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Do labour market reforms reduce the output growth threshold of Okun's law? An analysis for OECD countries

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Abstract

Reducing unemployment is still a priority for many governments. The objective of this paper is to analyse whether labour market reforms have succeeded in lowering the level of output growth required to reduce unemployment. With this aim, we estimate time-varying thresholds based on a first-difference version of Okun's law for 25 countries and, then we analyse whether 32 labour reforms have contributed to reducing thresholds. The results show a high heterogeneity of thresholds among countries, but also that thresholds have shown a clear decreasing trend, mainly due to the evolution of the labour force and productivity in these countries. We also find that in 21 of the 32 considered labour market reforms, they have been effective in reducing the value of the threshold. Both results are clearly relevant from a policy perspective.

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1. Introduction

Okun's law has generated a large number of papers focusing on estimating the coefficient that measures the elasticity of unemployment with respect to GDP growth¹, finding a high level of heterogeneity across countries (Ball et al, 2019). These differences have been explained by the share of temporary workers and unequal levels of employment protection legislation (Cazes et al., 2013; Dixon et al., 2017; Butkus et al., 2023), with the explanatory power of the remaining labour institutions generally being null.

However, the analysis of country differences regarding Okun's coefficient has limited relevance for reducing unemployment, which is still a priority for many countries². In contrast, very few studies have dealt with a rate of output growth consistent with a stable unemployment rate, and, moreover, they have focused on single countries, namely the United States (Knotek, 2007), Austria (Cristl et al., 2017), Germany (Kosfeld and Dreger, 2006) and Spain (de Cea and Dolado, 2013; Buendía and Sánchez, 2017), without analysing its determinants.

This paper attempts to fill this gap. First, it estimates growth thresholds compatible with stable unemployment for a large number of countries, and then analyses whether labour reforms enacted by governments have lowered these thresholds. The contribution to the literature is twofold: first, it extends the analysis to 25 countries that have carried out 32 labour reforms, and, second, it identifies the reforms that have succeeded in lowering the threshold, providing relevant evidence about effective options for reducing unemployment.

2. Materials and methods

Okun's law is an inverse relationship between fluctuations in output and the unemployment rate. In its first-difference version, we can specify Okun's law as follows:

$$\Delta u_t = \gamma_0 + \gamma_1 \cdot y_t, \quad (1)$$

Equation (1) relates the variation in the unemployment rate (Δu_t) to GDP growth in real terms (y_t). Following Kosfeld and Dreger (2006), we can define the threshold value of the output growth required to start reducing unemployment at that point where $\Delta u_t = 0$. Taking this into account, if we reorder the terms in equation (1), we can obtain a measure of the threshold by computing the following expression:

$$\delta = -\gamma_0/\gamma_1. \quad (2)$$

As our objective is to analyse the effects of labour market reforms on the value of the threshold for different countries, we need to obtain time-varying measures of the threshold. With this aim, we follow a similar approach to that of Knotek (2007) and estimate rolling regressions for each country across a fixed time observation window of 12 years. In a second step, we relate the evolution of the estimated time-varying threshold for each country to a set of dummy

¹ The recent meta-analysis by Porras-Arenas and Martín-Roman (2023) has compiled 1,213 estimates since 1980 from 64 different econometric studies selected from 163 articles.

² In the OECD countries there are more than 33 million unemployed. Unemployment rates exceed 10% in Spain and Colombia and are around 9% in Greece, Chile and Turkey.

variables related to the introduction of the considered reforms and two additional controls: labour force and productivity average growth³ during the analysed period:

$$\hat{\delta}_{i,t} = \alpha_0 + \alpha_1 reform_{i,t} + \alpha_2 \Delta lf_{i,t} + \alpha_3 \Delta prod_{i,t} + u_{i,t}. \quad (3)$$

A statistically significant negative value of $\hat{\alpha}_1$ will indicate that the reform has been effective in reducing the threshold. In order to take into account the uncertainty around the estimate of $\hat{\delta}_{i,t}$, the inverse of its standard error has been used as weights when estimating Equation (3). It is also important to note that, due to the high correlation between the labour force and productivity growth in several countries, when the variance inflation factor (VIF) was above 5, only the one providing a better statistical fit has been included.

Our analysis focuses on those OECD countries that fulfil two conditions: first, prominent labour market reforms have been adopted in the considered period, and second, statistical information is available for at least six years before and after the considered reform.

