BANCA D'ITALIA
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Statistics

Survey of Industrial and Service Firms

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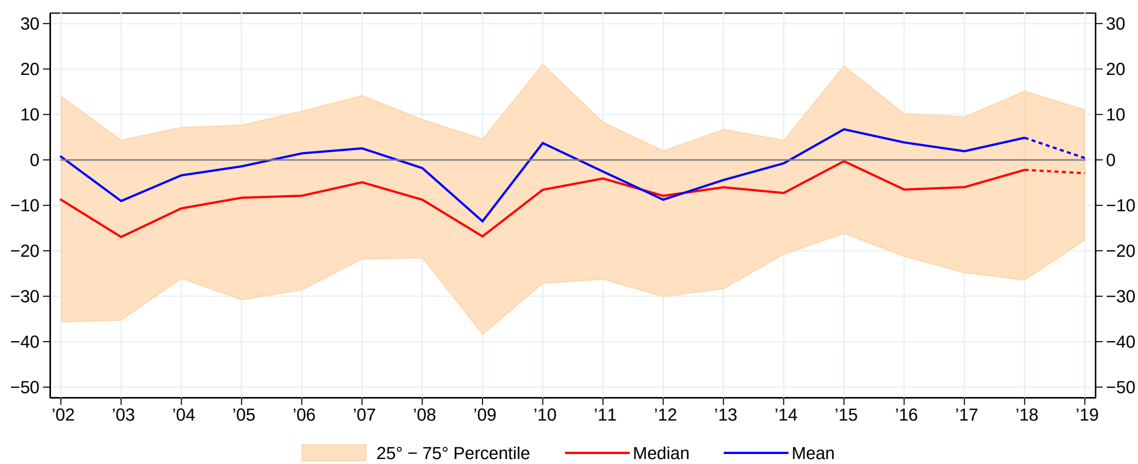
Main results

According to the Bank of Italy survey conducted last spring, in 2018 the sales of industrial and private non-financial service firms with at least 20 workers slowed significantly. This was due both to the weakening of domestic demand, which had already been anticipated in the previous wave of the survey, and to the unexpected progressive worsening of the international business cycle. On average, sales prices grew at a slower pace, after the acceleration observed in 2017; however, taking into account firms' turnover, the share of firms that reduced their prices decreased further, while the share of those that increased them by at least 2 per cent rose. According to firms' expectations, both sales and prices will grow at a slow pace in 2019. Labour demand increased in 2018 as a whole.

In 2018 investment expenditure rose, at constant prices, at a pace similar to that of the previous year, driven mostly by investment by medium-sized firms. According to firms' plans, total expenditure in 2019 would remain at the levels of 2018. Significant investment plans by large firms, which contributed little to overall investment expenditure in recent years, would compensate the planned reduction by small and medium-sized firms, which have supported it since 2016.

The output of construction firms with at least 10 workers started to increase again in 2018, after a long period of contraction. The positive performance of activity in private construction was offset by the further decrease in public works.

Investment (1)
(percentage changes)



Note: (1) Not including the construction sector; calculated at constant prices using deflators found in the survey. Statistics weighted by firm distribution and investment spending. Dotted lines indicate firms' expectations for 2019.

Reference period: 2018

Survey of industrial and service firms[1]

Non-construction industry and non-financial private services

Sales slowed ...

In 2018 the total sales volume of firms with at least 20 employees operating in industry excluding construction and in non-financial private services slowed markedly (0.6 per cent, from 2.3 per cent in 2017; Table 1). The share of firms that increased their sales turnover at current prices remained above 60 per cent, though the median growth rate decreased considerably (from 3.7 to 2.7 per cent in 2016). The slowdown affected both the domestic and the foreign market (Figure 1). However, while the weakening in domestic demand had already been reported by firms in the previous survey, the slowdown in foreign sales reflected the gradual weakening in the world trade cycle over the course of 2018, which especially affected manufacturing firms.

