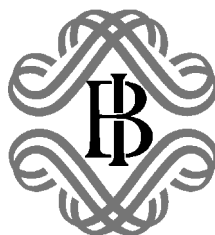


**BANCA D'ITALIA**

**Supplements to the Statistical Bulletin**  
**Sample Surveys**

**Survey of Industrial and Service Firms**  
**Year 2003**



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**Volume XV Number 55 - 20 October 2005**

## GENERAL INFORMATION

- I - Unless indicated otherwise, figures have been computed by the Bank of Italy.
- II - Symbols and Conventions:
  - the phenomenon in question does not occur;
  - .... the phenomenon occurs but its value is not known;
  - :: the data are not statistically significant;
  - .. the value is known but is nil or less than half the final digit shown.

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*This publication contains the main findings of the Bank of Italy's survey of industrial and service firms in 2003.*

*The data were collected in 2004 exclusively for the purpose of economic analysis and have been handled and processed in aggregate form, in full compliance with Italy's law on the treatment of personal information.*

*We would like to thank all the firms that agreed to take part in the survey, providing the information requested in a long and demanding interview, thereby making it possible for us to analyse the economic behaviour of the corporate sector.*

## **SURVEY OF INDUSTRIAL AND SERVICE FIRMS <sup>(1)</sup>**

### **Introduction**

The interviews for the sample survey of industrial and service firms with 20 or more employees for the year 2003 were conducted between January and April 2004.

The sample consists of 3,143 firms in industry excluding construction, 1,236 of which with 20 to 49 employees and 1,907 with 50 or more, and of 994 non-financial private service firms, 374 of which with 20 to 49 employees and 620 with 50 or more. The sampling fraction, i.e. the ratio of firms sampled to the respective reference population, is 7.8 per cent for industry and 4 per cent for services. In the rest of the paper the two sectors will be known briefly as industry and services and the implicit reference, wherever possible, will be to firms with at least 20 employees.

The sample is distributed between the various branches of activity, in both industry and services, in a similar manner to the reference population, with a prevalence, respectively, of engineering firms and of wholesale and retail trade and tourism (Figures 1 and 2).

By contrast, the sample is fairly unbalanced in favour of large firms, with 60 per cent of the businesses interviewed employing more than 50 workers and the remaining 40 per cent, 20 to 49 (compared with 30 and 70 per cent respectively for the population). Because a higher fraction of large firms has been surveyed, the two samples represent about a quarter of total employment in the reference universe; in the case of investments, which are more concentrated, they account for an even larger share, around 40 per cent. This has the evident advantage of improving the accuracy of estimates of the totals of the most important aggregates (employment, turnover and investments) and of their fluctuations over a period of time.

For the South and Islands, where, according to the 8th Census of Industry and Services conducted by Istat (National Statistics Institute) in 2001, just over 16 per cent of industrial and service firms with more than 20 employees are located, more accurate estimates were obtained by over-representing businesses in the area so that they account for 35 per cent of all those surveyed.

Estimates take into account the difference between the composition of the sample and the population by means of weighting coefficients.<sup>2</sup>

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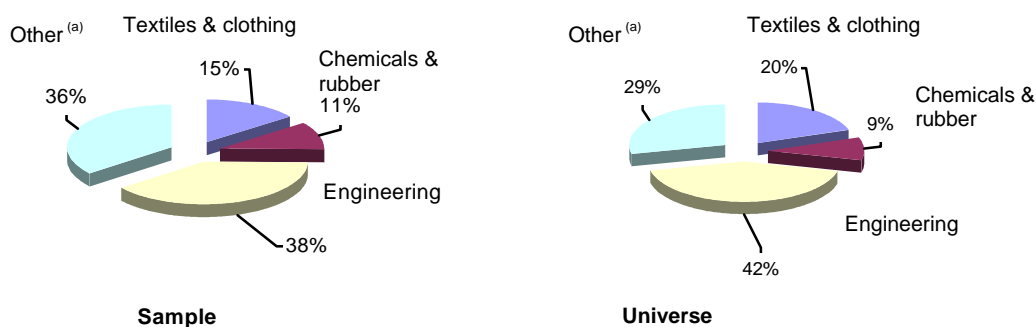
<sup>1</sup> Prepared by Claudia Biancotti, Leandro D'Aurizio, Caterina Di Benedetto and Raffaele Tartaglia-Polcini. The branches of the Bank of Italy actively participated in the survey, being directly responsible for collecting the data.

<sup>2</sup> See the Methodological Notes (Appendix A).

This report describes the salient features and main findings of the survey.<sup>3</sup> Section I describes the basic characteristics of firms' economic activity – utilisation of labour and capital, and production – from both the cyclical and the structural point of view. In Section II individual topics are discussed in detail.<sup>4</sup>

**Figure 1**

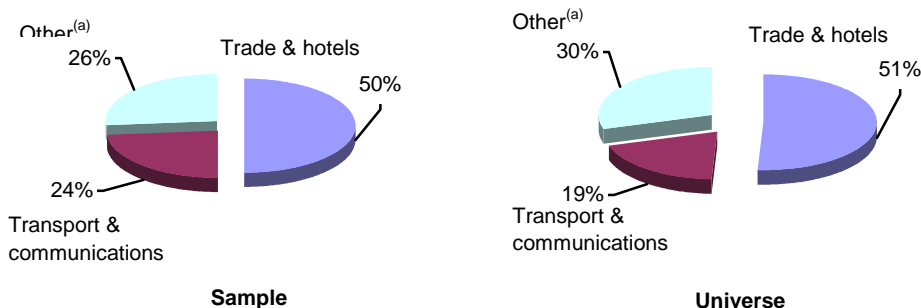
**Breakdown by sector of non-construction industrial firms in the sample and in the reference population in 2003**



(a) Includes 'Food, beverages and tobacco', 'Non-metal minerals', 'Other manufacturing', and 'Energy production and mining and quarrying'.

**Figure 2**

**Breakdown by sector of non-financial private service firms in the sample and in the reference population in 2003**



(a) Includes 'Real-estate activities', 'Charters and rentals', 'Software', 'Research', and 'Other professional and business activities'.

<sup>3</sup> In interpreting the findings it should be kept in mind that the population of firms with 20 or more employees accounts for a large share of the main economic aggregates in the sectors concerned (e.g. 80 per cent of turnover in industry and 50 per cent in services).

<sup>4</sup> The topics covered include the ownership and organisation of firms, recruitment, atypical work contracts and immigrant workers, information and communication technology, outsourcing of production, the internationalisation of industrial firms and aspects of corporate financing.

The methodological notes (Appendix A) describe the composition of the sample and the universe, the sample design, the collection of data and the estimation and weighting procedures. They also provide information about response behaviour and data quality, partly from the viewpoint of comparability with data from other sources. The statistical tables and the questionnaires are in Appendices B and C.

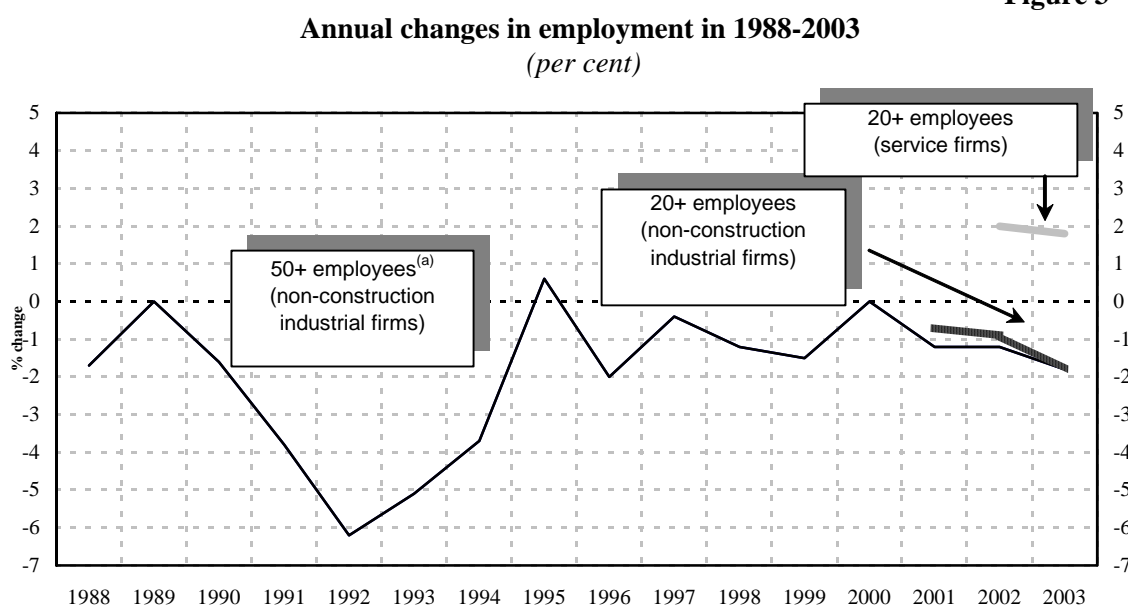
## I – Labour, capital and production: cyclical and structural aspects

### I.1 Employment

The survey reveals that employment in industrial firms in 2003 was 1.8 per cent down on 2002, but rose by an equivalent amount in the service sector. This trend mirrors the pattern of recent years (Figure 3; Table H1) and bears out the national accounts data, which include firms with fewer than 20 employees; according to the national accounts, employment in industrial firms remained virtually stationary, increasing by just 0.1 per cent, while in non-financial private service firms it grew by 2 per cent.<sup>5</sup>

According to the survey, the trend of employment in textile firms was negative, with a decline of 4.8 per cent, as was that in energy and mining and quarrying industries (-3 per cent). On the other hand, results for wholesale and retail firms and hotels were positive, with employment growth of 4 per cent.

Figure 3



(a) The data for 1988-1998 refer to manufacturing firms; those for 1999-2003, to industry excluding construction.

<sup>5</sup> The discrepancy with respect to the national accounts is due first of all to the different reference populations, the one used by the national accounts being broader as it includes firms with fewer than 20 employees. Other not inconsiderable sources of divergence are the assessment of the underground economy in Istat estimates and the inclusion of atypical forms of employment, or of forms not picked up by the survey (such as continuous collaboration contracts) or not considered in employment trends (such as temporary work). The survey data reflect a long-term tendency for the largest firms to downsize (average employment in firms with 500 or more employees was 2,167 in 1991 and 1,875 in 2001) and an accompanying increase – of smaller magnitude – in the number of firms in this size class (1,184 in 1991 and 1,338 in 2001). According to the *Relazione Annuale della Banca d'Italia sul 2003* the rise in the number of large firms “is largely attributable to the positive performance of wholesale and retail trade and business services, particularly cleaning, IT consulting, research and the supply of personnel. In fact, personnel is the sector that has grown most in terms of employment, probably owing to the introduction of new types of contracts, such as temporary work. The development of outsourcing might explain the rise in the number of large firms”.



Regarding changes in employment, both observed changes in 2003 and forecast changes in 2004, results were best for large firms in the service sector and for small firms in industry.

In 2003 the actual number of hours worked per capita decreased by 0.5 per cent overall (Table C4), the outcome of a decline of 0.7 per cent in industry and 0.4 per cent in services.<sup>6</sup> Hours of overtime worked in 2003 averaged 4.2 per cent of the total.

The average workforce in the firms surveyed was about 86 and was higher in the service sector (94) than in industry (82). Energy and mining and quarrying industries tended to be larger (245 employees), as did transport and communication firms (127), chemical, rubber and plastic companies (100) and other services for business and households (99). The smallest firms were found in textiles and clothing (Table C1).

The average size of firms differed considerably from one geographical area to another. Industrial and service firms in the South and Islands had on average just over half as many employees as in the North-West.<sup>7</sup> The gap did not change even controlling for branch of activity.

The geographical distribution of the workforce by actual location<sup>8</sup> was slightly more homogeneous, with 64 per cent in the North, 19 per cent in the Centre and 17 per cent in the South and Islands. The difference was due to the employment of workers in the South and Islands by firms with head offices in the North and Centre.

The survey data for 2003 indicate that the presence in the South of factories owned by Italian firms based in the North or Centre is correlated with size and that the phenomenon is more frequent among industrial firms than among service companies (Table 1).

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6 A comparison with estimates based on previous surveys, which covered only firms with 50 or more employees, indicates that after 1999 the drop in the number of hours worked in industry affected all branches and all geographical areas to varying degrees, although the South less. The amount of overtime also tends to decline over the years, especially in engineering, where it fell from 5.1 per cent in 1999 to 4.5 per cent in 2003. It should also be recalled that the number of hours worked per capita is calculated in relation to average employment, which includes full-time employees and workers with fixed-term contracts, whose number is weighted according to the duration of their employment; external collaborators and temporary workers are not computed. Therefore, the drop in actual hours worked per capita could be correlated with the growing use of atypical work contracts although, according to the *Relazione Annuale della Banca d'Italia sul 2003* the "decline in hours worked per capita [was] only partly offset by increased use of temporary workers."

7 According to the 2001 survey, about 66 per cent of payroll employees in the sectors surveyed worked for firms with their head office in the North, 22 per cent for firms based in the Centre and only 12 per cent for firms based in the South.

8 The survey only records the actual location of workers for firms with 50 or more employees.

Table 1

**Distribution of workers in industrial and service firms with 50 or more employees  
by head office and actual location in 2003**

*(per cent)*

Head office	Actual location			
	North	Centre	South/Islands	Total
<b>Industry excl. construction</b>				
North.....	72.0	2.1	4.3	78.4
Centre .....	1.9	11.3	1.5	14.7
South and Islands .....	0.2	0.1	6.6	6.9
<b>Total.....</b>	<b>74.1</b>	<b>13.5</b>	<b>12.4</b>	<b>100.0</b>
<b>Non-financial private services</b>				
North	61.9	3.3	2.4	67.6
Centre .....	4.4	16.3	2.4	23.1
South and Islands .....	0.1	0.4	8.8	9.3
<b>Total.....</b>	<b>66.4</b>	<b>20.0</b>	<b>13.6</b>	<b>100.0</b>
<b>Total industry and services</b>				
North	67.6	2.7	3.5	73.8
Centre .....	3.0	13.4	1.9	18.3
South and Islands .....	0.2	0.2	7.5	7.9
<b>Total.....</b>	<b>70.8</b>	<b>16.3</b>	<b>12.9</b>	<b>100.0</b>

Labour turnover<sup>9</sup> in 2003 was 29.1 per cent in industry and 55.9 per cent in services. In industrial firms separations slightly exceeded hirings (15.5 per cent and 13.7 per cent respectively), while in the service sector the opposite occurred (27 per cent against 28.8 per cent). In both sectors mobility was greatest among workers with fixed-term contracts, and was particularly marked in wholesale and retail trade and hotels, which have a strong seasonal component: in fact, out of 100 workers observed over the year, 41.2 per cent were new hirings and 37.3 per cent terminated their contracts during that time. In the South and Islands, labour turnover was high in both types of firm,<sup>10</sup> amounting to 43.3 per cent in industry and 60.5 per cent in services; only in the North-East was labour turnover in service firms higher, reaching 72.9 per cent. Firms with 500 or more employees, chemical companies, energy and mining and quarrying industries and firms in the North-West had a lower turnover of labour (Table C2).

Fixed-term contracts were more frequent in services than in industry, applying to respectively 9.2 and 5.9 per cent of the workforce at the end of the year (Table C3). This form of employment was also used on a larger scale in the regions of the North-East and

<sup>9</sup> Labour turnover, which is a notable indicator of the speed of staff renewal, is the ratio of the sum of hirings and separations in the year to average employment.

<sup>10</sup> The service sector in the South is mainly composed of commercial companies, hotels and catering firms.

the South and Islands, by both industrial and service firms. Wholesale and retail trade and hotels used more temporary workers than other branches (12.8 per cent), energy and mining and quarrying industries less (1.7 per cent). The actual number of hours worked by payroll employees, which averaged 1,644 a year, tended to be higher in firms located in the South and Islands (1,685 hours in industry and 1,755 in services) and in those with 20 to 49 employees (1,698 in industry and 1,746 in services). By contrast, the number of hours worked was below average (1,492) in energy and mining and quarrying firms, which are more capital-intensive (Table C4).

Gross per capita earnings averaged €25,000 per annum, increasing with firm size in both industry and services (Table C7). One of the reasons for this is that the productivity gap between large and small firms is a factor in supplementary company-level bargaining. A typical worker in energy, mining and quarrying earned around €33,000 p.a. and in the chemical industry, around €28,000 p.a., compared with €20,000 in textile firms. In the service sector earnings were lowest in trade and tourism (€22,000 p.a.) and highest in transport and communication (€28,000 p.a.).

There was a gap between wages and salaries in the South and Islands and in the North and Centre. This was mainly due to structural factors: the average firm in the South is smaller and operates in a branch that relies heavily on unskilled labour. A worker in the South earned on average €20,000 per annum, which was just 7 per cent above the minimum wage, while the country-wide figure was €25,000 p.a., 15 per cent above the minimum wage.

## **I.2 Investment and capacity utilisation**

The survey findings indicate that in 2003 the trend of gross fixed investment<sup>11</sup> was negative overall compared with 2002, resulting in a decline of 8.3 per cent in real terms.<sup>12</sup> As observed in the *Relazione Annuale della Banca d'Italia sul 2003* “the contraction in investments recorded by the survey [...] is much larger than according to the national accounts, which indicate a decrease of 2.1 per cent; the discrepancy is due to the fact that the survey sample excludes not only several branches (such as agriculture, construction and monetary and financial intermediation) but also firms with fewer than 20 employees, which presumably invest more, as suggested by the fact that the rise in bank lending to this category has been sharper than in lending to larger firms.”

There was a substantial decline in investments in industry (–16.9 per cent), particularly of textile and clothing firms (–24.8 per cent) and in the Centre (–21.7 per cent). In the service sector, investments increased on average by 2.2 per cent, mainly thanks to 20.8 per cent growth in transport and communication; the other branches recorded a decline, although not as large as in industry.<sup>13</sup>

In 2002 the survey predicted that the performance of investments would be even more negative: the ratio between actual spending in 2003 and planned expenditure at the

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<sup>11</sup> Gross fixed investment is defined as the addition of capital assets to the firm's existing stock in the reference period. Capital assets consist of tangible goods, software, databases and mineral exploration. They are the result of a production process and are used repeatedly or continuously in the production of goods and/or services for more than a year. Gross fixed investment includes depreciation.

<sup>12</sup> See Appendix A for details of the method of deflation.

<sup>13</sup> According to Istat, gross investment in industry excluding construction, including firms with fewer than 20 employees, declined by 5.6 per cent in 2003. In the service sector, including firms with fewer than 20 employees and financial services, gross investment increased by 0.5 per cent.

end of 2002 (i.e. the realisation rate) was 104.9 per cent. In particular, 50.9 per cent of firms invested more than they had planned a year earlier (even considerably more in 31.5 per cent of cases), compared with 44 per cent that invested less (26.7 per cent, substantially less). Therefore, the average realisation rates for industrial and service firms were 92.9 and 121 per cent respectively (Tables D1 and D2).<sup>14</sup> In general, investment spending by industrial firms, especially if large or export-oriented, did not match expectations, while spending by service firms, particularly if small or supplying services to business and households, exceeded them. The chemical, rubber and plastics industry was the worst affected, with 65.8 per cent of firms making cuts and 42.9 per cent spending less than 75 per cent of their original budget.

The reasons for amending investment plans were recorded only for firms with 50 or more employees and were mainly associated with changes in their objectives and strategies (internal organisation; Table D3). Demand developments were cited by 35 per cent of the firms who cut their planned investments, particularly in the North-East and Centre (nearly 40 per cent) and in the textile sector; these were followed by uncertainty regarding costs and changes in delivery times, which affected, respectively, 7.6 and 6.3 per cent of the firms. Problems of cash-flow and credit availability were reported by 5 per cent of the firms. As far as increases in planned investments were concerned, tensions on goods markets played a minor role (accounting for 29.8 per cent of cases), although they remained the second most frequently cited reason. Other considerations affecting the plans of these firms included cash-flow and the cost of capital assets (6.1 and 5.5 per cent respectively).

The trend of gross fixed investment varies considerably, both because of the nature of the cost and because it responds rapidly to the economic cycle (Figure 4 and Table H3). This variability is borne out by the relationship between the forecasts for 2004 and the outturn for 2003. Firms expected investments to pick up slightly in 2004, by 0.7 per cent in real terms. Prospects were more optimistic among industrial firms (3.2 per cent growth), especially those in the Centre, large firms and energy and mining and quarrying industries, but were negative for service firms (2.1 per cent decline), particularly those with fewer than 500 employees and in branches other than wholesale and retail trade and catering. Firms in the South expected a further slowdown in the rate of increase in investments, regardless of the branch of activity.

The survey estimates that firms invested an average of €1,800 per employee in 2003, before adjusting for depreciation of capital assets.<sup>15</sup> The figure was higher in the service sector (€1,700) than in industry (€1,600) owing to the substantial investments, mainly in software, made by transport and communication firms in 2003 (€29,900 per employee; Table D1). Investments increase with firm size owing to the concentration of large firms in capital-intensive sectors. Among industrial firms (Table D1), the figure was higher in the Centre (€17,500) than in the other areas as that is the official location of many large energy and mining and quarrying firms, which invest considerably more than the rest of the productive system (€1,700).

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<sup>14</sup> According to the quarterly survey of inflation and growth expectations conducted by the Bank of Italy and the economic daily *Il Sole 24 Ore* on a representative sample of firms with 50 or more employees, the investment plans of industrial and service firms took different directions in 2003. In the first half of the year, manufacturing firms cut back their plans while wholesale and retail firms increased them. In the closing months of the year, the gap narrowed between the directions taken by the two sectors, mainly because more manufacturing firms stepped up their overly pessimistic investment plans, no doubt influenced by the poor performance of the first half-year.

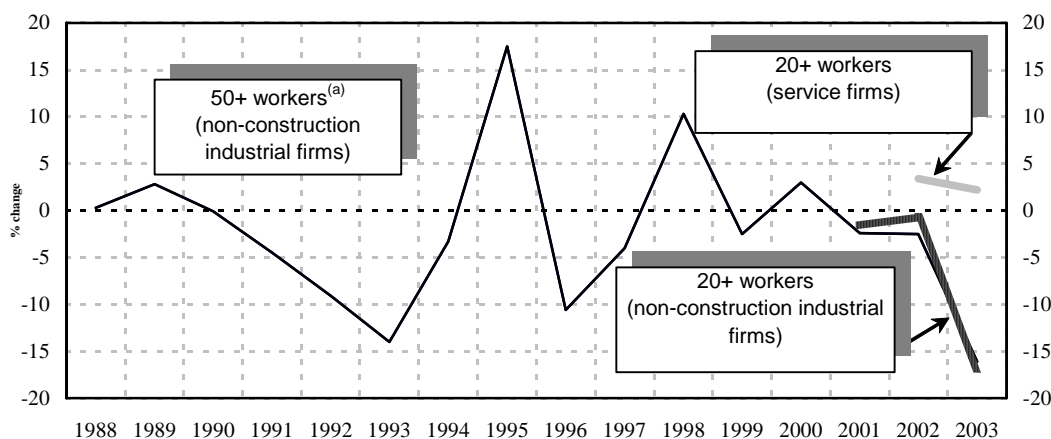
<sup>15</sup> Similar figures, although for 2001, were recorded by comparable Istat surveys. See the Methodological Notes for details of comparisons with this source.

According to the national accounts, investments per employee totalled €9,600 in industry excluding construction and €9,000 in the service sector as a whole. The higher figures recorded by the Bank of Italy's survey, which does not include firms with fewer than 20 employees, appear in line with the observation that per capita investments are positively dependent upon firm size. Moreover, the survey does not include the construction industry and public services, sectors in which investment levels are normally low.

Between 2002 and 2003 the capacity utilisation rate increased by 4.9 per cent in firms with 50 or more employees,<sup>16</sup> with a similar gain forecast for 2004. The largest increases were both recorded and forecast for firms in the South (7.4 and 15.1 per cent respectively) and for firms with fewer than 500 workers; the figures were lower for the textile sector and for energy and mining and quarrying industries (Table D4).

Figure 4

**Annual changes in investments in 1988-2003**  
(at constant prices; per cent)



(a) For 1988-1998, expenditure on tangible goods by manufacturing firms; for 1999-2003, spending on gross fixed investment by non-construction industrial firms.

The average capacity utilisation rate for industrial firms with 50 or more employees was 79.6 per cent (Table D4),<sup>17</sup> down 0.9 per cent on 2002; the chemical industry (-3.6 per cent) and the North-West (-2.2 per cent) were the worst hit. Firms' expectations were of a 1 per cent increase in 2004. Firms in the Centre and energy and mining and quarrying firms, whose capacity utilisation increased by 2.2 and 4.4 per cent respectively during the year, forecast future decreases of 1.7 and 1.9 per cent. Southern firms and firms exporting between one- and two-thirds of their output recorded increases in both periods.

16 Considering all industrial firms (including those with fewer than 50 employees), Istat data recorded a small increase in capacity utilisation last year. According to the *Relazione Annuale della Banca d'Italia sul 2003* "Although capacity utilisation in manufacturing industry as a whole increased by a modest amount in 2003, at the end of the year it was only slightly higher than the low levels recorded in the past eight years. Despite the recovery in world trade, the absence of demand pressures was even more apparent in the most export-oriented sectors, where plant utilisation was considerably lower than in 2002."

17 This measure varies very little either between sectors or between geographical areas and size classes.

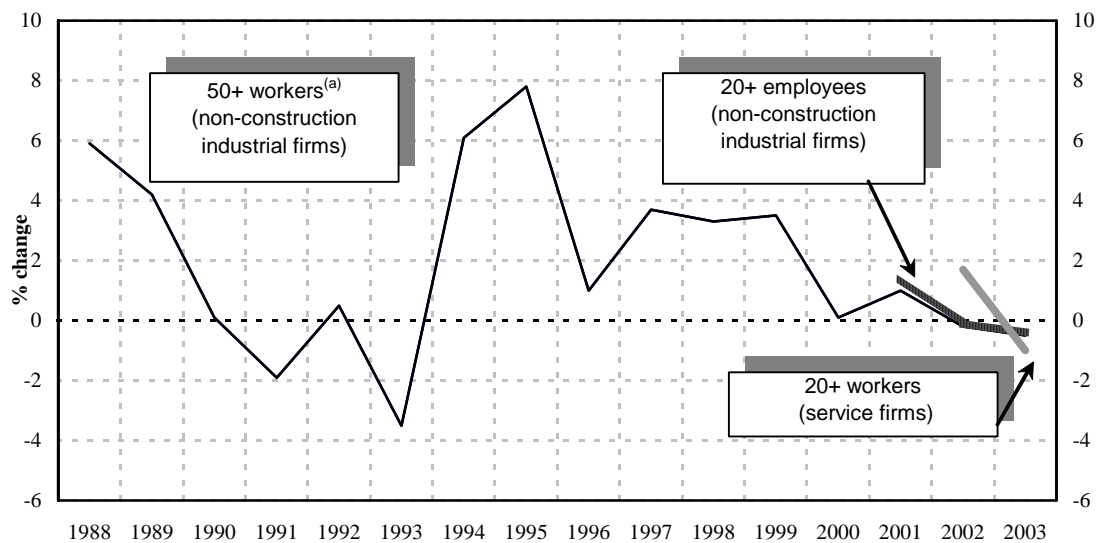
### I.3 Turnover and operating result

Between 2002 and 2003 turnover of industrial firms declined by 0.4 per cent at constant prices.<sup>18</sup> The sectors experiencing the greatest difficulties were textiles, where turnover contracted by 4.3 per cent, and chemicals, where it was down 3.5 per cent, while energy and mining and quarrying firms achieved good results, with an increase of 4.4 per cent (Table E1). Turnover also declined, by 1 per cent at constant prices, among service firms, particularly those with 20 to 49 employees (–7.2 per cent).<sup>19</sup> It is worth noting that industrial and service firms with head offices in the South and Islands achieved increases of 1.2 and 3.3 per cent respectively. The results for 2003 are in line with the very small movements recorded in the past five years (Figure 5 and Table H5).

Export revenue increased by just 0.6 per cent in industry and services as a whole. However, excluding energy and mining and quarrying firms, which react to different market factors than those that influence the rest of exports, and curtailing the influence of outliers,<sup>20</sup> the result is a contraction of 1.3 per cent.<sup>21</sup>

Figure 5

Annual changes in turnover, 1988-2003  
(data at constant prices, per cent)



(a) For 1988-1998, manufacturing firms; for 1999-2003, non-construction industry.

18 The survey records a 0.6 per cent difference in turnover at current prices compared with 2002. According to Istat calculations, based on monthly indexes of turnover and orders in industry, which include firms with fewer than 20 employees, turnover of manufacturing and mining and quarrying firms rose by 1.4 per cent at current prices.

19 Estimates of the rate of increase in turnover of small service firms vary widely owing to the presence of outliers. If an estimator that takes this aspect into account is used (type II Winsorisation at the 5th and 95th percentile; see Section A9 of the Appendix), the downward tendency appears less marked (3.3 per cent).

20 Type II Winsorisation at the 5th and 95th percentile is used (see Section A9 of the Appendix).

21 The national accounts show a decline in export sales (at constant 1995 prices) of 3.4 per cent in 2002 and 3.9 per cent in 2003.

