



**WP/18/19**

# **IMF Working Paper**

---

## **A Narrative Database of Major Labor and Product Market Reforms in Advanced Economies**

Romain Duval, Davide Furceri, Bingjie Hu, Joao Tovar Jalles, Huy Nguyen

**I N T E R N A T I O N A L M O N E T A R Y F U N D**

**IMF Working Paper**

Research Department

**A Narrative Database of Major Labor and Product Market Reforms in Advanced Economies<sup>1</sup>**

**Prepared by Romain Duval, Davide Furceri, Bingjie Hu, Joao Jalles and Huy Nguyen**

Authorized for distribution by Romain Duval

January 2018

**IMF Working Papers describe research in progress by the author(s) and are published to elicit comments and to encourage debate.** The views expressed in IMF Working Papers are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

**Abstract**

This paper describes a new database of major labor and product market reforms covering 26 advanced economies over the period 1970-2013. The focus is on large changes in product market regulation in seven individual network industries, employment protection legislation for regular and temporary workers, and the replacement rate and duration of unemployment benefits. The main advantage of this dataset is the precise identification of the nature and date of major reforms, which is valuable in many empirical applications. By contrast, the dataset does not attempt to measure and compare policy settings across countries, and as such is no substitute for other publicly available indicators produced, for example, by the ILO, the OECD or the World Bank. It should also be seen as work in progress, for researchers to build on and improve upon. Based on the dataset, major reforms appear to have been more frequent in product markets than in labor markets in the last decades, and were predominantly implemented during the 1990s and 2000s.

JEL Classification Numbers: J65; L43; L51; O43; O47

Keywords: Reform; Regulation; Product Market; Network Industries; Labor Market; Employment Protection; Unemployment insurance.

Authors' E-Mail Addresses: [rduval@imf.org](mailto:rduval@imf.org), [dfurceri@imf.org](mailto:dfurceri@imf.org), [bhu1@worldbank.org](mailto:bhu1@worldbank.org), [jjalles@imf.org](mailto:jjalles@imf.org), [hnguyen4@imf.org](mailto:hnguyen4@imf.org)

---

<sup>1</sup> All authors were with the International Monetary Fund at the time of writing. The views expressed in this paper are those of the authors and do not necessarily reflect those of the IMF, its Executive Board, or IMF management. We would like to thank Olivier Blanchard, Jorg Decressin, Maurice Obstfeld, Gian Maria Milesi-Ferretti, Jonathan Ostry as well as participants to various seminars and conferences at Banca d'Italia, Banco de Espana, Banco de Portugal, Bank of England, Bank of Korea, Banque de France, European Central Bank, European Commission, ILO, IMF and OECD for valuable comments on the approach taken to build this database and associated research. All remaining errors are ours.

Contents	Page
I. Introduction .....	4
II. Methodology .....	8
A. Database construction .....	8
B. Strengths and limitations .....	10
III. A few stylized facts on reform patterns .....	13
IV. An empirical application.....	19
V. References.....	24
 Tables	
1. Country Examples of Reforms Identified According to Different Criteria .....	11
2. Percentage of Reforms by Area in Good and Bad Times .....	19
 Figures	
1. Number of Major Reforms and Counter-reforms .....	13
2. Distribution of Major Reforms and Counter-Reforms Across Time .....	15
3. Number of Major Reforms and Counter-reforms by Country (1970-2013).....	17
4. The Average Effect of Major Product Market Reforms on Output .....	20
5. The Average Effect of Major Unemployment Benefit Reforms on the Unemployment Rate .....	22
6. The Average Effect of Major Employment Protection Legislation Reforms on Employment.....	23
 Appendixes	
Detailed List of Major Labor and Product Market Reforms in the Dataset.....	27

## I. INTRODUCTION

Labor and product market reforms rank high on the policy agenda in advanced economies, against the background of persistent weak growth and limited scope for macroeconomic (fiscal and/or monetary) policy tools to address it. The specifics vary with the context, but broadly involve: reducing administrative burdens and barriers to entry in product markets, including in the areas of retail trade, professional services, and some network industries; easing hiring and dismissal regulations for regular workers; increasing the ability of and incentives for the non-employed to find jobs by reducing the level or duration of unemployment benefits, or by increasing the resources for, and the efficiency of, active labor market policies; cutting labor tax wedges; targeted policies to boost the employment rate of underrepresented groups in the labor market, including youth, women, older workers and, in some countries, migrants.

Since the 1990s, leading international policy institutions and academic scholars have put in a major effort to measure and compare countries' policy settings in these areas, including primarily the OECD (e.g. OECD indicators of product market regulation and employment protection, used for example in Nicoletti and Scarpetta, 2003, Bassanini and Duval, 2009, or, more recently, Egert, 2016) but also, in selected areas and for both advanced and non-advanced economies alike, ILO (employment protection legislation database), IMF (e.g. the product market, trade, domestic and external finance indicators in Ostry et al., 2009, used for example in Giuliano et al., 2013, or Prati et al., 2013) and World Bank (e.g. the Doing Business project, building in part on the work of Botero et al., 2002, and Djankov et al., 2004).

In parallel to the voluminous literature using cross-country time-series policy indicators, and to enhance identification strategies, academic researchers have increasingly studied the impact of specific reform events, such as large policy *changes* in specific countries. These events lend themselves more naturally to the use of empirical techniques—such as differences-in-differences in outcomes between treated and non-treated groups, regression discontinuity design, propensity score matching or the synthetic control method—that have been helping

researchers get closer to a causal interpretation of the link between policies and outcomes.<sup>2</sup> Having detailed information on major policy changes in the areas of labor and product market regulation in advanced economies can also help advance knowledge in other related areas, including: (i) the dynamic effects of these reforms—an under-researched issue that has been gaining prominence in policy and academic debates (see e.g. Cacciatore et al., 2016a,b; Draghi, 2015; Eggertsson et al., 2014; IMF, 2016; Krugman, 2014; Rodrik, 2015); (ii) the political economy of these reforms—an area in which limited research so far has relied predominantly on large changes in OECD indicators as an indirect way to identify major reforms (see e.g. Buti et al., 2010; Duval, 2008; Hoj et al., 2007).

In principle, major reforms could be identified through, and their magnitude be inferred from, large changes in existing indicators of the stance of various labor product and market regulations or, even better, by retrieving available information about the underlying reforms that drove such changes. This is not straightforward in practice, however. For example, there is no readily available information about the nature and date of the policy measures that underpin observed changes in OECD indicators of labor and product market regulations. Furthermore, at present such information cannot, or if so only partially, be retrieved in a number of relevant areas. In part, this is likely to reflect the fact that indicators produced by institutions and academic scholars were primarily conceived to measure and compare policy *stances* across countries at particular points in time, rather than to document in detail past *changes* in stance, i.e. reforms (or counter-reforms). As regards labor market institutions, other databases such as the European Commission's *Labref*, the Fondazione Rodolfo de Benedetti-IZA database, and the ILO's *EPLex* database, provide some direct information about the nature and date of government measures. However, they have relatively short time-series coverage and, importantly, do not attempt to identify which measures, among the many historical actions taken by any country within any particular area, should be regarded as economically meaningful *a priori*.

