

**CONTROVERSIES ON THE ECONOMIC EFFECTS  
OF FIXED – TERM EMPLOYMENT – EVIDENCE FROM  
THE OECD COUNTRIES\***

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**A b s t r a c t**

This paper focuses on fixed-term employment in the OECD countries, its trends and conditions, as well as controversies regarding its significance for flexibility of employment and labour market segmentation.

Statistical data show that fixed-term employment significantly increased its share in total employment in many OECD countries in the last quarter century. The reasons of this trend can be sought in the lower labour cost of this type of employment, and the ease with which this group of employees can be dismissed, which was in part a result of the relaxed legal protection of fixed-term employment in the nineties. Analyses indicate that the increase in the share of fixed-term employment affect employment elasticity nonlinearly according to the shape of the letter U. The analyses support the hypothesis about the segmentation of the labour market as a result of the development of fixed-term employment.

**KONTROWERSJE WOKÓŁ EKONOMICZNYCH SKUTKÓW ZATRUDNIENIA  
NA CZAS OKREŚLONY – ANALIZA NA PRZYKŁADZIE KRAJÓW OECD**

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**Słowa kluczowe:** zatrudnienie na czas określony, elastyczność zatrudnienia, kontraktowa segmentacja rynku pracy.

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**A b s t r a k t**

Przedmiotem artykułu jest zatrudnienie na czas określony w krajach OECD, jego tendencje i uwarunkowania, a także kontrowersje dotyczące jego znaczenia dla elastyczności zatrudnienia oraz segmentacji rynku pracy.

Dane statystyczne pokazują, że zatrudnienie na czas określony znacząco zwiększyło swój udział w ogólnej liczbie zatrudnionych w wielu krajach OECD w ostatnim kwartale. Przyczyn tej tendencji można doszukiwać się w niższych kosztach pracy tego zatrudnienia, łatwości zwolnień z pracy takich pracowników, a także liberalizacji prawnej ochrony zatrudnienia na czas określony w latach dziewięćdziesiątych. Przeprowadzone analizy wskazują, że wzrost udziału zatrudnienia na czas określony wpływa na elastyczność zatrudnienia nieliniowo, zgodnie z kształtem litery U. Analizy potwierdzają hipotezy o segmentacji rynku pracy w rezultacie rozwoju zatrudnienia na czas określony.

**Introduction**

The economic analysis of the labour market is dominated by aggregate approach involving the use of macroeconomic aggregates for the whole economy, such as employment, unemployment or the economically active population. Their popularity is due to their high analytical usefulness. This approach allows identifying a number of important processes occurring in the labour markets, concerning both the trend changes of basic values as well as the relationship between them. Next to the essential advantages, the aggregate approach, however, has limitations and also weakness primarily consisting in that it does not allow us to penetrate into the internal structure of the examined aggregates. These weaknesses manifest themselves particularly clearly when the examined aggregates are internally heterogeneous. This occurs among other things, for such an aggregate as employment, which is the focus of the analysis of this paper. Therefore, the analysis based on the disaggregation of this variable should contribute to a better diagnosis of the processes taking place in the labour markets.

Disaggregation of employment into components can be made based on various criteria. One of the most important classification criteria is the type of employment contracts as the basis of employment. According to the classification adopted in the OECD reports, we can identify regular employment understood as employment on the basis of employment contracts of indefinite duration and non-regular employment comprising all types of employment which do not use the standard, legal protections in the field of employment protection (OECD 2014, p. 146). The main type of non-regular employment is – according to this classification – temporary employment, whose basic form is fixed-term employment (OECD 2014, p. 146).

The subject of this paper is fixed-term employment in OECD countries. The analysis is aimed not only at recognizing the scale and structure of fixed-term

employment and its determinants in OECD countries, but also at presenting controversies regarding the economic impact of this type of employment. Particular attention is paid to the controversies concerning the importance of the development of fixed-term employment for the elasticity of employment and labour market segmentation.

