UNIONCAMERE

EXCELSIOR INFORMA
COMPANY EMPLOYMENT SCHEMES OBTAINED FROM THE CHAMBER OF COMMERCE SYSTEM

PROGETTO EXCELSIOR
SISTEMA INFORMATIVO
PER L'OCCUPAZIONE
E LA FORMAZIONE

Year 2021

In line with the climate of economic recovery characterising the current year, an increase in employment needs by the Italian business system is expected. In fact, 61% of the total number of companies with employees in industry and services plan to hire workers in 2021, a percentage that is returning to the pre-pandemic level, after a significant decline in 2020. The inflow expected in 2021 - with any contractual form - is approximately 4.6 million units, thereby fully returning to the 2019 levels. This rapid recovery is also accompanied by an increase in the difficulty companies experience in recruiting the professional profiles they are seeking, which involves almost a third of the expected inflow and which can also be attributed to a growing level of experience requested from candidates. The major problems in recruitment will mainly concern specialised profiles: managers and specialists with in-depth knowledge, also of a scientific nature (about 40% will be difficult to recruit) and above all skilled labourers (46%).

	COMPANIES HIRING	OUT OF ALL COMPANIES WITH EMPLOYEES	EXPECTED INFLOW	YOUNG PEOPLE	DIFFICULTY IN RECRUITING
2021	**776,590**	**61%**	**4,638,980**	**28%**	**32%**
2020	601,050	46%	3,242,310	28%	30%
2019	766,310	59%	4,615,200	27%	26%

N.B. Due to the rounding off, the sum of the single percentage values may differ by 100. This note applies to all graphs in the bulletin showing percentage compositions.

INFLOW EXPECTED IN 2021: BUSINESS AREAS AND BUSINESS SECTORS

The inflow planned by companies by functional area of insertion are traditionally concentrated in the area of production of goods/provision of services, and this was once again the case in 2021, with this area amounting to almost 47% of the total (as opposed to 45 % for the previous two years). This is followed by the commercial and sales area (19% in 2021) and the technical and design area (13%), both of which decreased slightly with respect to 2020 and 2019. The difficulty in recruiting profiles is particularly high in the IT systems area, amounting to 57% (in line with 2020); a significant *mismatch* is also seen in the design/research/development and installation and maintenance areas, which amounted to approximately 48-47% (the former showing a decrease compared to the previous year, and latter showing an increase).

In 2021, the economic recovery brought the inflow rate (for the direct employment component only) back to the 2019 level of about 30%, for a recovery of 10 points with respect to 2020, and included all sectors across the board. The sector which showed the greatest increase is that of tourism, amounting to nearly 37 points, followed by the construction sector (+10 points), and personal services and business services (both +7-8 points).

BUSINESS AREAS	2021			2020		2019	
	INFLOW (*)	% inflow	% diff. rec.	% inflow	% diff. rec.	% inflow	% diff. rec.
TOTAL	4,638,980	100	32	100	30	100	26
Direction and General services areas	191,530	4.1	34	4.1	34	4.2	31
1 General management and human resources organisation	28,380	0.6	23	0.5	25	0.6	27
2 Secretariat, staff and general	87,330	1.9	17	2.0	17	2.1	15
3 Information systems	75,820	1.6	57	1.6	57	1.5	54
Administrative areas	209,460	4.5	20	4.6	22	4.8	24
1 Administration, legal	76,460	1.6	18	1.8	24	1.9	27
2 Accounting, management control, finance	133,000	2.9	22	2.8	21	2.9	22
Technical and planning areas	622,180	13.4	44	14.3	41	13.4	38
1 Planning and research and	127,100	2.7	47	3.0	49	3.3	49
2 Installation and maintenance	399,660	8.6	48	9.0	42	7.8	38
3 Certification, quality control, safety, environment	95,420	2.1	27	2.2	27	2.3	24
Production of goods and provision of services area	2,168,150	46.7	32	45.2	27	45.2	25
Commercial and sales areas	900,880	19.4	28	20.4	27	20.6	24
1 Sales	587,550	12.7	27	13.2	26	13.2	22
2 Marketing, commercial, communication, public relations	129,160	2.8	37	3.1	36	3.4	36
3 Customer assistance	184,170	4.0	24	4.1	24	4.0	22
Logistics areas	546,790	11.8	29	11.4	30	11.8	23
1 Purchasing and internal handling of goods	131,660	2.8	17	2.7	16	3.1	14
2 Transportation and distribution	415,130	8.9	32	8.7	35	8.7	26

INFLOW BY BUSINESS SECTOR *(% by size class)**
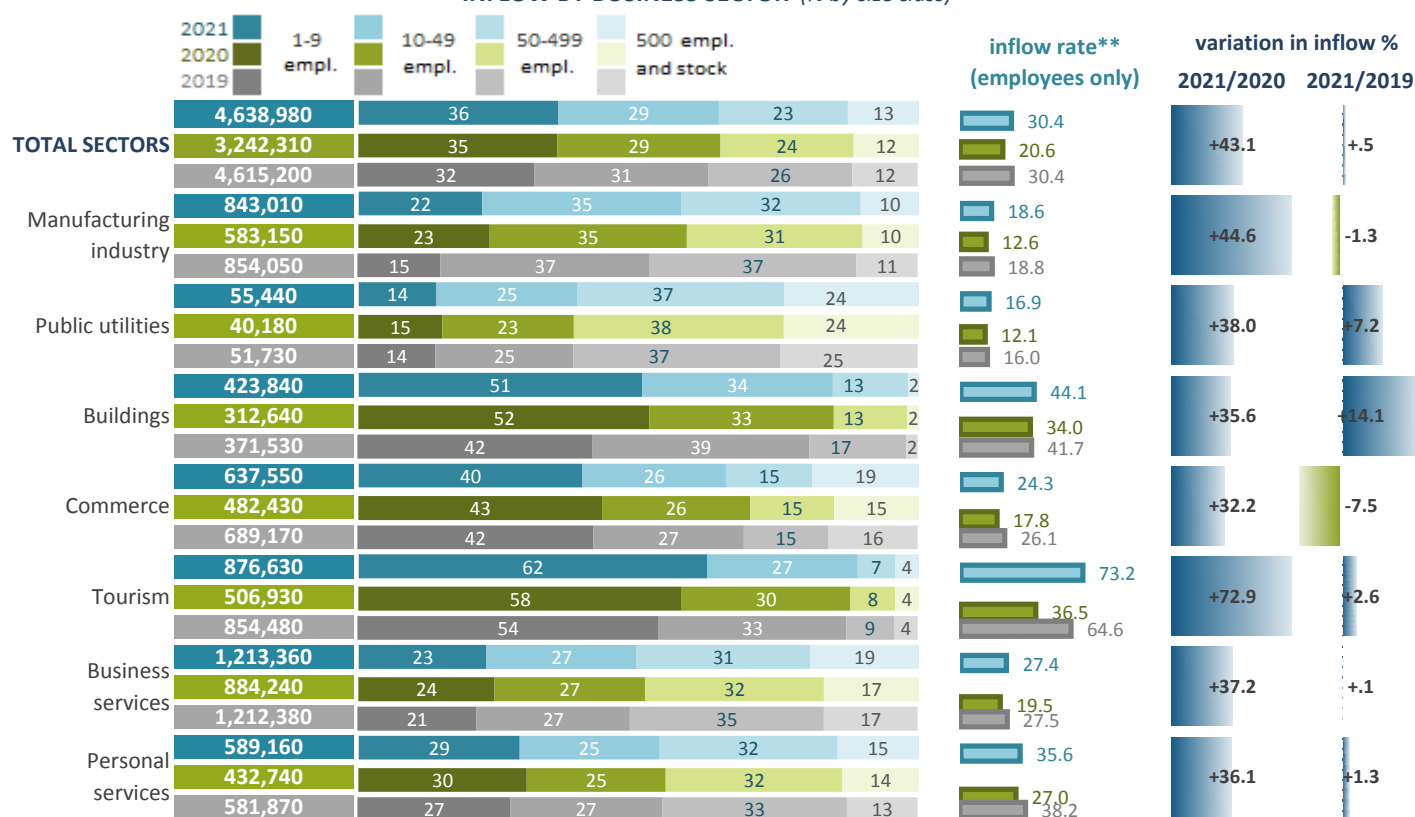
* Activation of contracts for employees and non-employees (with a duration > 20 days) planned by companies with employees.

** The inflow rate is calculated as the ratio between the expected new employees and the number of existing employees for companies in the sector.