Turnover per employee in 2003 averaged €67,000 and was higher in industry (€80,000) than in services (€50,000). In industry, per employee turnover increases with the size of the firm, while in the service sector the opposite holds true. In southern firms the figures were lower in both sectors. Per employee turnover was highest in energy and mining and quarrying industries (€39,000) and in chemicals (€66,000). Transport and communication and textile firms and firms providing services to business and households recorded smaller turnover (Table E1).

Among industrial firms, the share of turnover from exports was substantial in the North-East but small in the South and was highest in the textile and engineering sectors.<sup>22</sup> In the service sector, exports are of secondary importance<sup>23</sup> and are concentrated in transport and communication.

Looking at the distribution of turnover by sector of destination (Table E2) it emerges that non-financial companies were the main purchasers of goods and services, taking 53 per cent. The second largest clients of industrial firms were producer households and of service firms, consumer households.

Fewer firms in the industrial sector recorded a profit in 2003 than in 2002. The same tendency could be observed among service firms with 50 or more employees, while the percentage of firms with 20-49 employees recording a profit increased.<sup>24</sup>

The distribution of operating result<sup>25</sup> follows a very similar pattern in both industry and services, with just under two-thirds of firms showing a profit and the remainder equally distributed between those in balance and those recording a loss. The weakness of the business cycle seems to have had a worse effect on large industries (25.9 per cent of which showed a loss) and on mainly export firms (22.7 per cent with a loss) compared with the general average of 18.1 per cent. In the service sector wholesale and retail firms recorded the best results, in line with their performance in terms of turnover (Table E3).

## II – Focus topics

### II.1 Ownership and organisation of firms

The majority of the firms studied are set up in the form of public limited companies, which account for 47.3 per cent of the total, followed by private companies at 46 per cent. The percentage of public limited companies increases with firm size. Recourse to the capital market is still very limited, only 1 per cent of industrial firms with

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22 For further information on exports by the various sectors of industry, see M. Bugamelli and L. Infante, *Sunk cost of exports*, Temi di discussione No. 469, Banca d'Italia, 2003.

23 In addition to the supply of services abroad, account should be taken of the substantial role of sales of services in Italy to foreign residents, typically by the wholesale and retail trade, hotels and restaurants.

24 The improvement in the operating result of small service firms in conjunction with the decline in their turnover observed earlier could be ascribed to a greater ability to adapt the labour force to the cycle. In fact, according to the survey data, these firms react more promptly by adjusting the size and composition of the workforce: this means they are better at cutting operating costs when turnover contracts.

25 Operating result is recorded using a qualitative variable: firms declare whether they showed a profit (large or small), were in balance, or recorded a loss (large or small).

50 or more employees being listed, and only 10 per cent of those with 500 or more employees (Table B2).<sup>26</sup>

Firm ownership tends to be concentrated, and direct control<sup>27</sup> is often in the hands of a physical person. Among firms with 50 or more employees, the leading shareholder or person with the largest shareholding owns on average 66.2 per cent, while the first three shareholders together own 90.8 per cent. In 55.5 per cent of cases the shareholder with control is a person; this is especially true in the South (68.2 per cent of cases), in firms with 50 to 199 employees (62.3 per cent), and in the textile sector (68.8 per cent). Large firms are usually controlled by holding or sub-holding companies: 53.6 per cent in the 200-499 employee size class and 66.1 per cent in firms with 500 or more employees. These firms are located most often in the North and in the heavy industry sectors. Control by banks, other financial companies and insurance companies is rare (Table B2).<sup>28</sup>

The changes in the structure of firms in 2003 resulting from interaction with other entities (mergers, acquisitions, splits, capital contributions, transfers) concerned 3.8 per cent of firms overall (Table B3). They were more frequent among firms with 500 or more employees and involved 16 per cent of industrial firms and 12 per cent of service firms in this size class. The main branches affected by these operations were energy and mining and quarrying, on the one hand, and other services for business and households, on the other.<sup>29</sup>

About a quarter of the firms concerned belong to a group, in 77.2 per cent of cases an Italian group and in 16.2 per cent of cases a group from another European Union country (Table B1).<sup>30</sup>

Membership of a group is closely dependent on firm size, economic activity, and geographical location: 42.5 per cent of firms with 50 or more employees fall within this category, rising to 46.2 in engineering alone and 59.7 in the chemical industry. Only 20.8 per cent of the smallest firms (20 to 49 employees) belong to a group. The figure is slightly higher in the service sector (27.5 per cent) than in industry (16.6 per cent). There are more groups in the North than in the Centre or South.

The nationality of the parent group is correlated with the branch of activity and geographical location of the firms. In Italy's main export sectors, such as textiles and clothing, or those only recently privatised, such as energy and mining and quarrying and transport and communication, Italian groups predominate (respectively, 92.6 per cent, 91.8 per cent and 85 per cent). Foreign groups, particularly those from European Union countries, constitute the majority in capital-intensive industries: chemicals, rubber and

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<sup>26</sup> However, among industrial firms with 50 or more employees, those that are listed account for 13.4 per cent of turnover and 21.9 per cent of total investment.

<sup>27</sup> The person with direct control over the firm is the person who, usually by means of their shareholder's vote, wields a decisive influence over decisions regarding the firm's medium- to long-term objectives, the strategies for achieving them, the firm's economic and financial development, and its investments. It is not necessarily the same person as the majority shareholder.

<sup>28</sup> Part of the reason for this is the existence of regulatory constraints.

<sup>29</sup> The results of the section of the questionnaire dealing with this subject indicate that the majority of mergers and acquisitions were financed from own funds (90 per cent) and with bank credit (52 per cent). Other sources of finance, such as intra-group financing or capital contributions, also accounted for a fair proportion (15 per cent). The role of the market and specialised intermediaries was marginal (less than 2 per cent). Over 90 per cent of the firms concerned belong to the same branch of activity.

<sup>30</sup> The European Union on 31-12-2003: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.



plastic (42.1 per cent, of which 31.5 per cent EU groups) and engineering (33.8 per cent, including 24.6 per cent from the EU).

## **II.2 Recruitment, atypical work contracts and immigrant workers**

In 2003, 75.4 per cent of firms hired new workers or engaged temporary personnel in order to cover vacancies for production staff and apprentices; the percentage drops to 47.2 in the case of clerical staff and junior management. Industrial firms sought mainly production staff (77.9 per cent), while service firms concentrated on clerical staff (53.9 per cent). The time taken to fill vacancies averaged 4 weeks for production staff and 5 weeks for clerical staff and was longest in the North (Table C5).

The main avenue for personnel search in all sectors and for all types of vacancies is the examination of CVs sent directly to the firms. Some 69.9 per cent of industrial firms use this method for production workers and apprentices, 69 per cent for clerical workers and junior management; in the service sector the figures are 73.3 and 76.1 per cent respectively. The other channels for staff recruitment are, in order of frequency, recommendations by employees, trade unions, employers' associations and non-profit organisations. The popularity of these methods stresses the importance of personal acquaintance in the selection process. Private recruitment agencies also play a substantial role: 52.3 per cent of industrial firms use them to find production staff and apprentices and 42.8 per cent for clerical staff and junior management; the respective figures for service companies are 31.5 and 31.8 per cent (Table C6).

Almost one-third of firms place advertisements for personnel in newspapers or similar; the same proportion turn to public job agencies for production staff and apprentices and 25 per cent for clerical workers and junior management. Just under 15 per cent of firms seek personnel on the Internet. The last three methods are judged to be the least satisfactory: on a scale from 1 to 3, where 1 is 'not very efficient' and 3 is 'very efficient', public job agencies are awarded an average of 1.5 points for all types of work, the Internet about 1.7, newspaper advertisements about 2; other methods of recruitment are judged better, receiving around 2.2 points.

According to the firms, renewing or prolonging fixed-term work contracts is an efficient method of filling vacancies, and both industrial and service firms award it 2.3 points on a scale from 1 to 3.

Temporary employment amounts to 2 per cent of the number of hours worked by payroll employees in industry and 0.8 per cent in services. In industry, the share of this type of employment, in terms of number of hours worked, is largest in the North and in chemicals and engineering and increases with the percentage of turnover from exports. In the service sector, the use of temporary work contracts increases with firm size and is positively correlated with the seasonal nature of the activity.

Immigrant workers represent 3.3 per cent of total employment. They are employed mainly in the service sector (3.8 per cent) rather than in industry (2.9 per cent) and above all in the provision of services to business and households, which includes cleaning, disinfection and maintenance. The area with the majority of foreign workers is the North-East; with 4.3 per cent in both industry and services, while the South accounts for a very small proportion (0.8 per cent in industry and 1.2 per cent in services).<sup>31</sup> In the

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<sup>31</sup> The gap is partly due to differences in the sectoral allocation of immigrant workers, who tend to be concentrated in agriculture in the South, a sector not covered by the survey; it may also be that unrecorded employment of foreigners is greater in the South than in the North or Centre.

various branches of industry the percentage of foreign workers decreases with firm size (Table C3).

### II.3 The role of subcontractors

In the present survey the role of subcontractors, undertake a part of production according to the commissioning company's technical specifications, is examined in closer detail, but only for the industrial sector (Table 2). According to the survey, 49 per cent of firms use subcontractors, mainly those with fewer than 200 employees and those selling to the domestic market. Two-thirds of these clients are Italian firms from a different region to the subcontractor and the remaining third is equally divided between foreign firms and firms in the same region. The proportion of foreign clients increases among firms with 200 or more employees and among those located in the North. Contract work accounts on average for 22 per cent of turnover, more for firms with fewer than 200 employees and in the South and Islands.<sup>32</sup> From an industry point of view, the percentage of turnover from contract work is highest in engineering, which comprises a large number of manufacturers of components. It is infrequent among energy and mining and quarrying firms.

**Table 2**

**Subcontractors in industry in 2003**  
(per cent)

	Share of turnover from contract work	Share of subcontractors <sup>(a)</sup>	Location of main clients <sup>(b)</sup>		
			Italian firms		Foreign firms
			same region	other region	
<b>Geographical area<sup>(b)</sup></b>					
North .....	22.6	49.2	15.3	64.8	20.0
Centre .....	16.3	47.1	22.8	65.0	12.2
South & Islands .....	29.8	52.6	28.1	63.2	8.7
<b>Number of employees</b>					
20 – 199 .....	27.1	50.0	18.4	65.2	16.5
200 and over .....	14.1	34.6	18.3	46.7	34.9
<b>Branch</b>					
Engineering .....	35.2	60.2	15.1	69.0	15.9
Other manufacturing .....	15.1	40.9	22.4	59.0	18.6
Energy & mining/quarrying ....	1.1	28.2	3.8	94.5	1.8
<b>Export share</b>					
Less than one-third .....	24.0	54.4	19.9	75.5	4.7
One-third or more .....	20.0	40.4	15.1	40.6	44.3
<b>Total for industry excl. construction</b>	<b>22.0</b>	<b>49.3</b>	<b>18.4</b>	<b>64.6</b>	<b>17.0</b>

(a) Subcontractors with at least 15 per cent of turnover from this activity. – (b) Head office.

<sup>32</sup> The percentage of contract work is higher in southern firms, partly because of their smaller average size.

## II.4 Information and communication technology

The extent to which Italian firms use information and communication technology varies widely, especially in relation to sector of activity and geographical location.<sup>33</sup>

The number of personal computers per 100 employees (Table E4) averages 46.8. In service firms, 100 employees have 51.4 computers (74.7 in the case of software companies and business services). The figure drops among firms that rely strongly on craftsmanship (31.4 in the textile industry) and those associated with the wholesale and retail trade and tourist services (38.8). ICT is less widespread in the South: among industrial firms, compared with a national average of 43.9 PCs per 100 employees, the number drops to 30.8 in the South; for service firms the respective figures are 51.4 and 39.4. The gap between North and South remains even taking account of branch of activity and firm size.

On-line trading is generally limited, in terms of both the number of firms involved and the percentage of purchases and of turnover. Some 9.9 per cent of industrial firms and 13.1 per cent of service firms buy goods on-line and these account, respectively, for 2.1 and 3 per cent of total purchases. In addition, 5.5 per cent of industrial firms and 9.6 per cent of service firms sell goods on-line,<sup>34</sup> corresponding, respectively, to 1.3 and 2.1 per cent of turnover. In industry, the scale of on-line transactions increases with firm size, so that firms with 500 or more employees make 13.8 per cent of sales and 18 per cent of purchases by that method. Again, the figures are below average in the South and Islands.

## II.5 The internationalisation of industrial firms

A specific section of the 2003 survey aims to gather information on industrial firms with 50 or more employees concerning their level of internationalisation. Two possible relationships with foreign firms are analysed: one being shareholdings or affiliations, the other consisting in co-operation agreements.

Over 20 per cent of the firms are involved in the first type of relationship. At the end of 2003, foreign shareholdings and affiliations were prevalent among firms with head offices in the North, which are also the ones responsible for the majority of foreign direct investments in the last three years.

The firms that are most active at the international level are mainly those obtaining at least a third of their turnover from exports and with the largest workforce (Table F1). Foreign investments per employee and the ratio of investments to foreign turnover in 2003 were in line, on average, with domestic figures.

Co-operation agreements with foreign firms are slightly more frequent than the previous type of relationship, involving about a quarter of firms, and are distributed in a

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<sup>33</sup> See S. Rossi *et al.*, *La nuova economia: i fatti dietro il mito*, Il Mulino, Bologna, 2003 and *Le innovazioni nel sistema dei pagamenti elettronici: luci ed ombre nella diffusione delle tecnologie dell'informazione e della comunicazione. Le indagini su imprese, famiglie e pubblica amministrazione*, Banca d'Italia, Rome, 2003.

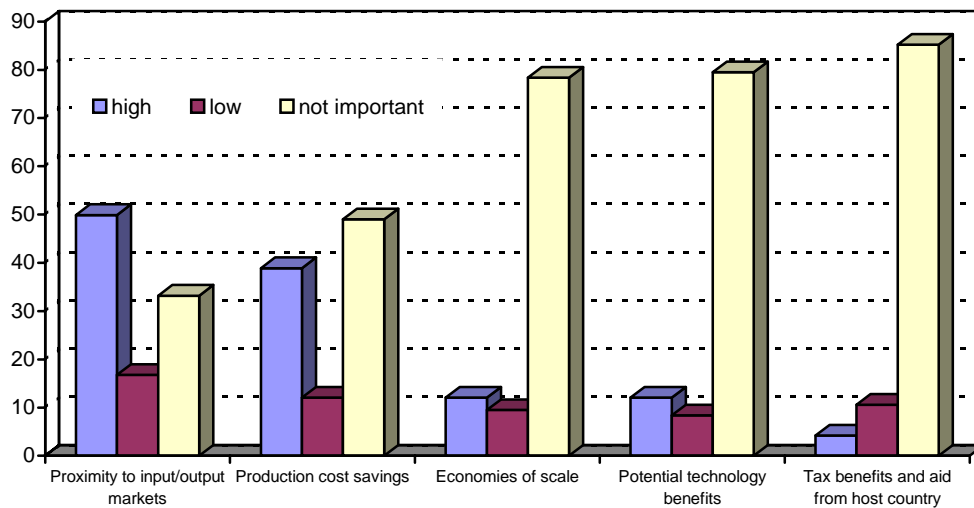
<sup>34</sup> The fact that more firms buy goods on-line than sell on-line can be put down to three factors. First, several firms may buy specific intermediate goods from a same specialised supplier; second, on-line transactions may be used mainly for purchases from abroad, to cut the costs associated with distance; finally, on-line selling of finished products is extremely limited in Italy and therefore cannot offset the gap created by the first two factors. According to the Survey of Household Income and Wealth (SHIW) conducted every two years by the Bank of Italy, in 2002 only 4.4 per cent of Italians made purchases on the Internet; the inability to view the goods properly and the fear of fraud discouraged the others. See *Italian Household Budgets in 2002*, edited by C. Biancotti, G. D'Alessio, I. Faiella and A. Neri, Banca d'Italia, Supplements to the Statistical Bulletin (new series) No. 12, 2004.

similar manner (Table F2). However, they are more closely correlated with firm size in terms of workforce and share of turnover from exports. Commercial agreements are the most common form of co-operation, followed by technical/production agreements. Co-operation in research and development activity is minimal.<sup>35</sup>

In the opinion of the interviewees, the advantages of internationalisation are the proximity to markets (outlet and for provisioning) and savings in production costs. Other reasons cited are of less importance (Figure 6).

**Figure 6**

**Industrial firms with 50 or more employees: reasons for operating abroad in 2003**  
(per cent)



## II.6 Some aspects of corporate financing

The aim of the part of the questionnaire relating to corporate financing is to obtain information about specific phenomena on which no data are available, either from supervisory activity or from the Company Accounts Data Service. As a consequence the survey does not pick up the specifically structural aspects of financing (such as borrowing from banks or other balance-sheet items), but focuses on a few features that are more dependent upon individual behaviour.

One of the aspects analysed concerns the potential difficulties for firms in accessing bank credit. The survey reveals that some 11 per cent of firms, in industry and services alike, wish to borrow more from banks and financial institutions at current conditions as to cost and collateral, a figure that is 2.3 per cent lower than in 2002. The

<sup>35</sup> Comparable information, although for an earlier period, can be found in the latest edition of the Mediocredito Centrale Survey for 2001: some internationalisation phenomena were observed in 1998-2000. Among manufacturing firms with 50 to 199 employees and with 200 or more employees, respectively 3.9 and 8.1 per cent made foreign direct investments, 14 and 18.8 per cent were party to commercial agreements, and 6.3 and 11.5 per cent were engaged in forms of technical co-operation.

percentage rises in the case of firms with 50 or more employees, as well as for service firms and firms located in the South and Islands (Table 3).<sup>36</sup>

This indicator does not reveal to what extent the wish to borrow more is due to a real need for credit, and therefore the questionnaire asks for further information about the possible additional cost of such loans and any steps actually taken to obtain them.

About half the firms that state they need additional financing would actually be willing to accept tougher conditions (higher interest rate or extra collateral) in order to obtain it. A similar proportion of firms wishing to borrow more from banks reported that the institutions were unwilling to lend.

If both these requirements must be fulfilled in order to qualify as a real situation of difficulty – i.e. if only the firms willing to accept slightly worse terms that applied to a bank and were rejected are taken into consideration – the overall percentage of firms affected is extremely small, only 3.2 per cent, a figure that matches the findings for 2002 (3.6 per cent). The percentage is slightly higher for industrial firms (3.8 per cent), large firms (4.2 per cent), and firms with head offices in the South and Islands (4.9 per cent).

**Table 3**

**Firms wishing to borrow more at the same conditions in 2003**  
(per cent of total)

	Total	Would borrow even on worse terms (a)	Institutions were not willing to lend (b)	Both (a) and (b)
<b>Geographical area</b>				
Centre North .....	10.2	5.6	4.5	2.9
South & Islands.....	17.0	8.0	9.2	4.9
<b>Number of employees</b>				
20-49.....	9.9	5.5	4.6	2.8
50 or more.....	14.4	7.3	6.8	4.2
<b>Sector</b>				
Industry excl. construction.....	10.6	6.6	5.5	3.8
Non-financial private services	12.2	5.2	4.9	2.3
<b>Total</b> .....	<b>11.2</b>	<b>6.0</b>	<b>5.3</b>	<b>3.2</b>

A different section of the questionnaire gathers information on trade credit and debt, which play a major role for Italy's productive system.<sup>37</sup>

<sup>36</sup> The analysis for the years prior to 2003 indicates a structural and significant gap between the Centre and North and the South and Islands. Although in 2003 more firms in the 50+- employee group had difficulty obtaining bank credit compared with the 20-49 group, in both industry and services, this finding was not observed in 2001-2002, the years with which a comparison is possible.

<sup>37</sup> For an analysis of the reasons underlying trade credit and debt in Italy see L. Cannari, S. Chiri and M. Omiccioli, *Condizioni di credito commerciale e differenziazione della clientela*, Temi di discussione, No. 495, Banca d'Italia, 2004; P. Finaldi Russo and L. Leva, *Il debito commerciale in Italia: quanto contano le motivazioni finanziarie?*, Temi di discussione, No. 496, Banca d'Italia, 2004.

In all the categories covered by the surveyed, trade credit in 2003 amounted to 24 per cent of turnover, that is 25.8 per cent in industry and 21 per cent in services (Table G1). In Italy, the proportion is particularly large compared with other countries.<sup>38</sup> The average duration of outstanding trade credit is around 88 days and is higher in industry (92 days) than in services (80 days). It tends to decline with firm size. Overall, the duration of trade credit is slightly longer than in 2002, amounting to 85 on average – 90 in industry and 74 in services.

Two-part terms represent less than a fifth of total trade credit; the percentage is considerably lower in services than in industry. About 31 per cent of all credit is paid late, with no significant difference between small and large firms, although the delay tends to be slightly longer in services than in industry (Table 4 and Figure 7).

According to the survey, credit paid after the deadline is on average 55 days late, more in services (69 days) than in industry (49 days). The period is slightly longer than in the previous year in both sectors.

**Table 4**

**Trade credit: two-part terms and late payments in 2003**  
(per cent of total credit)

	Firms with 50 or more employees		Firms with 20 to 49 employees		Total firms with 20 or more employees	
	two-part terms	late payments	two-part terms	late payments	two-part terms	late payments
Industry excl. construction.....	17.2	30.7	10.1	29.9	15.3	30.5
Non-financial private services .....	9.6	33.3	6.3	34.0	8.3	33.6
<b>Total .....</b>	<b>15.1</b>	<b>31.4</b>	<b>8.6</b>	<b>31.5</b>	<b>13.1</b>	<b>31.4</b>

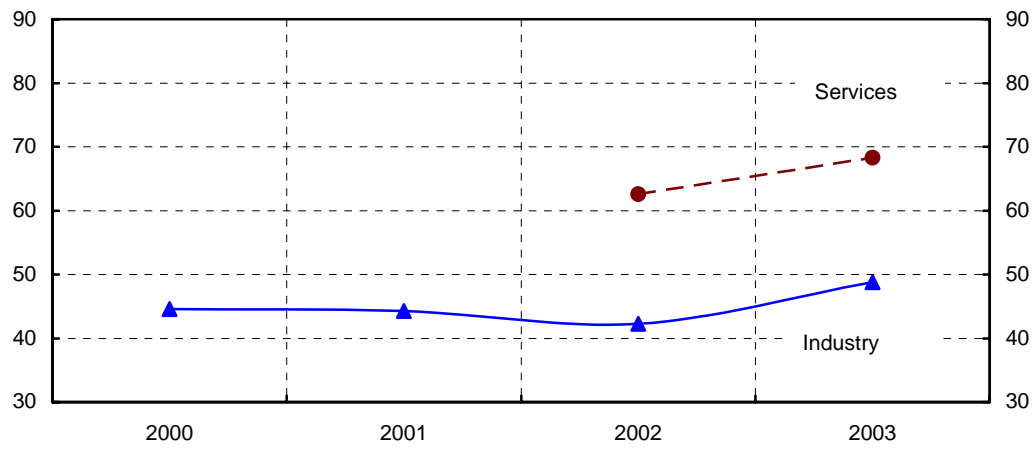
On the domestic market, trade credit to general government represents a larger proportion of turnover (40 per cent) than trade credit to other parties, and this is true in both industry and services. By contrast credit to foreign firms represents 23 per cent of turnover in industry and 16 per cent in services (Table G2).

In 2003 trade debt amounted to 18.4 per cent of turnover; the percentage was similar for industry and services and only slightly lower than in the previous year (18.8 per cent). The average duration was around 87 days.

<sup>38</sup> See in this connection M. Omiccioli, *Il credito commerciale: problemi e teorie*, Temi di discussione No. 494, Banca d'Italia, 2004.

**Figure 7**

**Late payment of trade credit in 2000-03<sup>(a)</sup>**  
*(calendar days)*



(a) Firms with 50 or more employees.





**Appendix A:**  
**Methodological Notes**



## A1. General remarks

The Bank of Italy has conducted sample surveys of firms since 1972.<sup>39</sup> Prior to 1998 the survey only covered industrial processing firms with 50 or more employees.<sup>40</sup> In recent years the field of observation has been extended to include, since 1999, all manufacturing firms as well as mining and quarrying and energy production and since 2001 firms with 20 to 49 employees. In 2002 a similar survey of non-financial private service firms<sup>41</sup> with 20 or more employees<sup>42</sup> was begun. Table 1 describes the progressive change in the field of observation in terms of firm size (number of employees) and branch of economic activity (according to Ateco<sup>43</sup>).

**Table 1a**

Year of the first wave of the survey by branch of activity and size class			
	Branch of activity <sup>(a)</sup>	Size class	
		20-49 employees	50+ employees
CA	Mining and quarrying of energy-producing materials	2001	1999
CB	Mining and quarrying, except energy-producing minerals	2001	1972 <sup>(b)</sup>
D	Manufacturing	2001	1972 <sup>(b)</sup>
E	Electricity, gas and water supply	2001	1999
G	Wholesale and retail trade, repair of motor-vehicles, motorcycles, and personal and household goods	2002	2002
H	Hotels and restaurants	2002	2002
I	Transport, storage and communication	2002	2002
K	Real estate, renting and business activities	2002	2002

(a) Section C “Mining of minerals” is divided into sub-sections CA and CB. - (b) Before 1998 only manufacturing firms were surveyed (Section D – except sub-sections DF “Manufacture of coke, refined petroleum products and nuclear fuel” – and CB “Mining and quarrying except energy-producing materials”). “Industrial firms excluding construction” are the ones in sections C, D and E, and “Non-financial private service firms” the ones in sections G, H, I and K.

Likewise, the sampling and estimation methods have evolved considerably over the years.

The sampling scheme, which was originally purposive, was redefined in 1982, when criteria for random drawing and stratification were rigorously specified. In 1987 it was completely overhauled, with the adoption of a stratified non-proportional design. This has remained largely unchanged, although the overall number of firms sampled has gradually increased over the years.

Already in 1982 the values of the reference population were estimated using weights representing the reciprocal of the sampling fraction. After the 1987 revision, the Horvitz-Thompson estimator was usually

<sup>39</sup> This is the reference year of the survey, which is actually conducted in the early months of the following year.

<sup>40</sup> Until 1986 the survey only covered a small number of firms with fewer than 50 employees. The activities classified under Manufacturing were modified slightly during the changeover from the 1981 Ateco classification to that of 1991: some activities associated with the mining of minerals and the maintenance of data processing equipment were reassigned to the mining and quarrying and service sectors. The change had no effect on the survey, as it concerned only 10 firms included in the sample between 1988 and 1991.

<sup>41</sup> The survey does not include financial intermediation (on which the Bank of Italy has a vast dataset collected for institutional purposes of banking supervision and monetary policy) and insurance, or general government and the school and health sectors and other social and personal public services, which are dominated by general government and therefore not of interest to the present sample surveys.

<sup>42</sup> Between 1995 and 2002 the Bank of Italy conducted a survey of large food retailers. Information was collected each year on the investments, turnover, employment, and pricing strategies of Italian food companies with 50 or more employees. In 2002 this survey was incorporated in the new study of service firms, which continues to observe a number of large food retailers.

<sup>43</sup> Ateco is the national version of the NACE classification of economic activities and is created and maintained by Istat. See Istat, *Classificazione delle attività economiche. Metodi e norme, serie C – n. 11*, Rome, 1991. This classification was updated in 2002 following minor changes in the NACE classification, although these have no bearing on the purpose of the surveys.

employed, with appropriate re-weighting for the treatment of outliers. Over the years, the robustness of the estimates, particularly of variables with a larger percentage of extreme values, was improved by resorting to “Winsorisation” techniques.

Below is a description of various methodological aspects of the present survey.

## A2. Composition of the universe

The reference population<sup>44</sup> is composed of firms whose registered head office is in Italy, having 20 or more employees and belonging to the following branches of activity (Table 2a).

**Table 2a**

<b>Branches of activity</b>		
	Ateco 91 section or sub-section	Branch of activity
Industry excluding construction	DA	Food products, beverages and tobacco
	DB,DC	Textiles, clothing, hides and leather
	DF, DG, DH	Chemicals, rubber and plastic
	DI	Non-metal minerals
	DJ, DK, DL, DM	Engineering
	DD, DE, DN	Other manufacturing
	CA, CB, E	Energy production and mining and quarrying
Non-financial private services	G	Wholesale and retail trade and repair services
	H	Hotels and restaurants
	I	Transport, storage and communication
	K	Real-estate, renting and business activities

The majority of the firms with 20 or more employees have head offices in the North of Italy. According to the Istat census, out of a total of 65,075 firms in the sectors surveyed, 37 per cent are located in the North-West, 29 per cent in the North-East, 18 per cent in the Centre, and the remainder in the South and Islands (Table 3a).

This northerly concentration, which is evident in both industry and services, is particularly marked in the case of large firms. The distribution of firms by number of employees reveals a large presence of small firms, reflecting a traditional feature of Italy’s productive system.<sup>45</sup> Again according to the census, 69 per cent of firms in the sectors surveyed have 20 to 49 employees and 2 per cent, 500 or more. Those of smaller size tend to be concentrated in the South.

Industrial firms outnumber service firms, accounting respectively for 62 and 38 per cent of the target population. The distribution of firms by branch of activity varies according to geographical area: in the North engineering firms are in the majority, while the Centre and the South have a large percentage of labour-intensive activities, such as catering, wholesale and retail trade and textile products (Figure 1a).