---

<sup>2</sup> These evaluation techniques complement experimental set-ups such as randomized controlled trials. These have been playing a growing role in assessing the impact of interventions, but they are also rare events.

The alternative of identifying major reforms only through large changes in existing policy indicators is not fully satisfactory either, for two reasons. First, it requires setting up criteria, or a more or less ad-hoc statistical procedure, to identify breaks in the data that should be considered as large and/or abrupt enough to indicate a major reform—as opposed to minor policy changes, or no reform; in areas such as product market regulation or employment protection legislation, which are multi-faceted and have no natural measurement metric (unlike, say, a tax rate), this difficulty is compounded by the inherent degree of arbitrariness in the choice, scoring and weighing of the relevant dimensions (sub-components). Second, in any event, this approach does not help document the precise nature of the reforms.

Against this background, a new cross-country time-series database of major historical reforms in product and labor markets could be of great use to researchers and practitioners alike. This should be particularly the case in those areas where measuring the policy stance is most challenging and existing information on major reforms is currently scarce or incomplete. For advanced economies, prime candidates include product market regulation and employment protection legislation, and to a lesser extent unemployment benefit systems.<sup>3</sup>

This paper presents a new database on major reforms in the areas of product market regulation, employment protection legislation and unemployment benefit systems for 26 countries over the period 1970-2013.<sup>4</sup> The data are provided in an accompanying electronic file. For product market regulation, the focus is on reforms in seven key network industries covered by the OECD's indicators of regulation in energy, transport and communication (ETCR), namely air transport, electricity, gas, postal services, rail transport, road transport and telecommunications. For employment protection legislation, we distinguish between historical reforms that touched on regular contracts and those that affected temporary work. As regards

---

<sup>3</sup> Two key aspects of unemployment benefit systems are the replacement rate and the duration of benefits, both of which are conceptually straightforward to measure. In practice, however, these provisions can vary widely across different types of workers depending *inter alia* on their employment history, wage and family situation. Furthermore, other, harder-to-measure dimensions of unemployment benefit systems, such as for example benefit conditionality (e.g. job search requirements and monitoring), can also have a significant impact on labor market outcomes.

<sup>4</sup> For the former transition economies in the dataset, namely the Czech Republic and the Slovak Republic, data are available over 1990-2013.

unemployment benefits, changes in the initial replacement rates and those in the duration of benefits are considered separately.

The dataset is built in two steps. First, for each of the 26 advanced economies and each of the aforementioned policy areas, we record all legislative and regulatory actions mentioned in all past *OECD Economic Surveys*—the regular country surveys published by the OECD—published over the period 1970-2015. Second, among all those actions, we identify major measures (liberalizing and tightening reforms) as those that meet at least one of three alternative criteria: (i) a narrative criterion based on OECD staff’s judgement on the significance of the reform at the time of adoption; (ii) whether the reform is mentioned again in subsequent *Economic Surveys*, as opposed to only once when the measure is adopted; (iii) the magnitude of the change in the corresponding OECD indicator, when available.

The main advantage of this dataset is to identify, document, and provide the implementation date of, major reforms in the areas covered by this paper. As flagged above, this is highly valuable in many empirical applications, of which several recent and forthcoming IMF papers provide examples (e.g. Bouis, Duval and Eugster, 2016; Gal and Hijzen, 2016; IMF, 2016; Duval and Furceri, 2017; Duval, Furceri and Jalles, 2017; Duval, Furceri and Miethe, forthcoming). For example, in a simple application to the cross-country time-series estimation of the macroeconomic effects of major reforms, we illustrate the gains from using our database rather than others typically used in this strand of the literature on structural reforms.

At the same time, it should be acknowledged that the criteria we apply to identify major reforms, as transparent as they are, are not the only possible option—there is no single, objective way to distinguish between major and minor reforms. Furthermore, we do not distinguish among different major reforms—all of them are treated equally, even though some have likely been more important than others in practice. Finally, by design, our dataset does not attempt to measure and compare policy settings across countries, and as such is no substitute for other publicly available indicators produced, for example, by the ILO, the OECD or the World Bank.

This dataset should be regarded as work in progress, for researchers to build on and improve upon. The quality and accuracy of the information gathered through web search varies across countries, time periods and areas of reform, and in a handful of cases no relevant information could be found altogether at this stage. Furthermore, the approach taken here could, in principle, be extended to other relevant areas not covered here but for which relevant information can be found in OECD Economic Surveys, IMF reports and similar sources, such as, for example, product market regulation in retail trade and professional services, further dimensions of unemployment benefit systems (e.g. benefit conditionality), active labor market policies and other areas of reforms such as on domestic and external finance.

Based on the dataset, major reforms appear to have been more frequent in product markets than in labor markets in the last decades, and the majority of them were implemented during the 1990s and the 2000s.

The remainder of this paper is structured as follows. Section 2 describes in detail the methodology used to construct our database of major product and labor market reforms, and discusses both the pros and cons of using this database versus others in various contexts. Section 3 provides a few stylized facts on major reforms across areas, countries and over time. Section 4 presents an application to the cross-country time-series estimation of the macroeconomic effects of selected major reforms that illustrates the empirical gains from using our database rather than others typically used in the literature. An appendix lists all individual reforms featured in the database, which is also provided in electronic form online.

## **II. METHODOLOGY**

### **A. Database construction**

The database currently covers seven product market regulation areas (one for each of seven network industries, which include air transport, electricity, gas, postal services, rail transport, road transport and telecommunications) and four labor market regulation areas (employment protection legislation for regular workers, employment protection legislation for temporary workers, unemployment benefit replacement rates and the duration of unemployment benefits).

In a first step, we identify all legislative and regulatory actions related to product market regulation, employment protection legislation and unemployment benefits mentioned in any *OECD Economic Survey* for any of the 26 countries over the entire sample.<sup>5</sup> Several hundreds such actions are identified overall.