MAIN CHARACTERISTICS OF EXPECTED INFLOW BY BUSINESS SECTOR

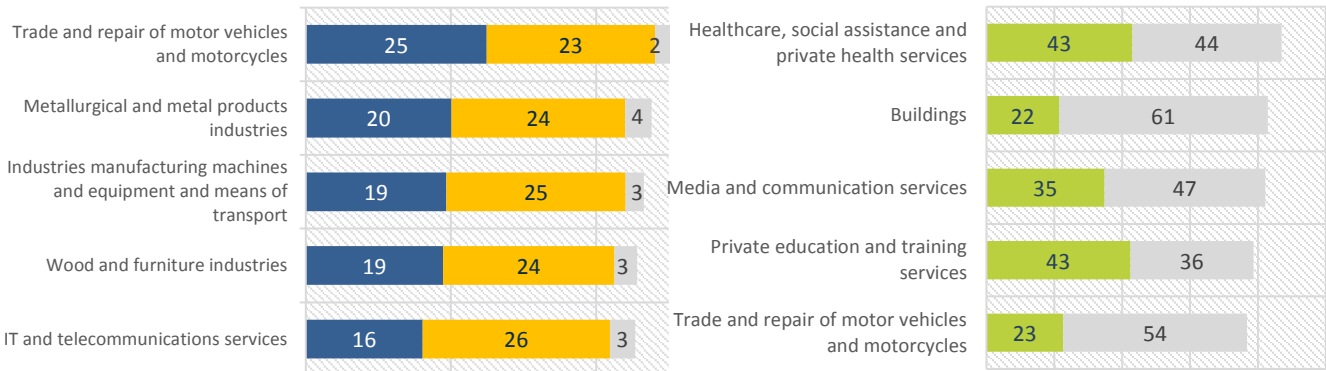| DIFFICULTY IN RECRUITING	32%	EXPERIENCE	69%	GENDER	
for lack of candidates	16%	*in the profession*	22%	*female*	19%
due to inadequate skill set	13%	*in the sector*	47%	*male*	34%
for other reasons	3%	*non requested*	31%	*equally suitable*	47%

The analysis of the main characteristics of the incoming figures at the sectoral level highlights critical issues in the supply/demand balance, especially in five sectors for which the difficulty in recruiting covers about half of the figures required: vehicle trade and repairs (50%), the metallurgical and metal products industries (48%), the machinery and equipment manufacturing industries (47%), the wood and furniture industries (46%) and IT and telecommunications services (45%). These difficulties mainly reflect a lack of specialised and technical figures (e.g. engineers and computer programmers) and specialised workers (e.g. computer equipment installation and maintenance personnel, welders and cutters in the metalworking industries). Healthcare and construction, on the other hand, are the sectors in which experienced personnel are in the greatest demand. Almost 15% of inflow consist of immigrants, with even greater numbers for transport/logistics (26%), operational services (22%) and social and health services (20%).

THE MAIN SECTORS...

...WITH THE GREATEST **DIFFICULTY IN RECRUITING** (%)

Legend: ■ Inadequate skill set ■ Lack of candidates ■ Other reasons

Sector	Inadequate skill set	Lack of candidates	Other reasons
Trade and repair of motor vehicles and motorcycles	25	23	2
Metallurgical and metal products industries	20	24	4
Industries manufacturing machines and equipment and means of transport	19	25	3
Wood and furniture industries	19	24	3
IT and telecommunications services	16	26	3

...IN WHICH SPECIFIC **EXPERIENCE** IS MOST OFTEN REQUIRED (%)

Legend: ■ Experience in the profession ■ Experience in the sector

Sector	Experience in the profession	Experience in the sector
Healthcare, social assistance and private health services	43	44
Buildings	22	61
Media and communication services	35	47
Private education and training services	43	36
Trade and repair of motor vehicles and motorcycles	23	54

...IN WHICH STAFF IS SOUGHT **BY GENDER** (%)

Legend: ■ female ■ male ■ equally suitable

Sector	female	male	equally suitable
Textile, clothing and footwear industries	46	31	24
Retail trade	32	13	55
Healthcare, social assistance and private health services	30	5	65
Household and leisure goods and other manufacturing industries	30	47	23
Food, beverage and tobacco industries	25	33	42

...WITH GREATER INFLOW OF **IMMIGRANTS**
(a.v. and % of total inflow in the sector)

Sector	a.v.	% of total inflow
Accommodation and catering services; tourism services	113,980	13%
Transport, logistics and warehousing services	93,140	26%
Operational support services for businesses and individuals	90,490	22%
Buildings	63,600	15%
Healthcare, social assistance and private health services	52,980	19%

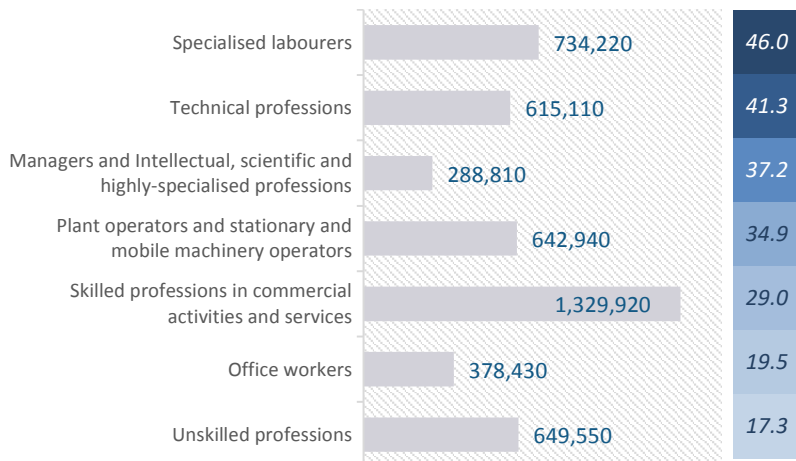*% share of difficult to recruit/experienced/gender-specific new hires out of each sector's total inflow. The sectors are presented in descending order with respect to the variable indicated in the graph.*

MAIN CHARACTERISTICS OF EXPECTED INFLOW BY PROFESSION

TOTAL INFLOW AND RELATIVE RECRUITING DIFFICULTIES — *diff. rec. %*

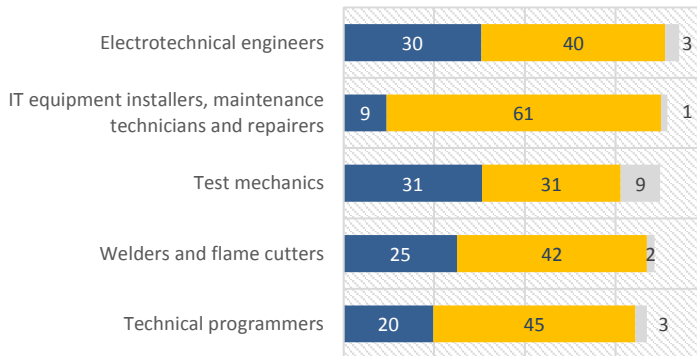| Profession	Total inflow	diff. rec. %
Specialised labourers	734,220	46.0
Technical professions	615,110	41.3
Managers and Intellectual, scientific and highly-specialised professions	288,810	37.2
Plant operators and stationary and mobile machinery operators	642,940	34.9
Skilled professions in commercial activities and services	1,329,920	29.0
Office workers	378,430	19.5
Unskilled professions	649,550	17.3

The difficulty in recruiting is particularly high for the specialised worker occupations, covering over 46% of inflow, as well as for high-profile figures, or rather technicians (41%) and managers and specialists (37%). With respect to other groups, these two professional groups are also those for which companies are most likely to hire for an indefinite period.

Based on the requirements expressed by companies, *soft skills*, especially flexibility and adaptability (up to 95%), are considered to be more or less indispensable for incoming figures. The most highly requested "technical" capability, on the other hand, is digital skills (60% of the total).
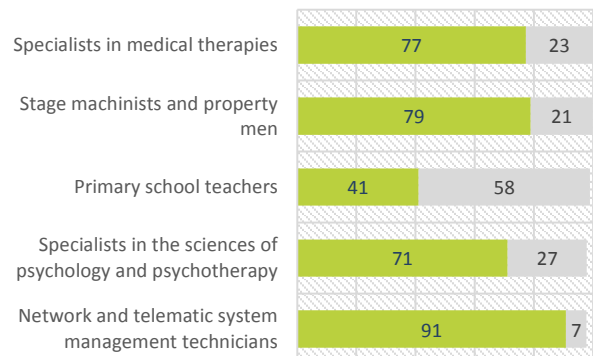
THE MAIN PROFESSIONS...

...FOR WHICH INFLOW IS DIFFICULT TO RECRUIT (%)

■ Inadequate skill set   ■ Lack of candidates   ■ Other reasons

Profession	Inadequate skill set	Lack of candidates	Other reasons
Electrotechnical engineers	30	40	3
IT equipment installers, maintenance technicians and repairers	9	61	1
Test mechanics	31	31	9
Welders and flame cutters	25	42	2
Technical programmers	20	45	3

...FOR WHICH SPECIFIC EXPERIENCE IS REQUIRED (%)

■ Experience in the profession   ■ Experience in the sector

Profession	Experience in the profession	Experience in the sector
Specialists in medical therapies	77	23
Stage machinists and property men	79	21
Primary school teachers	41	58
Specialists in the sciences of psychology and psychotherapy	71	27
Network and telematic system management technicians	91	7

% share of difficult to recruit/experienced new hires out of each profession's total inflow. The professions indicated in the bulletin refer to the "groups" (four-digit codes) used in the ISTAT 2011 classification of professions. It should be noted that the main professions are those with an expected inflow of at least 2500 workers.
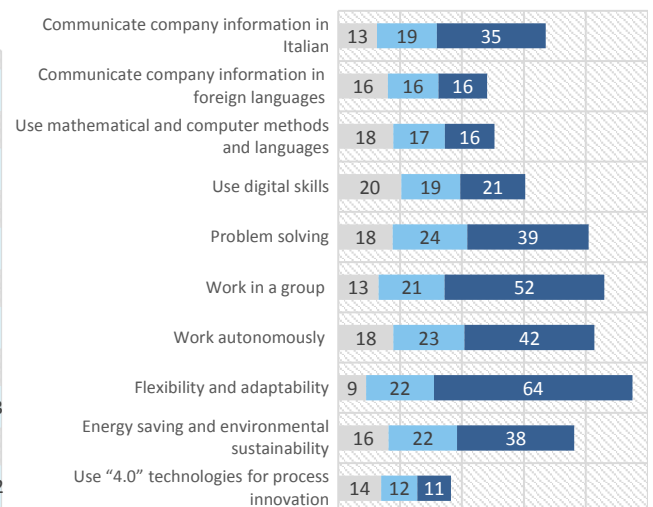
CONTRACTS BY LARGE PROFESSIONAL GROUP (%)

