HAVE LABOR MARKET REFORMS LED TO MORE EFFICIENT LABOUR MARKETS?

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Since the 80s, mainly since the 90s, most developed (mainly in Europe) countries, supported by mainstream (Monetarist – New Keynesian) models and recommendations made by international organizations (OECD, European Commission, IMF), have reformed their labour markets with the objective of enhancing the flexibility of these markets.

It was argued that rigidities in labour markets, provoked by inefficient labour institutions, were the main reason of the high (current and structural) unemployment rates and the low resilience of labour markets in the presence of adverse economic shocks

Special attention was played to the role played by the legal norms regulating the hiring and firing of workers, that is, the Employment Protection Legislation (EPL): the set of rules governing the capacity of employers to hire and fire workers and the capacity to hire an employee using one of the existing kinds of employment contracts

OECD Employment Protection Legislation Indexes

To rise the efficiency of labour markets, accelerating the growth of employment and the decline in unemployment rates, many countries have cut down the firing costs of permanent workers and reduced/removed the constraints to using non-standard employment contracts, favouring the use of fixed-term and/or part-time employment contracts.
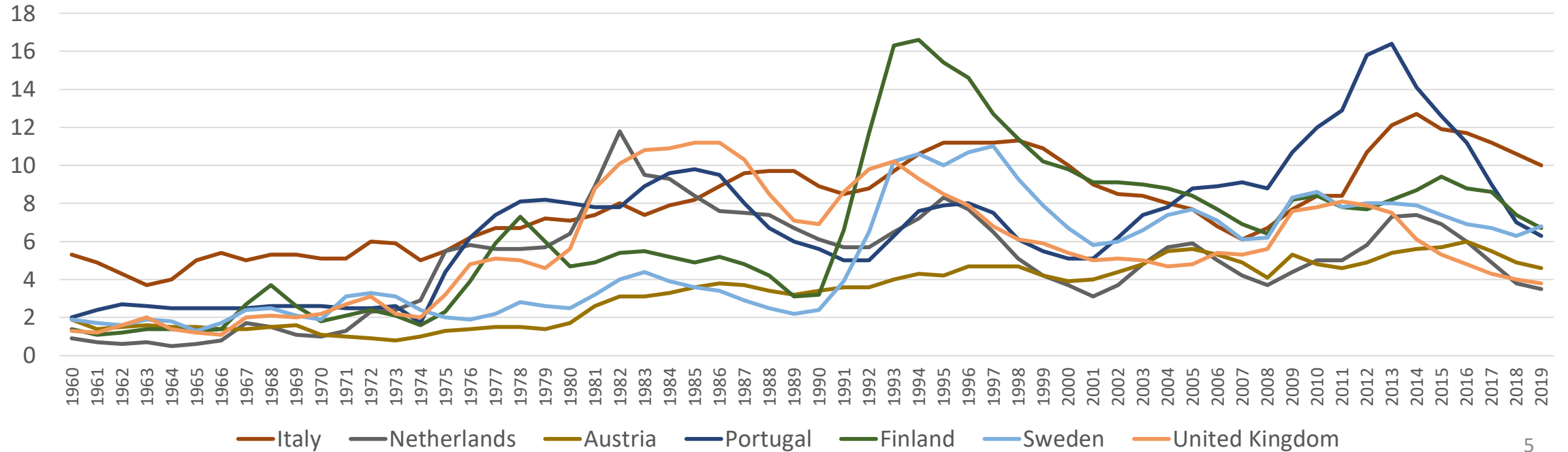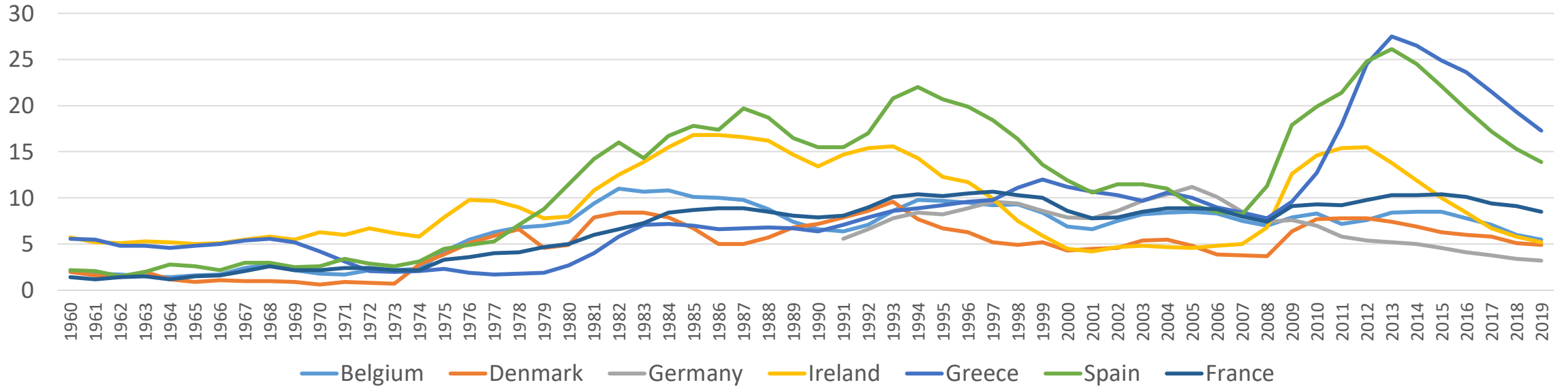
In most cases, the higher flexibility in the use of temporary contracts have come with lower compensations at the end of these contracts (compared to those affecting permanent workers), generating a dual-segmented labour market, with a rising size of atypical contracts.

