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Migration. Comparing political and cultural visions

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Migration
Comparing political and cultural visions

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Executive summary
Different interpretations of migration confront themselves in the political arena. Considering two factors, necessity and acceptability, the paper identifies four stereotyped visions: the society of the walls, the society of mercy, the society of ghettos, and the society of reason. The first three share the ideological assumption that migration flows are supply determined, that they are pushed by poverty, lack of jobs, and desperation due to the lack of perspectives of a better future. The fourth vision states, based on robust empirical evidence, that migrations are determined by the structural shortage of labour that characterizes an increasing number of Developed countries, in the presence of an unlimited supply of labour in the Least developed countries. The implication of this idea is that international migrations flows of increasing size are unavoidable and indispensable to both groups of countries that should reach a political agreement to jointly manage them with mutual advantage.

An Annex -that summarize previous work of one of the author but is based on the last data and estimates released by UN DESA- provides a short, critical introduction to the concept of the demographic transition and present the statistical implications of its most relevant consequence: the demographic polarization of the plane.

JEL Classification: F22, J11, J24

Keywords: Migration; Demographic transition; Demographic polarization; Structural labour shortage; Structural excess of labour; Africa.


Introduction*

There are themes that have the power to divide and create opposing factions and that, as always happens when a debate is inspired and nurtured by ideology and passion, face each other in the total absence of logic and consistency, favoring banalities, insults and populism. Immigration is one of these.

The migration debate: clichés and theories

Very often, in talking about immigration:

1. The dimensional plans are mixed. A qualitative fact is "projected" on a quantitative level. For example, the arrival of a certain number of immigrants on a given day, in a given place, is enough to talk about a national emergency or, just to make a bit of catastrophism that always sells very well, of invasion.
2. Single events are generalized, transforming them in indisputable and general statements. So, it is enough that an immigrant commits a criminal act against a local, for migrants to become the primary source of delinquency.

However, the most serious error (that unfortunately affects both the supporters and the detractors of migration) is to analyze the problem only from the supply side, and therefore to look only to the aspirations and motivations of immigrants, to their search for a job and a better future for themselves and their families. In doing so migrants immediately become people escaping from hunger, poverty, lack of employment opportunities and who are not needed by the countries of arrival. Set in these terms, the problem becomes an ethical problem. The so-called patriots, and in any case all those ready to join the we first choir, will feel completely justified in rejecting migrants using all available means. The mercyfulls, moved by humanity and solidarity, will have to face the difficult question of how many immigrants the country can reach out in a fraternal gesture, and inevitably end up being accused to help foreigners when there are so many citizens who have the same needs and that should have precedence.¹

Migration flows are in fact the necessary and inevitable response to the growing structural shortage of labor that by now is affecting almost all developed countries and an increasing number of developing countries, in the presence of a structural excess of labor affecting the poorest countries of the world. (Bruni, 2008, 2009, 2012, 2016, 2017, 2018). The structural shortage of labor is originated by the interaction between the demographic and economic spheres and their impact respectively on the supply of labor and the demand of labor. The majority of countries in this situation are those already in the third phase of the demographic transition of the population of working age in which the dramatic decline of this fundamental variable results in an equally dramatic decline of the labor supply.² The shortage of labor can also be created or exacerbated by an expansion of labor demand structurally in excess of the growth of labor supply. While the most staggering case of this situation is represented by the Gulf countries and especially by Saudi Arabia, it has also been the case of the U.S. between 1950 and 2000 (Bruni, 2019).

This approach does therefore explain migrations from the demand side, imputing it to the structural lack of local labor supply that affects the more developed countries, in the presence of an unlimited supply of labor present in the poorest countries of the world. The implication is that

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³ This paper is the revised version of a previous article in Italian (Bruni, Catani, 2017)

¹ To avoid their support to immigrants be linked only to ethical reasons, the mercyfulls recall the economic benefits that migrants provide to the economic and welfare system of arrival countries (see e.g. Dustmann, Frattini, 2014; Dustmann, Frattini, Preston, 2013).