■ open-ended   ■ apprenticeship
■ fixed term   ■ other employment contracts
■ agency work   ■ other NON employment contracts

Professional group	open-ended	apprenticeship	fixed term	other employment contracts	agency work	other NON employment contracts
Managers and Intellectual, scientific and highly-specialised professions	29	1	32	4	1	33
Technical professions	24	2	36	8	1	29
Office workers	17	6	53	14	2	8
Skilled professions in commercial activities and services	10	6	66	5	8	5
Specialised labourers	21	8	58	8	1	3
Plant operators and stationary and mobile machinery operators	19	4	52	22	1	2
Unskilled professions	13	2	68	12	5	1

SKILLS BASED ON THE REQUIRED LEVEL (%)

■ basic level   ■ medium level   ■ high level

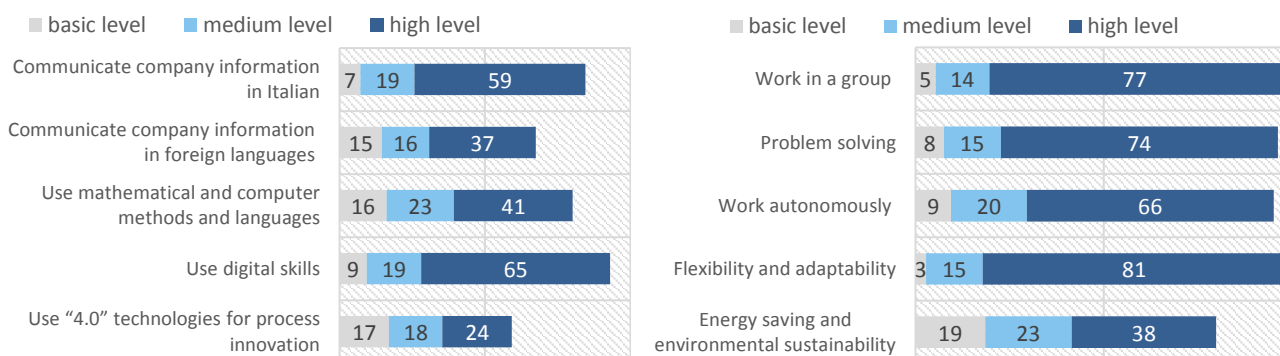| Skill	basic level	medium level	high level
Communicate company information in Italian	13	19	35
Communicate company information in foreign languages	16	16	16
Use mathematical and computer methods and languages	18	17	16
Use digital skills	20	19	21
Problem solving	18	24	39
Work in a group	13	21	52
Work autonomously	18	23	42
Flexibility and adaptability	9	22	64
Energy saving and environmental sustainability	16	22	38
Use "4.0" technologies for process innovation	14	12	11

The companies assign each skill a score from 0 (non-requested skill) to 4: the basic level corresponds to the percentage of companies that assign a score of 1 to that skill, the medium level a score of 2 and the high level a score of 3 or 4.

The demand for skills is much greater for managerial, specialised and technical figures than for others. Soft skills are required of almost all new hires, while digital skills are required in 93% of cases, and "green" skills in 80%. Technical figures for digital services are among the most difficult to recruit, but are also the positions that are most open to young people.

"KEY" SKILLS BASED ON THE REQUIRED LEVEL (%)

■ basic level ■ medium level ■ high level

Skill	basic	medium	high
Communicate company information in Italian	7	19	59
Communicate company information in foreign languages	15	16	37
Use mathematical and computer methods and languages	16	23	41
Use digital skills	9	19	65
Use "4.0" technologies for process innovation	17	18	24

■ basic level ■ medium level ■ high level

Skill	basic	medium	high
Work in a group	5	14	77
Problem solving	8	15	74
Work autonomously	9	20	66
Flexibility and adaptability	3	15	81
Energy saving and environmental sustainability	19	23	38

PROFESSIONS MOST SOUGHT BY AGE AND LEVEL OF EDUCATION (%)

Code - Profession	INFLOW (A.V.)	young people under 30	university graduates	post-secondary diploma	secondary school diploma	vocational or professional training
3334-Sales and distribution technicians	106,300	18.3	40.9	5.5	48.2	5.4
3212-Rehabilitation health professions	46,870	32.6	100.0	-	-	-
3312-Accounting and similar professions	42,970	17.5	38.2	-	61.8	-
3211-Nursing and midwifery health professions	40,160	14.5	100.0	-	-	-
2114-Software analysts and designers	30,860	36.6	87.9	4.9	7.2	-
3422-Teachers in the field of vocational training	30,240	1.5	86.7	1.1	12.3	-
3121-Technical programmers	29,020	35.8	66.1	9.8	21.3	2.9
3346-Sales representatives	26,670	18.8	14.5	5.3	60.0	20.1
2515-Market relations specialists	24,630	11.3	76.5	3.3	20.1	-
3122-Technical experts in applications	22,960	49.3	29.4	12.0	53.9	-
2552-Directors, artistic directors, actors, screenwriters and set designers	19,780	12.2	30.7	0.4	68.9	-
3137-Industrial designers and similar professions	19,130	39.5	39.8	9.2	50.4	0.6

THE MOST DIFFICULT PROFESSIONS TO RECRUIT BY MAIN REASONS (%)

■ Inadequate skill set ■ Lack of candidates ■ Other reasons

Profession	INFLOW	of which DIFFICULT TO RECRUIT	Inadequate skill set	Lack of candidates	Other reasons
3334-Sales and distribution technicians	106,300	46,180	20	19	5
3121-Technical programmers	29,020	19,430	20	45	3
3211-Nursing and midwifery health professions	40,160	18,930	2	39	6
2114-Software analysts and designers	30,860	18,090	15	40	4
3212-Rehabilitation health professions	46,870	17,390	11	23	3
3346-Sales representatives	26,670	13,680	30	17	4
3312-Accounting and similar professions	42,970	12,970	15	14	1

Soft skills are also considered necessary in the vast majority of cases for these intermediate professional figures as well, especially flexibility and the ability to work in a team. An under-30 hiring percentage of over 40% is expected for various professional profiles in this grouping. These profiles are associated with the prevailing demand for secondary diplomas and professional qualifications; out of the most highly sought-after figures, hairdressers and hotel and restaurant chefs are among the most difficult to recruit.

"KEY" SKILLS BASED ON THE REQUIRED LEVEL (%)
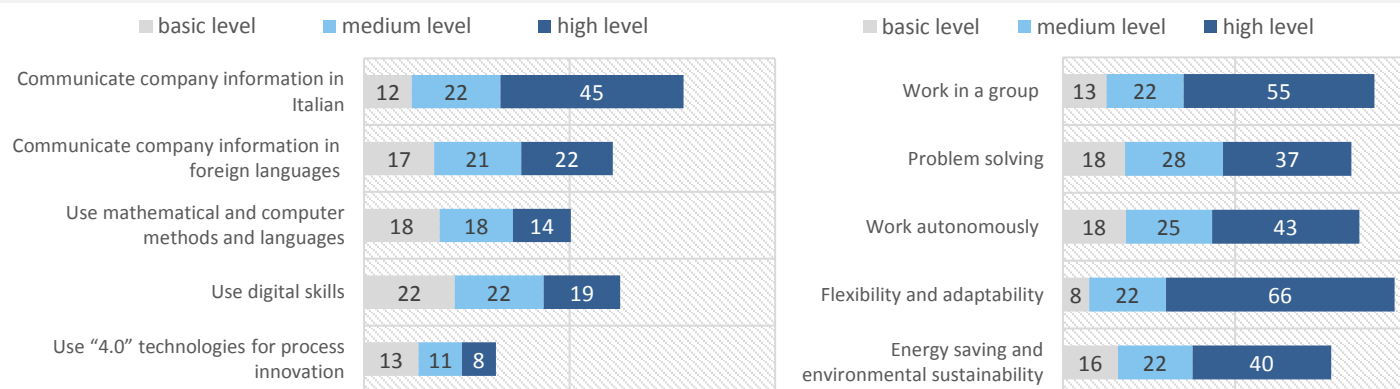
■ basic level   ■ medium level   ■ high level   ■ basic level   ■ medium level   ■ high level

Skill	basic	medium	high
Communicate company information in Italian	12	22	45
Communicate company information in foreign languages	17	21	22
Use mathematical and computer methods and languages	18	18	14
Use digital skills	22	22	19
Use "4.0" technologies for process innovation	13	11	8

Skill	basic	medium	high
Work in a group	13	22	55
Problem solving	18	28	37
Work autonomously	18	25	43
Flexibility and adaptability	8	22	66
Energy saving and environmental sustainability	16	22	40

PROFESSIONS MOST SOUGHT BY AGE AND LEVEL OF EDUCATION (%)