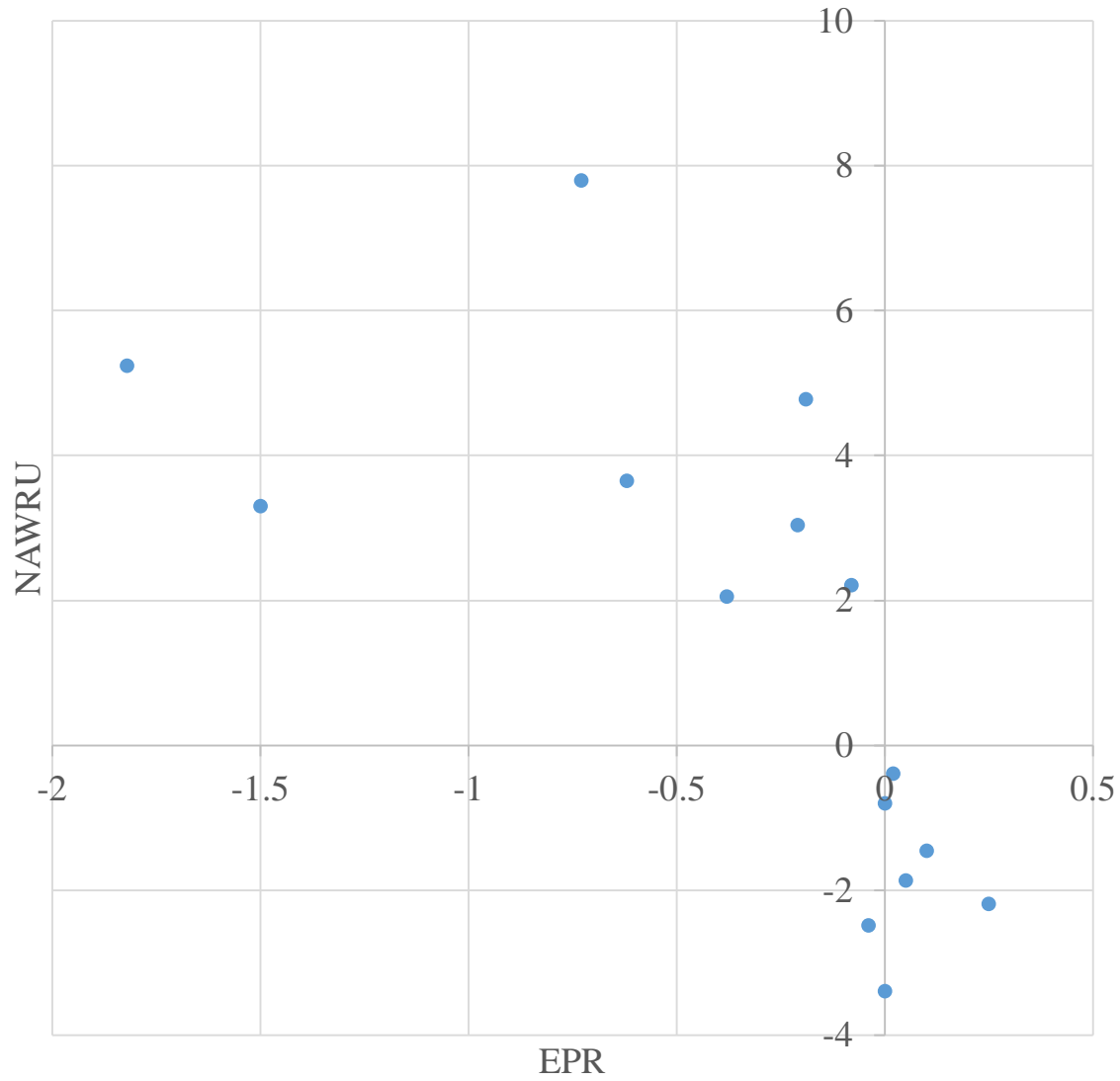|	EPR index			EPT index		
	1985	2013	Change	1985	2013	Change
Australia	1,17	1,67	0,50	0,88	0,88	0,00
Austria	2,75	2,37	-0,38	1,31	1,31	0,00
Belgium	1,85	1,89	0,05	4,63	2,38	-2,25
Canada	0,92	0,92	0,00	0,25	0,25	0,00
Denmark	2,18	2,20	0,02	3,13	1,38	-1,75
Finland	2,79	2,17	-0,62	1,25	1,56	0,31
France	2,59	2,38	-0,21	3,06	3,63	0,56
Germany	2,58	2,68	0,10	5,00	1,13	-3,88
Greece	2,85	2,12	-0,73	4,75	2,25	-2,50
Ireland	1,44	1,40	-0,04	0,25	0,63	0,38
Italy	2,76	2,68	-0,08	5,25	2,00	-3,25
Japan	1,70	1,37	-0,33	1,69	0,88	-0,81
Netherlands	3,07	2,82	-0,25	1,38	0,94	-0,44
Norway	2,33	2,33	0,00	3,13	3,00	-0,13
Portugal	5,00	3,18	-1,82	3,38	1,81	-1,56
Spain	3,55	2,05	-1,50	3,75	2,56	-1,19
Sweden	2,80	2,61	-0,19	4,08	0,81	-3,27
Switzerland	1,60	1,60	0,00	1,13	1,13	0,00
United Kingdom	1,10	1,10	0,00	0,25	0,38	0,13
United States	0,26	0,26	0,00	0,25	0,25	0,00

Have labour markets reforms that have reduced the employment protection for salaried workers led to more efficient labour markets?:

- Low unemployment rates
- Low structural unemployment rates
- More resilient labour markets (lower employment growth/GDP elasticity)

