Chapter 19. 15° Population Census 2011 : territorial dynamics and demographic indicators in Sicily

The diffusion of the final results of the Census of the population and habitation was launched with the publication in the Gazzetta Ufficiale (GURI) of December 18, 2012, of figures for the legal population and was followed by public initiatives for presenting the data. In Sicily, two meetings took place, one at the City Hall of Catania on February 8, 2013 and the other at the Prefecture of Palermo, the following day, and during which ISTAT illustrated the main demographic features of the population and, for the occasion, presented contributions from other institutions and academics. What follows constitutes the contents of the talk by the representative from the statistical Services of the Regione Siciliana; the aim was to describe the trends of certain indicators deducible from the Census data, of particular relevance for Regional programming.

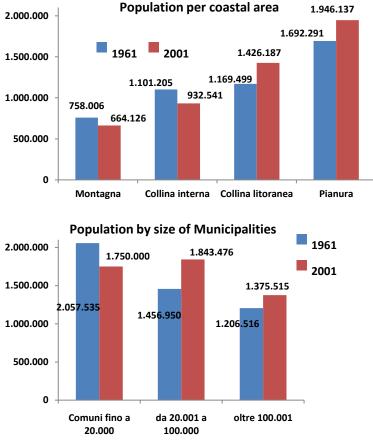
On October 9, 2011, the resident population in Sicily (comprising persons with their fixed abode there) totaled 5,002,904 individuals, of whom 2,584,147 were females and 2,418,757 were males. In the 60 years since the first post-war Census (1951) the total went from 4.487 million to 4.721 in 1961, 4,861 in 1971, 4.907 in1981, 4.966 in 1991 and 4.969 in 2001. Therefore, it only crossed the threshold of 5 million in 2011, bearing in mind the considerable emigration, which, especially in the first two decades, compensated for the similarly significant natural growth. In fact, since 1981 the population has become somewhat stationary, but several profound social and economic changes have conditioned the structure and territorial distribution in line with clearly-defined trends. The latter can be examined with reference to the period 1961-2001 and to several important determining factors, which will be highlighted forthwith. Subsequently there will be a verification to see whether during the last Census period (2001-2011) the same trends were confirmed.

In short, the phenomena that we shall be discussing can be described as followed. The essential feature of demographic and territorial evolution in Sicily, in the decades under examination, is that of progressive urbanization of large towns, located principally along the coasts of Sicily. This has been accompanied by a transformation of the economy, with agriculture losing much of its traditional importance in favour of the service sector, leaving industry in a secondary role as a productive sector. This dynamic, which in the past was converted into a growth of large towns as a demographic trend, does not seem to have been confirmed in 2011, when in the last Census there emerged an increase in indicators concerned with the intermediate class of Municipalities, driven by criteria for settling down that were different from those linked to economic activity.

1. Urbanization and abandonment of the interior

The data in Tab. 1 shows that 43.6% of the population lived in Municipalities with fewer than 20,000 inhabitants, this figure having fallen to 35.2% in 2001. In the same period the percentage of the population resident in Municipalities of between 20,001 and 100,000 rose from 30.9% to 37.1% and the resident population in large towns (> 100,001) from 25.6% to 27.7%. This process was accompanied by a reduction in the demographic weight in the areas of the interior: in 1961 39.4% of the Sicilian population resided in these areas (including mountains and inland hills); in 2001 this figure fell to 32.1%. Settlement in coastal areas of hills and plains, on the other hand, increased by the same amount; from 60.6% in 1961 to 67.9% in 2001. The graph in fig.1 shows the evolution of the aggregates in absolute values.

