







# MAKING MIGRATION WORK FOR DEVELOPMENT (MMWD)

Policy tools for strategic planning in SEE regions and cities

**Policy Scenarios for Emilia-Romagna** 

**Country: ITALY** 

Territory (territorial level): EMILIA-ROMAGNA (NUTS2)

**MMWD Partner: REGIONE EMILIA-ROMAGNA** 







#### **Section 1: Introduction**

Emilia-Romagna is one of the most competitive and developed regions in Italy, with average level of wealth significantly higher than the national average. The recent economic recession heavily hit the regional economic structure, emphasizing the impact of pre existing structural weakness.

In this context the main objectives for the 2014-2020 programming period are growth (smart, sustainable and inclusive in line with Europe 2020 strategy) and jobs. The priorities set by the regional strategic framework have been assumed as reference trajectories for scenario building

REGIONAL STRATEGIC FRAMEWORK 2014-20 PRIORITIES	TARGET EU 2020	TARGET IT
	Early leavers rate <10%	< 15%/16%
To enhance intellectual capital raising stock and quality of regional human capital	40% of people 30-34 with tertiary degree	26%/27%
To favour innovation, diversification and	75% of people 20-64 employed	67%/69%
entrepreneurship capacity of regional productive system, towards activities, sectors and fields with high growth potential	R&D investments >3% of GDP	1.53%
To maintain a high quality of environment, cultural heritage and infrastructures	20/20/20 energy	
Social cohesion: not only attention to poverty and exclusion but also the idea that functioning of adequate social networks is crucial for the efficacy of regional development policies	-20 mln of people at risk of poverty and social exclusion	-2.2 mln

The overall objective of scenarios is to describe the impact of demographic change on the development paths of Emilia-Romagna up to 2020 investigating the implications of demographic change in three policy realms: labour market, human capital and welfare.

Scenarios have been developed starting from a combination of demographic hypotheses with macro-economic ones. Specifically, starting from demographic projections produced within MMDW (both basic and derived projections) two possible trajectories have chosen:





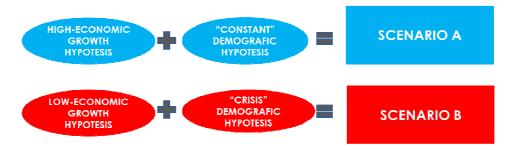


A "constant" trajectory, which is based on the trends of the last ten years

A "crisis" trajectory, which is based on the trends of the 2009-2012 period.

They have been combined with two macro-economic hypotheses (low economic growth in line with regional strategic framework projection, and higher economic growth) derived with a bridge model from national accounts forecasts. The figure below highlight the concrete combination.

Figure 1.1 – Scenario A and B diagram



The output indicators that are projected in the different scenarios, therefore, will reflect the combined effects of the demographic and economic components.

Different models are used to define the quantitative relationships between input and output variables, depending on the policy area and on data availability:

- a) LABOUR MARKET: estimation of an econometric model (multinomial logit regression model which estimates the individual probability of being in a given status within the labour market as a function of explanatory variables: individual socio-economic characteristics and macroeconomic variables);
- b) SOCIAL NEEDS and HUMAN CAPITAL: cohort component projections and/or quantitative relationship to input variables and economic/demographic scenario variables.

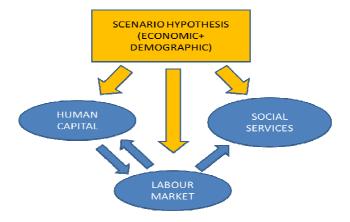
Linkages among policy fields are taken into account with specific indicators which are at the same time an output of foresight and input in foresight model in another policy field. For example, future population by level of education is both an output indicator of the human capital policy field and an input variable for the estimation of the econometric model of the labour market; female employment rate is an output of the econometric model of the labour market, but also an input for the estimation of future welfare needs.

Figure 1.2 - Linkages between policy fields









The analytical path used to select key indicators for the three policy areas originated from the panel of indicators defined within MMWD project (activity 3.2) in the light of the Europe 2020 strategy indicators and targets, the linkage with expected demographic changes, the concrete data availability.

After this short introduction to approach and methodology employed, the report is structured a follow: next session summarise demographic trends, the following depicts scenario outcomes in the three policy realms (labour market, human capital, welfare and social needs), the last one conclude with a focus on two target of population: youth and elderly. When it is not specified figures refer to scenario B which is more in line with macroeconomic forecasting developed for 2014-2020 programming period by Regione Emilia-Romagna.







# **Section 2: Demographic Projections**

The development of population projections and projection methodologies increasingly sophisticated, which Emilia-Romagna Region now has a thirty-year tradition, goes precisely in the direction of increasing knowledge about demographic phenomena and possible evolutionary paths of the future: the Statistical Service, the bearer of this experience, he has been involved from the early stages of 'construction' of the project actions. The projection instrument adopted within the project takes the approach already used in the Emilia -Romagna region and allows to distinguish the evolution of the population taking account of inflows and outflows, both in terms of age structure and sex, both in terms of destinations ( the rest of Italy or abroad), both in terms of Italian or foreign citizenship. These results incorporate the latest trends and the different structure of the population by age and sex of origin and constitute an update of the latest population projections prepared by the Statistical Service in 2011 on trends up to 2010. Projection methodology in use has been expanded to ' interior of the project both in terms of expansion of the reflections on the types families spread among the foreign population, both derived from the novel construction of projections on the level of education of the population (the information base consists of the continuous measurements of the labor force). The family as a social structure and human capital expressed by the population become new points of reflection with respect to the impact of the increasing heterogeneity of regional population.

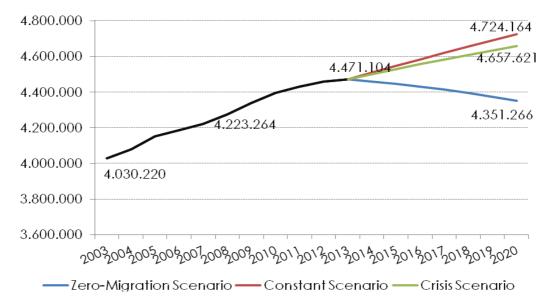
The methodological approach is described in detail in previous outputs of the project. It is sufficient here to recall that population projections were developed in 3 different scenarios: one scenario based on demographic behavior observed during the last decade, the second one based on 2009-2012 records in order to isolate the impact of economic crisis, and a third one based on assumption of closed population de designed to detect the specific effects of migration flows. Evidence below when not specified differently refer to crisis scenario.

Figure 2.1 – Total resident population and projections under three scenario hypotheses









Source: processed by Nomisma based on data from Emilia-Romagna Region and Istat

At the beginning of 2013, the regional population numbered 4,471,104 people, of whom 547 552 citizenship not

Italian. This is an increase of over 10% compared to just ten years ago, almost entirely due to

foreign nationals increased by over 234% in the same period (compared with a 0.7% of Italians). the

projections for 2020 estimate a further increase of the total population of 4.17% in scenario less

#### favorable.

The incidence of non-Italian residents in the total population of the region has increased from 4% in 2003 to

12.2% in 2013. Constant MMWD The scenario assumes that the impact will exceed 17.2% in 2020, including 7 years,

garnering nearly 800,000 Emilia-Romagna with foreign citizenship (with the same course of rules for the acquisition of citizenship).

The breakdown by age group allows you to obtain additional information of great importance both in terms

evolution of the overall population, both with respect to the contribution of the foreign component and reflections







on the structural characteristics of the regional community in the near future. The prediction is that by the year

2020 nearly a third of the Italian population will be over 65 years (27% versus 4% of foreign nationals) and

that there will be nearly 38 thousand more great old (75 + years). 2020, meanwhile, more than 60% of residents

foreigners will have less than 40 years (compared with 34% of Italians), with an expected incidence in this age group

around 27%, the youngest member of the working population will be more than a quarter from costituta

people of non-Italian citizenship.

**GRAFICO** 

A second dynamic relates to the significant structural change in the process of population growth.

In fact, if demographic projections confirm that the foreign population will continue to increase by

2020, this growth will not be sustained by immigration from abroad, as it has been in the recent past,

but more and more by the increased number of foreign-born in Emilia-Romagna. Already in 2011 infants born to

foreign parents were nearly 10,000 total births for an incidence of 23.8%: one in every four births.

To these are added a further 6.8% of births from mixed pairs, for a total of more than 30% of newborns with

at least one foreign parent. By 2020 it could reach about 40% of babies born with at least one parent

and 33% of foreign-born with two foreign parents: one every three births will have a relationship with other areas

the world.

Flows Italian: increase in the Emilia-Romagna region who choose to emigrate

At the same time, the trend of migration flows indicates an additional element of novelty that is







strengthening in the years of recession (2011-2013): Increases the number of emigrants emilianoromagnoli,

so much so that in 2012 the net migration of Italians is negative.

Tabella 1 – Saldi migratori interno ed estero 2003 e 2012

2003	interno	estero	totale per migrazione	totali con rettifiche
italiani	16.169	447	16.616	20.254
stranieri	3.989	40.514	44.503	42.445
totale	20.158	40.961	61.119	62.699
2012	interno	estero	totale per migrazione	totali con rettifiche
italiani	7.516	-2.950	4.566	12.781
stranieri	452	26.669	27.121	20.254
totale	7.968	23.719	31.687	33.035

The structure of families to 2020: change and impact the families of foreigners

The reading of the demographic changes and the effects in terms of social organization goes, as anticipated, also through the way in which individuals form and transform families. The increase in the number of elderly people, which will cover almost exclusively the population of Italian citizenship can be read in relation to the Italian family structures, that evolve in a different way than those of foreigners. Structuring families of considerable importance in the social sphere, not least for its function and support that creates around its members and that this was reflected in terms of social welfare services.

Although the short time horizon of the projection can not by itself detect major structural changes in demographic terms that require decades to make obvious their effects , however, it is possible to detect the continuation of some trends already underway. Among these , the increase in single person households for both Italians and foreigners (Table 1) , although for the first while it is mainly older people , for foreigners it is mainly young adults, and the slow trend reduction of couples with children is necessarily accompanied by the expected decrease in births , especially by Italian couples . The distribution of households with reference to a foreign person would think of a familiar pattern in which the couple will be associated with the birth of children: less than 8 % of households with a reference person living in a foreign couple without children compared to about 26 % of households headed by Italian .

We must instead still further analysis and reflection on another important demographic and social transformation , represented by profound change in family networks . A large number of people living alone , a strong prevalence of families with one or two children than most numerous type , a significant proportion of single-parent households . Based on







the only piece of personal data family networks are decidedly shorter than in the recent past . The demographic scenario families is being integrated into the project with a description of the evolution of the social and economic conditions of families, particularly important at this stage of the crisis is still open to the outcome of great uncertainty.

Tabella 2- Popolazione residente in famiglia Emilia-Romagna per tipologia e cittadinanza della persona di riferimento . distribuzioni percentuali stimate. Anni 2013 e 2020.