In a second step, for any of these actions to qualify as a major liberalizing or tightening reform one of the following three alternative criteria has to be met:

- (1) The *OECD Economic Survey* uses strong normative language to define the action at the time it is taken, suggestive of an important measure (for example, “major reform”). In this respect, the methodology is related to the “narrative approach” used by Romer and Romer (1989, 2004, 2010, and 2017) and Devries et al. (2011) to identify monetary and fiscal shocks and periods of high financial distress.
- (2) The policy action is mentioned repeatedly across different editions of the *OECD Economic Survey* for the country considered, and/or in the retrospective summaries of key past reforms that are featured in some editions, which is also indicative of a major action;
- (3) When available, the existing OECD indicator of the regulatory stance in the area considered displays a very large change (in the 5<sup>th</sup> percentile of the distribution of the cumulative change in the indicator over three years—to accommodate possibly gradual phasing-in of otherwise major reforms). The OECD indicators used for this purpose are the seven indicators of product market regulation in the seven network industries mentioned above, the employment protection legislation indices for regular and temporary workers, and the average unemployment benefit replacement rate over a five-year unemployment spell across a set of hypothetical workers with different income and family statuses (see e.g. OECD, 2016). In some cases, OECD indicator values are not available—for example, employment protection legislation indicators are available

---

<sup>5</sup> The 26 countries covered are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland, United Kingdom and United States. For the Czech Republic and the Slovak Republic, policy actions are recorded starting from 1990. For Korea, while data are collected starting from 1970, the information is drawn from OECD Surveys published starting from 1994. Therefore, the quality of the information collected for the years prior to 1994 is generally poorer for Korea than it is for the other countries in the dataset.

starting only from the mid-1980s for most countries, and later for some—but the reform would meet the 5<sup>th</sup> percentile criterion if the indicator’s scoring system were applied; it is then scored as a major reform.

When only the third condition is met, an extensive search through other available domestic and national sources, including through the internet, is performed to identify the policy action underpinning the change in the indicator.

As noted above, the approach considers both liberalizing and tightening reforms. Therefore, for each country, the reform variable in each area takes value 0 in non-reform years, 1 in liberalizing reform years, and -1 in tightening reform years. In the absence of fully comprehensive information on reform announcement dates, the database focuses on implementation dates. Given its annual frequency, as a rule, major reforms that are implemented during the first half of a given year  $t$  are assigned to year  $t$ , while those implemented during the second half of year  $t$  are assigned to year  $t+1$ . Judgement calls are made when a major reform results from two or more measures taken at different points during a given year or are spread across two years. This is the case when a major reform results from the combination of two distinct policy actions taken at different, but close dates—for example, a cut in barriers to entry and a reduction in public ownership in a given network industry.

## **B. Strengths and limitations**

Table 1 provides an illustrative example on how the three criteria mentioned above guide the identification of major reforms and “counter-reforms” in the area of product market regulation, employment protection legislation, and unemployment benefits. In some cases, the major action goes beyond the scope of available indicators (e.g. telecoms deregulation in the United States as a result of the antitrust lawsuit against AT&T, which was not a government measure and as such is not captured by the existing OECD indicator), or pre-dates the period over which the OECD indicator is available (Italy’s 1970 “Workers’ Statute”), but language used to describe it in the *Country Survey* makes its importance clear. In other cases, the available OECD indicator does not capture the full scope of the measure (1994 overhaul of the unemployment benefit system in Denmark). In other cases, the

qualitative information drawn from the *Country Surveys* coincides, and is fully consistent with, the observed change in the value of the corresponding OECD indicator (1995 employment protection legislation reform in Spain).

**Table 1. Country Examples of Reforms Identified According to Different Criteria**

Reform (+) or Counter- reform (-)	Implementation Year	Area	Country	Content	Normative Language featured in OECD Country Survey	Mention in later Surveys	Large Change in OECD Indicator
+	1984	Product market (telecommu- nications)	United States	Antitrust suit against AT&T	The most important deregulatory move in telecommunications came with the antitrust suit against AT&T by the United States. Competition for long- distance voice services entered a new phase in 1984.	1986, 1989, 2004	No
+	Late-1994 /1995	Employment protection legislation	Spain	Draft law modifying the current law regulating employment. It introduces dismissals of permanent workers.	... far-reaching labor market reforms aimed at lifting barriers to job creation. A decree was passed at the end of December 1993, and a draft has been presented to Parliament and is expected to become law by the middle of 1994.	No	Yes for 1995
-	1970	Employment protection legislation	Italy	Act of 1970, referred as the "workers' statute"	The Act of 1970 referred to as the "workers' statute" laid the basis for employer-employee relations and regulations concerning hiring. The two main sources of rigidity seem to be the regulations governing hiring and firing. The conditions and procedures for hiring workers are extremely stringent, particularly for large firms.	1986	
+	1994	Unemployment benefits	Denmark	Labor market reforms of 1994: activation of the unemployed, limiting the duration of unemployment benefits, enforcing job availability criteria, compulsory full-time activation, stricter eligibility criteria.	The measures taken ...are steps in the right direction. Training and education offers are fully operational, a foundation has been established for reducing the duration of unemployment benefits on a sustainable basis.	2000	Yes for 1994 (replacement rate); other aspects (duration, eligibility, active policies) not captured

More broadly, compared to indirect methods that would infer major reforms only from changes in OECD or other alternative policy indicators, our approach: identifies the exact timing of major legislative and regulatory actions; identifies the precise reforms that underpin what otherwise looks like a gradual decline in OECD policy indicators without any obvious break (for example, the series of reforms that took place in the telecommunications industry in many countries in the mid-late 1990s); captures reforms in areas for which OECD indicators exist but may not cover all relevant policy dimensions (for example, unemployment benefits beyond a five-year unemployment spell); covers a longer time period

in some policy areas, such as employment protection legislation; documents the nature and timing of the legislative and regulatory actions that underpin observed large changes in OECD indicators—in cases where the latter are the main, or even the only source of identification of a major reform.

Compared with other existing databases on policy actions in the area of labor market institutions, such as the European Commission's *Labref*, the Fondazione Rodolfo de Benedetti-IZA database, and the ILO's *EPLex* database, the approach taken here allows identifying a rather limited set of major legislative and regulatory reforms, as opposed to a long list of actions that in some cases would be expected to have little or no bearing on macroeconomic outcomes. The times series coverage of the database is also much longer.

These important strengths of the database come with limitations, some conceptual, others practical. On a conceptual level, as transparent as they are, the criteria we apply to identify major reforms are only one amongst several possible options—there is no single, objective way to distinguish between major and minor reforms. Furthermore, we do not distinguish among different major reforms—all of them are treated equally, even though some have likely been more important than others in practice. Yet two large reforms in a given area (for example, employment protection legislation) can involve widely different specific actions in practice (for example, a major simplification of the procedures for individual and collective dismissals, respectively). Finally, by design, the reform database provides no information regarding the *stance* of labor and product market regulations.

