

The Annual report 2014 – The state of the Nation

Summary

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Sala della Regina, Palazzo Montecitorio

Madame Vice President of the Chamber of Deputies, Government representatives, Authorities, Ladies and Gentlemen,

for more than 20 years, Istat's *Annual Report* has provided the Parliament and the citizens with a documented analysis of ongoing economic and social changes, identifying risks and opportunities for the future.

The last decade experienced deep changes: under the new conditions, the traditional background of knowledge and analysis tools appears to be inadequate. Official statistics has made significant progress.

Amongst the most recent innovations, we highlight the development of a new business information system and of 611 local systems, a geography designed according to daily movements, which allows to disclose information with a territorial reference closer to the places where people, enterprises and institutions operate.

Thanks to these new opportunities, the *2015 Report* focuses on differences, strengths and weaknesses of individuals by appealing to the ability to read interactions among them, tie their events to places, identify critical points, dynamic elements, needs for intervention, in order to offer them to the decisions of *policy makers*.

Macroeconomic trends

In 2014, world Gdp amounted to 3,4 percent, in line with the previous year; the global indicator reflects a moderate acceleration in growth for advanced economies (1.8 percent from 1.4 percent in 2013) and a slight slowdown for emerging countries (4.6 percent from 5.0 percent in 2013). In Emu, a modest turnaround in activity (+0.9 percent) was observed after a two year contraction (-0.8 and -0.4 in 2012 and 2013, respectively). In 2014, the recovery did not touch Italy, where the economic activity kept on reducing (-0.4 percent), even if in a more limited way compared with the two previous years (-2.8 percent in 2012 and -1.7 percent in 2013) and its profile progressively improved: according to the preliminary estimate disclosed on 13th May, in the first quarter of 2015 Gdp finally recorded a +0.3 percent cyclical fluctuation. As an effect of the protracted recession, in 2014 Gdp decreased below the value recorded in 2000 and the value per capita decreased below the level recorded in 1997.

As in the three previous years, also in 2014 net foreign demand provided a positive contribution to the product growth - amounting to 0.3 percent - thanks to higher exports of goods and services (+2.6 percent) than imports (+1.8 percent). This partially compensated the negative contribution of domestic demand, which in 2014 was completely due to a drop in investments and reduction in inventories. Household final consumption expenditure increased by 0.3 percent, after a significant decrease in the two previous years (-3.9 percent and -2.9 percent in 2012 and 2013, respectively). The slight recovery of household consumption can be attributed to the real disposable income trend (households' purchasing

The contribution of foreign demand to growth

power) which, for the first time since 2008, experienced no variation on a yearly average (in 2012 and 2013 it decreased by 5.2 percent and 0.9 percent, respectively) and resulted in a reduction of the indicator for severe material deprivation. The slowdown of inflation contributed to stop the drop in purchasing power: on average the variation in the harmonized index of consumer prices was reduced to 0.2 percent in 2014, decreasing by over 1 percent compared to 2013, as a result of the downward price pressures on a wide range of products purchased by households. The recovery of consumption was helped by the reduction of households' propensity to save, from 8.9 percent to 8.6 percent, i.e. by the amount of disposable income intended for gross saving.

For 2015, the indicators highlight positive perspectives for Italy and for the whole Emu. Amongst the main reasons of the first signs of the economic activity's recovery, there are three international factors: the depreciation of the Euro, the drop in the oil price and the ECB's monetary policy. These external factors can boost the economic cycle and enhance confidence among households and enterprises.

Signs of recovery
in Italy and Emu

In Italy, 2015 started with several positive signs - from the trend of industrial production to that of export: a 0.3 percent Gdp (year-on-year) growth was recorded in the first quarter of the year. Preliminary estimates of the activity trend show an expansion of domestic demand and a negative contribution of net foreign demand. With reference to this, data on foreign trade in the first quarter of 2015, disseminated last Monday, showed a positive year-on-year variation in exports (+1.2 percent) and a higher growth in imports (+1.9 percent), which resulted from a strong recovery in purchases of intermediate (+4.9 percent) and capital goods (+4.6 percent) by enterprises.

Positive signs also come from higher confidence of both households and businesses as compared to the 2010 average. As for households, the synthetic index increased from 97.8 in December 2014 to 110.7 in March, equalling 108.2 in April; similarly, the composite indicator of business confidence in Italy has significantly increased since December 2014, with peaks in February and March. In April, increases were registered in manufacturing and trade, while services and constructions showed a downturn. Manufacturing enterprises experienced an improvement in orders assessment, while production expectations remained stable.

The wealth of the Country lies in diversity

The geography of local systems, generated by movements to reach the workplace, describes with good approximation the daily urban systems, i.e. places where most of the activities and daily movements of people and economic actors occur. Since they result from spontaneous and (mostly) autonomous organization of choices and actions of these actors, local systems allow to observe the real country in its differences and peculiarities, with a better approximation of the perimeters of specific relationships, networks, exchanges and flows in places. The resulting framework is different from the one described by administrative partitions. This approach allows to use different perspectives to deal with such topical themes, as health and safety in industrial districts, land use and several aspects of the "urban issue", such as types of settlement, town hierarchies and environmental aspects.