There have been several attempts to compile information about the labour market reforms adopted in developed countries during the last decades. However, none of them exactly fits our requirements. First, most of them do not cover all aspects of the labour market, but they only focus on reforms affecting employment protection legislation (EPL) and unemployment benefits (UB) (Duval et al, 2018; Wiese et al, 2024; Aumond et al, 2022). Second, their geographical coverage does not adapt to our needs. For instance, Aumond et al, (2022) focus on Eurozone countries, Turrini et al (2015) on European Union countries, and, although being the more comprehensive, Duval et al (2018) and Wiese et al (2024) do not cover all OECD countries. Third, their temporal coverage is relatively limited, with the only exception of Wiese et al (2024). But perhaps, the most relevant limitation from the point of view of our analysis is the concept of the reform itself, since these works consider a reform to be any legislative modification of any of the aspects considered (normally EPL and UB, as previously indicated). However, a labour market reform potentially able to modify the threshold cannot be any minor change related to a single aspect of the labour market, but ideally a legislative package with broad contents that affects different elements of the labour market functioning, that is, a comprehensive or close to comprehensive reform of the labour market, especially also including changes in the wage setting.

In order to identify this type of reforms, a part of an extensive review of the previous works, an additional search was carried out in academic and general search engines. The outcome of our analysis is summarized in Appendix A. It is important to highlight that, following this procedure, relevant reforms have been identified in 35 countries. During the considered period, no relevant reform has been identified in countries with fully flexible labour market such as United States and Canada. In addition, due to the econometric methodology used (rolling regressions), reforms close to the beginning and end of the series available for each country had to be omitted, and reforms carried out in several consecutive years had to be accumulated in the last year (for example, the reforms approved by Greece in 2010, 2011 and 2012 were accumulated in 2012, as were those of Germany in 2005 and those of the United Kingdom in

³ The inclusion of these two additional controls is required in order to isolate the effects of the reform. As clearly highlighted by Blanchard (2021) or Ball (2017), in order to keep unemployment constant, the threshold must vary to accommodate variations in population and, thus in the labour force, but also in output per worker.

1982 and 1988). Thus, 32 comprehensive labour market reforms in 25 countries are being considered in our empirical analysis (Appendix A)⁴.

With regard to data sources, annual data for the considered variables have been obtained from the OECD's Economic Outlook database. We have considered all data available until 2019 in order to avoid the possibility that the different job retention schemes adopted during the COVID-19 pandemic could affect the results⁵. Variable definitions and summary statistics are provided in Tables B1 and B2 in Appendix B, respectively.

3. Results and discussion

The last column of Table B3 in Appendix B shows the estimates of the threshold for the last window of the 12-year rolling regression. In general, countries with higher growth in their determinants (labour force and productivity growth) have the highest thresholds: Turkey, Australia and Korea with strong labour force growth, and Ireland, Poland and Korea with strong productivity improvements. The lower thresholds are countries such as Japan with ageing demographics and zero productivity growth, or countries with very flexible labour markets nowadays (Greece and Portugal). Germany stands out with an extremely high negative output growth threshold, partly explained by a very weak growth in both determinants, wage restraint and the implementation of short-time work schemes (*Kurzarbeit*).

As regards the effect of labour reforms, the results in Table 1 show that most of the reforms implemented by the countries analysed have been effective in reducing the output growth threshold. Of the 32 reforms analysed, 23 (71.8%) are statistically significant, and 21 (65.6%) have the expected negative sign⁶. These 21 reforms have been adopted by 18 countries, with France, Sweden and the United Kingdom having lowered the threshold with more than one reform. Specifically, 18 of the 25 countries analysed (72%) have lowered the threshold with some of their labour market reforms.

However, not all reforms have had the same lowering effect, as their content is uneven across countries. The estimated coefficients reveal that the reforms that have had the greatest effect in reducing the output growth threshold have been those carried out in Italy (1997), Greece (2010 to 2012), France (1987), Japan (1999), Korea (1998), the United Kingdom (1982 and 1988), Austria (2003), Estonia (2009) and Spain (2012). Some of these reforms had an intense flexibilising content and a broad scope, such as those implemented in Greece⁷ and Spain during the sovereign debt crisis or the British reforms of the Thatcher era. Others, by contrast, have been more limited in scope but equally effective, such as those in Italy, France and the Asian countries, which have made temporary and part-time hiring more flexible, as well as making

⁴ Romania has also been excluded as no stable Okun's curve has been found for this period.