The dataset is preliminary and should be regarded as such. In cases where extensive web search had to be performed to identify the nature of the reforms—primarily when the latter were not mentioned in any OECD *Economic Survey* and instead were inferred only from a large change in the corresponding OECD policy indicator—the quality and accuracy of the information gathered sometimes varied, and in a handful of cases no relevant information could be found altogether at this stage. The focus and quality of the information featured in OECD *Economic Surveys* has also varied across areas, countries and, perhaps most importantly, over the years—typically becoming more detailed over time as regards the coverage of structural reforms. This implies that the quality of the current database is likely to be stronger for the recent decades (1990s, 2000s and 2010s) than for older ones (1970s and 1980s).

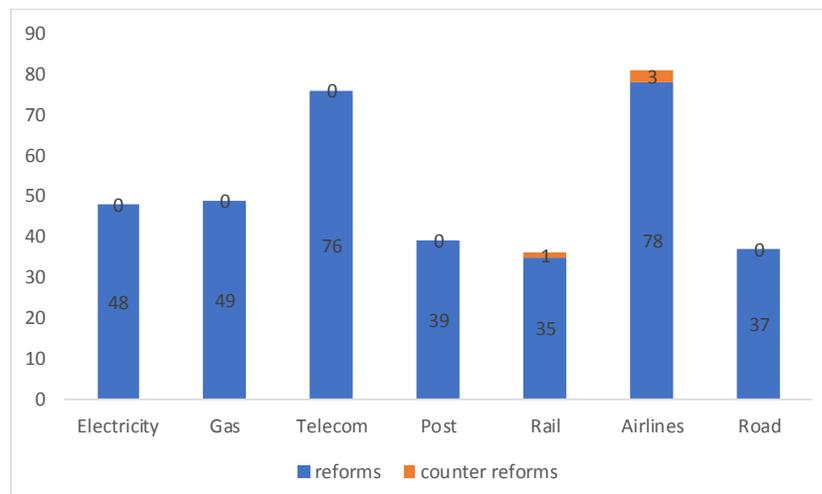
### III. A FEW STYLIZED FACTS ON REFORM PATTERNS

All major reforms in the database are documented in the 10 tables reported in the Appendix that cover each of the product and labor market areas highlighted above. Figures 1–3 present stylized facts on reforms—that is, decreases in regulation/liberalizing measures—and counter-reforms—that is, increases in regulation/tightening measures.

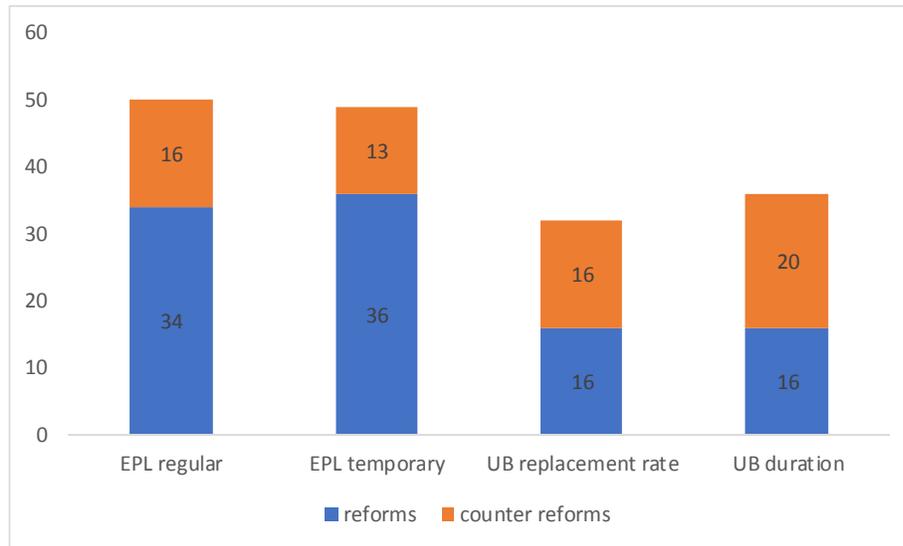
Major reforms appear to have been more frequent in product markets than in labor markets in the last decades. Figures 1A and 1B, which provide the total number of reforms and counter-reforms identified in the sample, illustrate this heterogeneity of reforms efforts across regulatory areas. In the area of product market regulation, major reforms have been most frequent in telecoms and airlines. As regards labor markets, major changes in employment protection legislation have been more common than major changes in unemployment benefit systems (Figure 1, Panels A and B). In addition, tightening reforms have been less frequent in product markets than in labor markets over the last four decades; there have been only 4 tightening-reform cases in product market regulation—that is, just about 1 percent of the total number of major actions, while in labor market regulation over 1/3 of the total number of major actions were tightening reforms.