A new
perspective of
analysis

A similar approach has been used in the *Report* also to examine our production system and business competitiveness. Traditional analyses by sector, size and territory do not properly describe the significant heterogeneity of the system. For a more rigorous and real analysis, available tools need to be extended, so as to include strategies, aims, relationships between enterprises. Thanks to the implementation of a new information system (Frame-Sbs), which includes annual data on the profits and losses of all active enterprises (almost 4.4 million), official statistics offers a deep insight into business performance.

After a prolonged period of recession and economic difficulties, one of the strengths, to be adequately emphasized, is Italy's variety of ways of living, producing, inhabiting the

territory, generating culture and knowledge learning and liaising with other people and enterprises. Paradoxically, in this context, even problematic aspects may turn into potential levers for change. The other side of the paradox is that sticking to strengths, production specializations, habits and consolidated ways of being can be a losing choice, a competitive disadvantage, an impediment to innovation.

A symbolic case is that of industrial districts, which decreased in number from 181 to 141 in the decade 2001-2011. These areas, with marked geographic (mainly concentrated in the North-east and Centre of Italy) and economic characteristics (mostly specialized in *made in Italy* production), showed very different capabilities to adapt to the changing conditions of global competition: only 29 districts had good employment performance in the same sector as in 2001. Conversely, 22 showed a good capability to adapt to the changed local and global economic contexts (they changed their main specialization, achieving positive employment dynamics) and 17 remained halfway, partially abandoning the know-how underlying their production specialization. However half of the industrial districts kept their economic specialization, running into employment losses and showing difficulties to adapt the production model to the changed competitive context.

The number of districts decreases

The map of business performance, in terms of value added, also shows a mixed framework. On the one hand, the role of production specializations in urban areas arises (especially household and business services, and services for public benefit). On the other hand, local specific production is confirmed. For instance, the production of machinery and jewellery is still important despite the downfall of manufacture. The most suitable models to meet foreign demand proved to be the district-based economy and urban systems, where concentration and heterogeneity coexist.

Business performance framework

However, trends in employment performance of urban systems differ from those of *made in Italy*. Urban systems are well represented among the 64 local systems and include Rome, Milan, Bologna, and Florence: between 2008 and 2014, employment increased despite recession. Many of the systems located in the North-East and specialized in the fields of jewelry, eyeglasses, musical instruments, wood and furniture and above all mechanics, are among those (a total of 235) which were hardly affected by the crisis in its early years, but showed signs of employment recovery in 2014. The topic of work, as well as the Southern issue, are described in several parts of the *Report*. In 2014, in the European Union, thanks to an increase of almost two million employed people, the employment rate amounted nearly to 65 percent and almost recovered the level of 2008. In Italy, the growth was slower and the employment rate amounted to 56 percent, below the European average by almost 10 percent and below the level of 2008 by almost 3 percent. To equal the average European employment rate, the number of people employed in our Country should increase by almost 3,5 million.

Employment in Emu and Italy

The gap between the average national and European employment rates is due to territorial, gender and age factors. In 2014, employment increased only in Centre-Northern areas, while the South continued to register job losses: -45 thousand employees last year, almost -600 thousand since the beginning of the crisis (-9 percent). Last year's drop reduced the employment rate in the South and Islands to below 42 percent.

The modest increase in female employment, recorded since the beginning of the crisis (64 thousand new employees between 2008 and 2014) opposed a significant drop in male employment (minus 875 thousand employees). This depended on several factors: a rise in both foreign female employees and in female employees aged 50 and over, as a result of an increased retirement age, and the entry - in this age cohort - of more educated women. This is added to the higher number of women who accessed the labor market to support the household income in case of unemployed partners. Nevertheless, the female employment rate remained very low: it amounted to less than 47 percent, i.e. almost 13 percent less than the Eu average. Even in this case, to equal the average European employment rate, the number of women employed in our Country should increase by almost 2,5 million.

Female employment is still low

More investments to change and grow

In a broad sense, investments are the real key to recovery. One of the most evident aspects of last years' recession in all major European countries was the drop in economic investments. Specifically in Italy, from 2008 to 2014, the ratio of investments to Gdp decreased by 4.5 percent (involving both constructions and machinery and equipment industry). In 2014, gross investments kept on decreasing, with a 3.3 percent average annual decline. However, in the last quarter of the year, signs of a trend reversal have showed up: after five consecutive quarters of contraction, fixed gross investments gave rise to a 0.2 percent growth, mostly resulting from an increase in equipment, machinery and arms (+1.4 percent), compared with a negative trend for investments in construction (-0.6 percent).

