

CORRADO GINI, THE RECONSTRUCTOR OF THE ITALIAN STATISTICS SYSTEM

Giuseppe Leti¹

Formerly La Sapienza University of Rome, Italy

Abstract. *After a long period of decline for Italian public statistics, the (still-existing) Istituto Centrale di Statistica (then ISTAT) was created in 1926 under the impulsion of the Mussolini government, and Corrado Gini was chosen to act as its head. Over a period of six years, Gini provided such outstanding intellectual, scientific and organizational leadership that he may well be considered as the re-constructor of the Italian statistical system. After a brief survey of the period prior to 1926, this paper describes in detail the process that led to the creation of ISTAT, the reforms accomplished during Gini's tenure, the close relationships between the latter and Mussolini, as well as the circumstances that led to Gini's forced resignation in 1932.*

Keywords: *ISTAT, public statistics, Mussolini*

1. THE GOLDEN PERIOD OF ITALIAN NATIONAL STATISTICS DURING THE SECOND HALF OF THE NINETEENTH CENTURY AND THE FOLLOWING DECLINE

To fully understand the great contribution introduced by the work of Corrado Gini towards Italian national statistics, it is necessary to go back about ten years before his birth in Motta di Livenza, province of Treviso, Italy, on May 23rd 1884.

The birth of the Italian national statistics system dates back to 1861, the year of the Italian Kingdom's foundation. This institution was directed by an important statistician, Pietro Maestri, whose main first task was to harmonise the various forms of records and data collection that, before national unification, were used by the former Italian States. He also had to organize and carry out many important surveys among which two population censuses in 1861 and 1871.

¹ giuseppe.leti@tin.it

This paper refers to parts of the author's work titled «*L'Istat e il Consiglio Superiore di Statistica dal 1926 al 1945*» (Leti, 1996). For additional archive references and bibliographical remarks the above mentioned publication contains analytical credits, whilst the excerpts in this paper are summarized in the final "References". A version of this paper was published in Italian in 2015 (Leti, 2015).

After the premature death of Maestri, the national statistical services were handed over to Luigi Bodio, initially in 1872 as permanent secretary of the Central Statistical Committee and therefore acting as director. In 1878 the rank of the institution was raised to General Directorate, so in 1883 he was appointed as General Director. With Bodio in the lead, the national statistics flourished so much to be considered among the best ones in Europe. This development was the effect of Bodio's personal prestige and of his remarkable methodological and managerial abilities. He was able to efficiently organise the central statistical services, primarily concentrating in his Statistics Directorate the largest part of statistical data production; furthermore he could use all the public administrative bodies to collect data, instruct binding methodologies and programmes to be used for collection and act as a reference point for statistical counselling. The only subjects he was not able to gather under his Directorate were agriculture and livestock statistics, international commerce and navigation statistics, detention statistics and national service statistics, which were managed by other appointed directorates. Hence, the authority of the Statistics Directorate was extremely wide, covering almost completely the economic, demographic, social and political fields.

This flourishing period lasted until 1890: in these years the statistical work was really relevant both in terms of quantity and quality. Bodio's networking activity with other Italian and international statistical bodies qualified the Italian national statistics as top rank among the public administrations thanks to an adequate budget and freedom both in initiative and managerial autonomy.

Bodio was supported in his activity by Francesco Crispi, at that time President of the Council of Ministers, who viewed statistics as a relevant tool for the Government action since it allowed not only to effectively represent but also to anticipate social phenomena and therefore act promptly.

After the fall of Crispi's last presidency in the early nineties, the right-wing governments that followed during the last years of the nineteenth century cancelled the results obtained during Bodio's directorate, therefore the glorious period of Italian national statistics ended. The Ministry of Finances – acting irrationally – drastically cut the statistical services budget so that the 1891 population census was not carried out officially due to budget problems, halting the ten-year series of 1861, 1871 and 1881. The Statistics Directorate was deprived of its best-qualified personnel that had been developed and trained during the last twenty years. The other bureaucratic institutions of the various Ministries managed also to regain possession of their own statistical offices and therefore to manage their own subjects and topics of interest. So, in 1898, when Bodio – after having tried to protect what he had achieved over more than 20 years – left, the Statistics

Directorate and the Italian national statistics system rapidly fell. For decades, the Directorate's activity basically consisted only in carrying out the population censuses of 1901, 1911 and 1921 and disseminating – irregularly and discontinuously – demographic and a few other types of statistics and publishing the Yearly Statistics Report.

The state of decline of the Italian national statistics was subject of various specific analyses (Leti, 1996). For example, Francesco Saverio Nitti in 1907, listed in a detailed manner the problems of the national statistics of that time, also by using in his clear account of his thoughts, his well-known and stinging sarcasm: «(...) there is now an office not only poorly organized, but also that works extremely badly (...) the truth is that in Italy statistics do not exist (...) the publications of the statistical office are ugly; on the other hand they are rare; this is the only benefit we have». In 1910 Giovanni Montemartini noted that national statistics were being affected by «dissolving procedures» and in 1911 Nitti, having become Minister of Agriculture, Industry and Commerce stated: «the condition of statistics is really pathetic». In 1921 Francesco Coletti wrote that national statistics were the «Cinderella» of public administration and in 1922 Giorgio Mortara described the Central Office as «the castrated and mutilated dead body of what had been the Statistics Directorate». In the following years Corrado Gini wrote (Gini, 1932): «In 1923, the Central Statistical Office had no more than twenty tenured employees and its activity was limited to compiling, on obsolete forms, of the usual demographic statistics, that were published with great delay, and addressed to the discontinuous publication of the Annual Statistics Report... About these difficult inconveniences, an influential but unheard claim was made by the Higher Statistical Council, by asking in vain for quick and radical intervention».

2. THE REFORM OF STATISTICAL SERVICES IN 1923 AND 1926

In December 1923, about one year after Mussolini came into power, he promulgated three decrees aimed at re-organising the Italian statistical services. Two reasons urged the government: one was the terrible situation and lack of management of statistics to be handled by the government and the other was that Mussolini was really concerned with statistics as a tool for understanding social phenomena and, in particular, being tormented by the decrease in birth-rate, he wished to be continuously aware of population evolutions.

The 1923 decrees were aimed at healing the situation, but did not achieve the expected results because they did not go to the root of problem. In fact, they solved the problems of the statistical secret, the compulsoriness of responses and the necessity to obtain the advice of the Higher Statistical Council on statistical

programs and on statistical activities of other public bodies, but ignored the relationship between the Central Statistical Office and ministries (a decree stated that the Office institutionally depended on the Ministry of National Economy) and the difficulty for the Higher Statistical Council to carry out its functions. The failure of the decrees was due to the lack of experience of the new government, which accepted in full the reform proposed by the Higher Statistical Council that improved some technical elements but left the general system as it was.

Having acknowledged the lack of effect of the 1923 reform and that any additional alteration of the existing system would be in vain, the fascist government worked towards a radical reconstruction of the system from its basic foundations. The analysis of the past highlighted that the inefficiency of the service did not depend on the ministry under which it was organised, but simply to be dependent on *a* ministry. Statistics being common to all State activities, all public bodies should defer to the statistical service with regard to statistical matters. Hence, the new system ought to be set above all ministries and be assigned sufficient autonomy to favour its initiative and functioning capacity.

Law no. 1162 of July 9th 1926, concerning 'Reordering of the statistical service', ruled the foundation of «an autonomous institute, named Central Statistical Institute of the Italian Kingdom. The Central Institute has legal status and managerial autonomy and is a State institute by all means (...); it is established at the direct dependency of the Head of the Government, the Prime Minister».

The Institute was given the following tasks:

- a) Compilation, illustration and dissemination of general and special statistics concerning the State administration and national activities as required by the Government, in particular the Yearly Statistical Report and the Statistical Bulletin;
- b) Carry out under the Prime Minister's authorization as Head of the Government, special statistics for associations and public bodies;
- c) Coordinate the dissemination of statistic publications from State administrative bodies, other public bodies and State-controlled bodies, and define the survey rules which institutions and public bodies have to conform to;
- d) Promote statistical studies also through scholarships and award competitions.

The law, despite the 'central' characteristic given to the Institute, did not mean that all the data collection activities had to be carried out by the Institute but meant to establish a middle way between the two opposite tendencies to centralise and decentralise the surveying activities – tendencies that are still present today in various countries.

The biggest mistake of the law was that it gave to the Higher Statistical

Council the power to direct and coordinate the activities of the Institute, i.e. the leading role was not assigned to a person but to a collegial body. The 'mistake' might be a consequence of the ambition of a member of the Higher Statistical Council to become head of the Institute through the presidency of the Council itself, a position he believed he deserved for his merits.

3. THE FOUNDATION OF THE CENTRAL STATISTICAL INSTITUTE (ISTAT) AND APPOINTMENT OF CORRADO GINI TO THE PRESIDENCY OF THE HIGHER STATISTICAL COUNCIL

On 14th of July 1926, the same day in which the new law was issued in the Italian Official Journal, the Central Statistical Institute was handed over to the Head of the Government. The presentation was done by the Minister of the National Economy, Giuseppe Belluzzo, who concluded his short address with the following words: «*With this wish, our beloved Duce, I am honoured and proud of delivering in your hands the Central Statistical Institute of the Italian Kingdom*».

Indeed he delivered to the Prime Minister an institutional body that did not exist yet because the law would be have been effective only thirty days after the law was passed. But Mussolini was eager to start his "creature" even if prematurely born.

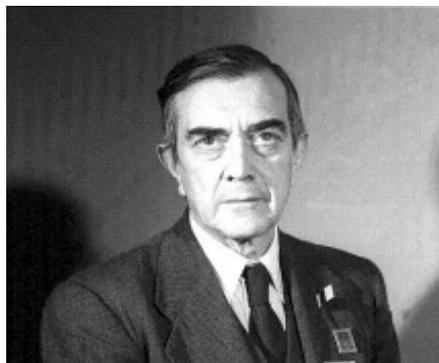


Figure 1: Corrado Gini, first President of the Central Statistical Institute (1926-1932)

Again on the 14th of July, the Royal decree was released, through which Corrado Gini was appointed as president of the Higher Statistical Council and not of the Central Statistical Institute since the law did not consider this position. Therefore, as in 1872 a «wise decision» had been taken by appointing Luigi Bodio as "secretary" of the Committee, also in 1926 it was a «wise decision» to appoint Corrado Gini as president of the collegial body designated to rule Istat.

