

Methods and Sources: Methodological Notes

1 July 2020

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Special survey on the impact of the Coronavirus

General aspects

Between 16 March and 14 May 2020, the Bank of Italy conducted a special survey of Italian firms with 20 or more employees in non-construction industry and in non-financial private services, to obtain timely information on the economic effects of the spread of the COVID-19 epidemic under way in Italy at the time of the survey. The Special Survey on the Impact of the Coronavirus interviewed a total of 3,503 firms (2,391 in non-construction industry and 1,112 in non-financial private services). The interviews were carried out directly by the Bank's branches.

The questionnaire gathered mainly qualitative data on: the effects of COVID-19 on firms; the transmission channels through which the public health emergency affected the activities and financial situation of firms; the company strategies adopted to contain the effects; and opinions on the suitability of the support policies adopted.¹ Firms were also asked to make a rough estimate of the percentage change in turnover in the first half of 2020 compared with the same period in 2019.

The survey's design, the reference sample, the weighting scheme and the type of questions were consistent with those of the Survey of Industrial and Service Firms on 2019, which was conducted between 29 January and 14 May 2020 (see [Methodology for the Survey on Industrial and Service Firms, July 2017](#)). The two surveys were conducted using the same methodology, although the Special Survey on the Impact of the Coronavirus was compiled and launched later than the Survey of Industrial and Service Firms to meet data needs that emerged as the health emergency worsened. Therefore, firms did not necessarily respond to the two surveys at the same time, possibly not even after the Iseco survey was sent out. This implies that a firm may have expressed its short-term expectations in two different ways.² The difference in sample size for the two surveys, instead, is because the surveys are compiled on a voluntary basis, which may have led some firms to reply to only one of them. Table 1a shows the composition of the sample for the Special Survey on the Impact of the Coronavirus by size, sector of economic activity, and geographical area.

Estimators

The aggregates are estimated using a weighting coefficient for each sample unit which, at the level of the marginal distributions by size, sector of economic activity, and geographical area takes account of the ratio of the number of employees in the firms surveyed to the number of employees in the firms comprising the reference universe, or, alternatively, the ratio of the number of firms surveyed to the number of firms in the reference universe. By using a scale variable (the number of employees), the estimates made with this weighting scheme take account of the different sizes of firms and are able to provide data on firms' macroeconomic results. The system of weighting

¹ The questionnaire is available here:
<https://www.bancaditalia.it/statistiche/tematiche/indagini-famiglie-imprese/imprese-industriali/distribuzione-microdati/questionario-indagine-imprese/index.html>

² See the box 'The impact of the COVID-19 pandemic on the outlook for 2020 and the expected recovery of turnover in the second half of the year' in the Survey of Industrial and Service Firms on 2019 and the Special Survey on the Impact of the Coronavirus.

by number of firms is more suitable for summarizing the behaviour of individual firms.

The estimate of the change in turnover in the first half of 2020 compared with the same period of the previous year is calculated as the weighted average of the changes recorded for each individual firm. For the remaining variables, the estimates refer to the weighted percentage shares.

Table 2a shows, for reference, the estimates of the standard errors, which include the finite population correction.

Table 1a – Sample size

	Number of firms in the survey
Geographical area ^(a)	
North-West	835
North-East	757
Centre	799
South and Islands	1,112
Number of employees ^(b)	
20 - 49	1,163
50 - 199	1,409
200 - 499	514
500 and over	417
Economic sectors	
Textiles, clothing, leather and footwear	201
Chemical, rubber and plastic products	314
Basic metals and engineering	970
Other manufactures	765
Energy, mining and quarrying	141
Total – Non-construction industry	2,391
Retail trade and hotel and restaurant industry	525
Transport, storage and communication	375
Other services for firms and households	212
Total - Services	1,112
Total – Non-construction industry and services	3,503

(a) Classification by firm's HQ. (b) Average number of employees in the year

Table 2a - Standard error for responses
(per cent)

	Estimated value									
	5 % 95 %	10 % 90 %	15 % 85 %	20 % 80 %	25 % 75 %	30 % 70 %	35 % 65 %	40 % 60 %	45 % 55 %	50 % 50 %
Firms in non-construction industry										
Size class										
20 - 49	0.8	1.0	1.2	1.4	1.5	1.6	1.7	1.7	1.7	1.7
50 -199	0.6	0.9	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.5
200 - 499	1.0	1.4	1.6	1.8	2.0	2.1	2.2	2.2	2.3	2.3
500 and over	1.1	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.4
Economic sectors										
Textiles.....	1.5	2.1	2.5	2.8	3.0	3.2	3.3	3.4	3.4	3.4
Chemicals	1.2	1.6	1.9	2.1	2.3	2.5	2.6	2.6	2.7	2.7
Basic metals and engineering ..	0.7	0.9	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.6
Other manufactures	0.7	1.0	1.2	1.4	1.5	1.6	1.6	1.7	1.7	1.7
Energy, mining and quarrying ..	1.8	2.4	2.9	3.2	3.5	3.7	3.9	4.0	4.0	4.0
Geographical area										
North	0.6	0.9	1.0	1.2	1.3	1.3	1.4	1.4	1.5	1.5
Centre	0.9	1.2	1.5	1.6	1.8	1.9	1.9	2.0	2.0	2.0
South and Islands	0.7	1.0	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.7
Total – Non-construction industry	0.4	0.6	0.7	0.8	0.9	0.9	0.9	1.0	1.0	1.0
Service firms										
Size										
20 - 49	1.1	1.6	1.8	2.1	2.2	2.4	2.5	2.5	2.6	2.6
50 -199.....	1.1	1.5	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.4
200 - 499	1.6	2.3	2.7	3.0	3.3	3.4	3.6	3.7	3.7	3.8
500 and over	1.4	2.0	2.3	2.6	2.8	3.0	3.1	3.2	3.3	3.3
Economic activity										
Retail trade and hotel and restaurant industry	0.9	1.3	1.5	1.7	1.9	2.0	2.1	2.1	2.1	2.2
Transport, storage and communication	1.1	1.5	1.8	2.0	2.2	2.3	2.4	2.5	2.5	2.5
Other services for firms and households.....	1.5	2.0	2.4	2.7	2.9	3.1	3.2	3.3	3.4	3.4
Geographical area										
North	1.0	1.3	1.6	1.8	1.9	2.0	2.1	2.2	2.2	2.2
Centre	1.3	1.8	2.2	2.4	2.6	2.8	2.9	3.0	3.0	3.0
South and Islands	1.1	1.5	1.8	2.1	2.2	2.4	2.5	2.5	2.6	2.6
Total - Services	0.6	0.9	1.1	1.2	1.3	1.4	1.4	1.4	1.5	1.5
Total – Non-construction industry and services.....	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8