

## Preface

The preliminary approach to identify the position of the productive system along the business cycle were based on diffusion indices and compared the trend of statistical time series with positive evolution with respect to stationary or negative ones. The underlying assumption was simple: in the presence of many time series on different productive sectors, the business cycle could be measured by the share of series showing similar trends. If the number of time series with positive trend observed in the short term (monthly or quarterly) amounted to over 50% of the whole set of series observed, then it could be inferred that the economy was expanding. The higher the share of time series with positive trends, the stronger the expansion phase of the economy. Conversely, by decreasing series with positive trends the economic evolution showed a deceleration: when the share of series with positive trends was lower than 50% the economy went toward the turning point marking a recession phase.

This simple rule of evaluation of the economic cycle has been used for a long time and is still quite popular. The basic idea is simple: if a very large number of monthly or quarterly time series related to various economic trends is available, the weight of each series is necessarily quite limited (virtually when the number of series tends to infinity the relative weight tends to zero) and there is no need to distinguish among them according to a system of weights. As a consequence the described analyses was well suited to sketch economic fluctuations. An essential condition was that the considered set of series were satisfactorily representative of the whole economy. This is why very disaggregated series by sector, price and products that in the past were the core of the economic system were usually taken into account. For many years the analysis of the business cycle only concerned the industrial sector- The official statistics favoured this orientation, paying great attention to it and producing a huge amount of surveys that are currently able to generate a great number of disaggregated time series representing its fluctuations.

Nowadays the industrial sector does no longer represent the core of economic activities in advanced countries: Industry represents roughly one fifth of the GDP and the share of the tertiary sector has tremendously grown. However, statistical institutions did not track perfectly this evolution. Although there is a great deal of monthly and very detailed information on industrial production or external trade of goods, information on the tertiary sector is often available only for a few macro-sectors (such as transports, finance, commerce, etc...) while higher detail is not available at all.

The recent analyses on quarterly turnover in the service sectors presented in this publication try to fill this relevant gap by providing new evidences. The indicators proposed shed new lights on the Italian business cycle fluctuations and aim to reinforce the debate on the coherence of the existing framework adopted to measure industrial short-term movements.

The measurement of the service sector cannot go along the same route adopted for the industrial sector. The paradigmatic concept of a quantity measure (for example number of shoes, etc...) is not tailored to capture the complexity of the service production. This is why suitable price indices are needed in order to deflate turnover index series and deduce quantities. Turnover indicators together with price indicators both for the domestic and non-domestic market exist for industry too, but they are usually overwhelmed by industrial production indices.

The approach related to the production measure has a different characterisation compared to the analysis based on turnover. The former supports the supply side focusing on commodity characteristics. The latter privileges the demand side looking at consumer needs rather than commodity features. The turnover concept implies information on goods and services which are not directly observed by the supply-side approach. In this way there could be some homogeneity problems comparing turnover over time but this approach provides a more comprehensive coverage of the economic activities developed by enterprises.

The actual evolution of the economy is rather going toward a more integrated output than toward a single product to be sold. Even manufacturing enterprises are more oriented to offer a set of services together with a product (for example the customer service related to the purchase of a boiler) in a way that the final product could evolve according to customer desiderata. Thus the concept of “prevailing production” vanishes along this evolution.

Moreover, the fast changes in the quality of goods makes the use of a fixed basket of commodities to be observed along the years less appealing. More in general, advanced economies are characterised by a progressive shift towards higher quality commodities and services involving a constant challenge to fit the appropriate measure to monitor this evolution. This is true looking both at individual behaviours and at the collective level. The growing implementation of the hedonic approach in the current practices of National Statistics Institutes, especially in the price domain, is a clear evidence in this direction.

In advanced countries consumer behaviours are no longer characterised by higher expenditure on food or clothing but by consumption of higher quality commodities. This picture holds for the majority of the population, although a share of households fall below the poverty line. However, macroeconomic growth is driven by total factor productivity gains reflecting an improvement in the quality of goods and services. Along this framework, turnover measures seem more suitable than those based on a product fixed basket that are not appropriate to monitor the evolution on quality.

The surveys and indices on turnover presented in this publication are relevant both because they fill the important gap in the knowledge of short-term indicators on services in Italy and because they shift the attention on the demand-side approach looking at turnover. This should imply a more precise measure for the business cycle interpretation of Italian economy. In a complex world where enterprises try to identify customer desiderata by providing tailored products and services and the production of commodities is not related to a single plant but is performed by assembling different components supplied by different enterprises, it becomes crucial for National Statistics Institutes to follow this trend by shifting attention toward the demand-side approach instead of focussing on the traditional single product view. The surveys on service turnover carried out by Istat represent a significant step in this direction.

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