	Persona sola	Coppia senza figli	Coppia con figli	Altra tipologia	Totale					
		stima 2013								
Italiani	33,2	25,7	30,4	10,7	100					
stranieri	43,7	8,9	35,6	11,9	100					
Totale	34,4	23,8	31,0	10,9	100					
	proiezione 2020									
Italiani	34,1	26,6	28,5	10,8	100					
stranieri	46,7	8,3	32,5	12,5	100					
Totale	36,5	23,1	29,3	11,1	100					

The quantitative and qualitative impacts of demographic change on the regional system are easy to understand and now widely analyzed more children and young people, older people, a working-age population growing older, older in very old age and a growing heterogeneity in the composition for nationalities of the population and therefore in the codes and in relations with the territory. These demographic trends that have structural and not cyclical, and that in fact, as can be seen from the estimates made by the project, will remain in the near term. This combination represents a strong challenge for public and private entities that have the task of guiding the choices necessary for the growth and well-being of the community and provide services to individuals and families that meet needs that change.







The resident population in Emilia-Romagna has increased by 10.9% between 2003 and 2013. This increase was almost entirely due to the foreign component of the population, which surged by 234.2% compared to a modest 1.5% growth of the national component.

For the future in the crisis scenario assuming constant patterns from 2009 (considered as the beginning year of the economic crisis) onwards, the regional population would grow 4.2% over the projection period. The grow would be stronger under the constant scenario (+5.7%) while there would be a decline (-2.7%) in a scenario assuming a total absence of migration.

Figure 2.3 – Share of foreigners in total resident population - Crisis Scenario

Source: processed by Nomisma based on Emilia-Romagna Region and Istat data

The share of foreign population in 2003 was only 4.1%. In 2013 – according to the latest data available from official sources - this share has risen to 12.2%. Up to 2020 projections point to a further increase both under constant and crisis scenarios (17.3% and 17.2%, respectively).

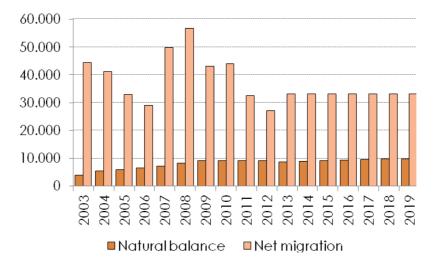
The increase of foreign residents is due both to natural balance and net migration flows. In the long term anyway, the contribute of former (basically new children born in Emilia-Romagna with foreign parents) has more than double, while the latter has decreased by one quarter.

Figure 2.4 – Natural balance and net migration of foreign population, time series analysis and projection - Crisis Scenario





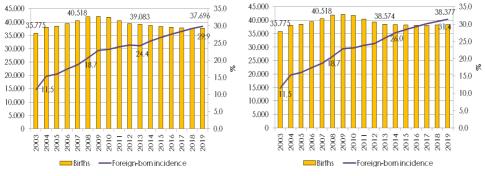




Source: processed by Nomisma based on Istat data

Overall the number of births in Emilia-Romagna registered an increasing trend until 2009 (2008 for the Italian component) and then a gradual decline. Under the assumptions of the crisis scenario, the total number of births is expected to decline slightly until 2020. The percentage of births to foreign parents in the total number of births is expected to increase steadily, reaching 29.9% in 2020 (31.4% under constant scenario).

Figure 2.5 – Total births and share of children born to foreign parents, time series analysis and projection – Constant and Crisis Scenario



Source: processed by Nomisma based on Istat data

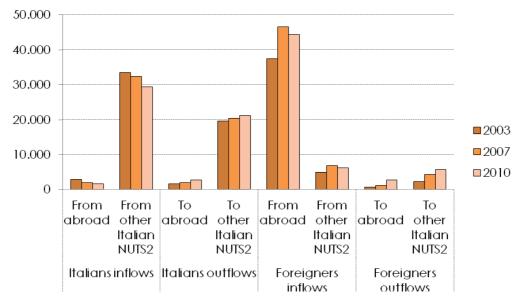
The analysis of migratory flows shows that the main driver of population growth is inflows of foreigners from abroad, which reached more than 44,000 in 2010. However, it should be noted that the data relating to inflows from abroad are influenced by policy actions aimed at regularization of foreigners, and that the time series data have been normalized during the process of population forecasting.







Figure 2.6 - Migratory inflows and outflows - Emilia Romagna



Source: processed by Nomisma based on Istat data

With regard to the net migratory flows with other Italian regions, the balance remains positive for Emilia-Romagna in terms of inflows of Italian citizens (+8,207 in 2010), although this has been in constant decline since 2003. The same holds true for inflows of foreigners from other Italian regions (+417 in 2010), where the difference between inflows and outflows has been shrinking over the years.

Finally, although numerically not very significant, it is worth noting that net migratory flow of Italian citizens from abroad has gone from positive to negative as a consequence of a stable increase of people going abroad combined with a decrease of people coming back.

5.000.000 4.500.000 .081.17 .082.344 4.000.000 .018.05 .069.39 961.297 3.500.000 3.000.000 .773.462 .760.23 .620.89 2.500.000 .450.288 .694.02 2.000.000 1.500.000 .241.128 .229.57 .200.293 .024.88 1.000.000 500.000 502.584 514.751 0 2007 2013 2020 -2020 -2020 -Constant Crisis 7ero Miaration Scenario Scenario Scenario ■0-14 ■15-39 ■40-64 ■65+

Figure 2.7 – Total population by macro-categories based on age

Source: processed by Nomisma based on Emilia-Romagna Region and Istat data







Looking at the structure of the population by age classes, from 2007 to 2013, the highest increases were recorded for children (+12.9% for those under 15) and the group between 40 to 64 years old (+11.8%). Also the group of people aged over 65 experienced moderate growth (+5.9%), while the younger adult group, those between 15 and 39 years old, experienced a decrease by 3.8%. Over the projection period, the younger categories show smaller increases than the groups over 40; in particular, the 15-39 group would increase only under the constant scenario (+0.9%), in any case losing weight over total population.

238.2 230,2 250,0 228,1 204,3 203,5 190,0 200,0 180,1 176,1 172,1 168,9 150,0 100,0 50.0 22,6 22,520,2 12,8 8,1 0,0 Italians Italians Italians Italians Italians Foreigners Foreigners Foreigners Foreigners **Foreigners** TOTAL TOTAL TOTAL TOTAL TOTAL 2007 2013 2020 - Zero 2020 -2020 - Crisis Constant Migration Scenario Scenario Scenario

Figure 2.8 – Old-age index evolution by citizenship

Source: processed by Nomisma based on Emilia-Romagna Region and Istat data

Regional population is ageing. Nevertheless the old-age index (the ratio of people over 65 years old per 100 individuals aged less than 15) in 2013 was lower than in 2007 (168.9 against 180.1) and it is expected to increase only moderately up to 2020 (between 172.1 under the constant scenario and to 176.1 under the crisis scenario). In fact, while the number of elderly is increasing, the growth rate of the youngest group has accelerated even more, due to both the recovery in the birth rate and a significant number of foreign incoming children.

The total dependency ratio (the ratio between the economic dependent population under 15 yo and over 65 yo and working age population (15-64) reached 56.9% in 2013, increasing since 2007 (54.8%). A substantial stability or slight increase is foresight in the coming years.

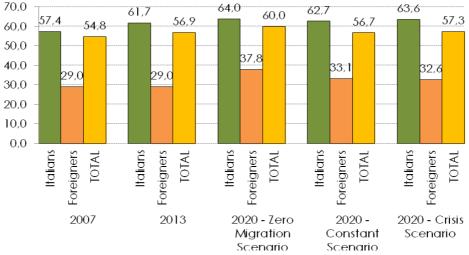
There is a completely different pattern for national and foreign population: for national two thirds of dependent people are elderly, while for foreigners the dependency index is represented for the largest part by the youth part.







Figure 2.9 – Change in total dependency ratio by citizenship



Source: processed by Nomisma based on Emilia-Romagna Region and Istat data

Ageing is a phenomenon involving also working age population as measured by the structural index of the population (the ratio between the number of persons aged 40-64 years and those between 15-39). The level of the index rose sharply from 113.5 in 2007 to 131.8 in 2013 and it is bound to increase also in the near future, even if with different magnitude according to scenario.

In addition to basic projections, derived projection of population by family structure and level of education attainment.

In order to determine future family structures, the so-called "headship rate method" was employed, providing the number of households by number of components or by household type for each year included in the projection period. Here results referring to the constant scenario are presented as results for the crisis scenario do not show significant differences.

With an expected increase in the total population of roughly 500,000 individuals between 2007 and 2020, there would be an increase in the number of families living in Emilia-Romagna of about 340,000 units, marking a further decline in the average family size. This is in line with recent trends and are the effect of ongoing changes such as the lengthening of average life, increasing number of separations and divorces, migratory flows that often involve, at least at initial stage, people arriving alone.

Table 2.1 – Households by number of components - Constant Scenario

	1	2	3	4	5	6+	TOTAL
2007	579,968	554,054	397,965	254,403	44,035	13,179	1,843,603
2013	678,980	601,713	381,760	260,999	54,461	28,145	2,006,055
2020	759,980	663,627	397,070	275,334	60,059	31,530	2,187,600

Source: Processed by Nomisma based on Istat RCFL (Labour Force Survey) data







In 2013, households formed by only one component represented 33.8% of total households and are the prevalent type. Families consisting of two components and three components account for 30% and 19% of total households respectively. There has been a 18.7% increase in the total number of families, driven by 31% increase of single-person households.

Table 2.2 – Households by types – Constant Scenario

	One- person	Couple without children	Couple with children	Mother with children	Father with children	No nucleu s	Multiple nucleus	TOTAL
2007	579,968	445,006	627,276	117,758	27,276	30,945	15,375	1,843,603
2013	678,980	480,665	620,492	141,785	30,300	34,860	18,976	2,006,055
2020	759,980	528,266	643,259	158,386	37,703	38,291	21,715	2,187,600

Source: Processed by Nomisma based on Istat RCFL (Labour Force Survey) data

With regard to type of household, single persons represent 33.8% of total households, followed by couples with children (30.9%) and couples without children (24.0%). The analysis of data for the period 2007-2020 shows a steady growth of single-component families (+31.0%), which constantly gain shares in the total; in line with growth rates that have been observed worldwide, there is the rise in the number of couples without children (+18.7%, maintaining the same share of the total), while the number of couples with children is expected to increase only by 2.5%, resulting in a decreased share of the total (from 34.0% to 29.4%). Thanks to growth rates above 30%, two other types of households are expected to gain higher shares of the total: mothers with children and fathers with children should account, respectively, for 7.2% and 1.7% of total households in 2020. However, fathers with children will in any case still represent a marginal type of household in the future (1.7%).

The small numbers of certain types of households within the foreign population has made it necessary to re-aggregate households by number of components and by type in the analysis based on the citizenship of the head of household. Generally speaking, foreign families, which in 2007 accounted for 7.2% of total households based in Emilia-Romagna, are expected to reach 21.9% of total households in 2020 under a constant scenario.