² In some EU countries, Germany in primis, this phenomenon has been going for at least 30 years (Bruni, 2017).
immigration is not an option, but a necessity for both groups of countries: for the countries facing a structural shortage of labor immigration is necessary to continue along the path of economic growth and social development; for the countries facing a structural excess of labour to avoid mass unemployment, poverty, famine, epidemics and social unrest.

**Four visions of migration**

The scheme below tries to summarize the terms of the migration debate that is dominating the political arena of developed countries on the basis of two binomial variables: on the vertical axis, the judgment on the socio-political acceptability of the phenomenon, on the horizontal axis the technical evaluation of its necessity. The result is represented by four stylized societies: the society of walls, the society of ghettos, the society of mercy, the society of reason.

<table>
<thead>
<tr>
<th>Immigration</th>
<th>Not needed</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not acceptable</td>
<td>The society of the walls</td>
<td>The society of the ghettos</td>
</tr>
<tr>
<td>Acceptable</td>
<td>The society of mercy</td>
<td>The society of reason</td>
</tr>
</tbody>
</table>

1. **The society of walls** - Immigrants not only are not needed, but are bearers of values, ideologies and religious beliefs that undermine the cultural identity of arrival countries, not to mention that they bring violence and crime with them. Our world, and our culture are under siege and therefore we must take all necessary measures, even the most extreme, to defend ourselves. The walls, the soldiers at the border, the ships that patrol the sea are the natural outcome of this position.

2. **The society of the ghettos** - Unfortunately migrants are needed to take those jobs that the local young people refuse, because they are too qualified while the economic situation of their family allows them to wait for the "right" job. Migration is inevitable, but immigrants must be kept in place not only through effective legal controls, but also resorting to resolute police interventions, included the deployment of the army and the navy to patrol the borders and prevent illegal arrivals.

3. **The society of mercy** - We can do without migrants, but you cannot close the door in the face of those who ask for help. Furthermore, immigrants provide a significant contribution to production. We must help them not only because we should be compassionate, but also because they help us.

4. **The society of reason** - We must accept the fact that we have a structural shortage of labor that only immigrants can fill. The only rational attitude is: i) to correctly assess the quantitative and qualitative need of foreign labor ii) to organize and finance, together with the potential countries of departure and international organizations like IOM and UNESCO, the necessary training processes allowing potential migrants to acquire the skills needed by arrival countries, but helpful also to the country of origin; iii) organize the transfer and placement of the migrants and their family in an orderly and humane way (Bruni, 2017). The best defense against irregular immigration is regular migration, in the amount necessary to fill the structural labor shortage, so reducing the likelihood of finding a regular job for those arriving through other channels.

The first two narratives, which exert an undoubted fascination on vast segments of the population, share the idea that migrants are motivated only by their personal interest, that we do not need
them or at most we need them only for specific occupations. The first is shouted by right wing parties, but also by an increasingly larger area, not clearly ideologically identified, that of the frightened. The second is the thesis of many governments. The first invokes the most drastic measures in the name of self-defense. The second demands domestic and international legislation to raise fixed and mobile barriers to stop the invasion, to distinguish between refugees and economic migrants, without disdaining to pay money to entrust unpresentable or even non-existing governments with the control and management of the problem. These visions not only are wrong, but dangerous for the social cohesion of a country because they lead to a society based on hatred and fear.

Probably even more dangerous is the third vision -shared by moderate Catholics and secular and progressive leftists- because it is draped in good intentions. According to this thesis, we could do without migrants (except the few needed in some occupations), but they are useful inasmuch as they contribute to production and pay for our welfare. The data brought to support this thesis prove the "extremists" wrong. However, this approach can lead to a society based on a "liquid cohabitation" (Bauman, 2003) that will lasts only until it is convenient¹, a society in which people are divided into two categories (as in the worst dystopias of the twentieth century): those that do good deeds and those who receive them. In a society of this type, a group risks being marginalized or expelled when is no longer needed, or no longer "convenient"; therefore, immigration is an event to be accepted until it brings advantages, or the citizens grow weary of being tolerant.