The analysis in this paper is based, on the one hand, on the views put forward in the literature on the importance and consequences of fixed-term employment, and on the other hand, on the empirical basis comprising statistical data on fixed-term employment in the OECD countries in the years from 1993 to 2014 and the results of the author's and others' research on the consequences of the development of fixed-term employment for the elasticity of employment and labour market segmentation.

### **Trends in fixed-term employment**

In the last quarter century substantial transformation of the structure of employment in terms of types of employment contracts took place in the OECD countries. Although employment for an indefinite period has remained the dominant type, employment on the basis of fixed-term contracts significantly increased its share in total employment. While in 1995 the average share of fixed-term employment in total employment for the OECD countries stood at 10.5%, then in 2014 this indicator reached 11.1%, whereas the whole growth of this indicator took place in the nineties (Stats. OECD online database).

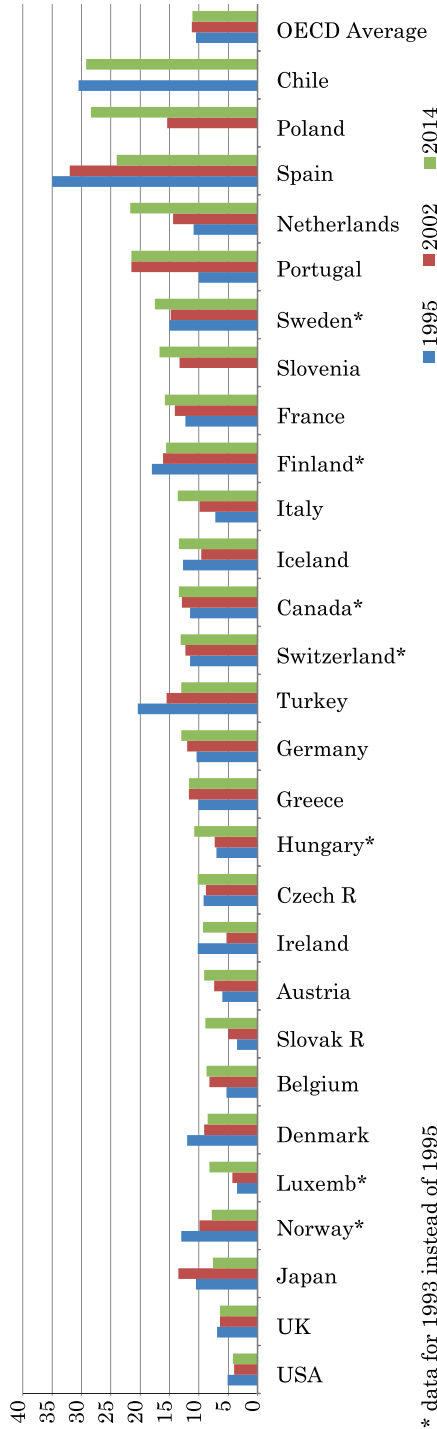
The growing share of fixed-term employment in the OECD countries was accompanied by a trend towards convergence of the share of this type of employment. While in 1995, the variation coefficient of the share of fixed-term employment in total employment in OECD countries was 0.62, in 2014 this coefficient fell to 0.47. This indicates a tendency to equalize the differences in the share of fixed-term employment in these countries during this period (see Figure 1).

Despite the trend of convergence there are still big differences in the share of fixed-term employment among OECD countries. This is clearly shown in Figure 1.

In 2014, the highest share of fixed-term employment in total employment took place in Chile (29.2%), Poland (28.4%)<sup>1</sup>, Spain (24%), the Netherlands (21.7%) and Portugal (21.5%). On the other hand the lowest share was found in the following countries: the United States (4.2%), UK (6.4%), Japan (7.6%), and Norway (7.8%).

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<sup>1</sup> The data for Poland do not include employment contracts under civil law since the data in Figure 1 refer to employment under labour law.



\* data for 1993 instead of 1995

Fig. 1. Shares of FTE in total employment in the OECD countries in 1995, 2002 and 2014 (%)

Source: Stats. OECD internet database.

The question arises, what are the reasons for the growing popularity of fixed-term employment in many OECD countries in recent years? In particular, why do employers exhibit so much interest in this type of employment? One can point to several important factors and conditions.

