

# Labour market reforms in Italy: evaluating the effects of the Jobs Act

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**Abstract** This article analyses the “Jobs Act”—the last structural reform implemented in Italy—framing it within the labour market reform process starting in 1997. Taking advantage of different data sources (administrative and labour force data), the investigation provides the following results. First, monetary incentives seem to play a key role in explaining the dynamics of new (or transformed) contracts. Second, new open-ended contracts are mostly driven by transformation. Third, a relevant share of new open-ended positions is characterized by part-time contracts. Fourth, the increase in employment is concentrated among older workforce (over 50 years old). Finally, new permanent jobs increase in low-skilled and low-tech service sectors, while the opposite occurs in manufacturing (particularly in high-tech industries).

**Keywords** Labour market reforms · Employment · Italian economy · Job creation

**JEL Classification** J5 · J21 · J23 · J3

## 1 Introduction

Since the late 1990s, the Italian labour market has been gradually reformed. A shift towards labour market “flexibility” has been pursued following two main strategies: (1) the introduction of temporary and para-subordinated contracts aimed at adapting

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labour to the discontinuity of the production process; (2) the weakening of legal protection against layoffs to ease workers entry and exit. The push towards greater labour flexibility is based on three main arguments.

A theoretical argument, according to which intense factor mobility—i.e. labour reallocation across firms and sectors and easier workers entry and exit—is expected to favour the achievement of a market clearing wage at which an increasing fraction of the labour force can be absorbed. In addition, stronger factor mobility may favour the matching between demand and supply of skills potentially leading to productivity gains (Saint-Paul 2000).

Second, labour flexibility is introduced to react to the so called “European hysteresis”. The latter refers to the persistently weaker European employment performance as opposed to the US (Blanchard and Summers 1986). In this respect, labour market “rigidities”—i.e. minimum wages and restrictions against firm layoffs—are usually seen as the fundamental cause driving such hysteresis.

Third, labour flexibility emerges as a way to address a set of specific Italian weaknesses. From this point of view, the reforms’ key objectives are: the improvement in labour participation for the youth and women; and the reduction of geographical dualism between Northern and Southern regions in terms of both employment rates and productivity dynamics.

Law 183 of 2014—the “Jobs Act” (hereafter JA)—is the last step of a reform process starting with the introduction of the first set of temporary and para-subordinated contracts (the “Legge Treu” of 1997). The JA aims to provide a solution to the problem of labour market segmentation between workers employed with open-ended contracts—characterized by strong protections in case of layoffs—and those covered by short-term contracts (Sestito and Viviano 2016). The JA determines three main changes in Italian labour relations. First, the introduction of a new contract type “contratto a tutele crescenti” (hereafter CTC) lacking any obligations of workers in case of invalid dismissals.<sup>1</sup> Second, the weakening of legal constraints for firms monitoring workers through electronic devices. Third, the elimination of previous restrictions on the use of temporary contracts—before the JA the maximum amount was set up to 20% of total contracts in force within a firm. The CTC implies a reduction of firing costs and, most significantly, the uncertainty surrounding the possibility of firing by the firm (Sestito and Viviano 2016). Furthermore, the CTC has been accompanied by a monetary incentive—lasting three years and taking the form of a reduction in firms’ social contributions burden per employee. Such incentive is provided to firms hiring under the CTC or transforming other contracts into the latter (more details on the content of the JA are offered in Sect. 4).

Further, the JA is one of the fundamental pillars of the anti-crisis actions put forth in Italy after 2008. Beside softening labour market segmentation, the JA aims to reduce unemployment and job instability; as well as fostering productivity and competitiveness. Indeed, the introduction of the JA occurs in a context of economic fragility. As shown elsewhere—see Cirillo and Guarascio (2015)—the 2008 economic crisis strongly impacted the Italian economy: industrial capacity dropped

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<sup>1</sup> The obligation of worker reinstatement is preserved only in case of layoffs based on racial, religious or gender discrimination. In Sect. 4 the legislative notion of “invalid dismissal” is explained.

close to the 25% between 2008 and 2013; youth unemployment was doubled the European average and GDP contracted by 7.1% over the same period; high-tech and knowledge intensive sectors reduced their relative weight; the North-South divide deepened.

This paper explores the dynamics of the labour market focusing on its evolution both before and after the implementation of the JA. The main focus is on: (a) the dynamics of jobs by age, gender and professional categories and contracts distinguishing between permanent and temporary ones; (b) the dynamics of the employment structure over time and among sectors. Moreover, the JA is contextualised within the reform process started in Italy in the late 1990s. First, a chronology of the labour market reform from 1997 onwards is provided. Alongside this, a set of descriptive evidence on key employment variables shedding lights on the key Italian labour market weaknesses is reported. Subsequently, a descriptive evaluation of the JA is provided. The former is carried out using both labour force—Istat and Eurostat Labour Force Survey (LFS) and administrative data (INPS-Osservatorio sul precariato)—to account for stock and flow variations in jobs and contracts in addition to their distribution across sectors, age cohorts and gender.

The article is organized as follows. Section 2 provides a short review of the literature analysing the impact of labour market flexibility on job creation and productivity. Section 3 pieces together the main measures included in the Italian labour market reform process and presents some key stylized facts. Section 4 focuses on the JA and provides a primary evaluation of its impact on employment. Section 5 offers some final remarks.

## 2 Employment, productivity and labour market reforms: a review of the literature

Over the past decades, labour market reforms have been implemented to spur competitiveness and employment performance in Europe. As argued above, such reforms are mainly directed at softening market “rigidities” (Howell et al. 2007; Kleinknecht 1998; Kleinknecht et al. 2014). Particularly, employment protections—i.e. firing restrictions—are increasingly seen as an obstacle to job creation due to high costs of dismissals (Lazear 1990; Scarpetta 1996; Siebert 1997; Elmeskov et al. 1998; Blanchard and Wolfers 2000; Saint-Paul 2004; Nickell et al. 2005). Accordingly, many forms of employment protection are identified as the major cause of increased periods of unemployment as noted by Blanchard and Portugal (2001).

The standard reform set-up consists of lifting firing restrictions, reducing minimum wages, cutting back social benefits and encouraging firm-level bargaining (Kleinknecht et al. 2014). The main theoretical underpinnings of such a reform agenda can be summarized as follows. First, the presence of firing protections is expected to hamper an efficient allocation of workers among sectors. More specifically, firing protections are supposed to prevent the matching between labour demand and supply making more difficult for workers to find the job in which they are more productive (Abraham and Taylor 1993; Bentolila and Saint-Paul 1994;

Boeri and Garibaldi 2007). In addition, softening firing protections is seen as a way to allow job turnover favouring knowledge spillovers and, in turn, spurring productivity growth (Bassanini and Ernst 2002; Scarpetta and Tressel 2004; Battisti and Vallanti 2013; Cappellari et al. 2012; Damiani et al. 2014).