Table 1

Main developments in 2017-2018 and expectations for 2019 (1)
(percentage changes)

	Turnover (2)			Investment (2)			Employment		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
Sector									
Industry excluding construction	2.0	0.2	0.0	3.0	6.7	0.6	0.5	0.9	0.8
of which: Manufacturing	*2.7*	*0.9*	*1.0*	*3.0*	*5.5*	*-2.0*	*0.6*	*1.0*	*0.8*
Non-financial services	2.6	1.0	1.5	2.3	-1.2	0.3	0.9	1.2	-0.1
Geographical area									
North-West	2.2	0.6	0.7	3.2	2.9	2.4	0.7	0.8	1.0
North-East	3.1	0.9	1.1	2.7	4.9	-3.8	1.4	1.6	0.8
Centre	1.8	0.2	0.2	0.8	0.3	2.6	-0.1	0.2	-0.5
South and Islands	1.6	1.1	1.8	8.2	7.4	-4.0	0.9	2.5	-1.4
Number of workers									
20 – 49	2.4	0.9	1.6	6.9	3.0	-12.6	-0.2	0.9	0.4
50 – 199	2.0	1.1	1.1	3.1	4.1	-4.7	1.2	1.3	1.0
200 – 499	1.3	-0.2	0.8	4.7	10.7	-4.3	0.7	1.9	0.3
500 and more	3.1	0.3	-0.2	0.3	0.3	9.7	1.1	0.7	-0.2
Share of turnover from exports									
Less than one third	2.0	0.5	0.7	3.1	3.3	0.9	0.8	0.9	0.0
Between one third and two thirds	2.7	0.1	0.5	-2.8	1.6	0.0	1.0	0.7	1.2
More than two thirds	3.5	1.9	1.6	6.0	2.9	-0.8	0.2	2.2	0.8
Total	**2.3**	**0.6**	**0.8**	**2.7**	**3.0**	**0.4**	**0.7**	**1.1**	**0.3**

Notes: (1) Data weighted by population weights. − (2) Based on winsorized elementary data; values at constant prices calculated on the basis of the average deflators found in the survey. In keeping with the SEC 2010 national accounting standard, the investment spending tracked by the survey includes that for tangible goods, for software, databases and mineral prospecting, and that for research and development, design, and prototyping.

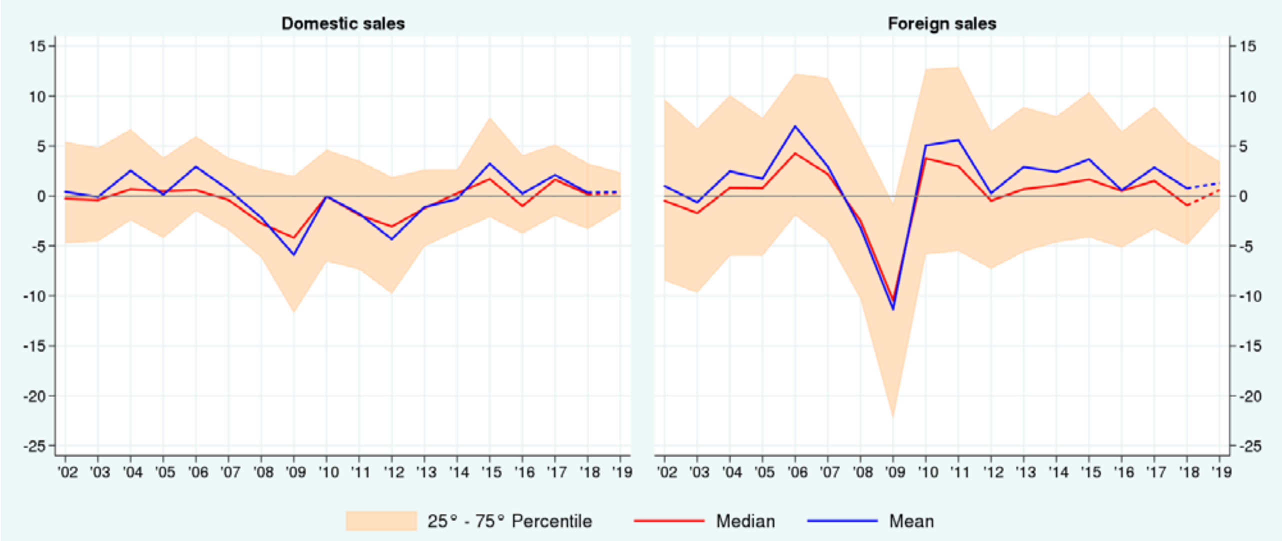
Sales slowed in all size classes and in all the main economic sectors covered by the survey. In the metalworking sector, where they fell from 4.1 to 1.4 per cent, reflecting the opposite effects of the new polluting emissions regulations, which led to a decrease in industrial production in the automotive sector (see Chapter 6, 'Firms', *Annual Report for 2018,* 2019), and of incentives on the purchases of investment goods, which instead drove sales. The slowdown in sales was accompanied by a slight reduction in the share of firms posting a profit, which however remains at historically high levels (73 per cent, from 75 per cent in 2017); the difference between the share of firms reporting a profit and those recording a loss was strongly positive in all the main groupings.