Firstly, it should be emphasized that employers' preferences for these types of employment are associated with lower labour costs in the case of fixed-term employment than the costs of employment with a contract of indefinite duration. This is due to lower wages of workers employed on fixed-term contracts than the workers employed on contracts of indefinite duration, the weaker wage pressure exerted by the former group of employees, lower training costs of employees incurred by employers in the case of fixed-term employment, and lower termination costs of these workers (see OECD 2014a, OECD 2014).

Secondly, employers are interested in hiring workers on fixed-term contracts because it is easier to dismiss such employees in the event of the need to adjust employment to economic conditions. This is due to the relatively short periods of fixed-term employment<sup>2</sup>, as well as very short notice periods of fixed-term contracts. This factor is very important in the era of dynamic technological and structural changes forcing fast adjustment of employment to changing economic conditions.

Thirdly, the increased popularity of fixed-term contracts was fostered by relaxed regulations on the protection of fixed-term employment which took place in many OECD countries in the nineties, coupled with relatively high restrictiveness of employment protection of contracts with indefinite duration. Declining trends in the indexes of employment protection legislation on temporary employment (EPLT) were observed in many countries. These indexes are estimated by the OECD and are a synthetic measure of this protection and depend, inter alia, on factors such as areas in which the fixed-term employment contracts can be applied, the maximum number of such consecutive contracts, the maximum cumulative duration of contracts, the minimum cooling-off periods between two fixed-term contracts so that they would not be considered as consecutive and notice periods (see OECD 2013, p. 87–93). The average EPLT index for OECD countries was 2.06 in 1995, while in 2002 it fell to 1.73, indicating a weakening employment protection for such contracts. This undoubtedly encouraged employers to conclude such employment contracts.

Statistical analyses support the hypothesis about the impact of the liberalization of employment protection legislation on the increased role of fixed-term employment. The correlation coefficient between the percentage change in the

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<sup>2</sup> According to the OECD study, in most of these countries, contracts up to 12 month long dominate among fixed-term contracts (see OECD 2014, p. 151).

EPLT indexes and a percentage change in the fixed-term employment share for the 26 OECD countries surveyed in the years from 1995 to 2002 is -0.47, indicating that the decrease in the EPLT index was accompanied by increases in the share of fixed-term employment. Even more telling is the estimation of the parameter in a simple linear regression for the 26 OECD countries in the years from 1995 to 2002 (amounting to -0.826), which indicates that the decrease in the EPLT index by 1 percentage point entailed an increase in the share of fixed-term employment in the overall employment of about 0.8 percentage point. Figure 2 shows the graphical representation of this relationship.

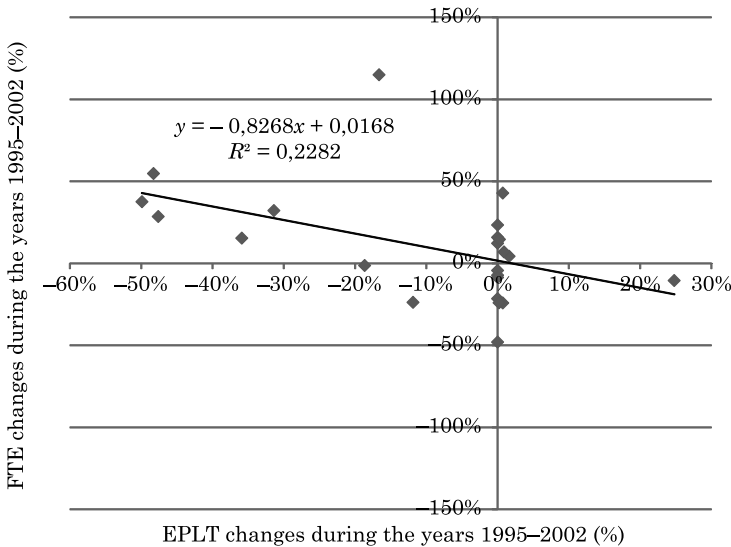


Fig. 2. The relationship between changes in FTE and changes in EPLT indexes during the years 1995–2002

Source: own calculations based on the data from Stats. OECD internet database.