Crucial investments for recovery

An appendix to a chapter in the *Report* presents a simulation exercise aiming at evaluating if positive conditions may arise during 2015 to promote a recovery in investments. According to behavioral reports of Istat econometric model, the level of uncertainty and credit conditions are also key factors for such a recovery, besides Gdp and interest rates. In this perspective, the resumption of a positive cycle of capital accumulation is expected to be enhanced by recent and future dynamics of all the factors affecting investments: improved confidence among entrepreneurs and households, reduction of sovereign security spreads, current and expected levels of production, and the monetary policy implemented by the European Central Bank, which favors a prolonged reduction in interest rates. Specifically, during 2015 the simulation highlights stronger growth for intellectual property products, more responsive to improved liquidity conditions, while investments in machinery and equipment are expected to grow at a slower pace. Investments in non-residential works, less responsive to production rates, are expected to increase only in 2016.

The recovery of gross fixed capital formation is a necessary – though not sufficient – condition for economic growth. A partially unexpected consequence of the recession is that significant features of the Italian production structure did not change. Micro-enterprises (those with less than ten employees) are more than 4 million, i.e. nearly 95 percent of total production units, and employ almost 7.8 million people (47 percent, as compared with 29 percent in the European average). Large enterprises (those with 250 or more employees) account for a very modest share: 0.1 percent of enterprises and 19 percent of employees. This fragmentation, which is only partially mitigated by the presence of groups of enterprises, results, on average, in very small sized enterprises (3,9 workers per enterprise, compared with a 6.8 European average), a very simplified ownership structure (individual enterprises are 63.3 percent) and a share of self-employed persons which is more than double the European average.

Italian production structure is unchanged

These features of the Italian production system are not an inevitable fate: they largely depend on the conditions in which enterprises operate. For this reason, the nature and number of business relations are a key factor for success.

One of the most stringent modalities is that of groups of enterprises based on financial participation: in Italy there are more than 90 thousand groups, and they include more than 206 thousand active resident enterprises, employing more than 5.6 million persons (almost one third of the people are employed in active enterprises of industry and services sectors). This is an increasing phenomenon - in 2008 there were almost 76 thousand groups with 176 thousand enterprises - with increasing economic importance. 54 percent of the overall value added and 80 percent of total export can be attributed to enterprises belonging to groups. Enterprises belonging to groups are much more productive than the others, regardless of their size. Even micro-enterprises, if they join a group, show an average productivity higher than larger enterprises operating individually.

The importance of relationships between enterprises

Therefore, Italian enterprises are reacting to structural limits imposed by excessive fragmentation, with a larger presence of complex structures, as well as with the traditional relationships between independent firms. There are many enterprises, indeed, which do not operate in isolation and seek for forms of flexibility and external economies through partnership with other units: in this case, enterprises that establish stable forms of collaboration - based on contractual or informal agreements - achieve better performances than those which operate in isolation.

Our business governance is very simplified and financing sources are limited. Ownership structures of enterprises with at least three employees feature a high concentration of ownership shares and family control. Control is exercised directly or indirectly by an individual or a family in more than 70 percent of the cases. The financing model is traditional, mainly based on bank loans and private resources, also because financial markets are little developed.

Among the actors of the business ecosystem, a significant role in the Italian production system is played by public enterprises and investee companies, operating especially in capital-intensive sectors, such as energy and infrastructures. These enterprises employ almost 750 thousand people (4.6 percent of the total), their average size is larger than private ones and they account for 10 percent of the value added of the whole production system. From a sectoral perspective, considering technological features, public companies appear to be more efficient than private ones in tertiary activities, both in providing business services and, more significantly, in providing individual services; on the contrary, the private sector is more efficient in manufacturing activities, above all in the production of intermediate goods. Therefore public companies - which are not necessarily less efficient than private ones - can play an important role in guiding growth, especially when operating in key sectors.

Public enterprises
or investee
companies

Moreover rules, regulations, and economic policy affect behaviors and performances. It is known that enterprises complain about bureaucratic and administrative burden: in February this year, about three out of four respondents to Istat's monthly survey on confidence, mentioned burden reduction as one of the factors that can lead to an increase in employment.

From a different point of view, the monetary policies implemented by the European Central Bank through tools such as the *Quantitative easing* (Qe) - an extraordinary measure to buy financial assets - are very important for their effects on the extent and quality of recovery. Stabilization of international oil prices at the levels of the first months of 2015 might also help the recovery. The effects of ECB interventions and of the oil price drop on the economic cycle in 2015-2016 have been estimated through two exercises which simulate the cyclic evolution of Emu on a baseline scenario where the two mentioned factors do not exist. According to the results of the two simulations, without an extraordinary monetary stimulus by the ECB, in 2016 Gdp is expected to grow at a slower rate (0.7 percent less than in the baseline scenario), while the effect on the inflation rate is expected to be more limited. A faster recovery of price dynamics would be enhanced by an increase in oil prices, whose level, in the second simulation, is hypothetically set to the value of end November 2014 (76 dollars a barrel): the consumer price index is expected to grow by 0.8 percent compared with the baseline scenario over the two-year period, with a higher effect in 2015 (0.6 percent) compared with 2016 (0.2 percent).