[1] This report and the statistical appendix were prepared by Marco Bottone, Elena Mattevi, Lucia Modugno and Matteo Mongardini. The survey was carried out directly by the Bank's branches. The data are used exclusively for the purpose of economic and statistical analysis and have been handled and processed in aggregate form.
We would like to thank all the firms that agreed to take part in the survey, providing the necessary information in the course of long and complex interviews. The statistical appendix and the methodological note are available at the following webpage:
https://www.bancaditalia.it/pubblicazioni/indagine-imprese/2018-indagine-imprese/index.html?com.dotmarketing.htmlpage.language=1

Figure 1

Turnover (1)

(percentage changes)



Notes: (1) Values at constant prices calculated on the basis of the average deflators found in the survey; based on winsorized elementary data. Dotted lines indicate firms' expectations for 2019. Data weighted by population weights and turnover.

...but labour demand continued to grow

The total number of workers increased, as a yearly average, at a higher rate than in the previous year (1.1 per cent, from 0.7 per cent in 2017), reflecting the recovery in permanent employment; this was accompanied by an expansion in the total number of hours worked (Figure 2). As in 2017, hours worked per capita, which provide a metric of the intensity of use of the labour input in the production process, rose for almost 60 per cent of firms, both in manufacturing and in services.

Figure 2

Labour input (1)

(percentage changes)

Notes: (1) The dotted line indicates firms' expectations for 2019. Data weighted by population weights and by the value of the variable being examined.

Sales prices slowed

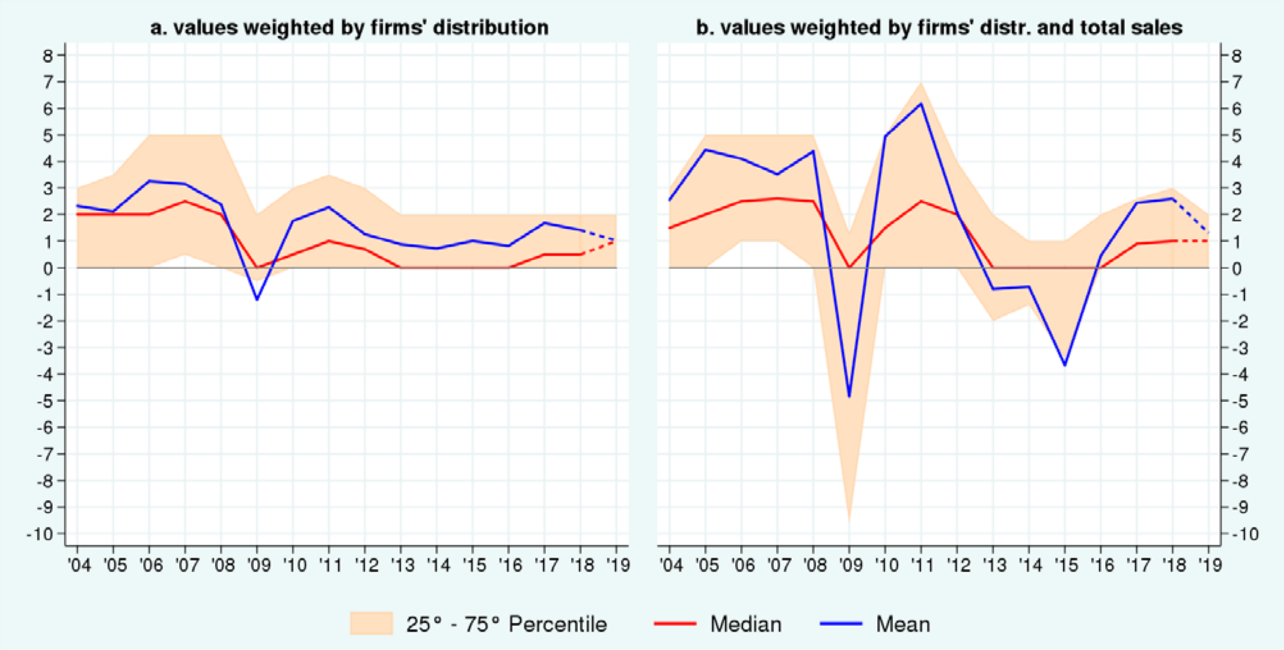
In 2018, the average change in firms' sales prices was less intense than in 2017 (1.4 per cent, from 1.7 per cent), when it had exhibited a significant recovery after four years of increases of less than 1 per cent (Figure 3). However, when taking account of sales turnover, the share of firms that reduced their own prices decreased further, from 15 to 10 per cent, while the share that increased them by at least 2 per cent increased, from 35 to 38 per cent. As in 2017, prices grew at a higher rate in industry excluding construction.