Unemployment rates

Legend (top chart): Belgium, Denmark, Germany, Ireland, Greece, Spain, France

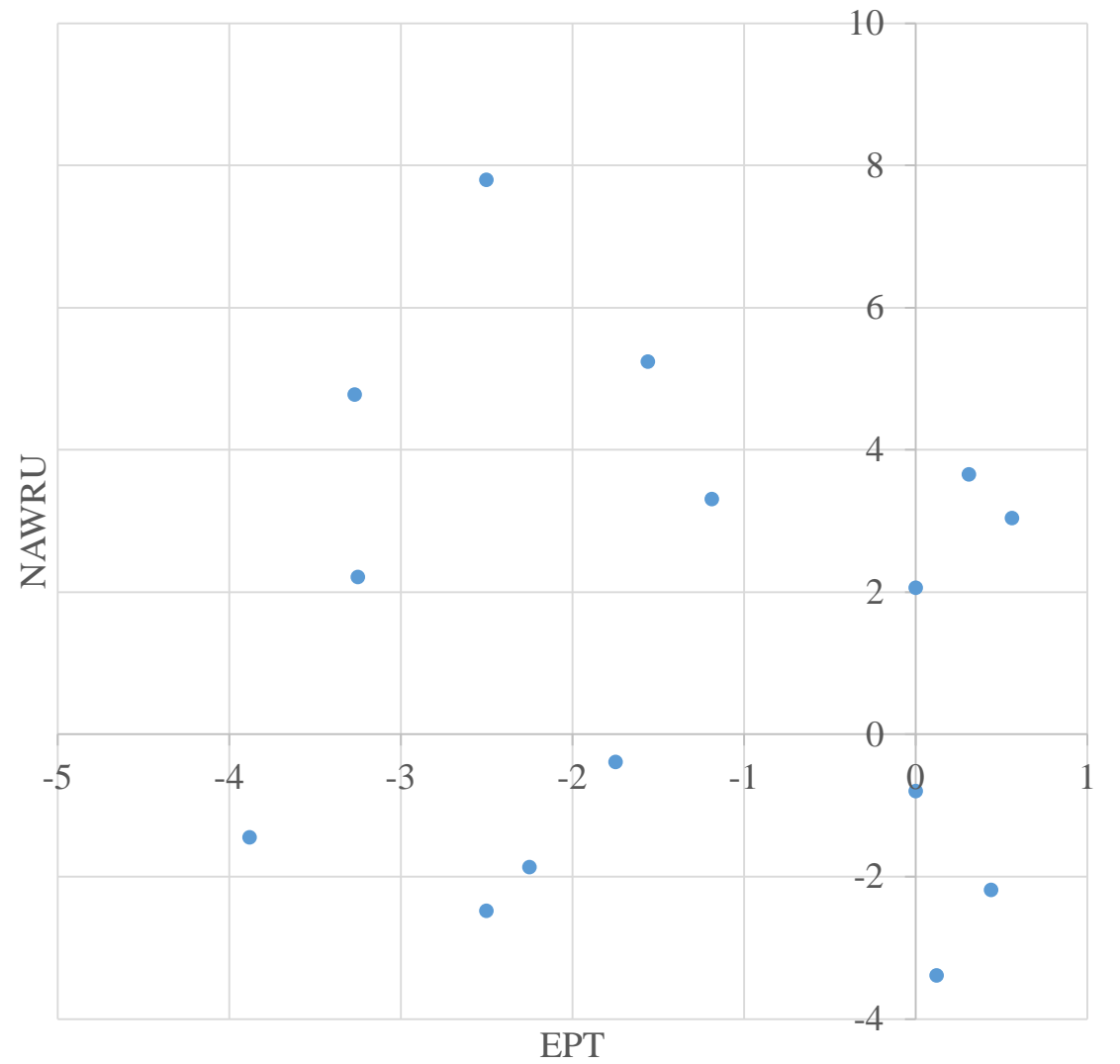Legend (bottom chart): Italy, Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom
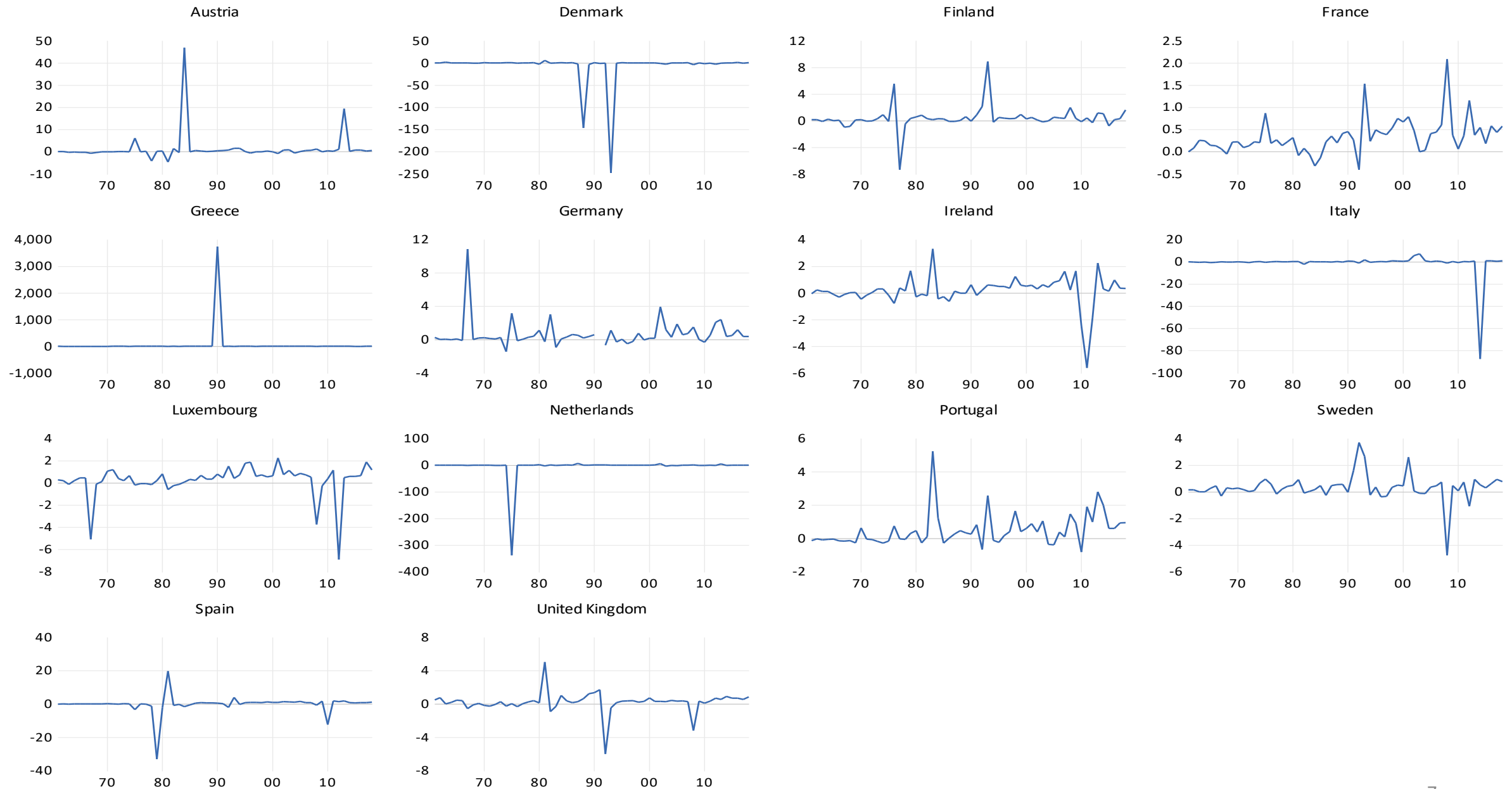
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Change in NAWRU and EPR index between 1985 and 2013

Change in NAWRU and EPT index between 1985 and 2013

Elasticity employment / GDP

Empirical studies conclude that the employment protection is not a key determinant of the labour markets performances in terms of the dynamics of employment and unemployment rates.

Contrary to what was argued by international organizations and mainstream analysis, the evolution of employment and unemployment is not the result of the interaction between labour market institutions (employment protection) and economic shocks. Only economic growth matters for the evolution of employment and unemployment rates.

Flexibilizing reforms in the Employment Protection Legislation have not led to more employment and lower unemployment rates

Determinants of employment growth (18 EU countries 1999-2012)

	1	2	3	4
Constant	-1.165 (0.079)	-0.873 (0.230)	-0.617 (0.311)	-0.355 (0.595)
GDP	**0.431 (0.000)**	**0.410 (0.000)**		
GFCF			**0.188 (0.000)**	**0.171 (0.000)**
POP 15-64	**0.822 (0.000)**	**0.802 (0.000)**	**0.884 (0.000)**	**0.864 (0.000)**
EPR	0.015 (0.930)	-0.097 (0.541)	0.064 (0.687)	-0.023 (0.894)
ΔEPR	-0.179 (0.861)	-0.042 (0.966)	-0.139 (0.909)	0.115 (0.922)
ΔEPR-1	1.193 (0.275)	1.277 (0.241)	0.411 (0.755)	0.715 (0.585)
EPC	-0.015 (0.900)	-0.032 (0.804)	0.021 (0.870)	0.001 (0.992)
ΔEPC	1.101 (0.185)	1.039 (0.149)	0.875 (0.269)	0.825 (0.253)
ΔEPC-1	-0.549 (0.515)	-0.647 (0.390)	-0.178 (0.832)	-0.299 (0.700)
EPT	**0.352 (0.017)**	**0.415 (0.009)**	**0.239 (0.099)**	**0.280 (0.087)**
ΔEPT	-0.031 (0.942)	0.026 (0.950)	0.285 (0.548)	0.291 (0.522)
ΔEPT-1	0.066 (0.874)	0.076 (0.845)	0.235 (0.608)	0.252 (0.565)
GE 09		2.893 (0.003)		
IE 09		-5.528 (0.000)		-5.477 (0.001)
SP 00				2.772 (0.066)
SP 09		-5.771 (0.002)		-4.746 (0.003)
SW 01		3.602 (0.003)		3.276 (0.000)
Obs	252	252	252	252
R^2	0.557	0.634	0.599	0.659