<sup>44</sup> According to the 8th Census of Industry and Services carried out by Istat in 2001.

<sup>45</sup> According to the census more than half the firms have only one employee. The share of firms in Italy with fewer than 50 employees is, according to Eurostat, about twice the average for France, Germany and the United Kingdom. In the whole productive system the average number of employees per firm is 3.9 (7.9 excluding firms with only one employee, free-lance workers and similar categories, and 9 in manufacturing alone). More than half the workers were attached to firms with 1 to 49 employees and just under 30 per cent to firms with 250 or more.

Table 3a

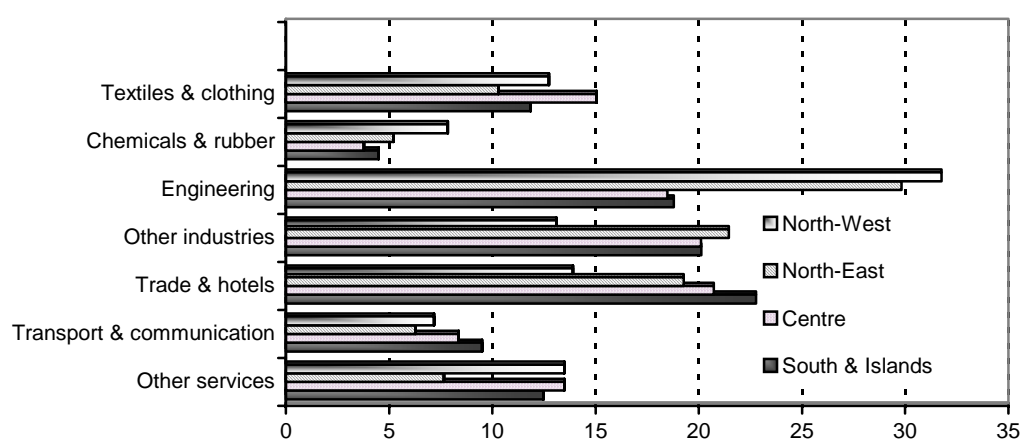
**Distribution of firms and employees in the reference population in 2001<sup>(a)</sup>**  
(units)

	Industry excluding construction		Non-financial private services	
	firms	employees	firms	Employees
<b>Geographical area<sup>(b)</sup></b>				
North-West .....	14,957	1,357,502	8,929	1,076,055
North-East .....	12,542	885,823	6,226	470,026
Centre .....	6,876	530,323	5,102	745,279
South & Islands .....	5,770	335,591	4,673	318,623
<b>Number of employees</b>				
20 – 49 .....	27,516	813,823	17,075	509,286
50 – 199 .....	10,498	941,541	6,243	563,982
200 – 499 .....	1,514	453,849	1,101	335,382
500 or more .....	617	900,026	511	1,201,333
<b>Total .....</b>	<b>40,145</b>	<b>3,109,239</b>	<b>24,930</b>	<b>2,609,983</b>

(a) Source: Istat, Census of Industry and Services, 2001. – (b) Of the head office.

Figure 1a

**Distribution of firms in the reference population  
by branch and geographical area in 2003**  
(per cent)



### A3. Sample design

The survey adopts a one-stage stratified sample design. The strata are combinations of branch of activity (according to the classification in Table 2a), size class (in terms of number of employees)<sup>46</sup> and regional location<sup>47</sup> of the firm's head office.

The sample size is determined in two stages. First, the number of size classes is identified using the method known as *optimum allocation to strata*,<sup>48</sup> which minimises variance of the sample means of the main

<sup>46</sup> The size classes are: 20-49, 50-99, 100-199, 200-499, 500-999, 1,000-4,999, and 5,000 or more employees. Firms in the last class form a self-representative (census) stratum. They are always included in the sample, except in rare cases of failure to answer.

<sup>47</sup> Piedmont and Valle d'Aosta are regarded as a single region.

<sup>48</sup> See for example W. G. Cochran, *Sampling Techniques*, John Wiley & Sons, New York, 1977.

variables observed.<sup>49</sup> Second, the number of units in each size class is divided among regions and branches of activity in proportion to the number of firms in the target population belonging to that stratum.<sup>50</sup>

The firms were selected from the databases of the Company Accounts Data Service, Cerved, Kompas<sup>51</sup> and other lists obtained independently by the Bank's branches in order to minimise the risk of under-coverage. The firms observed in the previous edition of the survey are always contacted again if they are still part of the target population,<sup>52</sup> while those no longer wishing to take part are replaced by others in the same branch and size class.

The sample is composed of 3,143 industrial firms, of which 1,236 have 20 to 49 employees and 1,907 have 50 or more, and of 994 service firms, of which 374 have 20 to 49 employees and 620 have 50 or more (Table A1). Population estimates are obtained by means of the weighting methods described below.

The sample distribution is similar to that of the reference population as regards branch of activity, for both industry and services (Figures 1 and 2 in the Introduction).

The sampling fractions (Table 3a) are 7.8 per cent for industry (15.1 per cent in the case of firms with 50 or more employees) and 4 per cent for services (7.9 per cent).<sup>53</sup>

**Table 4a**

**Firms observed and sampling fraction, 1999-2003**  
(units and per cent)

	1999		2000		2001		2002		2003	
	<b>Industry excluding construction</b>									
<b>Number of employees</b>										
20-49 .....	....	....	....	....	1,023	3.7	1,196	4.3	1,236	4.5
50 or more .....	1,135	9.7	1,475	12.3	1,769	14.0	1,855	14.7	1,907	15.1
<b>Total .....</b>	....	....	....	....	<b>2,792</b>	<b>7.0</b>	<b>3,051</b>	<b>7.6</b>	<b>3,143</b>	<b>7.8</b>
	<b>Non-financial private services</b>									
<b>Number of employees</b>										
20-49 .....	....	....	....	....	....	....	367	2.1	374	2.2
50 or more .....	....	....	....	....	....	....	556	7.1	620	7.9
<b>Total .....</b>	....	....	....	....	....	....	<b>923</b>	<b>3.7</b>	<b>994</b>	<b>4.0</b>
<b>Total industry and services..</b>	....	....	....	....	....	....	<b>3,974</b>	<b>6.1</b>	<b>4,137</b>	<b>6.4</b>

#### A4. Data collection and questionnaire

The data are collected in the course of interviews conducted by the Bank of Italy's branches every year between January and April concerning events and situations in the previous year.

The questionnaire (see Appendix C) is composed of a fixed part and a variable part. The fixed part contains general information on the firm and its structure, as well as annual data on investments, employment, turnover, operating result, capacity utilisation and financing. The variable part covers different

<sup>49</sup> Changes in investments, turnover and employment.

<sup>50</sup> The number of firms assigned for each region is then divided among the Bank's branches, which collect the data. In some areas of the country, such as Tuscany and the regions of the South and Islands, over-sampling was allowed for use in studies of the local economy.

<sup>51</sup> These are among the main Italian providers of corporate data and business information.

<sup>52</sup> Typical reasons for leaving the target population are change of activity and staff cutbacks to below the entry threshold. See Section A5 for a detailed discussion of this point.

<sup>53</sup> Because the sampling fraction of large firms is larger, the 2003 sample represents about one-quarter of the workforce in the two reference populations; the proportion is even larger in the case of investments (just under 40 per cent), which are concentrated among large firms. The share of turnover represented by the sample is about one-third in industry and slightly less than one-fifth in services.

themes each year, which are the subject of detailed cyclical or structural analysis. Topics covered so far include labour flexibility, price formation, information and communication technology, recruitment, trade credit and trade debt, internationalisation, and ownership and control.

Separate questionnaires are prepared for industry and for services, for firms with 20 to 49 employees and for firms with 50 or more. The general purpose of this distinction is to avoid having to ask questions that entail a greater respondent burden for small firms and to allow space, if necessary, to focus on separate topics for industry and services and for large and small firms.

The Economic Research Department decides the content and structure of the questionnaire shortly before it is administered. New questions are tested by the branches by means of pilot questionnaires designed to assess whether they are easy to understand and whether the information is effectively available from the firms.

In the case of employment, investments, and turnover, information is requested for three periods: the year just ended (preliminary results), the previous year (final results) and the following year (forecasts).

Questions are carefully selected and a limit is placed on the length of the questionnaire in order to minimise the effort involved, which is in any case monitored via a question at the end of the interview and specific information obtained from the interviewees.

## A5. Response behaviour

Thanks to the country-wide presence of Bank of Italy branches (which themselves make use of the data collected) and their continuous interaction with the local productive and financial world we are able to achieve a high response rate. The overall response rate for the 2003 survey was 74.9 per cent, which is only slightly lower than the average recorded from 1999 to 2002 (between 78.6 and 83.2 per cent). Table 5a contains some data on the evolution of exits from the sample for the last five editions of the survey of industrial firms.

**Table 5a**

**Reasons for leaving the survey of industrial firms, 1999-2003<sup>(a)</sup>**  
(units)

Year <sup>(b)</sup>	Closure, liquidation, bankruptcy	Merger	Change of main business	Failure to co-operate <sup>(c)</sup>	Other reasons <sup>(d)</sup>	Total
1999 .....	6	7	0	133	17	163
2000 .....	10	7	3	145	25	190
2001 .....	9	5	5	184	25	228
2002 .....	20	13	2	434	60	529
2003 .....	63	24	26	580	54	747

(a) Industrial firms with 50 or more employees up to 2001; with 20 or more from 2002. Classification is only possible from the second year in the sample of a given size class. – (b) The year shown is the year to which the data refer. – (c) Includes objective reasons for non-co-operation (receivership, appointment of a liquidator, etc.). – (d) Includes firms whose workforce at the end of the year is below the minimum threshold, firms unable to provide homogeneous information for the two years surveyed, and firms that did not give a reason.

A firm that has taken part in the survey at least once is regarded as having left the sample if it no longer belongs to the reference population owing to closure, liquidation or bankruptcy, or merger, or because it has left the branch of activity or size class surveyed. In addition, firms no longer willing to take part in the survey also exit the sample, if only temporarily.

## A6. Data quality checks

A system of quality checks on the collected data has been put in place to limit the distorting effects of non-sampling error. In particular, we check for the compatibility of values with the range allowed by the

question, the time consistency of panel data, the squaring of certain figures, and the presence of outliers. The data are verified at different levels, with each check being run on data that have passed the previous level.

The questionnaire is first checked by the officers in charge of the interviews, who apply their technical skills and knowledge of the local market to assess first the quality of the data collected.<sup>54</sup> The data-entry procedure then rejects everything outside the defined range of the variable or incompatible with the internal consistency of the questionnaire.

Data accepted by the procedure may still be outside certain thresholds based on past statistics or external information. In this case the data are highlighted for the attention of the interviewers, who check them and, if necessary, contact the firm for clarification. Confirmation is recorded in a special field. Only at this point is the checked data entered in the database.

The second set of checks is run on the database of responses. Editing techniques founded on statistical assumptions are used to detect extreme observations with respect to the frequencies based on (natural or logarithmic scale) cross-section distributions. The outliers are detected by comparing the value of each variable with the median of its distribution and setting as threshold a value proportional to the inter-quartile deviation.

Since the 2000 edition a further quality check has been put in place, called selective editing. This produces a list of priorities for checking outliers according to their importance for the final estimate. The values of each variable are compared with the predicted value of a simple regression model. On the basis of this statistic a Taylor approximation is used to build a score for each firm according to the impact each value would have on the final estimate in the model. The higher the score (i.e. the greater the impact of the observed value on the final estimate according to the model), the more urgent it is to check the value of that variable for that firm.<sup>55</sup> This process is applied to a set of several variables to draw up a ranking from the highest score down.

This method improves the quality of the estimates while reducing the respondent burden in the final stage of data processing because it is necessary to re-examine and possibly re-contact only the firms with a significant impact on the final estimates.

A treatment apart is reserved for data on firms affected by extraordinary events, such as mergers or splits. These firms are only included in the estimate if the data for final results, preliminary results and forecasts refer to a set of factories and workers that is homogeneous with the data collected in the same survey. The interviewer ensures their homogeneity either by considering the extraordinary event to have taken place at the beginning of the year of the final results, or by pretending the event never occurred and reconstructing the data accordingly; if this is not possible, the firm is excluded from further processing. Although this practice may cause distortions in the estimates (such as the total of investments), it does produce more stable estimates of changes and average values per employee, which are the main objective of the survey.

## **A7. Imputation of missing data**

The firms taking part in the survey may have difficulty answering some of the questions. If the missing answer concerns one of the main variables, such as investment spending or turnover, the missing data are imputed.

In general, ratio estimators are used to impute data, setting the number of the firm's employees as denominator (since this information is always available, otherwise the firm is excluded from the survey) in order to capture the scale effect.<sup>56</sup> In some cases the firm's time series data are used for the reconstruction, in the form of individual effects. This method gives an estimate of a level per employee that is obtained by combining a general cross-section mean and an average based on the firm's time series. The levels at time  $t$

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<sup>54</sup> At this stage, the interviewers use a form containing the main variables provided by the firms taking part in the previous survey to run a preliminary check on data consistency.

<sup>55</sup> For a detailed description of the process see P. Battipaglia, *Selective editing to increase efficiency in survey data processing. An application to the Bank of Italy's Business Survey on Industrial Firms*, Irving Fisher Committee Bulletin No. 13, December 2002.

<sup>56</sup> For an analysis of the situations in which a ratio estimator is preferable to the mean see F. Cicchitelli, A. Herzel and G. Montanari, *Il campionamento statistico*, Il Mulino Editore, Bologna, 1994.



and  $t+1$  are reconstructed in sequence, by calculating average changes in appropriate cells of homogeneous firms.<sup>57</sup>

The percentage of imputed data is usually small. A higher rate of non-response, in the order of 10 per cent, tends to occur with questions involving forecasts, particularly of investments.

## A8. Weighting

The weighting procedure takes place in two steps.

In step one, the combinations of branch of activity and size class are used as strata. Each firm is assigned an initial weight, given by the ratio of number of firms in the stratum cell to number of firms in the sample. Let  $h$  be the general stratum cell and, within it,  $N_h$  the number of firms in the target population and  $n_h$  the sample size.<sup>58</sup> The first stage weight of each firm in stratum  $h$  is therefore:

$$(1) \quad w_h^{(0)} = \frac{N_h}{n_h}$$

By construction, the sum of the weights of each cell therefore gives the size of the target population it contains.

In step two, post-stratification is performed using raking<sup>59</sup> to take into account also the geographical area  $k$  where the firm's head office is located. The initial weight is modified by an adjustment factor  $f_k$  so that the final weights can be obtained:

$$(2) \quad w_{hk}^{(1)} = w_h^{(0)} f_k$$

the sum of which coincides, in the post-stratum cells, with the number of firms in the target population they contain.<sup>60</sup>

Therefore the system of final weights does not take into account the complete combinations of sector, branch of activity and geographical area, partly because some of them may contain no sample units, and partly because such a system of weights might lead to overly variable estimates for some domains. Consequently, post-stratification is limited to reconstructing the combinations of a) North-West, North-East, Centre, South and Islands, b) firms with 20 to 49 and 50 or more employees, c) manufacturing, energy-producing, mining and quarrying, and service firms (the latter divided by section; see Section 2).

At every survey the weights are recalculated according to the distribution of the population on the latest available date.<sup>61</sup>

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57 Other devices are also used when imputing data. For example, if a cell in which an average is to be calculated contains a very small number of firms, it is merged with neighbouring cells according to size class or geographical area. Moreover, robust averages are calculated in the cells, limiting the influence of outliers in the reconstruction. In some cases specific solutions are used that exploit data collected in the questionnaire, as when there are arithmetic constraints between the variables or weaker links that nonetheless allow a reliable reconstruction of the missing datum. For instance, if a firm does not report the number of hirings during the year, this is calculated by adding the number of separations to the difference between the workforce at the beginning and end of the year; the same method is used for the number of separations. If the average workforce is not known, but the workforce at the beginning and end of the year are given, the former is imputed as the average of the two.

58 The symbol  $n_h$  indicates the actual sample size. This allows the weights to be implicitly corrected to take account of the total of missing responses.

59 Iterative proportional fitting (or raking) simultaneously aligns the sample weights to the distribution of certain characteristics known from outside sources. See for instance V. Verma, *Advanced sampling methods*, Manual for Statistical Trainers, Statistical Institute for Asia and the Pacific, Tokyo, 2000, p. 6.13-6.21.

60 A unit weight is assigned not only to firms with 5,000 or more employees, but also to a limited number of firms with extreme data that are not representative of their cell.

61 The population of firms currently available is that obtained from the 2001 Census of Industry and Services. The updates for the years between one census and the next are taken from the Statistical Archives of Active Firms (ASIA) and published periodically by Istat for the population of about two years earlier. The estimates are revised periodically to take account of updates in the survey reference population.

## A9. Estimation techniques

For a generic variable  $x$ , the aggregate is estimated with a Horvitz-Thompson unbiased estimator of the total,<sup>62</sup> given by:

$$(3) \quad X = \sum w_i x_i$$

The estimate of rates of change, for instance of turnover or investments, is obtained using as estimator the ratio of the sums of the levels for each firm, weighted with the inverse sampling fraction according to a formula of the following type:

$$(4) \quad r_{t,t-1} = \frac{\sum_i w_i X_i^t}{\sum_i w_i X_i^{t-1}}$$

The levels of the aggregate that are set as numerator and denominator of the formula are collected from the firm in the reference year, even when that firm had already taken part in the previous edition of the survey.<sup>63</sup>

In the specific case of percentage changes in investments, robust estimation techniques have been used since the 1999 survey.<sup>64</sup> The empirical distribution of this variable is ridden with outliers, partly owing to the nature of the phenomenon of interest: measurement of the levels, the ratio of which gives the rate of change, is complicated by the simultaneous presence of factors such as the typical long-term nature of spending, uncertainty, classification errors, and other sources of measurement error.

Using the method known as ‘type II Winsorisation’, the rates of change above and below the cut-offs fixed on the basis of the empirical distribution are squashed against the cut-off, in proportion to the sampling fraction, according to the following formula:

$$(5) \quad y_i^{wins} = \begin{cases} fy_i + (1-f)J & y_i < J \\ fy_i + (1-f)K & y_i > K \\ y_i & otherwise \end{cases}$$

in which  $y_i^{wins}$  is the Winsorised rate,  $y_i$  the observed rate,  $f$  the sampling fraction,  $J$  and  $K$  respectively the lower and upper cut-offs. In the case of firms labelled as outliers, the extreme values are set equal to the cut-off, without taking the sampling fraction into account.<sup>65</sup>

In a few cases the survey collects directly the rates of change in economic phenomena: this happens, for instance, with the rate of change of capacity utilisation or of percentages (such as the percentage of hours worked overtime). In this case, the estimate for the whole population is calculated as an average of the individual rates of change, weighted with inverse sampling fraction times the amount of the phenomenon (or, if unavailable, a proxy).

The deflators for the levels of investments and turnover are calculated as sectoral means of the individual deflators collected directly from the firms, weighted with the inverse sampling fraction times the amount of the phenomenon.

62 See for example F. Cicchitelli, A. Herzel and G. Montanari, *Il campionamento statistico*, Il Mulino Editore, Bologna, 1994.

63 The estimate of the trend of phenomena based on the data of a single survey has proved much more stable than the estimate obtained from a comparison of the values recorded in adjacent surveys, which sometimes reflect structural changes in the firms that are difficult to take into account, as well as problems of classification and measurement. These aspects are monitored more closely within a same questionnaire, leading to more accurate estimates of changes. However, this method does not take full account of the entry and exit of firms in the target population.

64 On robust estimation techniques in general see for example D.F. Andrews, P.J. Bickel, F.R. Hampel, P.J. Huber, W.H. Rogers and J.W. Tukey, *Robust estimates of location*, Princeton University Press, Princeton, 1972 or D.C. Hoaglin, F. Mosteller and J.W. Tukey (eds.) *Understanding robust and exploratory data*, John Wiley & Sons, New York, 1983. A classic reference for the theory is P. J. Huber, *Robust statistics*, John Wiley & Sons, New York, 1981.

65 In the literature, changing the values based on (5) is called ‘type II Winsorisation’; when the sampling fraction is not taken into account it is called ‘type I Winsorisation’: in the latter case, the values beyond the cut-off are completely squashed against it. For a detailed description of the method used to estimate the changes in investments see P. Battipaglia, *Robust Estimates of Investments from the Bank of Italy’s Business Survey*, Statistics Research Report, London School of Economics, London, 2000.

## A10. Estimating standard errors

Finding the analytical expressions of the variance of the estimators obtained from a non-proportional stratified sampling design, with weights adjusted to take account of post-stratified variables, can be a complex task<sup>66</sup> that suggests resorting to simulation methods able to take account of the original sample design and of subsequent adjustments instead.<sup>67</sup> We replicated 500 bootstrapped samples of the same size as the actual sample (with replacement), which were used to measure the means of the main aggregates, obtained by re-running the whole estimation process. The distribution of these means makes it possible to derive an estimate of the variability of the estimators.

**Table 6a**

**Standard errors of percentage changes, 2003 on 2002**  
(per cent)

	Change in total investments <sup>(a) (b)</sup>		Change in turnover <sup>(b)</sup>		Change in end-year workforce		Change in average workforce in year	
	estimate	standard error	estimate	standard error	estimate	standard error	estimate	standard error
<b>Industry excluding construction</b>								
<b>No. of employees</b>								
20–49.....	-18.8	3.3	-0.2	1.0	-1.9	0.6	-1.3	0.4
50–199.....	-14.2	2.5	-1.8	2.2	-1.3	0.4	-1.2	0.4
200–499.....	-12.2	4.4	0.3	1.2	-1.2	0.5	-1.0	0.5
500 or more.....	-19.0	2.1	0.1	0.7	-2.5	0.4	-2.1	0.5
<b>Geographical area<sup>(c)</sup></b>								
North-West.....	-14.0	2.9	-1.0	1.4	-1.9	0.3	-1.8	0.4
North-East	-18.9	2.7	0.1	0.9	-1.6	0.6	-1.1	0.4
Centre.....	-21.7	2.0	-0.1	0.6	-2.3	0.5	-1.8	0.4
South & Islands	-12.4	2.8	1.2	0.9	-1.0	0.5	-0.2	0.5
<b>Total.....</b>	<b>-16.9</b>	<b>1.7</b>	<b>-0.4</b>	<b>0.7</b>	<b>-1.8</b>	<b>0.2</b>	<b>-1.4</b>	<b>0.2</b>
<b>Non-financial private services</b>								
<b>No. of employees</b>								
20–49.....	-8.9	5.4	-7.2	3.4	1.4	0.9	0.2	1.2
50–199.....	-9.4	5.1	2.4	1.4	1.6	0.8	2.0	0.9
200–499.....	-6.9	3.8	5.0	1.6	1.6	1.8	2.3	1.4
500 or more.....	15.8	7.7	1.4	0.8	2.3	0.8	1.8	1.3
<b>Geographical area<sup>(c)</sup></b>								
North-West.....	17.8	9.6	-0.2	1.3	2.2	1.0	1.8	1.3
North-East	-9.4	3.9	-3.6	4.0	3.3	0.7	3.1	0.7
Centre	-8.7	2.2	-0.7	1.3	0.0	0.9	-0.4	1.3
South & Islands	-4.8	4.2	3.3	1.3	1.1	1.3	1.4	1.3
<b>Total.....</b>	<b>2.2</b>	<b>3.2</b>	<b>-1.0</b>	<b>1.4</b>	<b>1.8</b>	<b>0.5</b>	<b>1.5</b>	<b>0.7</b>

(a) Estimated using type II Winsorisation at the 5th and 95th percentile distribution of changes. – (b) At constant 2003 prices. – (c) Of the head office.

The highest standard errors occurred in the estimate of changes in investments owing to their intrinsic variability, while they were considerably smaller for turnover and employment. In the domain analyses, for example by firm size class or geographical area, the estimates are less accurate than the estimates for the total sample, a circumstance that should be taken in to account when analysing the results.<sup>68</sup>

<sup>66</sup> See for instance Chapter 7 of C. Särndal, B. Swensson and J. Wretman, *Model Assisted Survey Sampling*, Springer-Verlag, New York, 1992.

<sup>67</sup> For an introduction see B.Z. Mooney and R.D. Duval, *Bootstrapping. A Nonparametric Approach to Statistical Inference*, Sage, Newbury Park, 1993. Further work can be found in K. M. Wolter, *Introduction to Variance Estimation*, Springer Verlag, New York, 1985.

<sup>68</sup> This is why the size classes and branches of activity used for the analysis are more aggregated than in the sample design.

## A11. Comparison with external sources

Although the main purpose of the Bank of Italy's survey is to provide material for microeconomic studies rather than estimates of aggregates, it is worth comparing the latter with official statistics, which are usually based on broader samples and multiple sources of information, in order to verify whether the sample is representative and to provide further elements for comparison. Below is a comparison of the estimates of the main aggregates collected in the survey (total turnover and gross fixed investment) with those obtained from official sources, such as the Istat survey of enterprises and the national accounts.<sup>69</sup>

**Table 7a**

### Sectoral distribution of turnover and investments in 2002 <sup>(a)</sup> (per cent)

	Total turnover		Investments	
	Istat	Bank of Italy	Istat	Bank of Italy
<b>Industry excluding construction</b>				
Textiles, clothing, leather, footwear	8,8	10,5	6,2	7,5
Chemicals, rubber & plastic .....	17,8	17,4	14,8	12,7
Engineering .....	36,0	38,3	37,6	31,1
Other manufacturing .....	24,0	23,7	22,7	21,1
Energy, mining & quarrying .....	13,5	10,1	18,6	27,6
<b>Total.....</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>
<b>Non-financial private services</b>				
Wholesale & retail trade.....	59,3	65,5	22,8	28,1
Hotels & restaurants.....	2,9	2,7	3,5	5,2
Transport & communication .....	23,1	18,4	52,2	49,2
Other services to bus. & hhs .....	14,6	13,4	21,5	17,5
<b>Total.....</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

(a) Industry excluding construction and non-financial private services with 20 or more employees.

Turnover, which is not assessed in the national accounts, is collected in two surveys by Istat, *Rilevazione sulle piccole e medie imprese e sull'esercizio di arti e professioni* (Survey of small and medium-size businesses and arts and professions), which is a sample survey covering firms with up to 99 employees, and *Rilevazione sul sistema dei conti delle imprese* (Survey of firms' accounts), which is in the form of a census<sup>70</sup> and covers firms with 100 or more employees. From both surveys it is possible to extract estimates for the same population as in the Bank of Italy's surveys, although only until 2002, the last year for which the data, still subject to revision, are available.

Estimates of the distribution of total turnover and investments in 2002 by branch of activity, deduced from Istat and Bank of Italy figures, are generally similar. In industry the largest discrepancy is in the share of total turnover of energy-producing and mining and quarrying firms; in services it is in the percentage of turnover attributed to the wholesale and retail trade. In the case of investments the widest gap is for energy-producing and mining and quarrying firms, which are very few in number in the Bank of Italy's survey (Table 7a).

The estimates of the levels of per employee turnover are in line for industry, but in services the Bank of Italy's estimate is higher (Table 8a). The trend of turnover (Figure 2a), which can only be compared for manufacturing firms with 50 or more employees, shows a similar pattern, although differences in individual years are not always negligible.

<sup>69</sup> Comparisons of annual changes in turnover and investments are based on current values because Istat does not make estimates of these aggregates at constant prices for its own business surveys.

<sup>70</sup> Although this survey is in the form of a census, the data must still be interpreted with caution owing to the presence of missing values that may be imputed. For further details see Istat, *Conti Economici delle Imprese*, Rome, 1997.

Table 8a

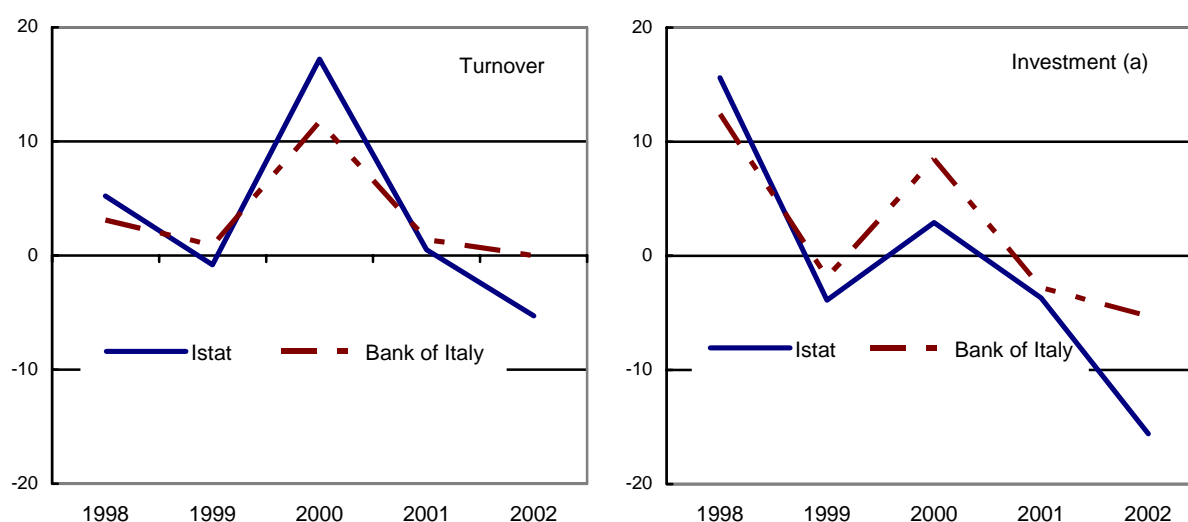
**Turnover per employee in 2002<sup>(a)</sup>**  
(€ thousands at current prices)

	Istat	Bank of Italy
Industry excluding construction.....	251.5	262.5
Non-financial private services .....	200.0	250.4

(a) Firms with 20 or more employees.

