

# Statistics, Expectations and Economic Policy \*

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Statistical research in Italy took a notable step forward in the second half of the nineteenth century. Immediately after the proclamation of Italian unity, the new-born nation-state embarked upon considerable statistical and demographic research and survey activity. In the early decades of this century further important advances were made in methodology and in our understanding of important aspects of Italian economic life, thanks to the work of eminent scholars too numerous to mention except at the risk of grave omissions. Two events in particular testify to the maturity acquired by the study of statistics in Italy: the foundation of the Central Institute of Statistics in 1926 and the creation of the Faculty of Statistical, Demographic and Actuarial Sciences in Rome in 1935.

The Bank of Italy owes an immense debt to the statistical profession, not only because of the intensive use of statistical tools in the field of money and credit but also on account of the direct participation in the Bank's activities of such illustrious figures as Bonaldo Stringher, Giorgio Mortara and Paolo Baffi, who were trained in statistics and who made major contributions in that field. The Bank has been inspired by the example these men set with their methods of work, spirit of research and analytical rigour.

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## The Bank of Italy, Data and Statistical Analysis

The role of the central bank in the field of credit statistics was confirmed and defined by Legislative Decree 322 of 1989, which instituted the National Statistical System.

In the late eighties far-reaching reform brought the statistical reporting of the Italian banking system up to date, beginning with the most basic observations, namely the automated collection of banks' balance sheet data. The system was broadened in content and adapted to reflect the greater diversity of banking business and the information requirements of monetary policy and banking supervision. The new classification of bank customers made it possible to integrate the real and the financial accounts of the economy. At the same time, the adoption of new information technology prompted the banks to upgrade their own data processing systems.

The Bank of Italy's Central Credit Register, which is the realization of an idea suggested long ago by Giorgio Mortara, provides the banks with information on their customers' borrowing from the entire banking system in order to limit the risk deriving from the accumulation of loans. The recently initiated reform is designed to take account of the changes that have taken place within the credit system by extending the coverage to the principal non-bank intermediaries, to improve the significance of the data, and to modernize the Register's technology.

The problem of the quality of data and of processing affects the Bank of Italy both as the user of a mass of statistical information from a multiplicity of sources and as the producer of statistics on money, credit and finance.

Addressing a conference at the Accademia Nazionale dei Lincei on the implications of automatic data processing, Bruno de Finetti called on his audience to abandon "metaphysical preconceptions" about automation, to seize the new opportunities it was constantly creating and to reconsider our living and working conditions in their light.<sup>1</sup> Another master in the field, Oskar Morgenstern, warned us not

<sup>1</sup> B. de Finetti, "Idee da correggere circa l'elettronica", in Accademia Nazionale dei Lincei, *Atti del Convegno sul tema: L'automazione elettronica e le sue implicazioni scientifiche, tecniche e sociali* (Rome 1968), pp. 321-24; see also the remarks on pp. 528-30.

to let ourselves be dazzled by the enormous processing capacities of the new technology and to guard all the more carefully against the danger of applying the refined methods of econometrics combined with the calculating power of electronic information technology to statistical bases of uncertain quality and soundness.<sup>2</sup>

Balancing the requirements of innovation and prudence, the Bank of Italy has significantly reorganized its statistical apparatus in recent years. In the mid-eighties we created a new department to manage information systems concerning intermediaries, which is independent of the operational departments within the Bank that make use of its output. The same approach was followed more recently within the Bank's Research Department, with the establishment of a division for information and statistics that is distinct from the divisions responsible for specific areas of economic analysis.

The Bank of Italy uses many of the methodological instruments statistical science provides. Sampling techniques are employed for surveys on important aspects of the economy: household saving, the distribution of income and wealth and firms' planned and actual investment. The methods and procedures for seasonal adjustment and the treatment of time series are constantly used in analyzing the key variables for the regulation of monetary and credit aggregates. The definitions and content of these aggregates are updated continuously; recently they were redefined to take account of new financial instruments, international capital mobility and the requirements of harmonization within the European Community. The nation's financial accounts, which the Bank of Italy initially developed in the mid-sixties, have been redesigned to bring the definition of instruments and sectors more closely into line with the European System of Integrated Economic Accounts; the financial data, formerly available only on an annual basis, are now published quarterly.