On similar grounds, large unemployment benefits are recognized as a disincentive to find a job especially for young workers (OECD 1994). Moreover, unemployment benefits are considered potentially responsible for labour demand contraction due to their positive correlation with the reserve wage (Boeri and Terrell 2002). Furthermore, as argued by Bassanini and Ernst (2002) and Scarpetta and Tressel (2004), expensive firings are supposed to negatively affect productivity by reducing firms' willingness to introduce labour saving innovations.

An alternative strand of literature challenges the theories pointing to positive effects of labour market flexibility (see, among the others, Kleinknecht 1998; Lucidi and Kleinknecht 2010; Vergeer and Kleinknecht 2014; Kleinknecht et al. 2014).<sup>2</sup>

From an empirical point of view, Howell et al. (2007) highlights the weaknesses of contributions finding a positive impact of labour market liberalisation on employment, productivity and innovation dynamics. The major criticism regards the weak statistical reliability of labour protection indicators used in the analysis; the presence of potential biases stemming from a “theory-driven” interpretation of the labour market; and the lack of consideration of the role of institutions, power asymmetries and tacit knowledge. Baker et al. (2005); Avdagic (2013) and Avdagic and Crouch (2015) re-examined the relationship between unemployment and labour market institutions. They note that many works detecting a positive impact of labour flexibility—intended as the reduction or the elimination of firing restrictions—on employment are sensible to changes in data, model specification and econometric techniques. Moreover, Avdagic (2015) do not find a statistically significant relationship between employment protection and unemployment, while Oesch (2010) and Noelke (2011) do not find any evidence for a link between employment protection and negative employment performance for low-skilled and young workers.<sup>3</sup>

In Italy, labour market flexibility has been introduced to foster employment participation and productivity. As recognized by Malgarini et al. (2013) and Mancini (2007), Italian labour market institutions changed significantly since the late 1990s. That is a softening of the Employment Protection Legislation (EPL) for temporary employment has been gradually introduced. The main actions adopted to reform the Italian labour market are: (1) the introduction of temporary and para-subordinated contracts—lacking firing restrictions and characterized by a

<sup>2</sup> It is worth noting that a standard argument against labour market flexibility comes from the Neoclassical theory through the so-called hold-up—among the others Caballero and Hammour (1998)—referring to the problem that occurs when a party can threaten to break the relationship, leaving the other with a loss. Considering on-the-job training as an investment on asset specific capital that implies sunk costs for the enterprise, it emerges that a high level of labour market flexibility can be detrimental for firms concerned that future quasi-rents may be appropriated by others in case well-trained workers leave.

<sup>3</sup> A number of empirical studies taking into consideration different time periods from the 1960s until today find no evidence of correlation between labour market flexibility and innovation; while, in many cases, the opposite emerges (Glyn et al. (2003); Howell et al. (2007); Lucidi and Kleinknecht (2010); Vergeer and Kleinknecht (2012) and Kleinknecht et al. (2014)).

lower level of protection; (2) the reduction of firing restrictions for open-ended contracts.<sup>4</sup>

A number of contributions have empirically examined the outcomes of the Italian labour market reforms. Heterogeneous evidence emerges on the link between labour market flexibilisation, productivity dynamics and employment growth. Battisti and Vallanti (2013) assess the effects of flexibility in terms of temporary employment on a sample of Italian firms evaluating the impact of the former on productivity. The authors found that temporary contracts are negatively associated with workers' motivation and effort. Similar evidence is given by Boeri and Garibaldi (2007) who detect a positive effect of temporary contracts on employment and a negative effect on labour productivity.

On the employment side, many authors recognize the positive impact of labour market flexibility on the employment rate. As Lucidi and Kleinknecht (2010) point out, part of the employment gains experienced during the reform process can be related to a regularization of informal jobs rather than to the creation of new jobs.<sup>5</sup>

Another relevant dimension regards the North-South regional dualism. Job creation during the reform period has been unequally distributed across Italian regions. In fact, the traditional North-South divide has increased: the majority of new jobs are created in the North while the South lags behind especially with respect to women and young people (Lucidi and Kleinknecht (2010)).

On the productivity side, most of the contributions highlight a negative relationship between labour flexibility and productivity performances in Italy (Faini and Sapir (2005); Ciriaci and Palma (2008); Lucidi and Kleinknecht (2010); Codogno (2009) and Jona-Lasinio and Vallanti (2013)). Daveri et al. (2005), for example, attributes the Italian poor labour productivity performance to an inflow into employment of low skilled workers. Focusing on the Italian labour market, Boeri and Garibaldi (2007) find a negative relation between temporary employment and productivity growth. Similar results were found by Addessi (2014) who detects a persistently negative impact of temporary contracts on productivity. Providing further support to this evidence, Cappellari et al. (2012) identifies a negative effect of temporary employment on productivity indicators exploiting a panel data on Italian firms.

The debate on the effects of labour market liberalization in Italy has recently come back to the fore due to the reform interventions adopted after the 2008 crisis (Cirillo and Guarascio 2015). Pini (2012) and Pini (2014) discuss the implications of further flexibility in a context of structural weaknesses. In particular, Pini (2014) argues that eliminating firing restrictions on open-ended contracts risks to increase structural

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<sup>4</sup> “Structural reforms” have been implemented in all European Southern countries. Citing (OECD, 2015), Estonia, Greece, Ireland, Portugal and Spain have been classified as “highly responsive euro area countries”; while Italy is part of the “less responsive euro area countries” according to the *reform responsiveness index*. The latter ranks from 0—no action taken in areas covered by *Going for Growth* recommendations—to 1 (action taken in all areas covered by *Going for Growth* recommendations). Among the *Going for Growth* recommendations for difficult macro-economic contexts (see chapter 2 of OECD 2016) we found “reforms easing frictions in the reallocation of resources”, were namely jobs mobility.

<sup>5</sup> Regarding the employment impact of liberalization, Lucidi and Kleinknecht (2010) find that between 1999–2006 the Italian unemployment rate fell by 4.9% compared to 3% fall in the EU15; while in the same period the employment rate increases by 7.6% compared with 6.3% in the EU15.

fragilities, especially during recessionary phases. The manner in which it may occur is the reduction in consumption eventually determined by a drop in employment and pressure on wages deriving from a reduced bargaining power. On a similar line, Cirillo and Guarascio (2015) state that softening firing restrictions during recessionary phases may have two major shortcomings: pushing downward internal demand due to reduction in employment and weakening of workers bargaining power; favouring the shift towards cost-competitiveness strategies instead of technological ones based on investments, training and organizational innovation.