All previous visions share the premise that immigrants are desperate people fleeing poverty, war and natural disasters and therefore are a problem of national security. The alternative thesis is that migrations⁴ are the result of the "irresistible attraction" generated by the structural shortage of labor that affects the countries more advanced along the path of the demographic transition, in the presence of an unlimited supply of labor in the countries at the beginning of the demographic transition⁵.

International migration is the response of the global labour market to the labour needs of an increasing number of national labor markets, including, quite surprisingly, also China (Bruni, 2013, 2014, 2016). To be clear, this thesis does not state that migrations are useful or necessary, but that they are indispensable. Therefore, the only sensible and rational attitude is to concentrate on their management, on how to minimize the inevitable problems and social costs that migration flows entail and maximize their benefits. To do this potential arrival countries should:

- produce and regularly update forecasts (scenarios), as precise as possible, of their future quantitative and qualitative needs of foreign labor;
- identify countries characterized by a structural excess of labor supply with which they would be willing to organize migrations flows coherent with their needs;
- finance education and vocational training in potential departure countries to produce a labour supply in line with their needs, but that could also promote local economic development;
- organize, together with departure countries, correct and humane migration and labour market placement procedures.

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¹ The statement refers to the book “Liquid love. On the Frailty of Human Bonds” (2003). For Bauman, liquid love is what characterizes man without ties shaped by liquid modernity or by a society characterized by a changeable and unstable state of every form or organization (precarious work and unstable family). In this society, even the experience of love is similar to that of other goods. Affection and relationship are therefore treated as any other good so that if they do not provide immediate and effortless satisfaction are not “purchased”.

⁴ Internal migrations have the same explanation and play the same role (Bruni, 2008).

⁵ The shortage of labor is structural when cannot be solved, even in the long run, by increasing productivity and labor market participation, and by delocalizing production (Bruni, 2017).
This approach has also an important socio-political implication: it would allow to build a pact of social coexistence between arrival and departure countries based on the understanding that migrations flows are useful to both of them since they simultaneously satisfy the need of labor of the former and provide jobs to the citizens of the latter.

**Demographic transition and demographic polarization**

A large and increasing number of countries is affected by a structural lack of labour (Bruni, 2017) mainly but not only due to the progress of the demographic transition (see Annex). The demographic transition began in some European countries at the end of the eighteenth century and has progressively affected all the countries of the world, following the spread of economic and social development. The poorest countries have been reached only in recent years.

All the countries affected by the demographic transition follow the same path that we can divide into three phases. In the first, the population rejuvenates, and the percentage of young people grows up to reach, in some cases, 50 percent. In the second, the working age population increases to almost 3/4 of the total population, a situation that gives rise to the so-called demographic dividend. Finally, the third is the ageing phase that a present is affecting the great majority of developed countries⁶.

Up to now, the demographic transition has had the most significant impact on the countries that have been "hit" first and that have already reached the third phase; they are by now characterized by a decline of the population in working age and an increasing weight of the elderly. During this century the DT will have devastating effects also on the countries at the beginning of the DT; they will register a dramatic explosion of working age population. Therefore, our planet is entering a new unprecedented demographic phase dominated by two opposite trends that will have dramatic social, economic and political consequences.

According to the last demographic forecast (UN DESA, 2019) in around 50 years the working-age population of the planet will level off. An interesting implication is that the world economy will no longer need to create additional jobs to keep the world employment rate constant. Unfortunately, this otherwise favorable situation for our environment will be the result of two opposite demographic trends. On the one hand, an increasing number of countries, the most developed and richest, will be affected by a sharp decline of their WAP, while a decreasing number, the least developed and poorest, almost all located in Africa, will register unprecedented growth of their WAP. These trends will be so pronounced that, in the absence of migrations, the countries of the first group will have their own economic sustainability deeply impaired, while those of the second group will be affected by unemployment, and poverty of such dimension to cause famine, epidemics and socio-political unrest that could put the premise even for large scale wars.

**Policy implications**

The demographic polarization of the planet puts the premise for an economic, social and political pact between the two groups of countries, based on the recognition of the dramatic situation that awaits both rich and poor, developed and underdeveloped countries, and the fact that the symmetry and contemporaneity of the phenomenon contains in itself the solution of the problem⁷.