Fig. 19.1 – Sicily: population by demographic size and coastal position of municipalities in the Census (1961-2001)



Source: Istat data-processing

The economic factors that determined these flows can be traced to industrial expansion in Italy and Europe in the 1960s and in the effects that, also subsequently, this expansion caused in terms of sectorial redistribution of the labour force and of changes in life-style. In fact, Sicily was hit by a mass departure from agriculture, which, for a long period, apart from the migratory flow towards more attractive destinations (Germany, Switzerland, northern Italy), fuelled a growth in skills in other productive sectors, in a perspective of overall development of the Regional economy. It can be seen from Tab. 2 how the impact of value added in agriculture, on the total, falls from 20.5% to 4.2% in a forty-years period, whereas that of services rises from 58.6% to 77.8%, with industry remaining stable at 11.7% and construction also falling from 9.3% to 6.3%. Even more significant is the figure for the active population, which, in agriculture goes from 41% to 9.4% of the total (-467,000) and in services from 29.1% to 68.6% (+760,000). All this is accompanied by a general

increase in production, corroborated by the value added in real terms in 2001 (equal to 275.5), with 100 as the figure for 1961 (Tab. 2).

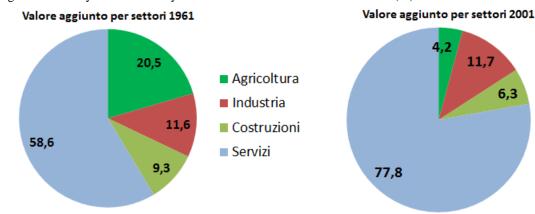


Fig. 19. 2 - Sicily: distribution by sector of value added in 1961 and 2001 (%)

The peculiar feature of the agricultural exodus, in a framework of overall improvement in production and quality of life, was, in Sicily, as in other contexts, that of greater mobility for the population, attracted by fresh opportunity and increasingly less attached to a specific territory. The changes in these trends, even in the most recent period (inter-Census decade 2001-2011), are the object of verification in subsequent pages via an analysis of the demographic variables, per group-size of the Municipalities.

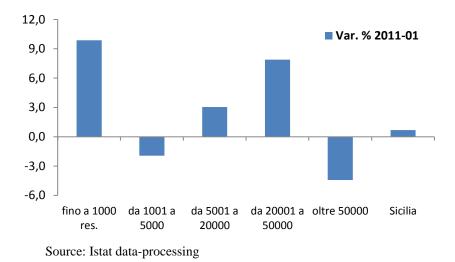
2. Comparison 2001-2011: population by size of Municipalities at the two Censuses

The data reported in Tab. 3 and represented graphically in Fig. 3 shows that the distribution of the population of Sicily among the group-sizes of Municipalities underwent certain changes between 2001 and 2011. Considerable population growth in small towns (+9.9% in those up to 1,000 inhabitants) is complemented by a necessarily modest figure (+2,145) in the absolute variation, cancelled out, moreover, by the decrease suffered by the group of Municipalities immediately above (-1.9% and -9.289 inhabitants in the class between 1,001 and 5,000). However, both the class between 5,001 and 20,000 inhabitants (+3% and + 37,984 residents) and the class from 20,001 to 50,000 (+7.9% and +93,139) underwent a notable increase, whereas the largest

Source: processing from Svimez data

Municipalities (>50,001) register a not indifferent loss (-4.4% and -90,066 in absolute values). If one accepts that the growth in the smallest Municipalities is simply due to the relocation to this class of 3 localities that belonged in 2001 to the higher class, the most logical conclusion for the 2011 Census is the growth of the Regional population in the average demographic classes (Municipalities from 5,001 to 50,000 residents) and the loss of influence of the classes at extreme ends (both the <5000 and the >50,000).