In 1910, at the age of 26, he had gained professorship at the University and was also nominated as 'referendary' of the Higher Statistical Council; ten years later, he had become a full member of that council. No better decision could be taken. Gini was already famous both in Italy and internationally for his important contributions to statistical methodology, economic statistics, economics, demography, social statistics and, in general, to social sciences. Furthermore, his authoritativeness and the clear ideas that characterised his work, guaranteed that he would have thrown himself with all his energy and intelligence to start-up and to manage the new agency.

Gini's appointment was a radical change, also from a generational point of view, in Italian national statistics: in fact, before the reform of 1926 the president of the Higher Statistical Council was Rodolfo Benini, who in 1926 was 64 years old, whilst Gini was 42 (one year younger than the Head of the Government). Another reason why Mussolini could not confirm Benini as president was because the 1923 reform – carried out strictly following the indications of the Higher Statistical Council chaired by Benini himself, had been a failure for the government and for Mussolini himself who had to quickly take remedial actions.

Rodolfo Benini did not imagine that Mussolini was hostile to him and, having been a member of the Council for 16 years and president for 6, he expected to be confirmed for the position. For this purpose, without exposing himself directly, he wrote to the Head of the Government on June 14th, 1926, presenting himself as *«interpreter of the profound gratitude that the members of the past Higher Statistical Council (...) as citizens and scholars»* owed him for the efforts in completing the reorganization of the statistical services, therefore founding *«on more solid bases and under the Head of the Government the observation of the prominent facts of national life»* this way leading *«to the happiest fulfilment of the repeated votes of the assembly I had the honour to chair for various years (...)»* adding that he was available to be summoned *«on the day and hour in which Your Excellency would call upon me, for a consultation or simply to be discharged. Today nobody is (...) more disinterested in wishing that the feeder of so many actions and ideas may find also this time industrious, intelligent and suitable collaborators for this high endeavour»*.

Mussolini did not even receive Benini. He had to bite the bullet, but other hard pills were to also to be swallowed: he was not re-appointed as Chairman of the Higher Statistical Council, a position that would have made him head of the Central Institute; the selection of Gini as President, who was much younger and less experienced as a member of the Council; and finally the public humiliation of not having a place of honour at the Presidency table nor to be able to say a few words

during the inauguration ceremony. Finally, the worst humiliation for him, who had been president of the previous Council, was to be elected simply as a member of the new Council. Therefore Benini felt he had to express his disappointment to the Undersecretary of the Presidency of Council of Ministers, Giacomo Suardo, obviously without mentioning his major expectation to be reconfirmed as president of the Higher Statistical Council.

«*Siusi (Alto Adige), July 25th, 1926*

Your Excellency, during the ceremony of inauguration of the Central Statistical Institute, the former president of the Higher Statistical Council did not have any part in the programme, even though to express some authorised words of greetings from the former to the new President or the simple possibility to sit at the presidential table could have better enlightened the latter and clarified the background in which the former nicely remained. From this and several other signs, that I do not mention for brevity, I acquired the impression that a clear cut was wanted between past and future.

Of course, I did not expect to be invited and take part in the new Council. If His Excellency the Prime Minister, to which I am devoted and to whom I cannot say 'no', in case He expects from me a 'yes', I beseech He does not include me among the members of the assembly so I could employ the time left in my life to more advantageous tasks for my Country.

Your Excellency, please, accept my esteem and explain my appreciative attitude to the eminent Head of the Government. With complete devotion, Rodolfo Benini.»

Undersecretary Suardo had to put a lot of effort in insisting that the former president of the Higher Statistical Council should accept the appointment as simple member of the new Council, and in the end Benini capitulated. A few years later though, in January 1931, during a session of the Higher Statistical Council, Benini sincerely recognised how suitable the choice of the Head of the Government had been «*of having given the leadership of the Central Statistical Institute to a man of such wide competence, tireless industriousness and so brightly minded, rare qualities among the heads of public administrations*».

In fact, Gini ruled firmly the new-born Institute and de facto substituted in the leading role the Higher Statistical Council. Even though the 1926 law did not regulate the position of President for the Central Institute, as Gini pointed out in 1932 - when the position of President of the Central Institute had been introduced by the decree of 1929 – that «*even before being established by law, the actual President has been addressed in this way and furthermore had also been since the opening ceremony of the Institute*». Gini signed all his correspondence as 'Istat

President' since his first day of assignment.

On July 20th, 1926, on a headed paper - addressed to the yet formally unborn Central Statistical Institute of the Italian Kingdom, the Head of the Government sent «*To prof. Corrado Gini, President of the Higher Statistical Council, 38 Esedra Square, Roma*» (actually his university address) a letter in which he expressed his will of speeding up the procedure: «*Waiting for the law no. 1162 of 9 July 1926 that establishes the Central Statistical Institute to enter in force and for the new Higher Statistical Council to be nominated, Your Excellency is kindly requested to follow the constitution of the new body and to carry out all the necessary to guarantee continuity of the service*».

4. THE FINALIZATION OF THE REFORM IN 1929

The experiences of Gini at the beginning of his activity as head of the Central Statistical Institute, the difficulties he had to face and the opposition of the other State bodies convinced him that he had to concentrate his energies on an additional reform in order to fill the gaps of the law issued in 1926. Hence, as Gini himself stated (Gini, 1932), he focused on the legal and administrative changes of that law, amendments that were included in the legislative decree no. 1285 of May 27th, 1929 (published on July 30th, 1929). The Head of the Government had given his endorsement to it since March 1928, and the Council of Ministers had approved it on October 30th, 1928. The time lapse taken to complete the procedure, highlights that the ministerial bureaucracy was against this transition – anticipated by Mussolini in a public notice of August 28th, 1928– of all statistical services to the Central Statistical Institute.

Most of the obstacles were overcome thanks to a compromise set forward by the Head of the Government, consisting in the acceptance by the ministries of the transition towards Istat of their statistical offices under the condition that this process had to be diluted in time. The time of this transition had to be fixed by the Head of the Government who had all the elements to define the opportunity and the pace for the transition of statistical offices to Istat.

Once the obstacles placed by bureaucrats were overcome, Mussolini imposed that the parliamentary process of the reorganization and completion of the rulings of 1926 and the definition into law of the decree had to be quick.

The basic elements of the 1929 legislative measure were as follows:

- I. Centralization of all statistical services in the Institute, therefore an increase in its fields of competence;
- II. Expansion of the tasks of the Institute;

III. Emphasizing the dependency role of the Institute under the Head of the Government;

IV. Assignment of the management of the Institute to a single person, the President.

The final purposes of the norms correlated with the above elements were the following:

I. Gini and Mussolini considered the centralization of all public statistical services into Istat as the fundamental principle of the reform since it allowed:

- a) Obtaining the comparability of the national statistics and eventually of the national statistics with those of other countries;
- b) Avoiding the risk that the interpretation of Italian matters could be inadequate at an international level;
- c) Avoiding both the inadequate use of sometimes precious statistical material and the delay in data publication, facts that may have given less value to late published results; furthermore avoiding duplicates, excessive implementations, lack of synthesis, mistakes and deficiencies;
- d) Creating a technically valid workforce for the resurrection of Italian statistics.

II. The tasks assigned to the Central Statistical Institute were much wider than those indicated in the 1926 law:

- a) Take care of the data compiling, explanation and publication for specific and general statistics defined by the government;
- b) Carrying out either directly or through other public agencies surveys that interested the governmental action;
- c) Carrying out under authorisation of the Head of the government and at their expense special surveys for third parties;
- d) Give a binding assent to the statistical projects carried out on a yearly basis by public administrations by giving instructions on new statistics or on changes or suspensions of ongoing statistics;
- e) Coordinating the statistical activities of other public bodies that were not directly carried out by Istat, and give binding instructions on how they had to be done as well as on their statistics publications;
- f) Proposing possible changes in the organisation of statistical services of other public bodies;
- g) Be recognized as the only channel to provide international and foreign bodies with data and information;
- h) Promoting statistical studies by its own initiative or favouring the initiatives of other bodies, offering grants and prize contests;

- i) Designating, after consultation with the Head of the Government, the Italian representatives for congresses, conferences and other international meetings in statistics.

Therefore the role of Istat was much wider than what had been listed in the law of 1926 (listed in paragraph 2).

III. Not only the competence of the Institute had been increased but also, having been set directly and exclusively under the direct responsibility of the Head of the Government, without intermediaries, its authority was now underlined.

IV. The new law reviewed the mistake of the 1926 regulation where the management was given to a collegial body rather than a single person, whilst now a president had to be designated for Istat by royal decree under proposal of the Head of Government.

According to this law Gini was appointed president of Istat and therefore the ambiguity of his position ended. The 1929 reform – desired and carried out by Gini – was fundamental in a juridical sense and not in a statistical one. His higher education in law and the convincing logic that characterised his *forma mentis* allowed a long lasting layout of the Italian national statistics system since it wasn't until half a century later, in the mid eighties, that there was need of a new reform of the established system.

5. THE RELATIONS BETWEEN PRESIDENT GINI AND THE HEAD OF THE GOVERNMENT FROM 1926 TO 1931

The reconstruction of Italian national statistics was a masterpiece of Corrado Gini. It was owed to his work, to the way he directed the Statistical Institute, to his incomparable scientific competence and genius, and to the peculiarity of his personality. Gini's work was favoured by Mussolini's real interest for statistics and by his effective support to the Institute he had created. Gini recognised this in his speech at the Higher Statistical Council on December 20th, 1926 when he said: *«It is clear that if the reconstruction of Italian statistics has had a good start (...) the credit is almost equally due to the work carried out by my collaborators and myself as well as to the favourable light under which the powerful figure of the Duce sees our work»*.

Their tight collaboration was occasion for several meetings between them. Here are some examples of Gini's consultation requests:

22nd February, 1927: *«Prof. Gini, having to leave on 24th, asks Your Excellency for a meeting either today or tomorrow »* (overwritten with a coloured pencil *«tomorrow morning/M»*) (Figure 2).

21st March, 1927: «*Professor Gini would hope to be received by Your Excellency on Friday 25th*» (overwritten with a coloured pencil: «*Yes - Vim[inale]/M*» and below written by a secretary: *Friday 25/3/27-V, at 12*);

24th March 1929: «*Prof. Gini would hope to be received to submit the 'Statistical Compendium' to Your Excellency in order to publish it as soon as possible*» (overwritten with a coloured pencil: «*Yes/M*» and below written by a secretary: *Monday 25/3/29-VII, at 17.45*);

15th July 1929: «*Prof. Gini would hope to be received by Your Excellency to report about his recent trip to America*» (above: «*Yes/M*» and below: *22/7/29-VII, at 18*).