Fourthly, the growing popularity of fixed-term employment is also related in part to voluntary choices made by employees. Although the OECD report shows that in most countries the majority of workers on fixed-term contracts accept this type of employment because of the lack of opportunity to find a regular employment, in such countries, however, as Iceland, Norway, Denmark, Sweden and Switzerland, a relatively high proportion of employees on fixed-term contracts (about 30–50%) voluntarily choose this type of employment (e.g., when they want to combine work with education or do not want to be involved for a long time with some employer) (OECD 2014, p. 149).

Table 1  
FTE by age groups in the OECD countries in 2011–2012 (share of employees with FTCs in the total number of employees at given age, %)

Country	All	Older workers (55–64)	Prime-age workers (25–54)	Youth (15–24)
Chile	30	23	29	47
Poland	28	23	25	58
Spain	24	10	24	62
Korea	23	40	20	28
Netherlands	19	7	13	50
Portugal	21	11	20	58
Sweden	16	7	12	58
Slovenia	17	10	13	73
France	15	9	11	56
Finland	15	8	13	43
Italy	13	7	12	51
Iceland	13	7	9	33
Canada	13	10	10	31
Switzerland	13	3	6	52
Turkey	12	19	10	19
Germany	14	4	10	54
Greece	10	7	10	29
Hungary	9	8	9	23
Czech Republic	8	9	7	25
Ireland	10	7	8	34
Austria	9	2	4	37
Slovak Republic	6	5	5	19
Belgium	8	3	6	32
Denmark	8	3	7	21
Luxembourg	7	4	6	37
Norway	8	2	7	23
Japan	13	15	10	28
United Kingdom	6	5	5	14
Estonia	3	2	2	12

Source: OECD Employment Outlook 2014, p. 154.

As shown in Figure 1 the growing share of fixed-term employment have not occurred in the all analysed countries. In some countries (USA, UK, Japan) the shares have remained at low levels. It is worth noting that these countries can be characterized by relaxed regulations on the protection of regular employment (Stats. OECD internet database). One can suppose the relatively high

Table 2

FTE by level of education of people aged 25–54, 2011–2012 (share of employees with fixed term contracts in the total number of employees with a given education, %)

Country	Total	High	Medium	Low
Poland	25	16	26	43
Spain	23	21	23	28
Netherlands	14	14	13	15
Portugal	20	24	18	18
Sweden	12	13	10	17
Slovenia	13	13	13	14
France	12	11	12	14
Finland	13	13	12	11
Italy	12	16	10	13
Iceland	8	11	8	8
Canada	10	13	9	9
Switzerland	6	9	4	6
Germany	10	11	9	15
Hungary	8	5	7	22
Czech Republic	6	6	6	14
Ireland	7	8	7	9
Austria	5	10	3	4
Slovak Republic	6	3	5	40
Belgium	7	7	6	8
Denmark	7	8	5	6
Luxembourg	6	7	4	5
Norway	6	8	5	6
United Kingdom	4	5	4	4
Estonia	3	2	4	8
Greece	10	7	8	18
Lithuania	2	1	3	9

Source: OECD Employment Outlook 2014, p. 156.

flexibility of employment in these countries is based on the flexibility of regular employment.

Let us take a look at current trends in the characteristics of fixed-term workers. Relevant data from the survey of the workforce carried out in the OECD countries during the years from 2011 to 2012, are shown in Table 1 and 2.

Table 1 contains data on the percentage share of people working on temporary contracts in the total number of employees in specific categories; in addition to the indicator for the entire working population three age groups have been identified: 15–24 years, 25–54 years and 55–64 years. The most



important conclusion from the data in Table 1 is that in all the countries surveyed, young people aged 15–24 years are over-represented among those working on fixed-term contracts. This is evidenced by the fact that in all countries the share of young people working on fixed-term contracts in the total number of employed persons aged 15–24 is much higher than the corresponding rates for the entire working population. In ten of the countries surveyed, more than half of the working young people had fixed-term contracts, while in Slovenia the share was 73%. Poland also belongs to the group of countries with a dominant share of fixed-term contracts among working youth (58%). It can be concluded that the problems related to fixed-term employment primarily affect young people. Among the countries surveyed only in Korea and Turkey different patterns were observed, characterized by a relatively high share of fixed-term contracts in a group of elderly people aged 55–64.