## Determinants of growth of unemployment rates (18 EU countries 1999-2012)

	1	2	3	4
Constant	1.024 (0.004)	1.136 (0.004)	0.609 (0.066)	0.605 (0.037)
GDP	**-0.311 (0.000)**	**-0.293 (0.000)**		
GFCF			**-0.143 (0.000)**	**-0.142 (0.000)**
POP 15-64	0.158 (0.272)	0.093 (0.422)	0.091 (0.453)	0.112 (0.244)
EPR	-0.063 (0.509)	-0.080 (0.419)	-0.088 (0.356)	-0.084 (0.300)
ΔEPR	-0.245 (0.763)	-0.125 (0.876)	0.005 (0.995)	-0.182 (0.827)
ΔEPR-1	-1.206 (0.164)	-1.116 (0.195)	-1.041 (0.547)	-0.644 (0.483)
EPC	-0.004 (0.943)	-0.031 (0.653)	-0.016 (0.856)	-0.029 (0.625)
ΔEPC	-0.252 (0.695)	-0.205 (0.707)	-0.021 (0.971)	-0.247 (0.623)
ΔEPC-1	0.522 (0.435)	0.607 (0.275)	1.022 (0.640)	0.277 (0.633)
EPT	-0.097 (0.298)	-0.101 (0.313)	-0.032 (0.742)	-0.033 (0.659)
ΔEPT	-0.057 (0.863)	-0.110 (0.735)	-0.331 (0.353)	-0.4701 (0.200)
ΔEPT-1	-0.264 (0.410)	-0.318 (0.314)	-0.393 (0.250)	-0.392 (0.224)
GR 05				-2.497 (0.066)
PL 99		3.517 (0.011)		3.824 (0.003)
PL 06		-3.148 (0.022)		
PL 07		-3.148 (0.023)		
SK 03				-2.358 (0.128)
SP 09		4.928 (0.000)		3.967 (0.001)
Obs	252	252	252	252
R^2	0.457	0.585	0.552	0.638

This does not mean that the reforms approved since late 80s that have reduced the employment protection for temporary and permanent workers, reducing firing costs of permanent–open ended contracts and/or temporary–fixed-term contracts, and reducing the constraints to use fixed–term employment contracts and agency workers, have not had any impact on labour markets.

One of these consequences is the strong segmentation existing in European countries, with the rising share of atypical, mainly temporary, employees:

- In 2018, the rate of temporary employees was above 15% in: Spain (26.9%), Poland (24.3%), Portugal (22%), Croatia (19.9%), Italy (17.1%), France (16.7%), Finland (16.2%), Slovenia (15.7%) and Sweden (15.6%)

Rate of temporary employees (%)
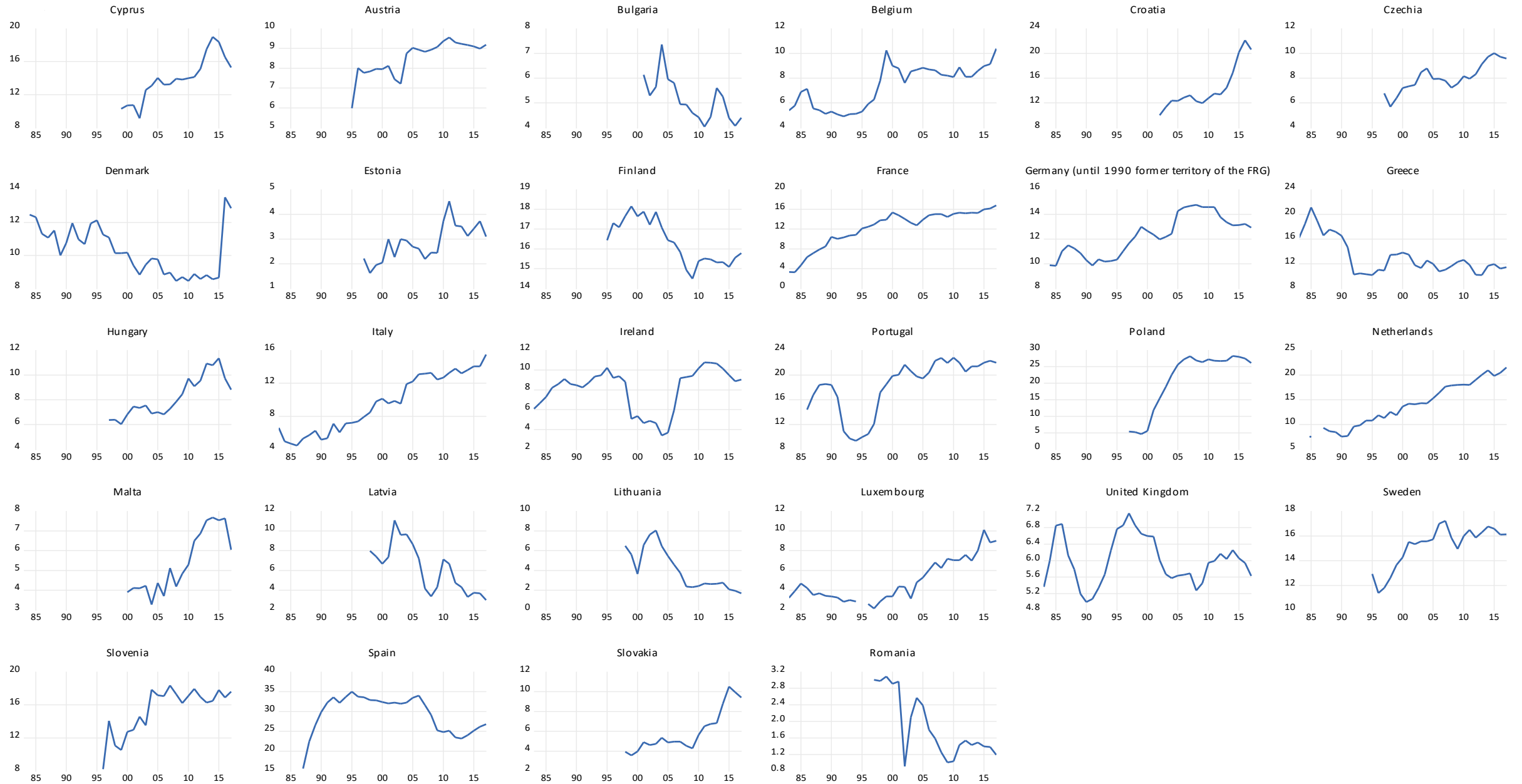
In a paper, that analyses the growth of total employees, permanent employees and temporary employees, in 11 European countries (Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, and the United Kingdom) for 25 years (1988-2012), we show that reforms in the employment protection have contributed to accelerate the growth of temporary employees and, consequently, to rise the rate of temporary workers

Descriptive statistics

	Mean	Median	Maximum	Minimum	Standard Deviation
ΔEmployees	1.255	1.101	2.951	-9.530	3.153
ΔPermanent Employees	1.103	0.924	3.014	-9.326	3.210
ΔTemporary Employees	2.957	2.260	7.136	-3.781	1.159
ΔGDP	2.201	2.337	1.728	-9.133	2.838
EPR	2.479	2.385	5.000	1.095	0.872
ΔEPR$_t$	-0.015	0.000	0.190	-1.190	0.100
ΔEPR$_{t-1}$	-0.012	0.000	0.190	-1.190	0.096
EPT	2.352	2.375	4.875	0.250	1.454
ΔEPT$_t$	-0.050	0.000	0.563	-2.250	0.250
ΔEPT$_{t-1}$	-0.050	0.000	0.563	-2.250	0.250

The average rate of temporary employees increased from 10.3% in 1987 to 15% in 2018.