### 3 The Italian case: stylized facts and the reforms chronicle

During the reform phase, Italy's employment and productivity dynamics lagged behind the major European economies. Between 1996 and 2013, the Italian employment rate was approximately ten percentage points below the European one; and a similar divergence characterizes the Italian labour productivity.<sup>6</sup> Indeed, a number of structural weaknesses are detected (Saltari and Travaglini (2008)). First, Italian women labour participation is systematically lower compared to male figures. Second, employment of young people remains strongly below the EU15's average. Third, the North-South polarization increases with the North growing in terms of production, employment and productivity; and the South lagging behind with respect to all dimensions. Figure 1 highlights the dynamics of employment in Italy broken down by sex and macro-regions (North versus South).

A systematic difference between female and male employment rates emerges from the data. In 1992, male participation was systematically higher as compared to the female one—30 percentage points in the South and 10 in the North. At the beginning of 2015, the difference in gender participation remains strong and it is only partially reduced by the 2008 economic crisis.<sup>7</sup>

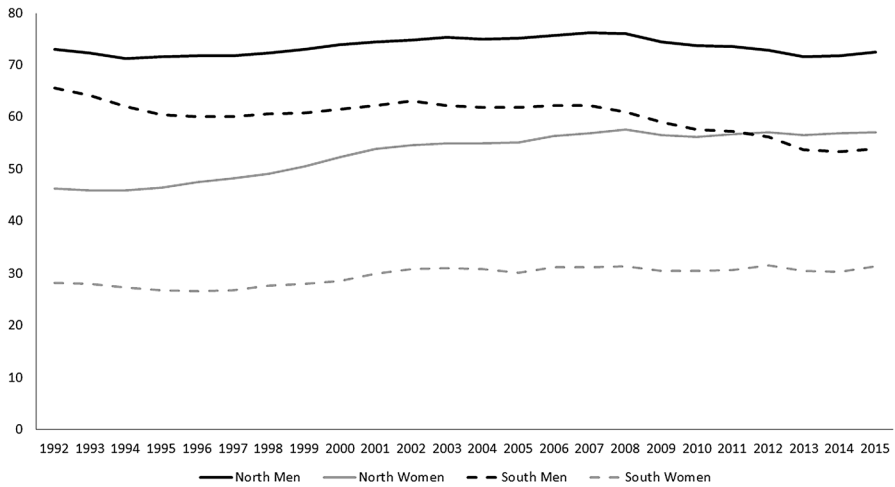
Another Italian weakness concerns youth participation in the labour market—see Fig. 2. In Italy, the average employment rate for young people is 10 percentage points below the European rate. Following the 2008 economic crisis, the difference between EU15 and Italy's young people employment rates reached approximately 20 percentage points in 2015.<sup>8</sup>

The structural weaknesses emerging from Figs. 1 and 2 have been persistent throughout the period. In this respect, it is worth underlying that the introduction of labour flexibility is motivated by the need of tackling such weaknesses. In particular, temporary contracts were expected to facilitate young people's entry into the labour market (Barbieri and Scherer 2009).

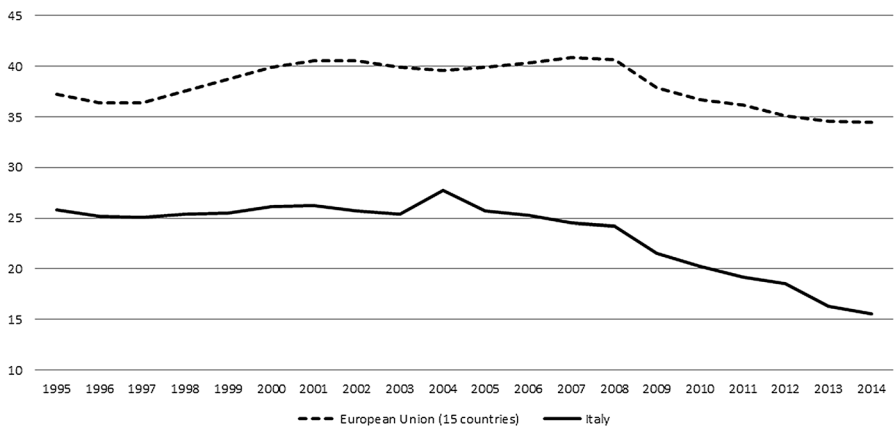
<sup>6</sup> In 1996 the employment rate in the EU was 60.1 and 50.1% in Italy while in 2013 it was respectively 65 and 55.5%. Between 1996 and 2013 average European productivity grew 1.4% per year while Italian productivity was 0.3%. Data source: authors' elaboration on Eurostat data.

<sup>7</sup> As highlighted by Calza Bini (2014), Cirillo and Guarascio (2015) and Cirillo et al. (2015) the last economic crisis impacted on industrial sectors employing male employees—such as the construction and automotive sectors. This phenomenon produced an apparent re-balancing in the participation of men and women in the labour market.

<sup>8</sup> Authors' elaboration on Eurostat-LFS data.



**Fig. 1** Employment rate by sex and macro region. Data source: Italian Statistical Office—ISTAT



**Fig. 2** Employment rate of young people (15–24 years) in Italy and Europe (EU15). Data source: Eurostat

### 3.1 Reform chronicle

The process of labour market flexibilization starts in 1997 with the so-called “Pacchetto Treu” (law 196/1997). This law introduces a new contractual framework including apprenticeship schemes, part-time employment and temporary contracts. In addition, the “Pacchetto Treu” creates new (private) work agencies—i.e. employment agencies—aimed at facilitating the matching between supply and demand in the labour market. In 2001, the Italian government extends the terms for use of temporary contracts and in 2003, with the “Legge Biagi” (Law n.30/2003) a number of para-subordinated contracts are put forth: “coordinated collaboration”,

“project-contracts”, “staff-leasing” and many other non-standard contractual forms (Jona-Lasinio and Vallanti 2013).

After a lull in the reform process, in 2012 the “Legge Fornero” (law 92/2012) is implemented with the aim to reduce labour market segmentation between workers covered by open-ended contracts and those by temporary or para-subordinated ones.<sup>9</sup> The “Legge Fornero” weakened the effectiveness of the “Articolo 18” (A18)—introduced with the Law 300 of 1970—reducing workers protection in case of layoffs deemed as invalid by the court.<sup>10</sup> However, Law 92/2012 weakened the previous legislation without completely abolishing it. Yet for a considerable set of cases the obligation of workers’ reinstatement in case of invalid layoff has been preserved.