In order to improve the documentation available to the public and to the markets and to discharge the strongly felt obligation to report on its activities, the Bank of Italy has radically revised its range of publications. Since 1983 the *Annual Report* has been supplemented by a twice-yearly *Economic Bulletin* to provide more up-to-date economic data and analysis. In the spring of 1991 the new series of the *Statistical Bulletin* and its *Supplements* was launched. The Italian

<sup>2</sup> O. Morgenstern, *On the Accuracy of Economic Observations* (Princeton, N.J.: Princeton University Press 1963), p. 55.

Exchange Office, which is responsible for the collection of data on settlements of foreign transactions, is planning to publish a bulletin of its own.

In keeping with the aims of the national statistical system and as a complement to the broader activities of the National Institute of Statistics, the Bank of Italy is going to issue a guide to the aggregates and statistical variables covered by our publications that will promote wider understanding of monetary, credit and financial statistics.

Two of the series of historical volumes that we are publishing to celebrate the centenary of the Bank of Italy, which falls this year, contain a set of historical statistical series that will be of interest to scholars. The first volume presents the accounts of the Italian note-issuing institutions from 1894 to 1990; the second provides data on the accounts of Italian banks and on interest rates from 1890 to 1936.

The job of the central bank is to govern the money supply. Performing this task requires knowledge of conditions and trends in the entire economy. To quote Herbert Simon, the economy can be defined as a complex system, "made up of a large number of parts that interact in a non-simple way", such that "given the properties of the parts and the laws of their interaction, it is not a trivial matter to infer the properties of the whole".<sup>3</sup>

To provide an overview of the economy, the Bank of Italy constructed an econometric model for Italy as early as 1964 and has redesigned it several times since then. The current version, which integrates the real and financial aspects of the economy, was presented to the academic community in 1986. The model is the product of the combination of statistical and economic theory; conceptually self-sufficient, it facilitates understanding of the complex relations between economic agents and provides a quantitative basis for the assessment of economic and monetary policy decisions.

Like all econometric models, that of the Bank of Italy is vulnerable to criticism from those who warn of the difficulty of deriving rules of behaviour from a world in continual evolution. The flexibility of the model and the continuous updating of specifications, methods of estimation, simulation techniques and data collection make it

<sup>3</sup> H.A. Simon, *The Science of the Artificial* (Cambridge, Mass.: MIT Press 1981), p. 145.

possible to take account of changes in institutions and markets and systematically order a vast, heterogeneous mass of data. Starting from statistically ascertained data and the institutional framework, the econometric model fosters deeper understanding, helps improve the organization of research work and compels rigorous reasoning about the economy and its internal and international linkages.

### Expectations and the Difficult Path Now Facing Economic Policy

Analysis of statistically established facts is the precondition for economic policy decisions; it is a prerequisite for correct decision-making. But in economics perhaps even more than in other branches of practical activity, decisions rarely follow unequivocally and mechanically from analysis, which sheds light on the framework for action and narrows the range of possible solutions but never eliminates the choice between alternative courses of action or the decision as to the timetable for implementation. What remains indispensable is the will to act, which alone can lead from knowledge to action, the act of will on which the exercise of responsibility is founded.

The problem implicit both in the diversity, indeed often contradiction, of the economic ends to be pursued and in the comparison inherent in every economic option between subordinate considerations (the cost) and primary interests (the benefit) is complicated by an additional element that broadens the scope for discretion in economic policy decisions. This element is particularly significant in the monetary and financial field in economies with highly developed and internationally open money, foreign exchange and financial markets; it consists of expectations, which take on central importance, and not only in the short run. Crucial variables such as investment, consumption, the supply and demand for currencies, credit, money and securities, and exchange and interest rates are strongly influenced by economic agents' expectations – not only by what they consider to be the most likely forecast, but also by the probability of error they assign to it, that is, by what Keynes called their *confidence* in it.