Actions to support
growth

The economic growth contributes to create a favorable climate for entrepreneurial activity and enterprise development, and helps to free up resources and skills. However, as seen in the case of industrial districts, in order to successfully adapt to the changing conditions of global competition, investing in efficiency is not enough (doing better but at lower and lower costs). It is often necessary to go beyond the limits of specialization, through innovation. Innovation is needed not merely for processes, but also for products by introducing new goods and services, in order to meet new needs.

Innovation to
compete and
meet new needs

The features of fragmentation and governance of our production system affect the behavior and performances of those enterprises which are more inclined to innovation. Italian firms show a moderate propensity to invest in research and development (0.7 percent of Gdp, as compared with a 1.3 percent Eu average) but are above the European average in terms of propensity to innovation, more suitable to the features of our enterprises (42 percent of innovators compared with 36 percent in the Eu).

Formal and informal relationships between enterprises counterbalance the negative effects of fragmentation in our production system. In particular the relations between manufacturing and service enterprises, more often and more significantly than other relations have positive effects on the inclination to innovation. This topic includes several aspects: tertiarisation of the economy (as long-term growth of service activities to the detriment of agricultural and

manufacturing ones), tertiarisation of industry (as an upward trend in supply of services by industrial enterprises), an increase in the exchange of intermediate goods and services in global value chains, the purchase of services by third parties. Therefore, the relations between industry and services sectors have been a typical feature of the economic evolution in the last few decades. Specifically, the purchase of services by third parties affects economic productivity, both indirectly – through production in *outsourcing* or by moving abroad activities with low value added – and directly – as a significant mean to transfer knowledge *spillovers*.

The role of
business services

The phenomenon of *outsourcing* – as shown in the *2015 Report on competitiveness of production sectors* – modestly increased amongst manufacturing enterprises in 2013-2014. This occurred above all for ICT and those activities which were rarely *outsourced*: research and development, marketing and post-sale services.

Over the last few decades, knowledge-intensive business services (Kibs) has experienced considerable growth in all advanced economies. Generally speaking, Kibs rely heavily on graduated people and a strong inclination to innovate. Starting from the '90s, the ratio of people employed in Kibs to the total employment in the economy increased exponentially also in Italy.

Moreover, several factors lead to growth in the service sector. Besides the above mentioned factors, two perspectives are important, which may seem in contrast but actually move towards the same direction, that is the services-based society.

Firstly, in developed economies, a need can be met – the main point for the consumer – in different ways: by means of a good (which also requires a personal commitment by the consumer, as it is required when owning and using a transport mean) or through a service provided by third parties (i.e. *car sharing*, to continue the previous example). The choice between the two is not only due to economic reasons, but it is also affected by personal preferences and technological progress (which continuously changes the ways in which needs can be satisfied, also in terms of "value in use"). However, this freedom of choice and, more generally, a widening range of choices is increasingly perceived as an essential element for wealth and subjective wellbeing.

Secondly, as productivity grows post-industrial societies free up resources which can be used for "higher" services, arising from new consumption models and a multiplicity of life-styles. With the elderly constantly growing, society requires numerous and more specific individual services. Such a society needs more services, more relationships, more integration, more trust and more social capital.

New services for
an ageing society

It is widely known that the age structure of the population has grown old. The considerable share of old people in the total population is the result of the gradual increase in the average life-expectancy (one of our Country's reasons for pride), while the decrease in the younger cohorts, sharper in the Center-North, results from the decline in the fertility rate which, starting from mid-70s, has gone down for three decades. In such a framework of endogenous demographic changes, over the last 20 years an external factor was included: international migrations.

Our future arises from the spread of cultural heritage

Investments, with the different meanings described above, are the drivers for change: from a strictly economic point of view, investments are new accumulation of constructions, plants, machinery and intellectual property products; action to determine the conditions of context and structural features of the Italian production system; investing in innovation, especially of products and services, as a mean to go beyond the limits of consolidated specializations; investing in services, not only to promote increasing integration with the manufacture and other sectors of the economic activities, but also to create and multiply the possibilities to meet people's needs in a society where new needs and life-styles arise.

Therefore, more generally and in different fields, investments are the way to build the future, by enhancing past accumulation processes: not only stocks of physical capital but also knowledge accumulation, identity, sociality, relationship, know-how and culture, which can be found all over our territory. It is no coincidence that the Italian term for heritage, i.e. "patrimonio", usually used in the phrase "cultural heritage", refers to the concept of capital stock.

Investments in culture: a lever for change

Starting from these considerations, it is evident that investments in a national heritage focusing on a comprehensive concept of culture, are an essential part of the levers for change.

