Statistics vs. Economics and Politics: 
Insights from the French Experience

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Abstract

The French statistical system, under the auspices of INSEE, closely associates economists and statisticians in the production of both data and economic analysis.

The paper presents a stylized description of the organization of data collection in France, which serves to illustrate the costs and benefits of such an organization compared to more standard specialized and decentralized structures.

The costs of centralization are, as always, potential difficulties in monitoring the various parts of the French statistical system. The benefits come from a better adequation of the long term investments in statistics gathering to the needs of the users. The information from administrative registers on individuals and firms covered by privacy laws, which cannot be accessed by outsiders, is readily put to statistical use. The credibility of INSEE is enhanced by the quality of its economic studies, which reinforces its reputation of independence.

However the French experience is intimately linked to its cultural and historical environment and may not be easily transferable elsewhere.

1 Introduction

The gathering of quantitative data and the production of statistics are organized very differently in the various countries around the world. While the statistical

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information is to be made public in the end, its collection can be decentralized, particularly in case of surveys, although the need to have a reliable nationwide basis to draw the samples calls for coordination. Also, along with the technological progress in computing, the statistical activity relies more and more on the use of large registers and data banks, often a side product of the administrative activities of the state. In turn the professional users of statistics, here I shall essentially talk of economists, have demands which change with the technological possibilities. In particular there is today a growing interest in individual data, sometimes conflicting with privacy laws.

Apart from the simple aim of minimizing the cost of data collection, the organization of statistical activities has another important goal in modern societies: it is the basis of the information of the citizens and of the financial markets. This is why it must be credible, free of manipulation.

My talk will describe the specificities of the French statistical system: more than elsewhere, the training of statisticians and the production of economic, demographic or sociological studies are integrated with the processing of statistics. I shall argue that such an integration has the potential to help adjusting to the technological progress and to the use of individual data, while it also may improve the credibility of the statistical agency. The argument is based on a stylized description of the French statistical institutions, and can be considered as an exercise in applied industrial organization, in the spirit of Wilson (1989).

2 The main features of the French statistical system

The French central statistical office, INSEE, has been created in 1946, in the wave of reorganizations following the second World War. It is part of the ministry of Finance, but it is responsible for collecting and harmonizing all French statistics, including those concerning other ministries (employment, etc..).

The French public statistical system is:

- Coordinated by INSEE, formally through the National Board for Statistical Information, but administratively decentralized in ministries and public institutions (e.g. the Central Bank).

- Geographically centralized: Most of the conceptual and decisional work is made in Paris. There is a deliberate policy, however, to increase the part played by local statisticians (mostly at the regional level).

In France, there are about 1.5 public statistician for 10 000 inhabitants (see table 1 for the distribution across ministries). Among the 6 500 persons working at INSEE, 1 500 have at least four years of studies after high school and are highly qualified.
2.1 The National Board for Statistical Information

The National Board for Statistical Information (CNIS in French) was founded in 1984. It is an advisory body of about 100 members representing both

- Main users of public statistics (Firms, Labor Unions, Universities, both parliamentary Houses, )

- Producers of public statistics (INSEE, Ministerial Statistical Bureaus, EUROSTAT).

It is chaired by the minister of Finance, and its permanent secretariat is harbored by INSEE. Its main missions are

- to help producers of statistics to take into account the needs of users;

- to help coordinating public statistical works in France (it must be consulted on the statistical programs).
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[number of permanent statistical jobs, computer centers included, rounded off]

Table 1: The French statistical system: size

It generates numerous specific small working groups, on specialized topics. Rather specific to France, the CNIS is quite useful (but costly to manage), to get a feeling on the demands for information and to get general public approval of the statistical projects. To quote one example, after the 1990 population census, a number of organizations started a press campaign on the grounds that the homeless were not properly accounted for. A working group was created inside CNIS and attended by most of these lobbies. It was explained and agreed, in an atmosphere more congenial to scientific discussion than a public debate, that the general census technique and questionnaire were ill adapted to the homeless, and even could raise ethical issues. The group recommended that a specific survey be carried out after the 1999 census, which was implemented successfully with the help of these organizations.
2.2 INSEE

INSEE is an administrative division of the Ministère de l’Économie des Finances et de l’Industrie, or MINEFI for short. Within this huge and powerful ministry:

- INSEE is small: 3% of the labor force, 2% of the budget;
- INSEE is not located inside the ministry main building;
- INSEE enjoys a publicly acknowledged intellectual independence;
- INSEE benefits from the institutional proximity of the economic directorates within MINEFI, especially the Forecasting Directorate.

INSEE was created in 1946, as the official French public statistical office, with five main missions:

- Production of statistics
- Economic analysis
- Coordination of public statistical works
- Training of statisticians / economists
- Information dissemination.