Only once a «*No/M*» appeared in response to the request of 24th August, 1930: «*Prof. Gini, who, as known to Your Excellency, should leave tomorrow at 7 p.m., asks to be received by Your Excellency either today or tomorrow*». Therefore, the day after Gini had to ask for Director Molinari to be received in his place and so Molinari was received on August 29th at 7 p.m..

Gini's meeting requests sometimes contained the motivation and were approved by Mussolini in that period with top priority. According to the records, there were 15 hearings in 1927, 13 in 1928, 17 in 1929, 13 in 1930 and 4 in the first months of 1931.

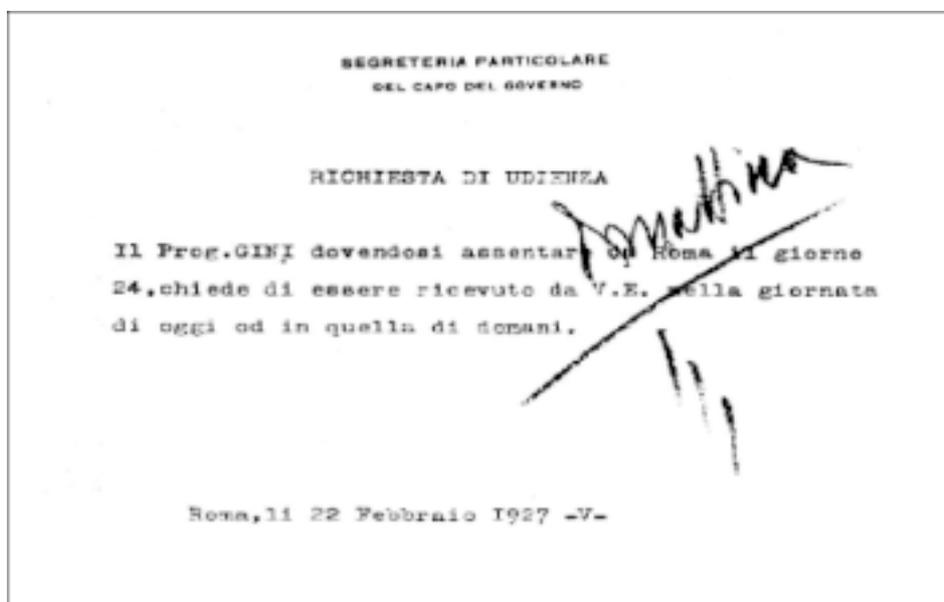


Figure 2: One of Gini's meeting requests to Mussolini

Even the epistolary exchange between Mussolini and Gini was frequent. Mussolini requested data and Gini used to respond immediately:

6th January 1928: «Dear Prof. Gini, Please send me the demographic data on marriages, births and deaths for the years 1919, 1920, 1921, 1922 and 1923. Please, send me also the overall population according to the 1921 census. The Bulletin, on the first page, should permanently show the data of previous censuses. Mussolini». Clearly, Mussolini wanted to calculate himself the demographic ratios and had looked in vain in the Bulletin for population numbers in previous censuses. The reply by Gini contained four tables and a note that data from 1919 to 1923 referred «to the Kingdom at previous borders, because only from 1924 the annexed provinces have started a regular statistical service in compliance to the one in force in the previous provinces».

23rd October 1929: «Mortality in Italy, France, United Kingdom, Germany, Switzerland during first four-month period of 1928 – first four-month period of 1929. Mussolini» (Figure 3).

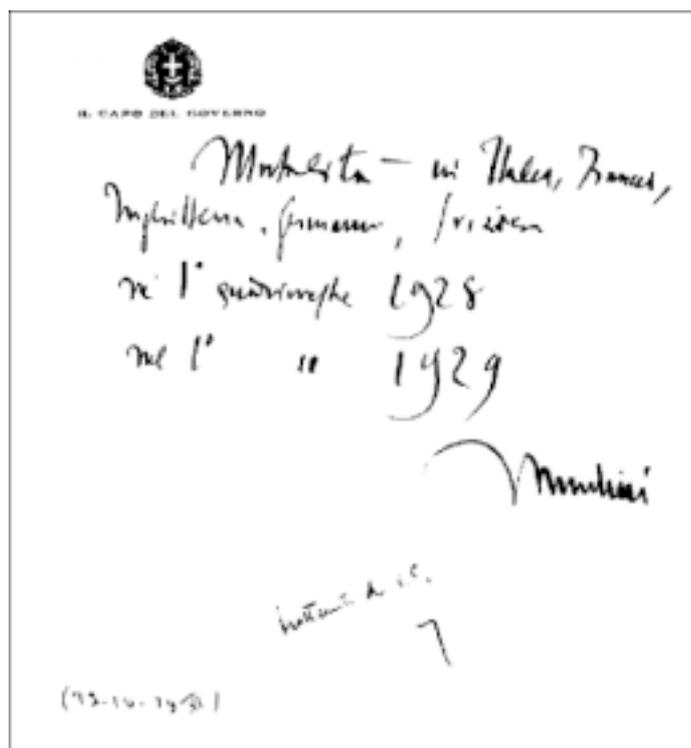


Figure 3: A request written by Mussolini's to Istat's President

In case Gini, due to lack of data, was not able to deliver the requested information, he did not hesitate to inform Mussolini but, as soon as the data were available, he used to send it to the Head of the Government without the need of being reminded.

16th April 1928: *«I was unable to find for births and deaths in Germany in 1927 anything other than the annexed data »;*

27th April 1928: *«I received now the April issue of ‘Wirtschaft und Statistik’ containing the data on marriages, births and deaths in Germany for the third quarter of 1927. I am honoured to inform Your Excellency, after my previous letter of April 16th, in which I reported the data for first two quarters (etc.)»;*

13th June 1928: *«I received now the May issue of ‘Wirtschaft und Statistik’ containing the data on births and deaths in Germany for the whole 1927. Since Your Excellency asked me data on this issue (...) I transcribe those data in comparison with those of 1926 ...».*

Mussolini frequently asked Gini questions about demographic or economic matters and Gini used to express his opinion promptly.

The correspondence reveals the impression of a man who dialogued with a powerful person not because he was obedient or compliant, but because he loved his job. The powerful person, on the other side, recognised the value and the benefit of the tool possessed by that Master and therefore (generally) accepted the lessons that Gini gave him.

The letter that the President of the Central Institute wrote to Mussolini on 20th June 1927 concerned an important economic decision. Less than one month had passed from the Ascension speech in which the Head of the Government had given advance notice of the Lira's increase in value, the so-called 'ninety level' that should have settled the currency's convertibility, by fixing the exchange for one Pound to approximately 90 Liras, and including therefore the Lira within the stable currencies. This is the text of Gini's letter:

20th June 1927: *«Your Excellency, in response to the question posed to me this morning: the gold index calculated for the third week of June, which ended last Saturday, equals 147.1, slightly lower than the one of the previous week (147.5) but much higher than the one of the great countries that use golden currency (140.4 for the United States, 138.0 for Germany, 133.4 for the United Kingdom).*

For Your Excellency to be able to be informed about the trends of the index numbers in these countries, please, consider the two tables annexed, one of which includes the index numbers for the United Kingdom, Germany, the United States and Italy (and the official quotation of gold in Italy) in the years 1924, 1925 and 1926 and in all months of 1926 and 1927. The second table presents weekly data

for the months of April, May and June. The maximum price index for gold in Italy was in the fourth week of April rating 153.8.

Although forecasting this subject is difficult, it is reasonable to predict (unless the quotation changes rapidly) that the gold price index in Italy will tend smoothly to decrease but nevertheless it should stay above the price indexes of the European countries with a good currency, such as Germany and the United Kingdom, and even more in relation to countries whose currency was devaluated, such as France, which presents a much lower gold index (January 1927: 131.1; February: 130.4; March: 132.4; April: 132.0).

These forecasts are not only coherent with past experiences, but can be explained easily from the theoretical viewpoint because the currency depreciation or increase in value that influence the gold prices in a country (by lowering them in the first case and raising them in the second), are partly transitory (due to inertia or 'viscosity' of internal prices that react to currency equality changes with some delay) and for the remaining part are assimilated slowly in relation to expiry of loans and investments that in that period become less relevant as new ones take place (this depends on the favourable or unfavourable conditions of producers who started a loan or an investment before the currency depreciation or before the appreciation, respectively). It is common in fact that the favourable (unfavourable) production conditions tend to fix a lower (higher) price level. The annexed table shows that the price level in Germany after the stabilization of the currency depreciation in December 1923 remained much lower than in other countries with golden currencies till April 1927, therefore for three more years. This might be presumably still a consequence of the currency depreciation.

As for our Country, we could forecast that the increase of gold prices in Italy, obvious consequence of currency depreciation, shall at least partially disappear due to the tendency of internal prices to adapt to currency parity; another part could instead remain for longer times, maybe for some years.

With deep devotion, yours Corrado Gini».

On 22nd July 1927, Mussolini received from Gini a letter that should have reassured his demographic stress and also contained a clear demography lecture. «Excellency, In an article on the Population of Bulgaria published by Dr. Scipco in his Survey from the East that you pointed out to me, there are data on annual population growth in some countries among which Italy and some Slavic populations: Poland 16.5%; Romania 14.5%; Bulgaria 17.1%; Italy 6.1%; on the side there was a question mark of Yours.

Furthermore, an article of the same journal on Demographic Yugoslavia by Mr. Vukic reported a post-war annual population growth in Yugoslavia of 15 per

thousand. Also the rates of the first article should clearly have been expressed per thousand and not per cent.

Besides this clear mistake, probably a printing one, there is another, more relevant oversight, meaning that the data relating to Poland, Romania and Bulgaria, as well as those of Yugoslavia in the following article, are concerning certainly just the natural growth of population, indicating the difference between births and deaths, without reference to migrations, whilst the same figure for Italy refers to the overall growth of population that involves also migrations and refers to the pre-war period.

Indeed the overall growth of Italian population in the pre-war period was much higher than what has been reported in the article (it was 6.5 per thousand from 1901 to 1911 and 6.8 per thousand from 1911 to 1921). After the war it increased a lot for the effect of reduced migration and in 1925 and 1926 it superseded 9 per thousand, whilst the natural growth kept close to 11 per thousand.

