in their neighbourhood: African migratory flows are primarily internal to the continent, and almost half of African migrants thus live in Africa. And many of those who leave travel to developing regions (the Arabian Peninsula), as well as North America. The number of people born in Africa and living in the United States was 80,000 in 1970, 881,000 in 2000, and over two million in 2015.¹⁰⁹ This is also true for Sub-Saharan populations alone: only 2% of the natives of this subregion live abroad (3% on average for developing countries), including 0.7% outside Africa. As a proportion of the total population of their countries, nationals from the south of the continent emigrate much less outside Africa than those from the north: the largest contingents are in Côte d’Ivoire (Burkinabé immigrants) and South Africa (Zimbabweans).¹¹⁰ In 2013, about 20 million lived outside their country, 6.6 million of them outside Africa - 90% of them in developed countries, notably the

¹⁰⁵ French TV interview, 14 July 2006.

¹⁰⁶ Yves-Marie Laulan (ed.), *Afrique : le cauchemar démographique. Les 4,2 milliards d’Africains pourraient-ils submerger l’Europe ?*, Paris, L’Aencres, 2015.

¹⁰⁷ UNECA 2017, p. 12.

¹⁰⁸ *UN International Migration Report 2017*.

¹⁰⁹ Monica Anderson, *African immigrant population in US steadily climbs*, Pew Research Center, 14 February 2017.

¹¹⁰ *UN International Migration Report 2017*.

**AFRICAN
MIGRATIONS**



1 000 km

Source : UN

United States, the United Kingdom and France (just over 40% of them live on the European continent).¹¹¹ This population is increasingly qualified, as it has benefited from higher education.¹¹²

Africans represent only a small minority of Europe's population. Of the 20 million non-European foreigners present on the continent, half come from Africa.¹¹³ Almost all of them (just under nine million) live in the Union, and the vast majority come from the northern part of the continent (Algeria, Morocco, Tunisia, etc.).¹¹⁴

Noting that many Africans are now rich enough to emigrate, like the Mexicans in the 1970s, Stephen Smith wonders if Africa will thus be "Europe's Mexico". It is doubtful. Not only is the Mediterranean not the Rio Grande, but, above all, if Europe has a "Mexico", it is not so much Sub-Saharan Africa as the Maghreb - from which significant migratory flows towards the Old Continent have already occurred.

One can be frightened by the one to three ratio, which will distinguish, in 2050, the European population from the African population. But then we must remember that the African territory is precisely three times larger than the European, and that it still includes huge empty living spaces.¹¹⁵ This is the reason why many African leaders continue to say, with a dash of provocation, that Africa is in fact underpopulated.

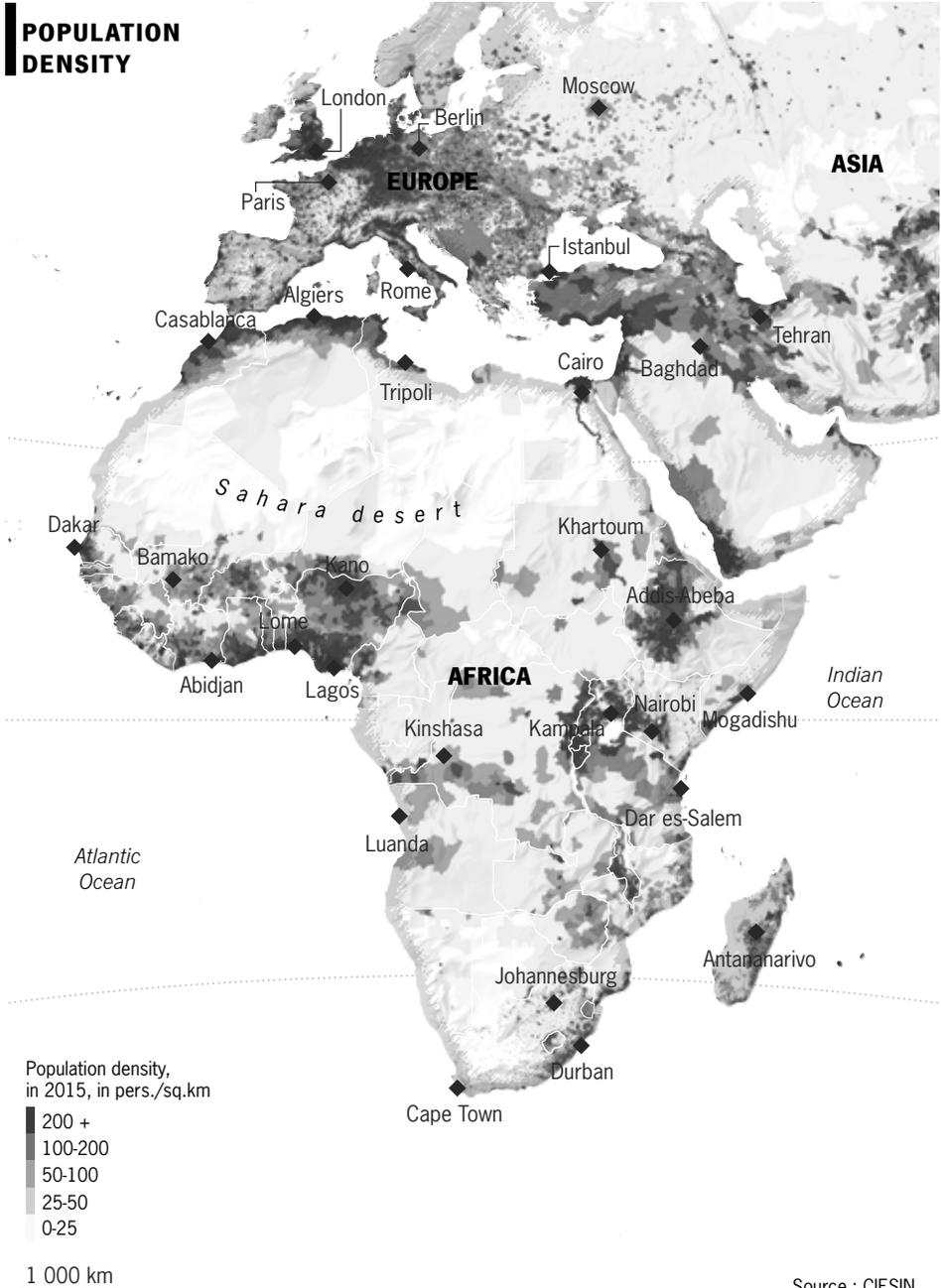
¹¹¹ Jesus Gonzalez-Garcia et al, *Sub-Saharan African Migration: Patterns and Spillovers*, Spillover Notes, Spillover Task Force, IMF, November 2016.

¹¹² *Sub-Saharan Migration: Facts and Figures, Question de développement n° 29*, Agence française de développement, November 2015.

¹¹³ *UN International Migration Report 2017*.