The final step of this reform process is the JA. Implemented in 2015, the JA changes a large range of aspects among the Italian labour laws. Its major outcome is the total elimination of the reinstatement right—the A18 is cancelled—which is replaced by monetary compensation.

To wrap up, the reforms implemented over the last decade in Italy introduced a large set of temporary and para-subordinated contracts; and, with the last two interventions (the “Legge Fornero” and the JA), dramatically lifted firing restrictions.<sup>11</sup> Table 1 summarizes the reform path.

### 3.2 Stylized facts

Between 1992 and 2013, the EPL (measuring the strictness of regulation on the use of fixed-term and temporary contracts) decreased from 4.75 to 2 for temporary contracts remaining almost constant over time for open-ended ones at 2.76 (Data source: OECD/IDB Employment Protection Database). This evidence highlights labour market dualism, which increases throughout the reform process.<sup>12</sup> Open-

<sup>9</sup> It is worth noting that the implementation of such reforms program has been shared by most Southern European countries. As Muffels (2013) points out Southern European labour markets share an insider-oriented segmented labour market characterised by high levels of employment protection for insiders and a large number of “atypical” workers with very low levels of security. Although Italy, Spain, Greece and Portugal followed different paths to flexibility, according to Moreira et al. (2015) these countries reinforced labour market segmentation by creating flexibility on the margins of the labour market. Indeed, labour market segmentation concerns not only employees—such the ones explicitly analyzed in this study—but also self-employed. Focusing on the latter, Ricci (2016) shows labour market dualism among self-employees with disparity of working conditions across industry, age cohort, etc. impacting on upward/downward income mobility.

<sup>10</sup> Layoffs were considered invalid if the judge recognizes the lack of “giusta causa” (workers guilty of relevant contractual irregularities) or “giustificato motivo oggettivo” (a set of cases where the law recognizes the legitimacy of workers layoff).

<sup>11</sup> The JA also modifies the law on unemployment benefits; however, they will not be discussed here.

<sup>12</sup> The presence of dualism in the labour market has been studied under different approaches challenging the neoclassical description of a unified labour market according to which any kind of “dualism” can be temporarily explained by the presence of external rigidities. Conversely, the Segmented Labour Market (SLM) approach taking for granted the existence of segmented labour markets studies its consequences in terms of income distribution, unemployment, and discrimination—considered as a result of that segmentation (Taubman and Wachter 1986). Indeed, labour market segmentation explained as “polarisation of the employment relationships” has been also explained as a consequence of dysfunctional capital accumulation in post-fordist societies under a Marxist perspective (Vidal 2013).



**Table 1** Labour market reforms in Italy

Reforms description	
1997	“Pacchetto Treu”: use of temporary worker agency; new fiscal treatment of part-time work. New atypical contracts such as job-sharing; new fiscal treatment of part-time work
2001	Decree Law no. 368: Fixed term contracts are extended to regular employees
2003	“Legge Biagi” (2003): which provides a common framework to atypical contracts and extends further the use of TWA
2012	“Legge Fornero” (Law 92/2012): two additional forms of temporary employment; Art. 18 Law. No. 300/1970 is amended
2014–2015	“Jobs Act” (Law 183/2014): revision of the unemployment benefit system and introduction of the contract with increasing protection

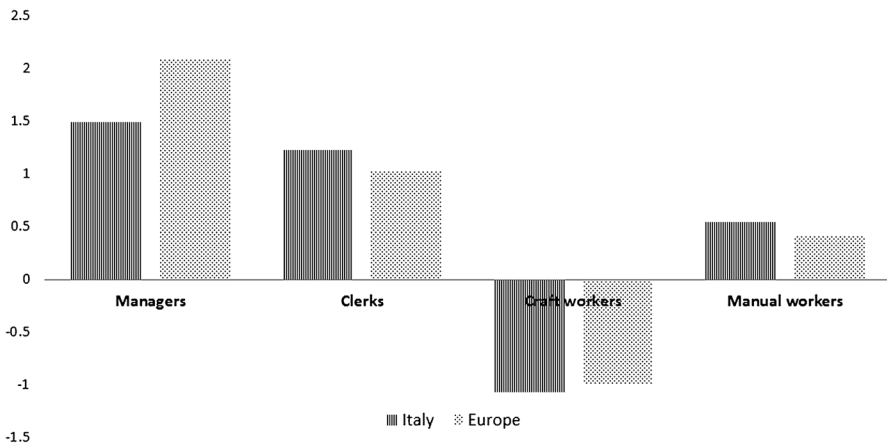
ended contracts—featured by a strong protection against layoffs until 2012—start to co-exist with temporary and para-subordinated contracts characterized, in turn, by low or no protection. During the same period, sustained job creation takes place among high and low skilled workers depicting a smoothed trend toward polarization. Evidence in Europe, on the contrary, show a dynamics of upskilling—Managers, Associate Professionals, Technicians and Clerks grew by more than 1% by year over the entire period (2000–2015).<sup>13</sup>

The dynamics of polarization is displayed in Fig. 3. It shows that over the period 2000–2015 the professional groups that grew relatively more are Managers, Technicians and Associate Professionals—proxying high paid and high qualified jobs—and Manual workers—proxying low paid and low qualified professions. The growth of the latter group has been mainly registered in low-tech services mostly related to retail trade, tourism, care services for children and the elderly, etc. However, craft workers decreased by more than 1% per year.<sup>14</sup>

Finally, focusing on labour productivity, a substantial stagnation emerges over the reform period, Italy’s labour productivity growth is constantly below the European average (0.1%) between 1995 and 2014 (Source: Eurostat). In this respect, productivity dynamics is strongly linked with R&D expenditure and investments (particularly innovative ones)—on this point, see Simonazzi et al. (2013) and Cirillo and Guarascio (2015). During the considered period, R&D activities were mostly stagnant both in the government sector from 0.2% in 1995 to 0.19 in 2014 and in the business enterprise sectors from 0.5 to 0.72. Dosi and Guarascio (2016), Guarascio and Simonazzi (2016) and Luchese et al. (2016) associate such weak R&D dynamics to a turn toward cost-competitiveness strategies based on labour cost reduction. Such dynamics are also related to the weakening of the manufacturing

<sup>13</sup> This evidence draws on previous work on workers polarization based on the ISCO classification (Hurley et al. 2013).

<sup>14</sup> Building on Cirillo (2017), ISCO categories are aggregated as follows: managers, professionals and technicians in the “Managers” group; clerk workers and service workers in “Clerks”; craft workers and skilled agricultural workers in “Craft workers”; and manual workers and elementary occupations in “Manual”.