It is this rate, 11 per thousand, that has to be compared for Italy to the rates of Slavic countries that are around 14 and 17 per thousand.

Hence, we are certainly lower than Slavic countries but not that much as could be implied by the quoted article.

With deep esteem, yours Corrado Gini».

Maybe the above mentioned letter had not yet been delivered to Mussolini when the latter, as a low-skilled scholar in demography but respectful to the professor, submitted to Gini another question:

23rd July 1927: «Dear Gini, is this news real? I realised that in some Bulletins of the Municipalities the garrison is included in the present population number calculation. This to me seems absurd. Only the number of resident population should be published. In any case, I submit the question to You. Mussolini».

On the 25th of the same month, Gini responded about various issues and pointed out that:

«The question of using either the present or the resident population to calculate demographic rates is rather complex. It will be my concern to write about it to Your Excellency later today or tomorrow at the latest».

On 6th January 1928 Mussolini submitted to Gini seven articles drawn from seven journals asking for Gini's opinion. Each article was addressed: «To Prof. Gini/M ». But on that occasion Gini was in Cairo for the XVII Session of the International Statistical Institute.

On 14th May 1928 the Head of the Government sent to Gini an article from the 'Ambrosiano' newspaper of May 11th titled 'Demographic statistics: Which is the official source for birth data?': «Dear Professor, Let me highlight the annexed memo that I consider a particularly serious matter. Please, give firm instructions

in order for there to be a statistic in Milan and not a statistical jazz. Mussolini». Gini answered on the same day: « ... I agree that the fact is serious indeed. The Statistical Studies Office of the Municipality of Milan, in charge of publishing the official statistics on population variations, is possibly the best municipal statistical office in Italy and therefore it is even worse that other offices of the same municipality publish incongruent data. I will write immediately to the Mayor of Milan in order to prevent similar cases in the future and investigate on the discrepancies that inspired the article in the 'Ambrosiano'».

On 16th June 1928, Mussolini asked Gini to check and acknowledge the information in *«the French population data included in the article of the newspaper 'Popolo d'Italia'»*.

Gini's answers to Mussolini were not always respectful. Once (on January 26th, 1929) he seemed to be tired of repeating always the same things: *«Mr. Sebastiani asked, on behalf of Your Excellency, the executive officer of this Institute appointed to Demographic Statistics, the reason for the gap between the living newborns, deaths and the difference of the former data on the latter ones (...). During the past month I had the opportunity to explain the same thing to Mr. Flores, who posed the question on behalf Mr. Beer on behalf of Your Excellency. Hence I feel that it is best to write directly to Your Excellency to exclude any doubts in the future ...»*. Mussolini put a note on Gini's letter: *«To be explained in future issues»*.

Mussolini counterbalanced Gini's lessons highlighting the mistakes he was able to find in Istat's publications.

«Monthly Bulletin of Statistics - September 1927- V, Issue. 9, page 562: To Prof. Gini: Rieti – since being a district – was aggregated to the Province of Rome, hence to Lazio/M».

24th January 1928: *«His Excellency has appointed me to inform You that the analysis of the data [some forwarded data] included a mistake in the marriage rate»*.

The following is Gini's reply to a similar point:

20th November 1928: *«Thank you very much for having pointed out the mistake in the calculation of the difference between births and deaths. I did not check myself, as I usually do on drafts, the figures written in the summary notes that I received at the time»*.

On one occasion Gini had to show to the Head of the Government that what the latter had pointed out was not relevant. Mussolini stated that his misunderstanding was due to the low clarity of the article and therefore had the following instruction sent out (29th January 1929): *«His Excellency the Head of the Government (...) wishes that the explanation [given to Him] should be highlighted in the next issue of the Monthly Statistical Bulletin»*.

On 4th March 1928: «*This dispatch, as usual, is wrong ...*» and underneath the note of the Secretary Chiavolini: «*Praying Prof. Gini not to publish any dispatch without the approval of His Excellency*».

Gini had already received similar requests. Once he highlighted on 8th February 1928: «*Your Excellency, through a letter I received right now, the Personal Secretary of Your Excellency notifies me about Your desire to see the draft of the bulletins two days before the publication. I have ordered to do as Your Excellency wishes. Let me point out though, Your Excellency, that the above mentioned draft can never be final because the data often arrive at the last minute and sometimes also when the printout has already started*».

In any case Mussolini's orders were always satisfied.

18th February 1928: «*Excellency, let me include 1) the draft of the Monthly Statistical Bulletin to be published on 21st. As You can see, there are residual errors that will be adjusted within the next two days (...)*»;

27th February 1928: «*Excellency, I am honoured to include the draft of the Monthly Bulletin of Agriculture and Forestry Statistics as a supplement of the Official Journal of February 29th that will be issued the morning of March 1st*». The evaluation in advance of the drafts allowed Mussolini to keep the situation under his control and also to add his own comments when there was also data interpretation. We do not have evidence that Mussolini used this advance reading to censor – in the sense of prohibiting the publication of some information – of the Demographic News, of the Monthly Statistical Bulletin and of other Istat publications or of press releases. On the other hand, Mussolini used to give his personal interpretation to statistical data either mitigating or enhancing their value.

Sometimes there was indeed an order not to publish certain data but this was certainly justified by their insufficient quality. In fact, when on July 30th 1931 from Forli the order was sent: «*His Excellency the Head of the Government ordered not to publish any statistic or comment about the wheat, having called on the phone prof. Gini (and for him prof. Molinari)*», there was a previous letter by Gini to Mussolini of July 19th: «*Excellency, I have the honour to inform Your Excellency that, according to the advance estimates of the past June, the wheat harvest for the year 1931 is foreseen in quintals 68.189.000 (compared with 57.169.000 counted in 1930 and 70.795.000 in 1929)... Being aware of the «shrinkage» phenomenon that took place in the second half of June, I think it is wise to ask the professors of agriculture to confirm the estimates before publication. It will be my duty to inform Your Excellency as soon as I get the feedback to my enquiries. Whether Your Excellency would like to publish these statistics it might be necessary to point that it is a first raw estimate*». On this letter Mussolini wrote: «*No/M*».

Mussolini was worried not only of the data accuracy but also of the form in which Istat presented numbers to the public. In fact he wished that Italians would acquire a statistical mentality and therefore thought that it was necessary to stimulate their interest for survey results. The interest for data presentation layout was depending on Mussolini's experience as a journalist; he wished that the inner message of Istat statistics could reach readers easily. Therefore, he gave indication on which data were to be published and in which order, as if he was the director of the publication. Here following is one of these orders:

18th June 1928: «*In the Statistical Bulletin of 20th July the population of county towns of each Province on 30th June 1928, should be published in decreasing order*» (Figure 4).

IL CAPO DEL GOVERNO

Nel Bollettino di Istat del 20 luglio
 deve essere pubblicata in ordine
 decrescente le popolazioni dei Comuni.
 Capitali di Province e città
 allora alla data 30 giugno 1928

Figure 4: One of Mussolini's orders to Istat's President

The active role of Mussolini towards Istat, consisting in both stimulating and controlling its activity and therefore also of its president, was paired with a passive role of collecting claims and petitions against its officials and particularly against its current president. This occurred since the foundation of Istat and carried on till the fall of fascism. The people who made claims were either Istat employees unhappy of their work conditions or former employees who protested or were seeking revenge for having been fired. The claims were addressed to the Head of the Government, both directly or through the Fascist Party. Often those who made

claims underlined their fascist merits in order to get more credit from the Duce. Claims and petitions came also from the political police, the National Fascist Party, fascist newspapers and government members.

Often Mussolini sent to Istat's President claims, petitions, anonymous letters and also signed-but-made-anonymous letters. He used to act in this way because he wanted to let people know he knew everything of everybody. If a claim concerned the Institute's President, he had to justify his activity to the Head of the Government, whose intent was to limit, through humiliation, the personality growth of a man he could not avoid appreciating as a scientist. Mussolini did not care about the justifications he received and sent them straight away to the archives of the Presidency of the Council of Ministers without comments, a different attitude to what was his custom for other documents.

Many denunciations addressed to Mussolini concerned President Gini. A certain G.C. in October 1928 sent to Mussolini a lengthy and detailed report titled '*What is prof. Gini doing at the Central Statistical Institute?*'. The denunciation was addressed also to Minister Giuseppe Belluzzo, to the Secretary of the Fascist Party, Augusto Turati, to the undersecretary to the Presidency of the Council of Ministers, Francesco Giunta, and to the Secretary of the Roman fascist federation and director of 'Fascist Rome' newspaper, Umberto Guglielmotti. Most charges were based on real facts that occurred at Istat or at the University of Rome but misinterpreted. The report, without signature and address, was forwarded to Gini by Mussolini, who in his copy wrote «*copy and send to the involved person, Prof. Gini*». The latter replied with a detailed letter (sent to Mussolini on 10th November) of 16 pages in which he denied any allegation. The letter ended with an acknowledgment: «*Isn't the wish of 'Fascist Rome' a legitimate desire for everyone, that with the change in location [from Santa Susanna St. to the new building in Cesare Balbo St.] somebody from that Institute may also need a change of air?*». With reference to the insinuation, Gini wrote clearly: «*In the August issue n. 26 of 'Fascist Rome' – which I have only currently acknowledged – I read the following note: 'The Central Statistical Institute is going to move. This can be the occasion for the Regime to allow some high officials of that institution to take a break'. It is obvious to me that this allusion does not apply to the Institute's President*».

A report written by Gini about an international conference he participated to, started a *casus belli* with the Minister of Foreign Affairs, Dino Grandi. The latter protested with the Head of the Government on November 1929.

«*I am forced to let Your Excellency know that the information sent by Istat's President relating to the International conference on nomenclature for death causes is completely incorrect. This occurs frequently, at least in relation to this*

Ministry's activity, in connection with the above mentioned Institute. I consider appropriate that, from now on, to avoid misunderstandings and in the interest of the service, the relationships between the Central Statistical Institute and other foreign Institutes should be direct and do not go through our Royal representatives. I have already given instructions in this direction to the mentioned Royal representatives.

I will be grateful to Your Excellency if in the instructions that Your Excellency shall give to the President of the Central Statistical Institute would consider that the relations between the President of the Central Statistical Institute and this Ministry often ignore the most elementary rules not only of civic courtesy but also of politeness. Grandi».

Nevertheless Gini produced the written testimony of two officials who formed with him the Italian group of representatives at the conference. The testimony showed that his information was not 'incorrect' at all. Furthermore, during that period, the relations between Gini and Mussolini were quite informal (several letters started with «Dear Gini») and the Head of the Government put an end to the matter writing on Grandi's letter the footnote «Proceedings/Pres.» and the claim was archived.