In short, the indispensable knowledge of the economy's structure and cyclical situation sets the framework but does not eliminate the scope for discretionary measures. The relationship be-

tween necessity and freedom of action in economic policy is not deterministic. "It is up to us"; for better or worse, our economic destiny is in our own hands.

Events in the Italian economy in recent years confirm this. With the entry of the lira into the narrow EMS band, Italian economic policy had set a clear course: management of the lira within the narrow band; a monetary policy consistent with the exchange rate; the restoration of sound public finances; rigorously counter-inflationary incomes and fiscal policies; and structural measures to boost productivity and thus help improve the competitiveness of the economy, which was called upon as a whole to converge in accordance with the guidelines and objectives agreed in the Maastricht Treaty.

The success of that economic policy essentially depended on two basic conditions:

- rapid and incisive action to adjust the Italian economy, and
- continued progress of the twelve countries of the Community towards economic and monetary union.

The adjustment of our economy proceeded slowly, particularly as regards the public finances. More recently, at the beginning of last June, confidence in the steady progress of European integration was shaken by the negative outcome of the Danish referendum on the Maastricht Treaty; doubt was cast on the very survival of the EMS as a bridge to monetary union. A period of pronounced tension in the European foreign exchange and financial markets commenced. Domestic and international economic factors interacted with the political difficulties that beset Italy, causing expectations regarding the stability of the lira and the trends of interest rates to turn pessimistic.

At the Community level, the damage inflicted by the Danish referendum was compounded during the summer by the mounting uncertainty surrounding the referendum to be held in France on 20 September. The reaction of Community governments was dominated by concern lest French rejection of the Treaty deal a mortal blow to the Maastricht project. Hence the twelve governments' agreed statements of 28 August and 4 September ruling out any currency realignment within the EMS. The rigidity shown on the exchange rate front was not offset by any flexibility with regard to interest rates. The international markets interpreted this dual rigidity as a sign not of determination, but of a lack of coordination, and the tensions grew more acute.

In Italy, the new Government formed after the elections of 5 April took office on 4 July and drew up an economic adjustment programme whose explicit linchpin was the stability of the lira. The Bank of Italy, in line with the domestic and Community decisions that it had helped to shape, committed itself to a defence of the lira that turned on the time factor – the time necessary for the economic policy to succeed in bringing expectations under control and turning them positive. The defence was based on the three instruments of market intervention available to a central bank: increases in interest rates and a tightening of liquidity, movements within the exchange rate fluctuation band, and resolute use of foreign currency reserves. These are accumulated on purpose, not to be "burnt up" but to support the currency when a crisis threatens. They are subsequently rebuilt: at a profit if the crisis is averted, as happened several times in the eighties; at a loss, which nonetheless does not cancel the earlier profit, once the crisis is over, as in recent months.

The Government's action won recognition for the approach and the methods adopted, and produced some significant results, notably the agreement on the cost of labour. However, in the delicate sequence of budgetary policy announcements and measures, its progress appeared to be held up by discord and obstacles. At several crucial moments it was unable to act within the necessary time frame.

The events that culminated in the mid-September weekend are well known; the technical aspects connected with the devaluation of the lira are treated in depth in the February issue of the *Economic Bulletin* of the Bank of Italy. The failure of many European governments to grasp that the currency crisis concerned the EMS as a whole and its very foundations meant that advantage was not taken of the opportunity offered by the Italian and German proposal to carry out a general realignment of central rates and change the stance of monetary policies in view of the seriousness of the crisis. Even after the favourable result of the French referendum, the EMS was beset by repeated strains that threatened its survival. The real economy, already clearly in recession throughout Europe, suffered the repercussions of a futile and harmful continuation of high interest rates.