Table 2.3 Households by number of components and citizenship of the head of household

- Constant Scenario

		1	2	3	4+	TOTAL
2007	Italian	527,513	538,975	371,636	280,993	1,719,117
2007	Foreigner	52,455	15,079	26,329	30,623	124,486
	Italian	587,822	567,078	346,358	270,811	1,772,069
2013	Foreigner	91,158	34,635	35,402	72,794	233,989
	Italian	612,204	589,756	331,988	259,767	1,793,715
2020	Foreigner	147,776	73,871	65,082	107,156	393,885

Source: Processed by Nomisma based on Istat RCFL (Labour Force Survey) data







The analysis of households by total number of components shows that recently Italian single-person households have "overtaken" those households formed by two components, and that single-person households are experiencing steady growth. With regard to foreigners, while the incidence of singles on the total is still much higher than for Italians, the trend is decreasing over time, while the share of households consisting of two or more components is progressively increasing.

Table 2.4 - Households by typologies and citizenship of the head of households – Constant Scenario

		One- person	Couple without	Couples with		
		households	children	children	Other	TOTAL
2007	Italian	527,513	434,958	576,893	179,754	1,719,117
2007	Foreigner	52,455	10,048	50,383	11,600	124,486
	Italian	587,822	455,870	538,081	190,297	1,772,070
2013	Foreigner	91,158	24,795	82,411	35,624	233,988
	Italian	612,204	589,756	331,988	259,767	1,793,715
2020	Foreigner	147,777	52,444	131,238	62,426	393,885

Source: Processed by Nomisma based on Istat RCFL (Labour Force Survey) data

Focusing on the types of households, the analysis by citizenship shows how in 2013, Italian households consisting of single persons (33.2% in 2013 against 30.7% in 2007) have outnumbered couples with children (30.4% in 2013 and 33.6% in 2007) and how these trends are set to continue in the future. Regarding foreigners, the share of single person households tends to decrease, while the number of couples without children are growing.







# **Section 3: Policy Scenarios**

#### 3.1 Labour Market

The slow pace of the current economic recovery will make it harder to return to pre-crisis levels of employment<sup>1</sup>. The econometric model confirms this tendency: in 2020 the employment rate will likely be at lower than 2007. With an estimated increase of 50,000 in the number of employed persons between 2013 and 2020 and corresponding demographic growth in the working age population, the employment rate is not expected to rise in the next few years (even in the case of a more sustained economic growth - scenario A).

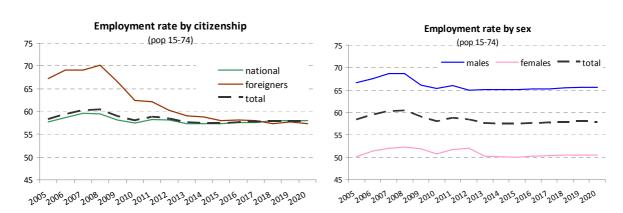


Figure 3.1.1- Employment rate of age groups 15-74 years

Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

The crisis hit foreign population more severely leading to a sharp fall of their specific employment rate of about 10 percentage points. The two rates are now aligned, despite foreign population is more concentrated than national one in younger age classes. A wide gender gap is visible in labour market, even if it is not impacted by recent economic crisis, and it is slowly narrowing.

Behind total figures, employment rate is unevenly distributed by age classes: it is above 75% for people aged 25-59, while it is just above 25% for young people 15-24 and below 15% for people 60-74 (this latter is expected to increase as an effect of recent pension system reform).

The break down of employment rate by level of education attainment has been investigated. In line with expectations the rate is growing with respect to education attainment with people with a degree qualification but also with a upper secondary school diploma having an employment rate higher than average. More interestingly up to 2020 employment rate is

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<sup>&</sup>lt;sup>1</sup> Employment and unemployment rates are referred to the age class 15-74, given that foreign population estimates at regional level are unreliable for the age class 60-64.

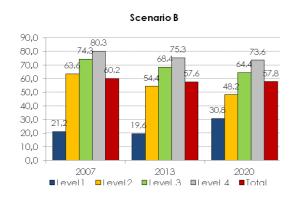


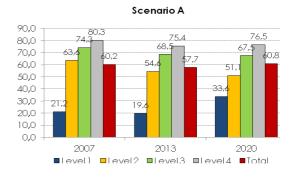




expected to decrease for all level of education except the lowest one (scenario B). The regional labour market seems to move towards a polarisation of employment, with implication in social cohesion and inclusion.

Figure 3.1.2 – Employment rate 15-74 by level of education<sup>2</sup>

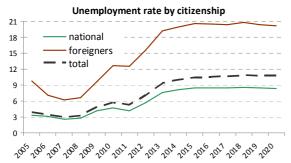


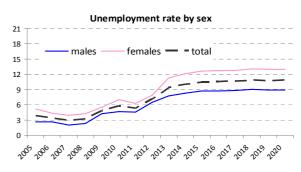


Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

In the same period activity rate, after a couple of years of reduction between 2009 and 2010, has maintained on a growing path sustained by higher availability to work by national population. Current researches read this phenomenon as an effect of recession of households balance and the necessity for more households members to enter the labour market in order to keep the same wealth level. Although higher labour market participation has long been a desirable goal, when it is combined with decreasing of stagnant labour demand it leads to a strong increase of unemployment.

Figure 3.1.3 – Unemployment rate of the age group 15 years and over





Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

The trend of unemployment rate confirms that during the recession foreign workers have experienced more difficulties in the labour market. Although there has always been a gap between national and foreigners, it was narrowing until 2008. Unemployment, which was at

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 $<sup>^2</sup>$  Levels of education: 1 = No title / Primary education, 2 = Lower secondary education (or vocational training) / Diploma of first-level secondary education / Diploma of professional qualification of secondary school (2-3 years), 3 = Upper secondary school diploma, 4 = tertiary education degree or higher.







very low levels in Emilia-Romagna, almost doubled in a couple of years between 2008 and 2010 and tripled before 2013. For foreigners the rate has grown dramatically: almost one of five people is not able to find a job. This gap with national labour forces is not likely to decrease over the next few years: the unemployment rate of foreign citizens would remain more than 10 percentage points higher than the one for nationals. Also the gap between men and women enlarged during the very recent years, but it remains much more contained and reflect the generalised worsening of labour market conditions.

The persistence of unemployment is reflected also by the explosion of long term unemployment (i.e. people being unemployed for more than one year). This rate was around 1% until 2009 but since there it doubled a first time before 2011, then again in 2013 and according to econometric projections it is expected to reach 6% in 2020. There is a structural difficulty of the labour market to successfully reintegrate workers who have lost their job.

The regional labour force is characterised by an ageing process which will not stop in the next years: up to 2020 against an increase of population 40-64 of about 140.000 people the number of people 15-39 will decrease by almost 30.000.

Despite negative demographic trend, young people face growing difficulties in the regional labour market. Departing from usual statistical standard, we focused the attention on people aged 20-39 in order to look at young people which are supposed to have completed upper secondary education and have had time enough to settle within the labour market.

Figure 3.1.4 – Young adults unemployment rate (age group 20-39) by citizenship

Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

As showed in figure 3.1.4 youth unemployment rate is double than the average one. Also in this case the trend has been a dramatic increase between 2007 and 2013 and a further increase expected up to 2020. Only in the case of a more steady economic growth (scenario A not showed here) a slight decrease would happen in the next years. Also for this age group the gap between national and foreigner people exists and has widened during the years of economic recession, in parallel with more incisive presence of foreigners among population.







Unemployment is becoming persistent also for younger people, the long term rate is even higher than for total labour force and points towards unsustainable high levels in 2020 (8% for nationals and 13% for foreigners).

## 3.2 Human capital

The school age population (6-19 years)<sup>3</sup> in Emilia-Romagna has grown by 11.7% between 2007 and 2012, while the share of enrolled pupils (from primary to upper secondary school) has increased by 10.4% during the same period. As a consequence during those five years, the ratio between the number of pupils and the school-age population has decreased slightly from 96.5% to 95.5%. The decline in this ratio which does not appear alarming if the overall population is regarded, hides a substantial differences between foreign and national students. In fact the percentage of foreign students in total foreign school age population has decreased by 8%, while no changes were detected for nationals.

Table 3.2.1 – Trends in the share of enrolled pupils in total school age population (aged 6-19) by citizenship (%)

	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	Var.
Italian Pupils/ Italian Population (aged 6-19)	98,4	98,7	98,9	98,3	98,9	99,5	1,1
Foreign Pupils/ Foreign Population (aged 6-19	80,5	78,5	74,2	72,2	72,7	72,2	-8,3
Total Pupils/ Total Population (aged 6-19)	96,5	96,4	95,8	94,8	95,2	95,5	-1,1

Source: Processed by Nomisma on Regional Student Registry of Emilia Romagna data

The projection of population by level of education attainment in the near future has been developed consistently with MMWD methodological indication according to the "probability of transition" method. The method have been applied to the population between 15 and 34 years of age, broken down into five-year segments considering four broad level of education:

1. No title or primary school; 2. Junior high school; 3. High school diploma; 4. University education. The transition probabilities matrix has been combined with demographic projections by age, gender and citizenship in order to male projections about population education attainment up to 2020.

<sup>3</sup> Given data constraint it has been possible to undertake a time series analysis only on total student population included in the age group 6-19 without breakdown by school level.

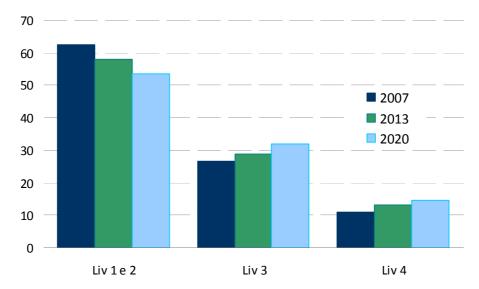
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Figure 3.2.1 - Population 15-75 by level of educational attainment (%)

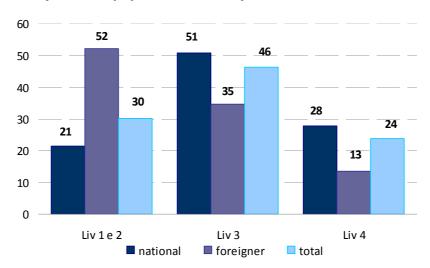


Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

Despite a slow improvement of education attainment, the majority of working age people will not have completed more than compulsory education in 2020. Less than one third will have a upper secondary education diploma and only 13% a tertiary education degree.

Given the short projection time horizon of MMWD it is more interesting to drive attention to evolution concerning younger age classes in order to highlights changes in education patterns.