¹¹⁴ According to EUROSTAT, 16.9% of total EU residents born abroad in 2011. According to IMO: 16.6% in 2015.

¹¹⁵ 11 of the world's 20 least densely populated countries are in Africa, and only one of the twenty most densely populated (Mauritius, one of the richest on the continent).



The Sahel is off to a bad start

However, some trends and forecasts are worrisome.

The emigration of Africans is accelerating (in stock, 21.6 million in 2000, 36.3 million in 2017), and its transcontinental share is also increasing.¹¹⁶ African immigration to OECD countries, particularly to Europe, has thus increased considerably since the 1970s. The flow from Africa to Europe doubled between 1990 and 2015, and the Old Continent now hosts a quarter of African migrants.¹¹⁷ This increase mainly concerned individuals from North Africa, who represent on average two-thirds of African emigrants to Europe.¹¹⁸ Currently, legal transcontinental emigration to OECD countries represents about 700,000 people per year, illegal emigration, a few tens of thousands (the record was the year 2016, with 100,000 arrivals).¹¹⁹

Flows from Sub-Saharan Africa alone follow the same path: they are increasing in volume and their transcontinental share is growing (25% in 1990, 33% in 2013). Moreover, they increasingly include so-called economic migrants (50% in 1990, i.e. 1 million, 90% in 2013, i.e. 6 million).¹²⁰ According to an IMF taskforce's forecasts, they could be, in OECD countries, 18 million in 2040, and 34 million in 2050 (and would then represent 2.4% of the population of these countries, against 0.4% in 2015).¹²¹

As Stephen Smith suggests, the economic conditions are now gathered on the continent for a significant increase of migration flows from south to north: *“Emerging Africa is on the verge of undergoing this scale effect: yesterday without the means to emigrate, its masses on the threshold of prosperity are today setting off towards the ‘European’ paradise”*.¹²²

¹¹⁶ UN International Migration Report 2017.

¹¹⁷ UNECA 2017, p. 21.

¹¹⁸ UNECA 2017, pp. 12-14.

¹¹⁹ UNECA 2017, p. 17.

¹²⁰ Jesus Gonzalez-Garcia et al, *Sub-Saharan African Migration: Patterns and Spillovers*, Spillover Notes, Spillover Task Force, IMF, November 2016. Asylum applications made in an EU country by nationals of Sub-Saharan Africa alone are in the minority: between 5 and 10% of applications depending on the year.

¹²¹ Jesus Gonzalez-Garcia et al, *Sub-Saharan African Migration: Patterns and Spillovers*, Spillover Notes, Spillover Task Force, IMF, November 2016.

¹²² Smith, *op. cit.*

From a European point of view, a particular region attracts attention. It is not entirely exaggerated to describe the Sahel as a “*demographic bomb*”.¹²³ Niger, which had 3 million inhabitants in 1960, will have 68 million in 2050... and will still be the youngest country in the world. Although it still has virgin land, its overall cultivable area is only about 10 per cent, and the arable soils in the Sahelian strip are very degraded. Forecasts suggest significant migration westwards. The latest report of the US National Intelligence Council (2017) predicts that young people from the Sahel will mainly migrate to Algeria, Ghana, Kenya, Morocco, Senegal, and Tunisia.¹²⁴ Were this to happen, the unfavorable climate evolutions forecasted for this region could only increase migratory pressure (even if, as we will see later, the very notion of climate refugees is questionable).¹²⁵ For these very reasons, some experts estimate that Sahelian emigration could affect 40 million people by the end of the century.¹²⁶

The demographic dividend or bonus (see above) hardly exists in Africa, at least not currently: the decline in fertility is too slow and the prospects for employment growth too modest.¹²⁷ It is unlikely that the foreseeable economic growth on the continent will be sufficient to absorb the large cohorts of young people of working age who will come onto the market. The demographic dividend in Africa would contribute only 10 to 15% of African GDP growth by 2030.¹²⁸ A research center predicts that by 2040, for a population of 823 million (compared to 395 million in 2015), employment opportunities in Sub-Saharan Africa will only be 773 million.¹²⁹

Thus, while the prospects for African immigration to Europe are hardly a nightmarish prophecy, our countries must be fully aware that it will be an important parameter of Europe’s demographic future. One that it will be necessary to deal with, one way or another, and probably by avoiding both “*humanitarian irenicism*” and “*nationalist selfishness*” (Stephen Smith).¹³⁰

¹²³ Laurence Caramel, “*Le Sahel est une bombe démographique*”, Interview with Michel Garenne, *Le Monde*, 16 January 2017.

¹²⁴ National Intelligence Council, *Global Trends 2035*, 2017, p. 164.

¹²⁵ According to some projections, they could lead, by 2100, to an annual migration “surplus” towards Europe of between 98,000 and 660,000. Anouch Missirian & Wolfram Schlenker “*Asylum applications respond to temperature fluctuation*”, *Science*, 2017 (358).

¹²⁶ Laurence Caramel, “*Le Sahel est une bombe démographique*”, Interview with Michel Garenne, *Le Monde*, 16 January 2017.

¹²⁷ Gilles Pison, “*In 2100, more than one in three Africans?*” *The Conversation*, 19 September 2017.

¹²⁸ Désaunay et al., *op. cit.*, p. 28.

¹²⁹ Karen McVeigh, “*Africa facing shortfall of 50 million jobs by 2040, report says*”, *The Guardian*, 27 June 2017.

¹³⁰ Stephen Smith’s book (in French - *op. cit.*) provides valuable, in-depth and - most importantly - dispassionate insights on this subject.

For African migration, the road to hell is paved with good European intentions. Development aid? It is likely, as previously mentioned, to increase the scale of the phenomenon. Repression and border closures? They can encourage permanent emigration and thus be counterproductive. Humanitarian assistance? It can be a “pull” factor if it makes it seem like the risk incurred is reduced. The dismantling of transit routes? If poorly managed, it can incite smugglers to convert to more lucrative trafficking and even to recruit in violent groups.¹³¹ Since 2016, Europe has tried to set up specific and targeted bilateral programs with certain countries (Ethiopia, Nigeria, Niger, Mali, Senegal), but its results remain unsatisfactory.

“Climate refugees” a questionable concept

However, another fantasy, that of massive and inexorable population displacements due to climate change, must be put into perspective.

Could global warming lead to increased global migration? It is likely. Yet here again, caution is required.¹³² Biologist Norman Myers estimated in the 1990s that “climate refugees” were already 25 million, and that their number would double 15 years later, reaching perhaps 200 million in 2050.¹³³ This risky forecast, to say the least, devoid of any scientific basis, has unfortunately since been reused by numerous publications and alarmist speeches, without any critical distance. In 2009, a Columbia University study forecasted 700 million climate refugees in 2050.¹³⁴ The NGO Christian Aid expected no less than a billion by this time.¹³⁵ Without any further methodological precision. FAO estimates that, in 2015, there were 19 million people displaced because of climate phenomena (26.4 million on average over the 2008-2015 period).¹³⁶

Things are very unclear, to say the least.

