

### **Bottleneck Vacancies in Italy**

### Industry and manufacturing experiencing recruitment difficulties

Overall, the economic crisis has contributed to fewer recruitment problems in Italy. However, as in previous years, main bottlenecks appear within industry rather than services. Difficulties in recruitment are identified in the metallurgic sector, followed by the automotive industry. In the services field, the highest recruitment difficulties are encountered in ICT. Data on the nature of these bottlenecks were only partially available.

### Bottlenecks concern mainly high-skilled and skilled-manual occuaptions

Bottleneck vacancies mainly appear with high-skilled and skilled-manual occupations, confirming a recruitment trend focused on a more qualified labour force. Among high-skilled occupations, bottlenecks mainly concern ICT professionals, such as IT system designers, computer programmers and software developers, in addition to mechanical engineers and pharmacists. Within skilled-manual occupations, bottlenecks emerge among heating system mechanics, plumbers and some skilled metal and machinery industry profiles, such as lathe turners, agricultural and industrial machinery repairers and motor vehicle mechanics.

#### Lack of qualified candidates

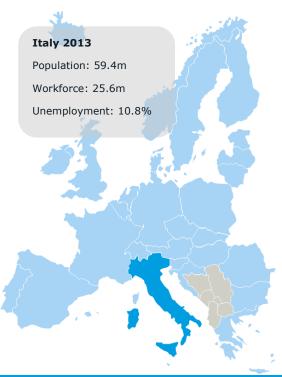
Reasons for bottlenecks vary depending on the occupation, but in general, the predominant reason is a lack of qualified labour. This suggests that there has not been a qualitative elevation of labour supply, at least in relation to enterprises' occupational needs. Within high-skilled occupations, lack of qualified workforce is often due to the fact that some profiles, such as IT system designers, software developers or mechanical engineers, are highly requested and there is a great competition among enterprises.

### Improvement of the technical educational system

Initiatives primarily involve the modernisation of vocational education in terms of the technical and teaching facilities, ensuring the quality and competencies of the workforce, in coherence with the Europe 2020 Strategy. Public authorities, social partners, educational and training institutions have increasingly been involved in the adaptation and modernization of technical educational supply and programming, according to the changing labour market's needs.

#### Assessment of available evidence





TOP 20 Bottleneck Vacancies in Italy 2013			
Occupation (ISCO-08)*	Development since 2008		
IT system designer	71		
Heating system mechanic*	71		
Lathe turner*	<b>→</b>		
Food service counter attendant*	2		
Plumber*	2		
Pharmacist	2		
Docker	2		
Agricultural [] machinery repairer	7		
Hairdresser	7		
Mechanical engineer	<b>→</b>		
Technical salesperson	7		
Bus and tram driver	<b>→</b>		
Mechanical digger driver*	<b>→</b>		
Iron carpenter	71		
Computer programmer	7		
Beautician*	7		
Motor vehicle mechanic	71		
Software developer	71		
Bartender	<b>→</b>		
Nursing associate professional	7		

\*Where an occupation has been identified on a more specific level than ISCO 4 digit, this is used.



## **Top 20 Bottleneck Vacancies**

The main source used for identifying bottleneck vacancies in Italy is the Excelsior survey, which is periodically conducted, since 1997, by the Italian Union of the Chambers of Commerce (Unioncamere) and funded by the Ministry of Labour (through the European Social Fund). The main indicator provided by this survey is the number of employees the Italian enterprises plan to recruit during a given year.

Labour demand is increasingly heading towards highly-specialised occupations characterised by very specific competencies. A major incidence of bottlenecks are therefore present within these specific profiles. Bottleneck vacancies mainly emerge among high-skilled occupations, especially among ICT professionals, such as IT system designers, computer programmers and software developers. The pace of change within these ICT occupations is such that continuous up-skilling is needed due to the speed of development and adoption of new technologies.

Recruitment difficulties are also registered within the health sector for pharmacists and nursing associate professionals. Although the number of expected vacancies

The main source used for identifying bottleneck vacancies for pharmacists is lower compared to other bottlenecks, in Italy is the Excelsior survey, which is periodically con- on average it takes more than 7 months to fill a vacancy, ducted, since 1997, by the Italian Union of the Chambers which is the highest value among the 20 listed bottle-of Commerce (Unioncamere) and funded by the Ministry necks.

Skilled-manual occupations, especially some profiles within metal, machinery and related trades workers are also experiencing bottlenecks. With regards to metal and machinery industry profiles, recruitment difficulties are reported for lather turners (expected hiring recruitment specialised occupations characterised by very specific competencies. A major incidence of bottlenecks are therefore present within these specific profiles. Bottleneck ters (31.6%) and motor vehicle mechanics (19.9%).