Compared with the previous survey, the share of firms that view the performance of demand as the main factor explaining developments in own prices rose considerably, from 25 to 42 per cent (Table 2); more than half of the firms reported that they did not increase their own prices.

Figure 3

Changes in own sales prices (1)

(percentage changes)



Notes: (1) The dotted lines indicate firms' expectations for 2019.

Economic activity looks set to remain weak this year

Firms' expectations suggest that the total sales volume will continue to grow in 2019 at a pace similar to that of 2018 in both the domestic and foreign market, notwithstanding heterogeneous projections between sectors. Employment is expected to remain unchanged overall, owing to its slight contraction in larger firms and its increase in smaller firms.

Price developments are expected to weaken further, especially in the service sector (from 1.2 to 0.6 per cent, compared with a reduction from 1.8 to 1.5 per cent in manufacturing). About 50 per cent of firms plan to increase their prices by at least 1 percentage point, and about one third of firms by at least 2 percentage points. The main factor underlying these plans is, for around one third of firms, the performance of overall demand and, for a similar share of firms, developments in commodity prices; about one fifth of firms indicated the pricing policies of their competitors as the main factor.

Investment continued to grow, mainly driven by medium-sized firms

In 2018, capital accumulation continued at a largely stable pace (3.0 per cent, compared with 2.7 per cent in 2017; Table 1); the expansion in expenditure mainly concerned tangible goods (plant, machinery and transport equipment). Some 75 per cent of total spending for these capital goods was carried out by the top 25 per cent of firms with the highest ratio of investments to turnover, which is a measure of the intensity of capital accumulation that is independent of firm size. Capital accumulation was positive for smaller firms, notwithstanding the contraction feared at the beginning of the year; it accelerated for medium-sized firms (those employing between 50 and 499 workers), broadly in line with their expectations; it remained unchanged for the larger firms, disappointing very favourable expectations. Total investment spending rose by just over half the rate planned last year (5.3 per cent).

Three quarters of the firms whose investment spending differed from that planned at the beginning of the year reported that the divergence was mainly due to organizational factors. Additional factors were revisions in demand expectations for their own goods and developments in the availability of financial resources (for 34 and 17 per cent of firms, respectively). Half of the firms invested more than planned: of these, almost one fifth attributes this decision to regulatory aspects, among others.

Table 2

Reasons for changes in prices (1)

(percentage changes and percentage shares of firms indicating the reason as the most significant)

	2017/2018			2018/2019		
	Average change in prices	Median change in prices	Share of firms	Average change in prices	Median change in prices	Share of firms
Changes in overall demand ……………..	1.2	0.0	42.1	0.4	0.0	42.1
Changes in commodity prices …………..	3.0	1.4	24.5	0.9	1.0	23.4
Changes in labour costs ……………………….	1.5	1.0	4.6	0.8	1.0	5.1
Pricing policies of main competitors ….	3.0	1.0	21.1	2.8	0.8	22.5
Inflation expectations ……………………………….	0.8	0.9	4.7	0.5	1.0	3.4
Changes in the exchange rate …………………	3.5	0.0	0.3	1.9	0.0	0.2
Interest expense and sources of external financing …	0.8	1.0	0.6	-0.5	-2.0	0.5
No answer ……………………………………………..	1.2	1.5	2.2	0.3	0.0	2.7

Notes: (1) Data weighted by population weights and turnover.

As in 2017, over half of firms benefited from at least one of the investment incentive measures in force (Nuova Sabatini incentives, tax credit for investment in Southern Italy, super-amortization for tangible or intangible goods, hyper-amortization or other). The spending of the firms benefiting from the various incentives in place accounts for over two thirds of overall investment. For about one third of these firms, capital accumulation was at least in part carried out thanks to the incentives.