The mean of the EPR index declined from 2.61 in 1987 to 2.30 in 2012; the EPT index fell from 3.00 to 1.74.

The mean of the changes in the EPR and EPT indexes is very small and the median is zero. Out of the 275 observations, the EPR index changed in 34 observations, and the EPT index in 29

Determinants of the rate of growth of salaried employment

	Employees	Permanent Employees	Temporary Employees	
Constant	-2.956*	-3.630**	17.177	2.693
GDP	**0.716***	**0.612***	**1.368***	**0.744***
EPR	0.874	0.479	-1.126	12.108
EPR^2	0.167*	-0.157	0.466	-0.140
EPT	1.009	**1.847**	-8.259	**-14.204**
EPT^2	-0.147	**-0.255**	1.074	**1.742***
EPR/EPT	0.190	0.498	**-3.854***	**-6.059**
ΔEPR	0.798	0.671	2.283	6.276
ΔEPRt-1	0.093	-0.074	1.789	-0.112
ΔEPT	0.569	**0.864***	-2.630	-3.347
ΔEPTt-1	-0.176	0.557	**-7.924***	**-9.185***
Germany 1991	17.076*	19.288***		
R^2	0.666	0.592	0.143	0.275
Cross-section random effects	No	No	Yes	
Cross-section fixed effects	No	No		Yes
Period fixed effects	No	No		Yes

*p-value<0.1
** p-value <0.05
*** p-value<0.01

A dummy (Germany 1991) is included to control the impact of German reunification on the figures of German employment (this creates some problems: we cannot apply fixed or random efects models in the estimations for total and permanent employees). It is not significant for temporary employees

We apply SUR estimators to correct the contemporaneous correlation among countries

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	Employees
Constant	-2.956*
GDP	**0.716*****
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EPT	1.009
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ΔEPR	0.798
ΔEPR$_{t-1}$	0.093
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ΔEPT$_{t-1}$	-0.176
Germany 1991	17.076*
R^2	0.666
Cross-section random effects	No
Cross-section fixed effects	No
Period fixed effects	No

Only economic growth is a significant determinant of the rate of growth of total employees

	Permanent Employees
Constant	-3.630**
GDP	**0.612***
EPR	0.479
EPR^2	-0.157
EPT	**1.847****
EPT^2	**-0.255****
EPR/EPT	0.498
ΔEPR	0.671
ΔEPRt-1	-0.074
ΔEPT	**0.864***
ΔEPTt-1	0.557
Germany 1991	19.288***
R^2	0.592
Cross-section random effects	No
Cross-section fixed effects	No
Period fixed effects	No

Employment protection for permanent employees does not have a significant impact on the rate of growth of permanent employees

There is a non-linear relation (decreasing marginal effect: threshold: 3,45) between the employment protection for temporary employees and the growth of permanent employees.

The EPT index ranges from 0 to 6. Therefore, the protection for temporary employees accelerates the growth of permanent employees, although an excessive protection for temporary employees (severe constraints to using temporary contracts) slows down the growth of permanent employees. Reasons:
- Activities and industries with a high seasonal component
- Existence of an optimal rate of temporary workers

However, the current change in the EPT index has a direct impact on the growth of permanent employees. The reforms that facilitated the use of temporary contracts and agency workers had a negative impact on permanent employment (the declines in the EPT indexes ranged from 0.125 to 2.25)

A posible explanation to this contradiction would be that the largest reforms in employment protection for temporary employees (the largest declines in the EPT index) took place where the constraints to the use of temporary contract were more severe. Thus, these reforms could estimulate the hiring of temporary workers to the detriment of permanent employees

	Temporary Employees	
Constant	17.177	2.693
GDP	**1.368*****	**0.744***
EPR	-1.126	12.108
EPR^2	0.466	-0.140
EPT	-8.259	**-14.204****
EPT^2	1.074	**1.742***
EPR/EPT	**-3.854***	**-6.059****
ΔEPR	2.283	6.276
ΔEPRt-1	1.789	-0.112
ΔEPT	-2.630	-3.347
ΔEPTt-1	**-7.924*****	**-9.185*****
Germany 1991		
R^2	0.143	0.275
Cross-section random effects	Yes	
Cross-section fixed effects		Yes
Period fixed effects		Yes

The model has a poor explanatory capacity: other variables explain the dynamics of temporary employees

The impact of economic growth on the rate of growth of temporary employees is larger than for permanent workers

The employment protection for permanent employees has not a significant impact on the growth of temporary employees

The lagged change in employment protection for temporary employees has an inverse significant impact. Declines in EPT index ranged from 0.125 to 2.25: they contributed to a large increase in the temporary salaried employment

With fixed-effects, there is a non-linear effect of protection for temporary contracts on the growth of temporary employees. There is a rising marginal effect; threshold: 4.05). EPT (ranges 0-6) always slows down the growth of temporary employees, although above 4.05 the effect is gradually smaller. This implies that the reforms that have reduced the constraints to using temporary contracts have contributed to accelerate the growth of temporary employees

The differences between the employment protection for permanent and temporary employees have an inverse effect on the growth of temporary employees: a higher relative difference in employment protection leads to a smaller growth of temporary employees

Many papers focus on the adverse economic consequences generated by these reforms, highlighting the negative effects on labour segmentation, income distribution, job quality, household consumption and borrowing, innovation, competitiveness, productivity growth, and poverty (Brancaccio et al., 2018; Damiani et al., 2016; Gutierrez-Barbarrusa, 2016; Heyes and Lewis, 2015; Kleinknecht et al., 2013; OECD, 2018; Rubery and Piasna, 2016; Tridico, 2017)

Recent studies have focused on the impact of labour market reforms on income distribution and inequality. These contributions have analysed whether the labour market reforms approved in the last decades and that have contributed to enhance the flexibility in the labour markers have contribute to increase income inequality. Many studies have focused on the effects generated on income inequality by the reforms to employment protection legislation approved since the decade of the eighties that have facilitated the conditions for hiring and firing temporary and permanent workers.

In this sense, there is a general consensus in the sense that the reforms that have made the labour market more flexible have had a negative impact on income inequality, in particular on the size of labour and wage shares (Zoe Adams et al. 2019; Daniela Bellani and Giulio Bosio 2019; Emiliano Brancaccio, Nadia Garbellini, and Rafaelle Giammetti 2018; Siyan Chen and Saul Desiderio 2019; Gabriele Ciminelli, Romain Duval, and Davide Furceri 2018; Giovanni Dosi et al. 2018; OECD 2018; Tridico 2017)

Rising inequality is directly related to the rising share of part-time and temporary Jobs.