Less than two months later, the political police sent a letter to Mussolini (in a rather approximate Italian) in which Gini's political faith was being doubted.

«Rome, 20th February 1930.

Some Istat employees and some students have commented on Director prof. Corrado Gini. According to what they say about him, Gini could be an antifascist but he can benefit of the unlimited protection of His Excellency the Duce, protection that might derive from his undisputed professional value.

A proof of it, is what happened in relation to the 'Principessa Mafalda' steamship's sinking. Someone says that Gini, who was on the steamship, in America pronounced harsh words against the Italian Navy and highlighted the responsibilities of the Italian Government.

Someone says too, that upon his return, as a consequence of that episode, the students would have wished to organise a hostile protest.

Finally someone criticises the fact that nobody can approach Gini who seems to wrap himself up in an exaggerated privacy. Someone is questioning also if the protection boasted by Gini is real or just a self-advertisement».

This note shows the sordidness and maliciousness of informants and has the same validity of an anonymous letter. It is in fact evident that insinuations had no basis since it was impossible for an Istat employee or a student to know what Gini may have said in America two years before, having survived the sinking of 'Principessa Mafalda'. The steamboat sank into the Atlantic Ocean between Bahia

and Rio de Janeiro on October 25th, 1927 causing hundreds of victims among which crew members, officials and the commander. Mussolini did not give any credit to the charge.

On February 1930 L.C., who qualified himself as 'native of Trieste and former Fiume legionnaire', and Istat employee sent a letter to the Personal Secretary of the Head of the Government «*to beseech, for the decorum of a State Institute and for the quality of statistics, the adoption of urgent measures*» among which, and before all others, the suspension of «*the application of Istat's internal regulations that should become law on March 10th and that, being full of inconsistencies and illegal norms, could set the Institute at the mercy of the President's power, with employees not being able to seek help from any other authority*». The accusation did not have any consequence. The regulations were issued even though the complaints and protests multiplied as March 10th approached.

In June 1931 the newspaper 'Fascist Rome' denounced Gini once more. Mussolini sent to Gini the article about him. The allegation was that Gini «offended the sentiment of pure Italian character of Veneto's populations», because Gini in a speech had stated that the populations of lower Veneto had «basically Slavic blood». This was the reply by Gini to Mussolini: «*... the Presidency's Head of Cabinet sent me on Your behalf the annexed article of 'Fascist Rome'. It is well known that most of Veneto's populations are of Slavic origin (and this has nothing to do with their Italian feelings because they have been assimilated since thousands of years in the Latin culture). This is not just a peculiar idea of mine or of some isolated scholar, but it is a shared opinion among anthropologists (...)* Let me quote a few passages of the well-known essay of professor Ripley on European races (...) A specialist of the subject writes in a recent book (Haskel Sonnabend, *The Slavic Expansion*, page 3): *'The name 'Slavic' (Medieval writers used the Latin form 'Sclaveni' or 'Sclavi') was introduced for the first time in VI Century by Byzantine authors. The classic antique authors may have labelled these populations as 'Venedi' (Pliny) or 'Venethi' (Tacitus). Even today Germans call 'Vendem' the Slavic people of Lusatia.*

As Your Excellency can see the author of the article is not really updated in anthropology. Clearly he confuses the ethnic primordial elements of a population, to which the biological characters conform, with the cultural elements that imprint a nation's spiritual unity.

It is not worth the effort to reply to the article, for both its style and content, because it is written under a pseudonym and finally because I am very busy with other important things at the moment.

Doesn't Your Excellency believe it would be better to avoid the publication of such bizarre opinions, in particular if, as I have been told, the quoted newspaper

is an official agency of the Provincial Fascist Federation?».

Gini's public attitudes toward Mussolini and the regime – as evident from the proceedings of the Higher Statistical Council – appear grateful, deferential and generally moderate in exalting the figure of the Duce and his work, while this type of exaltation was frequent and possibly necessary among those who were seeking some power or tried to obtain a position.

On the other hand the following request that on 23rd June 1927 Gini sent to the Personal Secretary of Mussolini does not seem so spontaneous: *«to give this Central Statistical Institute a picture with signature [of Mussolini] and another to me, again with signature (...), because on 15th July, at the Institute, there will be a solemn session of the Higher Statistical Council to which Your Excellency promised to take part. I would be very grateful (...) to receive both pictures in due time to be able to position the one given to the Institute in the meeting room (...) and the other in my study. The honour of the two signatures shall be a propitiatory symbol on the day in which the Institute shall celebrate its first anniversary».* Mussolini wrote *«Yes/M»*, but the pictures did not get to Gini in time and only in October Gini sent *«his hearted and committed thanks for the given honour».*

On one occasion Gini went over the boundaries of his aversion to rhetoric. With reference to the visit of Mussolini on 15th July 1927, held in a room that Gini used to call 'a shack', he wrote *«I will never forget the ceremony held to celebrate the first anniversary of the establishment of the Central Statistical Institute. There were several Ministers and other authorities as well as members of the Higher Statistical Council and other officials (...). When the Head of the Government entered, a new spirit penetrated that 'shack'. The old statistical employees, with their backs bent by decades of bad events, straightened up as old soldiers demoralized by defeats stand when a trustable leader comes into power; they therefore became soldiers of reconstruction».*

Gini wrote also, without any rhetoric, that *«the ceremony was held in the 'engine room' of the General Directory of Statistics located in the basement of the main building. The room was illuminated by a large skylight without double-bottom and was accessible from the garden of the neighbouring Ministry through a temporary wooden staircase. The humidity in the room was mitigated by the July sun that the skylight concentrated as a lens on the audience. Decorated with some plants for the occasion, it was the best the old General Directory of Statistics could offer to the Head of the Government and to the invited authorities».*

It is easy to imagine how much the audience suffered from the July sun being filtered by the skylight. This was particularly tough for the authorities – Mussolini, Turati, Gini and the Ministers – who chaired the ceremony and dressed heavy wooden suits (see Figure 5).



Figure 5: In the front row Mussolini, between Gini and Turati (Fascist Party's Secretary), during the ceremony for the first anniversary of the foundation of the Central Statistical Institute – 15th July 1927

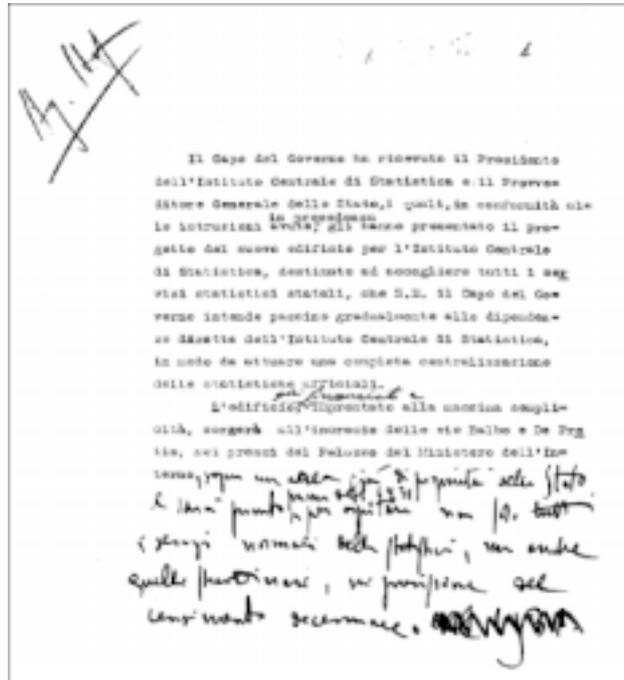


Figure 6: A note by Mussolini to the Stefani Agency about Istat's building being constructed

Mussolini, who chaired the ceremony, was hit by the dreariness, tightness and clear inadequacy of the rooms and asked Gini more details about them. For once Gini was not able to answer immediately and the day after he sent the requested information to the Head of the Government.

The building at Santa Susanna St. 17 was a real handicap for Istat's development since it did not allow to locate rationally the employees and recruit new personnel. That is why Mussolini decided that the Institute should have a new location, in a building close to the Viminale palace, where the Presidency of the Council of Ministers was located at that time. On 22nd August 1928 a press release was issued (Figure 6): «*The Head of the Government has received the President of the Central Statistical Institute and the State General Commissioner who, as requested, presented to him the project of the new building for the Central Statistical Institute, which is intended to gather all Italian statistical services that His Excellency the Head of the Government wishes to pass under the management of the Central Statistical Institute in order to centralize all official statistics*».

In June 1929 the demolition of the old buildings started. The construction of the new building was carried out rapidly considering the difficulties met with the foundations and the impressive dimensions of the building. The head of the Government showed high interest on the construction with several and unexpected inspections and with orders for its rapid completion. Two years after the start, on 28th October 1931, ninth anniversary of the march upon Rome, Mussolini opened the new building and Corrado Gini was there to greet him.

6. THE DIFFICULTIES MET BY GINI IN HIS ACTIVITY AND HIS RESIGNATION AS ISTAT'S PRESIDENT

The law that appointed the Central Statistical Institute under the direct and exclusive authority of the Head of the Government might have forced Gini to believe that Mussolini could solve Istat's main problems. In fact, he had been able to solve the main problem, the lack of space that limited in great measure the Institute's activities, by ordering the quick construction of the Balbo Street building. But, even the Head of the Government, with his power, met problems he was not able or did not want to solve.

That is why Gini, in spite of Mussolini's support, had to face personally the other problems that prevented the Institute's progress and that were the three cornerstones of the reform: the centralization of all statistical services into Istat, being under the direct authority of the Prime Minister and its managerial autonomy.

The State administrative bodies strongly opposed to the transfer of their statistical services into Istat because they:

- feared that Istat could invade their competence and consequently alter both the relations with their local offices and with their own personnel which collaborated with the Institute;
- did not want to give up data analysis activities they already performed;
- believed that any administration could define better their specific statistics;
- objected that statistical documents and the data collection units were strictly linked to administrative documents and this could alter their institutional duties;
- believed that any activity of the Statistical Institute greatly disturbed the internal organisation of their own services.

These objections caused several State administrations to call also for a revision of the general principles of the norms in force. Even the State autonomous agencies (Mail and Telegraphs, Railways, Monopolies), which considered themselves excluded from the regulations set by the 1929 legislative decree (this belief was also backed up by the State General Accounts Department), made objections and a direct intervention of the Head of the Government was required to make it clear that also those statistical services had to be concentrated.