Figure 2a

**Percentage change on previous year in turnover and investments at current prices in manufacturing firms with 50 or more employees, 1998-2002**



(a) For the Bank of Italy the change in 1997-98 is only in investments in tangible goods.

Table 9a shows the estimated values of per employee investments based on the Istat and Bank of Italy samples for 2001 and 2002, in industry excluding construction and in non-financial private services,<sup>71</sup> divided by size class. Once again the results are generally consistent; the largest differences are found in 2002 for industrial firms with 50 or more employees and service firms with 20 to 49 employees.

If the comparison is limited to manufacturing firms with 50 or more employees, for which more years of observation are available, the trend of changes in investments follows a fairly similar pattern in the two surveys, with the exception of 2002 when Istat estimates a larger decline (on preliminary figures; Figure 2a).

In comparing the survey estimates with national accounts data it must be taken into account that in this exercise the estimate of investments is obtained by pooling information on the demand and the supply sides. On the demand side, the estimate of investments by owner branch is based mainly on the two surveys *Rilevazione sulle piccole e medie imprese e sull'esercizio di arti e professioni* and *Rilevazione sul sistema dei conti delle imprese* (see above). On the supply side, Istat estimates investments by producer branch using information on output, turnover and foreign trade.<sup>72</sup> This estimate precedes the estimate by owner branch and is more reliable as it is based on a larger number of sources, including some official sources. This is why,

<sup>71</sup> In the 2001 survey the Bank of Italy's sample only comprises industrial firms.

<sup>72</sup> The underlying surveys provide data on the volume of output and on sales, thereby indicating the branch of destination of the goods; the intersection between investments by producer sector and by user sector is described by the so-called distribution matrix, which is used to reconcile the demand-side and supply-side estimates.

when there is a discrepancy between total investments on the demand side and on the supply side, the two are equalised to bring into line the results of both approaches, constraining them with the supply-side estimates.

**Table 9a**

**Investments per employee**  
(€ thousands at current prices)

	Industry excluding construction		Non-financial private services	
	Istat <sup>(a)</sup>	Bank of Italy <sup>(b)</sup>	Istat <sup>(a)</sup>	Bank of Italy <sup>(b)</sup>
<b>Number of employees</b>	<b>2001</b>			
20-49 .....	8.1	8.7	5.5	-
50 or more .....	12.9	13.1	12.0	-
<b>Total</b> .....	11.6	11.9	10.7	-
<b>Number of employees</b>	<b>2002</b>			
20-49 .....	8.2	9.2	6.7	9.4
50 or more .....	11.1	14.1	12.7	12.5
<b>Total</b> .....	10.4	12.8	11.5	11.8

(a) Sources: Istat, *Rilevazione sulle piccole e medie imprese e sull'esercizio di arti e professioni*; *Rilevazione sul sistema dei conti delle imprese*. – (b) Robust estimates (Winsorised) obtained by adjusting the extreme values (with negative or positive sign) of the distributions of annual changes in investments on the basis of the 5th and 95th percentile; the method takes account of the sampling fraction in each stratum of the sample (*Winsorised type II estimator*).

Istat's demand-side surveys are comparable in methodology to the Bank of Italy's observations but represent only a portion of the information used to estimate investment in the national accounts. In industry excluding construction, the total of investments estimated in these surveys in 2001 represented about 76 per cent of the corresponding national accounts figure; in non-financial private services it was only 40 per cent.

Between 1999 and 2003 the Bank of Italy's estimate of the change in investments in non-construction industry was lower than in the national accounts, and even more so for 2003 on 2002 (-15.3 per cent against -4.5 per cent). Disregarding the differences due to the larger dataset underlying the national accounts estimates (see above), the discrepancy is due at least in part to the exclusion of firms with fewer than 20 employees from the Bank of Italy's sample. Istat's surveys show, in fact, that in 2001 and 2002 capital formation by firms with fewer than 20 employees – whose investments accounted for about one-quarter of the total for industry excluding construction – was greater than that of larger firms (in percentage terms +10.1 against -4.6 in 2001 and +3.6 against -13.7 in 2002). The inclusion of firms with 20 to 49 employees in the Bank of Italy's surveys brought the estimates based on the two sources closer in 2002, while for the other two years available (2001 and 2003) it confirmed the estimates obtained from large firms alone (Table 10a). However, any comparison with more recent national accounts data must be regarded as a preliminary exercise since the data are susceptible to revision in the three years following their original publication.

The Bank of Italy has conducted its survey of the service sector since 2002. In the two years available the corresponding national accounts data show a change in the sector's investments that is of the same sign, but smaller than in the Bank's survey (4 per cent against 5.5 per cent in 2002; 1.7 per cent against 3.5 per cent in 2003; Table 10a).

The information, however, relates to two different reference populations. First, the Bank of Italy's survey covers only non-financial private services, which account for about 75 per cent of the branch's total. Istat's corresponding aggregate, which is only published up to 2001 so far, follows a pattern that is generally similar to that of the service sector as a whole, despite sometimes considerable differences in the magnitude of the change (1.2 percentage points in absolute value on average for 1990-2001; see Figure 3a).

Second, the Bank of Italy's survey is confined to firms with 20 or more employees, which in the branch of non-financial private services (according to the Istat surveys) account for around 60 per cent of total investment. In 2001 and 2002 investments of firms with fewer than 20 employees grew less than those of larger firms (+11 per cent against +32.5 per cent in 2001 and -1.1 per cent and +15.9 per cent in 2002). This helps to explain the stronger performance of investments as estimated in the Bank of Italy's survey.

**Table 10a**

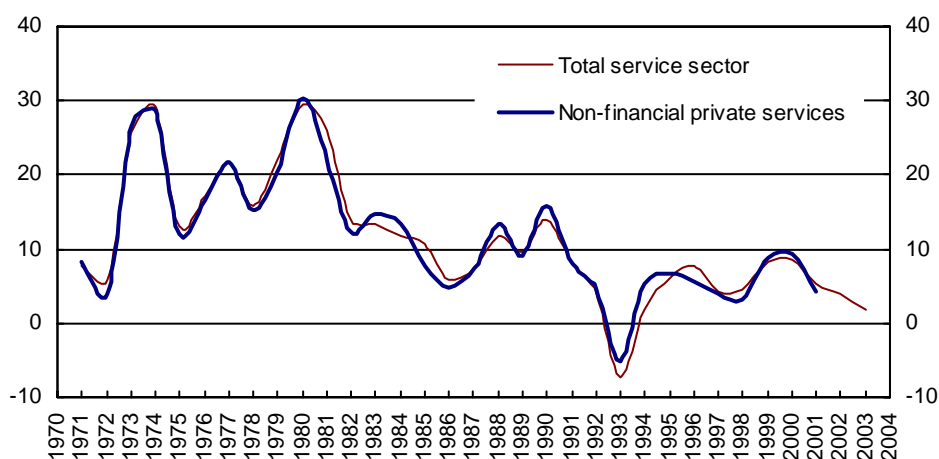
**Change in investments at current prices**  
(per cent)

	1999	2000	2001	2002	2003
	<b>Industry excluding construction</b>				
Istat (national accounts) .....	1.7	10.7	1.8	3.3	-4.5
Bank of Italy (50 or more employees) .....	-2.8	5.3	0.6	0.2	-14.9
Bank of Italy (20 or more employees) .....	-	-	0.6	1.2	-15.3
	<b>Non-financial private services</b>				
Istat (national accounts) .....	8.4	8.6	5.3	4.0	1.7
Istat (national accounts) (a) .....	8.7	9.3	4.3	-	-
Bank of Italy (20 or more employees) (a).....	-	-	-	5.5	3.5
	<b>Total industry and services</b>				
Istat (national accounts) .....	-	-	-	3.8	0.0
Bank of Italy (a) .....	-	-	-	2.8	-6.8

(a) Only non-financial private services.

**Figure 3a**

**Change in investments at current prices in the service sector**  
(per cent)



Source: Istat, national accounts.

At the aggregate level (industry and services) the national accounts data indicate that on average in the three years 1999-2001 gross fixed investment of the branches covered by the Bank of Italy's surveys – industry excluding construction and non-financial private services – represented in nominal terms about 76 per cent of that of the economy as a whole.

In 2002, the Bank of Italy's survey indicated that in non-construction industry and non-financial private services together nominal spending on investments grew by 2.8 per cent, followed by a decline of 6.8 per cent in 2003 (Table 10a). The only national accounts figure with which a comparison is possible is aggregate investment in non-construction industry and service activities as a whole, since more detailed sector information is currently only available up to 2001. In 2002 this aggregate grew by a very similar amount to that of the survey (3.8 per cent), but was stationary in 2003.<sup>73</sup>

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<sup>73</sup> As pointed out earlier, Istat's is a preliminary result and may be revised in the following three years.



**Appendix B:**  
**Statistical Tables**



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## Composition of the samples and the reference populations

(units)

	Firms with 20-49 employees		Firms with 50 or more employees		Total firms with 20 or more employees	
	sample size 2003	population size <sup>(1)</sup>	sample size 2003	population size <sup>(1)</sup>	sample size 2003	population size <sup>(1)</sup>
	<b>Industrial firms <sup>(2)</sup></b>					
<b>Geographical area <sup>(3)</sup></b>						
North-West .....	195	9,615	549	5,342	744	14,957
North-East .....	176	8,606	429	3,935	605	12,542
Centre .....	252	4,999	416	1,877	668	6,876
South and Islands .....	613	4,295	513	1,475	1,126	5,770
<b>Number of employees</b>						
20 – 49 .....	1,236	27,516	–	–	1,236	27,516
50 – 199 .....	–	–	1,189	10,498	1,189	10,498
200 – 499 .....	–	–	406	1,514	406	1,514
500 or more .....	–	–	312	617	312	617
<b>Branch of activity</b>						
Textiles, clothing, leather, shoes ..	171	5,736	288	2,153	459	7,889
Chemicals, rubber and plastic .....	124	2,239	214	1,452	338	3,691
Engineering .....	436	11,473	792	5,563	1,228	17,036
Other manufacturing .....	469	7,627	556	3,219	1,025	10,847
Energy, mining & quarrying .....	36	440	57	242	93	682
<b>Total industrial firms .....</b>	<b>1,236</b>	<b>27,516</b>	<b>1,907</b>	<b>12,629</b>	<b>3,143</b>	<b>40,145</b>
	<b>Service firms <sup>(4)</sup></b>					
<b>Geographical area <sup>(3)</sup></b>						
North-West .....	77	5,826	148	3,102	225	8,929
North-East .....	60	4,408	157	1,818	217	6,226
Centre .....	85	3,485	145	1,617	230	5,102
South and Islands .....	152	3,356	170	1,317	322	4,673
<b>Number of employees</b>						
20 – 49 .....	374	17,075	–	–	374	17,075
50 – 199 .....	–	–	327	6,243	327	6,243
200 – 499 .....	–	–	149	1,101	149	1,101
500 or more .....	–	–	144	511	144	511
<b>Branch of activity</b>						
Trade, hotels and restaurants .....	234	9,538	263	3,145	497	12,683
Transport and communication .....	65	3,022	169	1,792	234	4,814
Other business & h.hold services ..	75	4,515	188	2,918	263	7,433
<b>Total service firms .....</b>	<b>374</b>	<b>17,075</b>	<b>620</b>	<b>7,855</b>	<b>994</b>	<b>24,930</b>
<b>Total .....</b>	<b>1,610</b>	<b>44,591</b>	<b>2,527</b>	<b>20,484</b>	<b>4,137</b>	<b>65,075</b>

(1) Population data are from Istat and refer to 2001. – (2) Firms in industry excluding construction. – (3) The geographical area is defined by the location of the registered head office (North-West = Piedmont, Valle d'Aosta, Lombardy and Liguria; North-East = Veneto, Trentino-Alto Adige, Friuli Venezia Giulia and Emilia Romagna; Centre = Tuscany, Umbria, Marche and Lazio; South and Islands = Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicily and Sardinia). – (4) Does not include firms in credit and insurance, public services and other social and personal services.

## Firms belonging to a group, 2003

(per cent)

	Firms belonging to a group	Nationality of the group			
		Italian	EU countries <sup>(1)</sup>	Non-EU countries <sup>(1)</sup>	Total
<b>Industrial firms</b>					
<b>Geographical area</b>					
North-West .....	30.6	67.6	26.0	6.4	100.0
North-East .....	27.2	75.1	17.6	7.4	100.0
Centre .....	19.4	80.6	13.0	6.4	100.0
South and Islands .....	15.4	83.3	9.1	7.7	100.0
<b>Number of employees</b>					
20 – 49 .....	16.6	72.9	21.3	5.8	100.0
50 – 199 .....	37.6	74.7	19.5	5.8	100.0
200 – 499 .....	75.9	72.1	16.8	11.0	100.0
500 or more .....	87.6	65.6	19.9	14.5	100.0
<b>Branch of activity</b>					
Textiles, clothing, leather, shoes ..	19.5	92.6	6.2	1.2	100.0
Chemicals, rubber and plastic .....	34.6	57.9	31.5	10.6	100.0
Engineering .....	28.6	66.2	24.6	9.2	100.0
Other manufacturing .....	21.3	82.2	14.1	3.6	100.0
Energy, mining & quarrying.....	28.8	91.8	5.4	2.8	100.0
<b>Share of exports</b>					
Less than one-third .....	22.4	80.7	15.4	3.8	100.0
From one- to two-thirds .....	29.5	72.6	19.2	8.3	100.0
More than two-thirds .....	31.6	53.0	33.8	13.2	100.0
<b>Total industrial firms .....</b>	<b>25.4</b>	<b>73.1</b>	<b>20.0</b>	<b>6.8</b>	<b>100.0</b>
<b>Service firms</b>					
<b>Geographical area</b>					
North-West .....	41.0	79.3	13.3	7.4	100.0
North-East .....	30.3	82.9	11.8	5.3	100.0
Centre .....	27.7	82.3	9.6	8.1	100.0
South and Islands .....	17.5	97.3	2.7	0.0	100.0
<b>Number of employees</b>					
20 – 49 .....	27.5	84.7	10.7	4.5	100.0
50 – 199 .....	35.0	80.7	8.8	10.5	100.0
200 – 499 .....	49.4	75.3	22.2	2.5	100.0
500 or more .....	68.1	79.0	12.7	8.3	100.0
<b>Branch of activity</b>					
Trade, hotels and restaurants	23.7	74.9	18.5	6.5	100.0
Transport and communication.....	26.5	85.0	14.3	0.7	100.0
Other business & h.hold services ..	46.9	88.6	3.4	8.0	100.0
<b>Total service firms .....</b>	<b>31.2</b>	<b>82.7</b>	<b>11.1</b>	<b>6.2</b>	<b>100.0</b>
<b>Total .....</b>	<b>27.6</b>	<b>77.2</b>	<b>16.2</b>	<b>6.6</b>	<b>100.0</b>

(1) European Union on 31-12-2003.

Table B2

## Concentration of ownership and controlling entity in 2003

(per cent)

	Quota of first shareholder	Quota of first three shareholders	Controlling entity					Listed firms
			physical person	holding, sub-holding	bank, other financial co., insurance co.	non-financial company	total	
<b>Industrial firms with 50 or more employees</b>								
<b>Geographical area</b>								
North-West .....	66.4	90.2	56.0	30.4	4.5	9.1	100.0	1.2
North-East .....	68.8	91.9	50.4	30.5	6.3	12.9	100.0	1.1
Centre .....	63.2	90.4	55.7	27.7	8.2	8.4	100.0	1.2
South and Islands .....	62.1	90.7	68.2	19.2	3.8	8.8	100.0	0.2
<b>Number of employees</b>								
20 – 49 .....	–	–	–	–	–	–	–	–
50 – 199 .....	64.1	90.4	62.3	22.9	5.5	9.3	100.0	0.3
200 – 499 .....	75.1	92.7	25.8	53.6	5.9	14.7	100.0	2.9
500 or more .....	79.6	93.1	14.2	66.1	6.9	12.9	100.0	10.3
<b>Branch of activity</b>								
Textiles, clothing, leather, shoes ..	63.0	91.8	68.8	19.4	5.2	6.6	100.0	1.0
Chemicals, rubber and plastic .....	72.9	93.1	40.0	44.9	6.3	8.9	100.0	0.3
Engineering .....	68.6	91.4	53.6	30.1	4.8	11.5	100.0	0.8
Other manufacturing .....	61.5	88.8	59.0	25.6	7.1	8.2	100.0	1.3
Energy, mining & quarrying .....	63.5	84.1	25.1	26.5	1.6	46.7	100.0	9.7
<b>Total industrial firms .....</b>	<b>66.2</b>	<b>90.8</b>	<b>55.5</b>	<b>28.7</b>	<b>5.6</b>	<b>10.2</b>	<b>100.0</b>	<b>1.1</b>

Table B3

## Firms affected by mergers, acquisitions, contributions, transfers and splits in 2003

(per cent)

	Firms with 20-49 employees	Firms with 50 or more employees	Total firms with 20 or more employees
<b>Industrial firms</b>			
<b>Geographical area</b>			
North-West .....	0.7	4.0	1.9
North-East .....	2.3	9.0	4.4
Centre .....	3.1	5.8	3.8
South and Islands .....	1.7	4.5	2.4
<b>Number of employees</b>			
20 – 49 .....	1.8	–	1.8
50 – 199 .....	–	4.6	4.6
200 – 499 .....	–	10.7	10.7
500 or more .....	–	16.0	16.0
<b>Branch of activity</b>			
Textiles, clothing, leather, shoes ..	0.7	5.1	1.9
Chemicals, rubber and plastic .....	0.9	3.1	1.8
Engineering .....	1.5	5.9	2.9
Other manufacturing .....	2.6	6.6	3.8
Energy, mining & quarrying .....	::	20.3	15.1
<b>Share of exports</b>			
Less than one-third .....	2.2	5.6	3.1
From one- to two-thirds .....	::	7.1	3.6
More than two-thirds .....	::	4.9	2.0
<b>Total industrial firms .....</b>	<b>1.8</b>	<b>5.9</b>	<b>3.1</b>
<b>Service firms</b>			
<b>Geographical area</b>			
North-West .....	6.0	9.5	7.2
North-East .....	1.6	6.2	2.9
Centre .....	4.4	8.5	5.7
South and Islands .....	1.0	6.3	2.5
<b>Number of employees</b>			
20 – 49 .....	3.6	–	3.6
50 – 199 .....	–	7.6	7.6
200 – 499 .....	–	8.3	8.3
500 or more .....	–	12.0	12.0
<b>Branch of activity</b>			
Trade, hotels and restaurants .....	4.2	7.9	5.1
Transport and communication.....	1.4	5.2	2.8
Other business & h.hold services ..	3.6	9.8	6.0
<b>Total service firms .....</b>	<b>3.6</b>	<b>8.0</b>	<b>4.9</b>
<b>Total .....</b>	<b>2.4</b>	<b>6.7</b>	<b>3.8</b>

## End-of-year workforce in 2003

(number, per cent)

	Average workforce at the end of the year	Percentage change on previous year	
		2003	2004 <sup>(1)</sup>
<b>Industrial firms</b>			
<b>Geographical area</b>			
North-West .....	99	-1.9	-0.5
North-East .....	78	-1.6	1.2
Centre .....	75	-2.3	-0.8
South and Islands .....	52	-1.0	0.5
<b>Number of employees</b>			
20 – 49 .....	33	-1.9	0.3
50 – 199 .....	93	-1.3	0.4
200 – 499 .....	314	-1.2	-0.2
500 or more .....	1,485	-2.5	-0.4
<b>Branch of activity</b>			
Textiles, clothing, leather, shoes ..	61	-4.8	-1.3
Chemicals, rubber and plastic .....	100	0.4	0.7
Engineering .....	87	-1.7	0.0
Other manufacturing .....	72	-0.8	1.1
Energy, mining & quarrying .....	245	-3.0	-2.0
<b>Share of exports</b>			
Less than one-third .....	69	-1.8	0.3
From one- to two-thirds .....	107	-2.0	-0.4
More than two-thirds .....	97	-1.6	0.2
<b>Total industrial firms .....</b>	<b>82</b>	<b>-1.8</b>	<b>0.1</b>
<b>Service firms</b>			
<b>Geographical area</b>			
North-West .....	110	2.2	2.9
North-East .....	88	3.3	1.7
Centre .....	103	0.0	1.9
South and Islands .....	59	1.1	1.2
<b>Number of employees</b>			
20 – 49 .....	33	1.4	1.4
50 – 199 .....	91	1.6	1.7
200 – 499 .....	325	1.6	2.5
500 or more .....	1,641	2.3	2.9
<b>Branch of activity</b>			
Trade, hotels and restaurants .....	78	4.0	2.4
Transport and communication.....	127	0.3	0.7
Other business & h.hold services ..	99	0.1	3.1
<b>Total service firms .....</b>	<b>94</b>	<b>1.8</b>	<b>2.2</b>
<b>Total .....</b>	<b>86</b>	<b>-0.3</b>	<b>0.9</b>

(1) Forecast.



## Labour turnover, hirings and separations in 2003

(per cent)

	Labour turnover <sup>(1)</sup>	Hirings			Separations		
		payroll workforce	fixed-term contracts	total	end of fixed-term contract	other reasons	total
<b>Industrial firms</b>							
<b>Geographical area</b>							
North-West .....	23.5	4.9	5.8	10.8	6.1	6.6	12.7
North-East .....	33.5	7.1	8.8	15.9	9.2	8.3	17.5
Centre .....	28.8	4.9	8.4	13.3	8.5	7.0	15.6
South and Islands .....	43.3	6.7	14.4	21.2	14.4	7.7	22.2
<b>Number of employees</b>							
20 – 49 .....	34.4	6.9	9.4	16.2	9.2	8.9	18.1
50 – 199 .....	30.4	6.0	8.6	14.6	9.0	6.9	15.9
200 – 499 .....	26.9	5.1	7.7	12.8	8.2	5.9	14.1
500 or more .....	23.6	4.7	5.8	10.6	6.3	6.8	13.1
<b>Branch of activity</b>							
Textiles, clothing, leather, shoes ..	26.4	5.2	5.5	10.8	5.8	9.8	15.7
Chemicals, rubber and plastic .....	21.8	4.9	6.2	11.1	5.8	4.9	10.7
Engineering .....	24.9	5.8	5.8	11.6	6.3	7.0	13.3
Other manufacturing .....	45.4	7.0	15.3	22.3	15.3	7.8	23.1
Energy, mining & quarrying.....	15.0	2.9	3.1	6.0	3.5	5.5	9.0
<b>Share of exports</b>							
Less than one-third .....	32.3	5.9	9.3	15.3	9.5	7.5	17.0
From one- to two-thirds .....	24.1	5.2	5.8	11.1	6.2	6.9	13.1
More than two-thirds .....	27.9	6.1	7.1	13.1	7.5	7.2	14.8
<b>Total industrial firms.....</b>	<b>29.1</b>	<b>5.7</b>	<b>7.9</b>	<b>13.7</b>	<b>8.2</b>	<b>7.3</b>	<b>15.5</b>
<b>Service firms</b>							
<b>Geographical area</b>							
North-West .....	49.1	12.8	12.8	25.6	14.0	9.5	23.5
North-East .....	72.9	13.3	24.8	38.0	24.3	10.5	34.8
Centre .....	48.4	8.8	15.4	24.2	15.8	8.4	24.2
South and Islands .....	60.5	9.6	21.1	30.8	20.5	9.2	29.7
<b>Number of employees</b>							
20 – 49 .....	63.5	9.9	22.6	32.4	22.3	8.7	31.1
50 – 199 .....	56.8	12.7	16.5	29.2	16.8	10.8	27.6
200 – 499 .....	66.3	15.3	18.7	33.9	17.8	14.5	32.3
500 or more .....	45.6	10.5	13.4	23.9	14.8	6.8	21.7
<b>Branch of activity</b>							
Trade, hotels and restaurants .....	78.6	11.7	29.6	41.2	29.1	8.3	37.3
Transport and communication .....	36.4	8.5	9.9	18.4	10.3	7.8	18.0
Other business & h.hold services ..	42.1	14.1	7.0	21.1	8.6	12.4	21.0
<b>Total service firms.....</b>	<b>55.9</b>	<b>11.6</b>	<b>17.2</b>	<b>28.8</b>	<b>17.6</b>	<b>9.4</b>	<b>27.0</b>
<b>Total .....</b>	<b>40.1</b>	<b>8.2</b>	<b>11.7</b>	<b>19.9</b>	<b>12.0</b>	<b>8.2</b>	<b>20.2</b>

(1) Sum of flows of hirings and separations during the year as a percentage of average workforce (mean of workforce at the beginning and end of the year).

Table C3

## Fixed-term work, temporary work and immigrant workers in 2003

(per cent, number, average points)

	Fixed-term work			Temporary work <sup>(1)</sup>		Immigrant workers
	% of workforce at end of year	opinion of effectiveness of renewing fixed-term contract <sup>(2)</sup>		number of assignments	% hours temporary work over total	% of workforce at end of year
		production workers	clerical workers			
<b>Industrial firms</b>						
<b>Geographical area</b>						
North-West .....	4.7	2.3	2.3	15.5	2.1	2.2
North-East .....	6.6	2.2	2.3	12.0	2.2	4.3
Centre .....	6.1	2.4	2.4	6.8	1.4	3.1
South and Islands .....	9.1	2.4	2.4	20.4	1.5	0.8
<b>Number of employees</b>						
20 – 49 .....	6.5	2.3	2.3	-	-	3.8
50 – 199 .....	5.9	2.3	2.4	6.1	1.8	3.2
200 – 499 .....	5.6	2.3	2.3	28.3	2.4	2.8
500 or more .....	5.5	2.4	2.3	118.6	2.0	1.5
<b>Branch of activity</b>						
Textiles, clothing, leather, shoes ..	4.2	2.3	2.3	5.7	1.5	2.8
Chemicals, rubber and plastic .....	5.4	2.4	2.4	19.2	2.6	2.7
Engineering .....	5.6	2.3	2.3	16.8	2.2	2.6
Other manufacturing .....	8.7	2.3	2.3	11.5	1.9	3.8
Energy, mining & quarrying .....	1.7	2.4	2.2	4.8	0.6	0.2
<b>Share of exports</b>						
Less than one-third .....	6.6	2.3	2.4	10.5	1.8	3.3
From one- to two-thirds .....	4.9	2.2	2.2	18.5	2.0	2.4
More than two-thirds .....	5.5	2.2	2.2	13.9	2.3	2.6
<b>Total industrial firms.....</b>	<b>5.9</b>	<b>2.3</b>	<b>2.3</b>	<b>13.5</b>	<b>2.0</b>	<b>2.9</b>
<b>Service firms</b>						
<b>Geographical area</b>						
North-West .....	8.4	2.2	2.2	51.7	0.8	4.4
North-East .....	11.8	2.3	2.3	19.4	1.1	4.3
Centre .....	7.1	2.2	2.2	98.9	0.5	3.9
South and Islands .....	10.7	2.3	2.2	12.3	0.5	1.2
<b>Number of employees</b>						
20 – 49 .....	9.5	2.1	2.2	-	-	2.4
50 – 199 .....	11.1	2.4	2.3	3.3	0.4	4.7
200 – 499 .....	10.3	2.5	2.5	159.7	0.6	6.2
500 or more .....	7.1	2.4	2.3	362.0	1.4	2.9
<b>Branch of activity</b>						
Trade, hotels and restaurants .....	12.8	2.3	2.3	82.5	1.0	2.6
Transport and communication.....	7.3	2.1	2.2	12.5	0.7	4.3
Other business & h.hold services ..	5.9	2.2	2.2	32.9	0.6	5.2
<b>Total service firms .....</b>	<b>9.2</b>	<b>2.2</b>	<b>2.3</b>	<b>48.3</b>	<b>0.8</b>	<b>3.8</b>
<b>Total .....</b>	<b>7.3</b>	<b>2.3</b>	<b>2.3</b>	<b>24.7</b>	<b>1.6</b>	<b>3.3</b>

(1) Only firms with 50 or more employees. – (2) Average of: 1=not effective, 2=fairly effective, 3=very effective.