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⁶ The percentage of elderly increases not only because the number of elderly increases, but also because in this phase the number of people in working age declines and the young normally does not increase substantially.

⁷ Replacing the model proposed here to the mechanical hypotheses on the migratory balance used by the United Nations Population Division and by the other statistical institutes dealing with demographic projections (including ISTAT) leads to support, contrary to what prevailed by the prevailing thesis, that the decline of birth rate determines an increase in both the working age population and the total population, while the resulting migratory balances also
International mass migrations are and will be the unavoidable response of the global labor market to the labor needs of developed countries, as it is clearly shown by the fact that international migration flows have been steadily increasing in parallel with the number of countries in the third phase of the demographic transition of WAP and their structural shortage of labor (Bruni, 2013, 2014, 2016).

**Migrations are not useful, they are not necessary, they are indispensable.**

Therefore, the only sensible and rational attitude of the countries with a structural shortage of labor is to concentrate on the management of migration flows, on how to minimize the inevitable problems and the social and political costs that they entail, and maximize their benefits in terms of making them coherent with quantitative and qualitative needs of their labor market.

This is not the place to discuss the enormous obstacles that stands in the way of this proposal, which can appear utopian in the light of the political trends emerging in so many countries of the first group, starting with the United States, France, Germany, Italy, Hungary, Austria, just to cite the largest ones. One could even argue that these racist and identitarian tendencies are the result of a confused, but basically correct perception of the trends we have just described and the reaction to its only possible solution: mass migration.

No matter what are the reason of the global spreading of nativist attitudes, the only relevant question is: should we put up with mass migrations of unprecedented dimension taking place in an uncontrolled way (or better leaving the mafias of the worlds making a huge business out of them) and silently witness the horrible consequences of this approach, or should we manage them in a rational and humane way in the interest not of a single country, but of humanity?

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8 According to an increasing body of anthropological analyses and evidences, racism, and more generally the fear of the “others”, stems from deep evolutionary roots and by now is innate in the human nature which explains its pervasiveness and presence in every country and ethnic groups.
ANNEX 1

Some notes on demographic transition and demographic polarization

Introduction
It is by now widely accepted that global warming represents a terrible menace for humanity so that, despite the opposition of numerous and powerful lobbies, some measures have been agreed upon and begin to be enacted by numerous countries, while public awareness is increasing. The demographic transition and the ensuing demographic polarization could have even more dramatic consequences, but for the moment they have attracted very little attention not only from the politicians, but also from the academic world.

The demographic transition
According to the standard narrative, the demographic transition is defined as the process that brings a population from a traditional demographic regime, characterized by high rates of fertility and mortality, to a modern demographic regime, characterized by low rates of fertility and mortality. It is also generally assumed that at the beginning and at the end of the demographic transition total population is substantially stable.

This vision, that often carries positive overtones, hides a very complex process that has and will have dramatic consequences not only in the single affected countries, but also for the whole planet. Empirical evidence shows that all the countries affected by the demographic transition follow the same demographic path, going through three consecutive phases

1. A first phase in which total population increases at an increasing rate
2. A second phase in which total population increases at a declining rate
3. A third phase in which total population declines.

All sub-populations and more specifically the young, the working age population and the elderly follow the same path and exhibit the same phases in the same order. Therefore, the demographic transition determines not only a well-defined evolution pattern of the total population, but also, and even more dramatically, of its age structure (See Table A1).

More specifically:

1. In the first phase, the death rate declines mainly due to, the decline in infant and child mortality, while the birth rate remains at the original level; therefore, total population increases at an increasing rate, while the share of the young increases;
2. In the second phase the birth rate starts to decline, progressively converging toward the death rate; therefore, total population continues to increase, but at a decreasing rate; due to the arrival of cohorts of increasing size, the share of working age

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9 The speed with which the process takes place varies notably from country to country, depending on the economic, social, political and cultural characteristics.
10 This is because the decline of the children mortality allows a high and increasing number of boys and girls to reach the reproduction stage in a situation in which the birth rate is still at the “traditional” level.
population increases, while the share of young declines; it is at the end of this phase that the ageing process starts;
3. The third phase begins when the birth rate falls below the death rate; population declines, while the ageing process takes momentum; the share of the elderly increases, those of working age population and of the young decline.