Short-termism in temporary hiring is even higher than figures in the table, due to the high number of workers that gives no response to the question of the lenght of their contracts (50% in Spain)

In 2018, in Spain, for a total of 4.3 million temporary employees, 20 million contracts were signed (6 million less than 7 days, 0.9 million 7-15 days, 1.6 million 15-30 days, 7.5 million contracts with inderminate duration

Temporary employees by duration of contract (% total temporary employees)

	less than 1 month	from 1 to 3 months	from 4 to 6 months
Belgium	24,57	14,56	15,53
Bulgaria	8,35	7,17	39,84
Czechia		3,72	9,57
Denmark	3,37	6,92	12,88
Germany		2,96	11,40
Estonia	6,12	36,73	34,69
Ireland	4,22	12,18	13,51
Greece	1,99	9,56	32,36
Spain	4,87	11,34	14,41
France	13,62	16,11	15,37
Croatia	2,23	32,37	26,56
Italy	2,61	19,61	26,00
Cyprus		3,38	15,40
Latvia		39,23	27,27
Lithuania		53,76	23,12
Luxembourg	7,66	9,27	14,52
Hungary	6,44	20,78	19,29
Malta		8,13	17,50
Netherlands	0,30	4,32	4,07
Austria		10,53	15,11
Poland	1,77	13,70	11,52
Portugal	5,84	6,76	26,83
Romania		16,95	28,43
Slovenia	4,01	23,28	19,97
Slovakia	3,73	13,70	23,97
Finland	6,84	19,97	22,98
Sweden	12,61	8,98	16,37
United Kingdom	2,22	4,02	6,80

Rising inequality in income distribution is related to the lower incomes of employees with atypical contracts (temporary- fixed-term contracts, agency workers, part-time contracts)
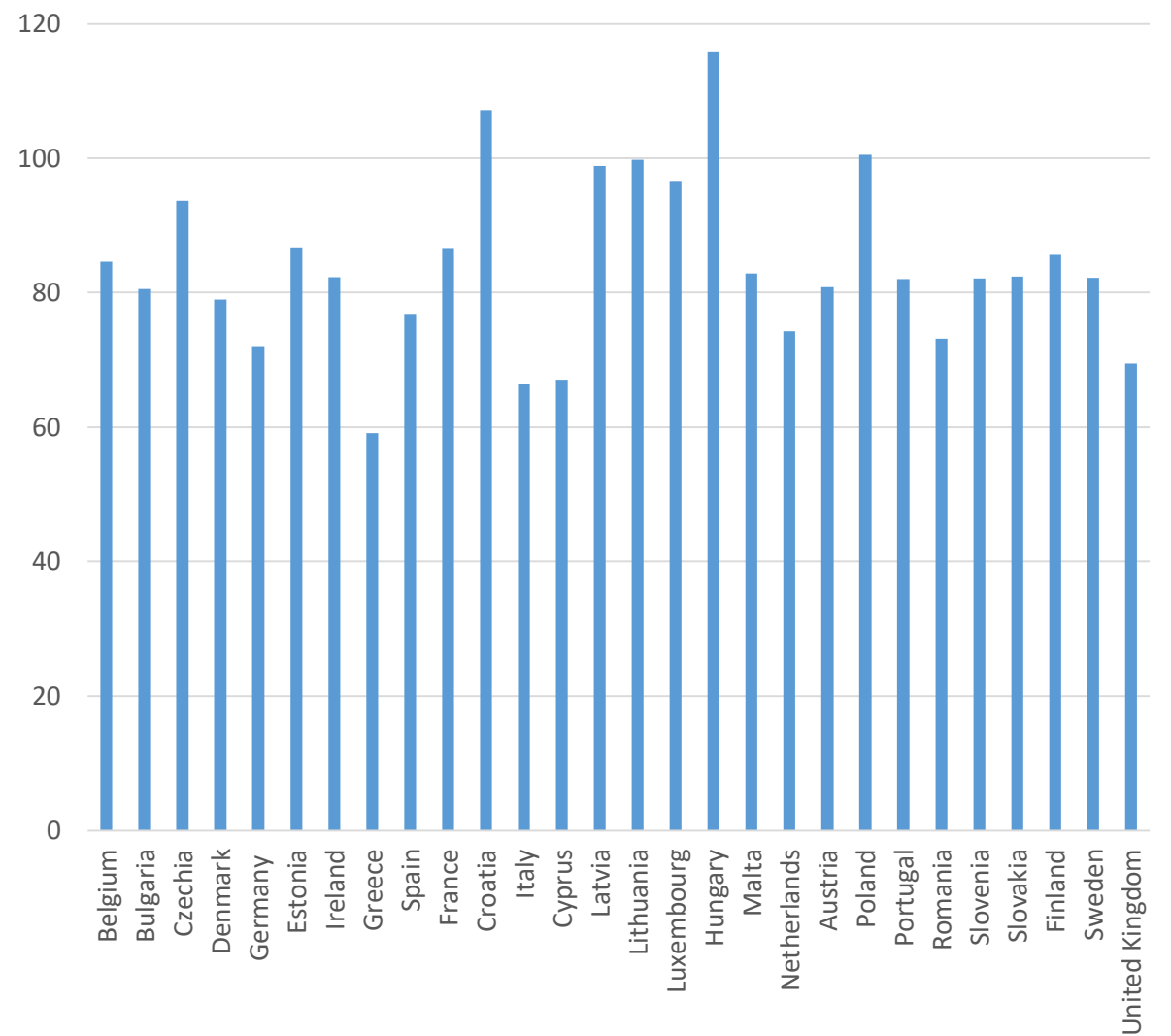
Earnings of employees with temporary and part-time contracts are significantly lower than those with permanent (full-time) workers

The low quality of jobs (short lenghth, preciariousness, low wages) has risen the rates of povert, even for those people that have a job (not only for unemployed workers)