For each bottleneck, difficulties in recruitment are registered at the national level. However, in some regions, some bottlenecks encounter higher recruitment difficulties compared to the national average due to the higher number of enterprises present in those areas.

Ranking is based on index of the share of employers' expecting difficulties in recruitment on the total of firms expecting to hire each specific occupation and the time-length needed to fill the vacancy (see p. 5).

Rank	Bottleneck Vacancies ISCO-08	Skills level (ISCO-08)	Geographical aspects
1	IT system designer	HS	National (Northern regions)
2	Heating system mechanic	SM	National
3	Lathe turner	SM	National (Lombardia)
4	Food service counter attendant	SNM	National
5	Plumber	SM	National (Central regions)
6	Pharmacist	HS	National (Lombardia)
7	Docker	Elem	National (North-east regions)
8	Agricultural and industrial machinery repairer	SM	National
9	Hairdresser	SNM	National
10	Mechanical engineer	HS	National (Emilia-Romagna)
11	Technical salesperson	HS	National (Piemonte)
12	Bus and tram driver	SM	National (Lombardia)
13	Mechanical digger driver	SM	National (Abruzzo)
14	Iron carpenter	SM	National (Toscana)
15	Computer programmer	HS	National
16	Beautician	SNM	National
17	Motor vehicle mechanic	SM	National (Abruzzo)
18	Software developer	HS	National
19	Bartender	SNM	National
20	Nursing associate professional	HS	National



### Main sectors with Bottleneck Vacancies

Sectors	<b>Bottleneck vacancies</b>
Manufacturing	Lathe turner, Mechanical engineer,
Health	Nursing associate professional
ICT	IT system designer, Computer programmer, Software developer
Green Jobs	Software developer, Mechanical engineer

Many of the recruitment difficulties identified are within, in particular, the manufacturing industry. Among enterprises experiencing difficulties in recruiting specific profiles, 26.1% are in the manufacture of basic metals and fabricated metal products.

Bottlenecks also appear in the ICT and health sectors. Furthermore, the greening of the industrial and construction sectors more broadly has led to requirements for "green skills" among traditional occupations.

#### **Bottleneck problems in manufacturing**

The impact of the economic slowdown on the Italian manufacture industry has been particularly severe especially in terms of loss of job positions. However, according to the National Institute of Statistics (Istat), the demand of technical specialised profiles has resumed to grow and enterprises experience constant recruitment difficulties for these types of vacancies.

Difficulties in recruitment have been identified in the metallurgic sector, followed by the automotive industry, including manufacture and repair of machineries, motor vehicles and other transport equipment.

### **Main reasons for Bottleneck Vacancies**

#### Lack of technical competencies

Reasons for bottlenecks vary depending on the occupation, but in general the predominant reason is a lack of technical competencies among candidates. The quota of hard-to-fill vacancies due to candidates' inadequacy is the highest in the last three years, underlining that unemployment rate growth mainly relates to the low-skilled workforce and first-time entrants to the labour market. Within high-skilled occupations, lack of qualified workforce is often due to the fact that some profiles, such as IT system designers, software developers or mechanical engineers, are highly requested and there is a great competition among enterprises.

#### **Technical progress in manufacturing**

Reasons for bottlenecks in the sector are several. On the one hand, there has been a lack of interest amoung young people for many technical profiles, such as lathe turner or carpenter, which, in many cases, do not constitute an attractive professional path for younger workers. On the other hand, the risk of skills' obsolesce is high in reason of the continuous technological evolution of plants and equipment. This requires a constant training and at the same time an ability to adapt to the rapidly evolving production processes and organisational structures.

#### **Unsociable hours and other reasons**

In some occupations (such as lathe turner, bartender, food service counter attendant) other reasons are also evidenced rather than the lack of qualified workforce. Changes in the extension of opening hours, for example, has increased the demand for flexibility and adaptation of workers, often entailing also shift work or working unsocial hours.



# Initiatives to cope with Bottleneck Vacancies

The main strategy implemented at the level of employers concerns the provision of additional training for existing staff. For some specialised professionals firms are often more inclined to improve contractual conditions, such as higher wages and/or more attractive contracts.

Concerning the technical and professional educational system, a number of initiatives have also been undertaken to support the development of intellectual capital. They primarily involve modernisation of vocational education in terms of the technical and teaching facilities, ensuring the quality and competencies of the workforce, coherently with the Europe 2020 Strategy.

At the local level, many Public Employment Services are playing a vital role in the development of new methods for early identification of skill needs, as well as detecting and addressing potential skill mismatches.

#### Training and education

The main strategy implemented at the level of employers concerns the provision of additional training for existing staff. In this context, the social partners have established, through specific agreements, different funds ("Fondi Paritetici Interprofessionali") supporting the development of vocational training of existing staff. Companies might schedule training plans for their employees according to emerging skill needs.