Table A1 - The phases of the demographic transition

<table>
<thead>
<tr>
<th></th>
<th>First phase</th>
<th>Second phase</th>
<th>Third phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death rate</td>
<td>Declines rapidly</td>
<td>Declines</td>
<td>Increases</td>
</tr>
<tr>
<td>Birth rate</td>
<td>Remains constant</td>
<td>Declines and converge toward the mortality rate</td>
<td>Not defined</td>
</tr>
<tr>
<td>Natural rate of growth</td>
<td>Increases</td>
<td>Declines</td>
<td>Becomes negative</td>
</tr>
<tr>
<td>Share of young people</td>
<td>Increases</td>
<td>Declines</td>
<td>Not defined</td>
</tr>
<tr>
<td>Share of WAP</td>
<td>Declines</td>
<td>Increases</td>
<td>Declines</td>
</tr>
<tr>
<td>Share of elderly</td>
<td>Declines</td>
<td>Start to increase at the end of the phase</td>
<td>Increases</td>
</tr>
</tbody>
</table>

The demographic transition at the planet level
To have a comprehensive vision of the demographic transition, we can analyze its development and main phases at the planet level\(^{11}\).

The yearly rate of growth of total population increased to the second half of the 1960\(^{12}\), when it reached a maximum of 2.1%; since then it has progressively declined to a present value of 1.3% and is projected to half by 2050s and go to zero by the end of the century (Figure 1A)\(^{13}\). The highest average absolute increase was reached in 2005-10 with 93 million. It has then started to decline and is expected to go down to 50 million by 2050 (a value just a little higher than that registered in 1950) and to around 4 million at the end of the XXI century (Figure 1B).

Figure A1 - Total population and working age population; yearly average growth from 1950 to 2100

A - percentage growth  

B - absolute growth

Source: Elaborations on UN DESA data; UN DESA, 2019

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\(^{11}\) The data for the planet discounts the different timing in which the DT has taken and is taking place in different countries but offer the advantage of being only marginally affected by migrations. Therefore, although the yearly changes are less pronounced, they show the general pattern of the DT.

\(^{12}\) If as I have suggested in previous papers the world is going to witness migrations of unprecedented size, the birth rates will fall faster than presently envisaged bringing to a decline of total population before the end of the century.

\(^{13}\)The data for the period 2020- 2100 come from the zero-migration scenario (UN DESA, 2019).
The same evolution pattern is exhibited by WAP, whose yearly average rate of growth increased till 1980-85 when it reached a maximum of 2.4%; the following decline has been faster than that of total population, so that the rate of growth of working age population at present is 1% and is forecast to be 0.3% by 2050 and nil by 2085 (Figure 1A).

The absolute increase of WAP reached its maximum in 1985-90, with 63 million; it is now down to 49 million; it is projected to be around 20 million in 2050 and slightly negative at the end of the century (Figure 1B).

The evolution of the age structure confirms that the first phase of the DT was completed in 1965 when the percentage of young people peaked at 37.9%, while the second phase was completed in 2010 when the share of WAP reached a maximum of 67.7% and the proportion of elderly began to climb at a pronounced pace; the percentage of the elderly will continue to grow for the rest of the century, becoming bigger than that of the young around 2070 and reaching almost 23% by 2100 (Figure A2).

**Figure A2 - The planet; percentage composition of total population by main age group; 1950-2100**

Source: Elaborations on UN DESA data; UN DESA, 2019

The previous data documents how the demographic transition is bringing the world population from less than one billion at the beginning of the XIX century to almost 11 billion at the end of the XXI century and then, hopefully, to a decline in the following century. They do also clearly show that the demographic transition is not, as heralded for long time by demographers, the passage from an situation of equilibrium to another situation of equilibrium, but a transition between two different types of disorders and inefficiency. It must also be underlined that the probable demographic decline that will take place in not too far a future (at least in a demographic perspective) will not be as in the past the consequence of famine, diseases, natural disasters and wars, that is of the incapacity of men to control “natural” phenomena and its own nature, but of his capacity to control his reproductive mechanisms (Bruni, 2008).