Table 2 shows statistics on the 26 OECD countries during the years from 2011 to 2012 specifying the share of workers employed on fixed-term contracts in the total number of employees with a given level of education, while only the workers in the 25–54 year age group were taken into account. Three levels of education were identified: low, medium and high. The table shows, firstly, that in the 16 countries there was an over-representation of persons with low education in the stock of fixed-term jobs. This is evidenced by much higher percentages of workers with fixed-term contracts among employees with low level of education than the corresponding rates for the entire population. This over-representation was particularly high in Slovakia, Poland, the Czech Republic and Hungary. We must therefore conclude that the low level of education in most countries surveyed is a factor increasing the likelihood of fixed-term employment. Secondly, it should be noted that this regularity was not universal, because in ten other countries there was an over-representation of people with high education in the stock of fixed-term jobs. Especially in countries such as Austria, Switzerland, Canada, Italy and Portugal the share of workers with fixed-term contracts in the number of employees with higher education was significantly higher than the corresponding rates for the entire population. This may indicate a somewhat different range of factors that affect the development of fixed-term employment in these countries.

### **Do fixed-term employment contracts actually increase the employment elasticity?**

In discussions on the importance of fixed-term employment an argument is often raised about the important role of this type of employment in increasing employment elasticity. The question arises, why is employment elasticity so

important and whether indeed fixed-term employment increases employment elasticity?

Employment elasticity in the economic literature is usually understood as the ability to adjust the number of workers to changing conditions and determinants, such as: production, wages, profitability or technology (EHRENBURG, SMITH 2012, p. 95), and is treated as a component of a broader concept, namely, labour market flexibility, comprising in addition wage flexibility, working time flexibility and labour supply flexibility.

The issues of labour market flexibility have been the subject of interest in economics for a long time. For neoclassical economists flexible wages and prices formed the basis of mechanisms to restore balance on the markets. Keynes, who challenged the neoclassical belief in the effective operation of flexible wages, argued that the size of employment adjusts to the size of aggregate demand and production. Friedman put forward the theory of a natural rate of unemployment, which implies the imperfect flexibility of various variables in the labour market is one of the causes of the natural unemployment rate. In a similar vein the authors of the NAIRU concept spoke about the role of labour market flexibility in the development of equilibrium unemployment (KWIATKOWSKI 2002, p. 99–154). Also the theories on adjustments to economic shocks stressed the importance of wage flexibility, working time flexibility and employment flexibility for the nature and speed of adjustment processes, and pointed to the possibility of trade off between the scale of the adjustments in the form of changes in employment and the scale of adjustments in the form of changes in wages and working time (Cahuc, Zylberberg 2004, p. 193–214, SMITH 2003, p. 47–73).

Economic theories involving labour market flexibility stressed above all, the importance of different types of flexibility for restoring equilibrium on the markets and to a lesser extent – with the exception of the theories held in the Keynesian tradition – drew attention to the negative consequences of flexibility related to fluctuations in employment and wages. The argument about the essential role of labour market flexibility in restoring equilibrium gained even more importance with the creation of the Eurozone, when one of the essential adjustment mechanisms based on changes in national currency exchange rates ceased to operate. In this situation, flexible labour markets began to be seen as an essential mechanism for the adjustment of the economy in times of economic shocks, offsetting the loss of the exchange rate mechanism.