**Figure 1. Number of Major Reforms and Counter-reforms (26 advanced economies, 1970-2013)**

Panel A. Product Market Regulation



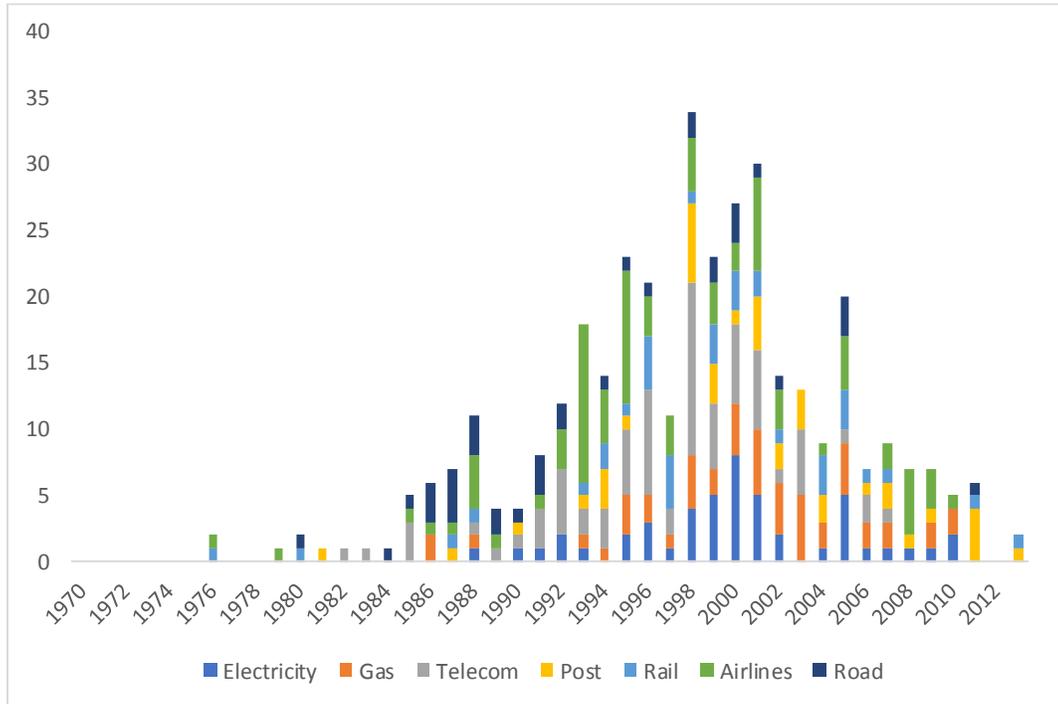
Panel B. Labor Market Regulation



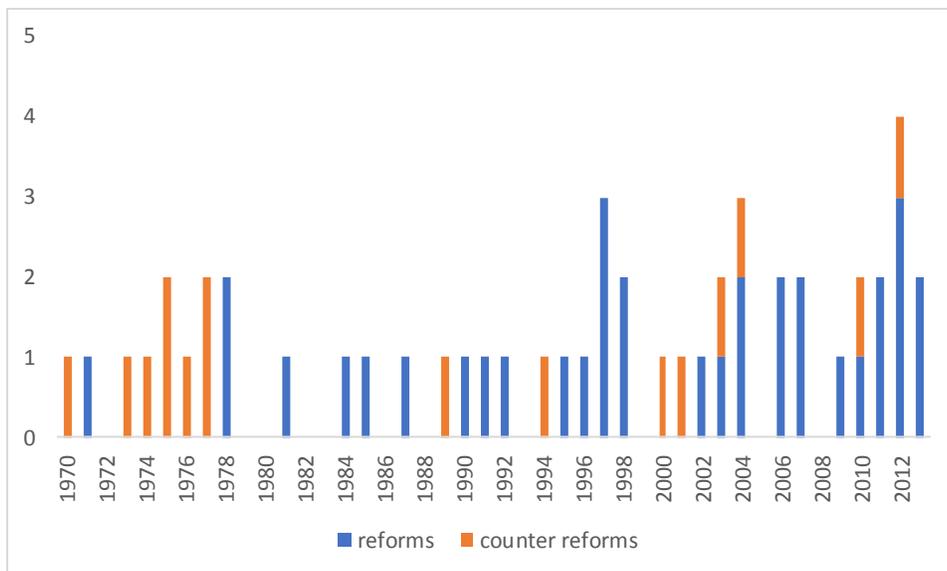
Liberalizing reforms have been predominantly implemented during the 1990s and the 2000s (Figure 2, Panels A through D). This is most striking for product market reforms, which were clustered around the late 1990s and early 2000s, partly reflecting the EU-driven liberalization process in European countries over this period (see Appendix tables). In labor markets, tightening measures mostly took place in the 1970s, followed by a gradual shift towards liberalizing reforms starting from the 1980s. This pattern holds true for both unemployment benefit systems and employment protection legislation.

**Figure 2. Distribution of Major Reforms and Counter-Reforms Across Time (26 advanced economies)**

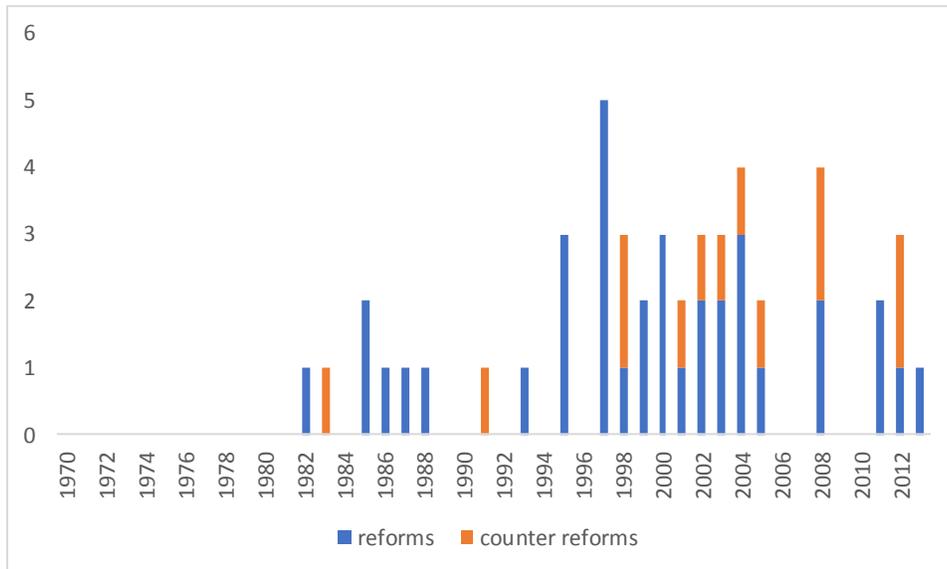
Panel A. Product Market Regulation



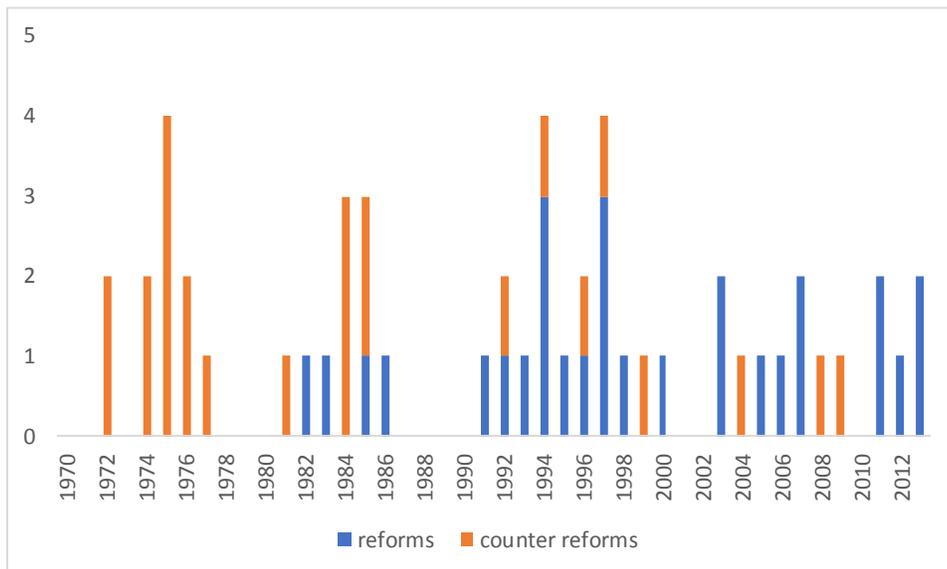
Panel B. Labor Market Regulation: Regular Contracts