## Per capita hours worked and hours overtime in 2002-2003

(hours, percentage change)

	2003		Percentage change on previous year	
	hours worked during the year	hours worked overtime during the year	hours worked during the year	hours worked overtime during the year
<b>Industrial firms</b>				
<b>Geographical area</b>				
North-West .....	1,631	68	-0.7	0.0
North-East .....	1,635	68	-0.5	-4.2
Centre .....	1,615	63	-0.6	-1.6
South and Islands .....	1,685	58	-0.9	-3.3
<b>Number of employees</b>				
20 – 49 .....	1,698	62	0.1	-1.6
50 – 199 .....	1,659	67	-0.5	-2.9
200 – 499 .....	1,616	67	-0.8	-2.9
500 or more .....	1,556	69	-1.6	-1.4
<b>Branch of activity</b>				
Textiles, clothing, leather, shoes	1,569	42	-1.2	0.0
Chemicals, rubber and plastic	1,690	59	0.1	-1.7
Engineering .....	1,640	71	-0.8	-2.7
Other manufacturing .....	1,670	71	0.0	-2.8
Energy, mining & quarrying...	1,492	88	-3.1	-1.1
<b>Share of exports</b>				
Less than one-third .....	1,644	67	-0.4	-1.5
From one- to two-thirds .....	1,625	63	-1.3	-4.5
More than two-thirds .....	1,625	67	-0.5	-2.9
<b>Total industrial firms .....</b>	<b>1,635</b>	<b>66</b>	<b>-0.7</b>	<b>-2.9</b>
<b>Service firms</b>				
<b>Geographical area</b>				
North-West .....	1,625	90	-0.5	-1.1
North-East .....	1,639	83	-1.1	-2.4
Centre .....	1,681	89	0.5	3.5
South and Islands .....	1,755	83	-0.1	3.8
<b>Number of employees</b>				
20 – 49 .....	1,746	74	-1.1	-2.7
50 – 199 .....	1,752	92	-0.1	0.0
200 – 499 .....	1,665	92	0.3	-2.1
500 or more .....	1,526	91	-0.3	1.1
<b>Branch of activity</b>				
Trade, hotels and restaurants .....	1,626	84	-0.7	1.2
Transport and communication .....	1,723	99	1.6	0.0
Other business & h.hold services ..	1,643	82	-1.5	-1.2
<b>Total service firms .....</b>	<b>1,657</b>	<b>87</b>	<b>-0.4</b>	<b>0.0</b>
<b>Total .....</b>	<b>1.644</b>	<b>75</b>	<b>-0.5</b>	<b>-1.3</b>

## Recruitment in 2003

(per cent of firms, weeks)

	Production workers and apprentices		Clerical workers and junior managers	
	filled vacancies	weeks before position filled	filled vacancies	weeks before position filled
	<b>Industrial firms</b>			
<b>Geographical area</b>				
North-West .....	76.0	6	40.0	5
North-East .....	82.6	4	50.4	5
Centre .....	77.5	3	42.3	4
South and Islands .....	72.3	4	32.7	3
<b>Number of employees</b>				
20 – 49 .....	74.1	5	37.5	5
50 – 199 .....	85.7	4	51.6	4
200 – 499 .....	91.5	5	69.0	5
500 or more .....	93.2	4	86.4	6
<b>Branch of activity</b>				
Textiles, clothing, leather, shoes ..	69.4	5	33.2	5
Chemicals, rubber and plastic .....	87.8	5	44.5	5
Engineering .....	77.9	4	47.0	5
Other manufacturing .....	80.6	4	43.4	4
Energy, mining & quarrying .....	80.7	2	36.2	3
<b>Share of exports</b>				
Less than one-third .....	76.2	5	42.3	5
From one- to two-thirds .....	81.4	4	43.4	5
More than two-thirds .....	80.1	5	44.7	4
<b>Total industrial firms.....</b>	<b>77.9</b>	<b>5</b>	<b>42.9</b>	<b>5</b>
	<b>Service firms</b>			
<b>Geographical area</b>				
North-West .....	69.5	3	54.0	7
North-East .....	76.3	3	62.5	4
Centre .....	70.0	3	52.3	3
South and Islands .....	68.5	2	42.9	2
<b>Number of employees</b>				
20 – 49 .....	71.0	3	49.1	5
50 – 199 .....	69.2	2	62.0	3
200 – 499 .....	83.2	5	71.0	5
500 or more .....	79.9	3	86.0	4
<b>Branch of activity</b>				
Trade, hotels and restaurants .....	79.9	3	51.6	4
Transport and communication.....	76.8	2	45.0	6
Other business & h.hold services ..	48.3	3	63.8	4
<b>Total service firms.....</b>	<b>71.2</b>	<b>3</b>	<b>53.9</b>	<b>4</b>
<b>Total .....</b>	<b>75.4</b>	<b>4</b>	<b>47.2</b>	<b>5</b>

## Opinions of recruitment methods and their usage in 2003

(per cent of firms, average points<sup>(1)</sup>)

	Production workers and apprentices			Clerical workers and junior managers		
	firms with 20-49 employees	firms with 50 or more employees	total firms with 20 or more employees	firms with 20-49 employees	firms with 50 or more employees	total firms with 20 or more employees
<b>Industrial firms</b>						
Public employment agency	28.4	33.6	30.2	22.2	26.7	23.8
<i>average points given</i> .....	1.6	1.4	1.5	1.5	1.4	1.5
Private employment agency .....	47.7	61.4	52.3	35.3	56.7	42.8
<i>average points given</i> .....	2.3	2.2	2.3	2.3	2.3	2.3
Advertisement .....	28.1	29.6	28.6	30.8	37.5	33.2
<i>average points given</i> .....	1.9	1.9	1.9	2.0	2.2	2.0
Internet/e-mail search .....	10.3	13.9	11.5	12.6	18.7	14.7
<i>average points given</i> .....	1.6	1.7	1.6	1.6	1.8	1.7
Recommendation of employees etc. ....	54.6	58.4	55.9	46.1	54.2	49.0
<i>average points given</i> .....	2.2	2.2	2.2	2.2	2.1	2.2
CVs received .....	64.7	80.1	69.9	63.6	79.0	69.0
<i>average points given</i> .....	2.2	2.2	2.2	2.2	2.3	2.2
<b>Service firms</b>						
Public employment agency .....	28.8	35.0	30.8	26.6	28.9	27.4
<i>average points given</i> .....	1.6	1.6	1.6	1.5	1.5	1.5
Private employment agency .....	32.4	29.6	31.5	29.8	35.7	31.8
<i>average points given</i> .....	2.0	2.1	2.0	2.1	2.2	2.1
Advertisement .....	29.5	31.4	30.1	32.3	35.9	33.5
<i>average points given</i> .....	2.0	2.0	2.0	2.1	2.0	2.1
Internet/e-mail search .....	11.6	16.5	13.2	14.9	20.2	16.7
<i>average points given</i> .....	1.7	1.8	1.7	1.8	1.8	1.8
Recommendation of employees etc. ....	56.7	52.8	55.4	50.4	47.5	49.4
<i>average points given</i> .....	2.2	2.1	2.2	2.2	2.0	2.1
CVs received .....	69.2	81.9	73.3	73.2	81.8	76.1
<i>average points given</i> .....	2.2	2.4	2.3	2.3	2.4	2.3

(1) Average of: 1=not efficient, 2=fairly efficient, 3=very efficient.

## Total gross earnings and minimum wages per national agreements in 2003

(€ thousands, per cent)

	Total gross earnings	Minimum earnings over total gross earnings
<b>Industrial firms</b>		
<b>Geographical area</b>		
North-West .....	25	85.1
North-East .....	25	83.7
Centre .....	26	90.7
South and Islands .....	20	93.5
<b>Number of employees</b>		
20 – 49 .....	23	88.4
50 – 199 .....	24	87.5
200 – 499 .....	26	84.3
500 or more .....	27	85.1
<b>Branch of activity</b>		
Textiles, clothing, leather, shoes ..	20	89.1
Chemicals, rubber and plastic .....	28	84.8
Engineering .....	25	84.1
Other manufacturing .....	24	87.8
Energy, mining & quarrying .....	33	94.3
<b>Share of exports</b>		
Less than one-third .....	25	89.1
From one- to two-thirds .....	25	83.7
More than two-thirds .....	25	83.8
<b>Total industrial firms</b> .....	<b>25</b>	<b>86.5</b>
<b>Service firms</b>		
<b>Geographical area</b>		
North-West .....	25	84.1
North-East .....	24	86.9
Centre .....	26	86.8
South and Islands .....	22	92.8
<b>Number of employees</b>		
20 – 49 .....	24	88.2
50 – 199 .....	24	88.5
200 – 499 .....	24	89.0
500 or more .....	26	82.2
<b>Branch of activity</b>		
Trade, hotels and restaurants .....	22	89.4
Transport and communication.....	28	83.7
Other business & h.hold services ..	25	86.2
<b>Total service firms</b> .....	<b>25</b>	<b>86.5</b>
<b>Total</b> .....	<b>25</b>	<b>86.5</b>

## Investments in 2003

(€ thousands, per cent)<sup>(1)</sup>

	Gross fixed investment per employee	Gross fixed investment % change on previous year <sup>(2)</sup>		Realisation rate <sup>(4)</sup>
		2003	2004 <sup>(3)</sup>	
<b>Industrial firms</b>				
<b>Geographical area</b>				
North-West .....	10.3	-14.0	3.8	95.3
North-East .....	7.8	-18.9	0.6	93.5
Centre .....	17.5	-21.7	6.7	88.9
South and Islands .....	9.2	-2.4	-3.0	90.2
<b>Number of employees</b>				
20 – 49 .....	7.0	-18.8	-6.4	100.6
50 – 199 .....	7.9	-14.2	-4.4	95.3
200 – 499 .....	10.8	-12.2	2.6	96.8
500 or more .....	16.9	-19.0	12.0	86.9
<b>Branch of activity</b>				
Textiles, clothing, leather, shoes ..	4.8	-24.8	-9.3	96.5
Chemicals, rubber and plastic .....	12.5	-13.3	-0.4	94.9
Engineering .....	7.8	-15.6	3.2	92.3
Other manufacturing .....	9.7	-18.2	1.2	94.4
Energy, mining & quarrying.....	51.7	-16.8	9.5	90.4
<b>Share of exports</b>				
Less than one-third .....	12.0	-17.0	5.4	93.8
From one- to two-thirds .....	9.3	-15.9	1.5	89.2
More than two-thirds .....	8.5	-17.8	-3.4	95.0
<b>Total industrial firms</b> .....	<b>10.6</b>	<b>-16.9</b>	<b>3.2</b>	<b>92.9</b>
<b>Service firms</b>				
<b>Geographical area</b>				
North-West .....	17.0	17.8	-4.2	144.0
North-East .....	9.7	-9.4	-1.5	104.6
Centre .....	13.7	-8.7	3.9	115.8
South and Islands .....	10.1	-4.8	-5.6	101.4
<b>Number of employees</b>				
20 – 49 .....	8.0	-8.9	-6.5	107.2
50 – 199 .....	9.3	-9.4	-8.0	101.6
200 – 499 .....	11.1	-6.9	-0.5	114.4
500 or more .....	21.7	15.8	1.6	142.8
<b>Branch of activity</b>				
Trade, hotels and restaurants .....	9.3	-11.2	0.9	95.4
Transport and communication .....	28.9	20.8	-2.3	152.8
Other business & h.hold services ..	7.0	-11.3	-4.4	106.5
<b>Total service firms</b> .....	<b>13.7</b>	<b>2.2</b>	<b>-2.1</b>	<b>121.0</b>
<b>Total</b> .....	<b>11.8</b>	<b>-8.3</b>	<b>0.7</b>	<b>104.9</b>

(1) Robust means (Winsorised) obtained by adjusting extreme values (with positive or negative sign) according to the 5th and 95th percentile. The method takes account of the sampling fractions in each stratum of the sample (Winsorised type II estimator). – (2) At constant 2003 prices. The deflator is calculated as the average, at Ateco 91 sub-section level, of the price indices for their investment spending estimated by the firms interviewed. – (3) Forecast. – (4) Ratio between investments effectively made and investments planned at the end of the previous year.

## Review of investment plans in 2003

(per cent)

	Expenditure in 2003 on gross fixed investment compared with plans at end-2002 <sup>(1)</sup>							
	much less	less	a little less	same	a little more	more	much more	Total
<b>Industrial firms</b>								
<b>Geographical area</b>								
North-West .....	27.5	10.3	10.3	3.4	2.0	17.6	28.9	100.0
North-East .....	25.1	17.8	6.7	2.7	1.8	21.4	24.5	100.0
Centre .....	31.4	8.9	8.0	4.7	2.0	13.4	31.6	100.0
South and Islands .....	26.3	7.5	6.7	11.1	1.8	15.1	31.5	100.0
<b>Number of employees</b>								
20 – 49 .....	27.8	10.8	2.1	5.7	1.2	22.6	29.7	100.0
50 – 199 .....	25.7	13.7	21.8	1.8	3.6	7.0	26.3	100.0
200 – 499 .....	26.1	19.2	20.9	1.8	3.0	6.6	22.4	100.0
500 or more .....	29.3	20.6	23.0	0.3	2.2	9.4	15.1	100.0
<b>Branch of activity</b>								
Textiles, clothing, leather, shoes ..	26.3	7.5	8.3	4.9	0.9	17.4	34.7	100.0
Chemicals, rubber and plastic .....	42.9	9.3	13.6	3.2	3.4	7.8	20.0	100.0
Engineering .....	24.9	8.2	9.5	5.5	1.5	27.1	23.3	100.0
Other manufacturing .....	26.5	22.1	4.7	3.0	2.4	6.2	35.1	100.0
Energy, mining & quarrying .....	21.8	14.7	4.8	6.6	9.4	22.9	19.9	100.0
<b>Share of exports</b>								
Less than one-third .....	27.2	12.6	7.2	5.2	1.7	17.5	28.6	100.0
From one- to two-thirds .....	26.6	10.5	8.8	3.1	2.4	18.2	30.3	100.0
More than two-thirds .....	27.9	11.8	12.0	3.7	2.2	17.8	24.6	100.0
<b>Total industrial firms.....</b>	<b>27.2</b>	<b>12.0</b>	<b>8.3</b>	<b>4.5</b>	<b>1.9</b>	<b>17.7</b>	<b>28.3</b>	<b>100.0</b>
<b>Service firms</b>								
<b>Geographical area</b>								
North-West .....	26.5	7.6	2.8	5.1	1.0	19.9	37.0	100.0
North-East .....	23.2	11.2	2.8	5.8	0.6	19.1	37.1	100.0
Centre .....	27.8	13.6	1.2	9.1	0.0	13.9	34.3	100.0
South and Islands .....	26.2	9.5	1.3	6.3	1.0	18.3	37.4	100.0
<b>Number of employees</b>								
20 – 49 .....	27.7	4.5	2.7	7.2	0.1	22.8	34.9	100.0
50 – 199 .....	20.1	24.0	1.2	5.5	2.0	8.1	39.2	100.0
200 – 499 .....	28.4	13.9	1.2	0.8	2.4	6.7	46.8	100.0
500 or more .....	30.8	18.7	1.3	0.2	1.5	12.2	35.3	100.0
<b>Branch of activity</b>								
Trade, hotels and restaurants .....	24.2	14.2	2.3	5.3	0.4	24.6	29.0	100.0
Transport and communication.....	29.3	5.8	2.8	8.2	0.6	22.0	31.2	100.0
Other business & h.hold services ..	26.6	5.8	1.7	6.9	1.3	4.8	52.9	100.0
<b>Total service firms .....</b>	<b>25.9</b>	<b>10.1</b>	<b>2.2</b>	<b>6.3</b>	<b>0.7</b>	<b>18.2</b>	<b>36.5</b>	<b>100.0</b>
<b>Total .....</b>	<b>26.7</b>	<b>11.3</b>	<b>6.0</b>	<b>5.2</b>	<b>1.5</b>	<b>17.9</b>	<b>31.5</b>	<b>100.0</b>

(1) 'much less' = less than 75 per cent of planned; 'less' = 75 to 95 per cent of planned; 'a little less' = 95 to 100 per cent of planned; 'same' = 100 per cent of planned; 'a little more' 100 to 105 per cent of planned; 'more' = 105 to 125 per cent of planned; 'much more' = over 125 per cent of planned.



## Reasons for reviewing investment plans in 2003

(per cent)<sup>(1)</sup>

	Industrial firms with 50 or more employees											
	demand	costs		rules	delivery times	purchase price	cash flow	interest rates	availability of financing		internal organisation	other reasons
		level	uncertainty						shares	loans		
	<b>Cut-back in planned investments<sup>(2)</sup></b>											
<b>Geographical area</b>												
North-West .....	29.7	5.0	6.2	0.8	6.7	2.4	3.2	0.4	0.4	9.3	54.4	18.1
North-East .....	39.6	2.7	13.0	4.0	7.5	2.8	8.3	0.0	0.4	0.9	60.0	18.2
Centre .....	39.5	1.6	1.4	6.6	5.5	1.4	5.4	0.0	0.9	1.1	55.5	19.4
South and Islands .....	33.5	1.2	5.5	9.3	1.2	6.8	1.5	0.7	2.3	8.1	39.1	14.9
<b>Number of employees</b>												
20 – 49 .....	–	–	–	–	–	–	–	–	–	–	–	–
50 – 199 .....	36.3	3.2	7.6	3.3	6.1	2.8	3.8	0.1	0.3	5.7	55.3	16.8
200 – 499 .....	27.6	3.6	6.2	4.6	8.0	2.1	10.2	1.3	2.8	1.8	53.7	24.1
500 or more .....	32.8	4.9	11.2	5.5	4.8	3.7	12.5	0.0	0.0	3.1	57.6	22.0
<b>Branch of activity</b>												
Textiles, clothing, leather, shoes .....	38.8	2.7	5.0	2.2	10.5	6.8	2.4	0.0	0.0	6.9	54.1	9.7
Chemicals, rubber and plastic .....	35.0	2.0	12.9	6.9	2.3	3.0	4.8	2.0	2.6	7.8	52.5	22.1
Engineering .....	33.3	5.2	9.9	3.0	5.7	2.0	7.1	0.1	0.5	4.4	54.0	17.6
Other manufacturing .....	35.0	1.1	4.7	4.2	5.9	1.1	3.6	0.0	0.8	3.8	59.5	22.1
Energy, mining & quarrying .....	34.6	7.0	0.0	4.6	1.8	1.8	12.7	0.0	0.0	4.6	43.0	34.2
<b>Share of exports</b>												
Less than one-third .....	30.6	2.7	7.7	4.3	3.7	2.7	3.9	0.1	0.4	2.2	50.5	21.2
From one- to two-thirds .....	40.5	1.7	6.0	3.4	7.3	3.5	3.6	0.6	1.5	9.4	53.8	18.6
More than two-thirds .....	37.4	7.1	9.7	2.0	10.9	1.8	10.3	0.0	0.0	5.3	68.3	9.9
<b>Total industrial firms .....</b>	<b>35.0</b>	<b>3.3</b>	<b>7.6</b>	<b>3.6</b>	<b>6.3</b>	<b>2.7</b>	<b>5.2</b>	<b>0.2</b>	<b>0.7</b>	<b>5.0</b>	<b>55.2</b>	<b>18.1</b>
	<b>Increase in planned investments<sup>(3)</sup></b>											
<b>Geographical area</b>												
North-West .....	22.6	3.7	1.4	5.4	6.5	0.9	1.2	0.0	0.3	2.8	62.5	17.6
North-East .....	33.6	2.2	4.8	2.4	3.6	12.4	15.4	2.6	0.0	5.2	68.6	14.3
Centre .....	31.8	4.4	2.5	3.4	2.1	3.1	1.4	0.0	3.3	1.8	61.3	12.1
South and Islands .....	41.4	4.5	3.3	8.3	3.5	3.5	0.3	4.8	1.6	6.4	56.8	8.7
<b>Number of employees</b>												
20 – 49 .....	–	–	–	–	–	–	–	–	–	–	–	–
50 – 199 .....	29.2	2.8	2.8	4.6	3.8	5.1	6.3	1.6	0.8	4.1	63.4	15.6
200 – 499 .....	33.1	7.4	3.9	3.9	8.9	7.0	5.7	0.0	0.0	1.6	64.2	10.5
500 or more .....	33.7	4.3	4.7	0.0	8.9	11.1	1.8	1.8	3.4	3.9	75.6	5.5
<b>Branch of activity</b>												
Textiles, clothing, leather, shoes .....	28.1	2.0	2.9	0.0	0.8	3.3	5.1	0.8	0.8	0.8	68.1	16.9
Chemicals, rubber and plastic .....	29.0	14.0	0.7	8.9	10.3	1.5	0.0	0.0	5.1	12.0	50.6	8.1
Engineering .....	34.9	2.4	2.7	3.2	4.1	6.8	5.8	2.4	0.0	2.6	65.1	15.9
Other manufacturing .....	24.1	2.3	4.2	7.7	6.3	5.9	9.6	0.8	0.5	4.6	63.2	14.0
Energy, mining & quarrying .....	9.1	0.0	0.0	11.9	0.0	24.1	5.8	0.0	0.0	23.7	67.2	0.0
<b>Share of exports</b>												
Less than one-third .....	35.7	2.4	2.7	3.2	3.9	8.7	8.1	2.7	0.6	6.0	61.2	9.5
From one- to two-thirds .....	21.6	4.5	3.8	2.2	2.0	1.9	2.6	0.0	1.1	2.6	70.6	19.8
More than two-thirds .....	26.5	4.2	2.2	10.9	10.3	2.3	6.3	0.0	0.8	0.0	60.5	20.8
<b>Total industrial firms .....</b>	<b>29.8</b>	<b>3.4</b>	<b>2.9</b>	<b>4.3</b>	<b>4.5</b>	<b>5.5</b>	<b>6.1</b>	<b>1.4</b>	<b>0.8</b>	<b>3.9</b>	<b>63.9</b>	<b>14.7</b>

(1) As every firm can give more than one reason for reviewing plans, the sum of each row is not necessarily 100. – (2) Less than planned expenditure. – (3) More than planned expenditure.

## Change in plant capacity and utilisation rate in 2003

(per cent)

	Change in plant capacity from previous year		Capacity utilisation rate		
			% level	change from previous year	
	2003	2004 <sup>(1)</sup>	2003	2003	2004 <sup>(1)</sup>
<b>Industrial firms with 50 or more employees</b>					
<b>Geographical area</b>					
North-West .....	5.9	4.9	78.6	-2.2	1.7
North-East .....	4.6	4.9	81.3	-0.9	1.7
Centre .....	2.0	2.4	79.9	2.2	-1.7
South and Islands .....	7.4	15.1	81.8	1.7	0.7
<b>Number of employees</b>					
20 – 49 .....	–	–	–	–	–
50 – 199 .....	6.9	6.8	79.1	-2.0	2.0
200 – 499 .....	6.0	4.8	79.5	-3.0	2.3
500 or more .....	3.1	3.6	80.1	0.8	-0.4
<b>Branch of activity</b>					
Textiles, clothing, leather, shoes ...	1.5	3.6	79.7	-2.7	1.1
Chemicals, rubber and plastic .....	7.1	7.6	78.7	-3.6	1.7
Engineering .....	5.1	3.9	79.9	-0.6	1.8
Other manufacturing .....	6.4	6.6	80.3	-0.9	0.8
Energy, mining & quarrying.....	1.0	1.8	79.3	4.4	-1.9
<b>Share of exports</b>					
Less than one-third .....	6.1	5.6	77.4	-2.7	0.6
From one- to two-thirds .....	2.3	3.6	82.9	3.0	1.5
More than two-thirds .....	6.0	4.9	81.1	-1.7	1.4
<b>Total industrial firms</b>	<b>4.9</b>	<b>4.9</b>	<b>79.6</b>	<b>-0.9</b>	<b>1.0</b>

(1) Forecast.

## Turnover in 2003

(€ thousands, per cent)

	Turnover per employee	Percentage change in turnover on previous year <sup>(1)</sup>		Share of turnover from exports	
	2003	2003	2004 <sup>(2)</sup>	2003	2004 <sup>(2)</sup>
<b>Industrial firms</b>					
<b>Geographical area</b>					
North-West .....	305	-1.0	2.3	29.5	31.0
North-East .....	232	0.1	2.6	39.5	40.4
Centre .....	336	-0.1	5.4	26.3	25.7
South and Islands .....	212	1.2	3.1	21.7	22.0
<b>Number of employees</b>					
20 – 49 .....	227	-0.2	2.1	29.0	29.6
50 – 199 .....	238	-1.8	2.0	32.0	31.9
200 – 499 .....	313	0.3	3.1	32.7	37.5
500 or more .....	360	0.1	4.3	30.4	30.2
<b>Branch of activity</b>					
Textiles, clothing, leather, shoes ..	191	-4.3	1.2	42.2	43.0
Chemicals, rubber and plastic .....	466	-3.5	1.8	23.3	26.9
Engineering .....	229	0.0	3.7	43.0	43.4
Other manufacturing .....	266	1.0	2.2	23.0	23.4
Energy, mining & quarrying .....	639	4.4	6.1	9.9	9.0
<b>Share of exports</b>					
Less than one-third .....	300	0.2	2.7	8.5	10.1
From one- to two-thirds .....	275	-1.6	3.9	47.5	47.7
More than two-thirds .....	232	-0.4	2.4	81.6	80.7
<b>Total industrial firms.....</b>	<b>280</b>	<b>-0.4</b>	<b>3.0</b>	<b>30.9</b>	<b>31.7</b>
<b>Service firms</b>					
<b>Geographical area</b>					
North-West .....	234	-0.2	2.7	11.3	11.3
North-East .....	315	-3.6	3.0	6.0	5.7
Centre .....	227	-0.7	3.6	8.6	8.9
South and Islands .....	222	3.3	4.2	6.8	7.3
<b>Number of employees</b>					
20 – 49 .....	346	-7.2	1.6	11.9	12.2
50 – 199 .....	286	2.4	4.8	4.6	4.7
200 – 499 .....	200	5.0	2.5	10.0	10.3
500 or more .....	182	1.4	3.7	8.3	7.9
<b>Branch of activity</b>					
Trade, hotels and restaurants .....	374	-0.4	3.6	6.2	5.9
Transport and communication.....	208	-2.7	1.9	17.7	18.6
Other business & h.hold services ..	119	-1.0	2.9	6.2	6.5
<b>Total service firms.....</b>	<b>250</b>	<b>-1.0</b>	<b>3.1</b>	<b>8.7</b>	<b>8.7</b>
<b>Total .....</b>	<b>267</b>	<b>-0.6</b>	<b>3.1</b>	<b>22.3</b>	<b>22.7</b>

(1) At constant 2003 prices. The deflator is calculated as the average, at Ateco 91 sub-section level, of the price indices for their turnover estimated by the firms interviewed. – (2) Forecast.

Table E2

## Distribution of turnover by destination sector in 2003

(per cent)

	Italy						Foreign countries	Total
	general government	consumer households <sup>(1)</sup>	producer households <sup>(2)</sup>	non-financial companies	financial companies	total for Italy		
<b>Industrial firms</b>								
<b>Geographical area</b>								
North-West .....	2.5	1.7	4.7	60.2	1.5	70.5	29.5	100.0
North-East .....	2.0	1.5	8.8	47.1	1.0	60.5	39.5	100.0
Centre .....	5.3	1.7	6.5	59.2	1.0	73.7	26.3	100.0
South and Islands .....	3.0	2.4	8.7	62.7	1.5	78.3	21.7	100.0
<b>Number of employees</b>								
20 – 49 .....	2.2	1.3	11.3	55.0	1.3	71.0	29.0	100.0
50 – 199 .....	1.9	2.3	6.1	55.8	1.9	68.0	32.0	100.0
200 – 499 .....	2.2	2.6	6.6	54.1	1.8	67.3	32.7	100.0
500 or more .....	5.1	1.0	2.5	60.8	0.2	69.6	30.4	100.0
<b>Branch of activity</b>								
Textiles, clothing, leather, shoes ..	0.2	2.8	8.3	45.5	1.0	57.8	42.2	100.0
Chemicals, rubber and plastic .....	3.8	0.5	3.9	67.9	0.6	76.7	23.3	100.0
Engineering .....	2.9	0.9	3.7	48.1	1.4	57.0	43.0	100.0
Other manufacturing .....	1.8	2.2	12.6	59.0	1.5	77.0	23.0	100.0
Energy, mining & quarrying .....	8.7	5.0	2.0	74.2	0.2	90.1	9.9	100.0
<b>Share of exports</b>								
Less than one-third .....	3.3	2.4	10.3	73.6	1.8	91.5	8.5	100.0
From one- to two-thirds .....	2.9	0.8	3.4	44.7	0.6	52.5	47.5	100.0
More than two-thirds .....	0.6	0.7	1.5	15.2	0.3	18.4	81.6	100.0
<b>Total industrial firms .....</b>	<b>2.9</b>	<b>1.7</b>	<b>6.7</b>	<b>56.6</b>	<b>1.2</b>	<b>69.1</b>	<b>30.9</b>	<b>100.0</b>
<b>Service firms</b>								
<b>Geographical area</b>								
North-West .....	5.8	17.3	14.1	47.4	4.0	88.7	11.3	100.0
North-East .....	6.1	15.0	14.5	55.7	2.6	94.0	6.0	100.0
Centre .....	7.9	19.2	16.7	40.1	7.5	91.4	8.6	100.0
South and Islands .....	7.4	25.9	15.1	42.4	2.3	93.2	6.8	100.0
<b>Number of employees</b>								
20 – 49 .....	4.4	17.3	16.7	44.8	4.8	88.1	11.9	100.0
50 – 199 .....	7.1	15.1	19.5	49.9	3.8	95.4	4.6	100.0
200 – 499 .....	6.9	18.2	7.1	54.2	3.7	90.0	10.0	100.0
500 or more .....	10.7	26.7	5.0	46.7	2.6	91.7	8.3	100.0
<b>Branch of activity</b>								
Trade, hotels and restaurants	4.5	24.4	18.0	45.6	1.4	93.8	6.2	100.0
Transport and communication .....	6.3	7.8	11.1	54.6	2.5	82.3	17.7	100.0
Other business & h.hold services ..	16.0	2.0	5.6	53.4	16.9	93.8	6.2	100.0
<b>Total service firms .....</b>	<b>6.5</b>	<b>18.0</b>	<b>14.8</b>	<b>47.8</b>	<b>4.1</b>	<b>91.3</b>	<b>8.7</b>	<b>100.0</b>
<b>Total .....</b>	<b>4.3</b>	<b>8.2</b>	<b>9.9</b>	<b>53.0</b>	<b>2.3</b>	<b>77.7</b>	<b>22.3</b>	<b>100.0</b>

(1) Includes individuals, alone or in groups, in the capacity of consumers. – (2) Includes individual firms as well as simple and de facto companies with up to five employees.