More often than not, the reference to Italian history, tradition, elegance, style and quality of life is little more than a stereotype. On the contrary, this *Report* uses the socio-economic characteristics of local systems to assess whether - and to what extent - factors such as natural and artistic heritage, history, culture and local traditions, quality of life turn out to be actual opportunities for territories, and whether physical resources and economic activities reflect the "cultural and attractive inclination" of places. The latter refers not only to historical, monumental, and landscape heritage, but also to agri-food resources and artistic crafts, as well as cultural and creative industry.

The analysis of these dimensions of Italian culture and tradition allow to identify five groups of local systems. The first one, named the *great beauty*, includes local systems with a high - and well combined - value for both of the aspects mentioned above: these systems are rich in both artistic and landscape heritage and have a culturally-marked production structure. There are 70 of these local systems, located both in the Center-North and in the South, where 38 percent of the Italian population live. It is a cultural ecosystem, including all cities of arts and where excellent landscape and cultural resources combine with excellent entrepreneurial skills in the field of culture. 43 percent of the local systems enjoying a successful mix of cultural features is strongly localized. In these areas different arts, culture, taste, craft and entrepreneurial traditions coexist. The territories of the *great beauty* are concentrated mainly in metropolitan areas: the cities of Florence and Rome alone attract more than 33 million visitors of museums which reach 50 million if we add Turin, Milan, Venice and Pompeii. Rome and Milan are the capitals of entrepreneurial initiative (43 thousand local units and 113 thousand employees work in the field of culture, which is equal to one fifth of the national total).

Five groups of systems by cultural inclination and entrepreneurship

The second group, *heritage potential*, includes 138 local systems having considerable values of cultural and landscape heritage but lacking production and training element. These territories could make a qualitative leap forward if they succeeded in improving their entrepreneurial skills. More than half of the local systems in this group is located in Southern regions; one fourth of them is located in Sicily and Apulia.

In the third group, called *cultural entrepreneurship* - as opposed to the previous one - local systems have a strong cultural/production structure, but a limited cultural and landscape heritage. 42 percent of local systems in this group is located in the North-East.

The fourth group, *the tourism push*, despite having strongly attractive tourist areas, includes local systems with middle-low values for both cultural heritage and production/cultural structure. There are several of these local systems in the Alpine area and in wide areas in the South; one fourth of them is located in the islands.

The last group is that of *cultural remoteness* (71 local systems), whose levels of culture and cultural production are constantly lower than the standard ones and includes areas of the Country which are sparsely populated and almost abandoned, mainly located in Calabria, Sicily and Apulia.

This analysis shows that the culture of beauty and tradition is common to most territories and contributes to create opportunities for growth and development of the whole Country. This is testified by the fact that the places of the *great beauty* are located in areas ranging from the North to the South; moreover, tourist areas with a high boost to economic growth

Cultural tradition as a tourism push

and development, the so-called tourism push, include local systems in the Alpine areas and in the South, above all in the islands. Finally, the culture of beauty and tradition is common to many areas, even differing from one another, which work together to create amazing opportunities of growth and development for the whole Country.

Investing on skills to compete

Broadly speaking, investments in knowledge and competences are also a form of investment (investments in human capital) and a driver for change. The ongoing fast and deep changes necessarily require new strategies for enterprises and workers, which enable them to compete and adapt to the new ways in which markets operate.

An analysis of the qualitative aspects underpinning employment choices by manufacturing and service enterprises in 2014 allowed to assess to what extent business strategies affect their employment choices. The analysis relied on data from the aforementioned ad hoc survey included in the survey on business confidence. Moreover, in 2014 new jobs were frequently given "young" people aged less than thirty years, and were largely motivated by the business need for expansion, and the need to increase and diversify the skills of the staff.

More than one third of manufacturing enterprises and almost 40 percent of service enterprises considered it appropriate to hire a considerable number (over 30 percent) of people with high qualifications, relying on a high level of theoretical knowledge achieved either through the completion of university courses or equivalent learning (including non-formal). This phenomenon mostly concerned large firms (36 percent in manufacturing and 47 percent in services) and medium-sized manufacturing enterprises (32 percent).

As widely documented in the *Report*, qualifications are still a significant advantage in the labor market: in 2014, the rate of graduate unemployment was 8 percent, almost 9 percent less than that of people with middle school qualification. The gap widened to 18 percent for people who did not participate in the labor market (13 percent of graduates, 31 percent of the less educated). Amongst graduates, the employment rate in 2014 was equal to 75 percent (compared with 63 percent amongst high school leavers and 42 percent amongst the less educated).

Factors such as level of educational attainment, duration of work experience and the worker's citizenship differently affect the gender pay gap which varies depending on the areas. Due to all the factors above, the effect on the pay gap is wider between men than between women: on average in the North a foreign woman is paid 8 percent less than an Italian woman and the gap widens to 12 percent among men. As to work experience, the greatest benefit in terms of earnings is also offered to men.