In addition, public authorities, social partners, educational and training institutions have increasingly been involved in the adaptation and modernization of technical educational supply and programming, according to the changing labour market's needs.

#### Local skill strategies

At local level, many public employment services are also playing a vital role in the development of new methods for early identification of skill needs, detecting and addressing skill mismatches. In the past years, the idea of anticipation rapidly spread among labour market stakeholders and many provincial and regional authorities are developing and implementing innovative tools in this direction (e.g. Liguria Region).

The idea of anticipating skill needs in advance in a more sophisticated way is strongly linked to policies that seek coordination between labour market policies and skill policies and the implementation at all levels of these policies.

#### Recruitment

In an effort to move away from the use of informal recruitment channels (e.g. business contacts, relatives, friends), private employment agencies have been called to develop more innovative recruitment strategies, particularly for high-skilled professionals.

Some private agencies are modernising their recruitment channels, in order to be more attractive for both candidates and firms. IT professionals, for example, are not inclined to address themselves to private employment agencies, often due to the fact that those agencies are not fully specialised in their field (with certain cases in which the interviewer is less competent than the interviewee).

## Terms and conditions

According to the 2012 employers' survey carried out by Unioncamere, among high-skilled profiles, firms might be available to improve contractual conditions (such as higher wages and/or more attractive contracts) for pharmacists, mechanical engineers and software developers. Among skilled -manual profiles, on the other hand, better conditions might be offered to lathe turners, agricultural and industrial machinery repairers, mechanical digger drivers and iron carpenters.

For IT professionals, such as IT system designers and software developers, often freelance professionals working at distance, are recruited to cover these professional needs.



# Main sources used to identify Bottleneck Vacancies in Italy

This main source used for identifying bottleneck vacancies in Italy is the Excelsior survey, which is periodically conducted, since 1997, by the Italian Union of the Chambers of Commerce (Unioncamere) and funded by the Ministry of Labour (through the European Social Fund).

 www.excelsior.unioncamere.it (database of the Excelsior Survey, conducted by Unioncamere and the Ministry of Labour)

The Excelsior survey provides detailed information on the characteristics of the labour demand in the country, trying to address concretely the actual needs of enterprises and their structural changes, over the years.

The information from the survey was cross-checked with information derived from other sources, such as desk research, internet websites, press releases, other data warehouses.

The desk research has been complemented by interviews with relevant stakeholders operating in the Italian labour market

Overall, the data quality is assessed to be good.

The Excelsior survey is included in the official statistics produced on an annual basis within the Italian National Statistical System (SISTAN). The Excelsior Information System for enterprises with more than 50 employees has national coverage, while for firms with up to 50 employees, an ad hoc sample is designed. The sample survey corresponds to about 8% of the total Italian enterprises having at least one employee.

The main indicator provided by this survey is the number of employees the Italian enterprises plan to recruit during a given year. The specific occupations employers are looking for, the educational level and the required field of studies, the preferred age of candidates, the experience, the need to provide post-entry training, the difficulties in recruiting the required profiles are also investigated.

Ranking is based on an index of the share of employers expecting difficulties in recruitment on the total of firms expecting to hire each specific occupation and the time-length needed to fill the vacancy. The index has been developed using the Excelsior Information System data from 2012, from a survey conducted on over 100,000 Italian enterprises.

#### Sources

Isfol, Rapporto 2012, Le competenze per l'occupazione e per la crescita, 2012, available at: http://isfoloa.isfol.it/bitstream/123456789/290/3/Rapporto\_Isfol\_2012.pdf

Chaloff J., Mismatches in the formal sector, expansion of the informal sector: immigration of health professionals to Italy, OECD Health Working Paper n.34, 2008, available ay http://www.who.int/hrh/migration/Case\_study\_Italy\_2008.pdf?ua=1

Unioncamere and the Ministry of Labour, Excelsior Survey database, www.excelsior.unioncamere.it

Unioncamere and the Ministry of Labour, *Gli sbocchi professionali dei laureatinelle imprese italiane per il 2012*, 2012. (All cited sources by Unioncamere are available at: http://excelsior.unioncamere.net/index.php?option=com\_content&view=category&id=43&layout=blog &Itemid=105)

Unioncamere and the Ministry of Labour, Gli sbocchi professionali dei diplomati nelle imprese italiane, 2012.

Unioncamere and the Ministry of Labour, I fabbisogni professionali e formativi del settore ICT per il 2012, 2012.

Sistema Informativo Excelsior, Il monitoraggio dei fabbisogni professionali dell'industria e dei servizi per favorire l'occupabilità, 2012.

Italian National Institute of Statistics (ISTAT), Datawarehouse, ww.dati.istat.it

Eight interviews conducted with key stakeholders and experts.