The norms on centralization were massively ignored by public bodies, so in his report in December 1931, Istat's President concluded that, up to that date, only the statistics on migration had been passed to the Institute and a negotiation had started for judicial statistics.

In any case, the law gave the Institute wide powers of direction, coordination and control of the statistical activities of the public bodies till their final concentration into Istat.

The width of power assigned to Istat could not be accepted with ease by public bodies that felt deprived of their authority and superseded. This was the reason of the several circular letters the Head of the Government had to issue under Gini's pressure for the bodies to respect the norms. Gini insisted also that all projects of legislative or regulatory norms on statistics and on the statistical system had to be communicated to the Central Statistical Institute for its approval before their submission to the Council of Ministers and to the Council of State, in order to examine if there were any variations in the organization and in the surveying system, and if so – these schemes should be approved by the Institute. This viewpoint was reaffirmed in a circular letter of July 1927 signed by Mussolini but prepared by Gini, as he himself stated in front of the Higher Statistical Council. Almost all ministries objected to this letter since they were worried that the preventive approval of the Institute, assigned to it an inappropriate political and administrative power and that this could lengthen even more and interfere with the already complex legislative procedure.

Nevertheless, after five years, Gini could state that *«the directional role that the Institute carries over the statistics of the other administrative bodies, has been performed and accepted with less resistance than before by the administrations themselves, and this can be a good sign towards a future centralization»*. The opinion expressed by Gini was mistaken in the optimistic direction because just a few public bodies collaborated with Istat. In fact not everybody submitted their surveys to the Central Institute and the results were nearly always disastrous: in his report to the Higher Statistical Council in December 1931 the President quoted the survey on food consumption held by the National Research Council Commission for the study of food problems. The Institute had asked in vain the Commission to act according to the norms.

With reference to control of published data, the President communicated to the Higher Statistical Council in the January 1931 session: *«It is a heavy though useful duty that derives from the wish expressed by the State General Commissioner that all statistical issues should be submitted to the Institute before publication. The law was sufficient enough for the administrative bodies to put more attention to their statistical issues than in the past [...but] it has happened that a publication that had not been submitted to the Institute in advance was so full of mistakes that, upon request of the Institute, the concerned administration had to withdraw it»*.

For sure, this was not the only issue that slipped the preliminary check by Istat. In the December 1931 session, the President quoted seven publications on which the Central Institute could claim no responsibility: *«the non-observance seems particularly serious for the issues of the Commissioner's Office for Migration and Internal Colonization, also sent to Presidency of the Ministries Council, that are full of mistakes and for the one on agriculture salaries of the National Confederation of Fascist Unions for Agriculture that looks not only wrong from a data collection methodology point of view but, as consequence of these mistakes, the data on real salary of agriculture workers from 1919 on were so wrong that the international press opposing the Regime drew pessimistic conclusions about the changes of workers conditions after the advent of fascism»*.

Gini did not use diplomacy to highlight the non-observance of the concerned norms. Those who had been accused did not react in plain sight but secretly sought revenge (as it appears from what happened right afterwards).

Faults could be also found in the statistical activity of the Economic Provincial Councils and of the Prefectures that, as regulated by the norms of 1926 and 1929, were to act for surveying activities, as local agencies of the Central Institute. In fact their activities were lacking in data exactness, classification and processing. In relation to this, Istat's President said (Gini, 1932): *«These inconveniences, in*

reality, do not happen any longer in Municipalities and Royal Prefectures with regards to population movements surveying, started shortly after the Kingdom's foundation. With the exception of few large cities, inconveniences in the same field happen in occasion of new surveys that, due to the greater importance of statistical studies in the modern organization of the State and in scientific research, are now more necessary... The mentioned inconveniences become major problems in occasion of large scale surveys (such as demographic, agricultural, industrial censuses), because the local offices in-charge lack operational personnel qualified in sufficient education and specific training».

As well as the centralization of public services into Istat, the other innovations that characterized the Institute – being set directly under the power of the Prime Minister and its managerial autonomy – changed the bureaucratic tradition and made the first years of activity of the Institute quite difficult.

The Institute's direct dependency, that in 1929 became also exclusive of the Head of the Government, overturned the position of statistics in the scale of values of Italian bureaucracy. Once «Cinderella» of the State services and pilgrim from one Ministry to another, and in each one of them to be considered an irrelevant and marginalized attachment, statistics were suddenly put at the top of the State hierarchy. In fact the direct and exclusive submission to the Head of the Government meant that statistical activity was indeed a common service but it was above all others. This led to general incomprehension and scepticism that emerged in particular in the Institute's relations with the Presidency of the Council of Ministers, with the only office that until then had depended directly and exclusively on the Head of the Government. Istat had to face several obstacles.

But bureaucracy opposed in particular Istat's managerial autonomy because, despite its State duties, it did not respond to State financial rules. The first in the line of opponents was the Ministry of Finance which used its most powerful weapon: not approving Istat's internal regulations as proposed by the Higher Statistical Council, regulations that had the purpose of designating for employees norms for recruitment, careers, salaries, retirements and discipline rules.

Three years after Istat's foundation the internal regulations were not yet issued; therefore Gini decided to solve the problem from its roots taking advantage in 1929 of the completion of the 1926 reform. In his address to the Higher Statistical Council in the session of December 1929 he said: «*Due to the divergences, that were not being cancelled by this Institute's goodwill just to be multiplied under initiative of the State General Accountancy, your President was forced to propose to the Head of the Government to change the norm that prescribed that the internal regulations of the Institute had to be issued in agreement with the [Ministry of] Finance and that*

therefore had been withholding its entering in force for two years. In fact, upon presentation of the law, the Senatorial commission pointed out its inadequacy and possible dangers.

To state our autonomy in this field is a constitutional characteristic of our Institute and an indispensable condition for its proficient functioning, and has been a basic aim of the new law».

In fact the 1926 bill stated that the internal regulations (article 12) had to be submitted by the Higher Statistical Council to the Head of the Government, Prime Minister, approval, in agreement with the Ministry of Finance. The 1929 decree stated instead (article 23) that it had to be approved by the Administrative Committee of the Central Institute and promulgated by the Head of the Government, Prime Minister. Once things had been settled, the path of the internal regulations was straightforward: it was approved by the Administrative Committee on 30th December 1929 and then with a decree of the Head of Government on 15th January 1930.

But if the Ministry of Finance had been deprived of a weapon, another more powerful one was still in its hands: the Institute's functioning budget approval.

Gini presented in this way to the Higher Statistical Council the Institute's financial situation in its 21st December 1931 session: *«The explicit and justified vote of the Higher Statistical Council that no budget reduction had to apply to the Institute (...) was not taken into any notice by the [Ministry of] Finance. So, whilst a larger need of about 600.000 liras was demonstrated as necessary to move to the new building, Finance maintained its inopportune cut of 1.600.000 [liras...]. Hence, your President immediately presented His Excellency the Head of the Government with the alternatives left to the Institute, either reducing its activities and closing offices in order to limit expenses within the available funds, again already confirmed as inadequate in the first place by the House of Members of Parliament in the act of the Institute's creation, and secondly by the Finance Committee in its economic report, and therefore give up the possibility of maintaining an adequate statistical service; or carrying on at the same work pace with the guarantee of integrating the necessary funds and using, in the meantime, previous savings, essentially linked ... to difficulties met in the past in service organisation due to the lack of space...*

His Excellency the Head of the Government decided on 13th March 1931 that the Institute should use its available budget till 30th June 1931 and added that in the next fiscal year – that is the current one – there would have been a new law or a special assignment. Since Finance did not endorse that decision, we are close to the moment when the Institute will not be able to carry on with its activities and will be

forced to dismiss many temporary or probationary employees, unless the Head of the Government orders to fulfil his decision (...).

If five and a half years of intense and continuous work and the consequent outcomes allow the Institute's President to express this request, this request shall be that based on previous experiences, in the near future the Institute should be given stability conditions for its functioning, conditions that exclude the threat that the achieved progresses may be quickly blanked out, as already happened after the bright organisation of the Central Statistical Directorate by Luigi Bodio.

It is necessary that the Institute should be aware of which financial means it can steadily rely on in relation to its program, so that either these means are sufficient to comply with the mandate assigned by law, or this program should be reduced to a lower level in accordance with the available funds.

The vast and respectable headquarters that His Excellency the Head of the Government wanted to be built to witness his consideration for the Institute, could become a source of serious embarrassment if at the same time an appropriate, although restricted budget, is not assigned to carry out its scopes.

Let me suppose that the affection with which His Excellency the Head of the Government has honoured the Central Statistical Institute, will push him to consider with benevolence as soon as possible these problems that past experiences have suggested should be presented to him for a final solution.

(...) The Institute's officials are often gratified of the appreciations towards the Institute's activities for the reconstruction of Italian statistics, that in such a short time has been set now in the front row among the often much more expensive statistical organisations of modern States. Though they often have to react against the illusion that these improvements are a demonstration that the Central Statistical Institute has gained a stability that warrants its future and excludes any crisis that in a short time may jeopardize and void all obtained results».

The one of many statements of certainty that the Head of the Government could solve the Institute's problems, this time was seriously doubted. Also the times in which the employees, only by watching the Head of the Government became aware of the value of their mission, seemed far away; today they had to be made aware of the reality of facts by Istat's President. Blind faith in the Duce had ended.

Even if discouraged, Gini did not show any tiredness or sign of pulling back; he did not change his attitudes nor he showed himself accommodating, instead he asked and obtained by Mussolini a new memo against the bodies that did not undergo Istat's rules while carrying out their statistical duties.

Who did get tired instead was in fact Mussolini. He was exasperated by the fights between Gini and the other public administrations that repeatedly involved

him and that he had to solve. Maybe he was also tired of the protests from Istat's personnel in relation to the authoritarian conduct of the President. Furthermore, he could not accept that his power could be subject of public discussion as Gini had clearly stated to the Higher Statistical Council. So he decided that his creature, the Central Statistical Institute, had overcome its adolescence and could proceed on its path with a more accommodating and flexible, however less knowledgeable, guide. Hence Gini's presidency period was at its end, and not because he had decided so.