¹³¹ See on this subject Peter Tinti’s inquiry into Niger, “*A Dangerous Immigration Crackdown in West Africa*”, *The Atlantic*, 11 February 2018.

¹³² We take up here an analysis developed in Bruno Tertrais, *Les guerres du climat. Contre-enquête sur un mythe moderne*, Paris, Éditions du CNRS, 2016.

¹³³ Norman Myers, “*Environmental refugees in a globally warmed world*”, *Bioscience*, vol. 43, no. 11 (1993); idem, “*Environmental Refugees*”, *Population and Environment*, vol. 19, no. 2 (1997).

¹³⁴ Koko Warner, “*In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement*”, Earth Institute of Columbia University, May 2009.

¹³⁵ Christian Aid, *Human Tide: The Real Migration Crisis*, 2007.

¹³⁶ FAO website.

And it is not surprising. For the very notion of “climate refugees” (proposed by a UN report in 1985) is problematic. Environmental displacement is generally progressive, and highly dependent on economic opportunities elsewhere: climate change is thus an immediate rather than a deep rather than an immediate cause, and “refugees” are in fact rather “migrants”. The Intergovernmental Panel on Climate Change (IPCC) itself acknowledges this: *“most climate and migration studies point to the environment as triggers and not causes for migration decisions”*.¹³⁷ They also depend on the resources needed: not everyone has the means to leave exposed areas. Indeed, *“it is difficult to accurately isolate examples where climate change is (...) the core reason for migration”*.¹³⁸ The IPCC stresses that it is “difficult to categorize a particular individual as a climate migrant” and that there is *“widespread agreement (...) that the use of the term climate refugee is scientifically and legally problematic”*.¹³⁹

Hurricanes, floods and droughts can cause massive displacement of people. Yet such disasters have always existed. How and why, then, should we place their victims in a particular category, thus distinguishing these population displacements from those caused by geophysical disasters (earthquakes, tsunamis, volcanic eruptions), and in which human activities have no responsibility? Especially since, according to the IPCC, *“extreme weather events are not necessarily associated with displacement”*, which is a *“strategy of last resort”*.¹⁴⁰ Moreover, this kind of displacement is usually reversible: after a disaster, most displaced people then seek to return home.

The IPCC adds that emigration, far from systematically being a tragedy, can be a good adaptation strategy, likely to reduce risks in very vulnerable places. Certain local climate changes can be correlated to an increase in agricultural productivity, and thus *reduce* migration flows.

Large population flows linked to environmental or climate change, be they rapid, after a disaster (“refugees”), or slow, due to changes in local conditions (“migrants”), are likely to remain exceptional and “manageable”, even if they may transform a country’s identity. Indeed, the Dust Bowl, a series of dust storms that affected the great North American plains for a decade, caused two to three million people to migrate west.

¹³⁷ Neil W. Adger et al, *“Human Security”*, in Climate Change 2014, Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment, Report of the Intergovernmental Panel on Climate Change, p. 771.

¹³⁸ Michael Werz & Laura Conley, *Climate Change, Migration, and Conflict. Addressing complex crisis scenarios in the 21st Century*, Center for American Progress / Heinrich Böll Stiftung, January 2012, p. 11.

¹³⁹ Adger et al., *op. cit.*, p. 768, p. 771.

¹⁴⁰ *Ibid*, p. 767, p. 771.

The same reasoning applies to populations that may be affected by the rise of sea level.¹⁴¹ For now, communities living on very low-lying islands have not chosen to migrate - and when they have, it was for economic reasons (e.g. some Tuvalu Islanders leaving for New Zealand). Some large countries would undoubtedly be affected, sometimes profoundly, by a significant rise in sea level: take those where a large share of the population lives in low-lying coastal areas for instance, such as Vietnam, Bangladesh, Egypt, Thailand and Japan. Yet unless the most pessimistic scenarios constructed by the IPCC come true, would it be inconceivable to imagine humans simply adapting to a rise of water levels of a few millimetres a year, as they have been doing for centuries? Especially since, at this rate, some countries would continue to gain as much surface through sedimentation as they will lose through erosion. The partial engulfment of Bangladesh, one of the most densely populated areas in the world, is a more than fragile hypothesis: it does not take into account the input of sediments carried by the rivers of the Himalayas (at least a billion tons per year), which will largely compensate for the sea level rise. The latter is today essentially caused by the destruction of natural barriers (mangroves) by local populations and other human activities (dams, ports...).

The notion of climate refugees feeds the fantasy of massive migrations of poor people in rags besieging rich countries like an army of zombies. In a nutshell, it says much more about Europe's ancestral fears than about the foreseeable reality of the effects of climate change.

How many foreigners in Europe?

Stock

For Europe as a whole: in 2017, there were 77.9 million immigrants on the continent, or 10.5% of its total population. The main host countries were Russia, Germany, the United Kingdom and France. Out of this figure, 37 million were non-European.¹⁴²

For the European Union alone, the total number of residents in countries of the Union born in a country other than that of their residence is 57.3 million, or 11% of

¹⁴¹ Taking into account the fact that local sea level rise is much more due to subsidence (natural for example for volcanic islands, or artificial in many inhabited areas, for example due to excessive groundwater abstraction), i.e. the "drop in land level". Large cities such as Bangkok, Ho Chi Minh City, Jakarta or Manila tend to "sink".

¹⁴² *UN International Migration Report 2017*. Europe includes here all the countries of the European continent including Russia, Belarus, Ukraine, Moldova, the former Yugoslavia... but neither Turkey nor the Caucasus states.

the EU population.¹⁴³ 64% of them (36.9 million) were born in a non-EU country (Morocco, Turkey, Russia, etc.). Among them, there are 21.6 million foreign nationals - or 4.2% of the total population of the Union - including approximately nine million Africans (Moroccans forming the largest contingent). The stock of illegal immigrants in the EU is estimated very differently; the Clandestino Research Project gave a range of 1.9 to 3.8 million at the end of the 2000s

Flows

The Pew Research Center estimated that the total net migration (inflows minus outflows) to Europe (including Norway and Switzerland and all categories combined, among whom 1.4 million refugees) amounted to 7 million people between mid-2010 and mid-2016, or about 1.2 million on average per year, but excluding an additional 1.7 million refugees whose asylum applications were, according to this study, likely to be rejected. Again, all categories combined, the main countries of origin (over 200,000 people each) were, in order, Syria, India, Morocco, Pakistan, Bangladesh, the United States, China and Iran.¹⁴⁴

For the EU alone, annual inflows - including intra-community inflows - represent a total of around 4.5 million, more than half of whom come from non-EU countries. Taking into account an outflow of about 3 million, the annual net migration concerns about 1.5 million immigrants.¹⁴⁵ Germany is the main European country of immigration and emigration, notably due to the refugee crisis.¹⁴⁶ But as far as legal immigration is concerned, the flow from South Asia to the United Kingdom remains the largest.