Code - Profession	INFLOW (A.V.)	young people under 30	university graduates	post-secondary diploma	secondary school diploma	explicit vocational or professional training*	potential vocational or professional training*
5122-Retail sales clerks	357,550	52.7	-	-	46.2	19.9	53.5
5223-Waiters and similar professions	316,710	44.2	-	-	24.6	34.6	75.3
5221-Hotel and restaurant chefs	194,760	27.6	-	-	20.5	65.1	79.5
5224-Baristas and similar professions	135,220	54.5	-	-	20.3	32.0	79.7
4112-Administration and back-office employees	111,700	18.8	25.0	7.1	60.8	7.2	7.2
5311-Qualified professions in health and social services	69,850	17.5	-	-	99.7	0.0	0.0
5443-Personal care workers	54,460	8.9	-	-	87.0	12.8	12.8
4111-Secretarial staff	47,800	30.9	16.1	-	72.0	11.9	11.9
4221-Reception an information clerks in companies and public institutions	45,810	43.9	13.6	-	73.9	12.4	12.4
5222-Food preparation, cooking and distribution workers	40,790	25.8	-	-	24.3	31.4	75.7
4222-Accommodation and catering services reception staff	36,290	33.9	15.7	10.0	52.2	22.0	22.0
5431-Hairstylists	35,510	57.9	-	-	-	70.8	100.0

* Please refer to the introductory text "Fields of study that offer the greatest job opportunities" on page 10 for the definitions of explicit and potential vocational qualification

THE MOST DIFFICULT PROFESSIONS TO RECRUIT BY MAIN REASONS (%)

■ Inadequate skill set   ■ Lack of candidates   ■ Other reasons

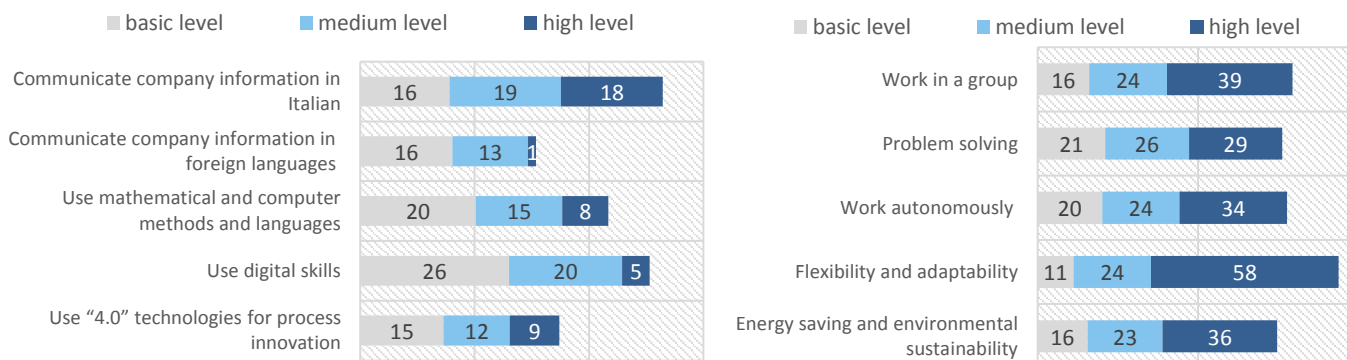| Profession	INFLOW	of which DIFFICULT TO RECRUIT	Inadequate skill set	Lack of candidates	Other reasons
5223-Waiters and similar professions	316,710	102,850	12	15	5
5122-Retail sales clerks	357,550	82,120	12	9	2
5221-Hotel and restaurant chefs	194,760	77,730	16	21	3
5224-Baristas and similar professions	135,220	28,950	10	7	4
5311-Qualified professions in health and social services	69,850	26,320	8	26	4
5443-Personal care workers	54,460	16,800	7	22	2
5431-Hairstylists	35,510	16,670	28	17	2

SPECIALISED LABOURERS, PLANT AND MACHINE OPERATORS

1,377,150
inflow

Soft and green skills required for about 80% of these figures, with a spike of 94% for flexibility and adaptability. These workers are frequently required to have a qualification beyond that of compulsory schooling, thus reaffirming how the main professions (with the exception of transport operators) represent the outlet for vocational training courses (up to over 9 out of 10 new hires for bricklayers). The workers most difficult to recruit include mechanics, car repairers and maintainers, and tooling engineers for machine tools.

"KEY" SKILLS BASED ON THE REQUIRED LEVEL (%)

Legend: ■ basic level ■ medium level ■ high level

Skill	basic	medium	high
Communicate company information in Italian	16	19	18
Communicate company information in foreign languages	16	13	1
Use mathematical and computer methods and languages	20	15	8
Use digital skills	26	20	5
Use "4.0" technologies for process innovation	15	12	9

Skill	basic	medium	high
Work in a group	16	24	39
Problem solving	21	26	29
Work autonomously	20	24	34
Flexibility and adaptability	11	24	58
Energy saving and environmental sustainability	16	23	36

PROFESSIONS MOST SOUGHT BY AGE AND LEVEL OF EDUCATION (%)

Code - Profession	INFLOW (A.V.)	young people under 30	post-secondary diploma	secondary school diploma	explicit vocational or professional training*	potential vocational or professional training*
7423-Heavy vehicle and truck drivers	182,370	8.3	-	14.3	18.8	18.8
6121-Stone, brick, fire-brick masons	155,810	13.5	-	7.7	39.8	92.3
6137-Electricians in civil construction and similar professions	70,800	31.8	3.9	26.6	69.5	69.5
6233-Industrial machinery mechanics and fitters and similar professions	67,000	29.5	5.7	43.4	44.4	50.9
7421-Taxi drivers, and drivers of cars, vans and other vehicles	60,510	23.4	-	21.1	14.0	14.0
7444-Forklift drivers	54,350	24.7	-	19.5	24.8	24.8
7281-Workers assigned to industrial product packaging machines	46,970	19.7	-	25.0	25.8	75.0
7211-Operators of automatic and semi-automatic industrial machine tools	45,290	44.8	6.3	26.9	50.6	66.9
6214-Metal structure fitters	43,010	20.9	-	14.8	41.1	85.2
6223-Machine toolmakers and similar professions	41,850	40.9	6.4	30.5	53.0	63.1
6231-Artisan mechanics, car repairers and maintainers, and similar professions	35,590	41.9	-	19.5	69.7	73.8
6241-Installers and repairers of electrical and electromechanical	33,710	31.8	5.7	31.0	63.3	63.3

* Please refer to the introductory text "Fields of study that offer the greatest job opportunities" on page 10 for the definitions of explicit and potential vocational qualification

THE MOST DIFFICULT PROFESSIONS TO RECRUIT BY MAIN REASONS (%)

Legend: ■ Inadequate skill set ■ Lack of candidates ■ Other reasons

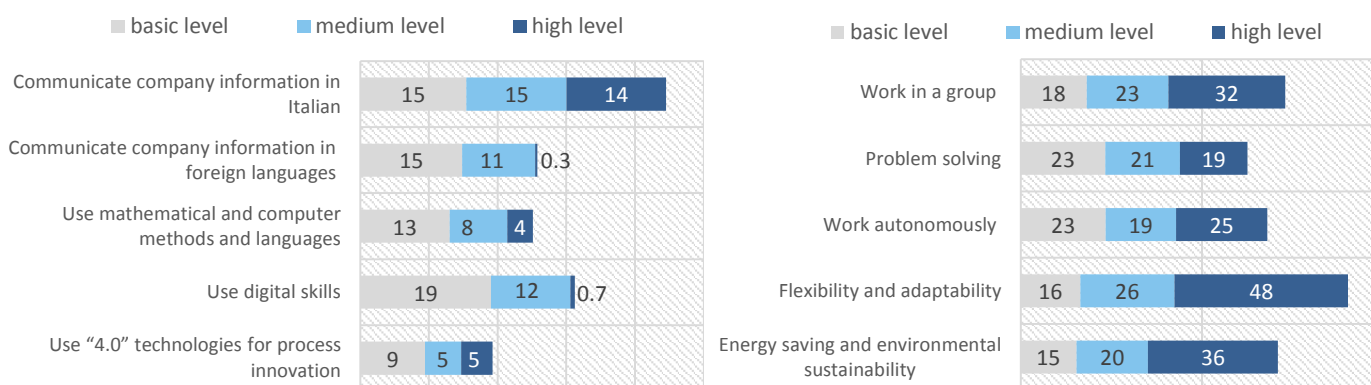| Profession	INFLOW	of which DIFFICULT TO RECRUIT	Inadequate skill set	Lack of candidates	Other reasons
7423-Heavy vehicle and truck drivers	182,370	84,990	13	31	3
6121-Stone, brick, fire-brick masons	155,810	47,750	14	15	2
6137-Electricians in civil construction and similar professions	70,800	39,130	31	20	4
6233-Industrial machinery mechanics and fitters and similar professions	67,000	35,850	23	26	5
6223-Machine toolmakers and similar professions	41,850	24,950	26	31	3
7211-Operators of automatic and semi-automatic industrial machine tools	45,290	23,640	20	29	4
6231-Artisan mechanics, car repairers and maintainers, and similar professions	35,590	22,760	32	29	3

For the main figures classified as "unskilled", 18% to 48% of all new hires are required to have a qualification beyond that of compulsory schooling. Flexibility and adaptability are required in 9 out of 10 cases, and over 60% of these figures are required to have other soft skills and green skills. Out of the most highly sought-after figures, those which are most difficult to recruit include cleaning personnel, green area maintenance workers, and unskilled industrial workers.