Figure 3.2.2 – Projection of population 20-39 by level of educational attainment in 2020



Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

Education attainment of young adults is on average higher than total working age population, but still with wide room to improvement. Up to 2020, despite a slight improvement, 30% of young adults will have at last compulsory school qualification, almost 50% a upper secondary diploma and less than 25% a tertiary degree. Disaggregating data by







citizenship we find out that more than one half of foreigners will have no more than compulsory school (double than nationals) and only 13% of them will get a tertiary degree (less than one half than national).

Human capital enhancement is regarded as one of the key factor to deliver smart, sustainable and inclusive growth according to Europe 2020 strategy. Two specific targets are set in this respect at European level: reducing the rate of early school leavers and increasing the rate of tertiary education attainment.

Early school leavers rate in Emilia-Romagna is higher than European Union average level (15.4% against 12.7% in 2012). Within MMWD this phenomenon has been investigated more closely breaking down data by citizenship<sup>4</sup> and attempting a foresight up to 2020 through a specific econometric model. The main finding is that early school leavers rate for foreigners leaving in Emilia-Romagna is about four times higher than for national students. Secondarily projections confirm that in absence of positive policies disparities will not narrow in the coming years, and Europe 2020 target will unlikely be approached.

One of the most critical effect of recent economic recession is the deterioration of the ability of the regional economic and social system to enhance young human capital in the direction of rising knowledge and skill base but also of easing adequate placement in the labour market. Qualification is crucial for from the individual point of view but the availability of qualified human capital is critical for the regional development process. Differently from desirable goal, the number of young people not in education nor in employment (NEET) has tremendously increased in recent years.

Figure 3.2.3 – NEET rate 15-34<sup>5</sup> and share of national and foreigners in total NEET (%)

<sup>4</sup> It has been necessary to extend the analysis to age group 15-24 departing from Eurostat standard definition (18-24) in order to have consistent estimates also for foreigner population.

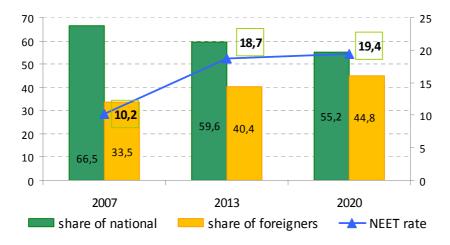
-24) in order to have con

<sup>&</sup>lt;sup>5</sup> It has been necessary to extend the analysis to age group 15-34 departing from Eurostat standard definition (18-29) in order to have more consistent estimates also for foreigner population. Moreover the phenomenon is increasingly becoming relevant for the over-29 age group.









Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

The NEET phenomenon has reached alarming dimensions throughout Europe and especially in Southern and Eastern countries. Not surprisingly the inclusion of NEET people into the labour market has become one of the top priorities of the next programming period (Thematic Objective 8).

In Emilia-Romagna from 2007 to 2013 the share of NEET people has increased by 75.3% involving almost one on five person in the age group 15-34. This trend seems to be confirmed for the next 2013-2020 period, though the rate of expansion will be more contained (+8.1%) and accompanied by an increase in the population (+4.2% vs -4.5% over the 2007-2013 period), limiting the rise in the NEET share to only 0.7 percentage points.

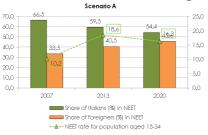
The composition of the NEET population in terms of citizenship will continue changing as well, to the disadvantage of foreigners, who will register an increase of 4.4 percentage points, leading them to represent 44.8% of the total.







Figure 3.2.8 –NEET rate (% on total population aged 15-34) and share of Italians and foreigners in total NEET (%), scenario A and B



Source: Processed by Nomisma based on Istat RCFL (Labour force Survey) data

The scenario A forecast is more optimistic, projecting that the share of NEET individuals will arrive at 16.3% by 2020, thus registering a contraction compared to 2013.

In this case as well, the share of foreigners in the total will progressively increase, arriving at 45.6% in 2020 and surpassing same figures for 2007 by 12 percentage points.







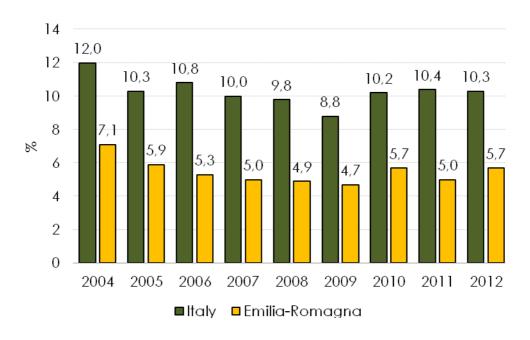
#### 3.3 Social welfare services

#### PEOPLE LIVING IN HOUSEHOLDS WITH VERY LOW WORK INTENSITY

During the years of the economic crisis Emilia-Romagna households have suffered from a reduction in their income levels: in 2007, per capita disposable income equalled €22,725, whereas in 2012 this value decreased to €21,037, with a 7.4% contraction in nominal terms.

The income decline is not just the consequence of fiscal policies introduced by the Government in order to deal with the explosion of the public debt, but also the result of the deterioration of labour market conditions and consequent job cuts. These trends are confirmed by data for 2012 which show that Emilia-Romagna reported an increase in individuals living in households with low work intensity to 5.7% of the population under 60. The same level was previously recorded in 2010, as a result of the first wave of recession, following a reduction of this rate from 7.1% to 4.7% during the period from 2004 to 2009.

Figure 3.3.1 – Time series of people aged 0 to 59 years living in households with very low work intensity<sup>6</sup> – Emilia-Romagna and Italy



Source: Eurostat

<sup>&</sup>lt;sup>6</sup> Data available only for the age-class 0-59 years.







#### POPULATION AT RISK OF POVERTY

Over the last few years we have witnessed an increase in situations of economic distress. This is a phenomenon that has particularly affected the foreign population, in relative terms: according to 2011 data, individuals between the ages of 17 and 64<sup>7</sup> living in conditions of extreme poverty comprise almost one-fourth of foreigner residents and only 3.9% of Italians<sup>8</sup> (in absolute terms, this means nearly 93,000 Italians and 78,000 foreigners). In addition, 17.9% of foreigners and 4.7% of Italians are at risk of poverty; thus more than half of the foreign population is poor or at risk of poverty, while 11.5% of the Italian population is affected by the same problem (in absolute terms, this means around 273,000 Italians and 175,000 foreigners).

While in absolute terms the household type with the highest number of individuals who are poor or at risk of poverty is the one with more than two adults (more than 200,000 individuals between 17 and 64 years, equal to 17.2% of the persons belonging to this group), in relative terms the households with one adult and children are the ones that are more exposed to the risk of economic fragility, since almost half of the individuals belonging to this category (ca. 24,000 individuals) are poor or at risk of poverty.

#### HOUSEHOLDS WITH CONDITIONS OF HOUSING VULNERABILITY

The housing situation of households is closely linked to the phenomenon of economic distress, i.e. the right to own the home in which they live: home ownership is the most common housing situation among Italian households (72.4%, of which 15.4% have a mortgage), while renting is more common among foreigner (67.5%). The share of foreign households owning a home is lower than 20%, most of them with mortgages that must be paid.

If we define housing vulnerability as a condition in which a household pays a rental fee or a mortgage rate which absorbs more than 30% of its household income, according to latest available data from 2011 we see that the phenomenon affects 7.2% of Italian and 30% of foreign households, in absolute terms equal to ca. 126,000 Italian and 68,000 foreign households.

The probability that a household will face conditions of housing vulnerability is mainly affected by socio-economic characteristics such as being a foreign citizen, having low household income, being of a younger age, being a single individual household, having an

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<sup>&</sup>lt;sup>7</sup> In Istat's IT-SILC survey the information about income divided by nationality (Italians and foreigners) is available only for individuals 17 years old and above.

<sup>&</sup>lt;sup>8</sup> The poverty threshold line has been calculated on the regional level, and it is equal to €10,632. The threshold on the Italian level, instead, is lower and equal to 8,067€.





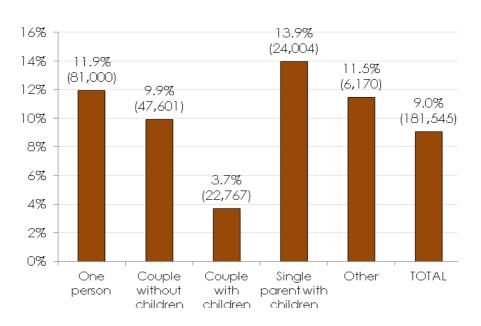


unemployed head of the household, having a separated or divorced member in the household, and having a head of the household with a high educational qualification. A household with all these characteristics has a 0.87 probability of being in a condition of housing vulnerability.

Over the last several years, from 2005 to 2012, there has been an increase in people living alone, who, as we have just seen, are more exposed to the risk of housing vulnerability: in 2005 this group numbered 543,000, while in 2012 the figure had risen to 686,000. In relative terms, the increase has been more evident within the foreign population, since such households represented 31.7% of foreign households in 2005 and 40.5% in 2012 (the respective shares of Italian households are 30.4% in 2005 and 33.8% in 2012).

Figure 3.3.5 – Projections of households by household type - percentage differences between 2020 and 2013 (absolute differences in brackets)

## "Constant" demographic hypothesis

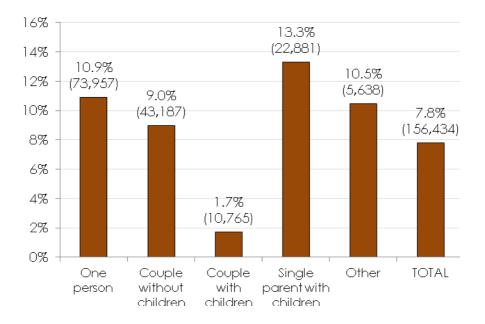


"Crisis" demographic hypothesis





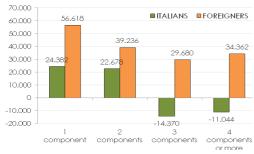




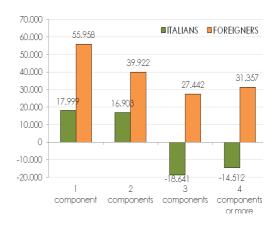
Source: processed by Nomisma based on data by Emilia-Romagna Region and Istat

Figure 3.3.6 – Projections of households by citizenship of head of household and number of components – Absolute differences between 2020 and 2013

# "Constant" demographic hypothesis



#### "Crisis" demographic hypothesis









Source: processed by Nomisma based on data by Emilia-Romagna Region and Istat

In addition, referring once more to foreign households, between 2005 and 2012 the share of households composed of single parents with children (another category at risk) has risen from 4.7% to 8.2%, which in absolute terms implies an increase from 4,005 to 17,186 households.

The trends observed over the past eight years are destined to continue in the years to come. The population of Emilia Romagna will rise mostly due to the contribution of the foreign population (which, as we have seen, is more vulnerable from the housing sustainability perspective): under the Crisis demographic hypothesis, between 2013 and 2020 the population will grow by 156,000 individuals (+7,8%), of which 154,000 will be of foreign origin, while under the Constant hypothesis the increase will amount to around 181,000 individuals (+9%), of which 160,000 will be foreigners.