**The demographic polarization**

The demographic transition began in some northern European countries at the end of the eighteenth century and has progressively affected all the countries of the world, following the
spread of economic and social development, while the poorest countries have been reached only in recent years.

The trend of the total fertility rate, which measures the average number of children per woman, illustrates very clearly how the demographic transition has been spreading along with socioeconomic development and provides strong evidence that the process is irreversible.

In 1950-55 the total fertility rate for the whole planet was equal to 5; after 30 years it was down to 3.6 and by now is 2.5: it is projected to be just above replacement level\(^\text{14}\) by 2050 (Table A2). In 1950, the spread was already quite high: the total fertility rate being 6.5 in least developed countries and 2.8 in developed countries. Considering the continents, the highest value was registered in Africa (6.6), the lowest in Europe (2.7). By 1980-85 the Total fertility rate of the Developed countries was already below replacement level; it had declined to 3.9 in the Less developed countries, but had not changed in the poorest countries of the planet. We can also observe that it had declined quite substantially not only in Northern America and Europe, but also in Asia and Latin America, but not in Africa. The intercontinental spread had therefore increased from 3.7 to 4.7 percentage points. In the following 30 years the decline of fertility became more pronounced, with Latin America reaching the replacement level, and Asia and Oceania registering values very close to replacement level, and Africa beginning to register some decline. The forecast is that by 2050 Africa will be the only continent registering a Total fertility level above replacement.

Table A2 – Total fertility rate by region and continent; 1950-55 – 2050-55

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MDR</td>
<td>2.8</td>
<td>1.8</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>LDR</td>
<td>6.0</td>
<td>3.9</td>
<td>2.4</td>
<td>2.0</td>
</tr>
<tr>
<td>LSTR</td>
<td>6.5</td>
<td>6.5</td>
<td>4.3</td>
<td>2.7</td>
</tr>
<tr>
<td>WORLD</td>
<td>5.0</td>
<td>3.6</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Max - Min</td>
<td>3.7</td>
<td>4.7</td>
<td>2.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Africa</td>
<td>6.6</td>
<td>6.5</td>
<td>4.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Latin America</td>
<td>5.8</td>
<td>3.9</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Asia</td>
<td>5.8</td>
<td>3.7</td>
<td>2.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Oceania</td>
<td>3.9</td>
<td>2.6</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Northern America</td>
<td>3.3</td>
<td>1.8</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Europe</td>
<td>2.7</td>
<td>1.9</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Max - Min</td>
<td>3.9</td>
<td>4.6</td>
<td>3.1</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Elaborations on UN DESA data; UN DESA, 2019

National data covering 201 countries provides additional relevant evidence of the decline of the total fertility rate across the world (Table 3). In 1950-55, the countries with a total fertility rate below replacement level were only 4; their number had increased to 40 in 1980-85 and to 80 in 2010-15. They are projected to be 137 in 2050-55 and 162 in 2080-85\(^\text{15}\).

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\(^{14}\) A population is stable when, on the average, every woman (or every man) has two children: one will substitute the father, the other the mother.

\(^{15}\) Of the 39 countries that will still have total fertility rate above replacement level, 35 will be African countries, the other four being Tajikistan, Samoa, Vanuatu, and Kiribati.
The countries that were "hit" first by the demographic transition were also the first to register a decline of the people in working age. The progress of the demographic transition will progressively increase their number so that working age population will decline in an increasing number of countries. At the same time, working age population will explode in a small number of countries that will reach the second phase of the Demographic transition. The conclusion: our planet is entering a new unprecedented demographic phase dominated by two opposite demographic trends that will have deep social, economic and political consequences.