"KEY" SKILLS BASED ON THE REQUIRED LEVEL (%)

■ basic level   ■ medium level   ■ high level

	basic	medium	high
Communicate company information in Italian	15	15	14
Communicate company information in foreign languages	15	11	0.3
Use mathematical and computer methods and languages	13	8	4
Use digital skills	19	12	0.7
Use "4.0" technologies for process innovation	9	5	5

	basic	medium	high
Work in a group	18	23	32
Problem solving	23	21	19
Work autonomously	23	19	25
Flexibility and adaptability	16	26	48
Energy saving and environmental sustainability	15	20	36

PROFESSIONS MOST SOUGHT BY AGE AND LEVEL OF EDUCATION (%)

Code - Profession	INFLOW (A.V.)	young people under 30	secondary school diploma	vocational or professional training
8143-Unskilled office and business cleaning personnel	269,970	9.0	19.8	9.6
8132-Unskilled packaging and warehousing personnel	109,080	24.1	21.0	18.9
8141-Unskilled accommodation and ship cleaning personnel	41,680	7.6	20.0	15.1
8142-Unskilled catering personnel	39,640	18.1	-	36.4
8161-Unskilled personnel assigned to custodial services for buildings, equipment and goods	37,230	12.3	26.1	15.8
8131-Porters, freight workers and similar	37,080	20.5	21.2	19.7
8431-Unskilled personnel in industrial activities and similar professions	33,340	18.9	13.8	30.8
8312-Unskilled personnel assigned to green space maintenance	20,710	15.6	7.3	27.6
8133-Delivery workers	18,170	58.7	1.7	15.8
8145-Sanitation workers and other waste collectors and separators	17,250	16.0	13.6	12.8
8421-Unskilled civil construction labourers and personnel, and similar professions	11,300	17.6	-	24.3
8211-Unskilled staff in recreational and cultural services	5,380	38.3	30.3	17.7

## THE MOST DIFFICULT PROFESSIONS TO RECRUIT BY MAIN REASONS (%)

■ Inadequate skill set   ■ Lack of candidates   ■ Other reasons

	INFLOW	of which DIFFICULT TO RECRUIT	Inadequate skill set	Lack of candidates	Other reasons
8143-Unskilled office and business cleaning personnel	269,970	53,440	5	9	6
8132-Unskilled packaging and warehousing personnel	109,080	13,610	6	4	2
8141-Unskilled accommodation and ship cleaning personnel	41,680	8,490	3	14	3
8431-Unskilled personnel in industrial activities and similar professions	33,340	6,830	9	10	2
8142-Unskilled catering personnel	39,640	6,230	2	13	1.4
8161-Unskilled personnel assigned to custodial services for buildings, equipment and goods	37,230	6,010	6	6	4
8312-Unskilled personnel assigned to green space maintenance	20,710	4,410	6	12	4

MAIN CHARACTERISTICS OF EXPECTED INFLOW BY AGE GROUP

An age of less than 30 is considered to be preferential for 28% of planned inflow in 2021, while in 30% of cases companies are indifferent to the age of the candidates. For 35% of inflow, companies prefer candidates between 30 and 44 years of age, while people over 44 are generally only sought in 8% of cases, mainly for managerial roles. While difficulty in recruiting young people under 30 is an issue for 33% of inflow, this figure exceeds 60% for specialists in computer science, physics and chemistry, and 50% for workers in the mechatronics sector.

EXPECTED INFLOW BY AGE GROUP
of which up to 29 years: **1,276,450**

- indifferent 30%
- up to 29 years 27%
- 30-44 years 35%
- over 44 years 8%
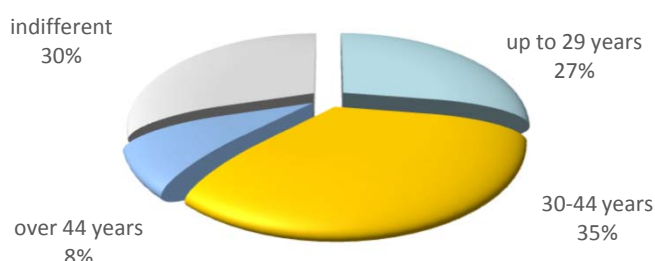
Young people are in greatest demand in the retail sector (47% of inflow) and in the accommodation, catering and tourism services sectors (36%). There are, however, two other sectors in which young people constitute about 30-32% of inflow: advanced services and in personal services.

PROFESSIONS WITH THE GREATEST DIFFICULTY IN RECRUITING YOUNG PEOPLE
(expected inflow of young people - % share and a.v.)

Profession	*Average difficulty in recruiting young people 33%*	difficult to recruit young people	young inflow
Specialists in computer, physical and chemical sciences	61%	7,820	12,910
Workers in metalworking and electromechanical activities	54%	43,870	81,900
Workers in metalworking activities required in other sectors	51%	32,570	64,240
Sales, marketing and commercial distribution technicians	50%	19,960	40,120
Specialised labourers in construction and building maintenance	49%	28,870	58,650
IT, engineering or production technicians	48%	26,880	56,370
Healthcare, social services and education experts	43%	10,210	23,520
Beauty care operators	42%	11,070	26,200
Social welfare workers in institutions or at home	38%	6,460	17,080
Administrative, financial and production management technicians	37%	8,140	21,980

MAIN BUSINESS SECTORS LOOKING FOR YOUNG PEOPLE *(% of young people out of the total for the sector)*

Sector	up to 29 years	Indifferent	30 years and over
Accommodation and catering services; tourism services	36	33	31
Retail trade	47	22	31
Buildings	16	27	57
Advanced business support services	30	21	49
Operational support services for businesses and individuals	15	44	41
Other personal services	32	38	30
Metallurgical and metal products industries	29	21	49
Transport, logistics and warehousing services	16	40	44
Healthcare, social assistance and private health services	18	37	45
Ind. manufact. machines and equipment and means of transport	29	20	51

The top 10 sectors in terms of young inflow up to 29 years of age (by absolute value) were selected

FIELDS OF STUDY THAT OFFER THE GREATEST JOB OPPORTUNITIES

In 2021, 14% of inflow was required to have a university degree. This figure was in line with that of 2020, but was one percentage point higher than that of 2019. A secondary or post-secondary school diploma was indicated as the preferred level of education for 32% of inflow, while a professional qualification or diploma was required for 24% of inflow.

The most frequently requested degrees were in economics, engineering, and education, the most frequently requested diplomas were in the fields of business administration, mechanics, and tourism, and the most frequently requested professional qualifications or diplomas were in the fields of food service and mechanics.

Data on the demand for figures with professional qualifications or diplomas are presented using two different approaches. In addition to figures with expressly indicated professional qualifications and diplomas ("explicit inflow"), companies are also looking for workers who have completed their generic "compulsory schooling." Following a specific in-depth study, cases were encountered in which this requirement is associated with professions for which there are three-year professional training courses formally offered among the 26 of the State-Regions Agreement of 1 August 2019. A further potential demand for professional qualifications was thus identified, which, combined with the explicit qualification, provides an overall estimate of the "potential inflow" for which a professional qualification is required, which would amount to 39% of the total.

FIELDS OF STUDY MOST HIGHLY REQUESTED

		Expected inflow (a.v.)	% of the total	% difficult to recruit	% with experience
UNIVERSITY		**634,360**	**14%**	**38%**	**86%**
of which with post-graduate training		*95,180*	*2%*	*47%*	*91%*
Economics		169,880		31%	81%
Teaching and education		85,720		37%	91%
Healthcare and paramedical		52,590		44%	91%
Electronic and IT engineering		49,410		57%	81%
Industrial engineering		41,760		51%	89%
HIGHER TECHNICAL EDUCATION (HTE)		**69,580**	**1%**	**49%**	**80%**
SECONDARY *(5-year diploma)*		**1,438,610**	**31%**	**31%**	**69%**
Administration, finance and marketing		441,760		23%	64%
Mechanics, mechatronics and energy		176,820		46%	69%
Tourism, food and wine, and hospitality		148,330		31%	76%
Social work/healthcare		136,190		33%	87%
Transport and logistics		92,360		21%	58%
Professional QUALIFICATION *(3-year)* **or**	**explicit inflow**	**1,099,240**	**24%**	**39%**	**70%**
Professional DIPLOMA *(4-year)*	**potential inflow**	**1,815,030**	**39%**	**34%**	**67%**
Food service	explicit inflow	294,780		31%	72%
	potential inflow	517,070			
Mechanics	explicit inflow	180,860		44%	66%
	potential inflow	289,970			
Sales services	explicit inflow	91,940		23%	44%
	potential inflow	207,630			
Construction	explicit inflow	94,480		32%	85%
	potential inflow	195,350			
Electrical engineering	explicit inflow	84,890		52%	78%
	potential inflow	89,180			

■ explicit inflow
■ potential inflow

The percentages of difficult to recruit inflow and inflow with experience refer to potential inflow

NO QUALIFICATION	explicit inflow	1,397,190	30%	25%	58%
	potential inflow	681,400	15%	24%	55%

SKILLS REQUIRED BASED ON QUALIFICATION

In addition to indicating which skills they require, the companies also indicate the level of importance, even in relation to the candidates' academic qualifications. Green skills are considered very important for about 38% of candidates, but this figure increases to 56% for industrial engineering graduates. Digital and IT skills are especially important for university graduates and candidates with post-secondary diplomas; those relating to "4.0" technologies and applications are more important for university graduates with engineering and computer science degrees. Soft skills are the most widely requested, with greater importance being attributed for candidates with tertiary qualifications.