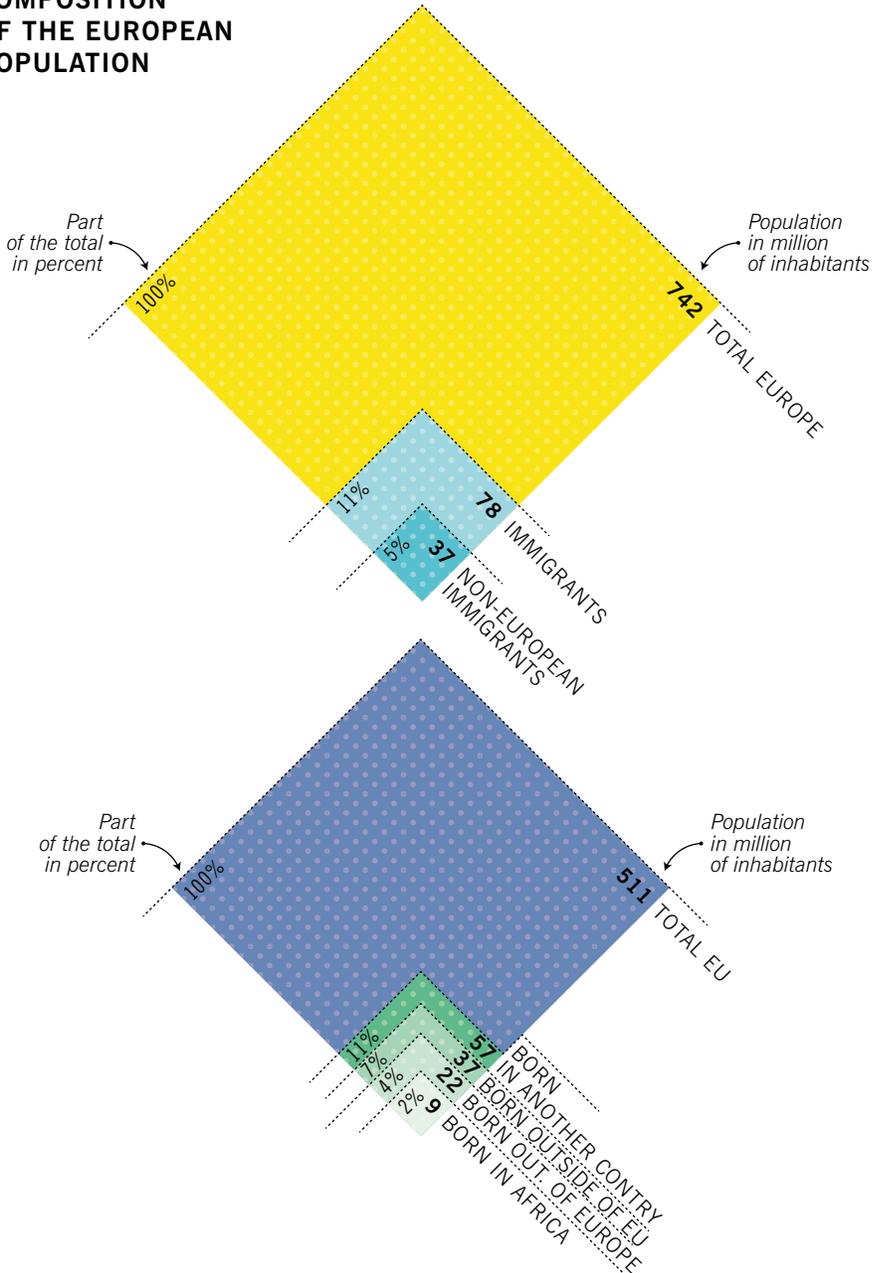
¹⁴³ EUROSTAT. They were 51 million in 2014 and 49 million in 2011.

¹⁴⁴ *Europe's Growing Muslim Population*, Pew Research Center, November 2017.

¹⁴⁵ In 2016, 4.3 million entrants to an EU country (half of them from non-EU countries), and at least 3 million exits, i.e. a positive net migration of 1.3 million. In 2015, 4.7 million entrants to an EU country (idem), and 2.8 million exits, i.e. a positive net migration of 1.9 million.

¹⁴⁶ EUROSTAT.

COMPOSITION OF THE EUROPEAN POPULATION



EURASIA: THE SOCIETAL CHALLENGE

Over the coming decades, most countries in the Eurasian region (Europe, Russia, East Asia) will face major societal challenges linked to their demographic transformations. They are all aging. The increase in the pension burden will be particularly significant in North-East Asia and Southern Europe. Indeed, the countries in which the ratio between over 65 years old and 20-64 years old will increase the most are Japan and South Korea on the one hand, and Spain, Portugal, Greece and Italy on the other.¹⁴⁷ Moreover, migration will make these forecasts evolve in one direction or the other, which will have major societal consequences.¹⁴⁸

The dilemma of old countries

The challenges are nevertheless not identical for all countries concerned.

Talking about aging is not sufficient. Given longer life expectancy and progress in the field of health, the so-called seniors are no longer just a burden: they work, consume, create, invent. The oldest countries (Europe, Russia, Japan, South Korea... but not China) will nonetheless have to decide between accepting demographic decline - with its economic and political consequences (not all of which are negative: a low birth rate reduces education spending) - and major reforms (pensions, immigration...) - with their societal and cultural implications.

If the “Old Continent” were to be confronted with new waves of refugees, *Mitteleuropa* countries would face a form of demographic “double whammy”: they would both suffer from a particularly pronounced numerical decline (see above) and their geographical status of crossroads for migrations. This could open a new divide between Western and Eastern Europe. As for the Mediterranean countries - Spain, Italy and Greece in particular - which for a long time were countries of emigration, they have become immigration countries within a few years. There is little doubt that immigration will be a major variable in the future size of the European population. According to UN projections, it could reduce the continent’s population decline by seven million by the late 2040s.¹⁴⁹

¹⁴⁷ UN 2017.

¹⁴⁸ They are not the only ones to suffer: one saw in Côte d'Ivoire (the so-called “ivoirité” issue) that intracontinental immigration could have major societal consequences in the countries concerned.

¹⁴⁹ UN *International Migration Report 2017*. The European population would decline by 14 million without immigration, and by only 7 million with it.