## Operating result for 2002-2003

(per cent)

	2002				2003			
	profit	balance	loss	total	profit	balance	loss	total
<b>Industrial firms</b>								
<b>Geographical area</b>								
North-West .....	69.0	15.0	16.0	100.0	62.2	17.8	20.0	100.0
North-East .....	70.6	11.5	17.9	100.0	62.6	18.5	18.9	100.0
Centre .....	69.9	17.0	13.1	100.0	64.5	21.7	13.7	100.0
South and Islands .....	63.8	18.5	17.7	100.0	63.8	19.0	17.2	100.0
<b>Number of employees</b>								
20 – 49 .....	68.7	14.8	16.5	100.0	63.1	19.9	17.1	100.0
50 – 199 .....	69.7	15.2	15.1	100.0	62.9	17.0	20.0	100.0
200 – 499 .....	67.2	11.7	21.1	100.0	62.1	15.8	22.1	100.0
500 or more .....	68.1	14.4	17.5	100.0	62.5	11.6	25.9	100.0
<b>Branch of activity</b>								
Textiles, clothing, leather, shoes ..	62.6	20.4	17.0	100.0	57.8	21.8	20.4	100.0
Chemicals, rubber and plastic .....	70.3	14.5	15.2	100.0	71.6	13.0	15.4	100.0
Engineering .....	71.9	12.8	15.3	100.0	62.5	17.7	19.9	100.0
Other manufacturing .....	68.0	14.1	17.9	100.0	64.4	20.6	14.9	100.0
Energy, mining & quarrying .....	72.5	13.4	14.0	100.0	66.5	19.3	14.2	100.0
<b>Share of exports</b>								
Less than one-third .....	69.0	13.9	17.1	100.0	63.0	19.1	17.9	100.0
From one- to two-thirds .....	69.2	17.2	13.5	100.0	63.7	20.6	15.7	100.0
More than two-thirds .....	68.1	14.6	17.3	100.0	62.0	15.3	22.7	100.0
<b>Total industrial firms.....</b>	<b>68.9</b>	<b>14.8</b>	<b>16.3</b>	<b>100.0</b>	<b>63.0</b>	<b>18.9</b>	<b>18.1</b>	<b>100.0</b>
<b>Service firms</b>								
<b>Geographical area</b>								
North-West .....	62.0	19.4	18.6	100.0	64.3	17.0	18.8	100.0
North-East .....	60.9	22.2	16.9	100.0	64.5	18.0	17.4	100.0
Centre .....	68.2	15.9	15.9	100.0	67.0	11.1	21.9	100.0
South and Islands .....	62.0	18.0	20.0	100.0	61.8	24.5	13.7	100.0
<b>Number of employees</b>								
20 – 49 .....	61.3	20.4	18.3	100.0	66.9	16.3	16.8	100.0
50 – 199 .....	66.1	16.2	17.7	100.0	56.6	20.4	23.0	100.0
200 – 499 .....	68.6	18.6	12.8	100.0	67.9	20.4	11.7	100.0
500 or more .....	73.0	12.1	14.8	100.0	71.6	11.9	16.5	100.0
<b>Branch of activity</b>								
Trade, hotels and restaurants	68.7	15.9	15.3	100.0	68.2	15.9	15.9	100.0
Transport and communication.....	54.0	24.1	21.9	100.0	63.2	17.8	18.9	100.0
Other business & h.hold services ..	59.1	21.4	19.6	100.0	58.5	20.0	21.4	100.0
<b>Total service firms .....</b>	<b>63.0</b>	<b>19.1</b>	<b>17.9</b>	<b>100.0</b>	<b>64.4</b>	<b>17.5</b>	<b>18.1</b>	<b>100.0</b>
<b>Total .....</b>	<b>66.7</b>	<b>16.4</b>	<b>16.9</b>	<b>100.0</b>	<b>63.5</b>	<b>18.3</b>	<b>18.1</b>	<b>100.0</b>

## Computers per 100 employees and on-line trading in 2003

(number per 100 employees and per cent)

	Computers per 100 employees	Firms trading on-line:		On-line selling and buying as share of respective totals	
		selling	buying	sales	purchases
<b>Industrial firms</b>					
<b>Geographical area</b>					
North-West .....	45.3	5.1	11.1	0.8	1.4
North-East .....	43.3	5.9	11.1	1.5	2.0
Centre .....	49.3	6.5	7.6	2.2	4.5
South and Islands .....	30.8	4.3	7.1	0.6	0.7
<b>Number of employees</b>					
20 – 49 .....	41.5	5.2	9.2	0.7	0.7
50 – 199 .....	38.0	5.4	10.7	0.7	0.9
200 – 499 .....	43.7	9.3	15.2	1.5	1.4
500 or more .....	54.1	13.8	18.0	2.1	4.4
<b>Branch of activity</b>					
Textiles, clothing, leather, shoes ..	31.4	4.3	5.9	1.0	0.7
Chemicals, rubber and plastic .....	52.1	5.2	9.6	0.5	1.9
Engineering .....	45.6	5.7	11.8	1.5	1.9
Other manufacturing .....	38.6	6.2	9.6	1.0	0.8
Energy, mining & quarrying .....	74.8	2.7	14.4	2.9	7.6
<b>Share of exports</b>					
Less than one-third .....	44.0	4.5	7.6	1.2	2.2
From one- to two-thirds .....	43.0	8.7	11.7	1.2	1.9
More than two-thirds .....	44.9	4.9	16.6	1.9	2.4
<b>Total industrial firms.....</b>	<b>43.9</b>	<b>5.5</b>	<b>9.9</b>	<b>1.3</b>	<b>2.1</b>
<b>Service firms</b>					
<b>Geographical area</b>					
North-West .....	53.6	8.8	11.5	0.9	1.2
North-East .....	45.9	9.4	18.3	1.8	1.3
Centre .....	61.6	12.6	8.3	2.2	6.4
South and Islands .....	39.4	8.0	14.4	7.6	8.1
<b>Number of employees</b>					
20 – 49 .....	67.6	8.8	11.6	1.6	2.3
50 – 199 .....	49.7	11.5	17.2	2.3	3.8
200 – 499 .....	34.6	8.9	10.8	4.6	1.3
500 or more .....	46.1	17.0	19.9	1.1	3.9
<b>Branch of activity</b>					
Trade, hotels and restaurants	38.8	14.5	11.3	2.5	2.7
Transport and communication.....	46.3	6.4	8.4	1.6	4.4
Other business & h.hold services ..	74.7	3.2	19.6	1.3	2.3
<b>Total service firms.....</b>	<b>51.4</b>	<b>9.6</b>	<b>13.1</b>	<b>2.1</b>	<b>3.0</b>
<b>Total .....</b>	<b>46.8</b>	<b>7.1</b>	<b>11.1</b>	<b>1.6</b>	<b>2.5</b>

Table F1

## Firms with foreign associates or large holdings in foreign firms in 2003

(per cent, € thousands)

	Firms with associates or shareholdings abroad (%)	of which: invested abroad in 2001-2003	Investments abroad per employee in 2003	Investments over foreign turnover in 2003 (%)
<b>Industrial firms with 50 or more employees</b>				
<b>Geographical area</b>				
North-West .....	24.8	9.4	12.0	5.5
North-East .....	26.8	12.2	6.2	5.1
Centre .....	11.0	4.6	9.1	8.1
South and Islands .....	6.4	2.2	12.1	1.3
<b>Number of employees</b>				
20 – 49 .....	–	–	–	–
50 – 199 .....	16.4	6.3	9.1	7.7
200 – 499 .....	42.5	18.6	4.9	3.0
500 or more .....	51.0	25.8	11.5	5.2
<b>Branch of activity</b>				
Textiles, clothing, leather, shoes ..	21.1	10.3	3.7	6.6
Chemicals, rubber and plastic .....	22.0	11.9	17.6	5.8
Engineering .....	25.2	9.3	8.8	5.1
Other manufacturing .....	15.0	5.7	12.5	5.3
Energy, mining & quarrying .....	8.7	4.3	25.1	8.4
<b>Share of exports</b>				
Less than one-third .....	13.1	6.1	15.0	9.0
From one- to two-thirds .....	31.2	12.9	9.3	5.1
More than two-thirds .....	28.0	9.7	3.6	2.2
Total industrial firms .....	<b>21.1</b>	<b>8.7</b>	<b>9.7</b>	<b>5.5</b>

## Forms of collaboration with foreign firms in 2003

(per cent)

	Firms collaborating with foreign firms	of which:		
		firms with commercial agreements	firms with technical/production agreements	firms co-operating in R&D activities
<b>Industrial firms with 50 or more employees</b>				
<b>Geographical area</b>				
North-West .....	31.9	25.0	17.6	5.1
North-East .....	27.5	22.8	12.5	6.2
Centre .....	22.5	16.7	10.6	3.6
South and Islands .....	13.3	10.5	4.5	2.1
<b>Number of employees</b>				
20 – 49 .....	–	–	–	–
50 – 199 .....	20.2	20.2	12.4	3.7
200 – 499 .....	23.6	23.6	14.7	10.6
500 or more .....	28.5	28.5	19.1	7.7
<b>Branch of activity</b>				
Textiles, clothing, leather, shoes ..	33.3	19.0	26.0	0.8
Chemicals, rubber and plastic .....	30.7	22.9	12.7	8.9
Engineering .....	27.5	25.0	11.4	6.7
Other manufacturing .....	18.8	15.1	6.7	2.8
Other non–construction industries	21.5	21.5	18.3	7.7
<b>Share of exports</b>				
Less than one-third .....	21.4	16.0	10.2	3.3
From one- to two-thirds .....	27.7	22.6	14.7	4.8
More than two-thirds .....	35.5	29.4	16.5	8.1
<b>Total industrial firms.....</b>	<b>26.5</b>	<b>21.1</b>	<b>13.0</b>	<b>4.9</b>



## Trade credit and trade debt in 2003

(per cent, days)

	Trade credit		Trade debt	
	% of turnover	average duration	% of turnover	average duration
<b>Industrial firms</b>				
<b>Geographical area</b>				
North-West .....	25.9	93.4	19.3	90.9
North-East .....	28.1	94.7	20.1	90.7
Centre .....	21.8	79.5	14.4	75.3
South and Islands .....	28.1	94.9	21.8	92.6
<b>Number of employees</b>				
20 – 49 .....	27.7	93.9	19.2	82.9
50 – 199 .....	28.5	99.1	20.1	92.6
200 – 499 .....	30.1	95.4	18.9	85.6
500 or more .....	21.0	79.5	17.0	91.7
<b>Branch of activity</b>				
Textiles, clothing, leather, shoes ..	29.0	105.8	19.5	90.6
Chemicals, rubber and plastic .....	21.7	87.4	15.5	85.9
Engineering .....	28.3	99.6	22.4	94.7
Other manufacturing .....	27.6	88.3	18.8	84.5
Energy, mining & quarrying .....	16.4	32.1	10.4	54.7
<b>Share of exports</b>				
Less than one-third .....	27.0	91.3	18.2	87.0
From one- to two-thirds .....	25.2	92.5	19.1	89.7
More than two-thirds .....	23.2	90.5	19.3	91.5
<b>Total industrial firms .....</b>	<b>25.8</b>	<b>91.6</b>	<b>18.7</b>	<b>88.6</b>
<b>Service firms</b>				
<b>Geographical area</b>				
North-West .....	19.6	76.4	17.2	87.8
North-East .....	22.5	80.3	18.5	79.8
Centre .....	22.1	82.5	18.1	92.8
South and Islands .....	18.6	80.9	18.8	72.4
<b>Number of employees</b>				
20 – 49 .....	21.2	88.5	18.4	82.0
50 – 199 .....	22.2	77.5	17.1	79.1
200 – 499 .....	18.9	70.6	17.6	76.4
500 or more .....	20.1	69.4	18.8	100.2
<b>Branch of activity</b>				
Trade, hotels and restaurants .....	17.5	82.3	17.5	79.5
Transport and communication.....	23.6	64.4	18.4	96.8
Other business & h.hold services ..	32.0	87.4	19.9	87.9
<b>Total service firms .....</b>	<b>21.0</b>	<b>79.5</b>	<b>18.0</b>	<b>84.7</b>
<b>Total .....</b>	<b>24.0</b>	<b>87.8</b>	<b>18.4</b>	<b>87.1</b>

## Trade credit by counterpart in 2003

(per cent of corresponding turnover)

	Italy						Foreign countries
	general government	consumer households	producer households	non-financial companies	financial companies	total for Italy	
	<b>Industrial firms</b>						
<b>Geographical area</b>							
North-West .....	50.2	22.8	26.2	28.6	23.4	28.9	23.5
North-East .....	39.2	15.5	31.6	29.8	29.6	30.0	25.4
Centre .....	32.8	33.3	26.1	25.8	29.2	26.5	19.2
South and Islands .....	47.1	34.0	30.0	28.5	28.5	29.5	21.5
<b>Number of employees</b>							
20 – 49 .....	47.3	22.5	25.7	29.6	27.1	29.4	23.5
50 – 199 .....	46.4	32.7	29.6	29.9	26.0	30.3	24.8
200 – 499 .....	35.7	15.9	39.1	31.8	25.8	31.9	28.1
500 or more .....	38.8	15.1	26.7	24.0	26.9	25.1	19.4
<b>Branch of activity</b>							
Textiles, clothing, leather, shoes ..	50.5	30.8	30.8	31.8	27.5	31.6	25.1
Chemicals, rubber and plastic .....	53.1	31.4	25.6	22.3	15.3	24.1	20.9
Engineering .....	44.1	17.5	28.1	32.3	26.3	32.3	24.3
Other manufacturing .....	41.1	20.6	29.4	29.0	27.6	29.1	24.3
Energy, mining & quarrying .....	26.4	26.2	26.3	18.2	38.6	19.7	6.9
<b>Share of exports</b>							
Less than one-third .....	46.6	23.8	29.5	29.0	25.5	29.5	26.1
From one- to two-thirds .....	34.0	32.7	27.8	26.9	26.6	27.5	24.0
More than two-thirds .....	43.0	11.4	24.6	28.4	33.7	28.0	21.7
<b>Total industrial firms .....</b>	<b>41.9</b>	<b>23.7</b>	<b>28.9</b>	<b>28.4</b>	<b>26.3</b>	<b>28.9</b>	<b>23.4</b>
	<b>Service firms</b>						
<b>Geographical area</b>							
North-West .....	31.6	4.5	20.3	25.8	17.2	20.6	15.0
North-East .....	46.6	5.6	21.2	25.9	24.4	23.7	17.6
Centre .....	37.7	5.2	17.2	25.4	24.0	20.8	14.7
South and Islands .....	32.8	6.7	20.2	22.1	14.9	18.3	26.0
<b>Number of employees</b>							
20 – 49 .....	45.8	5.9	19.2	28.0	15.7	22.1	19.9
50 – 199 .....	28.4	6.8	20.8	26.7	22.4	22.3	22.7
200 – 499 .....	34.7	3.5	20.3	22.7	25.1	20.0	10.7
500 or more .....	43.5	2.8	19.1	17.7	35.5	18.3	8.5
<b>Branch of activity</b>							
Trade, hotels and restaurants .....	36.0	4.8	19.4	23.5	10.6	18.5	15.4
Transport and communication .....	29.4	9.7	17.6	26.0	10.3	23.1	16.0
Other business & h.hold services ..	44.0	17.6	31.3	32.1	25.8	32.6	18.4
<b>Total service firms .....</b>	<b>38.1</b>	<b>5.4</b>	<b>19.9</b>	<b>25.3</b>	<b>20.9</b>	<b>21.4</b>	<b>16.2</b>
<b>Total .....</b>	<b>39.7</b>	<b>7.9</b>	<b>23.7</b>	<b>27.3</b>	<b>22.7</b>	<b>25.5</b>	<b>22.5</b>

## Annual change in workforce in 1999-2004

(per cent)

	Firms with 50 or more employees						Total firms with 20 or more employees		
	1999	2000	2001	2002	2003	2004 <sup>(1)</sup>	2002	2003	2004 <sup>(1)</sup>
<b>Industrial firms</b>									
<b>Geographical area</b>									
North-West .....	-2.3	-0.3	-1.9	-2.1	-2.0	-0.7	-1.6	-1.9	-0.5
North-East .....	0.4	1.0	0.0	0.3	-1.4	1.5	0.0	-1.6	1.2
Centre .....	-2.2	-1.3	-2.5	-1.7	-1.9	-1.1	-1.2	-2.3	-0.8
South and Islands .....	-0.1	0.8	1.4	0.2	-1.5	0.1	0.3	-1.0	0.5
<b>Number of employees</b>									
20 - 49 .....	-	-	-	-	-	-	-0.2	-1.9	0.3
50 - 199 .....	-0.4	0.4	-0.1	-0.8	-1.3	0.4	-0.8	-1.3	0.4
200 - 499 .....	-0.8	0.2	-0.6	-0.7	-1.2	-0.2	-0.7	-1.2	-0.2
500 or more .....	-2.7	-0.5	-2.5	-1.8	-2.5	-0.4	-1.8	-2.5	-0.4
<b>Branch of activity</b>									
Textiles, clothing, leather, shoes ..	-2.6	-0.6	-0.2	-2.3	-3.7	-1.6	-2.1	-4.8	-1.3
Chemicals, rubber and plastic .....	-0.4	0.6	-0.3	-0.7	0.2	0.6	-0.5	0.4	0.7
Engineering .....	-1.3	0.6	-1.6	-1.4	-1.9	-0.1	-0.9	-1.7	0.0
Other manufacturing .....	-0.8	-0.1	-0.4	0.0	-1.0	1.2	0.1	-0.8	1.1
Energy, mining & quarrying.....	-4.4	-4.1	-4.2	-3.0	-3.3	-2.1	-3.0	-3.0	-2.0
<b>Share of exports</b>									
Less than one-third .....	-1.3	-0.9	-1.5	-0.7	-1.6	0.2	-0.6	-1.8	0.3
From one- to two-thirds .....	-2.2	0.2	-1.3	-2.4	-2.0	-0.6	-1.8	-2.0	-0.4
More than two-thirds .....	-0.5	2.0	-0.1	-0.4	-1.7	0.2	-0.5	-1.6	0.2
<b>Total industrial firms.....</b>	<b>-1.5</b>	<b>0.0</b>	<b>-1.2</b>	<b>-1.2</b>	<b>-1.8</b>	<b>0.0</b>	<b>-0.9</b>	<b>-1.8</b>	<b>0.1</b>
<b>Service firms</b>									
<b>Geographical area</b>									
North-West .....	....	....	....	2.7	2.1	3.1	2.1	2.2	2.9
North-East .....	....	....	....	3.4	3.7	1.6	2.3	3.3	1.7
Centre .....	....	....	....	0.4	-0.4	2.3	0.5	0.0	1.9
South and Islands .....	....	....	....	5.6	2.6	1.8	4.3	1.1	1.2
<b>Number of employees</b>									
20 - 49 .....	....	....	....	-	-	-	0.4	1.4	1.4
50 - 199 .....	....	....	....	3.6	1.6	1.7	3.6	1.6	1.7
200 - 499 .....	....	....	....	2.0	1.6	2.5	2.0	1.6	2.5
500 or more .....	....	....	....	2.1	2.3	2.9	2.1	2.3	2.9
<b>Branch of activity</b>									
Trade, hotels and restaurants .....	....	....	....	3.7	4.9	3.1	2.7	4.0	2.4
Transport and communication .....	....	....	....	0.8	0.4	0.8	0.7	0.3	0.7
Other business & h.hold services ..	....	....	....	2.9	-0.1	3.0	2.2	0.1	3.1
<b>Total service firms.....</b>	<b>....</b>	<b>....</b>	<b>....</b>	<b>2.6</b>	<b>1.9</b>	<b>2.4</b>	<b>2.0</b>	<b>1.8</b>	<b>2.2</b>
<b>Total .....</b>	<b>....</b>	<b>....</b>	<b>....</b>	<b>0.4</b>	<b>-0.2</b>	<b>1.0</b>	<b>0.3</b>	<b>-0.3</b>	<b>0.9</b>

(1) Forecast.

## Annual change in per capita hours worked in 1999–2003

(per cent)

	Firms with 50 or more employees					Total firms with 20 or more employees		
	1999	2000	2001	2002	2003	2001	2002	2003
<b>Industrial firms</b>								
<b>Geographical area</b>								
North-West .....	-0.1	-0.2	-1.1	-0.7	-0.8	-0.8	-0.8	-0.7
North-East .....	-0.9	1.2	-1.8	-0.7	-1.0	-1.5	-0.5	-0.5
Centre .....	0.1	0.1	-0.2	-1.8	-1.1	-0.2	-1.5	-0.6
South and Islands .....	-2.0	1.0	0.4	0.2	-1.5	0.5	-0.5	-0.9
<b>Number of employees</b>								
20 – 49 .....	–	–	–	–	–	0.0	-0.9	0.1
50 – 199 .....	0.0	0.8	-0.8	-0.6	-0.5	-0.8	-0.6	-0.5
200 – 499 .....	-0.8	1.1	-1.1	-1.5	-0.8	-1.1	-1.5	-0.8
500 or more .....	-0.5	-0.6	-1.4	-0.6	-1.6	-1.4	-0.6	-1.6
<b>Branch of activity</b>								
Textiles, clothing, leather, shoes ..	-2.1	1.8	-1.1	-1.2	-1.9	-0.4	-1.5	-1.2
Chemicals, rubber and plastic .....	-0.1	1.5	-0.1	0.2	-0.1	-0.6	-0.2	0.1
Engineering .....	-0.5	0.3	-1.6	-1.1	-1.2	-1.1	-1.0	-0.8
Other manufacturing .....	0.5	-0.5	-0.7	-0.2	0.1	-0.5	-0.1	0.0
Energy, mining & quarrying .....	0.3	-1.7	-0.4	-2.1	-3.2	-0.6	-1.7	-3.1
<b>Share of exports</b>								
Less than one-third .....	0.1	0.2	-0.5	-0.7	-0.6	-0.3	-0.5	-0.4
From one- to two-thirds .....	-0.6	-0.2	-1.5	-0.6	-1.5	-1.2	-0.7	-1.3
More than two-thirds .....	-1.0	1.3	-2.0	-1.4	-1.0	-1.5	-1.9	-0.5
<b>Total industrial firms</b> .....	<b>-0.4</b>	<b>0.3</b>	<b>-1.1</b>	<b>-0.8</b>	<b>-1.0</b>	<b>-0.8</b>	<b>-0.8</b>	<b>-0.7</b>
<b>Service firms</b>								
<b>Geographical area</b>								
North-West .....	....	....	....	0.5	-0.1	....	0.3	-0.5
North-East .....	....	....	....	0.7	-1.7	....	0.3	-1.1
Centre .....	....	....	....	0.2	1.1	....	0.5	0.5
South and Islands .....	....	....	....	0.9	0.2	....	1.5	-0.1
<b>Number of employees</b>								
20 – 49 .....	....	....	....	....	....	....	0.6	-1.1
50 – 199 .....	....	....	....	0.8	-0.1	....	0.8	-0.1
200 – 499 .....	....	....	....	-0.5	0.3	....	-0.5	0.3
500 or more .....	....	....	....	0.7	-0.3	....	0.7	-0.3
<b>Branch of activity</b>								
Trade, hotels and restaurants .....	....	....	....	-0.1	-0.1	....	0.1	-0.7
Transport and communication.....	....	....	....	0.3	2.2	....	0.3	1.6
Other business & h.hold services ..	....	....	....	1.5	-2.1	....	1.3	-1.5
<b>Total service firms</b> .....	....	....	....	<b>0.5</b>	<b>-0.1</b>	....	<b>0.5</b>	<b>-0.4</b>
<b>Total</b> .....	....	....	....	<b>-0.2</b>	<b>-0.6</b>	....	<b>-0.2</b>	<b>-0.5</b>

## Annual change in investments in 1999-2004

(per cent at constant prices)<sup>(1)</sup>

	Firms with 50 or more employees						Total firms with 20 or more employees		
	1999	2000	2001	2002	2003	2004 <sup>(2)</sup>	2002	2003	2004 <sup>(2)</sup>
<b>Industrial firms</b>									
<b>Geographical area</b>									
North-West .....	-3.3	6.1	-3.4	-8.7	-12.8	5.0	-6.3	-14.0	3.8
North-East .....	-6.6	5.4	-2.4	1.9	-17.4	2.4	4.4	-18.9	0.6
Centre .....	4.8	-6.4	0.6	6.4	-21.8	9.8	7.8	-21.7	6.7
South and Islands .....	-2.4	-0.9	-3.6	-4.6	-12.7	0.9	-5.9	-12.4	-3.0
<b>Number of employees</b>									
20 – 49 .....	-	-	-	-	-	-	3.3	-18.8	-6.4
50 – 199 .....	-1.0	3.4	-6.3	-3.2	-13.8	-4.0	-1.5	-14.2	-4.4
200 – 499 .....	-7.6	1.1	1.0	-4.5	-12.0	2.6	-3.8	-12.2	2.6
500 or more .....	-1.7	3.4	-0.8	-1.3	-18.7	11.8	-0.7	-19.0	12.0
<b>Branch of activity</b>									
Textiles, clothing, leather, shoes ..	-8.3	4.2	-2.5	-5.2	-25.5	-12.5	-3.7	-24.8	-9.3
Chemicals, rubber and plastic .....	-9.6	-3.1	-0.5	-5.5	-11.3	-2.7	-2.4	-13.3	-0.4
Engineering .....	0.9	9.8	-9.2	-6.1	-15.4	6.1	-5.0	-15.6	3.2
Other manufacturing .....	-3.7	9.4	-2.3	-10.3	-16.4	7.2	-3.8	-18.2	1.2
Energy, mining & quarrying.....	0.5	-8.7	8.2	8.9	-16.8	10.1	9.8	-16.8	9.5
<b>Share of exports</b>									
Less than one-third .....	1.2	-0.2	-1.4	2.9	-16.1	7.1	2.9	-17.0	5.4
From one- to two-thirds .....	-12.5	7.5	-0.7	-15.5	-15.7	5.9	-9.4	-15.9	1.5
More than two-thirds .....	1.8	9.1	-9.4	-4.2	-16.9	-1.4	-2.1	-17.8	-3.4
<b>Total industrial firms</b> .....	<b>-2.5</b>	<b>3.0</b>	<b>-2.4</b>	<b>-2.5</b>	<b>-16.1</b>	<b>5.5</b>	<b>-0.7</b>	<b>-16.9</b>	<b>3.2</b>
<b>Service firms</b>									
<b>Geographical area</b>									
North-West .....	....	....	....	12.5	18.3	-4.2	8.1	17.8	-4.2
North-East .....	....	....	....	-5.9	-9.5	0.0	-3.5	-9.4	-1.5
Centre .....	....	....	....	1.0	-8.6	5.7	2.7	-8.7	3.9
South and Islands .....	....	....	....	3.0	-2.3	-1.3	3.3	-4.8	-5.6
<b>Number of employees</b>									
20 – 49 .....	....	....	....	-	-	-	0.2	-8.9	-6.5
50 – 199 .....	....	....	....	-4.4	-10.6	-8.1	-4.1	-9.4	-8.0
200 – 499 .....	....	....	....	3.1	-7.3	-0.5	3.5	-6.9	-0.5
500 or more .....	....	....	....	11.0	15.1	1.5	11.2	15.8	1.6
<b>Branch of activity</b>									
Trade, hotels and restaurants .....	....	....	....	-2.4	-11.5	4.1	0.1	-11.2	0.9
Transport and communication .....	....	....	....	9.2	22.1	-1.6	8.4	20.8	-2.3
Other business & h.hold services ..	....	....	....	-1.0	-13.2	-5.3	-2.6	-11.3	-4.4
<b>Total service firms</b> .....	....	....	....	<b>4.0</b>	<b>3.4</b>	<b>-1.1</b>	<b>3.4</b>	<b>2.2</b>	<b>-2.1</b>
<b>Total</b> .....	....	....	....	<b>0.1</b>	<b>-6.7</b>	<b>2.3</b>	<b>0.8</b>	<b>-8.3</b>	<b>0.7</b>

(1) The deflator is calculated as the average, at Ateco 91 sub-section level, of the price indices for their investment spending estimated by the firms interviewed. Robust means (Winsorised) obtained by adjusting extreme values (with positive or negative sign) according to the 5th and 95th percentile. The method takes account of the sampling fractions in each stratum of the sample (Winsorised type II estimator). (2) Forecast.