The main law governing the statistical activity dates back to 1951:

- Answering main official statistical surveys and questionnaires is made compulsory;
- Individual answers are to be kept secret;
- All public collection of statistics has to be coordinated through INSEE.

INSEE has a unique (to the best of my knowledge) feature among statistical offices around the world: it has its own schools, recruiting two years after the end of high school, and a large research center\(^1\); as explicitly stated in its name (national institute of statistics and economic studies), it undertakes economic studies and produces forecasts, close to the place where the data are collected and processed.

\(^1\)The Norwegian statistical office also has a research center.
3 Statistics and economics

3.1 Training at INSEE

The statistical system has a specific body of civil servants at the executive level, the ‘administrateurs de l’INSEE’. Apart from internal promotion, they are recruited through competitive exams and from the top ‘grandes écoles’, such as the École Polytechnique. Then they receive, along with other non civil servants students, a two-to-three years in house education at the INSEE school. The curriculum bears equally on statistics and economics, with a strong third major in computer science. In an environment where the universities were not quantitatively oriented, the INSEE school took a preeminent position in economics in France under the direction of Edmond Malinvaud.

A sizeable part of the influence of INSEE comes from the reputation of its civil servants and from the fact that the director of INSEE manages the statistician civil servants and allocates them to the various statistical departments of central and local governments. Moreover, a number of statisticians in the private sector have graduated from the same INSEE school, and a significant fraction of the civil servants slip into the private sector after some 5 to 10 years in the public service. All of these are therefore familiar with INSEE.

3.2 Research and diffusion of technical innovations

A research center, CREST, is associated with the school. It hosts the equivalent of 80 full time researchers, on a variety of topics, from mathematical statistics to sociology, including microeconometrics, macroeconomics, finance, industrial organization and survey methodology. A large fraction of the members of CREST are on a leave position from the academic world, paid by INSEE. The main aim of the research center is to train graduate students that will join the university or the private sector.

Aside from its academic activities, an important task of CREST is to facilitate the diffusion of research advances into the day to day practices of INSEE. This takes place in a number of ways. There are regular seminars on the new outputs of the production departments of INSEE; the heads of these departments have a scientific adviser from CREST whom they can ask for specific studies; days of training on specific topics (panel data, treatment of missing data, etc..) are organized three or four times a year.

What has turned out to be the most fruitful channel of innovation dissemination is a practice initiated by Edmond Malinvaud thirty years ago. Every civil servant of INSEE who has a scientific project can ask for a sabbatical of two to three years to carry out his/her study inside CREST (with possibly a year of study abroad). The number of people taking this opportunity is small (one or two persons every year, i.e. about 10% of the average annual inflow of ‘administra-
teurs de l’INSEE’), but the leverage on this investment in human capital is large: typically these persons work on the data they have produced, therefore improving the collection procedure and, in a few (non publicized) cases, correcting errors; furthermore, after their sabbatical, they often go back to production, carrying with them new ideas, computer programs, etc., which they have experimented at CREST.

3.3 Statistics and economic studies

Apart from research, there is a sizeable group of around thirty young professionalists belonging to a department of economic studies that produce applied economic studies. They are geographically located in the same building and on the same floor as CREST. But contrary to researchers at CREST, they work on topics that are chosen by the hierarchy of INSEE. The aim is to be competitive with the university and the other institutes that produce similar studies. The subjects range from macroeconomics (the evolution of productivity is followed closely and there is a quarterly macroeconomic model which is used for long run forecasting), to social issues (pensions and retirement, family composition,...) and firms’ behavior (labor demand, investment, localization of production activities,...). The precise issues under study may be related to problems of interpretation of newly released data (for instance a detailed tabulation of part time workers, by skills, over the business cycle), to topics of general interest (impact of information technology on productivity). Some studies simply replicate work done elsewhere in other countries and on different datasets.

As for research, as mentioned above, there is a strong positive externality between statistics and economics in the course of these studies. The economists benefit from an intimate knowledge of the data and from access to information covered by privacy laws. This last point is of particular importance for all studies on firms’ behavior. The statisticians improve the questionnaires and get a better understanding of the strengths and weaknesses of the data.

On the other hand, there are also some drawbacks. Data collection is by and large a natural monopoly, while the production of economic studies takes place in a competitive environment. It is not always easy to have them live side by side. An economic study is more easily criticized and not as ‘objective’ than the publication of regular statistics. Some people believe that the reputation of INSEE could be jeopardized by ill-conceived studies and therefore that it would be better to separate the two activities, at least in terms of supports of publication. There is truth in this statement and the economic studies should be tightly monitored. But, in my opinion, these concerns are overstated: the reputation of INSEE largely comes from the quality of its past studies and of the analysis of the data it produces, which is due to the association of economists and statisticians. Breaking the association would hit the reputation for sure!

The real danger is with independence. INSEE has to avoid studies that could
either vindicate or criticize government policies. This makes for a transition with the next part of my talk.