Is immigration the economic lifeline of aging countries? The mechanistic reasoning that wants to fill a labour force deficit through immigration is short-sighted.¹⁵⁰ First, because immigration does not solve the problem of pensions in the medium term: newcomers also end up getting older. To maintain the demographic dependency ratio (active/inactive), one expert calculated that Europe needed to import more than 800 million people in half a century!¹⁵¹ Similarly, French demographer Hervé le Bras calculated in 2015 that the European Union would need 11 million immigrants per year if it wanted to maintain its working population by 2050.¹⁵² Secondly, because it can increase the social burden given the needs (education, health) of immigrant families. In any event, an in-depth examination of the problem leads specialist Paul Collier to conclude: *“Despite the polemical assertions on both sides of the immigration debate, the evidence suggests that the net effects are usually likely to be small. (...) In the long term any economic effects are trivial.”*¹⁵³

Even if he was wrong, it would be irresponsible to have a strictly technical reasoning on such a topic.¹⁵⁴ Because what is economically desirable can be politically problematic.¹⁵⁵ *“What is good for business is not necessarily good for indigenous people”*, as Paul Collier crudely sums up.¹⁵⁶ “Cultural insecurity” is a reality in Western societies. And it maintains constant and regrettable confusions in the public debate - between “foreigners”, “immigrants”, “refugees”, “Arabs”, “Muslims”, etc.

We know that immigrants can paradoxically be an opportunity for their countries of origin because of income transfers that can support their development.¹⁵⁷ Less is known about the often positive cultural influences that migrants bring to their countries of origin (e.g. in terms of girls’ education and women rights).¹⁵⁸ Immigrant

¹⁵⁰ See on this point Collier, *op. cit.*, pp. 111s.

¹⁵¹ See Danny Dorling & Stuart Gietel-Basten, *Why Demography Matters*, Cambridge, Polity Press, 2018, p. 156.

¹⁵² Hervé Le Bras, *L’Âge des migrations*, Paris, La Découverte, 2017.

¹⁵³ Collier, *op. cit.*, p. 61, p. 123. For the developing countries concerned, he estimates that the benefits of remittances are probably greater than the losses caused by the “brain drain” (*ibid.*, p. 217).

¹⁵⁴ For a critical approach, see for example Michèle Tribalat, *“Les conséquences de l’immigration”*, Commentaire, No. 159, Automn 2017, which reviews the work of the American economist George Borjas.

¹⁵⁵ Some countries receive millions of refugees without being “destabilized” (Iran, Turkey, Jordan, Lebanon...). Yet it tends to be forgotten that in some cases, the majority of refugees are hosted - if one can say so - in camps, hardly mingle with the population, and, above all, are generally neighbours, the geographical proximity coinciding with a certain ethnic, cultural or religious proximity. Moreover, even this proximity is by no means a guarantee against destabilization or even political violence, as the cases of Jordan and Lebanon have shown in the 1970s (Palestinians), or more recently that of Pakistan (Afghans) since the 1990s.

¹⁵⁶ Collier, *op. cit.*, p. 127.

¹⁵⁷ For many countries, these flows are two-way: France and Germany, which are among the 10 most important countries in this respect, “receive” more than they “send”.

¹⁵⁸ Peggy Levitt, *“Social Remittances: Migration Driven Local-Level Forms of Cultural Diffusion,”* International Migration Review, Vol. 32, No. 4, Winter 2008.

populations who settle on the long term frequently abandon the characteristics of their country of origin as soon as they are dispersed. In the United States, the proportion of immigrants who speak their mother tongue in their families decreases very rapidly from the second generation onwards - which tempers the alarmism of some Republicans on this matter.¹⁵⁹ (The latter are indeed concerned about the “Hispanization” of the country.¹⁶⁰) In Europe as well as in America, the values of Muslim families with recent immigrant backgrounds are becoming increasingly similar, over time, to those of the majority of the population.¹⁶¹ The same phenomenon is at work in the demographic field: the behaviour of immigrant families is more and more similar to that of the rest of the population in host countries.

But such arguments are of little weight in political debates in host countries. Remember the symbolic figure of the Polish worker in the debates that preceded the French referendum of 2005, and especially the British referendum of 2016 (London had opened its doors wide to workers from new members of the Union, notably to those from Poland).¹⁶² Immigration has become a major political challenge in Central Europe, in countries in which immigration has long remained low, and which are declining. This played an important role, during the German elections of 2017, in the success of the *Alternative für Deutschland* in the eastern Länder (sometimes over 30% in some constituencies on the eastern border). And it was *the* central issue in the 2017 Austrian elections and the 2018 Italian elections of 2018.

The French notion of a “great replacement” and its Anglo-Saxon avatar, the advent of “Eurabia”, have acquired a prominent place in the list of European political fantasies. If the relative rise in Islamic practices is far from being mainly linked to the pursuit of immigration - it concerns just as much young people with the nationality of a country of the Union -, the two problems are frequently confused in the public debate. By presenting the acceptance of foreign workers as an possible solution to the European demographic problem, international institutions such as the UN or the EU itself do little to allay the fears of some segments of the public opinion. A UN report entitled *Replacement Migration: Is it a solution to population declining and*

¹⁵⁹ Rubén G. Rumbaut et al, “Linguistic life expectancies: Immigrant language retention in Southern California”, *Population and Development Review*, Vol. 32, n° 3, September 2006.

¹⁶⁰ Samuel P. Huntington, *Who Are We? The Challenges to America's National Identity*, New York, Simon & Schuster, 2004.

¹⁶¹ Ronald Inglehart, Pippa Norris, *Muslim Integration into Western Cultures: Between Origins and Destinations*, Research Working Paper 09-007, John F. Kennedy School of Government, Harvard University, March 2009.

¹⁶² This does not imply a mechanical relationship between the presence of foreign populations or populations of foreign origins and the meaning of the vote: the city of London, where the “Whites of the United Kingdom” (according to the UK official criteria of the 2011 census) now represent only 44.9% of residents, voted against Brexit.

ageing? (2000) is still used today to support the thesis that the “great replacement” would be deliberately encouraged by obscure international organizations - even though it demonstrated that resorting to immigration could not be the solution to Western demographic problems. Its degree of celebrity in far-right groups is close to that of *The Camp of the Saints*. This conspiracy theory could make people smile if it was not so successful, even at the highest level of government in some European countries (such as Hungary, where Mr Orbán has labeled the demographic issue as the priority of his new mandate).

This does not make the problems posed by immigration any less real: (i) a discomfort regarding the diversification of a country’s cultural references, which fosters nostalgia for the past (a generally mythified and idealized past), (ii) a risk of communitarization of life in society, (iii) beyond that, the contestation by certain organizations or individuals of the common rules that characterize the republican model.

First prompted by the jihadist terrorist attacks, then by the wave of refugees in 2015-2016, these issues will undoubtedly be central to the European public debate in the 2020s. Especially since some parties could be tempted to reorient their political strategies according to evolutions of their national populations. Including at the diplomatic level: we have seen, for example, over the last 20 years, a part of the European left reaffirm its support to Arab countries and the Palestinian cause for this reason - and at the same time distance itself from Israel (at a time when the politics of this country can certainly be a source of criticism).