In around 60 years the working age population of the planet will level off\(^\text{16}\) so that the world economy will no longer need to create additional jobs to keep the world employment rate constant. This would be a very positive outcome if the world were a village, providing equal labour market opportunities to everybody. Unfortunately, this is not the case since the stability of the global working age population will be the result of two opposite situations and structural tendencies. In absence of mass migration, the more developed countries will be affected by a deep decline of working age population, while the poorest ones will be affected by an unprecedented increase of working age population; therefore, everything else constant, the first group of countries will be affected by a structural shortage of labour, the second by a structural excess of labour. These phenomena will be so pronounced that the countries of the first group will not be able to continue along their path of economic growth in spite of rapid technological progress, while those of the second group will be affected by such lack of jobs opportunities that skyrocketing unemployment and poverty will end up causing famine, epidemics, social and political unrest.

Between 2015 and 2020, WAP is already declining in 56 countries; in 40 years, in absence of migrations, the number will increase to 92 and the phenomenon will spread to Asia and Latin America (Table A3).

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\(^{16}\) We have already argued that working age population goes through a demographic transition similar to that of total population. The transition of working age population does, however, present some specific characteristics: it starts after that of total population, it proceeds at a faster pace and reaches the third final phase, that of decline, before total population. In the second place, its changes are more pronounced.
Table A3 - Countries with declining WAP by continent and region; total number and percentage composition; 2015-2020, 2050-55, and 2080-85

<table>
<thead>
<tr>
<th>N. Countries</th>
<th>Declining WAP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015-20</td>
<td>2050-55</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percentage composition</td>
</tr>
<tr>
<td>Africa</td>
<td>57</td>
<td>0.0</td>
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<tr>
<td>Asia</td>
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<td>10</td>
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<tr>
<td>Europe</td>
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<tr>
<td>NWC</td>
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<td>2</td>
</tr>
<tr>
<td>Latin America</td>
<td>38</td>
<td>6</td>
</tr>
<tr>
<td>Oceania</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: Elaborations on UN DESA data; UN DESA, 2017

Table A4 reports the trend of working age population for the whole planet and for the relevant geographical regions for the period up to 2085 when, according to the last estimates of UN DESA, working age population is projected to peak, divided into two periods of 35 years.

From 2015 to 2085 working age population is expected to increase by almost 1.8 billion, from 4.841 to 6,527 million. As we already know, the absolute and percentage growth of working age population are projected to progressively decline, so working age population will increase by 1.298 million in the first 35 years and by only 387 million in the following 35.

Table A4 - Working age population; absolute values by continent in 2015 and 2055; sum of countries positive balances, negative balances, and total balances by continent for the period 2015-2055; values in million

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Absolute value</td>
<td>Absolute change</td>
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<td>961</td>
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<td>3,051</td>
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<tr>
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<td>2,309</td>
<td>667</td>
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<td>651</td>
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<td>-197</td>
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<tr>
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<td>-111</td>
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<tr>
<td>New world countries</td>
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<td>-37</td>
<td>-51</td>
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<tr>
<td>Latin America</td>
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<td>493</td>
<td>423</td>
<td>77</td>
<td>-70</td>
<td>7</td>
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<tr>
<td>Oceania</td>
<td>7</td>
<td>13</td>
<td>17</td>
<td>6</td>
<td>4</td>
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<tr>
<td>World</td>
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<td>6,140</td>
<td>6,527</td>
<td>1,298</td>
<td>387</td>
<td>1,686</td>
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<td>-357</td>
<td>-351</td>
<td>-708</td>
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<tr>
<td></td>
<td>18,415</td>
<td>1,655</td>
<td>738</td>
<td>2,393</td>
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Percentage composition | Percentage change