4 Statistics and politics

4.1 About independence

Like most statistical offices, INSEE is part of the executive branch of government. The main orientations of INSEE activities, upon consultation of the CNIS, are decided by the political authorities and reflected in INSEE’s budget. Independence therefore has to be understood as professional independence. Once money is allocated, the civil servants have full responsibility for carrying out the statistical program and making public its results. This professional independence is a condition for the credibility of the public statistics. Most politicians, I believe, understand the issue and agree ex ante with this sharing of roles.

The head of INSEE is nominated by the council of ministers, on the proposal of the minister of finance. Typically this is considered a job of high technicality assigned to a politically neutral insider: from 1974, Edmond Malinvaud, Jean-Claude Milleron, Paul Champsaur, the three successive directors, all were fellows of the Econometric Society. INSEE has a valuable reputation with the media which is reinforced by the training and scientific culture of its civil servants.

4.2 Publication

An important aspect of professional independence is that the statistical system has direct access to the media and is responsible for publication of data or studies without interference from the political authorities. In practice, to avoid a breach of commitment in the wake, say, of disputed elections, this has to be organized with care and procedures have to be spelled out in details.

On sensitive short run statistics, the IMF guidelines from SDDS have turned out to be very helpful. At the end of every month, INSEE announces a predetermined timetable for the coming four months on short run statistics to be issued by the whole statistical system. The political authorities are informed prior to the public, typically in the evening before an early morning release the following day.

More generally, INSEE has its own journals and web site. A press office has direct access to the director. Press conferences are organized to directly comment the important news to the journalists. Press breakfasts are also designed for more general pedagogical purposes, to explain methodological points, such as issues in price indices and the measurement of inflation, or conventions in national accounts.
4.3 Short run forecasts

To my knowledge, INSEE is the only statistical agency to publish a forecast with a six month horizon on a regular basis, four times a year. It is useful as a case study since it probably summarizes best the trade offs associated with doing economic analysis in a statistical agency.

First, the benefits. The same persons compiling the short run statistics, collecting the opinion surveys, or building the national accounts, are involved in forecasting. It follows that the data is studied in detail and depth, and any deviation from the usual behavior of a series is scrutinized. Since most of the time forecasting at a six month horizon is very much extrapolating current trend, it is also the case that INSEE appears to be more reliable than its competitors in the field, due to its comparative advantage associated with proximity to the data: for instance, the individual answers of large firms to different surveys can be compared in case of discrepancies between sources.

Now, the risks. There is always an element of judgment in forecasting. The forecast may turn out to be difficult to reconcile with the official (two years ahead) government forecast, which serves to plan the budget voted in parliament. Then the independence of INSEE is in danger. At the end of the 1970's, the government, worried that INSEE's forecasts were biased against it, created five (private with public support) forecasting institutes, attached to the university, to the employers' confederation and to the unions. This move, which initially was thought by some observers, as a blow to INSEE, turned out to be very beneficial for its credibility and independence. It is now publicly acknowledged in the media, from comparison with the competition, that INSEE's forecasts are unbiased.

5 Conclusion

There are benefits and costs to integrating the training of statisticians and the production of economic (demographic or sociological) studies with the production of statistics.

On the cost side, as usual from the theory of the firm, the main danger comes from the difficulty of monitoring the various activities from inside the organization. The individual producer of statistics may keep his data for himself in order to conduct his own studies or to avoid double checks from others. Indeed, a complaint in this guise is sometimes heard about INSEE as a whole. Day to day small scale improvements may be easier to carry forward than major restructuring. Some civil servant in a far away ministry may turn out to be lazy or inefficient, without notice to the center. These costs can be (partially) mitigated by promoting outside competition in all activities where this is feasible (training, research\(^2\), short run forecasting,..) and systematically benchmarking with

\(^2\)INSEE supports a scientific association which publishes a journal, *Annales d’Économie et de*
comparable functions undertaken elsewhere, especially abroad or in international organizations.

On the benefit side, as emphasized previously in my talk, there seems to be a clear case of Coasian savings in transaction costs. Statistics, like any products, are better designed when the producers are well aware of the needs of the users. They suppose long run investments, with time consistent sample designs, to yield homogeneous time series, that are better implemented by competent personnel attached to the institution. Furthermore, the credibility of statistics in the public, an essential feature, is also reinforced in the scheme.

An economist would like to put a number on (or at least to give the sign of) the balance of costs and benefits, but here, as often, this is out of reach. The outcome is likely to depend very much on the environment. Has the public service access to highly skilled personnel? Is higher education and research mostly publicly or privately financed? How strong and helpful can the academic world be on statistical matters? History and culture play an important role, and the French experience may not be easily transferable elsewhere.

References


*Statistique*, and finances a group of academic laboratories dedicated to quantitative economics.