Panel C. Labor Market Regulation: Temporary Contracts



Panel D. Unemployment Benefits

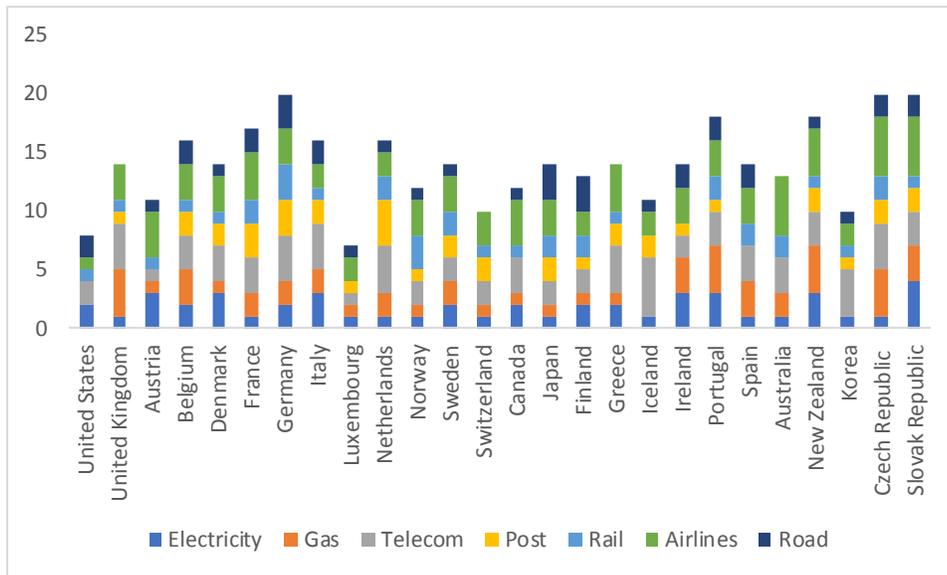


In terms of geographical distribution, EU countries took more actions than non-EU countries on average, reflecting to a large extent the greater scope for action in the former group (Figure 3, Panels A through D). While in product markets the frequency of reforms was generally similar across country groups, in labor markets southern European countries (e.g. Portugal, Spain) took many more significant actions, particularly towards easing employment protection legislation for both regular and temporary workers (Figure 3, Panels B and C). Concerning

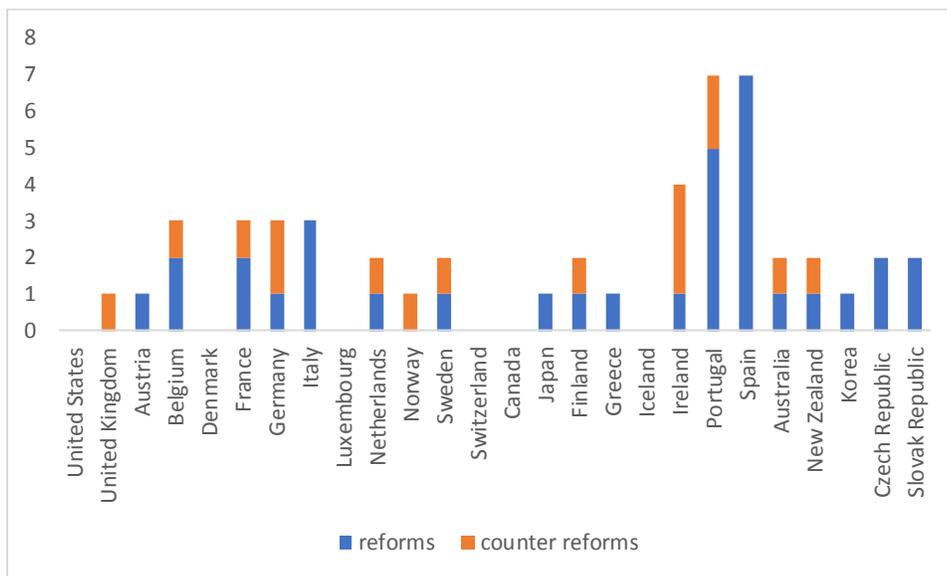
unemployment benefit systems, several countries increased or maintained the generosity of their systems during the 1970s and early part of the 1980s before reducing it later on (Figure 3, Panel D). Reforms touched roughly equally on replacement rates and duration.

**Figure 3. Number of Major Reforms and Counter-reforms by Country (1970-2013)**

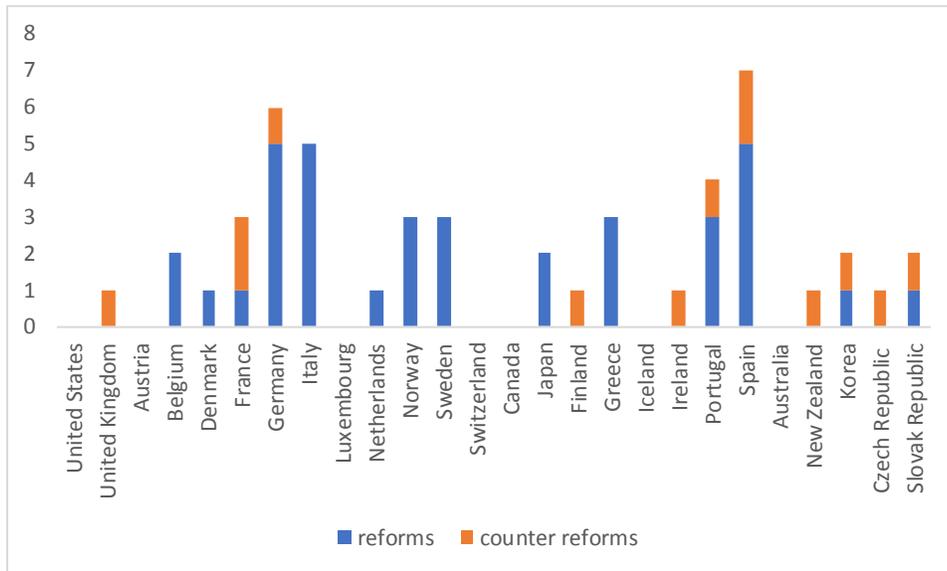
**Panel A. Product Market Regulation**



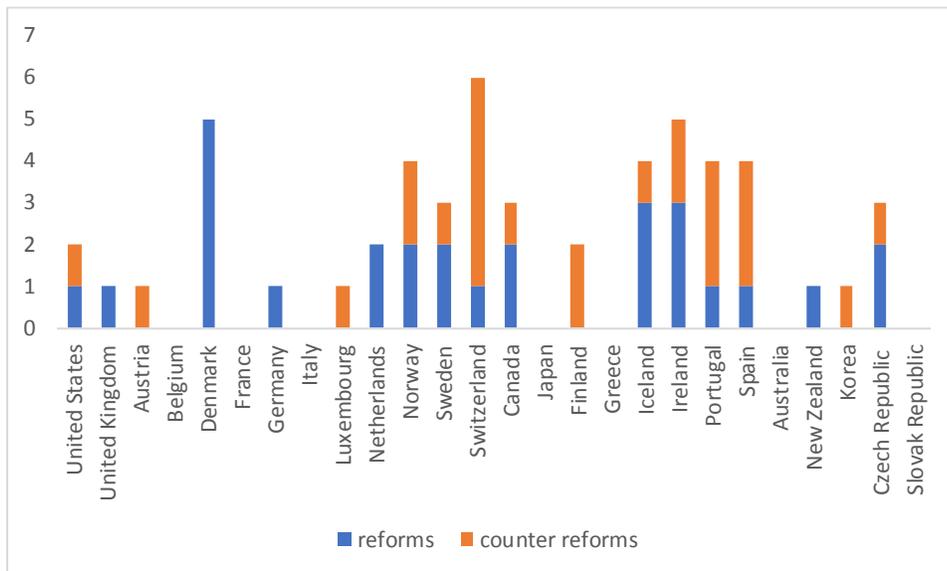
**Panel B. Labor Market Regulation: Regular Contracts**