As to the level of educational attainment, the gender gap adds to a great difference among areas: on average in the Centre, women graduates are paid 29 percent more than those with a high school diploma, whereas the percentage rises up to 68 percent among men. In the South, the gap narrows: the jobs held by women graduates give them a leverage of almost 20 percent, compared to 51 percent for men.

The already wide gap in the average pay between men and women becomes even more significant for higher career positions, suggesting the presence of the so-called "glass ceiling" which prevents women from accessing top positions in enterprises and accordingly from gaining a corresponding pay.

Data about PhDs also confirm that investments in higher education guarantee higher wages and higher professional satisfaction. Four years after achieving the PhD degree, nine PhDs out of ten are employed; 85 percent has an intellectual, scientific or highly specialized occupation.

Therefore, investments in higher education guarantee higher wages and higher professional satisfaction. From the individual's point of view, high employment rates, as well as the contents and features of the work performed by PhDs, are proof for a reward proportionate

Business strategies for employment

Benefits from education

Gender pay gap with same education level

to higher education attainment. From the society's point of view, the strong presence of qualified human capital plays a key role in terms of economic development and innovation.

The number of PhDs living and working abroad is increasing: from 7 percent for PhD cohorts graduated in 2004 and 2006 to 13 percent of those graduated in 2008 and 2010. There are three thousands of them, almost 13 percent of the total (17 percent for men, 10 percent for women). Above all, PhDs in Physical Sciences (32 percent) and in Mathematics or IT (22 percent) are the ones who migrate the most, compared with those who achieved a PhD in Law, Agricultural or Veterinary Sciences (almost 8 percent). The Countries attracting more Italian PhDs are the United Kingdom and United States (16 percent), France (14 percent), Germany (11 percent) and Switzerland (9 percent). Those who live abroad, have a higher chance to find a job at Universities (48 percent compared with 29 percent for those who live in Italy) or at public or private research bodies (20 percent compared with 12 percent).

High education is rewarding

The increase in the number of PhDs, who start their working career abroad, shows the success of a good education attained at our universities. However, Italy's negative PhD migration balance is due to a reduced appeal of our Country for foreign PhDs and to the difficulty for our young people to come back to Italy, because of the differing career perspectives as compared with those offered abroad.

Generally speaking, the employment trend over the period 2011-2014, resulting from the Labor force survey data broken down by 508 professional groups, shows that the overall decrease of 319 thousand people is the outcome of different trends: 356 professions are *stable*, 82 *suffer from the crisis* and 70 are *successful*, i.e. their employment rate grew (plus 1.4 million employees), totaling 6.6 million employed people at the end of the period.

As to successful occupations only, in the three-year period highly qualified groups (legislators, entrepreneurs and senior management; intellectual, scientific and highly specialized occupations; technical occupations and executive occupations in office work) experienced higher-than-average growth. These groups rank high in the list of occupations together with the group including craftsmen, skilled workers and farmers (amongst "blue-collar" workers). Flexibility, problem solving and communication skills - more than other occupation-specific know-how - are the most common requirements winning the labor market award.

Successful occupations

New map to read the real Country

In addition to high education qualifications and highly specialized technical competences the labor market rewards interpersonal skills (listening, teaching skills, and skills to select right methods and processes), especially when oriented to meet other people's needs. Therefore, attention is drawn again – as in other sections of the *Annual report* – to the theme of density of relations, between people as well as amongst social groups and economic actors.

From this point of view, the theme of relational density is pervasive: it often pops out of the maps, analyses, graphs and models included in the *Report*. For instance, it arises when comparing Italian and German enterprises on how they conveyed input from foreign demand to the whole economy

Although the two models have some common features, Italian export appears to be less concentrated than German export and depends on several sectors: the first five sectors in order of importance (four of them are the same in both countries) account for half of Italian export and two thirds of German export. Although from 2011 to 2014 the actual dynamics of exports was similar in Italy and Germany, a different activation ability in the two countries produced different effects. Specifically, the German economy activated a greater number of resources - both domestic and non - than the Italian economy. This was due to a higher sectoral interdependence, i.e. a greater relational density in the German production system.

Italian- German comparison on production model

Of course, relational and flow density between people and actors is more clearly observed at

the local level, especially in the geography of local systems. Another important emerging feature is the persistence of urban areas, as "long-lasting" elements of Italy's identification. Over thirty years, the number of local systems has decreased from almost 1000 to slightly more than 600. This was due to the changes in the population characteristics, in the re-distribution of the Italian territory between places of residence and places of work, in production specializations, in transport and communication means and so on. Nevertheless, local systems are real objects. This is confirmed by the fact that 503 *robust and persistent* local systems were identified from 2001 and 2011, regardless of the methods used for regionalization. These systems, which account for 64 percent of municipalities, 68 percent of area and 79 percent of population, are a permanent element of territorial self-organization and define the urban structure of the Country. The concept of local system itself is close to functional urban space, arranged on the basis of social relationships, rather than on buildings.