## Investment realisation rate in 1999-2003

(per cent)<sup>(1)(2)</sup>

	Firms with 50 or more employees					Total firms with 20 or more employees	
	1999	2000	2001	2002	2003	2002	2003
<b>Industrial firms</b>							
<b>Geographical area</b>							
North-West .....	98.4	97.8	93.2	100.3	95.1	101.4	95.3
North-East .....	94.6	97.5	95.9	100.7	90.7	103.9	93.5
Centre .....	94.3	81.3	92.0	114.7	87.4	113.7	88.9
South and Islands .....	103.4	100.1	94.6	100.4	84.0	104.3	90.2
<b>Number of employees</b>							
20 – 49 .....	–	–	–	–	–	107.8	100.6
50 – 199 .....	103.0	98.5	93.1	99.4	95.8	100.1	95.3
200 – 499 .....	99.6	99.2	96.3	100.9	97.0	101.5	96.8
500 or more .....	93.7	91.1	93.1	108.1	87.1	108.4	86.9
<b>Branch of activity</b>							
Textiles, clothing, leather, shoes ..	103.9	112.0	90.8	105.9	90.6	102.8	96.5
Chemicals, rubber and plastic .....	95.9	95.9	95.3	98.8	96.4	101.5	94.9
Engineering .....	99.4	104.9	98.0	99.4	90.5	100.3	92.3
Other manufacturing .....	94.9	94.8	90.7	99.0	91.7	104.9	94.4
Energy, mining & quarrying.....	94.8	77.7	90.7	113.6	90.1	114.0	90.4
<b>Share of exports</b>							
Less than one-third .....	96.8	91.3	91.7	107.3	92.7	107.5	93.8
From one- to two-thirds .....	93.1	100.6	97.1	94.3	85.7	97.6	89.2
More than two-thirds .....	106.0	99.3	96.7	104.5	95.4	106.2	95.0
<b>Total industrial firms</b> .....	<b>97.1</b>	<b>94.7</b>	<b>93.7</b>	<b>104.0</b>	<b>91.4</b>	<b>105.2</b>	<b>92.9</b>
<b>Service firms</b>							
<b>Geographical area</b>							
North-West .....	....	....	....	....	146.0	....	144.0
North-East .....	....	....	....	....	102.9	....	104.6
Centre .....	....	....	....	....	115.7	....	115.8
South and Islands .....	....	....	....	....	96.6	....	101.4
<b>Number of employees</b>							
20 – 49 .....	....	....	....	....	–	....	107.2
50 – 199 .....	....	....	....	....	99.5	....	101.6
200 – 499 .....	....	....	....	....	112.4	....	114.4
500 or more .....	....	....	....	....	141.5	....	142.8
<b>Branch of activity</b>							
Trade, hotels and restaurants .....	....	....	....	....	89.2	....	95.4
Transport and communication.....	....	....	....	....	155.7	....	152.8
Other business & h.hold services ..	....	....	....	....	102.9	....	106.5
<b>Total service firms</b> .....	....	....	....	....	<b>122.8</b>	....	<b>121.0</b>
<b>Total</b> .....	....	....	....	....	<b>105.2</b>	....	<b>104.9</b>

(1) Robust means (Winsorised) obtained by adjusting extreme values (with positive or negative sign) according to the 5th and 95th percentile. The method takes account of the sampling fractions in each stratum of the sample (Winsorised type II estimator).– (2) Ratio between investments effectively made and investments planned at the end of the previous year.

## Annual change in turnover in 1999-2004

(per cent at constant prices)<sup>(1)</sup>

	Firms with 50 or more employees						Total firms with 20 or more employees		
	1999	2000	2001	2002	2003	2004 <sup>(2)</sup>	2002	2003	2004 <sup>(2)</sup>
<b>Industrial firms</b>									
<b>Geographical area</b>									
North-West .....	2.8	-2.2	-0.4	-1.9	-1.5	2.2	-1.6	-1.0	2.3
North-East .....	3.2	5.1	5.3	2.9	-0.1	3.1	2.1	0.1	2.6
Centre .....	6.1	-1.2	-0.5	0.7	1.2	6.4	0.4	-0.1	5.4
South and Islands .....	4.9	13.0	-0.1	-0.5	2.0	2.8	1.5	1.2	3.1
<b>Number of employees</b>									
20 - 49 .....	-	-	-	-	-	-	0.3	-0.2	2.1
50 - 199 .....	1.2	-0.8	3.9	-1.5	-1.8	2.0	-1.5	-1.8	2.0
200 - 499 .....	2.8	-2.3	2.7	2.1	0.3	3.1	2.1	0.3	3.1
500 or more .....	5.2	1.6	-1.5	-0.2	0.1	4.3	-0.2	0.1	4.3
<b>Branch of activity</b>									
Textiles, clothing, leather, shoes ..	-1.8	5.0	2.7	-3.3	-3.7	1.4	-3.8	-4.3	1.2
Chemicals, rubber and plastic .....	8.7	-8.5	-4.1	-1.1	-4.6	1.6	-1.1	-3.5	1.8
Engineering .....	0.5	2.5	0.5	-0.5	-0.6	4.2	0.0	0.0	3.7
Other manufacturing .....	2.5	4.4	2.6	0.9	1.9	2.0	1.3	1.0	2.2
Energy, mining & quarrying.....	11.6	10.8	13.3	2.4	4.8	6.2	2.6	4.4	6.1
<b>Share of exports</b>									
Less than one-third .....	6.0	-3.7	0.9	0.3	-0.1	3.2	0.5	0.2	2.7
From one- to two-thirds .....	0.5	8.2	-0.2	-0.9	-1.1	3.9	-0.6	-1.6	3.9
More than two-thirds .....	0.1	5.3	3.5	-0.9	-0.7	2.4	-1.2	-0.4	2.4
<b>Total industrial firms.....</b>	<b>3.5</b>	<b>0.1</b>	<b>1.0</b>	<b>-0.2</b>	<b>-0.5</b>	<b>3.3</b>	<b>-0.1</b>	<b>-0.4</b>	<b>3.0</b>
<b>Service firms</b>									
<b>Geographical area</b>									
North-West .....	....	....	....	3.8	3.5	3.7	1.5	-0.2	2.7
North-East .....	....	....	....	6.9	2.4	3.8	3.7	-3.6	3.0
Centre .....	....	....	....	-0.9	-0.5	4.0	-1.2	-0.7	3.6
South and Islands .....	....	....	....	4.2	5.8	5.7	1.8	3.3	4.2
<b>Number of employees</b>									
20 - 49 .....	....	....	....	-	-	-	-1.7	-7.2	1.6
50 - 199 .....	....	....	....	5.5	2.4	4.8	5.5	2.4	4.8
200 - 499 .....	....	....	....	3.6	5.0	2.5	3.6	5.0	2.5
500 or more .....	....	....	....	2.0	1.4	3.7	2.0	1.4	3.7
<b>Branch of activity</b>									
Trade, hotels and restaurants .....	....	....	....	5.2	4.2	4.5	1.6	-0.4	3.6
Transport and communication .....	....	....	....	0.8	-1.8	2.7	0.4	-2.7	1.9
Other business & h.hold services ..	....	....	....	3.0	3.7	3.7	4.3	-1.0	2.9
<b>Total service firms.....</b>	<b>....</b>	<b>....</b>	<b>....</b>	<b>3.8</b>	<b>2.5</b>	<b>3.9</b>	<b>1.7</b>	<b>-1.0</b>	<b>3.1</b>
<b>Total .....</b>	<b>....</b>	<b>....</b>	<b>....</b>	<b>1.2</b>	<b>0.5</b>	<b>3.5</b>	<b>0.6</b>	<b>-0.6</b>	<b>3.1</b>

(1) The deflator is calculated as the mean, at Ateco 91 sub-section level, of the price indices for their investment spending estimated by the firms interviewed. - (2) Forecast.

## Capacity utilisation rate in 1999-2004

(per cent)

	1999	2000	2001	2002	2003	2004 <sup>(1)</sup>
<b>Industrial firms with 50 or more employees</b>						
<b>Geographical area</b>						
North-West .....	81.8	83.7	81.3	80.8	78.6	80.3
North-East .....	82.4	84.7	83.3	82.2	81.3	83.0
Centre .....	83.6	77.4	80.2	77.7	79.9	78.2
South and Islands .....	80.1	79.7	80.1	80.1	81.8	82.5
<b>Number of employees</b>						
20 – 49 .....	–	–	–	–	–	–
50 – 199 .....	80.4	82.0	82.0	81.1	79.1	81.1
200 – 499 .....	83.7	87.4	84.0	82.5	79.5	81.8
500 or more .....	82.8	81.3	80.2	79.3	80.1	79.7
<b>Branch of activity</b>						
Textiles, clothing, leather, shoes ...	83.7	85.7	85.0	82.4	79.7	80.8
Chemicals, rubber and plastic .....	81.2	84.3	84.9	82.3	78.7	80.4
Engineering .....	81.7	83.2	81.7	80.5	79.9	81.7
Other manufacturing .....	80.7	82.0	81.1	81.2	80.3	81.1
Energy, mining & quarrying.....	86.5	74.6	68.9	74.9	79.3	77.4
<b>Share of exports</b>						
Less than one-third .....	82.0	81.3	80.7	80.1	77.4	78.0
From one- to two-thirds .....	81.4	84.7	82.1	79.9	82.9	84.4
More than two-thirds .....	84.4	84.6	83.5	82.8	81.1	82.5
<b>Total industrial firms .....</b>	<b>82.1</b>	<b>82.6</b>	<b>81.5</b>	<b>80.5</b>	<b>79.6</b>	<b>80.6</b>

(1) Forecast.



**Appendix C:**  
**Questionnaires**



# BANCA D'ITALIA

## Survey of Industrial Firms - 2003

**50+ employees**

Confidentiality notice (Legislative Decree 196/2003) – The purpose of this survey is to collect information on the main economic and financial variables in the industrial sector. Your co-operation is important but not compulsory and any refusal to take part will bear no consequences. The information provided will only be used for research purposes and will not be published outside the Bank except in aggregate form. The firms taking part will be sent an extract of the main results of the survey. The data will be processed entirely inside the Bank and systems will be put in place to ensure their safety and confidentiality. Access to individual data is restricted to the people in charge of handling them and the staff engaged in processing and analysis. Firms enjoy the rights granted under the terms of Article 7 of the Decree, including the right to correct and integrate information concerning them. In charge of data handling: Head of the Economic Research Department of the Bank of Italy, 91 Via Nazionale, 00184 ROME. Responsible for data handling: Bank of Italy (Organisation Department), 91 Via Nazionale, 00184 ROME.

### **PART A – General information**

**Bank of Italy codes:** Branch code .....    Firm code .....

*(to be entered by branch)*

Head office .....    Type (sub-group)<sup>(1)</sup> .....

Town.....  Istat town code.....

Name of firm \_\_\_\_\_

Legal status .....  Branch of activity (Ateco91)<sup>(2)</sup> .....

(1=SRL; 2=SPA; 3=SAA; 4=SCRL; 5=SCRI; 6=SAS; 7=SNC; 8=Other) Branch of activity (Ateco2002)<sup>(3)</sup> ..

Year of creation     Listed firm  YES  NO  Total no. of shareholders in firm

Does the firm belong to a group?.....  NO  YES

***If the firm belongs to a group (a 'group' being a set of several firms directly or indirectly controlled – through one or more chains of control – by the same physical persons or the same public entity):***

Is the firm the parent company ?...  YES  NO  Name of the parent company \_\_\_\_\_

Name of the group \_\_\_\_\_

Nationality of group (1=Italian; 2=EU country on 31-12-2003 (except Italy); 3=Non-EU country on 31-12-2003) ...

Share of firm held by leading shareholder (owner of largest shareholding) .....    %

Total holding of first three shareholders (owners of 3 largest shareholdings) .....    %

Are there voting agreements between the shareholders or agreements on the sale of holdings?.....  NO  YES

Do the by-laws place conditions on the transfer of holdings (e.g. directors' acceptance, pre-emptive rights) ..  NO  YES

Information on the party exercising direct control over the firm<sup>(4)</sup>:

Type (1=person; 2=holding/sub-holding co.; 3=bank; 4=non-group financial or insurance co.; 5=non-financial co.)

Nationality (1=Italian; 2=foreign) .....  Nature (1=public; 2=private) .....

Did a transfer of direct control over the firm (or the majority of it) take place in 2003? .....  NO  YES

***If yes:*** Did the transfer take place: within the same group? .....  NO  YES

between relatives?.....  NO  YES

**Changes that took place in 2003:**

a) Split .....  NO  YES c) Merger .....  NO  YES e) Capital contribution  NO  YES

b) Acquisition .....  NO  YES d) New spin-off...  NO  YES f) Transfer of assets  NO  YES

***If the answer to one of the foregoing is yes:***

a) Name of firm that split off \_\_\_\_\_

b) Name of acquired firm \_\_\_\_\_

c) Name of merged firm \_\_\_\_\_

d) Name of firm making split \_\_\_\_\_

Please tick the box if you are unable to provide homogeneous data for 2002 and 2003 .....

(1) See Central Credit Register. *Nuova classificazione della clientela bancaria, 1991.* - (2) See ISTAT. *Classificazione delle attività economiche. Metodi e norme, 1991.* - (3) See ISTAT. *Classificazione delle attività economiche. Metodi e norme, 2002.* - (4) The party with direct control over the firm is the person who, usually by means of their shareholder's vote, wields a decisive influence over decisions regarding the firm's medium- to long-term objectives, the strategies for achieving them, the firm's economic and financial development, and its investments. It is not necessarily the same person as the majority shareholder

**PART B – Ownership structure**

**Only** complete this part if the party exercising direct control over the firm is a **PERSON**

How many years has the present chief executive officer<sup>(1)</sup> (or sole director) held his/her post? .....

How many years has he/she worked for the company?.....

Did the present CEO **replace** a previous CEO (or sole director?) .....  NO  YES ↓

⇒ Why was he/she replaced?

- age limit/death .....
- expiry of previous CEO's term of office/normal rotation .....
- poor performance .....
- differences with main shareholder.....
- change of control (new owner and/or entry of new shareholders).....
- personal reasons (e.g. changed job; set up own business; etc.) .....
- other (please specify) \_\_\_\_\_

(1) If there is more than one CEO, indicate the one with most influence on the board or the most senior.

**PART C – Workforce and wages**

(amounts in numbers)	Total workforce	Total workers & apprentices	Total on fixed-term contract	Total non-EU workforce
<u>2002</u> <b>Average</b> workforce .....				
Workforce at <b>end of year</b> .....				
Hirings .....				
Separations.....				
<u>2003</u> <b>Average</b> workforce .....				
Workforce at <b>end of year</b> .....				
Hirings .....				
Separations.....				
<u>2004</u> Workforce at <b>end of year</b> (projection)				

	2002	2003
<b>Total</b> hours worked by payroll employees .....		
- of which: <b>per cent</b> overtime .....	<input type="text"/> <input type="text"/> . <input type="text"/> %	<input type="text"/> <input type="text"/> . <input type="text"/> %
<b>Total</b> hours paid by Wage Equalisation Fund .....		
Number of temporary work assignments.....		
Total hours of temporary work .....		

**Staff recruitment during 2003**

Did you fill vacancies with new hirings or use of temporary work? .....

**How many weeks** did it take on average to fill vacancies? .....

How many times did you renew or extend fixed-term contracts? .....

**How many vacancies** were still not filled at the end of 2003? .....

How effective according to your company were the following **methods of recruitment**<sup>(1)</sup> (tick one or more boxes)

- Public employment agency .....
- Private agency (employment, recruitment, temporary work, etc.) .....
- Advertisement .....
- Internet/e-mail search (homepage advertisements, e-mails, etc.).....
- Recommendations of staff, unions, trade or non-profit associations, etc.
- Examination of CVs received from job-hunters .....
- Other (please specify) \_\_\_\_\_

How effective for your firm were fixed-term contract renewals or extensions? <sup>(1)</sup>

Workers & apprentices	Clerks & managers
<input type="text"/> NO <input type="text"/> YES ↓	<input type="text"/> NO <input type="text"/> YES ↓
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

(1) (1=not effective; 2=fairly effective; 3=very effective; 8=not used).



**PART E – Production capacity**

Percentage change in production capacity (*production capacity is the maximum output obtainable with plant operating at full capacity, without altering the organisation of work shifts*)

2003/2002	2004/2003 (proj.)
-----------	-------------------

<input type="text"/>	<input type="text"/>	%	<input type="text"/>	<input type="text"/>	%
----------------------	----------------------	---	----------------------	----------------------	---

Capacity utilisation (*actual output as a percentage of maximum obtainable output*)..

2003	2004 (proj.)
------	--------------

<input type="text"/>	<input type="text"/>	%	<input type="text"/>	<input type="text"/>	%
----------------------	----------------------	---	----------------------	----------------------	---

**PART F – Turnover and operating result**

Turnover (€ thousand)

	2002	2003	2004 (proj.)	2004/2003 (proj.)
Turnover from sales of goods & services in year.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
- of which: for export .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

(a) Calculate as: (turnover 2004/2003-1)\*100

2003/2002	2004/2003 (proj.)
-----------	-------------------

Average annual percentage change in prices of invoiced goods & services ..    %    % (b)

You have already provided an estimate of turnover, adjusted for changes in prices, in terms of **percentage changes 2004/2003** of roughly (*sign and percentage change*)    % (*calculate as (a) – (b)*)

Can you now forecast a **range around this figure**, i.e. an estimate of minimum and maximum turnover adjusted for changes in prices?

Minimum (*sign & % change*) .....    %      Maximum (*sign & % change*) ....    %

Share of 2003 **turnover** from production to **commissioning firm’s technical specifications** (contract work) ...    %

⇒Main location <sup>(1)</sup> of firms commissioning work .....

Share of 2003 **purchases** of goods produced by other firms to **your technical specifications** (contract work) ...    %

⇒Main location <sup>(1)</sup> of firms performing contract work .....

Please describe the firm’s **operating result** <sup>(2)</sup> for 2003?.....

(1) (1= Same region in which head office is located; 2=North; 3=Centre; 4=South & Islands; 5=Abroad). - (2) (1=large profit; 2=small profit; 3=broad balance; 4=small loss; 5=large loss).

**PART G - Price reviews and quality**

How often <sup>(1)</sup> do you usually review the prices of your products, **even without changing them?** .....

(1) (1=several times a month; 2=1-3 months; 3=every 4-6 months; 4= every 7-11 months; 5=once a year; 6=less often; 8=not applicable; 9=don’t know).

How often did you **actually** change your prices in 2003 (0=never; 1=once; 2=2-5 times; 3=6-9 times; 4=10-12 times; 5=more than 12 times) .....

Please imagine dividing the market for your specific sector into 4 bands<sup>(1)</sup>. Which **band** best describes/described the following:

- your main product line in terms of turnover .....
- the products of your main competitors in the industrial countries<sup>(2)</sup> .....
- the products of your main competitors in other countries.....
- of which: products of your main competitors in China .....

	Quality band	
	2000	2003
- your main product line in terms of turnover .....	<input type="text"/>	<input type="text"/>
- the products of your main competitors in the industrial countries <sup>(2)</sup> .....	<input type="text"/>	<input type="text"/>
- the products of your main competitors in other countries.....	<input type="text"/>	<input type="text"/>
of which: products of your main competitors in China .....	<input type="text"/>	<input type="text"/>

(1) (Bands: 1=products offering very good value for money; 2=products offering fair value for money; 3=medium-to-high quality products; 4=high quality products; 8=not applicable; 9=don’t know). - (2) For the industrial countries please refer to the methodology.

**PART H – Information and communication technology**

Number of PCs (including laptops) available within the firm on 31.12.2003 .....

**On-line transactions in 2003**

Selling <sup>(1)</sup> **on-line** (*per cent of turnover*).....

Buying <sup>(1)</sup> **on-line** (*per cent of purchases*).....

Transactions	If yes, please state percentage
<input type="checkbox"/> NO <input type="checkbox"/> YES⇒	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="checkbox"/> NO <input type="checkbox"/> YES⇒	<input type="text"/> <input type="text"/> <input type="text"/> %

(1) Transactions conducted either between firms or between firms and consumers involving the placement on-line of an order for a good or service; delivery and payment may take place either on-line or off-line.

**PART I - Internationalisation**

At the end of 2003 did the firm have **associates abroad** <sup>(1)</sup> or **large holdings** <sup>(2)</sup> in foreign companies <sup>(3)</sup>?  NO  YES ↓

(1) Companies entirely owned or at least controlled by the firm. - (2) Holding of not less than 10 % of the capital or enough to influence management decisions. - (3) Including non-industrial companies.

Turnover in 2003 of foreign associates or participated companies (€thousand).....

Employees in foreign associates and participated companies in 2003.....

	2001	2002	2003
Expenditure on foreign <b>direct investments</b> <sup>(1)</sup> ..... (€thousand; 0 for no investments)	<input type="text"/>	<input type="text"/>	<input type="text"/>
Main area <sup>(2)</sup> of destination .....	<input type="text"/>	<input type="text"/>	<input type="text"/>
Principal method <sup>(3)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>

(1) For a definition see the methodology. - (2) (1=EU countries on 31-12-2003; 2=other industrial countries (non-EU); 3=East European countries and former USSR; 4=China; 5=Rest of the world). For a list of countries see the methodology. - (3) (1=acquisition and/or merger; 2=construction of new plant).

Did your shareholdings in foreign companies produce a profit <sup>(1)</sup> in 2001-2003? .....  NO  YES ↓

(1) Profits of foreign associates, dividends or distributed profit of foreign shareholdings, interest on loans to latter, etc.

**If yes:** please indicate the **average percentage of revenue re-invested** abroad in the same period .....    %

Was your firm involved, at the end of 2003, in major **co-operation** agreements with foreign companies (**do not include** any associates/shareholdings or any agreements among firms in the same group or any foreign direct investments)?

Nature of co-operation		Location of <i>main</i> counterpart	First year of co-operation
- Commercial agreement .....	<input type="checkbox"/> NO <input type="checkbox"/> YES ⇔	Area <sup>(1)</sup> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
- Technical/production agreement .....	<input type="checkbox"/> NO <input type="checkbox"/> YES ⇔	Area <sup>(1)</sup> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
- Research and development .....	<input type="checkbox"/> NO <input type="checkbox"/> YES ⇔	Area <sup>(1)</sup> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

(1) (1=EU countries on 31-12-2003; 2=other industrialised countries (non-EU); 3=East European countries and former USSR; 4=China; 5=Rest of the world).

When planning your foreign operations, what degree of importance did you assign **throughout** to the following reasons? (fill in not more than two boxes: 0=not important; 1=very low; 2=low; 3=high; 4=very high; 8=not applicable).

- savings in production costs .....
- proximity to input/outlet markets .....
- potential technology benefits .....
- economies of scale .....
- tax benefits and aid from host country .....
- other significant reasons (please specify) .....

**PART J - Financing**

Please state whether, at the terms and conditions (cost and collateral) currently applied, the firm would like to **borrow more** from banks or other lenders .....  NO  YES ↓

**If you answered yes to the above question, please say:**

- whether the firm would be willing, at present, to pay a slightly higher rate of interest or to accept slightly harsher terms and conditions (e.g. extra collateral) in order to borrow more? .....  NO  YES
- why you think the firm has been unable so far to borrow as much as it would wish?: (tick **one** box only)
  - no banks or other lenders have been contacted for that purpose yet .....
  - the lenders who have been contacted are unwilling to increase the volume of lending to the firm.....

In 2001-2003 were you involved in mergers/acquisitions of other Italian or foreign firms (or their branches)? .....  NO  YES ↓

**If yes,** how was the operation financed? (tick no more than two boxes)

- from cash flow.....
- with bank loans.....
- on financial markets .....
- with the aid of M&A specialists.....
- other (please specify).....

**If yes,** did the operation involve the same branch of activity <sup>(1)</sup> ? .....  YES  NO

(1) See methodology for a list of sectors.

Please enter amounts for the following **forms of financing** (€ thousand)

	2002	2003	2004 (proj.)
Equity <sup>(1)</sup> .....			
of which: private equity funds <sup>(1) (2)</sup> .....			
Bonds and other medium/long-term securities <sup>(3)</sup> .....			
Other <sup>(3)</sup> .....			
Change in bank loans <sup>(4)</sup> (+/-) (€ thousand).....	<input type="text"/>	<input type="text"/>	<input type="text"/>
Cash flow <sup>(5)</sup> (+/-) (€ thousand).....	<input type="text"/>	<input type="text"/>	<input type="text"/>

(1) Please enter 0 if not used or if the firm made repayments of capital **overall**. - (2) Funds acquiring minority shareholdings in unlisted companies and generally playing an active role in their management. - (3) Please enter 0 if not used or if firm made redemptions of this category of securities **overall**. - (4) Change between start and end of year. Please enter 0 if not used or if no change took place. Please use minus sign to indicate negative change. - (5) Please enter 0 if not used. Please use minus sign to indicate negative cash flow.

**PART K – Trade credit and trade debt**

**Trade credit** (Please indicate average for 2003)

Amount of trade credit <sup>(1)</sup> (€ thousand).....  **Average** duration of contract in days

Composition of trade credit by type of contract/effective terms of payment:

one-part terms <sup>(2)</sup>    % paid by deadline    %  
two-part terms <sup>(3)</sup>    % paid over deadline    % ⇒ average delay in days   
**Total credit**    % **Total credit**    %

For two-part term trade credit only, please state the **monthly discount** that the firm offered to customers (for instance, for payment in 10 days as opposed to payment in 40 days) .....   .  %

Please state the percentage of trade credit and turnover per sector

Italy:

- General gov. (central & local auths, health services, social security agencies) .....
- Consumer households.....
- Producer households (self-employed workers, craft firms, sole proprietorships) .....
- Non-financial companies.....
- Financial companies (banks, insurance & other financial companies) .....
- **Total for Italy** .....
- **Other countries** .....
- Total for Italy and other countries**.....

Per cent of trade credit	Per cent of 2003 turnover
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<b>1</b> <b>0</b> <b>0</b> %	<b>1</b> <b>0</b> <b>0</b> %

**Trade debt** (Please indicate average for year)

Amount of trade debt <sup>(4)</sup> ..... 

2002	2003
<input type="text"/>	<input type="text"/>

**Actual average** duration in days 

2002	2003
<input type="text"/>	<input type="text"/>

 (€ thousand)

(1) Average yearly amounts outstanding. Includes any provision for diminution in value of trade credit. - (2) The purchaser was given an extension of payment at no additional cost and was not offered any discount for early payment (for example, 10 days instead of 40 days after delivery). - (3) The extension of payment entailed a cost for the purchaser, in the sense of forgoing a discount or a complimentary offer and/or of having to pay a higher price or a rate of interest. - (4) Average yearly amount outstanding.

How would you judge the effort involved in completing the questionnaire?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Additional comments:	<input type="text"/>			



## Survey of industrial firms - 2003

Confidentiality notice (Legislative Decree 196/2003) – The purpose of this survey is to collect information on the main economic and financial variables in the industrial sector. Your co-operation is important but not compulsory and any refusal to take part will bear no consequences. The information provided will only be used for research purposes and will not be published outside the Bank except in aggregate form. The firms taking part will be sent an extract of the main results of the survey. The data will be processed entirely inside the Bank and systems will be put in place to ensure their safety and confidentiality. Access to individual data is restricted to the people in charge of handling them and the staff engaged in processing and analysis. Firms enjoy the rights granted under the terms of Article 7 of the Decree, including the right to correct and integrate information concerning them. In charge of data handling: Head of the Economic Research Department of the Bank of Italy, 91 Via Nazionale, 00184 ROME. Responsible for data handling: Bank of Italy (Organisation Department), 91 Via Nazionale, 00184 ROME.

### PART A – General information

**Bank of Italy codes:** Branch code .....    Firm code.....

(to be entered by branch) Type (sub-group)<sup>(1)</sup> .....

Town.....  Istat town code .....

Name of firm \_\_\_\_\_

Legal status .....  Branch of activity (Ateco91)<sup>(2)</sup> .....

(1=SRL; 2=SPA; 3=SAA; 4=SCRL; 5=SCRI; 6=SAS; 7=SNC; 8=Other) Branch of activity (Ateco2002)<sup>(3)</sup>

Year of creation ....

Does the firm belong to a group? .....  NO  YES ↓

*If the firm belongs to a group (a 'group' being a set of several firms directly or indirectly controlled – through one or more chains of control – by the same physical persons or the same public entity):*

Is the firm the parent company? ...  YES  NO ⇒ Name of the parent company \_\_\_\_\_

Name of the group \_\_\_\_\_

Nationality of the group (1=Italian; 2=EU country on 31-12-2003 (except Italy); 3=Non-EU country on 31-12-2003)

What the firm the object of extraordinary **corporate actions** in 2003? .....  NO  YES ↓

(merger, acquisition, split, capital contribution, transfer of assets)

**If yes:** Please tick the box **if you are unable to provide homogeneous data** for 2002 and 2003 .....

(1) See Central Credit Register, *Nuova classificazione della clientela bancaria, 1991*. - (2) See ISTAT, *Classificazione delle attività economiche. Metodi e norme, 1991*. - (3) See ISTAT, *Classificazione delle attività economiche. Metodi e norme, 2002*.