Panel C. Labor Market Regulation: Temporary Contracts



Panel D. Unemployment Benefits



Finally, both product and labor market reforms have been more frequently implemented during periods of positive economic growth (Table 2). At the same time, recessions being rare events, the frequency of labor market reforms carried out in bad times was actually substantially higher than the frequency of bad times in the sample (over 20 per cent versus about 13 per cent).

**Table 2. Percentage of Reforms by Area in Good and Bad Times**

	<b>Good times</b>	<b>Bad times</b>
<b>PMR</b>	89	11
<b>EPL</b>	79	21
<b>UB</b>	80	20

Source: authors' calculations

Note: good and bad times defined simply as positive and negative real GDP growth in a given year, respectively. Bad times account for 13 percent of the total number of observations for real GDP growth.

#### IV. AN EMPIRICAL APPLICATION

As previously discussed, one important advantage of this dataset is the precise identification of major reforms and their implementation date. This is particularly valuable in many empirical applications, including to assess the dynamic (short- and medium-term) effects of reforms.

To illustrate the usefulness of the dataset for such empirical analysis, we compare the output and unemployment effects of the reforms identified in the database with those obtained using: (i) gradual changes in the OECD product market regulation (PMR), employment protection legislation (EPL) and net replacement rate indicators; (ii) large jumps in the OECD indicators, which aim to capture indirectly major reforms.<sup>6</sup> The empirical methodology underpinning these results is described in Duval and Furceri (2017), and Duval, Furceri and Jalles (2017).

Starting with product market reforms, the analysis shows that the product market reforms identified in the dataset have a statistically significant (at 5 percent) positive impact on output over the medium term, of about 1¾ percent on average four years after the reform (Figure 4, Panel A).<sup>7</sup> In contrast, the estimated short-to-medium-term effect is not statistically significant when using either the change in the OECD's PMR indicator or when considering a dummy variable that takes value one for a large change in the indicator (Figure 4, Panels B and C).

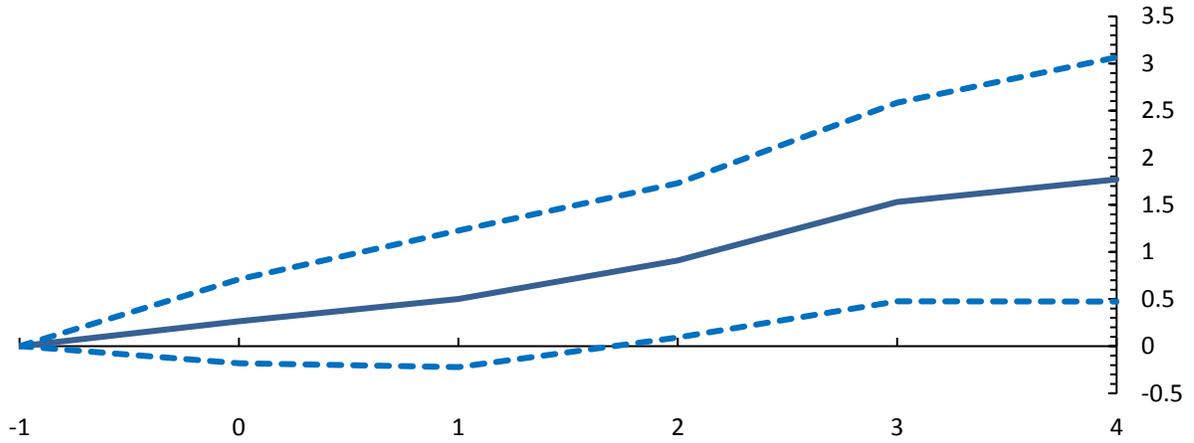
---

<sup>6</sup> To keep comparability with our database, we classify large jumps as those associated with a change in the OECD indicator in the top 5<sup>th</sup> percentile of the sample distribution of annual changes in the indicator.

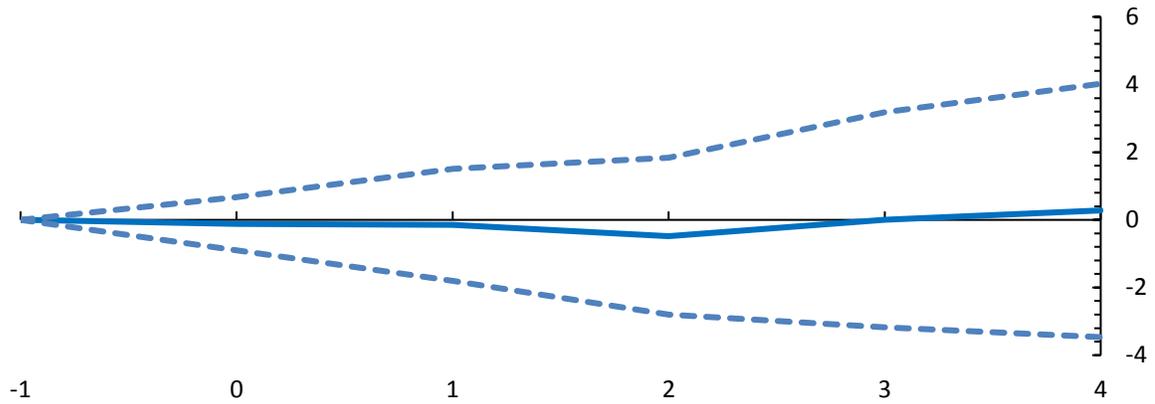
<sup>7</sup> A major product market reform is considered to take place in country *i* in year *t* when at least two out of the seven network industries experience a reform, which in practice corresponds to the 90<sup>th</sup> percentile of the distribution of the sum of all seven reform dummy variables. Similar results—not reported below but available upon request—are obtained when using the distribution of the weighted sum of the reform dummies instead, with weights equal to the (country-sector specific, time-varying) share of value added of each sector in GDP.