In 2018 as well, about half of firms reported that they benefited from the super-amortization measure introduced to support purchases of new capital goods. There was an increase, from 15 to 20 per cent, in the share of firms that benefited from the hyper-amortization measure to support investments in advanced technologies in connection with the 'Industry 4.0' plan. The use of hyper-amortization increased with firm size and was more widespread among manufacturing firms, especially in the chemical and pharmaceutical segment. Consistent with this, the share of firms that reported investment in advanced technologies in 2018 increased from 38 to 44 per cent; the share of spending attributable to this category of investment, however, remained below 5 per cent for half of these firms. Overall, the adoption of advanced digital technologies can be estimated to account for about 15 per cent of the overall investment spending recorded in the survey. Over the course of the last five years, investments in new technologies appear to have been accompanied by a replacement of the capital goods employed in the production cycle, including through the decommissioning of capital goods that were still productive (see the box 'The decommissioning of goods in firms' production cycle').

In 2019 investment spending is expected to match that of 2018

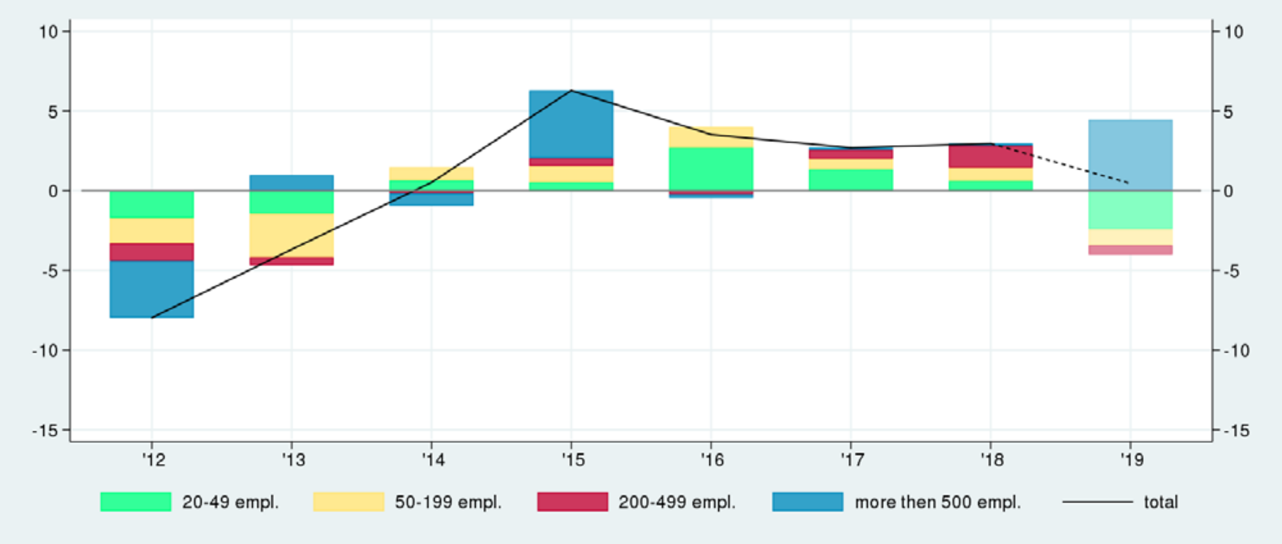
Based on the responses given by firms in the spring quarter, in 2019 investment expenditure is expected to remain at the same level of 2018. These forecasts reflect very different standpoints. Small and medium-sized firms, which had driven investment growth in 2016, plan to reduce their spending, while the larger firms, whose contribution in the last three years was almost nil, are planning a significant acceleration in investment (Figure 4). Manufacturing firms plan to reduce their spending following five years of growth, while service firms, which had decreased their spending in 2018, plan to increase it again.

The share of firms interested in increasing their borrowing fell slightly

Over the course of 2018, the share of firms interested in increasing their borrowing from the credit sector or other financial intermediaries fell slightly, to 30 per cent (from 33 per cent in 2017). In line with the previous three years, over 80 per cent of the firms that applied for a loan received the entire amount; the share of firms whose loan applications were denied, in part or in full, was 16 per cent, a low share compared with the latest recession (36 per cent in 2012).

Figure 4

Investment (1)
(*contributions to growth*)



Notes: (1) Values at constant prices calculated on the basis of the deflators found in the survey. Expenditure for tangible goods, for software, databases and mineral prospecting, and for research and development, design and prototyping. Data weighted by population weights and by investment spending. The dotted line and the lighter-coloured area indicate firms' expectations for 2019.