⁵ Due to this restriction, we have not been able to consider more recent reforms such as the 2015 reform in Italy or the 2017 reforms in Lithuania and Brazil.

⁶ The two statistically significant reforms with a positive sign are Latvia and Turkey. Both countries passed pro-European labour laws at the turn of the century. Latvia until 2002 operated under the strict, partially reformed Soviet labour law, which was poorly enforced, so that the market was de facto very flexible. Therefore, before accession to the EU it updated the regulations, which in reality meant introducing rigidity. In the case of Turkey, the new Labour Act in 2003 implied a reduction of the high level of informality, and as result, a lower flexibility.

⁷ Although the results for Greece must be taken with cautious as the explanatory power of the rolling regression for this country is very low as shown in table 1. We are grateful to a reviewer for highlighting this point.

dismissal easier (France) or cheaper (Estonia). The Austrian reform, which replaced dismissal costs with employer contributions to an employee fund (*Mitarbeitervorsorgekassen*), also had an important effect.

In contrast, minor reforms (Italy 1985, Portugal 2003, Spain 1984) did not reduce the output growth threshold. The German Hartz labour reforms are also not statistically significant. This finding confirms the thesis of Dustmann et al. (2014), who argue that Germany's resurgence was not based on Hartz reforms⁸ but on the decentralisation of collective bargaining, the generalisation of opt-out clauses and the attractiveness of cheap labour from neighbouring EU accession countries.

4. Conclusions

The obtained results show that labour market reforms can reduce the output growth threshold. From the analysis of those that have been effective, it can be deduced that in rigid labour markets a partial reform, such as facilitating temporary and part-time contracts, can sometimes be effective, but not always (Spain). Moreover, where unions are responsible (Sweden), centralised bargaining with government support can reduce the threshold. Lastly, reforms that introduce firm-level bargaining or facilitate opt-out clauses can also be effective. Reducing the generosity of unemployment benefits or excessive firing costs (or replacing them with contributions to a fund, as in Austria) can reduce the threshold, although not always as stand-alone measures.

Disclosure statement

No potential conflict of interest was reported by the authors.

Data statement

All research data are publicly available (see Appendix B).

⁸ "... while the focus of the reforms was on creating incentives for seeking employment, they did little to support the remarkable wage restraint witnessed since the mid 1990s" (Dustmann et al., 2014: 184).

Table 1. Determinants of the output growth threshold required to reduce unemployment

Country	Reform 1	Reform 2	Labour force growth	Productivity growth	Intercept	R-squared	Observations	Max VIF
Australia	-0.908***		2.609***	0.684*	-2.128**	0.690	44	2.019
Austria	-1.525***		-0.336		3.876***	0.313	38	6.197
Denmark	-0.570*		0.521*	0.480***	1.477***	0.695	39	4.082
Estonia	-1.580*		1.905	0.250	2.496*	0.760	13	4.638
Finland	-1.128***		0.287**	0.784***	1.341***	0.923	48	2.444
France	-2.460***	-0.486**	-0.391	0.718***	3.783***	0.847	48	2.480
Germany	-0.506		-10.614***	4.442	-0.257	0.744	16	3.190
Greece	-2.575*		0.974		2.399**	0.133	13	27.234
Hungary	6.856		36.361**	15.969**	-42.447**	0.642	15	3.145
Iceland	-0.895**		1.374***	-0.498**	2.521***	0.538	44	1.185
Ireland	-1.063**		0.024	0.499*	3.823***	0.392	18	3.065
Italy	0.809	-6.068**	6.400**		5.273***	0.324	48	7.380
Japan	-2.250***			1.471***	2.040***	0.880	48	5.543
Korea	-2.053**			0.452**	4.938***	0.770	43	11.715
Latvia	1.917**			1.219***	-3.410***	0.874	12	11.001
Netherlands	-0.369	-0.541***		1.066***	1.872***	0.950	48	6.203
Poland	-0.357			0.832***	0.779	0.926	15	16.811
Portugal	0.183	-1.164***	1.135**		1.425***	0.609	31	5.325
Slovakia	0.407		4.571***	1.134***	-3.378***	0.949	14	2.668
Slovenia	-1.051**			0.510**	1.860***	0.792	12	10.732
Spain	-0.138	-1.403***		0.345***	2.567***	0.730	31	6.714
Sweden	-0.396*	-0.309**	0.633***	0.670***	1.311**	0.656	48	4.770
Switzerland	-0.010		1.191***	0.487***	0.539	0.690	33	4.573
Turkey	0.877**		-0.413	0.308	5.319**	0.263	19	2.740
United Kingdom	-1.996***	-1.287***	-0.059		5.144	0.859	48	6.592