**Fig. 3** Change in employment by professional group (2000–2015). Data source: Labour Force Survey—Eurostat

base particularly concerning high-tech and technology intensive sectors—signalled, among the others, by Mazzucato et al. (2015).<sup>15</sup>

#### 4 The Jobs Act

In the aftermath of the 2008 crisis, labour market flexibility emerged as a priority among the structural reforms set by the European Commission for Southern European countries (on this issue, see Lehndorff 2014; Mazzucato et al. 2015).<sup>16</sup> From this point of view, the major reforms put forth in Italy are the Riforma Fornero and the JA. The JA introduces three major changes:

- **The new standard for open-ended contracts: *Contratto a tutele crescenti*.** The CTC does not provide the obligation of workers’ reinstatement in case of invalid layoff (with the exception of orally communicated or discrimination-based layoffs). Conversely, in case of invalid layoff firms are obliged to compensate workers with an amount equal to two monthly wages per each year of work tenure and not less than four monthly wages. Moreover, in the case of small firms (less than 15 employees) the monetary compensation is halved.<sup>17</sup>

<sup>15</sup> The figures regarding trend of Italian R&D expenditure over time are shown in Fig. 10 the Appendix.

<sup>16</sup> It is worth noting that the notion of “structural reforms” applied in this article refers to the one adopted from the Neoclassical approach. However, for Classical economists “structural reforms” were not aimed at reducing the State intervention in the economy. See on this, Zacchia (2016).

<sup>17</sup> It is worth noting that the reduction in employment security such as lowering the cost to employers of dismissing regular workers had already been implemented in Portugal in 2012 under the *New Labour Code*, in Greece in 2013 through a reduction in protection against unfair dismissal and in Spain in 2010 with the expansion of the use of the “Contrato de Fomento del Empleo”. For a detailed description of the reforms introduced in South of Europe during 2010–2013, see Moreira et al. (2015).

- **Temporary contracts.** The JA abrogates workers' right to get an open-ended contract if the employer exceeds the limit of temporary contracts—as a fraction of open-ended ones, previously set at 20%—allowed for each firm. This intervention follows the *Decreto Poletti*—introduced in May 2014—eliminating the specific requirements previously asked in order to use temporary contracts (i.e. temporary substitution of absent employees; temporary shock in production; etc.).<sup>18</sup>
- **Vouchers.** Vouchers are hourly tickets used to compensate workers with an hourly salary of 7.5 euros introduced in 2003 but actually in force since 2008.<sup>19</sup> The JA increases the maximum amount of revenues that a worker can receive annually in vouchers (from 5000 to 7000 euros).

The CTC has been accompanied by the provision of a monetary incentive—introduced by the Budgetary Law 2015—for firms hiring workers with the new contract type.<sup>20</sup> The aim of such incentives is to stimulate the use of the CTC and, more in general, to spur the dynamics of permanent employment. Between the 1<sup>st</sup> of January and the end of 2015, each firm hiring under an open-ended contract (including all changes from a temporary to permanent contract), is exempt from paying contributions to social security up to 8,060 euros per year for three years. However, the amount of the incentive was halved in January 2016.<sup>21</sup> Moreover, differently to previous cases, monetary incentives accompanying the CTC are not targeted at specific groups (i.e. the long-term unemployed persons, the young, disabled people, women) or industries.

#### 4.1 A preliminary evaluation

The analysis of employment and contract dynamics carried out in this section accounts for a number of dimensions: contract (open-ended, temporary, part-time, full-time), employees and industry technological characteristics. Moreover, the evolution of monetary incentives is explicitly considered. However, it is worth noting that an empirical assessment aimed at distinguishing the effects on employment of the JA from the impact of the monetary incentive is not possible yet due to the lack of a control group (counterfactual).<sup>22</sup> Nevertheless, a thorough investigation of labour market dynamics under the new legislative setting is possible

<sup>18</sup> The Decree-Law 34/2014 (also known as Decreto Poletti from the name of the Minister of Labour Giuliano Poletti of Renzi government) is a normative act of the Italian Republic converted into law 78/2014 in May.

<sup>19</sup> Vouchers were originally designed for “accessory jobs”—such as housework, gardening, or school tuition—lacking any social security right and implying only a minimal social security contribution. However, the Riforma Fornero enlarged their use to all industries (including the public sector).

<sup>20</sup> More precisely, the introduction of the monetary incentives occurred three months before the implementation of the JA.

<sup>21</sup> The announcement of the reduction in the incentive was diffused at the end of November 2015. As shown in the next Section, this element significantly affected the dynamics of contracts along the period of analysis.

<sup>22</sup> The de-contribution will end in four years and the amount of longitudinal data needed to perform a proper policy evaluation are, at the moment, unavailable.

relying on updated administrative and statistical data. The main data sources used for this analysis are listed below.

- The *Ministry of Labour* and *Social Security Institute (INPS)* provide administrative data on the flow of different types of contract—activated, transformed and dismissed—or employees and self-employed, excluding Agricultural sector and Public Administration (note: these data are not seasonally adjusted). Moreover, the *Ministry of Labour* provides information on the duration of temporary contracts and a focus on the Youth Guarantee scheme; while the *Social Security Institute (INPS)* database, in turn, offers information on atypical contracts as vouchers and, more importantly, on the number of contracts stipulated under the new fiscal regime for firms.
- The *Italian National Statistic Institute (Istat)* database reports standard stock data on the labour force, divided into age groups and gender. Stock data include employment and unemployment statistics at the monthly, quarterly and annual level for employees and self-employed. Sectoral contribution to employment is also provided as well as type of occupations, professions, within each industry. Other statistics are elaborated using the Eurostat Labour Force Survey.

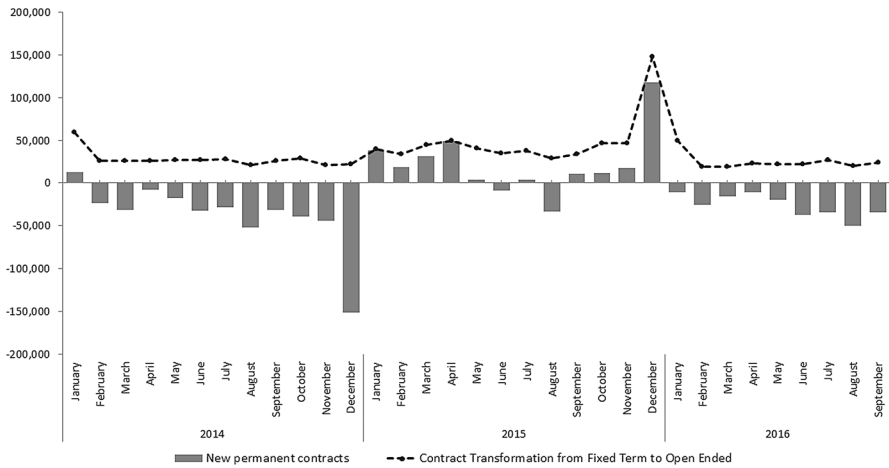
The goal of the statistical analysis is threefold. First, it is investigated whether the introduction of the JA and the monetary incentive are associated with an increase in permanent employment. In particular, the evolution of open-ended and temporary contracts—as well as the one of contracts transformations—is examined to distinguish the role of change in firing rules—associated with the CTC—and discounts on social contributions. Second, an analysis of the dynamics of vouchers to verify to what extent the evolution of the latter has been affected by the JA is offered.<sup>23</sup> Finally, an investigation of the employment changes across industries is discussed accounting for the structural weaknesses mentioned in Sect. 3.