Empirical studies on the role of fixed-term employment in the development of employment flexibility have been conducted many times in the economic literature. A. Benito and I. Hernando analysed the effects of flexible work contracts in Spain based on individual firm data and concluded that the increase in the share of fixed-term employment contributes to higher cyclical employment volatility (BENITO, HERNANDO 2008). W. van Lancker drew a simi-

lar conclusion from his analysis of European labour markets (VAN LANCKER 2012). Several studies analysed fixed-term employment in the context of employment for an indefinite period. It was noted that fixed-term employment is used especially as adjustment tool during periods of unexpected changes in economic activity, resulting in a reduction in volatility of employment for an indefinite period (GOUX, MAURIN, PAUCHET 2001; PFEIFFER 2009). The research of the labour market in Spain after the reforms of the market in 1984 shows that the development of fixed-term employment increased the demand for labour by approx. 3.5%, but also reduced employment for an indefinite period by approx. 10% (AGUIRREGABIRIA, ALLONSO-BORREGO 2014). P. BENTOLILA et al. analysed adjustment processes in the labour markets in Spain and France after the crisis of 2008 and came to the conclusion that the liberal legislation in the field of fixed-term employment in Spain was a significant reason of higher unemployment in this country than in France (BENTOLILA, CACHUC, DOLADO, LE BARBANCHON 2012). In turn, O.J. Blanchard and A. Landier examined the consequences of fixed-term employment in France, and came to the conclusion that while the development of fixed-term employment increased cyclical volatility of employment, but too high a share of fixed-term employment reduces employment for an indefinite period and increases long-term unemployment (BLANCHARD, LANDIER 2002).

An interesting idea, from the point of view of our discussion, on the flexibility of employment, was put forward by M. Malul, M. Rosenboim and S. Tal, although they refer it to the relationship between employment flexibility and the restrictive legislation on employment protection. In their view, very liberal regulations can result in high employment flexibility because it is easy to dismiss employees, while the increase in stringency of employment protection should result in a decrease in employment flexibility. The latter relationship has however probably its limits, because a very restrictive legislation on employment protection and failure to adjust employment to the economic conditions may increase the irrational allocation of the labour force, causing a decline in profitability and increased layoffs (MALUL, ROSENBOIM, TAI 2011, see also MALUL, ROSENBOIM, SHAVIT, TARBA 2011). We are actually dealing with a U-shaped relationship between employment flexibility and the restrictiveness of employment protection legislation.

This idea can be used to formulate the hypothesis of a U-shaped relationship between the share of employees on fixed-term contracts in the total number of employees and employment flexibility. This seems to be justified when we assume substantially greater liberalization of employment protection in the case of fixed-term employment contracts and the trade off between fixed-term employment and employment for an indefinite period. This hypothesis can be summarized as follows. With a high share of employees on fixed-term contracts employment flexibility can be quite high because it is easy

to lay off employees during the downturn. Reducing the share of workers on fixed-term contracts should reduce employment flexibility due to the increase in employment protection and more costly dismissals for employers (due to the increase of employment for an indefinite period). But this regularity probably has its limits. A too low share of employees on fixed-term contracts and failure to adjust the number of employees to economic conditions can result in additional costs from the irrational allocation of the labour force in enterprises, resulting in negative consequences for companies' profits and the size of their demand for labour, increasing as a result employment flexibility during the economic downturn.

This hypothesis was verified econometrically in another article (KWIATKOWSKI, WŁODARCZYK 2014), which used annual data for 28 OECD countries in the years 2002 to 2011 to estimate the impact of the share of employment for an indefinite period (note that the increase in this share means a decline in the share of employees on fixed-term contracts) on employment elasticity<sup>3</sup> in relation to GDP in the three sub-periods: 2002–2007, 2008–2011 and 2002–2011. The results obtained were consistent with the theoretical hypotheses formulated above and are graphically illustrated in Figure 3.