VERY IMPORTANT SKILLS BY MAIN FIELDS OF STUDY (*)

Key:
- from 1% to 33%
- from 34% to 66%
- from 67% to 100%

	Soft				Green	Technological			Communicative	
	Work in a group	Problem solving	Work autonomously	Flexibility and adaptability	Energy saving and environmental sustainability	Use mathematical and computer methods and languages	Use digital skills	Use "4.0" technologies for process innovation	Communicate company information in Italian	Communicate company information in foreign languages
UNIVERSITY	80%	76%	67%	83%	40%	43%	65%	27%	59%	41%
Economics	77%	77%	68%	82%	38%	47%	67%	27%	64%	44%
Teaching and education	83%	78%	68%	89%	34%	29%	52%	10%	52%	28%
Healthcare and paramedical	81%	55%	42%	67%	28%	12%	23%	10%	41%	12%
Electronic and IT engineering	85%	89%	73%	86%	42%	80%	98%	58%	56%	51%
Industrial engineering	81%	83%	73%	86%	56%	64%	85%	42%	65%	53%
HIGHER TECHNICAL EDUCATION (HTE)	67%	68%	65%	75%	46%	40%	56%	31%	51%	30%
SECONDARY *(5-year diploma)*	58%	46%	44%	69%	38%	18%	28%	11%	42%	18%
Administration, finance and marketing	60%	50%	47%	70%	33%	23%	45%	10%	53%	26%
Mechanics, mechatronics and energy	51%	45%	46%	69%	39%	16%	17%	15%	27%	6%
Tourism, food and wine, and hospitality	66%	41%	45%	70%	51%	17%	17%	12%	55%	41%
Social work/healthcare	55%	38%	35%	69%	37%	5%	2%	6%	31%	3%
Transport and logistics	44%	31%	32%	57%	38%	12%	7%	8%	23%	4%
Professional QUALIFICATION *(3-year)* **or Professional DIPLOMA** *(4-year)***	44%	27%	38%	60%	38%	9%	6%	7%	28%	10%
Food service	48%	28%	42%	60%	43%	10%	4%	6%	38%	21%
Mechanics	35%	26%	31%	58%	32%	8%	4%	9%	14%	1%
Sales services	52%	20%	41%	70%	44%	8%	12%	5%	43%	13%
Construction	41%	24%	38%	54%	35%	7%	0%	6%	19%	1%
Electrical engineering	47%	39%	41%	65%	36%	9%	15%	10%	22%	6%
NO QUALIFICATION	30%	19%	24%	49%	34%	4%	0%	5%	15%	0%

* The companies assign a score ranging from 0 (skill not required) to 4 (skill of the utmost importance) to each skill; the skills considered to be "very important" are those to which the companies assign a score of 3 or 4.

** The data refers to the potential inflow with professional diploma or qualification. Please refer to the introductory text "Fields of study that offer the greatest job opportunities" on page 10 for the definition of potential inflow.

COMPANIES HIRING

61% of companies with employees planned to recruit during 2021 (for an increase of 15% compared to 2020, and 2% compared to 2019). The sectors with the greatest percentages of companies hiring were the following: tourism (78%), transport and logistics (73%), health and public utilities (both with 70%), and the chemical/pharmaceutical industries (68%).
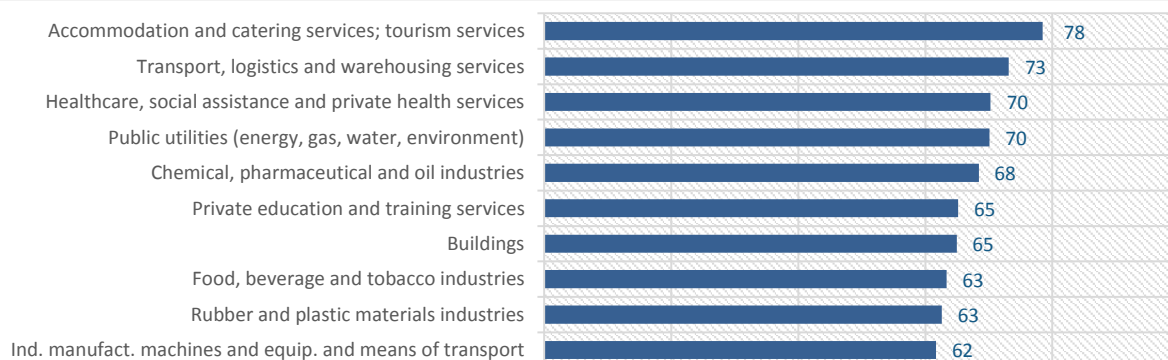
The recruitment channels mainly utilised by companies were: direct knowledge of the candidates (44%), CVs received (34%), and recommendations by known subjects (30%). For larger companies, on the other hand, more formal and structured channels, such as CVs submitted by candidates (up to 69%), or the use of employment agencies and recruitment companies (just under 40%), were more frequently utilised. Among the largest companies, the internet and social networks were also widely used (up to 30%).

Investments in digital transformation are particularly frequent, and are foreseen by 71% of companies with employees in 2021, with over 50% of companies requiring candidates to possess skills relating to environmental-sustainability and energy savings.

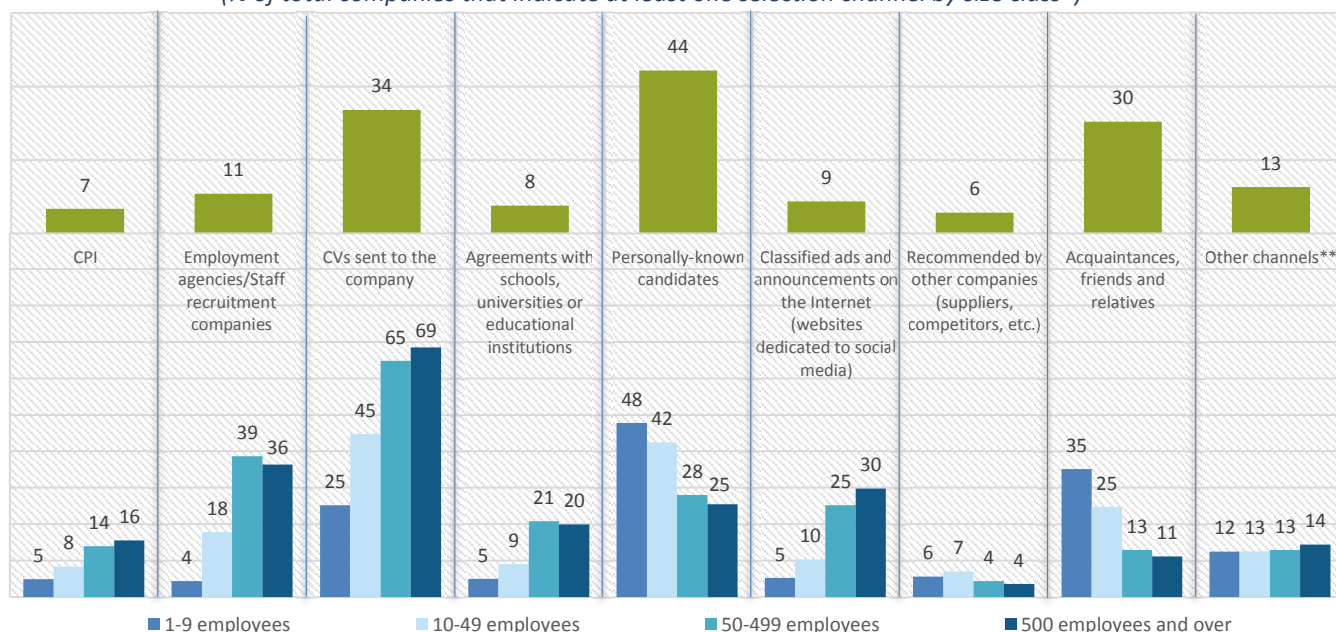## COMPANIES HIRING IN 2021 BY SECTOR (% of total companies in the sector)

61%

Companies hiring

Sector	%
Accommodation and catering services; tourism services	78
Transport, logistics and warehousing services	73
Healthcare, social assistance and private health services	70
Public utilities (energy, gas, water, environment)	70
Chemical, pharmaceutical and oil industries	68
Private education and training services	65
Buildings	65
Food, beverage and tobacco industries	63
Rubber and plastic materials industries	63
Ind. manufact. machines and equip. and means of transport	62

RECRUITMENT CHANNELS USED BY COMPANIES
(% of total companies that indicate at least one selection channel by size class*)

Channel	1-9 employees	10-49 employees	50-499 employees	500 employees and over	Total
CPI	5	8	14	16	7
Employment agencies/Staff recruitment companies	4	18	39	36	11
CVs sent to the company	25	45	65	69	34
Agreements with schools, universities or educational institutions	5	9	21	20	8
Personally-known candidates	48	42	28	25	44
Classified ads and announcements on the Internet (websites dedicated to social media)	5	10	25	30	9
Recommended by other companies (suppliers, competitors, etc.)	6	7	4	4	6
Acquaintances, friends and relatives	35	25	13	11	30
Other channels**	12	13	13	14	13

Legend: ■ 1-9 employees ■ 10-49 employees ■ 50-499 employees ■ 500 employees and over

* This is a multiple choice question on the questionnaire, and the total can exceed 100.