### PART B – Workforce and wages

(amounts in numbers)

	Total workforce	Total on fixed-term contract	Total non-EU workers
<u>2002</u> Average workforce .....			
Workforce at end of year .....			
Hirings .....			
Separations .....			
<u>2003</u> Average workforce .....			
Workforce at end of year .....			
Hirings .....			
Separations .....			
<u>2004</u> Workforce at end of year (projection) .....			

Total hours worked by payroll employees .....

- of which: per cent overtime .....

2002	2003
<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> %

**Wages and salaries in 2003**

Total gross annual per capita wages (€)<sup>(1)</sup> .....

Minimum wage per national contract<sup>(2)</sup> .....

(approximate per cent of total)

Workers & apprentices	Clerks & mangers	General average
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %

(1) Includes social security and tax withheld on behalf of workers; does not include firms' payments on behalf of INPS (National Social Security Institute) and others. - (2) The part covered by national contract includes: minimum wages, cost of living allowance, thirteenth and other additional months' pay, meal allowance, overtime, and shift allowance.

**Staff recruitment during 2003**

Did you fill vacancies with new hirings or use of temporary work? .....

**How many weeks** did it take on average to fill vacancies? .....

How many times did you renew or extend fixed-term contracts? .....

**How many vacancies** were still not filled at the end of 2003? .....

How effective according to your company were the following **methods of recruitment** <sup>(1)</sup> (tick one or more boxes)

- Public employment agency .....
- Private agency (employment, recruitment, temporary work, etc.) .....
- Advertisement .....
- Internet/e-mail search (homepage advertisements, e-mails, etc.) .....
- Recommendations of staff, unions, trade or non-profits associations, etc. ....
- Examinations of CVs received from job-hunters .....
- Other (please specify) .....

How effective for your firm were fixed-term contract renewals or extensions <sup>(1)</sup> ..

Workers & apprentices		Clerks & managers	
<input type="checkbox"/> NO	<input type="checkbox"/> YES↓	<input type="checkbox"/> NO	<input type="checkbox"/> YES↓
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(1) (1=not effective; 2=fairly effective; 3=very effective; 8=not used).

In the period 2001-2003 did you increase your scale of production (in terms of production capacity and/or workforce)? .....  NO  YES

**If yes:** to what extent? (1=a little; 2=a fair amount; 3=a lot).....

**If not:** why? (no more than two answers)

- present scale is appropriate for targets .....
- prospects are of a moderate increase in demand .....
- potential problems of control over firm .....
- organisational factors .....
- difficulty finding managerial staff and/or qualified personnel.....
- risk of increased rigidity in use of workforce .....
- financial factors .....
- other (please specify) .....

**PART C – Gross fixed investment in Italy** (please enter amounts in € thousand; enter 0 for no investments)

	2002	2003	Forecast 2004
<b>Total expenditure on material goods</b> <sup>(1)</sup> .....			
- of which: property .....			
- of which: for material goods <b>used</b> .....			
<b>Total spending on software, databases and mineral exploration</b> <sup>(2)</sup> .....			

(1) Material goods include property, plant, machinery and equipment, and means of transport. - (2) Includes expenditure on original copyright of entertainment and works of literature or art.

**PART D – Turnover and operating result**

(please enter amounts in € thousand)

	2002	2003	Forecast 2004
Turnover from sales of goods and services in the year ....			
- of which: for export .....			

Share of 2003 **turnover** from production to **commissioning firm’s technical specifications** (contract work) .    %

⇒ Main location <sup>(1)</sup> of firms commissioning work.....

Share of 2003 **purchases** of goods produced by other firms to **your specifications** (contract work) .....    %

⇒ Main location <sup>(1)</sup> of firms performing contract work .....

Please describe the firm’s **operating result** <sup>(2)</sup> for 2003?.....

(1) (1=Same region in which head office is located; 2=North; 3=Centre; 4=South & Islands; 5=Abroad). - (2) (1=large profit; 2=small profit; 3=broad balance; 4=small loss; 5=large loss).

**PART E – Information and communication technology**

Number of PCs (including laptops) available within the firm on 31.12.2003 .....

	Transactions	If yes, please state percentage
<b>On-line transactions in 2003</b>		
Selling <sup>(1)</sup> <b>on-line</b> (per cent of turnover).....	<input type="checkbox"/> NO <input type="checkbox"/> YES⇒	<input type="text"/> <input type="text"/> <input type="text"/> %
Buying <sup>(1)</sup> <b>on-line</b> (per cent of purchases) .....	<input type="checkbox"/> NO <input type="checkbox"/> YES⇒	<input type="text"/> <input type="text"/> <input type="text"/> %

(1) Transactions conducted either between firms or between firms and consumers involving the placement on-line of an order for a good or service; delivery and payment may take place either on-line or off-line.

**PART F - Financing**

Please state whether, at the terms and conditions (cost and collateral) currently applied, the firm would like to **borrow more** from banks or other lenders .....  NO  YES↓

**If you answered yes to the above question, please say:**

- whether the firm would be willing, at present, to pay a slightly higher rate of interest or to accept slightly harsher terms and conditions (e.g. extra collateral) in order to borrow more? .....  NO  YES
- why you think the firm has been unable so far to borrow as much as it would wish?: (*tick one box only*)
  - no banks or other lenders have been contacted for that purpose yet .....
  - the lenders who have been contacted are unwilling to increase the volume of lending to the firm.....

In 2001-2003 did you obtain guarantees from a collective loan guarantee consortium? .....  NO  YES

**PART G – Trade credit and trade debt**

**Trade credit** (*Please indicate average for 2003*)

Amount of trade credit <sup>(1)</sup> (€*thousand*).....  **Average duration of contract in days**

Composition of trade credit by type of contract/effective terms of payment:

one-part-terms <sup>(2)</sup>    % paid by deadline    %  
 two-part terms <sup>(3)</sup>    % paid over deadline    % ⇒ average delay in days   
**Total credit**    % **Total credit**    %

For two-part term trade credit only, please state the **monthly discount** that the firm offered to customers (*for instance, for payment in 10 days as opposed to payment in 40 days*) .....   .  %

Please state the percentage of trade credit and turnover per sector

Italy:

- General gov. (central & local auths, health services, social security agencies)*    %
- Consumer households*.....    %
- Producer households (self-employed workers, craft firms, sole proprietorships)*    %
- Non-financial companies*.....    %
- Financial companies (banks, insurance & other financial companies)* .....    %

• **Total for Italy** .....    %

• **Other countries** .....    %

**Total for Italy and other countries**.....    %

Per cent of trade credit	Per cent of 2003 turnover
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<b>1</b> <b>0</b> <b>0</b> %	<b>1</b> <b>0</b> <b>0</b> %

**Trade debt** (*Please indicate average for year*)

Amount of trade debt <sup>(4)</sup> ..... 

2002	2003
<input type="text"/>	<input type="text"/>

**Actual average duration in days**

2002	2003
<input type="text"/>	<input type="text"/>

  
 (€*thousand*)

(1) Average yearly amounts outstanding. Includes any provision for diminution in value of trade credit. - (2) The purchaser was given an extension of payment at no additional cost and was not offered any discount for early payment (for example, 10 days instead of 40 days after delivery). - (3) The extension of payment entailed a cost for the purchaser, in the sense of forgoing a discount or a complimentary offer and/or of having to pay a higher price or a rate of interest. - (4) Average yearly amount outstanding.

How would you judge the effort involved in completing the questionnaire? 

modest	average	large	excessive
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Additional comments: \_\_\_\_\_

# BANCA D'ITALIA

## Survey of service firms – 2003

50+ employees

Confidentiality notice (Legislative Decree 196/2003) – The purpose of this survey is to collect information on the main economic and financial variables in the industrial sector. Your co-operation is important but not compulsory and any refusal to take part will bear no consequences. The information provided will only be used for research purposes and will not be published outside the Bank except in aggregate form. The firms taking part will be sent an extract of the main results of the survey. The data will be processed entirely inside the Bank and systems will be put in place to ensure their safety and confidentiality. Access to individual data is restricted to the people in charge of handling them and the staff engaged in processing and analysis. Firms enjoy the rights granted under the terms of Article 7 of the Decree, including the right to correct and integrate information concerning them. In charge of data handling: Head of the Economic Research Department of the Bank of Italy, 91 Via Nazionale, 00184 ROME. Responsible for data handling: Bank of Italy (Organisation Department), 91 Via Nazionale, 00184 ROME.

### PART A – General information

**Bank of Italy codes:** Branch code .....     Firm code.....

(to be entered by branch) Type (sub-group) <sup>(1)</sup> .....

Town.....  Istat town code .....

Name of firm \_\_\_\_\_

Branch of activity (Ateco91) <sup>(2)</sup> .....     Branch of activity (Ateco 2002) <sup>(3)</sup> .....

Legal status .....  Year of creation.....

(0=Public company; 1=SRL; 2=SPA; 3=SAA; 4=SCRL; 5=SCRI; 6=SAS; 7=SNC; 8=Other)

Does the firm belong to a group? .....  NO  YES

**If the firm belongs to a group (a 'group' being a set of several firms directly or indirectly controlled – through one or more chains of control – by the same physical persons or the same public entity):**

Is the firm the parent company?  YES  NO  Name of the parent company \_\_\_\_\_

Name of the group \_\_\_\_\_

Nationality of the group (1=Italian; 2=EU country on 31-12-2003 (except Italy); 3=Non-EU country on 31-12-2003)

Was the firm the object of **extraordinary corporate actions** in 2003 ? .....  NO  YES

(merger, acquisition, split, capital contribution, transfer of assets)

**If yes:** Please tick the box **if you are unable to provide homogenous data** for 2002 and 2003 .....

(1) See Central Credit Register. *Nuova classificazione della clientele bancaria, 1991.* - (2) See ISTAT. *Classificazione delle attività economiche. Metodi e norme, 1991.* - (3) See ISTAT. *Classificazione delle attività economiche. Metodi e norme, 2002.*

### PART B – Workforce, wages and growth

(amounts in numbers)

	Total workforce	Total workers, apprentices & similar	Total on fixed-term contract	Total non-EU workforce
<u>2002</u> Average workforce .....				
- of which: part-time .....				
Workforce at <b>end of year</b> .....				
Hirings .....				
Separations .....				
<u>2003</u> Average workforce .....				
- of which: part-time .....				
Workforce at <b>end of year</b> .....				
Hirings .....				
Separations .....				
<u>2004</u> Workforce at <b>end of year</b> (projection)				

	2002	2003
<b>Total</b> hours worked by payroll employees .....		
- of which: <b>per cent</b> overtime .....	<input type="text"/> <input type="text"/> . <input type="text"/> %	<input type="text"/> <input type="text"/> . <input type="text"/> %
Number of temporary work assignments.....		
Total hours of temporary work .....		
Hours worked by <b>external collaborators</b> <sup>(1) (2)</sup> (% of total hours worked by payroll employees).....	<input type="text"/>	<input type="text"/>

(1) Includes co-ordinated and continuous collaboration contracts, occasional work and workers with VAT number. - (2) (1=less than 2%; 2=from 2 to 5 %; 3=from 5 to 10 %; 4=from 10 to 20 %; 5=more than 20%).

**Staff recruitment in 2003**

Did you fill vacancies with new hirings or use of temporary work? .....

**How many weeks** did it take on average to fill vacancies? .....

How many times did you renew or extend fixed-term contracts? .....

**How many vacancies** were still not filled at the end of 2003? .....

How effective according to your company were the following **methods of recruitment** <sup>(1)</sup> (*tick one or more boxes*)

- Public employment agency .....
- Private agency (employment, recruitment, temporary work, etc.) .....
- Advertisement .....
- Internet/e-mail search (homepage advertisements, e-mails, etc.) .....
- Recommendations of staff, unions, trade or non-profits associations, etc. ....
- Examinations of CVs received from job-hunters .....
- Other (*please specify*) .....

How effective for your firm were fixed-term contract renewals or extensions <sup>(1)</sup> ..

Workers, apprentices etc.	Clerical staff & managers
<input type="checkbox"/> NO <input type="checkbox"/> YES↓	<input type="checkbox"/> NO <input type="checkbox"/> YES↓
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

(1) (1=not effective; 2=fairly effective; 3=very effective; 8=not used).

**Wages and salaries in 2003**

Total gross annual per capita wages (€) <sup>(1)</sup> .....

Minimum wage per national contract <sup>(2)</sup> .....

(*approximate per cent of total*)

Workers, apprentices, etc.	Clerks & managers	General average
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/> %	<input type="text"/> %	<input type="text"/> %

(1) Includes social security and tax withheld on behalf of workers; does not include firms' payments on behalf of INPS (National Social Security Institute) and others. - (2) The part covered by national contract includes: minimum wages, cost of living allowance, thirteenth and other additional months' pay, meal allowance, overtime, and shift allowance.

In the period 2001-2003 did you enlarge the firm?  NO  YES

**If yes:** to what extent? (1= a little; 2=a fair amount; 3=a lot).....

**If not:** why? (*no more than two answers*)

- present size is appropriate for targets.....
- prospects are of a moderate increase in demand.....
- potential problems of control over firm .....
- organisational factors .....
- difficulty finding material staff and/or qualified personnel .....
- risk of increased rigidity in use of workforce .....
- financial factors .....
- other (*please specify*) .....

**PART C – Gross fixed investment in Italy** (*please enter amounts in € thousand; enter 0 for no investments*)

**Total expenditure on material goods** <sup>(1)</sup> .....

- of which: property .....

**Total expenditure on software, databases and mineral exploration** <sup>(2)</sup> .....

2002	2003	Projection 2004
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

<input type="text"/>	<input type="text"/>
----------------------	----------------------

Average annual percentage change in prices of **material goods** purchased .....

Average annual percentage change in prices of **software, databases and mineral exploration** purchased <sup>(2)</sup> .....

(1) Material goods include property, plant, machinery and equipment, and means of transport. - (2) Includes expenditure on original copyright of entertainment and works of literature or art.

Percentage breakdown of workforce and total fixed investments in 2002 and 2003 and projection for 2004:

	Workforce at end of year			Total gross fixed investment		
	2002	2003	2004 (proj.)	2002	2003	2004 (proj.)
North-West <sup>(1)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
North-East <sup>(2)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Centre <sup>(3)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
South & Islands <sup>(4)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total .....	<b>1 0 0</b>	<b>1 0 0</b>	<b>1 0 0</b>	<b>1 0 0</b>	<b>1 0 0</b>	<b>1 0 0</b>
same region <sup>(5)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

(1) North-West=Piedmont, Valle d'Aosta, Lombardy and Liguria. – (2) North-East=Veneto, Trentino Alto-Adige, Friuli Venezia Giulia and Emilia Romagna. – (3) Centre=Tuscany, Umbria, Marche and Lazio. – (4) South & Islands=Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicily and Sardinia. – (5) Same region as the location of the head office.

**PART D - Turnover** (please enter amounts in € thousand) **and operating result**

	2002	2003	2004 (proj.)	2004/2003 (proj.)
Turnover from sales of goods and services .....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> % (a)
- of which: % for export <sup>(1)</sup> .....	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %	

(1) Sales to non-residents in Italy.

(a) Calculate as: (turnover 2004/2003-1)\*100

	2003/2002	2004/2003 (proj.)
Average annual percentage change in prices of invoiced goods and services .....	<input type="text"/> %	<input type="text"/> % (b)

You have already provided an estimate of turnover, adjusted for changes in prices, in terms of **percentage changes 2004/2003** roughly equal to (sign and % change)  % (calculate as (a) - (b))

Can you now forecast a **range around this figure**, i.e. an estimate of minimum and maximum turnover adjusted for changes in prices?

Minimum (sign and % change) ....  %      Maximum (sign and % change) ....  %

Please describe the firm's **operating result** <sup>(1)</sup> for 2003. ....

(1) (1=large profit; 2=small profit; 3=broad balance; 4=small loss; 5=large loss).

**PART E - Price reviews**

How often <sup>(1)</sup> do you usually review the prices of your products, **even without changing them**? .....

(1) (1=several times a month; 2=1-3 months; 3=every 4-6 months; 4=every 7-11 months; 5=once a year; 6=less often; 8=not applicable; 9=don't know).

**Actual** price changes in 2003 (0=never; 1=once; 2=2-5 times; 3=6-9 times; 4=10-12 times; 5=more than 12 times) .....

**PART F - Information and communication technology**

Number of PCs (including laptops) available within the firm on 31.12.2003 .....

On-line transactions in 2003	Transactions	If yes, please state percentage
Selling <sup>(1)</sup> <b>on-line</b> (per cent of turnover) .....	<input type="text"/> NO <input type="text"/> YES⇒	<input type="text"/> %
Buying <sup>(1)</sup> <b>on-line</b> (per cent of purchases) .....	<input type="text"/> NO <input type="text"/> YES⇒	<input type="text"/> %

(1) Transactions conducted either between firms or between firms and consumers involving the placement on-line of an order for a good or service; delivery and payment may take place either on-line or off-line.

**PART G - Financing**

Please state whether, at the terms and conditions (cost and collateral) currently applied, the firm would like to **borrow more** from banks or other lenders .....  NO  YES↓

If you answered yes to the above question, please say:

- whether the firm would be willing, at present, to pay a slightly higher rate of interest or to accept slightly harsher terms and conditions (e.g. extra collateral) in order to borrow more?.....  NO  YES
- why you think the firm has been unable so far to borrow as much as it would wish?: (*tick one box only*)
  - no banks or other lenders have been contacted for that purpose yet .....
  - the lenders who have been contacted are unwilling to increase the volume of lending to the firm .....

**PART H – Trade credit and trade debt**

**Trade credit** (Please indicate average for 2003)

Amount of trade credit <sup>(1)</sup> (€thousand).....  Average duration of contract in days

Composition of trade credit by type of contract/effective terms of payment:

one-part terms <sup>(2)</sup>    % paid by deadline    %  
two-part terms <sup>(3)</sup>    % paid over deadline    % ⇒ average delay in days   
**Total credit**    %     **Total credit**    %

For two-part term trade credit only, please state the **monthly discount** that the firm offers to customers (for instance, for payment in 10 days as opposed to payment in 40 days) .....  .  %

Please state the percentage of trade credit and turnover per sector

Italy:

- General gov. (central & local auths, health services, social security agencies)
- Consumer households.....
- Producer households (self-employed workers, craft firms, sole pro).....
- Non-financial companies.....
- Financial companies (banks, insurance & other financial companies).....

• **Total for Italy** .....

• **Other countries**.....

**Total for Italy and other countries**.....

Per cent of trade credit	Per cent of 2003 turnover
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %
<input type="text"/> <input type="text"/> <input type="text"/> %	<input type="text"/> <input type="text"/> <input type="text"/> %

**Trade debt** (Please indicate average for year)

Amount of trade debt <sup>(4)</sup> ..... 

2002	2003
<input type="text"/>	<input type="text"/>

**Actual average duration in days**

2002	2003
<input type="text"/>	<input type="text"/>

 (€thousand)

(1) Average yearly amounts outstanding. Includes any provision for diminution in value of trade credit. - (2) The purchaser was given an extension of payment at no additional cost and was not offered any discount for early payment (for example, 10 days instead of 40 days after delivery). - (3) The extension of payment entailed a cost for the purchaser, in the sense of forgoing a discount or a complimentary offer and/or of having to pay a higher price or a rate of interest. - (4) Average yearly amount outstanding.

How would you judge the effort involved in completing the questionnaire? 

modest	average	large	excessive
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Additional comments: \_\_\_\_\_

## Survey of service firms – 2003

Confidentiality notice (Legislative Decree 196/2003) – The purpose of this survey is to collect information on the main economic and financial variables in the industrial sector. Your co-operation is important but not compulsory and any refusal to take part will bear no consequences. The information provided will only be used for research purposes and will not be published outside the Bank except in aggregate form. The firms taking part will be sent an extract of the main results of the survey. The data will be processed entirely inside the Bank and systems will be put in place to ensure their safety and confidentiality. Access to individual data is restricted to the people in charge of handling them and the staff engaged in processing and analysis. Firms enjoy the rights granted under the terms of Article 7 of the Decree, including the right to correct and integrate information concerning them. In charge of data handling: Head of the Economic Research Department of the Bank of Italy, 91 Via Nazionale, 00184 ROME. Responsible for data handling: Bank of Italy (Organisation Department), 91 Via Nazionale, 00184 ROME.

### PART A – General information

**Bank of Italy codes:** Branch code .....     Firm code.....

(to be entered by branch) Type (sub-group) <sup>(1)</sup> .....

Town.....  Istat town code.....

Name of firm

Branch of activity (Ateco91) <sup>(2)</sup> .....     Branch of activity (Ateco 2002) <sup>(3)</sup> .....

Legal status .....  Year of creation.....

(0=Public company; 1=SRL; 2=SPA; 3=SAA; 4=SCRL; 5=SCRI; 6=SAS; 7=SNC; 8=Other)

Does the firm belong to a group .....  NO  YES ↓

*If the firm belongs to a group (a 'group' being a set of several firms directly or indirectly controlled – through one or more chains of control – by the same physical persons or the same public entity):*

Is the firm the parent company?  YES  NO ⇒ Name of the parent company

Name of the group

Nationality of group (1=Italian; 2=EU country on 31-12-2003 (except Italy); 3=Non-EU country on 31-12-2003) ...

Was the firm the object of **extraordinary corporate actions** in 2003? .....  NO  YES ↓

(merger, acquisition, split, capital contribution, transfer of assets)

**If yes:** Please tick the box **if you are unable to provide homogeneous data** for 2002 and 2003 .....

(1) See Central Credit Register. *Nuova classificazione della clientele bancaria, 1991.* - (2) See ISTAT. *Classificazione delle attività economiche. Metodi e norme, 1991.* - (3) See ISTAT. *Classificazione delle attività economiche. Metodi e norme, 2002.*

### PART B – Workforce, wages and growth

(amounts in numbers)

	Total workforce	Total on fixed-term contract	Total non-EU workers
<u>2002</u> Average workforce .....			
- of which: part-time .....			
Workforce at <b>end of year</b> .....			
Hirings .....			
Separations.....			
<u>2003</u> Average workforce .....			
- of which: part-time .....			
Workforce at <b>end of year</b> .....			
Hirings .....			
Separations.....			
<u>2004</u> Workforce at <b>end of year</b> (projection)			

**Total** hours worked by payroll employees .....

- of which: **per cent** overtime .....

Hours worked by **external collaborators** <sup>(1) (2)</sup> (% of total hours worked by payroll employees).....

	2002	2003
	<input type="text"/> <input type="text"/> . <input type="text"/> %	<input type="text"/> <input type="text"/> . <input type="text"/> %
	<input type="text"/>	<input type="text"/>

(1) Includes co-ordinated and continuous collaboration contracts, occasional work and workers with VAT number. - (2) (1=less than 2%; 2=from 2 to 5 %; 3=from 5 to 10 %; 4=from 10 to 20 %; 5=more than 20%).



**Staff recruitment in 2003**

Did you fill vacancies with new hirings or use of temporary work? .....

**How many weeks** did it take on average to fill vacancies? .....

How many times did you renew or extend fixed-term contracts? .....

**How many vacancies** were still not filled at the end of 2003? .....

How effective according to your company were the following **methods of recruitment** <sup>(1)</sup> (tick **one or more** boxes)

- Public employment agency .....
- Private agency (employment, recruitment, temporary work, etc.) .....
- Advertisement .....
- Internet/e-mail search (homepage advertisements, e-mails, etc.) .....
- Recommendations of staff, unions, trade or non-profits associations, etc. ....
- Examinations of CVs received from job-hunters .....
- Other (please specify) .....

How effective for your firm were fixed-term contract renewals or extensions <sup>(1)</sup> ..

Workers, apprentices, etc.	Clerical staff & managers
<input type="checkbox"/> NO <input type="checkbox"/> YES↓	<input type="checkbox"/> NO <input type="checkbox"/> YES↓
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

(1) (1=not effective; 2=fairly effective; 3=very effective; 8=not used).

**Wages and salaries in 2003**

Total gross annual per capita wages (€) <sup>(1)</sup> .....

Minimum wage per national contract <sup>(2)</sup> .....

*approximate per cent of total*

Workers, apprentices, etc.	Clerks & managers	General average
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/> %	<input type="text"/> %	<input type="text"/> %

(1) Includes social security and tax withheld on behalf of workers; does not include firms' payments on behalf of INPS (National Social Security Institute) and others. - (2) The part covered by national contract includes: minimum wages, cost of living allowance, thirteenth and other additional months' pay, meal allowance, overtime, and shift allowance.

In the period 2001-2003 did you enlarge the firm ?

NO  YES

**If yes:** to what extent? (1= a little; 2=a fair amount; 3=a lot).....

**If not:** why? (no more than two answers)

- present size is appropriate for targets.....
- prospects are of a moderate increase in demand.....
- potential problems of control over firm .....
- organisational factors .....
- difficulty finding material staff and/or qualified personnel .....
- risk of increased rigidity in use of workforce .....
- financial factors .....
- other (please specify) .....

**PART C – Gross fixed investment in Italy** (please enter amounts in € thousand; enter 0 for no investments)

	2002	2003	Projection 2004
<b>Total expenditure on material goods</b> <sup>(1)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>
- of which: property .....	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Total expenditure on software, databases and mineral exploration</b> <sup>(2)</sup> .....	<input type="text"/>	<input type="text"/>	<input type="text"/>

(1) Material goods include property, plant, machinery and equipment, and means of transport. - (2) Includes expenditure on original copyright of entertainment and works of literature or art.

**PART D - Turnover** (please enter amounts in € thousand) **and operating result**

	2002	2003	Projection 2004
Turnover from sales of goods and services.....	<input type="text"/>	<input type="text"/>	<input type="text"/>
- of which: % for export <sup>(1)</sup> .....	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %

Please describe the firm's **operating result** <sup>(2)</sup> for 2003?.....

(1) Sales to non-residents in Italy. - (2) (1=large profit; 2=small profit; 3=broad balance; 4=small loss; 5=large loss).

**PART E – Information and communication technology**

Number of PCs (including laptops) available within the firm on 31.12.2003 .....

**On-line transactions in 2003**

Selling <sup>(1)</sup> **on-line** (per cent of turnover).....

Buying <sup>(1)</sup> **on-line** (per cent of purchases).....

Transactions	If yes, please state percentage
NO YES⇒	%
NO YES⇒	%

(1) Transactions conducted either between firms or between firms and consumers involving the placement on-line of an order for a good or service; delivery and payment may take place either on-line or off-line.

**PART F - Financing**

Please state whether, at the terms and conditions (cost and collateral) currently applied, the firm would like to **borrow more** from banks or other lenders .....

*If you answered yes to the above question, please say:*

• whether the firm would be willing, at present, to pay a slightly higher rate of interest or to accept slightly harsher terms and conditions (e.g. extra collateral) in order to borrow more? .....

- why you think the firm has been unable so far to borrow as much as it would wish?: (tick **one** box only)
  - no banks or other lenders have been contacted for that purpose yet .....
  - the lenders who have been contacted are unwilling to increase the volume of lending to the firm .....

In 2001-2003 did you obtain guarantees from a collective loan guarantee consortium? .....

**PART G – Trade credit and trade debt**

**Trade credit** (Please indicate average for 2003)

Amount of trade credit <sup>(1)</sup> (€thousand)..... Average duration of contract in days .....

Composition of trade credit by type of contract/ effective terms of payment:

one-part terms <sup>(2)</sup>       %	paid by deadline	%	
two-part terms <sup>(3)</sup>       %	paid over deadline	%	⇒ average delay in days
<b>Total credit</b>   <b>1</b>   <b>0</b>   <b>0</b> %	<b>Total credit</b>	<b>1</b>   <b>0</b>   <b>0</b> %	

For two-part term trade credit only, please state the **monthly discount** that the firm offers to customers (for instance, for payment in 10 days as opposed to payment in 40 days) .....

Please state the percentage of trade credit and turnover per sector

Italy:

- General gov. (central & local auths, health services, social security agencies)
- Consumer households.....
- Producer households (self-employed workers, craft firms, sole pro).....
- Non-financial companies.....
- Financial companies (banks, insurance & other financial companies) .....

• **Total for Italy** .....

• **Other countries**.....

**Total for Italy and other countries**.....

Per cent of trade credit	Per cent of 2003 turnover
%	%
%	%
%	%
%	%
%	%
%	%
%	%
%	%
<b>1</b>   <b>0</b>   <b>0</b> %	<b>1</b>   <b>0</b>   <b>0</b> %

**Trade debt** (Please indicate average for year)

	2002	2003		2002	2003
Amount of trade debt <sup>(4)</sup> (€thousand) .....			Actual average duration in days		

(1) Average yearly amounts outstanding. Includes any provision for diminution in value of trade credit. - (2) The purchaser was given an extension of payment at no additional cost and was not offered any discount for early payment (for example, 10 days instead of 40 days after delivery). - (3) The extension of payment entailed a cost for the purchaser, in the sense of forgoing a discount or a complimentary offer and/or of having to pay a higher price or a rate of interest. - (4) Average yearly amount outstanding.

How would you judge the effort involved in completing the questionnaire?  modest  average  large  excessive

Additional comments: \_\_\_\_\_