Urban systems:
the structure of
the Country

The persistence of this place qualification has not to be considered as a symptom of stagnation. On the contrary, over the decades, daily movements for work reasons have increased in number and have covered increasingly longer distances and durations. The persistence of this urban frameworks over the years, shows how deeply rooted they are in the behaviors and habits of the people living and operating in these places. This recalls the so called "central paradox" of modern cities. The cost to link increasingly farther places keeps on decreasing, whereas the value of proximity, density, closeness, absence of physical space increases. That is because the latter allow people to interact, work together, exchange ideas, competences, entrepreneurial projects, capitals, feelings and passions.

In Italy, in 2013 the taxable income per taxpayer in the 503 robust and persistent local systems (especially for 223 of them which attracted new municipalities from 2001 to 2011) was systematically higher than that in other local systems. In urban systems the taxable income per taxpayer was higher than that in all other groups.

In the consolidated scenario of urban realities, the heterogeneity of the Country clearly stands out again as a distinguishing feature. Focusing on some typical features of these types of settlement, different patterns have been identified in the development of local networks where people and activities interact. There are two models implying a large use of land: a thicker one, involving Milan, Rome and Naples conurbations, and a sparser one involving towns in the Veneto region, where the "cost" of the district system is well represented. Another model, making smaller use of land, is typical of other urban realities in the South, which confirms the structural divide between the two areas of the Country that is due to several reasons including the type of urban localizations. However, when analyzing the context of Southern cities (net of Naples) with reference to the considered dimension the South gets a higher score, compared with the Center-North: Southern areas have been less jeopardized by the sparser density of built-up areas. This distinguishing feature, that can be extended to all Southern local systems, as well as to Alpine or Apennine ones, can be meant as an indicator for better territory management. However, such territories are often fragile and marginal and have to be preserved from the replication of models that have already undermined most of the national context.

Two models for
land use

As to urban characterization, areas are still heterogeneous in size and in the relationships of their connecting structure: major urban systems largely differ from one another, because of the number of municipalities (from 6 of Trieste to 174 of Milan), residing population (from 217 thousand inhabitants in Reggio Calabria to over 3 million in Rome and Milan) and jobs (from 50 thousand to over a million), as well as because of the relationships between the areas and places of interest existing in each system. Genoa, Rome, Bari and Palermo have a monocentric structure, where a single gravitational center is surrounded by a strongly-centripetal periphery; whereas, Turin, Milan and Naples have a complex structure, with several major interacting centers.

Spatial organization of relationships results in real and abstract flows between places, in needs for local services, in different pressures over the territories. Considering this varied territory complexity, functional geographical bases (such as local systems) are an important opportunity to observe the real country, instead of the mere administrative geography. A comparison between groups of municipalities in major urban local systems and in the new

Beyond the
administration
boundaries to see
differences

metropolitan cities shows two different geographies: as an example, consider that Turin local system includes 112 municipalities, whereas the relative metropolitan city includes 316 municipalities; and, vice versa, the metropolitan city of Milan includes a lower number of municipalities than those included in the relative local system.

The implementation of policies focusing on the territory and keeping into account functional geographical partitions (such as local systems) is an opportunity to contribute to the success of specific industrial, infra-structural and social interventions. Moreover, local systems provide policy-makers with an information set which is also significant for re-engineering local territory management.

The variety of urban types of settlement and of consolidated intertwined relationships throughout the country – what is sometime called "Italy with hundreds of cities" – is reflected in the multiple ways of social living. It is worth repeating that this year's *Annual report* uses the new maps to get a closer look at the real country. The aim is to highlight both critical aspects and resources - which are often available in the same territory where problems arise - in order to face difficulties and turn constraints into levers for change.

Heterogeneity in socio-demographic profiles can explain some of the differences in living conditions, access to labor market and, more generally, in opportunities of social progress which spread in and are reflected in the territory. Gender, educational attainment, status in employment and nationality introduce significant differences. Women have better health conditions (in 2014, life expectancy was 85 years for women and slightly more than 80 for men), but have less work opportunities and, when they work, they usually do irregular jobs and get lower wages.

Socio-demographic profiles and life conditions

Those with higher educational attainment have more opportunities to be satisfied with their own living conditions, they access welfare services more easily and experience competitive advantages in the labor market. In 2014 their employment rate was more than 75 percent, whereas the rate of those with middle school diploma was equal to 42 percent. Those who have a low education qualification also risk to have worse health conditions, atypical or low-profile jobs.