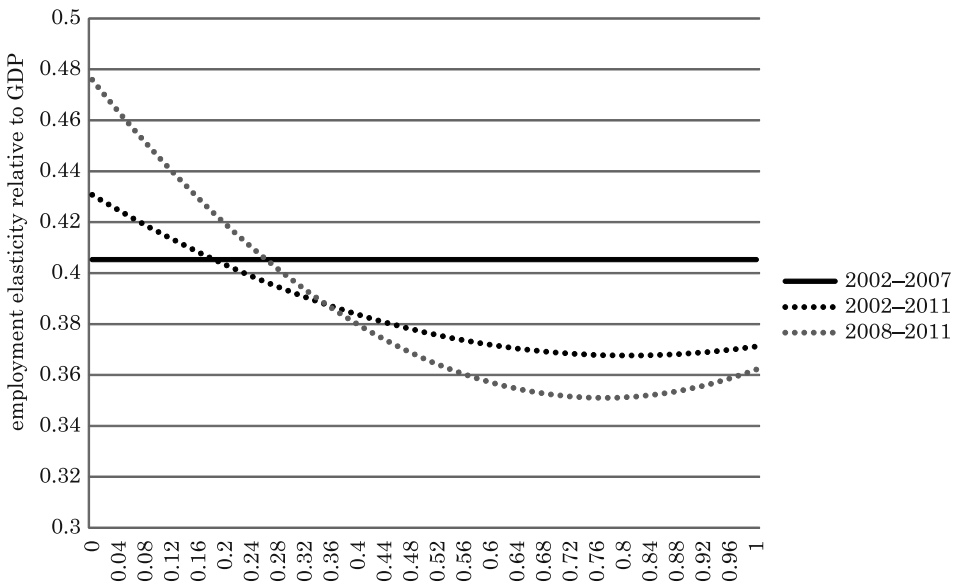


Fig. 3. Employment elasticity relative to GDP in the OECD countries at different shares of permanent employment contracts

Source: KWIATKOWSKI, WŁODARCZYK (2014).

<sup>3</sup> When we measure the flexibility of employment we use the term elasticity instead of flexibility.

As shown in Figure 3, higher employment elasticity can be observed in countries with relatively low and relatively high share of employment for an indefinite period in total employment (as well as with a high and low share of fixed-term employment). This means, therefore, that we can expect more declines in employment during the economic downturn in these countries. In the case of the analysed OECD countries in the years 2008 to 2011 elasticity of employment with respect to GDP takes a minimum value with the share of contracts for an indefinite period in the total employment contracts at the level of 78% (the fixed-term contracts at 22%). For the whole period from 2002 to 2011 this elasticity takes a minimum value with the share of employment for an indefinite period at the level of 81% (a share of fixed-term employment at 19%).

### **Does fixed-term employment lead to the labour market segmentation?**

Upward trends in fixed-term employment, occurring in many countries, led to the creation of two segments of jobs which differ substantially in terms of employment protection, employment stability and the amount of wages, namely: good jobs based on contracts for an indefinite period and bad jobs based on fixed-term contracts. The question arises whether the situation, meaning the segmentation of jobs, also means the segmentation of employees? In other words, whether between these two segments of jobs there exists a flow of employees, or whether employees are assigned to these segments for longer? Is the employment on fixed-term contracts a transitory “stepping stone” into stable employment for an indefinite period, or a pitfall which holds these employees there for longer?

On the theoretical side, one should note the arguments in favour of the “stepping stone”. Employees taking up fixed-term employment gain experience, increase their human capital, and also expand their network of contacts, which can help them find a permanent job. On the other hand, one should also note the arguments for a “pitfall” because while engaged in fixed-term employment, employees may not look for a permanent.

Empirical studies undertaken in different countries have produced different results. While studying the labour market in Germany, T. Hagen found that fixed-term employment after two years increases the probability of a permanent job (HAGEN 2003). Many empirical studies were devoted to the labour market in Spain. One of them stressed that taking up fixed-term employment helps to find a permanent job, but only in the case of educated people, but not young people and women (CASQUEL and CUNYAT 2008). Other

studies show that over 20% of employees on fixed-term contracts in Spain had the same job five years later (TOHARIA and CEBRIAN 2007). M. Guell and B. Petrongolo came to the conclusion that flows of workers between the two segments of jobs in Spain are small (GUELL and PETRONGOLO 2007). A similar conclusion can be drawn from the data of the European Union Statistics on Income and Living Conditions (EU-SILC), which are shown in Figure 4. They indicate that in the vast majority of EU countries, less than 50% of employees who were on fixed-term contracts in 2008 became employed for an indefinite period in 2011 (see Figure 4).