*** p < 0.01, ** p < 0.05, * p < 0.1

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APPENDICES

APPENDIX A. Labour market reforms

Australia	<i>1991 to 1996 reform.</i> Encouragement of firm level agreements and individual contracts. Reform of the welfare benefits system to encourage active job search and the privatisation of employment intermediation services.
Austria	<i>2003 reform.</i> Removal of severance pay. A personal fund was created for employees funded by employers with 1.5% of wages. The employee could use their fund in the case of firing (as a compensation) or save the amount for their retirement (as a complementary pension).
Denmark	<i>1994 reform.</i> Unemployment benefit duration was reduced, and activation measures were introduced. More flexible working time schemes and further decentralisation of collective agreements were also adopted.
Estonia	<i>2009 reform.</i> Dismissal compensation was reduced to one month's wage. Advance notice was shortened. The employer could reduce the employee's wages temporarily under certain circumstances.
Finland	<i>1998 reform</i> (full enforcement of the 1996 reform). Unemployment benefit was reduced, and active labour market support was increased for young and long-term unemployed. Moreover, notice for dismissal was reduced to half in 1997.
France	<i>1987 reform.</i> Authorisation for economic lay-offs was eliminated. More flexibility for fixed-term and part-time contracts were introduced. <i>2013 reform.</i> Employer could lower wages and take advantage of internal mobility if the company had economic difficulties. Dismissal compensation depended on seniority.
Germany	<i>2003–2005 reforms.</i> Unemployment benefit duration was reduced, and more conditions were added to entitlement. Mini jobs and midi jobs without social contributions or welfare benefits were introduced. Dismissal was facilitated. Higher flexibility for employment agencies was introduced.
Greece	<i>2010–2012 reforms.</i> They strengthened firm agreements and reduced the extension of sectoral agreements and the ultra-activity (after-effect) of agreements. Severance pay and the notice period for dismissals were also reduced. The probationary period was extended to one year. Unemployment benefits were reduced. Fixed-term contracts were extended to three years.
Hungary	<i>2012 reform.</i> It facilitated dismissals and extended overtime.
Iceland	<i>2008 reform.</i> It postponed wage increases by extending the duration of existing agreements (and wages).

Ireland	<i>2012 reform.</i> It reduced the amount and duration of unemployment benefits. It approved additional measures to create jobs.
Italy	<i>1985 reform.</i> It eliminated Scala Mobile, which indexed wages to inflation. <i>1997 reform.</i> It approved fixed-term contracts (up to 20% of the company's workforce), part-time contracts and private employment agencies.
Japan	<i>1999 reform.</i> All kinds of workers could be recruited through temporary work agencies.
Korea	<i>1998 reform.</i> It facilitated dismissals and extended unemployment benefits, although duration was reduced and replacement rates and coverage of the unemployed were lower than before. In addition, unemployment benefits became highly conditional on receiving training or accepting a job offer. It allowed temporary work and the intermediation provided by temporary work agencies.
Latvia	<i>2002 reform.</i> It was related to the ratification of International Labour Organisation (ILO) conventions and the transposition of European Union directives, with the result of closing part of the gap in terms of labour standards with continental European countries, although the severance pay was still far lower from them.
Netherlands	<i>1982 reform.</i> Zero wages increase in the years 1983 and 1984 (Wassenaar agreement). Progress towards more decentralised bargaining but with high coordination. <i>1993–1998 reforms.</i> Actions to reduce excess of disability, re-examination of beneficiaries and measures to return the disabled workers into the labour market were adopted. A new law on social assistance was introduced in 1996 to reduce generosity and to reintegrate beneficiaries into the labour market.
Poland	<i>2009 reform.</i> Flexible working time schemes were introduced. Fixed-term contracts could be renewed up two years. The tax wedge was reduced and regarding unemployment benefits, it reduced duration and the amount received from the third month.
Portugal	<i>2003 reform.</i> Fixed-term contracts could be extended up six years. It also reduced the after-effect of collective agreements. <i>2012–2013 reforms.</i> Reduction of dismissal pay. Simplification of dismissals. The amount and duration of unemployment benefits was also reduced. Higher decentralisation of collective bargaining and limits to the extension of sectoral agreements were introduced.
Slovakia	<i>2004 reform.</i> New labour law including easier dismissals, more flexibility in working time and easier use of temporary contracts. It also reinforced active labour market programmes becoming mandatory for certain unemployed. The tax wedge for low-income workers was cut.
Slovenia	<i>2013 reform.</i> Employment relations act simplifying dismissals, reducing dismissals pay and advancing the notice period. It made internal mobility easier than before.