Among the household typologies that will grow the most in percentage terms are the single parent households with children, which will increase by ca. 13 percentage points under both scenarios, corresponding to an absolute increase of 23,000-24,000 individuals.

Next in line are single households, growing by 11-12 percentage points, with a corresponding increase in absolute terms of 81,000 individuals under the Constant demographic hypothesis and 74,000 individuals under the Crisis hypothesis. This increase will be mainly driven by the foreigner component, which by 2020 will comprise 56,000 more individuals than in 2013.

Therefore, the growth in the population of foreigners, single parents with children and households composed of single individuals is a phenomenon that should sound an alarm for policymakers who need to evaluate which policies to adopt to address the issue of economic sustainability of housing.

#### CHILDREN FROM AGES 0 TO 2 WHO REQUEST ENROLLMENT IN DAY NURSERIES

Over the past few years there has been a rise in the enrollments in day nurseries from 25,376 in the scholastic year 2003-04 to 34,019 in 2011-12, with an increase of 34.1%. Yet when distinguishing the children by nationality, we can observe two different trends: the number of foreign children has progressively increased at rate that is three times higher than for Italian children, rising from 1,702 enrollments in the scholastic year 2003-04 to 3,495 in 2011-12; instead, the number of enrollments of Italian children has increased at a much lower pace up to 2009-10 and even decreased in the last year for which we have data available.

The increase in absolute terms was also followed by an increase in relative terms: over the last ten years, the percentage of children from ages 0 to 2 enrolled in day nurseries has constantly risen, growing from 23.8% in 2003-2004 to 27.9% in 2011-2012. Yet also in this

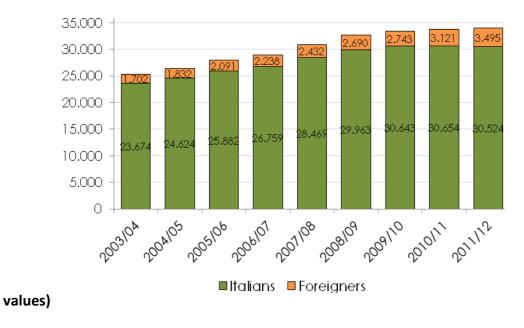






case, two different trends can be noted: households of foreign origin show a lower propensity to send their children to day nurseries, since the enrollment rate of foreign children has always remained below the Italian rate (during the latest reported scholastic year the former was 13.9%, while the latter was 31.9%).

Figure 3.3.7 – Children enrolled in day nurseries by citizenship - Emilia-Romagna (absolute



Source: processed by Nomisma based on data by Department from Social Policy, Emilia-Romagna Region

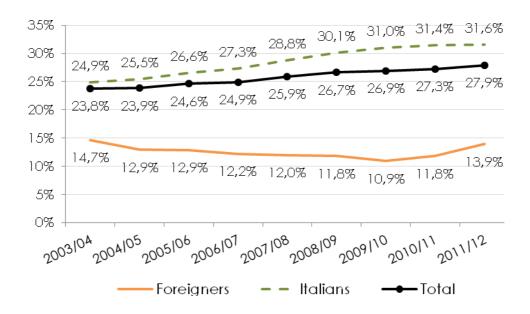
Among the reasons for the differing propensities of Italians and foreigners to send their children to a day nursery are the differences in the levels of occupation of Italian and foreign women with small children. In fact, among women between the ages of 15 and 54, the occupation rate for Italian women is above 70% and it is even higher for women with children. For foreign women the occupation rate is drastically lower, and is even lower for women with children (38.4% for women with one child and 26.8% for women with two or more children). Therefore, for foreign women the presence of children represents an obstacle to entering the labour market and, thus, the need for early childhood services is lower.







Figure 3.3.8 – Time series of the enrollment rate in day nurseries by citizenship - Emilia-Romagna (percentages)



Source: processed by Nomisma based on data by Department from Social Policy, Emilia-Romagna Region

It is interesting to note the different trends in the number of enrollments if we distinguish between public (both directly and indirectly managed) and private day nurseries: starting from academic year (a.y.) 2007-08, the number of children enrolled in private day nurseries has risen much more quickly than for public day nurseries, which even registered a reduction during the last two years surveyed. The share of children served by private day nurseries is constantly increasing, involving 24% of the total children enrolled during the a.y. 2011-12.

The number of applications to public or publicly contracted day nurseries grew until a.y. 2003-04, when it exceeded 29,000 requests, while in subsequent years the trend shifted downward, remaining below 25,000 applications during the last three years surveyed.

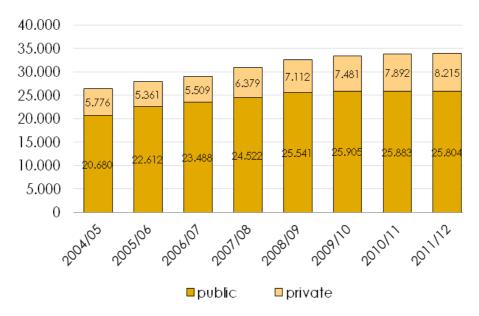
The propensity to apply for enrollment (represented by the number of requests compared to the total number of children aged from 0 to 2 years) reached its peak in 2003-2004, with 27.4% applying for enrollment, while in the last several years it hovered around 20%. In parallel to the decrease in the number of applications, there has been a decrease in the number of children on waiting lists: in 2002-2003 the number of outstanding requests exceeded 7,000, while in 2011-2012 this number was around 4,600.

Figure 3.3.9 – Children enrolled in day nurseries by type of service - Emilia-Romagna (absolute values)



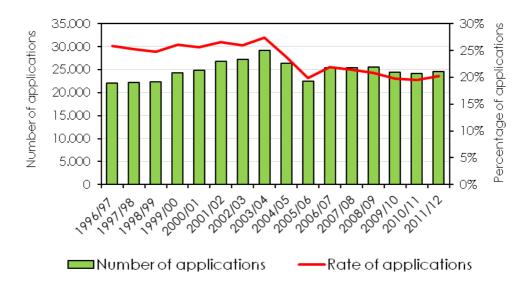






Source: processed by Nomisma based on data by Department from Social Policy, Emilia-Romagna Region

Figure 3.3.10 – Absolute number and rate of applications for public day nurseries - Emilia-Romagna (absolute values and percentages)



Source: processed by Nomisma based on data by Department from Social Policy, Emilia-Romagna Region

Under Scenario A of sustained economic recovery we suppose an increase in individual income and, in parallel, an increase of the female occupational rate, which positively affects the application rate to day nursery that, after touching the minimum of 18.4% in 2013-14, will increase up to 22.6% in 2020.



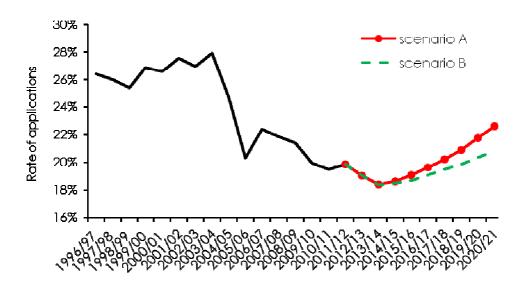




The demographic trends forecast for the next years, nonetheless, predict a diminishment of the population in the ages between 0 and 2: after the peak of 124,000 children in 2010, in the A Scenario we register a persistent contraction until 2018, assessing at 115,000, and a rise thereafter.

Therefore, after the 24,600 requests registered in 2011-12, in the following three years they should decrease down to 22,000, and increase thereafter in the following years, crossing by 2020 26,000 enrolment requests.

Figure 3.3.11 – Projections of the rate of applications for day nurseries – Comparison between scenario A and scenario B



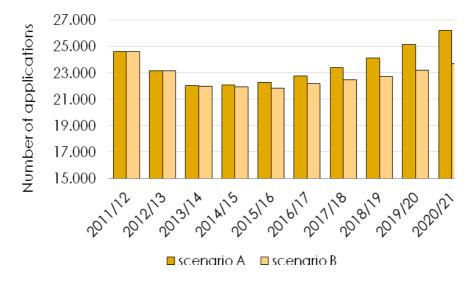
Source: processed by Nomisma based on data by Department from Social Policy, Emilia-Romagna Region

Figure 3.3.12 – Projections of the number of applications for day nursery – Comparison between scenario A and scenario B









Source: processed by Nomisma based on data by Department from Social Policy, Emilia-Romagna Region

In the B Scenario with weak economic recovery, we suppose a weak increase of income per capita and a female occupational rate stable at around 68%. This will determine a slight increase in the application rate, that should assess by 2020 at 20.8%.

Nonetheless, the B Scenario includes the Crisis demographic hypothesis, which forecasts a persistent reduction of the population in age 0-2 over the entire projected period, bottoming at 113,000 children in 2020. Putting together the two opposed trends of the application rate and of the number of children, we obtain a contraction of the absolute value of applications that decreases below 22,000 units until 2015-16, rising in the following five years until it reaches 23,600 application requests in 2020-21, still below the 24,600 applications of 2011-12, the most recent available number.

#### NOT SELF-SUFFICIENT ELDERLY (75 YEARS OR MORE) INDIVIDUALS

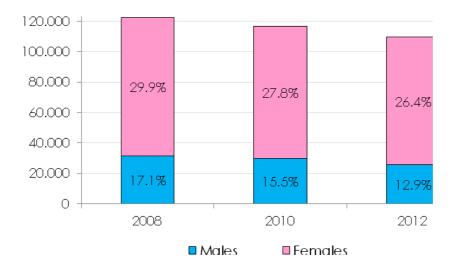
From the Istat survey data on the living conditions for Italian households comes out that, in Emilia Romagna, the number of elderly people that declare themselves non self-sufficient is decreasing, both in absolute terms (moving from 120,000 individuals in 2008 to 110,000 in 2012) and relative ones, with a percentage for men dropping from 17.1% to 12.9%, and for women from 29.9% to 26.4%.

Figure 3.3.13 – Number of elderly people (over 75 years old) who declare to have severe limitations





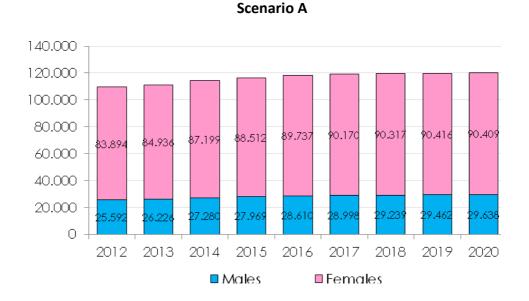




Source: processed by Nomisma based on data from IT-SILC, ISTAT

Supposing that the shares registered in 2012 will keep constant in the years to come, an increase in the number of not self-sufficient elderly individuals due to the general aging of the population can be expected, reaching 120,000 individuals by 2020. This is true both for A and B Scenarios, since the two diverge only in terms of demographic projection, that do not change considerably when referring to the elderly population given that, as has already been said, the influence of migratory movements over the elderly brackets of the population is not relevant.