Administrative data illustrate that between January 2014 and August 2016, the dynamics of permanent contracts show a positive trend only in 2015. Remarkably, Fig. 4 highlights that new open-ended contracts are represented mainly by positions transformed from temporary to open-ended ones. Inspecting the monthly dynamics of contracts, a huge increase in open-ended emerges during December 2015, the last month eligible for the full monetary incentive; and a subsequent fall during the first two quarters of 2016. This evidence points to the key role of monetary incentive (halved since January 2016) in driving the dynamics of open-ended contracts confirming the findings of Sestito and Viviano (2016).

The analysis of labour contracts distribution by working time—full and part-time jobs—provides some relevant insights. Specifically, it appears that part-time jobs prevail among new open-ended contracts, while the same does not occur among temporary contracts.<sup>24</sup> During the second semester of 2015, moreover, the incidence of involuntary part-time accounts for 64,6% of the total part-time employment (Istat

<sup>23</sup> Vouchers represent the more unstable form of employment foreseen by the Italian legislation.

<sup>24</sup> The incidence of part-time on new permanent contracts is highly above the incidence of total part-time employment as shown in Table 2. This difference could be explained by the fact that this detail takes into account only activations, therefore is gross of dismissal.



**Fig. 4** New permanent contracts and contract transformations in 2015 and January 2016. Data source: Inps

**Table 2** Distribution of new contracts by working time, cumulative data Jan–Dec 2015

	% of Permanent	% of Temporary	% Total
Full time	58	64	62
Part Time	42	36	38
Total	100	100	100

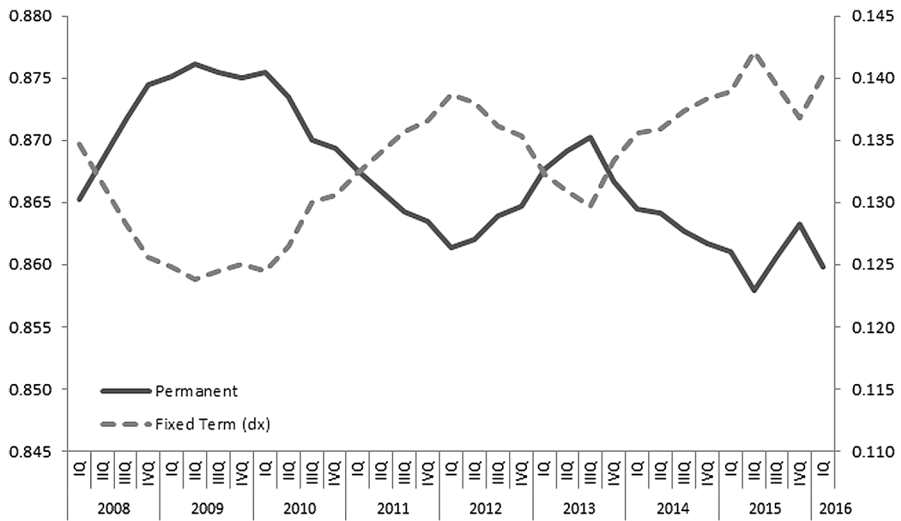
Data source: Inps

quarterly report). Finally, administrative data on earnings show that workers hired between January and December 2015—i.e. a considerable part of which are hired under the new CTC introduced in March—earn a monthly wage 2% lower than the cohort hired one year before—when the old open-ended contract was in force (INPS, 2015).

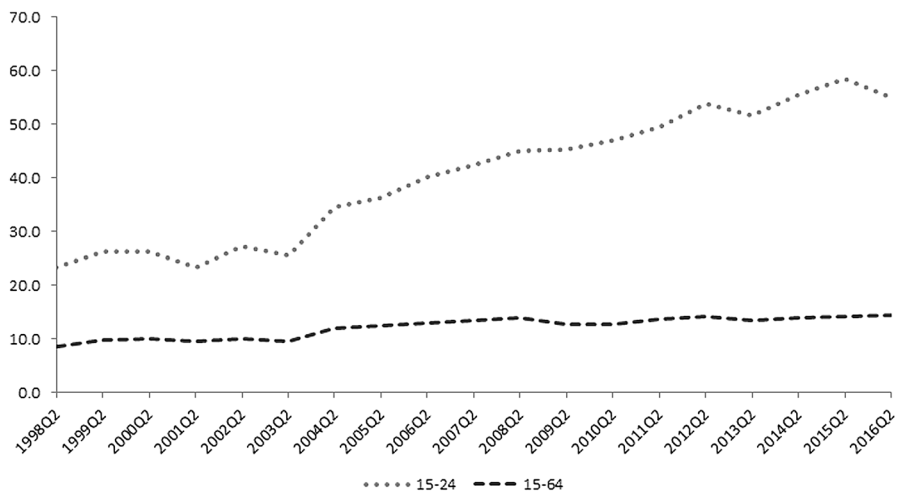
Moving to the analysis of LFS data, it emerges that on average temporary employment has not decreased in 2015. In addition, among employees aged below 24 years—see Fig. 5—temporary employment increased with respect to previous years, with the exception of the third and fourth quarters. Moreover, using the change in the stock of employees, it emerges that between 2014 and 2015 the average stock of permanent employees increased only by 121,000 units. The stock of permanent employees has increased also in the first months of 2016, because of the contracts stipulated at the end of 2015.<sup>25</sup>

The major change in the stock of temporary employment concerns new entrants in the labour market proxied by the younger cohort (15–24 years old). Interestingly,

<sup>25</sup> However, it is worth noting that the growth rate of temporary contracts is still higher than the one of permanent contracts. The latter could be explained by the liberalization in the use of temporary contracts implied by the JA. Such effect prevails when the monetary incentive has been halved.