Fig. 19. 3 Population by demographic size of municipalities

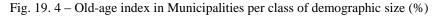


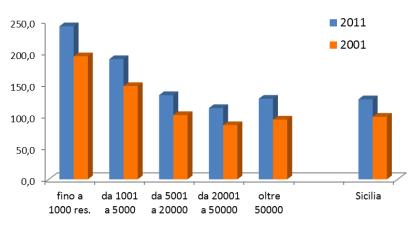
This trend is in partial disparity with the trends observed for the previous 40 years, during which, as we have seen, the drift specifically penalized the smaller Municipalities to the benefit of the larger ones. The inter-sectorial dynamics of the economy, understood as an explicatory factor for those movements, did not register, in the decade under examination, variations comparable to previous historic trends, at least not with regard to the distribution of value added (q.v. Tab. 4). Moreover these variations cannot be observed in the 2011 Census, in terms of changes in the active population, because of the failure so far, on the part of ISTAT, to issue the relative data. All the same, one may still investigate certain qualitative aspects of the new lay-out of Municipalities per demographic size, by examining the available figures

reported in Tab.5 and their evolution in the last two Censuses, in such a way as to obtain important additional information.

3. Comparison 2001-2011: demographic indicators per class of Municipality

The first of these is the old-age index, which is calculated from the percentage relationship between the over 65s and the population aged less than 15. As shown by the data in Tab.6, the figures (which are represented graphically in Tab.6) are generally on the rise throughout the Region, as proof of the greater importance of the oldest age-groups surveyed in Sicily in 2011; the Municipalities with 20,001 to 50,000 inhabitants register the lowest index figure and the lowest increase between the two Censuses.





Source: Istat data-processing

A second index, that of dependence, is built around the percentage relationship between persons at a non-working age and those at a working age (Tab. 7). It is also calculated separately for young people (0-14 years) and the elderly (65 and over) in order to demonstrate the significance of the relative age-group on the potentially active part of society (15-64 years); it shows its stability with regard to the total Regional figure for 2011 (51%) when compared to 2001 (51.6%), which is, in fact, a result of opposing and contrasting trends. As a result of the ongoing structural changes, the dependence of young people is in fact decreasing (from 26 to 22.6%), whereas that of the elderly is rising (from 22.5 to 28.5%). This trend assumes different values in the demographic-

size groups in the Municipalities; the smallest register a maximum of dependence for the elderly (42.5%) and a minimum dependence for young people (18.2%). Those with between 20,001 and 50,000 inhabitants, on the other hand, show a more balanced situation, with 23.8% of dependent young people and 26.2% elderly; this constitutes the lowest total value (50%), with a drop when compared to 2001 (50.6%).

Another important indicator, which is be influenced by the previouslymentioned age-group structure (and which therefore appears with different values in the groups of Municipalities analyzed thus far) is the substitution index for retired persons. It measures the ratio between those entering the job market (aged 15 - 19 years) and those leaving it (aged 60 - 64 years) and can be utilized to evaluate existing demographic pressure in terms of new recruits, as regards a certain degree of employment in a given area.

From Tab.8 it can be deduced that in 2011 the only class of Municipality in which the numbers of young people entering the labour market exceed those leaving it, is (with a value of 103.9%) that of the 20,001-50,000 inhabitant class. Apart from this, there is a disproportion between entries and retirements in favour of the latter, with the prospect of a decreasing trend regarding persons of working age and an increase in the number of elderly persons to support, with inevitable effects on the afore-mentioned dependence index. Furthermore, the reverse movement of the values is considerable when compared to 2001, bearing testimony to the relative speed with which this trend is manifested in all demographic classes of Municipalities (Fig. 5).

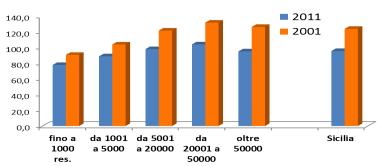


Fig. 19. 5 – Index of substitution of retired persons in Municipalities per class of demographic size (%)

Source: Istat data-processing

Finally, if one wishes to obtain an overall picture of the indicators for the 2011 Census (given that the trends compared to 2001 are those described) one can consult the figures reported in Tab.9, in order to investigate more thoroughly the characteristic of inferior aging of the population in the group of Municipalities already mentioned several times (20,001-50,000 inhabitants). Furthermore, the table enables us to observe in these Municipalities: the lowest average age (40.5), the highest index (91.4) for generational exchange (reciprocal of the old-age index) and the largest number of children per 100 elderly persons (40.9). On the strength of this evidence it is therefore possible to hypothesize a plausible explanation for this phenomenon, bearing in mind the population movements emerging from the Census data.