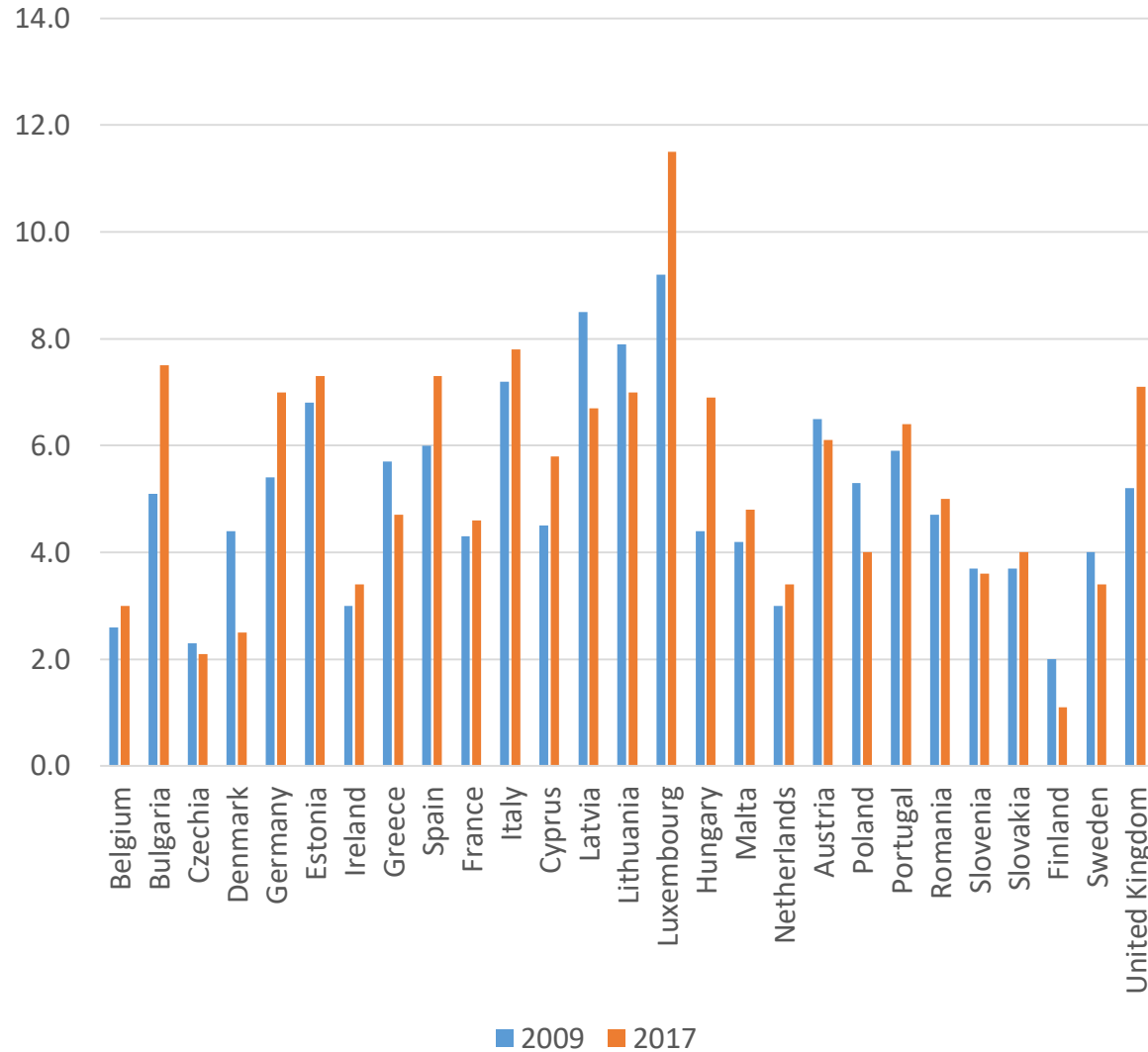Hourly earnings of a temporary employee (% of hourly earnings of a permanent employee) (year 2014)
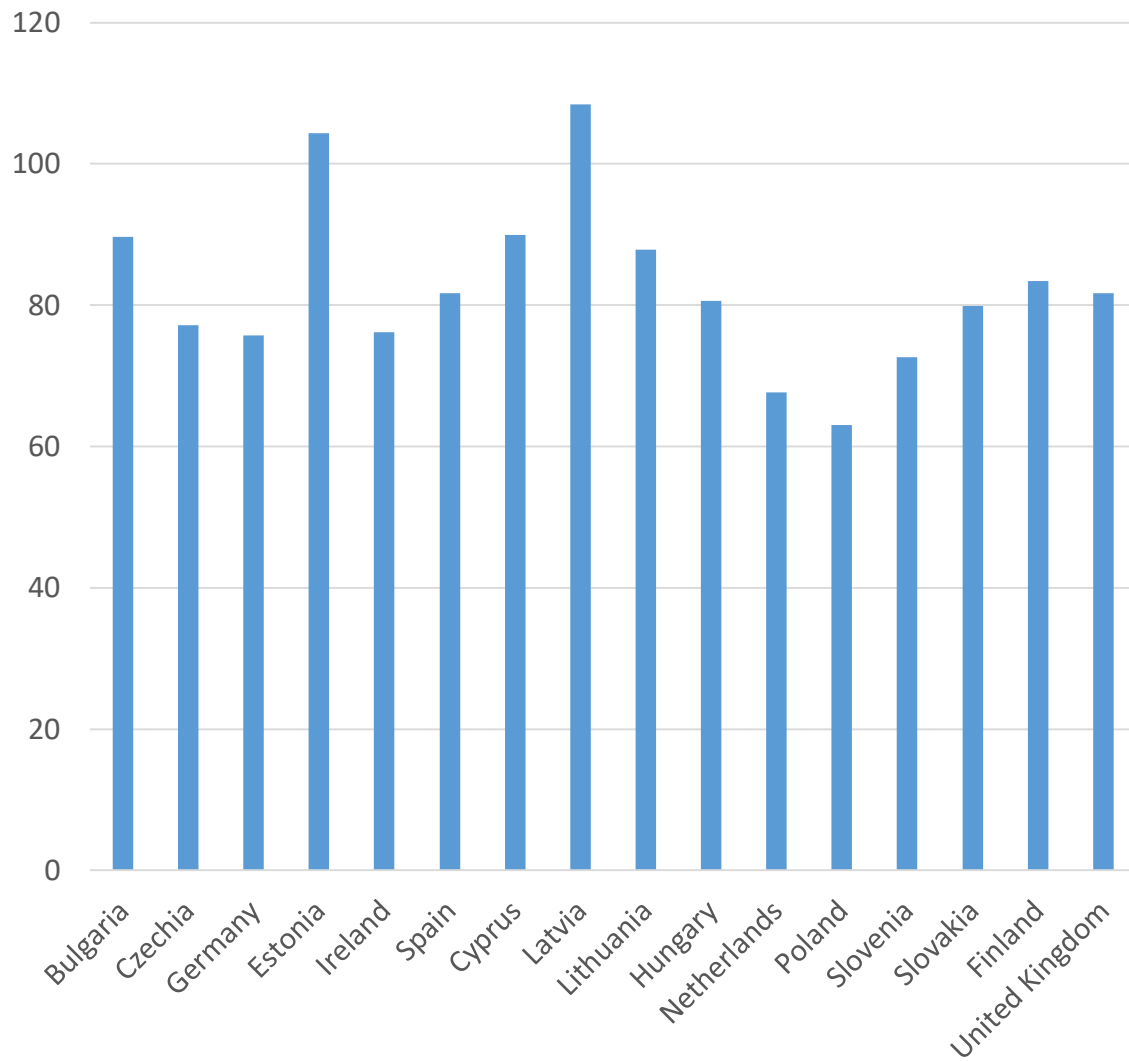
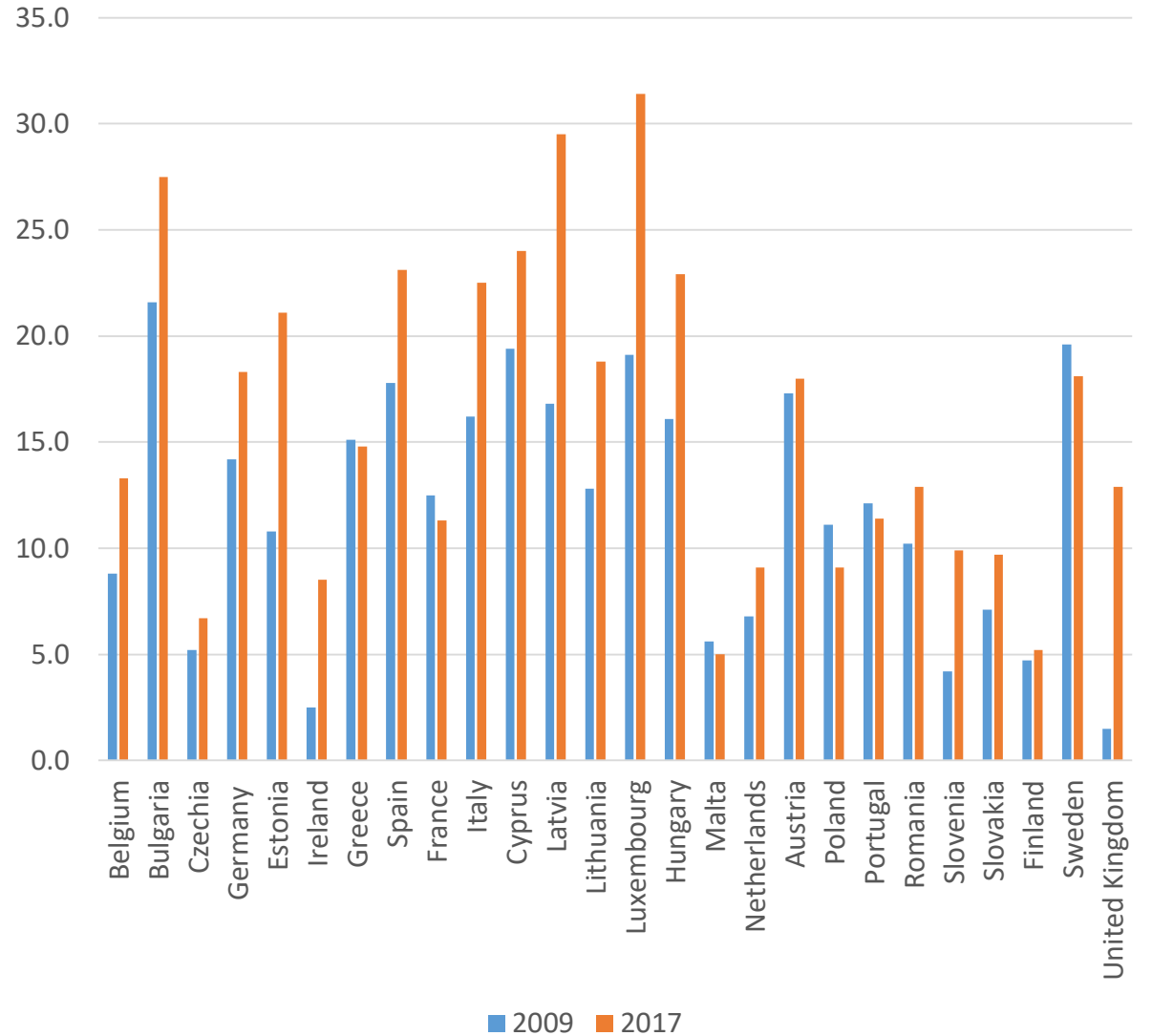Hourly earnings of a part-time employee (% of hourly earnings of a full-time employee) (year 2014)