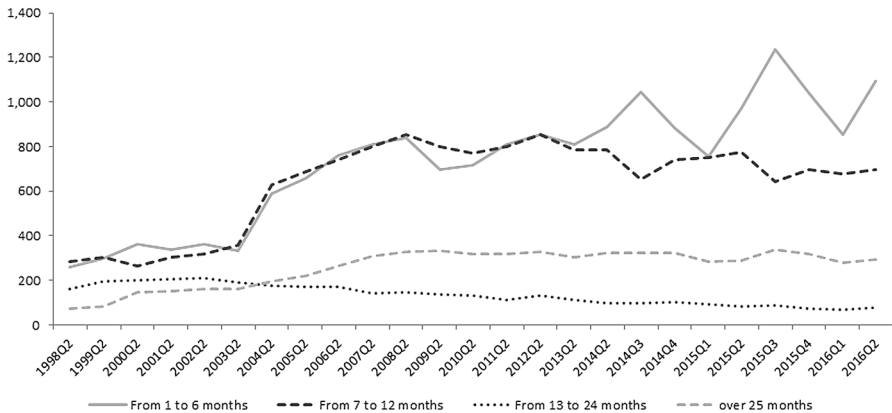
**Fig. 5** Share of temporary and permanent employment on total employees over time. Data Source: Italian Statistical Office—ISTAT



**Fig. 6** Share of temporary employment on total employment by age groups. Data source: Italian Statistical Office—ISTAT

the share of young people employed with a temporary contract tripled from 20 to 60% over the entire period (see Fig. 6). Finally, the share of temporary employment registered in 2015 (14%) is the highest since the beginning of the reform period (1997–2015).

Focusing on the average duration of temporary contracts, the share of the ones in force less than one year has increased since the beginning of the reform process—see Fig. 7.



**Fig. 7** Share of temporary employment by duration of labour contract. Data source: Labour Force Survey—Eurostat

In particular, the share of temporary employment covered by contracts lasting between 1 and 6 months rises substantially over time—representing almost 40% of total temporary employment in 2015.<sup>26</sup>

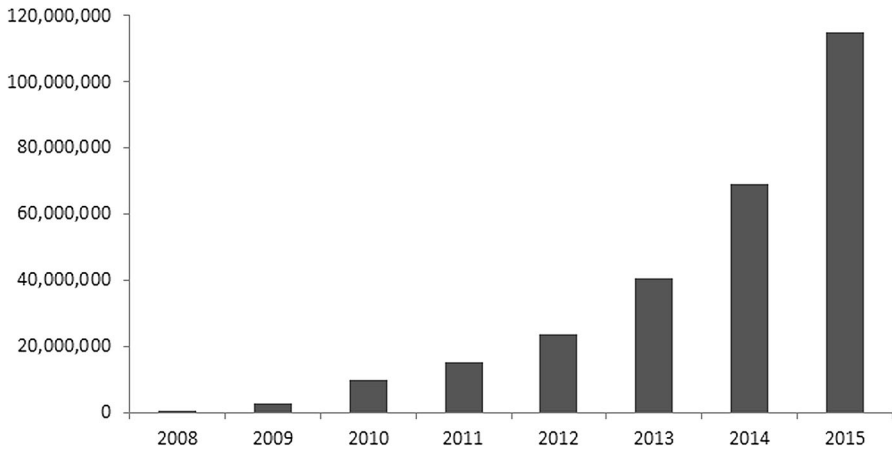
The analysis of employment distribution among age cohorts provides the following results. A reduction of the number of employees is observed in the cohort 15–49. On the contrary, an increase is registered among workers aged 50 and above. In turn, the youth employment rate remains at low levels—between 15.8%, at the end of 2015, and 16.2%, at the end of the second quarter in 2016. On the other hand, the youth unemployment rate decreases from 43.3% to 38.8%.<sup>27</sup>

As Fig. 8 shows, vouchers skyrocket during the considered period. This trend starts growing in 2012 with the Fornero reform which liberalizes the use of vouchers in all sectors and it dramatically increases under the JA. In 2015, approximately 115 million “job tickets” were sold, which equals to 57,000 full time equivalent workers. The time series of vouchers sold by age groups (see Fig. 11 in the Appendix), available until 2015, shows that the share of young workers drastically increased over time, while the opposite is true for those older than 50 years old.<sup>28</sup>

<sup>26</sup> Within this category, more than 30% is due to contracts lasting no more than a week (Data source: authors elaboration on Italian Ministry of Labour data).

<sup>27</sup> The decrease in the unemployment rate can be hardly attributed to the JA. In fact, on the one hand there is no evidence of higher youth employment, on the other hand during the same period, the *European Youth Guarantee* program was introduced in Italy increasing the youth activity rate. Although data are not as detailed as a rigorous analysis requires, on average jobs posted within the *Youth Guarantee* program corresponds to temporary positions and accounts for one tenth of the labour supply (GaranziaGiovani 2015). Assuming that at least part of these vacancies have been filled over time, this translates into a positive, even if weak, contribution to youth employment. Yet, one third of these vacancies are defined as “technical non professional” occupations, leading to low qualified jobs.

<sup>28</sup> According to INPS data, in the first eight months of 2016, the number of vouchers sold reached 96 million, and increase of 36% with respect to the same period in 2015.



**Fig. 8** Number of vouchers sold over time. Data source: INPS



**Fig. 9** New employment across sectors (I–IV quarter 2015). Data source: Italian Statistical Office

Finally, Fig. 9 displays the change in total and permanent employment distinguishing between high and low-tech as well as between manufacturing and service sectors.<sup>29</sup> A significant heterogeneity seems to affect the dynamics of

<sup>29</sup> Industries are grouped in high-tech and low-tech sectors, where the former include *Science Based* and *Specialized Suppliers* of the revised Pavitt taxonomy proposed by Bogliacino and Pianta (2016) and the latter *Scale Intensive* and *Suppliers Dominated* sectors. High-tech industries are: chemicals, office machinery, manufacture of radio, television and communication equipment and apparatus, manufacture of medical, precision and optical instruments, watches and clocks, communications, computer and related activities, research and development, mechanical engineering, manufacture of electrical machinery and apparatus n.e.c., manufacture of other transport equipment, real estate activities, renting of machinery and equipment, other business activities, motor vehicles, financial intermediation, insurance and pension funding, activities auxiliary to financial intermediation. While low-tech industries include: Pulp, paper



employment across sectors. In 2015, the largest majority of new jobs is registered in the services sector while the opposite occurs in manufacturing. More specifically, the strongest increase is observed in low-tech services while a contraction is detected in high-tech manufacturing regarding both total and permanent employment. The evidence in Fig. 9 seems to confirm the dynamics of structural weakening highlighted by Simonazzi et al. (2013) and Cirillo and Guarascio (2015). Moreover, a significant reduction in the manufacturing base (particularly high-tech manufacturing industries) emerges in favour of an increase of low-tech services. On the one hand, a strengthening of sectors (low-tech services) characterized by poor innovation as well as by a relatively more intense use of temporary and para-subordinated jobs is observed. On the other, a contraction of R&D and innovation intense industries (medium and high-tech manufacturing) traditionally featured by a more widespread use of permanent jobs related to investment in human capital and tacit knowledge accumulation (Kleinknecht et al. 2014), is seen.