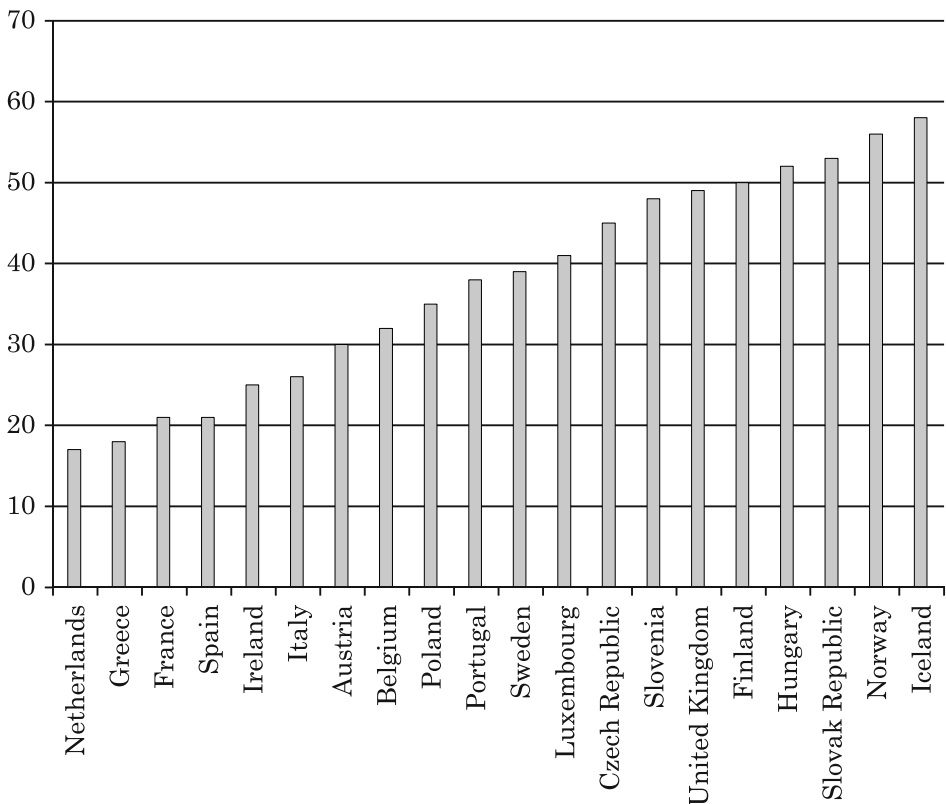


Fig. 4. Three-year transition rates from temporary to permanent contracts (percentage share of temporary employees in 2008 that were employed as full-time permanent employees in 2011)  
Source: OECD Employment Outlook, 2014, p. 182.

The above-mentioned data and results of empirical studies show that flows of workers between the two above mentioned segments of jobs are relatively small. It is especially important that the outflows from the fixed-term employ-

ment segment into the segment of employment for an indefinite period are low, which perpetuates the “being” of workers in their respective segments. This demonstrates a tendency towards a contractual labour market segmentation.

## Conclusions

The analysis shows that the role of fixed-term employment in many OECD countries has increased in the last quarter century. This was due to the relaxed legal protection on fixed-term employment, the ease with which this group of employees can be dismissed, as well as lower labour costs in the case of fixed-term employment.

The analysis shows that fixed-term employment affects employment elasticity, but not in a linear way, but according to the shape of the letter U: employment elasticity is high at the low and high share of fixed-term employment, and this elasticity is relatively low when the share is medium-sized (19–22%). The analysis also shows that outflows of workers from fixed-term employment into employment for an indefinite period are relatively low, and therefore it seems reasonable to claim the existence of a trend toward labour market segmentation as a result of the development of fixed-term employment contracts. Thus one can speak about contractual labour market segmentation.

In order to avoid excessive employment flexibility and eliminate a contractual labour market segmentation it is necessary to optimize the level of fixed-term employment, setting its share in the total employment at the medium level of (approx. 20%). Such action could be fostered by reducing the difference in terms of legal employment protection between fixed-term employment and employment for an indefinite period.

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