Figure 3.3.14 – Projections of the number of elderly people (over 75 years old) having severe limitations

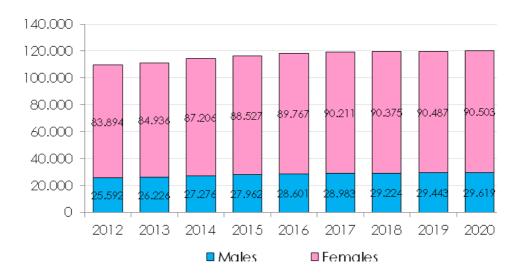








#### Scenario B



Source: processed by Nomisma based on data from IT-SILC, ISTAT

#### **Section 4: Cross sector analysis**

The objective of the analysis has been to verify the main effects of the processes of demographic change on various dimensions and specific areas through the interpretation of selected key indicators. This has been done by projecting, where possible, some key indicators through 2020, thus not only attempting to capture recent trends in the phenomena, but also possible developments over the medium term.

In interpreting the results, the adopted approach focused on the role of demographic change in regional development trajectories, concentrating on some specific areas.

An overview of these results has led to the identification of three main blocks of evidences. First of all, some major structural trends have emerged which the regional system will have to address in coming years, regardless of baseline scenarios and possible future developments. Secondly, the analysis highlights some specific trends in the economic cycle and some new evidences, derived not only from demographic change, but also from the shock of the five-year crisis period and from the development of new dynamics that had not been seen previously. Finally, the effects of demographic change can also be interpreted through the critical issues and results that emerge from the analysis of population target groups.

#### 1. MAJOR STRUCTURAL TRENDS

The most important structural trend--also the starting point of the analysis--is the process of demographic change that is changing the composition of the regional population from different perspectives. Obviously, the most immediate concern is the resumption of







population growth driven by an unprecedented increase in the population of foreign nationality. Between 2003 and 2013 the population grew by 1% per year and will continue to grow at similar rates between 2013 and 2020, a period during which the foreign population will account for over 17% of the regional population. Moreover, this figure is an average that conceals the true significance of the growth process of the foreign population, which is rather evident in the younger age groups. This is where public attention and action should concentrate<sup>9</sup>.

With regard to the overall process of growth of the foreign presence, the most striking phenomenon is that this growth is and will increasingly be driven not so much by the flow of people coming from abroad, as by foreigners born in the Emilia-Romagna region or, more generally, in Italy. This is of course a trend of major importance, as those who are called upon to decide on issues affected by demographic change will have to take into account the enormous differences between the processes of integration and development of a "second generation" foreign population and a foreign population which totally comes from an external environment.

Nevertheless, the effects of population growth remain similar at the macroeconomic level. The GDP of the Emilia-Romagna Region is expected to grow in coming years at a slightly higher rate than the national average, and the regional population will grow at a higher than average rate. This means that, in terms of GDP per capita, the region paradoxically will grow less than other areas of the country precisely because, given better economic performance, it is more attractive than other territories. In essence, the best regional performances risk leading to an increase in inequality because of two concurring elements: on the one hand, regional population growth fueled mainly by the increase in the foreign population, on the other hand by the fact that the average income level of foreign families is lower than the average for the families residing in the Emilia-Romagna Region. Population growth, certainly fuelled by the better economic opportunities and jobs that Emilia Romagna offers, in turn, is likely to become the driver of the process of alienation between the different social groups of which the regional population is composed.

An additional structural element is **population ageing**, a process that has been slowed only partially by the increase in the foreign population. It is not just a trend of the growing elderly population, but also of a parallel ageing of the workforce. According to demographic forecasts, between 2013 and 2020 the population aged between 20 and 39 years will decrease by more than 8%. Such dynamics bring highlight the issue of long-term sustainability, put to the test by an ongoing narrowing of the most dynamic group of the population, as well as by the expansion of the population aged over 75.

The effects of demographic change will be also structural from the perspective of **transformation of habits and social needs**. A more composite social mix will be the determining characteristic of the next Italian generations.

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<sup>&</sup>lt;sup>9</sup>See further analysis by target groups







Just one fact: in 2020, one out of three children born in Emilia-Romagna will be of foreign nationality. In this regard, the challenge is to identify new patterns of interpretation and integration, which take these data into account and envision the possible repercussions in terms of transversal policies that are not so focused on integration, but on interpretation and intervention in a new scenario.

This trend is linked to one of the most crucial challenges for the Emilia-Romagna system, which among other things is based on a strong correlation between entrepreneurship, vocational specificity, spirit of innovation and research and a sense of belonging to a wider community. All of these strong elements are also the result of an **education and training system** that has always been a key factor in the process of training regional intellectual and cognitive human capital. The process of demographic change presents this system with an enormous challenge, namely to convey to future generations not only useful skills to deal with an increasingly global labor market, but also the set of core values that is the key to the success of a system.

#### 2. ECONOMIC TRENDS AND NEW EVIDENCES

Some effects of demographic change have been accentuated or changed by the serious impact of the recent crisis.

Employment growth will be weak and uneven, particularly dependent on the capacity to increase the ability of businesses to operate in international markets, to foster strategic sectors with high potential, to intercept the 2014-2020 programming efficiently and effectively, to increase the level of attractiveness of the region to convince investors to settle in the region, faced with a domestic demand whose recovery is difficult to predict. In this sense, the processes of demographic change have a dual effect. On the one hand, the growth of the population in a period of extreme weakness of the labor market makes it more difficult to recover to pre-crisis employment levels. On the other hand, the ability to attract and/or train human capital with excellent skills and abilities can be one of the keys to foster stronger employment growth.

The prolonged crisis has fueled increased competition in the labor market, which has been manifested for example in **an increase in the rate of female participation in the labor market**. The effects of demographic change on this particular trend is especially evident if one considers the female population of foreign nationality. What is surprising is that even the **foreign component of the female workforce is increasingly active in the labor market**, so that the employment rate of foreign women rose between 2007 and 2013.

From the perspective of demographic dynamics, in recent years the dominant trend changed in part since the beginning of the crisis. While remaining within the overall trend of population growth induced by the increase in the foreign population, the economic crisis has sharply reduced the net rate of immigration rate from foreign countries, which dropped







from more than 50,000 individuals in 2008 to about half of that in 2012. At the same time the natural change of the foreign population has significantly increased: foreign nationals who already live in Emilia Romagna have a higher fertility rate than the average, contributing to the expansion of the population of foreign origin. Thus, during the crisis a critical step has taken place which also helps to shift the focus away from a vision of migration dynamics as incoming flows from abroad that can be controlled by a greater will to control. In fact, not only is the foreign population increasingly based on the second generation, but also around one-fifth of the inflows come from other Italian regions.

A more specific phenomenon concerning migration is the behavior of the Italian population during the crisis. One of the phenomena that has been among the most important--not so much in terms of numbers, but as an indicator of an emergency--has been the fact that the number of Italians who leave the region in order to move abroad has exceeded the number of those who come from abroad, occurring right during the crisis. This indicates an increasing difficulty of the system to integrate, especially in the labor market, an ever-increasing share of Italian citizens trained in regional schools, but who leave the country due to difficulties in finding a job or attracted by better opportunities for professional growth abroad. This trend confirms the need, already present in the regional planning documents, to put at the center of growth policies the creation of a system that is attractive not only for businesses in general, but particularly for businesses with high added value, capable of generating demand for constantly higher talent.

From the social point of view, in recent years the phenomena of growing inequality and uncertainty of economic conditions have certainly been exacerbated. In this context, the processes of demographic change combined with those of the economic downturn have produced, in some cases, a particularly serious effects in terms of economic vulnerability. The analysis, which focused in particular on the phenomenon of housing vulnerability, i.e. the difficulty of families to get access to housing and sustain the costs, has showed that the conditions are critical and deteriorating especially for three main groups of households: households of foreign nationality, people living alone and households composed of a single parent with children.

Another risk that is linked to phenomena that the crisis has accentuated or started *ex novo*, is **the early abandonment of education**. During the crisis, in fact, the process of a continual decrease in school dropouts came to a stop. This stop was certainly a direct result of the difficulties of families, who are struggling to support the schooling of their children and are encouraging them to enter into the labor market earlier. This risk is amplified by the processes of demographic change, as mostly foreign students have contributed to this reversal of trend. Overcoming this risk is only possible if effective policies to support education are accompanied by strengthening of the school system in order to increase skills and qualifications, so as to make education a key for privileged entry to the world of employment.













#### **Overview Matrix TARGET GROUPS-CRITICALITIES-INDICATORS**

Groups	Critical issues with respect to demographic change	1	What has been investigated in terms of key indicators
0-2 years	In 2013, almost one child out of four in this age group is a foreigner: how do the families of these "new Italians" interact with the services for early childhood?	1	Which is the consequence of the growth in the share of foreign children for childcare demand? Can a demand trend be predicted?
3-5 years	In 2013, one child out of five in this age group is a foreigner. How is the system for integrating these children operating?	1	How do families of foreign children behave compared to those of Italian children? Which is the current and prospective trend in enrolling their children in kindergarten?
School age population	The growing presence of foreign pupils at all school levels favours an understanding of what major changes the system is facing.	;	Is the increase in the school age population is matched by an increase in pupils enrolled? How has the composition of the school population changed over time?
Graduates	The growth in the number of graduates has been constant in recent years. How much is this trend being influenced by the growth of the foreign population?	1	Do foreigners fuel the growth in the number of graduates? Do foreign graduates find jobs? How many Italians and foreign workers are in the position of being over-qualified with respect to the work they do?
Youth population (15-24, 20-34, 15-34)	The youth population will grow more than any other demographic component between 2013 and 2020, mainly due to the growth of the foreign population in this age group. The critical issues in this regard reside in the processes of training and integration into the labour market: which is the ability to enter the labour market?	I	How many young people leave the education path early? How does the increase in foreign citizens affect the number of NEET?
Workforce (15-59 e 15-75 years)	For this age group, the main effect of demographic change is an increase in the working age population. How much and how is this growth reflected in the system's ability to create jobs?		Is population growth accompanied by a growth in employment?

	SOUTH EAST			
	For the elderly population the effects of demographic change work			
	are not so much related to the growth of the foreign			
	population, which further contributes to the sustainability of			
Over 75 years	Over 75 years the system by lowering the dependency ratio, but to the			
	overall aging of the population, which presents challenges in			
	terms of sustainability of the welfare and the ability to			

interpret new requirements.



What is the expected trend in the non-self-sufficient elderly population?

#### 3. TARGET GROUPS

#### a) Children aged 0-2 years

Families with foreign citizenship show a lower propensity to enroll their children in day nurseries: the most recent data show that within the age group of 0-2 years, around 14 out of 100 foreign children are attending day nurseries, while there are 32 out of 100 Italian children using this service. This gap has even widened over time. Over the last decade the propensity to enroll their children in day nurseries has continually increased among the Italian population, while it has declined among foreigners until 2009-2010, then recovering only during the last two years of the survey.