Foreigners, too experience highly different living conditions and opportunities almost everywhere across the country - though to different extents. The issue of foreigners' integration is very important, since for over two decades Italy has been the destination of considerable migration flows: currently over 4.8 million foreigners reside in our country. Foreigners are undoubtedly a resource for our country, which is confronted with advanced ageing and low fertility rates. In the labor market there is high demand for jobs in elementary occupations (36 percent of total labor demand). These occupations require low ability levels and are closely related to the sector of household services, including caregivers, social-health workers, cleaners in offices and houses. This part of the labor demand strongly attracts migrants, who are willing to do jobs for which there is a shortage of Italian labor supply. 40 percent of foreigners lives in the group of *Center-Northern cities* and shows clear signs of integration. A negative sign for this group of population is that - more often than others - they risk - to perform irregular works and are forced to accept a lower position than the one held in their countries of origin.

The integration of foreigners: a significant issue

Many of the analyses carried out in the *Report* have a common denominator: there is a North-South gradient along which as difficulties and problems increase, excellence situations become increasingly rarer. A traditionally dual reading can be useful to guide policies but is not enough to understand specific problems and to suggest efficient measures that can change the overall scenario. In other words, the geography of the Country described and analyzed in the *Report* confirms territorial differentials but highlights also elements which differ from well-known stereotypes. Confirmations concern economic conditions which reward Central-Northern areas, despite their less satisfying living and environmental conditions. In the South, areas with high economic and environmental degradation coexist with other areas where the inhabitants recount high levels of satisfaction and wellbeing.

For instance, the health sector shows both confirmations and denials for the paradigm of territorial differentials. A deep analysis carried out in the administrative territories pertaining

to Local Health Administrations (Asl) confirms the gap between the Center-North and the South, in terms of health conditions and quality of the National Health System. Yet it also highlights how complexly heterogeneous the Administrations are even within the same Region. Intra-regional heterogeneity concerns significant dimensions of quality of the National Health System, such as access to treatment and satisfaction for the care received. Once again, these results show that, from the more detailed view of functional geography some territories in the Center-North are much more similar to those in the South than traditional analyses, carried out on a regional basis, might reveal.

Over ten years after the completion of the reforms in the health sector - which introduced the principle of subsidiarity, laid down in the Constitution, and made the Regions accountable for service organization and management - imbalances in quality throughout the country still exist. Our National Health System, which is forced to move along a narrow path due to public finance constraints, is clearly suffering and keeps historical gaps across the country, not only between Regions but also between different Local Health Administrations operating in the same region. These inequalities give rise to two phenomena, described in the *Report*: the number of people forced to renounce to health services on average accounted for 9.5 percent at the national level and for 13.2 percent in the South) and a *mismatch* between material/financial resources and the population need for health, the latter being measured as the predominance of serious chronic diseases. It is worth to mention that in a recent report by the Ministry of Health it has been highlighted that Regions in debt have lower- than-expected assistance standards. The significant variety within the Regions proves that, even if subsidiarity were more efficiently applied, clear imbalances remain, probably as a result of inefficient allocation and organization.

Territorial differences in health

The analyses in the Report give a very detailed picture of the Country with many differences and lack of uniformity, with strong excellence and vital points, and with hard or chronic problems, which however concern few areas, few sectors, few groups of citizens or families. A big exception is the South: even without focusing on single details – being them territorial or sectoral, economic or social - the resulting patchwork shows the South as experiencing the worst situations.

For many years the South – despite some exceptions and trend reversals which are worth mentioning – has been excluded from *policy* priorities. The extent of the problem is so serious that, if the South (its companies, its cities, its inhabitants) is not allowed to keep pace with the level of development and growth that other areas and actors of the Country are trying to achieve, Italy's development and growth will be qualitatively and quantitatively penalized, compared with other countries.

South still struggles

Over the last few years, prolonged recession and tax policy constraints have brought about widening gaps not only in economic and employment activities, but also in most dimensions of wellbeing. Basing on this variety of evidences, a single *policy* cannot bring the South back on the path towards growth, not even if it had an "extraordinary" dimension (as it had in a recent and less recent past). Three types of investment are needed: besides investments in physical capital, investments in social capital (i.e. the mutual trust of citizens and economic actors, starting from the urban basis) and investments in "accountable" administrations, able to implement successful policies with successful results.



Istat does its job for the benefit of the Country, by disseminating and communicating every day, completely independently information about the economic environment and other economic, environmental and social factors. Today, we have described some of the in-depth studies that the Institute discloses with the *Annual report* and offered analyses and models to interpret complex phenomena – from competitiveness to wellbeing – with their interconnections and territorial structures.



Recently, the Institute has started a significant process for modernization of statistical production, consistently with the aims of the international and European statistical systems, which will lead to the integration of databases, deriving information from surveys, administrative records and new sources. It will be a wealth of information, which will need collaboration from the whole National statistical system, and will imply high quality standards; Istat will make this information accessible, in order to meet efficiently the demand for information and knowledge by citizens, policy-makers and scientific community.

The creation of new maps is a challenge with many perspectives, which is essential in order to decide and plan, at all managerial levels, but above all in order to understand the Country we live in.