## 5 Conclusions and final remarks

The analysis developed in this article aims at investigating the dynamics of the Italian labour market accounting for the implementation of the last structural reform: the Jobs Act. The latter is framed within the process of labour flexibilization occurring in Italy since the Riforma Treu in 1997; and taking into account the structural dynamics of employment observed since the late 1990s.

The stylized facts provided in Sect. 2 shed light on the poor performance of the Italian labour market. This weak performance relates, in particular, to the structural diseases historically affecting the Italian economy: women under-representation in the labour market; a persistently high youth unemployment rate and the North-South divide.

The main focus of this work concerns the analysis of labour market dynamics before and after the introduction of the JA. An empirical assessment by means of all available administrative (INPS) and employment (LFS) data is performed. Since a standard policy evaluation is not yet available due to a lack of a counterfactual, the analysis is carried out through a thorough descriptive exploration of the available data sources.

Results from the empirical exercise on administrative data show that an increase in the number of open ended contracts occurred only in 2015. Moreover, it turns out that, during the first half of 2016, the number of open ended contracts fall to the 2014 level giving strength to the findings of Sestito and Viviano (2016). In this

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Footnote 29 continued

and paper products, printing and publishing, mineral oil refining, coke and nuclear fuel, rubber and plastics, non-metallic mineral products, food, drink and tobacco, textiles, clothing, leather and footwear, wood and products of wood and cork, fabricated metal products, furniture, miscellaneous manufacturing, recycling, sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel, wholesale trade and commission trade, retail trade, repair of personal and household goods, hotels and catering, transport and auxiliary transport activities and basic metals.

respect, monetary incentives seem to play a key role in explaining the dynamics of new (or transformed) contracts. This evidence suggests two considerations. On the one hand, it seems that lifting firing costs—i.e. the CTC—does not spur the dynamics of new open-ended contracts. On the other, the consolidation of new permanent positions seems to be highly uncertain due to the planned reduction (and their final elimination) of monetary incentives. In addition, a sustained dynamics of temporary contracts as well as of contracts' transformations is observed during the considered period. In particular, monetary incentives to firms do not seem to translate into new permanent employment but mainly on contracts' transformation from temporary to permanent ones. Looking at working hours, results show that part-time contracts cover a high share of new permanent positions; moreover, the majority of part-time contracts have an involuntary nature.

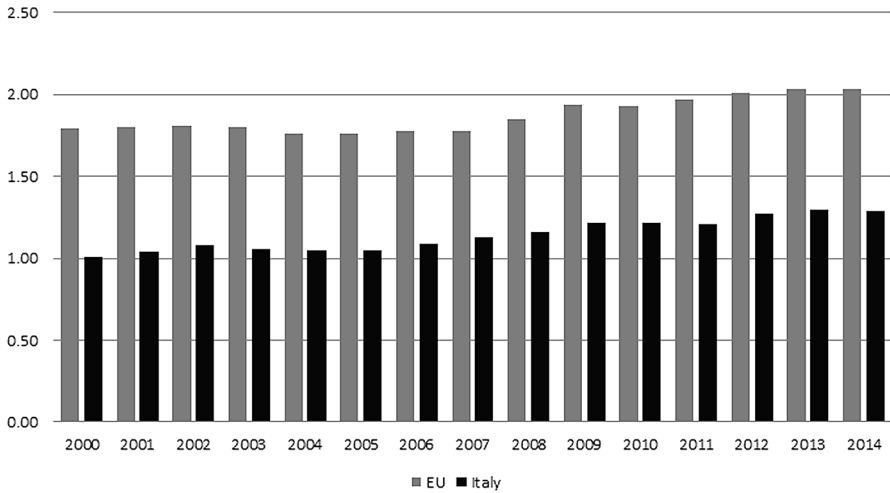
The analysis of LFS data provides some remarkable insights. The introduction of the JA does not seem to be associated with a reduction in the share of temporary and “atypical” contracts (vouchers). The increase in permanent jobs is observed almost exclusively among older cohorts (over 55 years old). On the contrary, temporary employment is mostly concentrated among young workers. The latter emerges as the more fragile employment component even during the JA era. More specifically, the reform period under investigation displays a tendency of employment change towards low skilled and low technology sectors (low-tech services), on one hand; diffusion of temporary jobs and vouchers among the younger cohorts, on the other. This element is particularly worrying since it relates to the weakening of the Italian industrial structure observed after the 2008 crisis.

Overall, the Italian labour market is characterized by a number of structural weaknesses which seem to persist throughout the investigated reform process. At present, the analysed combination of supply side policies, the JA and the provision of monetary incentives for new hirings are not associated with a significant reversal of such a trend.

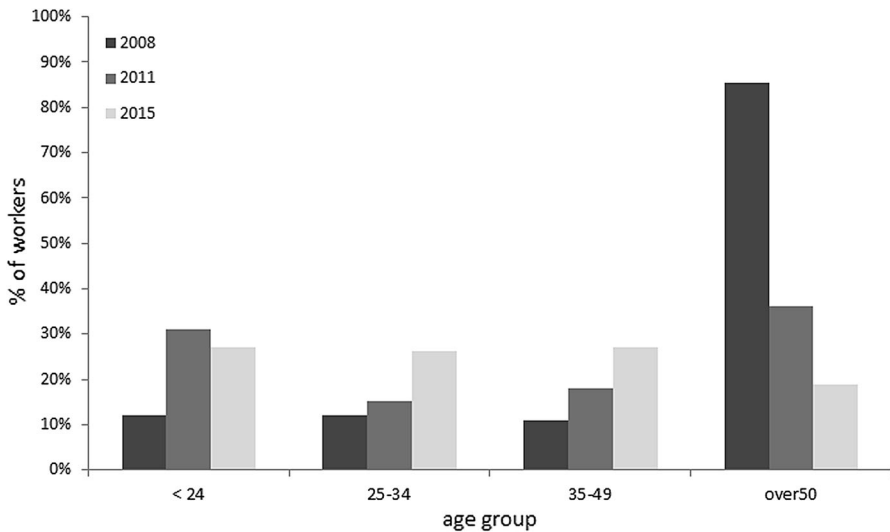
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## Appendix

See Figs. 10, 11.



**Fig. 10** Share of R&D on GDP (OECD). Data source: STAN OECD



**Fig. 11** Workers with vouchers by age group. Data source: INPS

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