Construction

Production in the construction sector has increased for the first time since 2007

In 2018 production in the construction sector returned to growth (2.2 per cent) following a ten-year period of contraction. Compared with 2017, production increased mainly for construction firms that are also active in the residential property sector.

The stock of unsold residential property decreased further and over half of firms consider their own stock to be no greater than the share deemed natural.

The non-residential property sector was affected by the fall in production in the public works segment attributable to firms with fewer than 200 employees, against the backdrop of higher demand for investment in construction expressed by private firms in industry excluding construction and in non-financial services.

Employment continued to decline, albeit at a less intense pace (from -3.7 to -2.5 per cent). The average number of employees decreased further among small and large firms, while it increased for medium-sized enterprises (those employing between 50 and 499 workers). The share of firms that posted a profit at the end of the year increased overall, but fell sharply among large firms.

For 2019, construction firms expect production to increase, including in public works, and employment to rise in all size classes.

The share of firms interested in increasing their borrowing from the credit sector in 2018 fell slightly, from 32 to 28 per cent, owing to the reduction among firms with fewer than 50 employees.

THE DECOMMISSIONING OF GOODS IN FIRMS' PRODUCTION CYCLE

The 2018 survey contains a special section on the purchase and decommissioning of certain categories of capital goods during the five-year period 2014-18, on the reasons underlying those decisions, and on the average useful life of the goods considered.[1]

In the five-year reference period, which was marked by an overall recovery in capital accumulation following a prolonged recessionary phase, almost two thirds of firms in industry excluding construction and in services decommissioned at least one of the goods considered (see the table).

Among the firms that decommissioned a capital good, the most commonly cited reason for doing so was that these goods had reached the end of their useful life. This occurred in about three quarters of cases for computers, communication equipment and apparatus, and furniture, and about two thirds of cases for machinery. A significant share of firms (35 per cent) reported decommissioning capital goods before the end of their useful life. In these cases, this was almost exclusively due to the decision to replace them with more technologically advanced equivalents. Decommissioning in connection with company downsizing and changes in the goods being produced played a marginal part overall.

The improvement in the quality of capital goods was most frequent among the firms that invested the most in the last two years, likely fostered by the investment investments in force, as well as among large manufacturing firms.

Decommissioning of capital goods (1)
(*2014-18, percentage shares)*

	Decom. (2)	*of which due to:*				
		technical obsoles.	*Technolog. Replacem.*	*reduction in production capacity*	*changes in production*	*other reasons*
Computers	47.6	*73.7*	*22.8*	*0.6*	*0.2*	*2.8*
Communication equipment and apparatus	19.7	*77.1*	*19.2*	*0.7*	*0.7*	*2.3*
Furniture	18.8	*75.2*	*7.2*	*0.5*	*1.8*	*15.4*
Machinery	32.7	*69.9*	*22.4*	*1.3*	*1.5*	*4.8*
Total	62.5	*72.8*	*20.9*	*0.8*	*0.8*	*4.8*

Source: Survey of Industrial and Service Firms, 2018.
(1) 'Machinery' comprises metal structures; tanks and steam generators; general purpose machinery; metal forming and metal manufacturing machinery; other special-purpose machinery; other machinery and equipment not included in the above items. The survey does not consider transport equipment, construction and intangible goods. – (2) Percentage share of firms that have decommissioned at least one good included in this category over the five-year period considered.

The average useful life of the decommissioned goods has remained stable compared with that recorded in 2011 as part of a similar survey conducted by the Bank of Italy and Istat.[2] The goods decommissioned in connection with the adoption of more advanced technologies have a shorter useful life compared with the average for this category of goods, especially for those transferred abroad. These transfers on the secondary market, either in the form of sales or free of charge, involved over one quarter of firms overall.

[1] The purpose of this section is to collect information on the useful life of some of the capital goods decommissioned or introduced in the production cycle. The survey does not consider transport equipment, construction and intangible goods. It considers the following categories: computers and peripheral equipment; communication equipment and apparatus; furniture; metal structures; tanks and steam generators; general purpose machinery; metal forming and metal manufacturing machinery; other special-purpose machinery; and other machinery and equipment not included in the above items.

[2] For a description of the survey of its findings, see E. Bobbio, M. Iommi and R. Tartaglia-Polcini 'New evidence on service lives of capital goods in Italy: Implications for capital stock measurement and TFP growth', paper prepared for the IARIW 33rd General conference, Rotterdam, Netherlands, August 24-30, 2014.

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