Will the French still be French in 2015?

French readers may remember the famous cover of a weekly magazine featuring a veiled Marianne, with the title “*Will we still be French in thirty years?*” (October 1985). The thesis defended by the article was that the fertility differential was such that the nature of France’s demography would change was such that the nature of our country’s demography would change. But its calculation bases (the number of French and foreigners on national soil) were false and its hypotheses - fall in the fertility of French women and, conversely, maintenance of that of foreign women - were questionable, to say the least.¹⁶³ They were indeed inaccurate. The TFR in France remains higher than that of its neighbours, but that of women of non-European origin falls from the second generation.¹⁶⁴ This convergence could accelerate if the decline in fertility in the Maghreb countries (itself partly due to migration) observed until the 2000s were to resume (see above).¹⁶⁵ Hence the image of the “meeting of civilizations” proposed a few years ago by Youssef Courbage and Emmanuel Todd.¹⁶⁶

¹⁶³ Hervé Le Bras, *Marianne et les lapins. L’obsession démographique*, Paris, Olivier Orban, 1991, pp. 213-216.

¹⁶⁴ In France, the TFR of immigrant women in 2010 was 2.73 children per woman, and that of their descendants 1.85. Ministry of the Interior, *La fécondité des descendantes d’immigrées est proche de celle de la population majoritaire*, Infos migrations, n° 79, August 2015. Moreover, this questionable forecast did not take into account exits from the territory.

¹⁶⁵ Michel Beine et al, “*International Migration, Transfers of Norms and Home Country Fertility*”, Institut zur Zukunft der Arbeit Discussion Paper, No. 3912, Institute for the Study of Labor, 2008.

¹⁶⁶ Youssef Courbage & Emmanuel Todd, *Le Rendez-vous des civilisations*, Paris, Seuil, 2007.

The place of Muslims in Europe

The place of Islam in European societies is a legitimate debate topic, but it is difficult today to approach it serenely.¹⁶⁷

In 2017, a French economist who sought to demonstrate that a “*European demographic suicide*” was imminent claimed that the Muslim population would be majoritary in Europe by 2050. The results of this simplistic calculation, published in a short article, were widely circulated. Yet his assumptions were just as hazardous as those from the 1985 article cited above. He undoubtedly overestimated the share of “Muslims” in the European population (10% according to him!), and especially postulated, against all evidence, that women of “Muslim origin” (sic) maintained a very high fertility rate (3 to 4) from generation to generation.¹⁶⁸

More seriously, the Pew Research Center tried to construct scenarios for the evolution of the Muslim population in Europe.¹⁶⁹ Currently, the number of births in Muslim families exceeds the number of deaths in all European countries. In a notice study published at the end of 2017, the fact tank presents three scenarios. In its middle scenario (medium-scale migration), the Muslim population would more than double by 2050, and would exceed on average the 10% of the European population overall.¹⁷⁰

	2010	2016	2050 Zero migration	2050 Medium- scale migration	2050 Large-scale migration
Non-Muslims	495.3 million	495.1 million	445.9 million	459.1 million	463 million
Muslims	19.5 million (4%)	25.8 million (4.9%)	35.8 million (7.4%)	57.9 million (11,2%)	75.6 million (14%)
Total	514.8 million	520.8 million	481.7 million	516.9 million	538.6 million

¹⁶⁷ The “management of Islam” is a different issue in the United States and Russia, because they have different political and cultural models, as well as a different geographical distribution of minorities.

¹⁶⁸ Charles Gave, “*Demain, le suicide démographique européen*”, Causeur, 10 September 2017.

¹⁶⁹ *The Changing Global Religious Landscape*, Pew Research Center, April 2017.

¹⁷⁰ *Europe’s Growing Muslim Population*, Pew Research Center, November 2017.

Its methodology has been questioned by some observers for various reasons: a broad definition of “Muslims”;¹⁷¹ an underestimation of the gradual decline in the birth rate in Muslim countries and, in host countries, among the descendants of immigrants; questionable hypotheses on the future of refugees accepted in Europe; a rigid distinction between “Muslims” and “non-Muslims” (lack of gradation in adherence to religious beliefs and practices); etc.¹⁷² French demographer Michèle Tribalat, who examined the study in detail, nevertheless considers it to be credible, and her own estimates of the starting and ending point of the zero migration forecast give comparable results.¹⁷³ Yet even supposing - which seems excluded - that all the assumptions of this study are valid and that the third scenario comes into effect by 2050, could we really speak of a phenomenon of “substitution” with 14% of Muslims in Europe?

Europe is by no means on the verge of a “great replacement”, nor is there any percentage (what was frequently called in the 1980s, with regards to North African immigrants, the “tolerance threshold”) allowing for the quantification of a particular share of Muslims that would alter the very nature of European societies, especially given the diversity of practices and cultures of the people concerned.

Nevertheless, the trend towards an increase in the relative share of the Muslim population exists, and it would be unreasonable to assume that this development will take place without any political and societal tensions. It is not insignificant, in this respect, to note that emigration from the countries of the Sahelian strip, which, as previously mentioned, has every reason to grow in the coming decades, will essentially be a Muslim emigration: in Mauritania, Niger, Mali and Sudan, more than 90% of the population is Muslim.

¹⁷¹ The report estimates that the current increase (2010-2016) in the “Muslim” population is primarily due to its natural increase (+2.92 million against -1.67 million for non-Muslims), and only then to the migration factor (net migration +3.48 million against +1.29 million). He estimates that only half (53%) of recent immigrants in Europe (all categories combined) are “Muslim” (78% for refugees alone).

¹⁷² For a synthesis of the criticisms see Agnès de Féo, “*Pourquoi ces données sur le nombre de musulmans en Europe ne sont pas fiables*”, Slate, 20 December 2017.

¹⁷³ Michèle Tribalat, “*Projections Pew 2017*”, www.micheletribalat.fr

The changing face of America... and of Russia

Europe is not alone in coping with the changing composition of its population.

Russia is rarely mentioned when discussing immigration - but it should be. Indeed, in retrospect, *deliberate* immigration could be among Vladimir Putin's most far-reaching decisions for the country's future.¹⁷⁴ Since 1990, Russia has been the second or third, depending on the year, country of immigration (with Germany), behind the United States. And since the beginning of the century, its immigrant population has doubled (about 11 million today), thus adding to the Russian newcomers from the former USSR an at least equivalent number of workers mainly coming from Central Asian Muslim countries, Uzbekistan, Tajikistan and Kyrgyzstan. The country has become a land of mass immigration. The reason for that is well known: the country's demographic decline (see above) and in particular the collapse of its male working age population. The creation of the Eurasian Economic Union promoted by the Kremlin is likely to encourage even more movement of people, and therefore, legal and illegal immigration. In 2012, a Russian demographer estimated that by 2050, 40% of the country's population would be recent immigrants.¹⁷⁵ The prevalence of racism in Russian society, which also targets populations of the Caucasian regions of the Federation, and the mafia-like behaviour of certain immigrant communities, has generated episodes of violence that have increased in both number and intensity over the past decade or so. Vladimir Putin, to his credit - although not without ulterior motives, as Caucasian gangs also provide henchmen to the power in place and the demography is more favorable in this region - advocates in favor of a tolerant Russia towards Islam, and of a more cultural than ethnic "Russianness". Yet the scenario of a Russia composed of a fifth of Muslims within a few years generates strong reactions from the majority. The country probably has 15 to 20 million Muslims inhabitants today, i.e. 10-15 percent of the population, and fertility is more dynamic in predominantly Muslim regions than in the rest of the country.