In fact, in the hinterland of the two largest Sicilian cities, there was evident expansion between 2001 and 2011 in several small towns; this assumed notable proportions and was probably determined by mobility due to a search for accommodation (possibly on the part of young married couples), and the demand for better services in less densely-populated areas than the respective Provincial capitals. As can be seen from the data in Tab.10, the Municipalities of Monreale, Misilmeri, Villabate and Carini, with regard to the Province of Palermo, and Belpasso, Misterbianco and Mascalucia, with regard to Catania, together make up about 18% of the demographic group of appurtenance; between the two Censuses they registered higher-than-average population increases, along with even more marked values for the selected demographic indicators, in terms of the greater incidence of the younger age-groups and the lower dependence of those of a non-working age on the population of working age.

In conclusion, in previous Censuses (1961-2001), it has always been affirmed that, in Sicily, there was a historical trend of inter-regional mobility on the part of the population, based on the economic motivation of a growing pressure from non-agricultural sectors that provided incentive for a move to the larger towns; however, in contrast to this affirmation, the mobility observed in the last decade between Censuses (2001-2011) specifically targeted medium-sized towns (20,001-50,000 inhabitants) and in particular those close to large cities, probably due to pressing factors of less congested services and the ease of finding more accessible accommodation. Given the age-group structure characterizing these towns, revealing the greater role of the young in all the demographic indicators, it is probable that this type of mobility has had as its

protagonists newly formed families; however, in order to assess this hypothesis there is a need for data (not yet released by ISTAT₁) from the 2011 Census regarding the composition of the families.

 The Regulation framework of the EU no.763/20081, art. 4, states that all member states have to make available the data from the Census and the relative meta-data within 27 months of the end of the year of reference of the survey, or otherwise by March 31, 2014.

Further reading

A booklet prepared by ISTAT with the results of the 2011 Census of the Population of Sicily is:

"L'ITALIA DEL CENSIMENTO STRUTTURA DEMOGRAFICA E PROCESSO DI RILEVAZIONE SICILIA"

and can be downloaded from the website: <u>http://www.istat.it/it/censimento-popolazione/popolazione-2011</u> by clicking on "**Risultati sul territorio**"

Statistical Appendix

Tab. 19. 1 – Sicily: population by demographic size and coastal position of settlements Source: Istat

Territorio	1961		2001	
	Popolaz.	Distr. %	Popolaz.	Distr. %
Comunifinoa 20.000	2.057.535	43,6	1.750.000	35,2
da 20.001 a 100.000	1.456.950	30,9	1.843.476	37,1
oltre 100.001	1.206.516	25,6	1.375.515	27,7
Sicilia	4.721.001	100,0	4.968.991	100,0
Zone interne	1.859.211	39,4	1.596.667	32,1
di cui: montagna	758.006	16,1	664, 126	13,4
collina	1.101.205	23,3	932.541	18,8
Zone litoranee	2.861.790	60,6	3.372.324	67,9
di cui: collina	1.169.499	24,8	1.426.187	28,7
pianura	1.692.291	35,8	1.946.137	39,2
Sicilia	4.721.001	100,0	4.968.991	100.0

Tab. 19. 2 - Sicily: percentage distribution of value added of active population and real grow	vth
1961 - 2001	

	1961	2001	1961	2001		
	Distr. %	Distr. %	Distr. %	Distr. %		
	Valore a	ggiunto	Popolaz	Popolazione attiva		
Agricoltura	20,5	4,2	41,0	9,4		
Industria	11,6	11,7	29.9	22.0		
Costruzioni	9,3	6,3	23,3	22,0		
Servizi	58,6	77,8	29,1	68,6		
Totale	100,0	100,0	100,0	100,0		
Volume *	100	275,5	1.546.237	1.766.030		