Mussolini's attitude towards Gini had already changed even before he expressed his opinions in front of the Higher Statistical Council on December 21st, 1931. A proof is the telegram he sent to the Kingdom's Prefects on November 28th, 1931: *«Any time requests from the Central Statistical Institute imply extraordinary or permanent expenses, Your Excellency is licensed to inform me before answering to the request».*

Mussolini's change of attitude towards Gini might have started months before, otherwise Gini's rivals in the Presidency of Ministers Council would not have exposed themselves and would not have obtained to 'filter' the relations between Gini and the Head of the Government after years of unsuccessful attempts. When Istat's President became aware that his meeting requests with the Head of the Government were subject to approval from the Cabinet Secretary of the Council's Presidency, he discussed the matter with Mussolini during the first approved meeting. Gini wrote on January 22nd, 1932 to Mussolini's Personal Secretary that the Head of the Government *«...(reaffirming previous instructions), he stated to have never thought necessary to put any intermediary for requests of meetings by people at his direct and exclusive dependency and although leaving me the freedom to follow the path I thought more appropriate»*, but, feeling that Mussolini had not had the courage to tell him the whole truth, he asked the Personal Secretary *«to ask His Excellency the Head of the Government confirmation of his intention in order to avoid misunderstandings and inconveniences»* and at the same time asked for another meeting with the Head of the Government. On January 29th the Personal Secretary took the following note from Mussolini: *«Prof. Gini – If and when he will show up, let him know that His Excellency will receive him in a day he reserves the right to inform him about».*

The days of the prompt meetings were gone, also because Mussolini wanted to take his time to find Gini's successor. On February 6th, 1932 the decision was made and communicated to Gini. Then Gini wrote his last letter as Istat's President to Mussolini, sending to him twelve volumes, partly published and partly as drafts, to complete the series of 28 volumes of the Statistics Annals *«prepared during the period of my presidency of the Central Statistical Institute (...) I am honoured to*

present them to Your Excellency (...) waiting for the official designation of my successor. As Your Excellency will certainly point out in some volumes that I am honoured to present to Your Excellency, the person designated by Your Excellency as my successor has provided his keen and appreciated contribution. Please, allow me to congratulate Your Excellency for his happy choice characterized by the usual deep intuition». The exalted endorsement of the choice could hide a subtle sarcasm because Gini knew and measured strictly the value of people with which he collaborated.

On 8th February 1932 a Royal decree was issued to accept Gini's resignation and his substitution with Franco Savorgnan.

The same day the last service order signed by President Gini was issued. The hand written date was instead February 10th.

«Service order No. 14.

I wish to inform all personnel of the Institute that, having completed after five years of work the reconstruction of the statistical services and the arrangement of the Institute in its new building, I submitted again to His Excellency the Head of the Government the request to be dismissed from the position of president of this Institute in order to allow me to devote all my time to studies.

His Excellency the Head of the Government was pleased to accept my request and appointed as my successor prof. Franco Savorgnan, a member of the Higher Statistical Council, of the Technical Committee and of the Administrative Committee of this Institute.

Let me express my deep thanks to the General Director, to the Vice-General Director, to the heads of the technical departments and to all personnel for their tireless work and for the valid collaboration granted that also allowed the flourishing services of Italian national statistics.

Rome, 10th February 1932 – The President of the Central Statistical Institute (Gini)».

Gini left the scene of Italian official statistics fully aware of the prominence of the work done and with his head held high: he had «completed the reconstruction of Italian national statistical services» and had made them «flourish» having been able to fulfil a task viewed nearly as impossible.

So Gini ceased his attempt to use political power to improve the national statistics without ever bending his head to it.

Mussolini was ungenerous while, addressing the Higher Statistical Council in the session of 14th December 1932, the first one chaired by Savorgnan, he did not even mention the predecessor and show open appreciation for his work, and on the other hand charged Gini mainly with the responsibility of the controversy with the

administrative bodies: *«For now we appreciate an improvement of the relations between the Institute and Ministries. An initial friction is unavoidable but now all these deleterious frictions, that were a waste of time, are over and we can see the necessary collaboration between State bodies for the centralization of statistics into this Institute (...) I am sure that all of you will work in order for the Central Statistical Institute to meet the scopes of its institution and for it to maintain its national and international prestige».*

Mussolini, involuntarily, expressed an implicit recognition of the high standards reached by the national statistical services after Gini's work. In fact that *«national and international prestige»* gained by the Central Statistical Institute had to be attributed mainly to his activities. Though, no gratitude was publicly expressed for the great achievements of the former president.

7. THE ACHIEVEMENTS OF PRESIDENT GINI AS THE CENTRAL STATISTICAL INSTITUTE'S LEADER

Gini's activity during the five years of his leadership at Istat, his successes and the peculiar characteristics of his personality were thoroughly described by Alessandro Molinari at the end of 1931 while he was General Director of Istat and hence Gini's closest collaborator. He was therefore more than able to testify and evaluate the actions of his boss. His testimony and evaluation, although filled by obvious enthusiasm, seem rather impartial and close to the truth. In fact they were written at the end of 1931 when, in high ranks, winds were already blowing against him. Some of Molinari's thoughts are written here below:

«[...] If Gini was able to conquer a relevant position in the scientific arena, his merits are equally relevant in the field of official and administrative statistics and for this he deserves the title of 're-constructor' of Italian official statistics. He will be remembered by future generations both for that and for his scientific contribution.

He is indeed an exceptional example of a 'pure' scientist who, suddenly appointed from a scientific field to a management position, at the lead of a delicate bureaucratic body such as that of official statistics, reveals skills of expert organiser, inflexible and parsimonious manager, able to promote statistical activities, and collaborators' leader!

In few years, from a dilapidated and fading office a new organism raised as a miracle, solid, vigorous and wealthy of publications, one of the most important and well-organised in Europe even though its financial resources were relatively scarce.

Everybody can admire the outcomes in this field. But the numerous contacts

that the public has with the Central Statistical Institute through official statistics, are just a part of the effort that the Institute, under the high patronage of the Head of the Government and Gini's lead, has and is carrying out to refine, improve and harmonize its own and other central and local administrative statistics.

Only those who know the low regard that in the past public bodies reserved to statistics, the sense of scepticism and also the scorn with which the request of data collection sent from the centre were met, the carelessness of data collection and analysis activities even for important issues, only those can effectively understand the sudden improvement that occurred in so few years.

The inflexible perseverance in obtaining the fixed aims, the intransigency toward the chronic latecomers, the careless and the superficial, the severity and equity towards who failed to fulfil purposes, the precise and systematic check of the news and data and the quick correction measures, the continuous fight against the habit of 'letting it go' and 'postponing', all this changed in few years first in the central offices and then in the whole Kingdom in favour of a sense of responsibility and seriousness that, for the common interest, have to pervade the data collection and processing.

Being aware of the responsibility assigned to the Central Statistical Institute as the propulsive and regulatory body of Italian statistics to which all the State, State-controlled and corporative bodies have to refer for data collection and dissemination, Gini –ignoring the aversion that a strict fulfilment of the assigned duty inevitably implies– was able to foster within all administrative bodies the certainty that nothing escapes the Central Statistical Institute and, sooner or later, all faults are discovered and must be remedied. The urging and encouraging work of the Institute enabled to create in Italy a statistical 'conscience' and 'honesty' that is prime prize for public administration and science.

Only Gini's exceptional temperament could stand such a huge duty and the unpleasant consequences of the widespread application of its principles to the reconstruction of statistics.

Innovative in methods and enemy of bureaucratic complications, Gini possesses a panoramic and concrete vision of the complex activities to which he attends, addressing, pushing and multiplying with new initiatives and continuous enhancements.

He attains an incomparable prestige from the fact that he is a raw model for hard working. He is gifted by exceptional memory and willpower, and also by perseverance, diligence and organisational skills that transmit to his collaborators a powerful stimulation for efficiency and a never-ending desire for improvement and perfection.

He has also another merit that has to be recognized, resisting to the temptation of using statistics for other purposes than those prescribed by law and of eclipsing or adapting statistics in the illusion that it could in some cases be useful, whilst it may become a harm to the nation. Gini was a serious and firm architect of the sound principle that the Head of the Government well summarized in his speech at the Higher Statistical Council on 15th July 1927: «Statistics are neither pessimistic nor optimistic. They cannot be used for prejudices. Their sign must be of plain truth, pleasant or unpleasant it may be. Only in this way statistics may have a superior formative and moralizing role for individuals and people».

Whilst attending the important role as re-constructor of the Italian Statistics, Gini didn't stop his scientific output. In contact with the actual concrete project management, it also found in fact new prompts and actuations...».

Other striking points are the acknowledgment of the linearity of his action, the courageous refusal of any compromise, his search for a continuous improvement, and finally the defence of the obtained results from outer interferences. This comprehensive picture of the great scientist and of his gigantic masterpiece, sketched by Alessandro Molinari with a touch similar to that of a Flemish painting, makes one regret that Gini's leading part in Italian national statistics was so short.

Molinari mentioned also the scientific activities of Gini as a scholar. This draws our attention to two relevant outcomes of his activity at Istat. He organised an important meeting in Rome, the 'International congress for the study of population problems', attended by several scholars from 7th to 10th September 1931 and whose proceedings were published in ten large volumes given the high number of contributions presented at the Congress. Another relevant outcome was the survey and classification of archive sources and bibliography for the study of past Italian populations. The survey was made difficult by both the number and variety of documents dispersed in so many State, municipal, diocesan, parish and private registers, and the fact that only at the moment of the survey itself was it possible to realise that documents existed and their abundance. This survey was, as well as other specific studies and researches carried out by Gini, a starting point for another series of studies finalized to develop Gini's project and that were conducted by different scholars (historians, demographers, statisticians, etc.) who worked throughout the '70s and '80s at the CISP (Italian Committee for the Study of Population Problems) founded by Gini in 1929 and in which he organised both the congress and the research on archive sources.

Going back to the Central Statistical Institute's activities during Gini's presidency, with no doubt they were vast and composite. The on-going surveys initiated at the time of the Statistics Directorate improved and new ones started.

Furthermore, statistical studies were stimulated and a massive publishing activity (see Table 1) was carried out together with the surveillance over the statistical activity of public bodies.

Table 1. Number of Istat's publications and models from 1926 to 1931 (Source: Di Tommaso, 1978, page 403)

Year	Publications			
	Current or special (a)	Censuses	Total	
	Volumes (b)	Volumes (c)	Volumes	Pages
1926 (d)	3	10	13	1.706
1927	14	14	28	8.810
1928	12	7	19	6.632
1929	17	2	19	7.763
1930	14	6	20	8.356
1931	19	1	20	8.422

(a) Publications with fortnightly or monthly periodicity. Monthly: Italian monthly bulletin; Monthly bulletin of agriculture and forestry statistics; Price bulletin. Fortnightly: Demographic news (monthly from 1st January 1930); Fortnightly informative sheet on seasonal trends.