In light of this question, China's human infiltration into the Far East is undoubtedly less of a hot topic - even if it has a significant impact on the relations between the two states, particularly because of the place it holds in the Russian fantasy. Today, there are probably 100,000 to 200,000 Chinese residents in the region. It is common to compare the approximately 100 million inhabitants of the Chinese border provinces

¹⁷⁴ Ben Judah, "Russia's Migration Crisis", *Survival*, vol. 55, no. 6, December 2013-January 2014; Leonid Ragozin, "Russia Wants Immigrants the World Doesn't", *Bloomberg*, 14 March 2017.

¹⁷⁵ Quoted in Judah, *op. cit.*

to the four million Russians on the other side of the border. If we take into account the real proximity of the territory, the number of Chinese people concerned is rather 35 million (including 25 million of working age).¹⁷⁶ The idea of a “demographic pressure” that would automatically lead to an “invasion” is here confronted, as for Europe, to its limits. There is no great replacement in sight - even if the Kremlin still proves itself to be incapable of persuading the Russians to emigrate to the Far East in order to repopulate a region that has emptied itself of its nationals.¹⁷⁷

The United States, for their part, are preparing to face a similar type of challenge, yet in very different forms: the diversification of its population due to the spectacular numerical increase (fertility, immigration) of Hispanics, as well as the transformation into a so-called white American minority (according to US criteria) by 2050.¹⁷⁸ It is essentially a matter of concern for the Republican camp: Samuel P. Huntington published another book after the issue of his famous work *The Clash of Civilizations*, less noticed but with an eloquent title, *Who are we?*, and Mr. Trump's willingness to build walls all around America (even though Mexican immigration is decreasing) is another sign of this concern. If real political and cultural questions are raised by this evolution (e.g. the question of the official language - the United States does not have any today), there is one that we should neither hope nor fear: that of a transformation of the country's foreign policy. Studies conducted on this topic show that there is no significant difference between the preferences, in this area, of the Latino population and the others.¹⁷⁹

¹⁷⁶ Dragos Tîrnoveanu, “Russia, China and the Far East Question”, *The Diplomat*, 20 January 2016.

¹⁷⁷ Ilan Berman, “Russia's Fraught Demographic Future,” *The Jamestown Foundation*, 13 September 2016.

¹⁷⁸ By 2044, more than half of Americans will be from a “non-White minority” (by US standards). By 2060, Hispanics could represent 29% of the population. Sandra L. Colby & Jennifer Mr Ortman, *Projections of the Size and Composition of the US Population: 2014 to 2060*, United States Census Bureau, March 2015.

¹⁷⁹ Dina Smeltz & Craig Cafura, *Latinos Resemble Other Americans in Preferences for US Foreign Policy*, The Chicago Council on Global Affairs, 24 February 2015.

The future of military power

Are aging countries naturally weakening militarily as a result of demographic change?

The reduction of the size of the recruitment pool (the number of young people of recruitment age) has no direct effect on the size of the armies that have abandoned conscription, which is the case for the majority of developed countries¹⁸⁰.

Yet their willingness to participate in large-scale and long-term stabilization operations could weaken. Many Western armies have been reduced as budgets have been cut. Moreover, the propensity to sustain operational losses is declining - the great strategist Edward Luttwak spoke a few years ago of a “*post-heroic warfare*” for operations that are not part of the country’s defence. In addition, in a successful economy, military employment cannot compete with civilian employment, especially for specialized or technical tasks.

Even if military budgets are structurally constrained, notably under the pressure of increasing public debt, it is difficult to speak of natural eviction of military expenditure by social expenditure (notably because social expenditure often falls under a different budgetary management).¹⁸¹ Defence circles frequently lament the downward trend in the share of Gross Domestic Product allocated to the armed forces, a phenomenon that affects the majority of industrialized countries. However, it is important to bear in mind that this is essentially a consequence of the dramatic increase in GDP: in constant currency, and in proportion to national budgets, defence spending has much less decreased.

If one accepts that the United States (see above) is likely to be better able to maintain a significant military potential than European countries (budget, equipment, manpower) because of a more favorable demographic situation, the transatlantic political debate on whether or not to share the burden of defending common interests could be reignited - even if France and the United Kingdom, which are at the forefront of the European military powers, will be in a relatively favorable situation (and so will Turkey).

¹⁸⁰ Germany and Israel being notable exceptions.

¹⁸¹ With the exception of transfers made from the state budget to social budgets.

A “surplus of men”?

The very old preference for boys in some cultures has recently benefited from the increasing availability of ultrasound and modern methods of abortion, which now serve as a method of selecting a child’s sex (in addition to infanticide for girls). As a result, some regions of the world experience significant imbalances between female and male births - over 110 boys for every 100 girls. The most important are today, on the one hand, in Asia (India, China, South Korea) and, on the other hand, - though to a lesser extent - in the Caucasus region. Imbalances in Asia can reach up to 130 to 140 boys for every 100 girls. The surplus of men will be 25 million in India in 2020, 30 million in China in 2030.

In Asia, the frequent imbalance between young men and young women in favor of the former has also been assimilated, in the past, to collective violence, at least locally (Nien rebellion in China in the 19th century).¹⁸² As in the case of the youth bulges described above, belonging to an armed group is undoubtedly an escape route for young people whose access to the formation of a family unit - and the social integration process that goes with it - is more difficult. The link between gender imbalance and crime has been empirically demonstrated.¹⁸³ The way Chinese youth manage this issue has an impact on the country’s society and economy of the country: import of young women from other Asian countries (the word is not too strong, given how it is today a real market), overinvestment in real estate to be an attractive partner (hence part of the Chinese real estate bubble)...

¹⁸² Valerie Mr Hudson & Andrea Mr Boer, *Bare Branches: The Security Implications of Asia’s Surplus Male Population*, Cambridge, MIT Press, 2005.

¹⁸³ Lena Edlund et al, *Sex ratios and crime: evidence from China’s one-child policy*, IZA Discussion Paper No. 3214, Bonn, Forschungsinstitut zur Zukunft der Arbeit, December 2007.