**Trade associations/trade unions, classified ads/announcements in newspapers, labour consultants, other channel

DIGITAL TRANSFORMATION AND GREEN INVESTMENTS

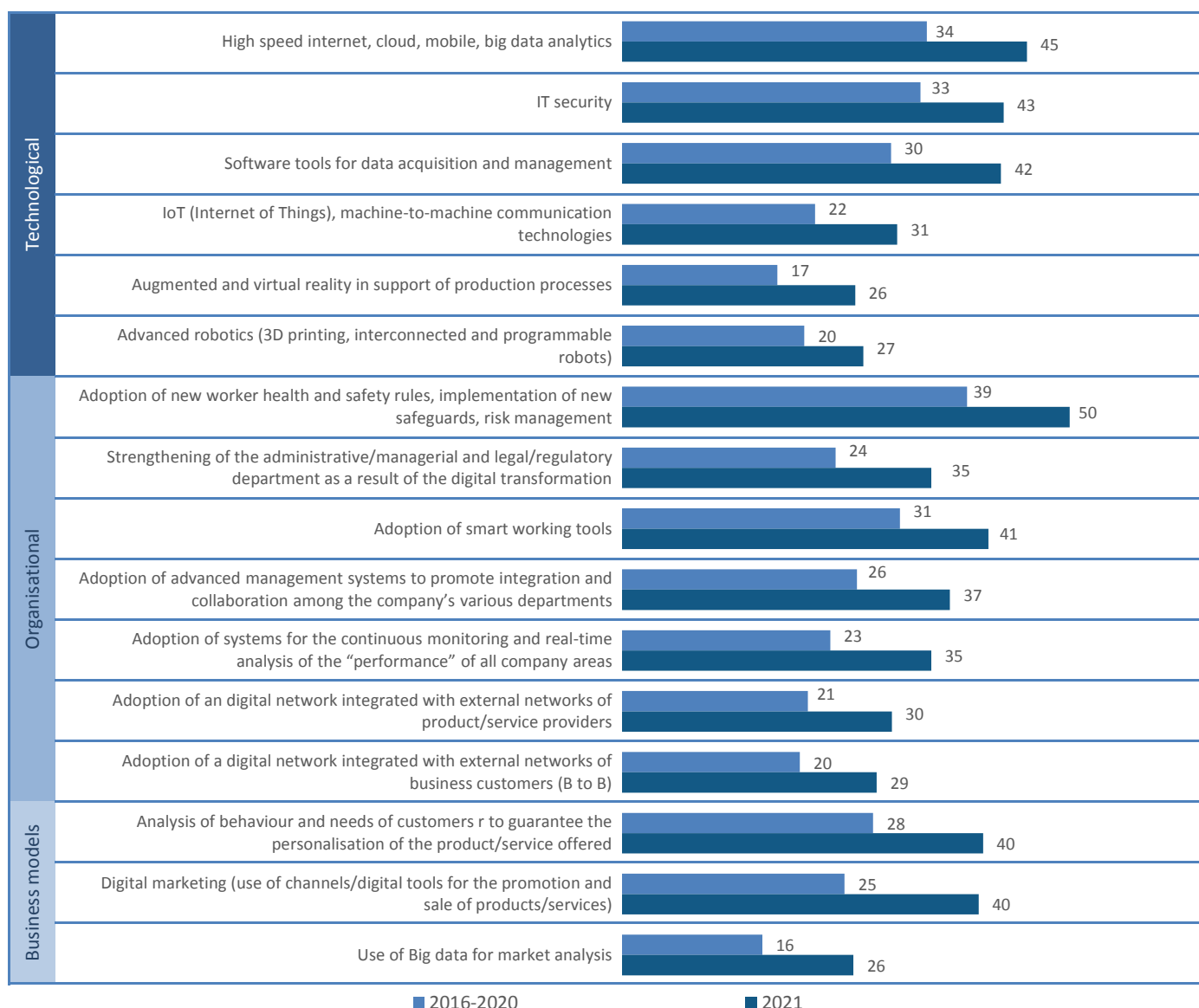| **68%**	**71%**	**39%**	**53%**
Companies that invested in digital transformation between 2016 and 2020 (out of the total number of companies)	Companies that are investing in digital transformation in 2021 (out of the total number of companies)	Companies that invested in green skills in 2020 (out of the total number of companies)	Companies that are investing in green skills in 2021 (out of the total number of companies)

COMPANIES INVESTING IN DIGITAL TRANSFORMATION

## AREAS OF INVESTMENT*
(% of companies that have made investments)

Technological

Area	2016-2020	2021
High speed internet, cloud, mobile, big data analytics	34	45
IT security	33	43
Software tools for data acquisition and management	30	42
IoT (Internet of Things), machine-to-machine communication technologies	22	31
Augmented and virtual reality in support of production processes	17	26
Advanced robotics (3D printing, interconnected and programmable robots)	20	27

Organisational

Area	2016-2020	2021
Adoption of new worker health and safety rules, implementation of new safeguards, risk management	39	50
Strengthening of the administrative/managerial and legal/regulatory department as a result of the digital transformation	24	35
Adoption of smart working tools	31	41
Adoption of advanced management systems to promote integration and collaboration among the company's various departments	26	37
Adoption of systems for the continuous monitoring and real-time analysis of the "performance" of all company areas	23	35
Adoption of an digital network integrated with external networks of product/service providers	21	30
Adoption of a digital network integrated with external networks of business customers (B to B)	20	29

Business models

Area	2016-2020	2021
Analysis of behaviour and needs of customers r to guarantee the personalisation of the product/service offered	28	40
Digital marketing (use of channels/digital tools for the promotion and sale of products/services)	25	40
Use of Big data for market analysis	16	26

■ 2016-2020   ■ 2021

* Companies that reported making high-value investments in every aspect of the digital transformation during the two periods

DIGITAL TRANSFORMATION IN 2021 BY REGION
(% of total companies by region)

75

65
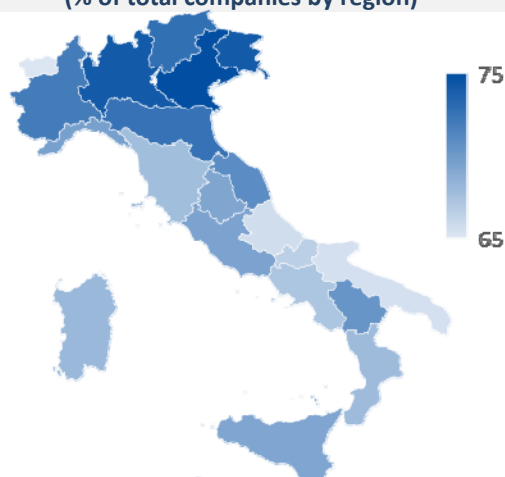
In 2021, the importance of digital transformations increased significantly with respect to the previous period (2016-2020). From a more strictly technological perspective, there has been a considerable increase in software tools for data acquisition and management (+12% for indications of high importance, for a total of 42% of cases), in high speed internet, cloud computing and big data analytics (+11%, for a total of 45%), and in IT security (+9%, for a total of 43%). Within the growing organisational context, the adoption of new rules for worker health security, the use of new safeguards and risk management (+12%, with 50% of companies considering the investment important), followed by the strengthening of the administrative and regulatory area as a result of the digital transformation, and the adoption of advanced management systems for integration and collaboration between different company departments (+11% and +10% respectively, with high importance ranging from 35%-37%).

From a territorial standpoint, companies located in the Northern regions have shown a greater propensity to invest in digital transformation.

ONGOING TRAINING AND SCHOOL/WORK CONNECTION

COMPANIES THAT CARRY OUT TRAINING COURSES

In 2020, about 263,000 companies organised training courses for their employees, or rather 19% of the total. In 2021 there has also been a recovery on this front: nearly 317,000 companies carried out training activities, equal to 23% of the total. In 2020, the main purpose of the training carried out by companies was to update the company's existing staff on the tasks already performed (reported by 71% of companies), while training activities aimed at training new hires (16% of cases), or to train existing staff to carry out new tasks (13%), were less frequent. The training is mainly carried out through coaching or external courses, and, to a lesser extent, through in-house courses, and is preferentially funded using the company's own resources.