<table>
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<tbody>
<tr>
<td>Africa</td>
<td>13.6</td>
<td>27.6</td>
<td>38.6</td>
<td>138.0</td>
<td>61.6</td>
<td>284.5</td>
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<tr>
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<td>46.7</td>
<td>14.5</td>
<td>-11.5</td>
<td>1.3</td>
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<tr>
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<td>37.2</td>
<td>39.8</td>
<td>35.4</td>
<td>37.1</td>
<td>-6.4</td>
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<td>China</td>
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<td>12.8</td>
<td>10.0</td>
<td>-17.0</td>
<td>-23.3</td>
<td>-36.3</td>
</tr>
<tr>
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<td>2.0</td>
<td>1.4</td>
<td>-30.4</td>
<td>-31.8</td>
<td>-52.5</td>
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<td>5.9</td>
<td>4.7</td>
<td>-22.4</td>
<td>-19.3</td>
<td>-37.4</td>
</tr>
<tr>
<td>New world countries</td>
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<td>3.8</td>
<td>3.1</td>
<td>-5.5</td>
<td>-15.3</td>
<td>-20.0</td>
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<tr>
<td>Latin America</td>
<td>8.6</td>
<td>7.9</td>
<td>6.5</td>
<td>18.6</td>
<td>-14.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Oceania</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>82.6</td>
<td>33.3</td>
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<td>World</td>
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<td>100.0</td>
<td>100.0</td>
<td>26.8</td>
<td>6.3</td>
<td>34.8</td>
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</tbody>
</table>

Source: Elaborations on UN DESA data; UN DESA, 2019
In both periods the increase of working age population is the balance of positive and negative changes taking place in different regions of the planet. In the first, the yearly increase of 38 million is the result of positive contributions of 47 million coming from Africa (26 million), a section of Asia (19 million) and Latin America (2 million), and a negative contribution of 10 million accounted for by China (in the large mainland definition), Japan, Korea, Thailand, and Singapore, Europe and North America.

In the second period the working age population of the planet will continue to increase, but at a lower rate of 11 million per year. Again, this will be the balance of positive and negative contributions, but in this phase the only positive contribution will come from Africa whose working age population is projected to continue to increase at an even faster rate than in the previous period (27.5 million per year); in all other areas working age population will decline (Asia -12 million, almost half of it in China), Europe and North America - 3.2 million, Latin America -2 million).

**Figure A4 – Working age populations; average yearly change in million by geographical region; 2015-2050 and 2050-2085; values in million**

Source: Elaborations on UN DESA data; UN DESA, 2019

In absence of migration these trends will bring to a very different distribution of the working age population of the planet.

In 2015 the working age population of Africa amounted to 656 million, 13.6% of the working age population of the planet. In absence of migration, the population of Africa is projected to increase to 1,712 million in 2055 and 2,052 million in 2085, representing respectively 27.6 per cent and 38.6 per cent of the world total.

Over the same time interval, the share of Europe is projected to decline by 185 million and its planet share to decline from 10.2 per cent to 4.7 per cent; that of the New World Countries (U.S., Canada, Australia and New Zealand combined) will decline by “only” 50 million but its planet share will become marginal (3.1 per cent). Quite surprisingly also China will exhibit the same trend, its working age population declining by 371 million and its share by more than half (from 21.1 per cent to 10 per cent). The same is projected to happen to other South East Asian countries (Japan, Korea, Singapore, Thailand, Singapore) that together will lose 100 million people in working age (around 60 per cent of the initial value). Finally, the working age population of Latin America will increase in the first period and decline in the second of almost the same amount so that in 2085 its working age population will be almost the same, but its world share will decline to 6.5%, a value larger than those of Europe and NWC.
Figure A5 – Working age populations; percentage distribution by geographical region; 2015-and 2085 and change

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2085</th>
<th>Diff.</th>
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<tbody>
<tr>
<td>Africa</td>
<td>13.6</td>
<td>38.6</td>
<td>25.0</td>
</tr>
<tr>
<td>Asia</td>
<td>62.2</td>
<td>46.7</td>
<td>-15.5</td>
</tr>
<tr>
<td>Europe+NA</td>
<td>15.5</td>
<td>7.8</td>
<td>-7.7</td>
</tr>
<tr>
<td>Latin America</td>
<td>8.6</td>
<td>6.5</td>
<td>-2.1</td>
</tr>
</tbody>
</table>

Source: Elaborations on UN DESA data; UN DESA, 2019

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Fondazione Leone Moressa

United Nations Population Division of the Department of Economic and Social Affairs