The importance of expectations is confirmed by current developments: a depreciation of the lira far in excess of that required to restore competitiveness, however calculated, and the slowness of the decline in market interest rates despite encouragement from the

monetary authorities within the limits imposed by the constraint of orderly management of Italy's massive public debt. The downward impulses imparted to money market, official and intervention rates are not being fully transmitted to long-term rates owing to the persistence of expectations influenced by political and economic uncertainty.

Adverse expectations can be overturned by the unswerving, tenacious pursuit of an economic policy that is clear and consistent in the ways it links instruments with objectives.

The fundamental precondition for this to be achieved is to continue to reject the pernicious idea that our main problem – the budget deficit and the public debt – could be resolved through cathartic action, with extraordinary financial measures that would compromise the country's image for generations, and to convince the market of this. Increasing the primary surplus, principally through structural measures to contain expenditure, consolidate revenue and distribute the tax burden more equally, and obtaining a reduction in the burden of interest payments from a more confident market still constitute the only course that can be followed without shocks and risks of financial crises like the one we avoided, not without difficulty, in late September and early October. The other key is to make the rate of growth in public and private sector nominal wages, tied to a comprehensive incomes policy directed towards and reinforced by disinflation, an integral part of the adjustment of the economy.

Since last October the depreciation of the lira has offered Italian producers the opportunity to regain shares in world markets despite their being affected by a recession that is primarily cyclical and hence temporary. It will be of considerable help to firms in resolving the underlying problems that afflict Italian industry and jeopardize the long-term outlook for employment.

In this context, success in meeting the targets for the expansion of the money supply and credit will anchor expectations to monetary stability. This does not clash with the prospect of lower long-term interest rates, some signs of which are perceptible internationally; on the contrary, it enhances such a prospect. The lira's re-entry into the ERM – at exchange rates which the progress already being made in improving the balance of payments and the economy will help set at realistic levels that are acceptable to Italy and to our trading partners – appears an obligatory step, and one that is not necessarily far in the future, along a route that we must follow and that is the object of

unanimous consensus: namely, participation in European Economic and Monetary Union. Our current experience with the forced floating of the lira reveals the disadvantages and dangers of the lack of a reference point for the exchange rate. It is in the national interest to bring this experience to an end as rapidly as possible.

Despite grave domestic and international economic difficulties and the general situation in which even the desire for renewal heightens the immediate uncertainty, economic policy has achieved significant progress of late. This can be summarized in the reduction of inflation, which has been the fruit of wage moderation and the monetary anchor as well as the weakness of demand. It remains crucially important to encourage behaviour that will minimize the inflationary impact of the higher lira prices of imports in the months to come. Only in this way can output and employment derive the greatest possible benefit from the depreciation of the lira once the expected international economic recovery begins.

In the last few weeks interest rates and the yields on medium-term government securities have come down to levels at or below those prevailing on the eve of the foreign exchange and financial crisis. The tendency needs to be consolidated, extended in full to bank rates, and continued. A prerequisite for this is the recovery of confidence and credibility; otherwise, our efforts risk unraveling like Penelope's.

Important steps towards economic and financial adjustment have been made, but two or three difficult years still lie ahead. We must persevere tenaciously in our commitment, with every ounce of will power at our disposal. To be truly effective, this will power has to originate in and draw its vitality from a moral sensibility, today even more than in other dramatic moments in our national history. Ethics, understood not as an external discipline but as an inner rule of conduct, is an integral part of acting, with dignity, in every field of social and civic endeavour, from scholarship to the professions to politics. For those who bear responsibility for economic policy, in the present crisis the ethical element is supplemented by an additional duty: namely, not to let problems accumulate, as was the case for too many years, but to suit actions to the great potential of an economy such as ours, which has the capacity for work, enterprise and saving to achieve continued growth.