*V.A. in real terms at 2000 prices; active population at Censuses Source:: SVIMEZ and Istat

	2001			2011			Popolaz.	Popolaz.	
	Comuni	Popolaz.	Distr.	Comuni	Popolaz.	Distr.	Var. % 2011-	V.A. 2011-01	
fino a 1000 residenti	28	21.742	0,4	31	23.887	0,5	9,9	2.145	
da 1001 a 5000	171	479.168	9,6	171	469.879	9,4	-1,9	-9.289	
da 5001 a 20000	135	1.249.090	25,1	133	1.287.074	25,7	3,0	37.984	
da 20001 a 50000	41	1.180.182	23,8	41	1.273.321	25,5	7,9	93.139	
oltre 50000	15	2.038.809	41,0	14	1.948.743	39,0	-4,4	-90.066	
Sicilia	390	4.968.991	100,0	390	5.002.904	100,0	0,7	33.913	

Tab. 19. 3 – Distribution of population by demographic class of municipalities: comparison 2001-2011

Source: Istat

Tab.	19.4	- Percentage	distribution	of value	added by	v sector	2001-2011

	2001	2011			
	Distr. %	Distr. %			
	Valore aggiu				
Agricoltura	4,2	3,7			
Industria	11,4	8,9			
Costruzioni	6,1	5,4			
Servizi	78,3	82,0			
Totale	100,0	100,0			
Volume *	100,0	98, 3			

*V.A. in real terms

Source: Istat

Tab. 19 5 – Indicators of the structure of the population by age-class, deducible from Census data

Indicatore	Descrizione				
Indce di vecchiaia	rapporto percentuale tra ultrasessantacinquenni e				
	popolazione con meno di 15 anni				
Indice di dipendenza dei giovani	rapporto percentuale tra popolazione con meno di 15 anni				
	e popolazione da 15 a 64 anni				
Indiaa di dinandanza dagli anziani	rapporto percentuale tra le persone nelle età post				
Indice di dipendenza degli anziani	lavorative e quelle nelle età lavorative				
ladies di dinendence Tetele	rapporto percentuale tra le persone nelle età pre e post				
Indice di dipendenza Totale	lavorative e quelle nelle età lavorative				
	rapporto % tra coloro che stanno per entrare nel mondo				
Indice di sostituzione dei ritirati dal lavoro	del lavoro (in età 15-19 anni) e coloro che stanno per				
	lasciare (in età 60 -64 anni)				
Indice di ricambio generazionale	rapporto fra la popolazione <14 anni/popolazione				
indice di ricambio generazionale	>65 x 100				
Età media	rapporto tra la somma delle età di tutti gli individui e il				
Eta media	numero della popolazione residente.				
Downkini wan 100 onoloni	rapporto fra la popolazione <7 anni/popolazione				
Bambini per 100 anziani	>65 x 100				

Source: Istat

		2001				
	Comuni	Indiaa di vaaabiaia	Comuni	Indiaa di Maaabiaia	D:# 0011 01	
	Ν.	Indice di vecchiaia	Ν.	Indice di vecchiaia	DIII. 2011-01	
fino a 1000 residenti	28	194,1	31	241,5	47,4	
da 1001 a 5000	171	147,1	171	189,6	42,5	
da 5001 a 20000	135	101,3	133	132,8	31,4	
da 20001 a 50000	41	85,5	41	112,4	26,9	
oltre 50000	15	94,1	14	127,1	33,0	
Sicilia	390	98,7	390	126,2	27,5	

Tab. 19. 6 – Old-age index in Municipalities per class of demographic size (minimum values in blue)

Source: Istat

Tab. 19. 7 – Index of dependence in Municipalities by class of demographic size (minimum values in blue)