CONCLUSION

Forecasts are intended to make you think. They are not deterministic. However, foresight suits the demographic field better than others. Overall, we know the demographic characteristics of the world in 2030.

It is not looking too good for Europe. Its geographical environment will probably remain very unstable and it will face major economic and societal challenges. The few European Union Member States that will escape the natural decline of their populations will nonetheless be deeply affected by migratory movements on the continent, in particular from Africa. The public debate on these questions will most probably be increasingly inseparable from the question of the place Islam must be given within our societies. Samuel P. Huntington's questioning of the future identity of a changing America - *Who are we?* (see *supra.*) - will undoubtedly be central for Europeans: it is thus a "Western" question.

This changing America will probably remain its main economic and military partner of choice: the United States retains more assets than its competitors, notably because of its demography. This partnership will still be necessary to restore or impose peace, including in Sub-Saharan Africa. Indeed, by 2030, this continent presents demographic trends that are structurally belligerent, or at least generate instability and political violence.

But some optimism should be shown for 2050 and beyond.

Let us first recall that the two major powers whose demographic vitality will probably be supported by a certain economic dynamism could be the United States and India - two democracies.

Beyond this, the hypothesis of what some have called "geriatric peace" is worthy of attention.¹⁸⁴

Regarding the developing world, the foreseeable lowering of the average TFR and the completion of the demographic transition in the vast majority of countries worldwide may give hope of a reduction of collective violence (the latter decreasing significantly

¹⁸⁴ Mark L. Haas, "A Geriatric Peace?" *The Future of US Power in a World of Ageing Populations*, International Security, vol. 32, no. 1, Summer 2007.

from the moment when fertility will ensure the replacement of generations).¹⁸⁵ Researchers have thus predicted a reduction of internal conflicts, particularly in Sub-Saharan Africa, by 2050.¹⁸⁶

An older world would also be one in which the risk of interstate conflict would decrease. There is a strong correlation between median age and the state of democracy: while a state whose median age is less than 25.5 years is statistically unlikely to be a liberal democracy, conversely, a population in the process of maturation tends to liberalize.¹⁸⁷ People who experience a demographic bonus see their societies become more democratic, as has been the case in Latin America (Brazil, Argentina), Asia (South Korea, Taiwan) but also sometimes in Africa (Tunisia). And it turns out that one of the few verified laws of political science is that, all other things being equal, “democracies do not wage war against each other” (see the concept of “democratic peace”). Modern and older societies could also be, as said above, less inclined to external military adventurism.

This prospect of a more peaceful international life (a “*demographic peace*”?¹⁸⁸) is only a forecast, but it is based on robust indicators.

In the very long term - around 2100 - the Earth population could stabilize at around two children per woman, all continents combined, and life expectancy at birth could reach beyond 80 years. The way Africa - again - evolves will determine the size of the world population at this time: depending on the evolution of its fertility, the world population could then, according to median projections, be 11 billion inhabitants according to the UN... or only 9 billion according to IIASA.¹⁸⁹ In short, a two billion person uncertainty.

Is the scenario of a stabilization of the population by this time reasonable? The natural convergence of TFRs around 2 children per woman, projected by the UN, seems too good not to be suspicious, and seems almost guided by a teleological

¹⁸⁵ Citing examples from Latin America, Lebanon and Algeria, researcher Gunnar Heinsohn advances: “*the warring stopped because no more warriors were being born*”. See Gunnar Heinsohn, “*Ending the West’s Proxy War Against Israel*”, *The Wall Street Journal*, 12 January 2009 ; and *ibid.*, “*Islamism and war: the demographics of rage*”, *OpenDemocracy*, 16 July 2007.

¹⁸⁶ Håvard Hegre et al, “*Predicting Armed Conflict, 2010-2050*”, *International Studies Quarterly*, December 2012.

¹⁸⁷ Richard Cincotta, “*8 Rules of Political Demography That Help Forecast Tomorrow’s World*,” *New Security Beat*, 21 June 2017.

¹⁸⁸ The expression was proposed by Neil Howe & Richard Jackson in “*Global Aging and the Crisis of the 2020s*”, *Current History*, January 2011.

¹⁸⁹ International Institute for Applied Systems Analysis.

approach.¹⁹⁰ One expert usefully recalls that “*the social sciences, taken as a whole, have not yet forged a theory capable of predicting the fertility of societies that have completed their demographic transition*”.¹⁹¹ From a very long-term perspective, the evolution of the Earth’s population is not unlike the theory of punctuated equilibrium in palaeontology (a relatively brutal passage from one equilibrium to another). How do we know that another phenomenon, still unknown, will not disturb this perspective of a “final” balance of the population? As the demographer Gilles Pison notes, this postmodern optimum is in any case a hypothetical object: it has never been observed.¹⁹²

¹⁹⁰ Danny Dorling & Stuart Gietel-Basten, *Why Demography Matters*, Cambridge, Polity Press, 2018, p. 163.

¹⁹¹ Wolfgang Lutz, “*The future of human reproduction: will birth rates recover or continue to fall?*”, *Ageing Horizons*, Vol. 16, n° 7, 2007.

¹⁹² Gilles Pison, “*Seven and a half billion humans today, how many tomorrow?*” *Marine Studies*, No. 12, June 2017, p. 21.

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FURTHER READING

- Danny Dorling & Stuart Gietel-Basten, *Why Demography Matters*, Cambridge: Polity Press, 2018
- International Organization for Migration, *World Migration Report 2018*, 2017
- United Nations, *Population Division, World Population Prospects: The 2017 Revision*, 2017
- United Nations, *Population Division, International Migration Report 2017*
- Charles S. Pearson, *On the Cusp. From Population Boom to Bust*, Oxford, Oxford University Press, 2015
- Paul Collier, *Exodus. How Migration is Changing Our World*, Oxford, Oxford University Press, 2013
- Fred Pearce, *Peoplequake. Mass Migration, Ageing Nations and the Coming Population Crash*, London, Transworld Publishers, 2010

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THERE IS NO DESIRE MORE NATURAL THAN THE DESIRE FOR KNOWLEDGE

The Demographic Challenge: Myths and Realities

The demographic challenge is at the core of all key contemporary societal issues: resources, climate, conflicts, migration, urbanization, growth, education, employment, pensions, health... On each and every one of these dimensions, demography raises fantasies, interrogations and debates.

This policy paper highlights the facts, the implications and the geopolitical consequences of the demographic evolutions that are emerging, as we go through unprecedented times in human history in terms of world population evolution.

This work provides a factual response to various interrogations: how will Africa, Europe and Asia evolve in the 21st century? Will Earth have the capacity to provide for the 11 billion inhabitants forecasted by the UN for 2100? In what ways does demography impact, both directly and indirectly, armed conflicts, geopolitical relations and transcontinental cultural dialogues?

This policy paper was written for Institut Montaigne by Bruno Tertrais, associate director of the Fondation pour la recherche stratégique (FRS).

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