Spain	<p><i>1984 reform.</i> It facilitated fixed-term contracts without any causal condition.</p> <p><i>2012 reform.</i> It reduced severance pay. It introduced more flexible working time and internal mobility and a reduction to one year of the after-effect of collective agreements. It also prioritised firm-level agreements and facilitated opt-out clauses. It reduced the amount of unemployment benefits from month six.</p>
Sweden	<p><i>1976 reform.</i> It consolidated centralised bargaining in force since the first third of the twentieth century and regulated workers' participation in company decision-making bodies.</p> <p><i>1997 reform.</i> It introduced sector-level agreements. There was also an agreement between employers and all unions with concessions from the government to limit wages and mechanisms for settling disagreements were also established in a spirit of cooperation. This type of agreements were adopted until 2001.</p>
Switzerland	<p><i>1997 reform.</i> After two years of intense wage moderation, unemployment benefits were reformed and measures for the activation of the unemployed were adopted. In particular, if in the seventh month, they did not participate in vocational training or follow an activation programme. Otherwise, they were excluded from unemployment benefits.</p>
Turkey	<p><i>2003 reform.</i> In order to conform to European regulations, the law (Turkish labour act) took the European Union directives as a reference. It regulated working time, paid holidays, labour contracts and conditions for dismissal.</p>
UK	<p><i>1980–1982 reforms.</i> Two employment acts with measures against unions were adopted. They restricted the action of picketing and limited closed shops (contracting union members only). There was a compensation for workers fired because of closed shop and union immunity if they cause civil damages was eliminated, workers on strike could be fired, etc.</p> <p><i>1986–1988 reforms.</i> They limited the powers of wage councils to set the minimum pay of different groups of workers. Measures against unions were reinforced and democracy was introduced into union's governance mechanisms and actions, such as strikes. They reduced the unemployment benefit amount and they strengthen activation measures with the Restart programme.</p>

APPENDIX B.

Table B1. Variable definition

Variable	Definition	OECD EO Code
Unemployment rate	Unemployed / labour force * 100	UNR
GDP	Gross domestic product, volume, market prices	GDPV
Labour productivity	Labour productivity, total economy	PDTY
Labour force	Labour force	LF

All data have been obtained from the OECD Economic Outlook database using the *sdmxuse* STATA command (Fontenay, 2018)⁹ as of March 10th 2024.

⁹ Fontenay, S. (2018), "sdmxuse: Command to import data from statistical agencies using the SDMX standard", *Stata Journal*, 18, 863–870.