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In-work at-risk-of-poverty rate by type of contract (%)

Employees with a permanent job

Employees with a temporary job

As far as workers are trapped in a in a loop of unemployment-low quality jobs, poverty becomes chronic.

Temporary (and part-time) contracts are not a step to high quality jobs (permanent contrcats with high wages)

Labour transitions for employees with a temporary job to a permanent job (2017) (% of employees with a temporary job)
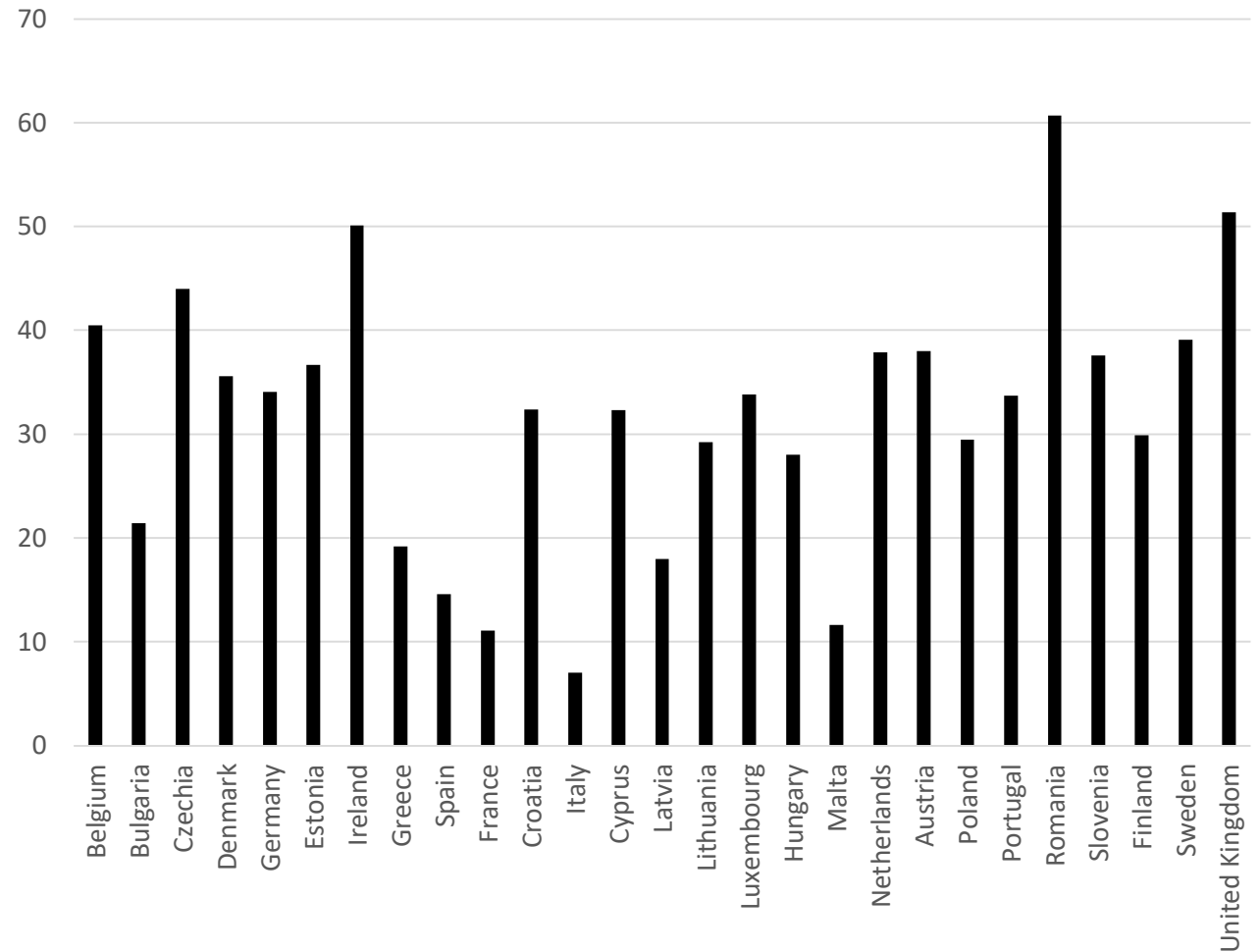
Conclusions

Labour market reforms reducing the employment protection for workers have not led to more efficient labour markets. These reforms have not contributed to increase employment or to reduce (structural and current) unemployment rates.

These reforms have, nevertheless, contributed to rise the segmentation of labour markets, with a rising and excessive share of temporary workers, leading to a lower quality in jobs, that, as the OECD now accepts, generates both micro and macroeconomic adverse consequences.

It must be emphasized the negative impact on inequality and poverty. In a not too far past, poverty among workers was associated to be unemployed. Nowadays, having a job is no longer a guarantee to escape from poverty. A reform in the labour markets, in labour institutions, is absolutely necessary to reduce the unsustainable figures of poverty and current levels of inequality, and to contribute to generate a more efficient labour markets that guarantees workers to get a sufficient level of earnings that avoids to fall into a trap of permanent poverty