Comuni		2001			2011			Diff.	
Contuni	Giovani	Anziani	Totale	Giovani	Anziani	Totale	Giovani	Anziani	Totale
fino a 1000 res.	21,7	42,1	63,8	18,2	42,5	60,7	-3,5	0,4	-3,1
da 1001 a 5000	24,4	35,9	60,2	20,6	37,7	58,2	-3,8	1,8	-2,0
da 5001 a 20000	26,3	26,7	53,0	22,5	29,2	51,7	-3,9	2,5	-1,3
da 20001 a 50000	27,3	23,3	50,6	23,8	26,2	50,0	-3,5	2,9	-0,6
oltre 50000	25,4	23,9	49,3	22,5	28,3	50,7	-2,9	4,4	1,4
Sicilia	26,0	25,6	51,6	22,6	28,5	51,0	-3,4	2,9	-0,6
Source: Istat									

Source: Istat

Tab. 19. 8 - Index of substitution of retired persons (highest values in blue)

		2001		2011	
Comuni	Comuni	Indice di sostituzione	Comuni	Indice di sostituzione	Diff. 2011-01
	Ν.	dei ritirati dal lavoro	Ν.	dei ritirati dal lavoro	DIII. 2011-01
fino a 1000 res.	28	90,5	31	77,7	-12,8
da 1001 a 5000	171	103,7	171	88,7	-15,0
da 5001 a 20000	135	121,4	133	97,8	-23,6
da 20001 a 50000	41	131,5	41	103,9	-27,7
oltre 50000	15	126,1	14	95,0	-31,1
Sicilia	390	123,6	390	95,4	-28,2

Source: Istat

N.	Comuni	Età media	Indice di vecchiaia	Indice di dipendenza dei giovani	Indice di dipendenza degli anziani	Indice di dipendenza Totale	Indice di sostituzione dei ritirati dal lavoro	Indice di ricambio generazionale	Bambini per 100 anziani
31	fino a 1000 residenti	46,3	225,4	18,4	41,4	59,7	73,7	44,4	19,2
171	da 1001 a 5000	44,0	171,5	20,9	35,9	56,8	88,1	58,3	25,4
133	da 5001 a 20000	41,6	125,5	22,6	28,4	51,1	96,8	79,7	35,6
41	da 20001 a 50000	40,5	109,4	23,9	26,1	50,0	103,2	91,4	40,9
14	oltre 50000 residenti	41,8	127,7	22,1	28,2	50,3	91,7	78,3	35,2

Tab. 19. 9 – Overall framework of indicators in Municipalities by class of demographic size 2011

Source: Istat

Tab. 19. 10 – Demographic indicators in average-sized towns situated in the hinterland of Palermo and Catania – Census 2011

Territori	Residenti	Var.% su 2001	Età media	Indice di vecchiaia	Indice di dipendenza dei giovani	Indice di dipendenza degli anziani		Indice di sostituzione dei ritirati dal lavoro	Indice di ricambio generazionale	Bambini per 100 anziani
Comuni vicini a PA										
Monreale	38.018	18,9	38,7	83,6	25,4	21,2	46,6	112,8	119,5	56,3
Villabate	19.819	7,9	36,6	61,8	29,4	18,2	47,6	139,6	161,9	75,9
Misilmeri	27.570	19,3	38,7	88,2	25,8	22,8	48,6	129,4	113,3	52,3
Carini	35.681	38,7	37,5	71,6	29,0	20,8	49,8	112,1	139,7	66,6
Comuni vicini a CT										
Belpasso	26.378	29,6	37,6	73,0	26,4	19,3	45,6	119,6	137,1	64,8
Misterbianco Mascalucia	47.356 29.984	7,6 22,5	37,5 38,4	72,7 76,9	26,0 24,6	18,9 18,9	44,9 43,5	128,2 108,3	137,6 130,0	64,8 61,1
Comuni <20001 <50000 Source: Istat	1.273.321	7,9	40,5	109,4	23,9	26,1	50,0	103,2	91,4	40,9