Table B2. Summary statistics

Country	Unemployment rate		Variations in UR		GDP growth		Productivity growth		Labour force growth		Period		Obs.
	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD	Start	End	
Australia	5.827	2.428	0.069	0.830	3.344	1.677	1.384	1.421	2.006	0.884	1965	2019	55
Austria	3.744	1.350	0.065	0.460	2.333	1.800	1.406	1.420	0.857	1.110	1971	2019	49
Denmark	5.858	2.121	0.075	0.962	1.905	1.961	1.423	1.394	0.506	1.194	1970	2019	50
Estonia	9.174	3.339	-0.211	2.465	4.244	5.433	4.029	4.085	0.046	1.719	1996	2019	24
Finland	6.672	4.137	0.091	1.318	2.806	3.066	2.439	2.261	0.423	1.02	1961	2019	59
France	6.890	3.259	0.123	0.547	2.794	2.059	2.188	1.803	0.655	0.480	1961	2019	59
Germany	7.203	2.376	-0.133	0.716	1.372	1.934	0.747	1.721	0.341	0.692	1993	2019	27
Greece	14.887	6.518	0.316	2.228	0.882	4.171	0.286	3.190	0.496	1.472	1996	2019	24
Hungary	7.558	2.378	-0.229	1.000	2.500	2.58	1.884	2.436	0.113	1.664	1993	2019	27
Iceland	3.029	1.828	0.052	0.889	3.580	3.829	1.813	2.749	1.771	1.694	1965	2019	55
Ireland	9.374	4.345	-0.279	1.732	5.441	5.136	3.024	3.811	1.961	1.897	1991	2019	29
Italy	7.607	2.923	0.100	0.666	2.353	2.618	2.014	2.661	0.245	0.851	1961	2019	59
Japan	2.804	1.284	0.013	0.292	3.723	3.867	2.972	3.367	0.729	0.756	1961	2019	59
Korea	3.935	1.273	-0.078	0.784	7.414	4.160	4.655	2.943	2.233	1.454	1964	2019	56
Latvia	11.88	3.765	-0.647	2.771	4.003	5.729	4.072	3.138	-0.747	1.774	1997	2019	23
Netherlands	6.208	3.520	0.057	1.113	2.762	2.035	1.275	1.935	1.289	0.752	1961	2019	59
Poland	11.908	5.065	-0.430	1.815	4.278	1.775	3.539	1.895	0.146	0.878	1994	2019	26
Portugal	7.534	3.179	0.057	1.165	3.193	3.334	2.489	3.485	0.785	1.543	1961	2019	59
Slovakia	13.223	3.699	-0.316	1.690	3.951	3.211	3.314	2.792	0.464	0.752	1995	2019	25
Slovenia	6.924	1.552	-0.110	0.867	2.755	3.077	2.09	2.509	0.422	1.646	1997	2019	23
Spain	15.139	4.863	0.233	2.042	2.194	2.121	1.187	1.238	1.326	1.481	1978	2019	42
Sweden	5.315	2.981	0.078	0.986	2.573	2.114	1.981	1.762	0.673	0.693	1961	2019	59
Switzerland	2.992	1.870	0.090	0.507	1.771	1.646	0.697	1.337	1.092	1.109	1976	2019	44
Turkey	8.474	1.767	0.083	1.139	4.757	3.947	3.058	4.355	1.780	1.856	1961	2019	59
United Kingdom	6.260	2.587	0.018	0.813	2.356	2.066	1.988	2.12	0.495	0.662	1961	2019	59

Table B3. Estimates of Okun's law and the output growth threshold required to reduce unemployment

Country	GDP growth	Intercept	R-squared	Observations	Period		Threshold	Threshold 2019
	Coefficient	Coefficient			Start	End		
Australia	-0.307***	1.096***	0.385	55	1965	2019	3.568	2.790
Austria	-0.107***	0.314***	0.175	49	1971	2019	2.937	0.987
Denmark	-0.355***	0.751***	0.523	50	1970	2019	2.117	1.293
Estonia	-0.295***	1.043**	0.424	24	1996	2019	3.531	1.339
Finland	-0.283***	0.887***	0.434	59	1961	2019	3.128	0.341
France	-0.100***	0.403***	0.143	59	1961	2019	4.020	1.066
Germany	-0.169**	0.099	0.208	27	1993	2019	0.586	-6.677
Greece	-0.383***	0.654**	0.513	24	1996	2019	1.708	-1.135
Hungary	-0.208***	0.292	0.289	27	1993	2019	1.402	0.677
Iceland	-0.144***	0.567***	0.383	55	1965	2019	3.941	2.236
Ireland	-0.247***	1.064***	0.535	29	1991	2019	4.312	4.243
Italy	-0.081**	0.291**	0.102	59	1961	2019	3.579	0.670
Japan	-0.021**	0.089*	0.074	59	1961	2019	4.339	-0.507
Korea	-0.115***	0.779***	0.376	56	1964	2019	6.742	4.037
Latvia	-0.378***	0.867*	0.612	23	1997	2019	2.293	0.515
Netherlands	-0.255***	0.761***	0.218	59	1961	2019	2.986	0.854
Poland	-0.556***	1.946**	0.295	26	1994	2019	3.504	2.307
Portugal	-0.133***	0.482**	0.145	59	1961	2019	3.620	0.212
Slovakia	-0.311***	0.911**	0.348	25	1995	2019	2.934	0.460
Slovenia	-0.199***	0.438**	0.498	23	1997	2019	2.204	1.149
Spain	-0.791***	1.969***	0.676	42	1978	2019	2.488	1.084
Sweden	-0.297***	0.843***	0.406	59	1961	2019	2.835	1.988
Switzerland	-0.187***	0.421***	0.368	44	1976	2019	2.255	1.782
Turkey	-0.080**	0.465**	0.077	59	1961	2019	5.793	5.866
United Kingdom	-0.239***	0.581***	0.368	59	1961	2019	2.431	0.898

*** p < 0.01, ** p < 0.05, * p < 0.1