Among the reasons behind these different propensities is that the employment levels of foreign women with young children are lower than of Italians. For foreign women, in fact, the presence of children is considered an obstacle to entering the world of employment and, consequently, they have a lower necessity to use the services for early childhood.

With regard to the public or publicly affiliated day nurseries, the propensity to apply for enrolment has been increasing until the 2003-2004 school year, when the number of applications exceeded 29,000 (around 27 children out of 100), while in subsequent years there was a downward trend to fewer than 25,000 applications during the last three years (approximately 20 children out of 100).

Demographic trends for the coming years indicate a decrease in the population aged 0-2 years: after the peak of 124,000 children registered in 2010, the worst case scenario foresees a decline throughout the projection period to a level of 113,000 children in 2020, while the most positive scenario forecasts a decrease until 2018, reaching 115,000, and then a slow rise in this population.

Over the next few years it is foreseen that there will initially be a decrease and then an increase in the propensity to benefit from day nurseries to different extents, depending on the intensity of the economic recovery. Under the worst case scenario, by 2020 there will be a lower number of requests for applications than registered in recent years (about 23,600, equal to 21 children out of 100), while under a more positive







scenario, the number of requests will exceed 26,000 (23 out of 100 children).

#### b) Children 3-5 years

If the services related to early childhood involve less than 30 out of 100 children, it is a different matter when referring to kindergarten, which is considered a sort of antechamber to compulsory education: more than 90 out of 100 children attend this facility.

Thus, as already noted for day nurseries, Italian households make greater use of kindergartens than the foreign families: in fact, in recent years, the percentage of Italian children aged 3-5 years enrolled in kindergarten was almost always higher than 94%, while the share of foreign children has varied between 70% and 80%. Moreover, this trend has declined among foreigners since its peak in the 2004-05 school year (81%), accounting for 74.7% in 2012-13. During the same period the Italian segment has registered a slight decrease, reaching 96.6% in the last year of the survey (in 2004-2005: the share was 99,6%).

Assuming that the propensity to utilize kindergarten services was stable at average levels over the past decade, in the coming years it is envisaged that there will be a decrease in the number of enrollees under both scenarios as of the 2014-15 school year, with 2020 levels ranging from around 120,000 to 108,000-109,000. This decrease is solely due to demographic reasons, since the population aged 3-5 years will steadily decline over the next few years, despite the fact that the foreign component will continue to increase, so that in 2020 nearly one of four children will have foreign citizenship.

#### c) School-age population

The level of integration of the foreign population in the regional education system seems quite far from that recorded for the Italian population. Over the past five years, in fact, the percentage of school-age children enrolled in school has declined, but this decrease in the demand for education is attributable solely to foreigners, whose percentage of pupils in the population aged 6-19 years dropped 8 points during the economic downturn, despite a more than 40% increase in the absolute number of foreign pupils.







In 2012/2013 less than a half of the foreign students in the age group 14-19 have attended the upper secondary school (46.8%) and this rate, though increasing compared to 2010, has not yet managed to reach the pre-crises figures. In contrast, the Italian population shows a higher propensity to enroll in the same level of secondary school than was recorded in 2007 and is just below 83%.

#### d) Graduates

The number of university graduates has steadily increased in Emilia-Romagna. The most important aspect, however, lies in the size and characteristics of this increase and in its relationship to the labor market. The first notable aspect is that the expected increase in graduates between 2013 and 2020 will be higher than the increase in the population between 15 and 75 years. If the population as a whole increases by around 3%, the number of graduates will increase by over 16%, indicating that the system will continue to bring a large number of citizens to higher education courses. In addition, graduates will also have better employment outcomes, with employment rates significantly higher than average. The new element lies in the effect generated by demographic change. From this point of view, the increase in the number of foreign citizens who are born and are studying in the Emilia-Romagna Region could contribute to undermining this type of trend, if social inclusion does not also comprise education paths that are aimed at engaging the second generation of new Italians. In this sense, the data show that the Emilia-Romagna has been able to set up a system of inclusion starting from the schools up to the highest level of education: the time series analysis shows that the number of foreign graduates increases more rapidly than the number of Italian graduates, while the econometric model provides a similar trend for the next seven years.

Rather, the real critical element will be to ensure that the economic system is able to absorb this type of labor and prevent brain drain processes of skilled workers who were trained in the region and then emigrated. Prospectively this holds true for both Italians and many foreigners who obtain a degree in Emilia-Romagna and face a difficult job market, where even today the over-qualification rate of foreigners is very high in absolute terms (it reached 40% during the crisis) and almost double that of Italians in relative terms.







#### e) Youth population

The youth population is the group that suffered the most from the effects of the economic downturn and this is, consequently, an element of particular concern for all categories of policymakers.

According to European directives, among the most critical issues on which to focus considerable efforts are promoting the entry NEET into the labor market and contrasting early leaving of education and training.

At present in Emilia Romagna young people not in education, employment or training number 163,701 and represent 18.7% of the population aged between 15 and 34 years, a percentage that is 8.4 points higher than in 2007.

Unfortunately, the forecasted results of the scenario for slower economic recovery, regarded as the most reliable reference, seem to confirm the growth trend of this phenomenon, which in any case will be more limited than that which characterized the years of economic downturn, also due to the expansion of the reference population during the same period. By 2020, 19.4% of young persons aged 15-34 will be NEET.

However, the situation improves when the scenario of sustained economic recovery is considered, in which the NEET rate levels out at 16.3% in 2020, marking a decline compared to 2013.

In both cases, consistently with the historical data, the composition of NEET by citizenship will continue to shift to the disadvantage of foreigners who will account for a larger share of the total, until they represent slightly less than half (45.6% under scenario A; 44.8% under scenario B).

How many of them are young people who prematurely abandon their studies?

If young people between 15 and 24 years are considered, the incidence of Early Leavers within the reference population will be 12% by 2020.

The results show a substantial stability compared to 2013, driven by very similar increases to that characterize the number of Early Leavers and the reference population.

As in the past, foreigners will account for the largest share afflicted by the problem of early leaving: despite losing about 3 percentage points between 2013 and 2020 in the rate of Early Leavers, the percentage of the







latest year considered will reach 31.4%, a value far from the 6.6% characterizing the Italian population.

#### f) Labour force

The results related to the labor market raise some key issues at the center of the considerations. The projected recovery does not allow envisaging a particularly quick recovery of pre-crisis employment levels. Within this baseline scenario, the different components of the labor force are oriented toward following different paths, also as a result of the current processes of demographic change.

First of all, in the coming years a steady **aging of the labour force** as a whole is foreseen, meaning that ratio of workers over 40 years to those aged under 40 will increase. This critical issue is only partially balanced by the lower age of foreigners entering from abroad and the higher fertility rate of foreign women.

Another key element is the growing role of female component in the labor market, not only as the result of a general trend of increasing female participation in the labor market. If, in fact, this trend is structural and acquired, the new feature is the increasingly active role of foreign women, who have experienced increasing rates of employment from 2007 to 2013, though lower than those of Italian women. This is a new element that also has implications relevant to family policies, especially with respect to the utilization or non-utilization of day nurseries and early childhood services. If this trend should also establish itself among women with children, it will be necessary to revise the estimates of the demand for such services, since as of today, a high percentage of foreign families avoid sending their children to day nurseries.

A further concern is related to the youth population (15-24 years). It is known that during the recession years, the youth component of the labor force has suffered the most from perspective of access to the labor market. The youth unemployment rate has exceeded 30% in 2013, but shows some divergence between the Italian and foreign populations. While for the young Italians the rate is below 30%, for foreigners it reached 50% in 2013, clearly demonstrating how the processes of school leaving in order to enter the labor market can have negative results if they are not supported by effective training programs. There is an even more negative outlook relating to this figure that is linked to the increase in the number of people not in education, employment and training (NEET), which increased during the economic downturn, creating a substrate of individuals who face







structural difficulties in finding any avenue for entry into the labor market. In 2013, about 18% of the population between 20 and 34 years of age was affected by this condition, and the forecasted low rate of employment growth does not allow hypotheses on scenarios for reducing this rate. These data indicate that this is essentially a youth issue, not as closely linked to demographic change, as to external factors such as the rigidity of the labor market and the sluggish recovery. At the regional level, the most important aspect is certainly the need to forcefully implement an extensive adaptation of training courses to types of resources actually required by businesses.

Overall, the processes of demographic change affect the labour force to the extent that they promote the rejuvenation of the working age population and contribute to the dynamism of the labor market. However, the specific characteristics of regional demographic change (sharp increase of the foreign population, especially in younger age groups ) also involve a number of challenges for the regional system . Primarily, the challenge is related to the capacity of this new human capital to sustain growth based on the creation of high added value. The analyzed data suggest that the system is oriented towards the training of qualified personnel, with a renewed centrality of the manufacturing system and advanced services. However, this requires a strong decision-making input in order to promote actions at all levels which will allow this human capital to be inserted into appropriate training courses in order to avoid the risk of a prolonged deterioration of the skills necessary to remain in the labor market in a satisfactory manner .

#### g) People older than 75 years

Recent trends in the fragmentation of family types have led to an increase in people living alone, particularly in the older age groups. This is particularly important with regard to the phenomenon of non-self-sufficiency. Given that the family networks which once took charge of the care of people with severe limitations have failed, the task of the social welfare services has become increasingly burdensome.

The lone elderly people are more likely to be women than men, given the different mortality rates affecting these two groups, and are mostly Italians, since even over the next few years, the foreign share of the total elderly population will be of little relevance.







Although the number of elderly people with severe limitations has decreased in recent years, thanks to a lower propensity of the elderly population to revert to conditions of non-self-sufficiency, assuming the stability of this trend as observed in 2012, over the projection period it is envisaged that the increase in older people with severe limitations due to the progressive aging of the population will again reach 120,000 individuals in 2020, as had already occurred in 2008.

### Summary table for scenario results (to be filled by each partner as an annex to the report):

DIMENSION/INDICATOR EUROPE 2020	RELEVANT DEMOGRAPHIC TRENDS 2007-LAST AVAILABLE YEAR - 2020	POLICY IMPACT AT 2020
	LABOUR MARKET	
Employment rate		
Employment rate has declined between 2007 and 2013, and will not likely regain the level of 2007 by 2020. The crisis has strengthened the difference between foreign and Italian citizens: the employment rate of foreign citizens has declined more significantly than Italian citizens.	Working age population (15-59)  2007: 2,476,320 ; 2020: 2,662,282; % change 2020/2007: +7.5%  Of which foreign:  2007: 235,686 ; 2020: 571,689 ; % change 2020/2007: +142%	In 2020 the employment rate will likely be at more or less the same level of 2007, given that the expected economic growth will not exceed the growth of working age population.  Employment rates should not increase for Italian as well for foreign citizens, as a result of different trends: Italian working force is declining in number
Citizens.	The overall demographic change of the workforce will be driven by the increase of foreign citizens, who by 2020 will be more than double than 2007.	and so are Italian employees. Foreign population is strongly increasing in number, and foreign employees are increasing as well but not at the same pace as population.
Unemployment rate		
Unemployment rate is estimated to remain high in 2020, possibly reaching	Working age population (15-59) 2007: 2,476,320 ; 2020: 2,662,282; % change	Estimates suggest that the unemployment rate will not decrease between 2013 and 2020.