263,390
(no. training companies)

Companies that carried out training courses in **2020**

19%
(% of total companies)

316,730
(no. training companies)

Companies that did or intend to carry out training courses in **2021**

23%
(% of total companies)

COMPANIES BY MAIN PURPOSE OF TRAINING - 2020

(composition % of total training companies)

- **16** to train new hires
- **71** to update existing staff on the tasks they already perform
- **13** to train existing staff to perform new tasks

COMPANIES BY TRAINING COURSE TYPE

(% of total companies, multiple choice)

■ 2020 ■ 2021

- coaching: 21 / 22
- in-house courses: 8 / 9
- external courses: 14 / 17
- other: 14 / 16
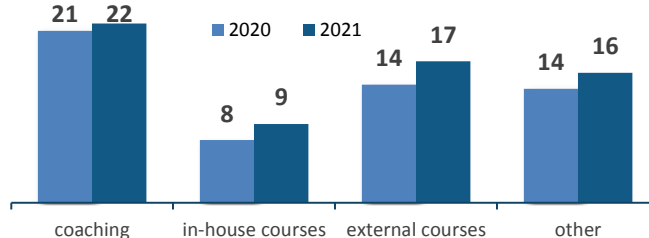
COMPANIES BY TRAINING AREA - 2021

(composition % of total training companies with courses)

- **8** Green transition and environmental sustainability
- **23** Digitisation
- **73** No training on digitisation and green transition expected
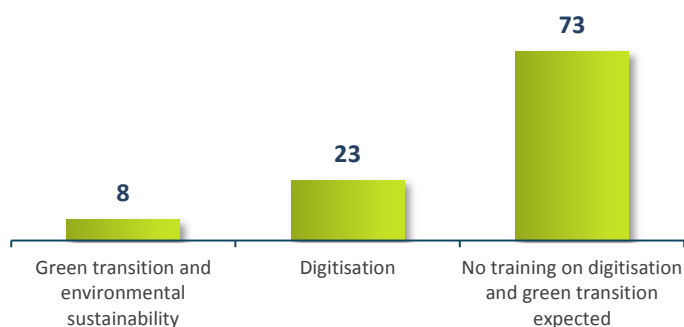
COMPANIES BY TRAINING FUNDING METHOD - 2021

(composition % of total training companies with courses)

- Structural/ESF/ERDF Funds: **2.1**
- In-house resources: **17.7**
- Inter-professional funds: **4.7**
- Other funding channels: **1.0**
- Grants from Bilateral Entities: **2.6**
- Indirect funding channels: **0.2**
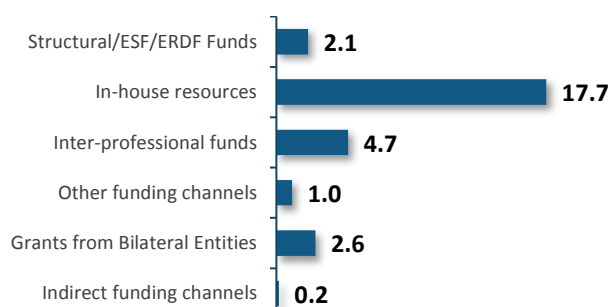
This is a multiple choice question

TRAINING AND INTERNSHIP ACTIVITIES

Companies that hosted trainees/interns in 2020 — **11%**

of which in collaboration with schools (school-work alternation) — **4%**

Percentage of trainees/interns employed in 2021 — **31%**

During 2020, 11% of companies (among those with employees) hosted one or more students for an internship or traineeship. In 2021 companies considered nearly a third of these trainees and interns for recruitment. This reveals the usefulness of this training tool for the purpose of recruiting personnel and directly verifying their abilities.

# INFLOW IN THE VARIOUS REGIONS

About half of the total expected inflow in Italy is concentrated in the larger regions, starting with Lombardia, followed at a certain distance by Lazio, Veneto and Emilia-Romagna. At the national level, it should be noted that the greatest difficulties in recruiting the profiles sought are reported by companies in the North East, where almost 39% of figures are difficult to recruit. Difficulties above the national average are also recorded in the North West (34%), as well as in Toscana, Umbria and Marche. In Lazio and in the regions of the South (but with the exception of Abruzzo, where it amounts to 32%), the difficulties in recruiting suitable figures are more modest, although they still affect over a quarter of the professional figures sought. Another particularly important aspect is the percentage of university graduates out of the total planned inflow, which in 2021 is greatest in Lazio (18% of total inflow), Lombardia (17%), Campania, Sicilia, and Piemonte (around 14%-15%). In all other regions, the percentage of university graduates is lower than the national average, and is particularly low in Valle d'Aosta, Trentino Alto Adige, Basilicata and Abruzzo. The nationwide differences in the qualitative characteristics of inflow clearly reflect the different economic structures and company sizes present in the relative areas, but also allow for local specificities and problems to be identified, which are extremely important elements for the purposes of guidance and active employment policies.

	TOTAL INFLOW (a.v.)	% difficult to recruit	% university graduates	variation %	
				2021/2020	2021/2019
ITALY	**4,638,980**	**32.2**	**13.7**	**43.1**	**0.5**
NORTH WEST	1,372,690	33.6	16.1	40.3	-1.5
NORTH EAST	1,107,990	38.6	10.9	46.8	0.2
CENTRAL	915,320	30.1	14.1	40.8	-2.5
SOUTH AND ISLANDS	1,242,980	26.6	13.1	44.6	5.5
PIEMONTE	308,420	34.4	14.5	38.7	2.4
VALLE D'AOSTA	17,460	31.8	5.7	54.9	16.2
LOMBARDIA	930,740	33.4	17.3	40.2	-3.2
LIGURIA	116,080	33.1	12.5	43.9	0.9
TRENTINO ALTO ADIGE	159,530	41.6	8.9	59.2	7.7
VENETO	446,890	38.9	10.0	46.5	-1.5
FRIULI VENEZIA GIULIA	99,840	41.4	12.0	51.1	4.1
EMILIA ROMAGNA	401,730	36.3	12.4	41.8	-1.5
TOSCANA	289,670	33.9	10.7	46.3	-1.2
UMBRIA	51,620	39.1	9.5	42.5	-4.3
MARCHE	116,400	33.4	10.4	50.5	7.8
LAZIO	457,630	25.9	17.7	35.2	-5.4
ABRUZZO	102,140	31.9	8.7	49.3	7.4
MOLISE	17,530	26.9	10.3	54.2	12.1
CAMPANIA	349,780	25.9	14.9	31.3	-6.0
PUGLIA	259,080	25.1	13.2	46.5	8.7
BASILICATA	33,930	28.9	8.9	49.6	-0.3
CALABRIA	94,660	25.4	11.9	55.0	12.5
SICILIA	255,430	26.5	15.1	46.3	13.6
SARDEGNA	130,430	28.2	10.4	67.0	14.7

DIFFICULTY IN RECRUITING PROFESSIONAL FIGURES IN THE VARIOUS REGIONS
(% of total inflow by province)
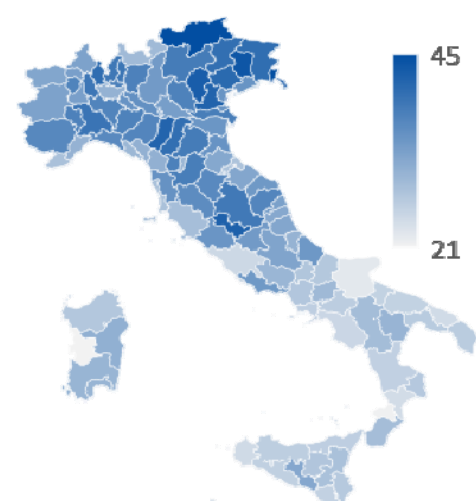
DEMAND FOR UNIVERSITY GRADUATES IN THE VARIOUS REGIONS
(% of total inflow by province)
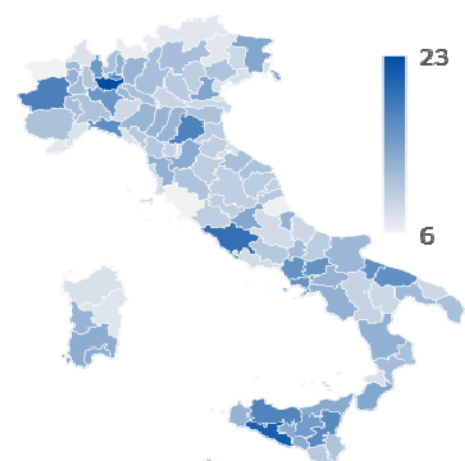
Methodological note

The data shown are derived from the Excelsior survey carried out by Unioncamere in agreement with the National Agency for Active Labour Policies. The survey, which is included in the National Statistical Program (UCC-00007) among those that imply an obligatory response, has been carried out on a monthly basis since 2017.

The information contained in this bulletin was acquired by processing all the information obtained through the monthly surveys carried out up until August 2021, mainly by using the compilation technique in CAWI mode, carrying out approximately 282,500 interviews at companies, a representative sample of companies with employees in 2020 in the various industrial and service sectors. The main innovation introduced, starting from the 2017 survey , concerns the adoption of specific modelling of the historical series of data, obtained from administrative sources on businesses and employment and appropriately integrated with the sample data relative to each monthly survey, in order to assess the forecasted inflow. The concept of inflow (i.e. the number of work contracts that companies intend to enter into within a given period) and their relative characteristics has also been extended to the flow of collaborators, agency workers, and other non-salaried workers, in addition to the employment of salaried workers. The data regarding the forecasts for the entire year therefore no longer come from a specific annual survey, but from the integrated processing of the available monthly surveys.

The projection of the data based on the monthly surveys and the strengthening of the integration between these and the administrative data, through a forecast model, as previously mentioned, allow comparisons with the forecasts made in the years prior to 2017 only in trend and qualitative terms. The analysis in this bulletin focuses mainly on the characteristics of the new hires planned during the course of 2021, based on the professional profiles and levels of education required. Several qualitative comparisons are also drawn with the 2020 and 2019 data in order to analyse the main dynamics of the "pre and post COVID-19" labour markets. The results of the survey are available at provincial and regional level according to a variable number of economic sectors, obtained as a grouping of economic activity codes of the ATECO2007 classification. The distribution of inflow envisaged by "professional group" refers to the codes of the ISTAT CP2011 classification.