(b) An annual series of issues was considered as a volume.

(c) Every census issue was considered as a volume.

(d) From July to December 1926.

The good quality of the survey results held by Istat at the time of Gini and the improvement of surveys held by other administrative bodies were due to their methodological organization and execution. The methodology was conceived and imposed by Gini both to Istat and to other controlled bodies. Its essential elements were presented by Gini himself:

«1) Obtaining the maximum accuracy and completeness of data in surveys carried out either directly or through other bodies. The accuracy of data was obtained by promptly and meticulously controlling all the incoming data. The completeness of the data collection was obtained inserting in forms all the questions that, compatibly with the possibilities of the surveyors, can offer both scientific and practical elements for the study of phenomena with reference to research outcomes in Italy or abroad, preferences of international associations or bodies, or requests of scholars from public bodies. For this reason, the data collection forms are assessed by study commissions, Istat technical offices and managers and experts of the Technical Committee. If one compares, for instance, the new collection forms for demographic data with those used before the Institute's

establishment, it can be noticed how much care has been put into their layout. Once filled in, the forms are checked three or four times before final processing.

2) Encouraging and urging systematically and continuously the collaborating bodies at both central and local level. This allowed the elimination of great part of the structural deficiencies in these bodies functions, which was the greatest of burdens inherited by the Institute. After five years of work, it may be said that unexpected progresses have been made towards the creation of a statistical conscience that, unfortunately, was missing in many administrative bodies.

3) Keeping and regularly updating the municipal population registers that first the war and then the post war disorganisation had reduced to a state of abandonment. The Institute's activity in this field was important: the 1901 regulations were modified (some norms were inapplicable) and a new regulatory system was approved on 2nd December 1929. The Institute and the Ministry of Internal Affairs were appointed for surveillance over population registers. The Institute started a systematic check of the population registers of all municipalities through inspections carried out by the Royal Prefectures and followed-up the control through a group of officials to be developed for the future. Eventually, in 1932, all municipal population registers should be completely reordered, something that in the past it had never been possible to achieve.

4) Examining from the technical-statistical viewpoint and harmonizing with other national and international statistics the data collection and processing procedures and the publications of all State, State-driven and corporate bodies' statistics.

5) Organising rationally according to the most modern principles the offices and their personnel whose performances are systematically and daily checked with the aims of eliminating superfluous activities, select the employees and increase the performances».

Another point that does not appear within the ones listed by Gini in its methodological description and had certainly positive effects on the surveys carried out by the Institute: it was the stimulating effect injected in the officers in charge of the surveys by also referring to their work during demography and statistics congresses and meetings of officials in charge of realising surveys. Gini wrote: *«The President and some employees of the Institute presented scientific reports at all sessions of the International Statistical Institute held in Cairo in 1927, Warsaw in 1929, Tokyo in 1930 and Madrid in 1931. Relevant studies were carried out on behalf of the League of Nations and the International Labour Office. Recently a main contribution was presented at the International Congress for Population Studies where the Institute presented 27 original papers that in great part are*

advanced statistics to be published by the Institute».

Istat carried out many surveys, some of which are still currently ongoing whilst others lost their relevance. We will therefore not consider them here, with the exception of censuses that were an important test for Gini and his collaborators. Gini wrote:

«When the Institute was founded, the activities for the sixth population census of 1921 were being run: they suddenly accelerated and some post-enumeration surveys were carried out to check the data for possible inaccuracies. The results of these activities were treasured for organising the 1931 census.

In 1927, after the publication of the last volume of the sixth population census the industrial and commercial census started (...).

In March 1930, after an adequate preparation, three agricultural censuses were conducted at the same time, one on farms (the first one in Italy and in accordance with the world census sponsored by the International Agricultural Institute), one on agricultural population (upon request of the Ministry of Corporations) and another one on livestock. All these activities were particularly complex and difficult (...).

After careful preparation, the activities of the seventh population census, updated to April 21st, are close to end. By April 1932 we will publish the first results. In parallel with the population census, a survey on houses was carried out in the main cities.

The care taken by the Institute for the seventh census activities is really new. New is also the technical organisation for the transcription and processing of data, in particular for those on jobs which is the weakest elements also in current censuses.

Five huge censuses in five years are probably a record in statistics history. (...) They may become the supporting wall of Italian statistics».

We have already commented in this paper on Gini's juridical and administrative competence that enabled the reforms completed in 1929 to be able to be effective for more than half a century, until some institutional changes in the country required a radical revision of the national statistics system. Also many activities he had initiated during his presidency were carried out for longer. Indeed, what Gini left to us is much more than single surveys. It is the methodology of planning and conducting efficient surveys in any public data collection; this methodology imposed when he was the leader of the Italian official statistics system has been followed ever since.

We recalled what Gini was able to accomplish in just five years. He was put in charge of an underdeveloped system, close to an ignominious end and to which

he, in few years, with his science, dedication and energy gave a new life. He brought the Italian national statistics at about the same level as Luigi Bodio had half a century before. He raised again Italian national statistics close to the world's top ones.

Eighty years ago, he was brutally excluded from the lead of the Italian official statistics system, but, in spite of a war that brought Italy to its knees, his creature survived unharmed and remains living and hearty. We cannot do anything but admire his talent as reconstructing genius and the long-lasting masterpieces he was able to create within statistical science, both theoretical and applied. A monument which, using Horace words '*monumentum aere perennius*', will last more than bronze.

REFERENCES

- Archivio Centrale dello Stato, Segreteria Particolare del Duce, Carteggio Ordinario, 1922-1943, *Istituto Centrale di Statistica: 509560 I, 1169; 509560 II, 1, 1170; 509560 II, 2, 1171; 509560 III, 3, 1172.*
- Archivio Centrale dello Stato, Carte delle Cassette di Zinco, *Autografi del Duce, 7, 6.4.6.*
- Archivio Centrale dello Stato, Presidenza del Consiglio Superiore di Statistica, Fascicolo 1.1.16/2700.3, 1, 2670.
- Archivio dell'Istituto Centrale di Statistica, Servizio del Personale, *Fascicolo GINI.*
- ISTAT (1929). *L'attività dell'Istituto Centrale di Statistica nel suo primo biennio di vita.* Annali di Statistica, Serie VI, Vol. II, Istituto Centrale di Statistica del Regno d'Italia, Roma.
- ISTAT (1930). *Atti del Consiglio Superiore di Statistica. Riassunti dei verbali delle sedute: Parte prima: Sessioni dal 1921 al 1925; Parte seconda: sessioni dal 1926 al 1927.* Annali di Statistica, Serie VI, Vol. VI, Istituto Centrale di Statistica del Regno d'Italia, Roma.
- ISTAT (1930). *Atti del Consiglio Superiore di Statistica - Sessione ordinaria 7 dicembre 1929-VIII: Verbale della seduta e relazioni illustrative dell'attività dell'Istituto Centrale di Statistica dal luglio 1927 al novembre 1929.* Annali di Statistica, Serie VI, Vol. VII, Istituto Centrale di Statistica del Regno d'Italia, Roma.
- ISTAT (1931). *Atti concernenti la costituzione dell'Istituto Centrale di Statistica e le successive modificazioni - Norme legislative e regolamentari concernenti l'ordinamento ed il funzionamento dell'Istituto - Scuole di statistica - Esami di abilitazione nelle discipline statistiche - Concorsi e iniziative per promuovere e favorire gli studi statistici.* Annali di Statistica, Serie VI, Vol. I Istituto Centrale di Statistica del Regno d'Italia, Roma.
- ISTAT (1932a). *Atti del Consiglio Superiore di Statistica - Sessione ordinaria 9-10 gennaio 1931-IX: Verbale delle sedute e relazioni illustrative dell'attività dell'Istituto Centrale di Statistica dal novembre 1929 al novembre 1930.* Annali di Statistica, Serie VI, Vol. XXVI, Istituto Centrale di Statistica del Regno d'Italia, Roma.
- ISTAT (1932b). *Atti del Consiglio Superiore di Statistica - Sessione ordinaria 21-22 dicembre 1931-X: Verbale delle sedute e relazioni illustrative dell'attività dell'Istituto Centrale di Statistica dal novembre 1930 al novembre 1931.* Annali di Statistica, Serie VI, Vol. XXVII, Istituto Centrale di Statistica del Regno d'Italia, Roma.

- ISTAT (1936). *Decennale dell'Istituto Centrale di Statistica, 1926-1936*, Istituto Centrale di Statistica, Roma.
- Di Tommaso, S. (1978). Le pubblicazioni dell'Istat. In: Istat, *Cinquanta anni di attività, 1926-1976*, Istat, Roma.
- Gini, C. (1932). L'Istituto Centrale di Statistica del Regno d'Italia, *Barometro Economico Italiano*, 4,1.
- Leti, G. (1996). *L'Istat e il Consiglio Superiore di Statistica dal 1926 al 1945*. Annali di Statistica, Anno 125, Serie X, Vol. 8, Sistema Statistico Nazionale - Istituto Nazionale di Statistica, Roma.
- Leti, G. (2015). Il ricostruttore della Statistica Pubblica Italiana. In: L. Fabbris, editor, *Corrado Gini una meteora statistica*. Cleup, Padova: 81-125.
- Mack Smith, D. (1981). *Mussolini*. Rizzoli, Milano.
- Melis, G. (1988). *Due modelli di amministrazione tra liberalismo e fascismo. Burocrazie tradizionali e nuovi apparati*. Pubblicazioni degli Archivi di Stato, Saggio 10, Ministero dei Beni Culturali e Ambientali, Roma.
- Molinari, A. (1931). Corrado Gini. *Barometro Economico Italiano*, 3,10.
- Montemartini, G. (1910). *Atti del Consiglio Superiore di Statistica*.
- Mortara, G. (1922). *Statistica ufficiale e politica economica*. Problemi italiani, n. 15.
- Nitti, F.S. (1907). Interpellanza al Ministro di Agricoltura, Industria e Commercio, Camera dei Deputati, Discussioni, XXII Legislatura, I sessione 1904-1907, tornata del 20 maggio 1907, v. X, page 14.411-14.412.
- Nitti, F.S. (1911). Discorso al Parlamento, Camera dei Deputati, *Discussioni XXII Legislatura*, I sessione 1909-1913, tornata del 13 maggio 1911, v. XII, page 13.980.