10.8%.

As for the employment rate, unemployment levels are strongly dependent on citizenship. Foreign citizens display much higher unemployment rates in 2013, and will continue to do so in 2020.

The unemployment condition of youth (15-24 years) is even more severe: the unemployment rate has reached as high as 30% during the recession, and estimates suggest that it will not decrease. The situtaion of foreign youth is particularly worrying, as they dispaly an unemployment rate of nearly 50%.

2020/2007: +7.5%

#### Of which foreign:

2007: 235,686 ; 2020: 571,689 ; % change 2020/2007: +

142%

#### Youth (15-24)

2007: 343,628; 2020: 418,067; % change 2020/2007:

+21.7%

#### Of which foreign:

2007: 35,916 ; 2020: 91,214 ; % change 2020/2007: +

154%

The youth component of the population is estimated to be increasing the most between 2007 and 2020. As for the overall population, youth demographic increase is due to foreign population growth, which should increase by more than 150% between 2007 and 2020.

Given the different demographic trend between foreign and native citizens, the expected outcome in the labour market are differentiated as well. For foreign workers, the strong demographic increase means that more people will be looking for a job in the next few years, but the slow pace of the recovery will not allow for sizeable occupational recovery. On the other hand, Italian population is declining, therefore the pressure on the labour market by this component is less intense.

A more worrying case is that of young citizens, whose unemployment rate could remain above 30% even in 2020. As for the general population, the different trend between foreign and Italian youth is mostly explained by the diverging demographic trend.







#### Long-term unemployment rate

Long-term unemployment has increased during the recession, and it will continue to increase due to the difficulty of reinstating certain components of the workforce who have lost their jobs during the crisis.

#### Working age population (15-75)

2007: 3,235,796 ; 2020: 3,470,490 ; % change

2020/2007: +7.3%

#### Of which older workforce (40-59)

2007: 1,202,972 ; 2020: 1,461,988 ; % change

2020/2007: +21.5%

The older component of the workforce (15-59) is the second most increasing group of the working age population between 2007 and 2020. This is one of the main reasons why long-term unemployment is estimated to increase, given the greater difficulties of older workers to be employable.

Long term unemployment is affected by both the structural damages of the economic crisis and by the process of ageing of the workforce. Of all the age groups, in fact, people in the age class 40-59 are the only group that is strongly increasing in absolute terms, putting more pressure on a group that suffers the consequences of the recession more than others.

By 2020 almost 60% of unemployment will be composed by long term unemployed.







	HUMAN CAPITAL				
Students enrolment by ISCED level					
The level of aggregation and availability of data have allowed us to only undertake a time series analysis on total pupils included in the 6-19 age group.  The share of enrolled pupils (from elementary to high school) has increased by 10.4% between 2007 and 2012.	The school age po Romagna has grow 2012 (Italians: +6.4 Population (6-19) 2007/2008 2012/2013 Var. %	n by 11.7 %; foreigr	7% between ners: +56.9%  Foreigners 49,658 77,914	2007 and ).  Total 471,304 526,370	NO PROJECTION
During those five years, the ratio between the number of pupils and the school-age population has decreased slightly from 96.5% to 95.5%.					
The percentage of foreign students in total foreign school age population has decreased by 8 percentage points, while for Italians there hasn't been any change.					
Population 25-64 by educational attainment and Tertiary education attainment rate  The group under analysis includes the population	Population (15+)				In the projection period the share of population with a lower secondary level of education will be the largest again, while the share of individuals with no title or at most a







between 15 and 59 subdivided into five-year segments and the population over 60. This is because the low number of older foreigners did not allow for a further division in subcategories of the latter.

# Projection of population by level of educational attainment

The analysis shows important differences between Italians and foreigners with regard to individuals without any education or at best an elementary school certificate: in 2013 they represented 23.6% of the entire Italian population, overtaking the foreign population by more than 10 percentage points. On the other hand, foreigners tend to be more concentrated than Italians in the lower educational levels of compulsory education (47.9 compared to 34.0 for Italians).

2007: 3,689,374;

2013: 3,868,520

2020: 4,042,870;

% change 2020/2007: +9.6%

% change 2020/2013: +4.5%

#### Of which foreign:

2007: 251,819; 2013: 438,466 2020: 639,141;

% change 2020/2007: +153.8%

% change 2020/2013: +45.7%

Between 2007 and 2020 the resident population of 15+ in Emilia Romagna would grow 9.6 percentage points. This increase will be almost entirely due to the foreign component of the population, which would surge by 153.8 percentage points .

primary school certificate will decrease by around 5 percentage points. In addition, there will be a general increase of the percentage of individuals with tertiary education +1.4%)

Foreigners tend to be more concentrated than Italians in the lower educational levels of compulsory education (47.4% compared to 33.7%, for Italians).

Considering only the foreign population, the projected decrease in university graduates from 2013 to 2020 is certainly alarming, and the graduation rate will decline circa two percentage points, reaching 11%, remaining below the Italian level, which will rise by 4 percentage points from 2013.







#### Early leavers from education and training

We consider the population of individuals between the ages of 15 and 24 who quit studying without achieving an educational level higher than secondary school (up to 13 years, in the Italian educational system).

The analysis of data time series shows an overall slight contraction of the phenomenon between 2007 and 2013: the number of early leavers between the ages of 15 and 24 has indeed diminished by 0.6% and the simultaneous increase in the share of population in the 15-24 age group (+9.4%) has led to a further 1.2% decline in the number of young people who have left school early within the population considered. In 2013 the incidence of early leavers within the 15-24 population was 12.1%.

#### Population (15-24)

2007: 343,628; 2013: 375,231 2020: 418,067;

% change 2020/2007: +21.7%

%change 2020/2013: +11.4%

#### Of which foreign:

2007: 35,916; 2013: 64,441; 2020: 91,214;

% change 2020/2007: + 154%

% change 2020/2013: +41.5%

The population 15-24 is estimated to be increasing the most between 2007 and 2020. As for the overall population, youth demographic increase is due to foreign population growth, which should increase by more than 150% between 2007 and 2020.

Looking toward 2020, it seems that the early leaving phenomenon will not diminish significantly, since the absolute number of early leavers and the reference population will be characterized by quite similar increasing trends, respectively 10.2% and 11.4%, which will guarantee a relative stability in the shares (2013: 12.1%, 2020: 12%).

The foreign contingent will continue to be the most heavily affected by the problem of early leaving, with a 31.4% share of early leavers in the reference population; certainly a much higher figure than for Italians, who will have only a 6.6% share of early leavers in the total population by 2020, declining by almost one percentage point compared to 2013.







#### **NEET rate**

The group under analysis includes the population between 15 and 34; the 15-34 age group is an extension of the 15-29 age group considered by Istat in the construction of the same indicator. The choice to include people between the ages of 30 and 34 derives from the awareness that the phenomenon is increasingly becoming relevant for the over-29 age group.

From 2007 to 2013 the share of NEET individuals in Emilia Romagna has increased by 75.3%, currently affecting 18.7% of the entire 15-34 population, 8.4 points higher than in 2007.

#### Population (15-34)

2007: 916,777; 2013: 875,413 2020: 911,818;

% change 2020/2013: +4.2%

Between 2013 and 2020 the population 15-34 will increase by 4.2%, moving from 875,413 individuals in 2013 to 911,818 in 2020.

The increasing trend of phenomenon seems to be confirmed for the next 2013-2020 period, though the rate of expansion will be more contained (+8.1%) and accompanied by an increase in the population (+4.2% vs -4.5% over the 2007-2013 period), limiting the rise in the NEET share to only 0.7 percentage points.

The share of foreigners will register an increase of 4.4 percentage points, leading them to represent 44.8% of the total.

	WELFARE	
Not self-sufficient elderly individuals (75 years		
or more)		
Percentage of elderly people (over 75 years old)	Projections of the number of elderly people (over	Projections of the number of elderly people







#### who declare to have severe limitations

year	Males	Females
2008	17.1%	29.9%
2010	15.5%	27.8%
2012	12.9%	26.4%

## Number of elderly people (over 75 years old) who declare to have severe limitations

year	Males	Females	Total
2008	31,509	91,055	122,563
2010	29,776	86,823	116,599
2012	25,592	83,894	109,487

The number of elderly people who declare themselves non self-sufficient has decreased, both in absolute terms (moving from 120,000 individuals in 2008 to 110,000 in 2012) and relative ones, with a percentage for men dropping from 17.1% to 12.9%, and for women from 29.9% to 26.4%.

### Children aged 0-2 years in day nursery

scholastic	Number of	Propensity
50110145616		opc,

#### 75 years old)

year	Males	Females	Total
2012	198,821	317,266	516,087
2020	230,099	342,256	572,355
% var.	15.7%	7.9%	10.9%

The population over 75 year old will increase by 9.5%, moving from 522,000 individuals in 2012 to 572,000 in 2020. The males will increase more than the females, with a percentage of variation of 14% instead of 6%, even if in absolute terms in 2020 the women will continue to be more numerous than the men (342,000 vs 230,000).

Children 0-2 years

#### (over 75 years old) having severe limitations

year	Males	Females	Total
2012	25,592	83,894	109,487
2020	29,619	90,503	120,121
% var.	15.7%	7.9%	9.7%

An increase in the number of not self-sufficient elderly individuals due to the general aging of the population can be expected, moving from about 109,000 individuals to 120,000.

scholastic Number of applications

year







year	application	to apply
	S	for
		enrollment
1996/97	22,057	26.4%
2003/04	29,191	27.4%
2011/12	24,595	19.9%

The number of applications to public or publicly contracted day nurseries grew until s.y. 2003-04, when it exceeded 29,000 requests, while in subsequent years the trend shifted downward, remaining below 25,000 applications during the last three years surveyed.

The propensity to apply for enrolment (represented by the number of requests compared to the total number of children aged from 0 to 2 years) reached its peak in 2003-2004, with 27.4% applying for enrolment, while in the last several years it hovered around 20%.

2013	119,917
2020	113,749
% var.	-5.1%

The demographic trends for the next years predict a diminishment of the population in the ages between 0 and 2: after the peak of 124,000 children in 2010, we register a persistent reduction over the entire projected period, bottoming at 113,000 children in 2020.

year	
2011/12	24,595
2020/21	23,677
% var.	-3.7%

In the projection period we will have a contraction of the absolute number of applications which decreases below 22,000 units until 2015-16, rising in the following five years until it reaches 23,600 application requests in 2020-21, still below the 24,600 applications of 2011-12, the most recent available number.

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Jointly for our common future