**Figure 4. The Average Effect of Major Product Market Reforms on Output (%)**

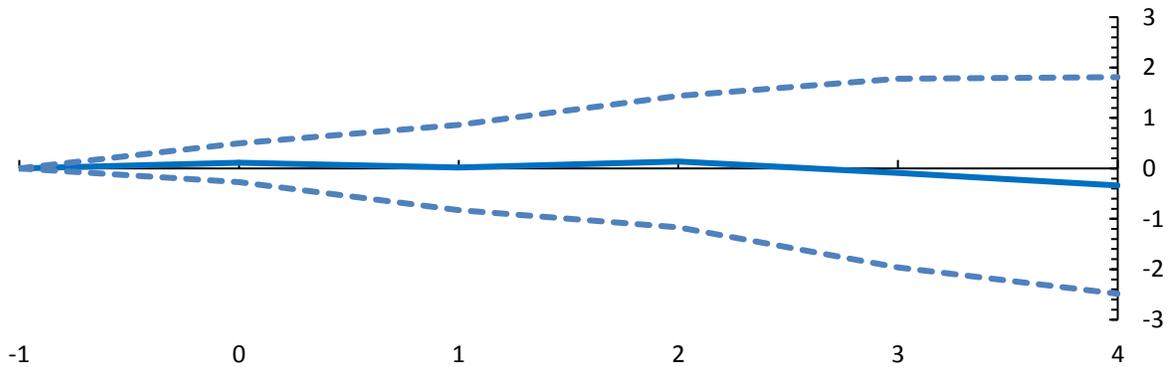
Panel A. Major Reforms in our Dataset



Panel B. Change in the OECD's PMR Indicator



Panel C. Large Decline in the OECD's PMR Indicator



Note:  $t=0$  is the year of the reform; dotted lines denote 90 percent confidence bands. Estimates based on Duval and Furceri (2017), using here the latest version of the dataset.

Similarly, reforms that reduce the income replacement rates of unemployment benefits are found to have statistically and economically significant, as well as long-lasting effects on the unemployment rate (Figure 5, Panel A). In particular, a major unemployment benefit reform identified in the present paper is found to reduce the unemployment rate by about 1¼ percentage points on average four years after the reform. In contrast, no statistically significant short-to-medium-term impact could be detected when considering gradual changes or large declines in the OECD's net initial replacement rate (Figure 5, Panels B and C).

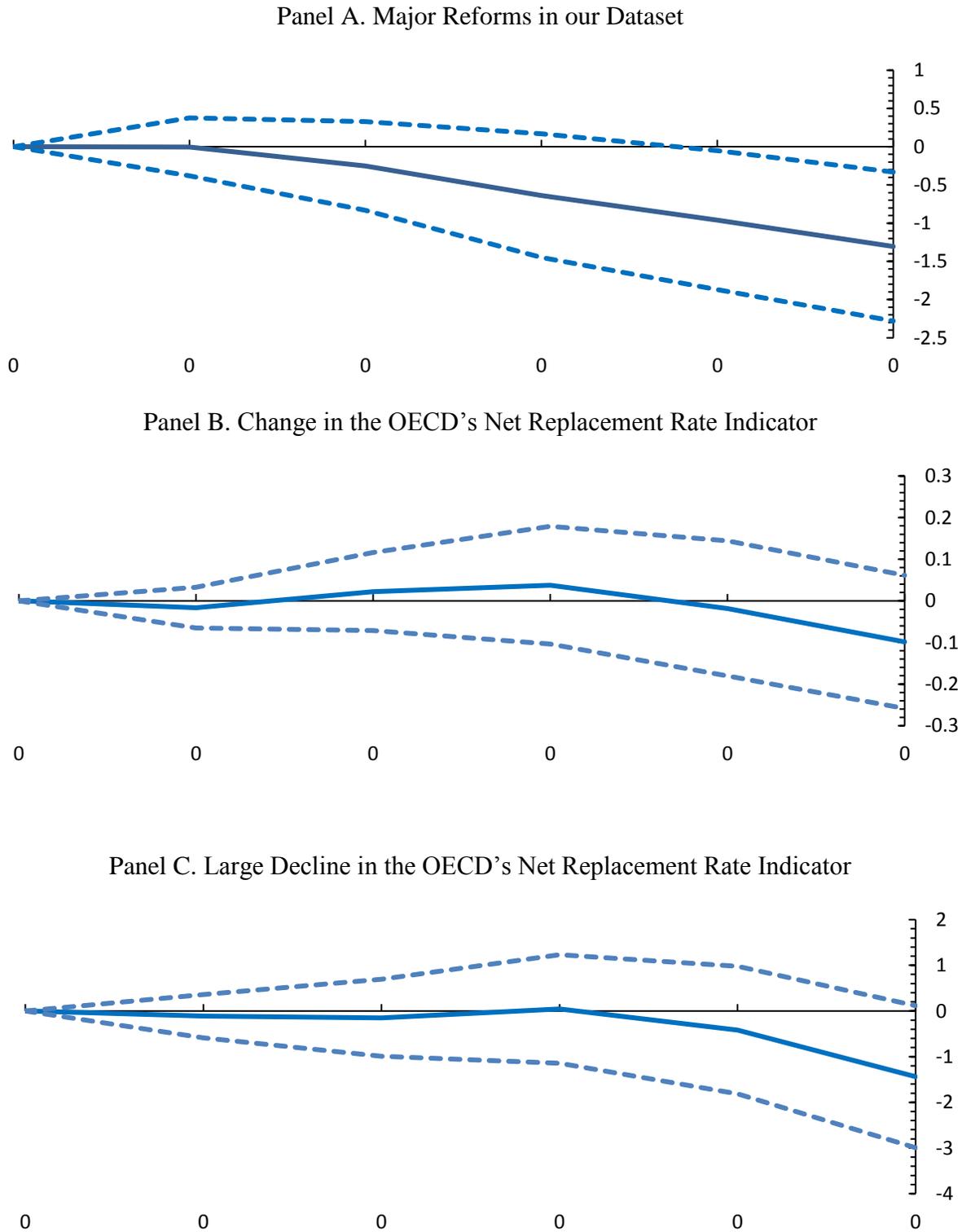
Finally, major reforms of employment protection legislation for regular workers are found to have short-to-medium-term effects on employment, but these depend on business conditions (Figure 6, Panel A): in an expansion, reforms appear to have a sizable positive and statistically significant impact on employment, whereas they significantly reduce employment in a recession—the difference in the response across the two economic regimes is statistically significant.<sup>8</sup>

No significant effects are found in either expansions or recessions when using either changes or large jumps in the OECD's EPL indicator (Figure 6, Panels B and C).

---

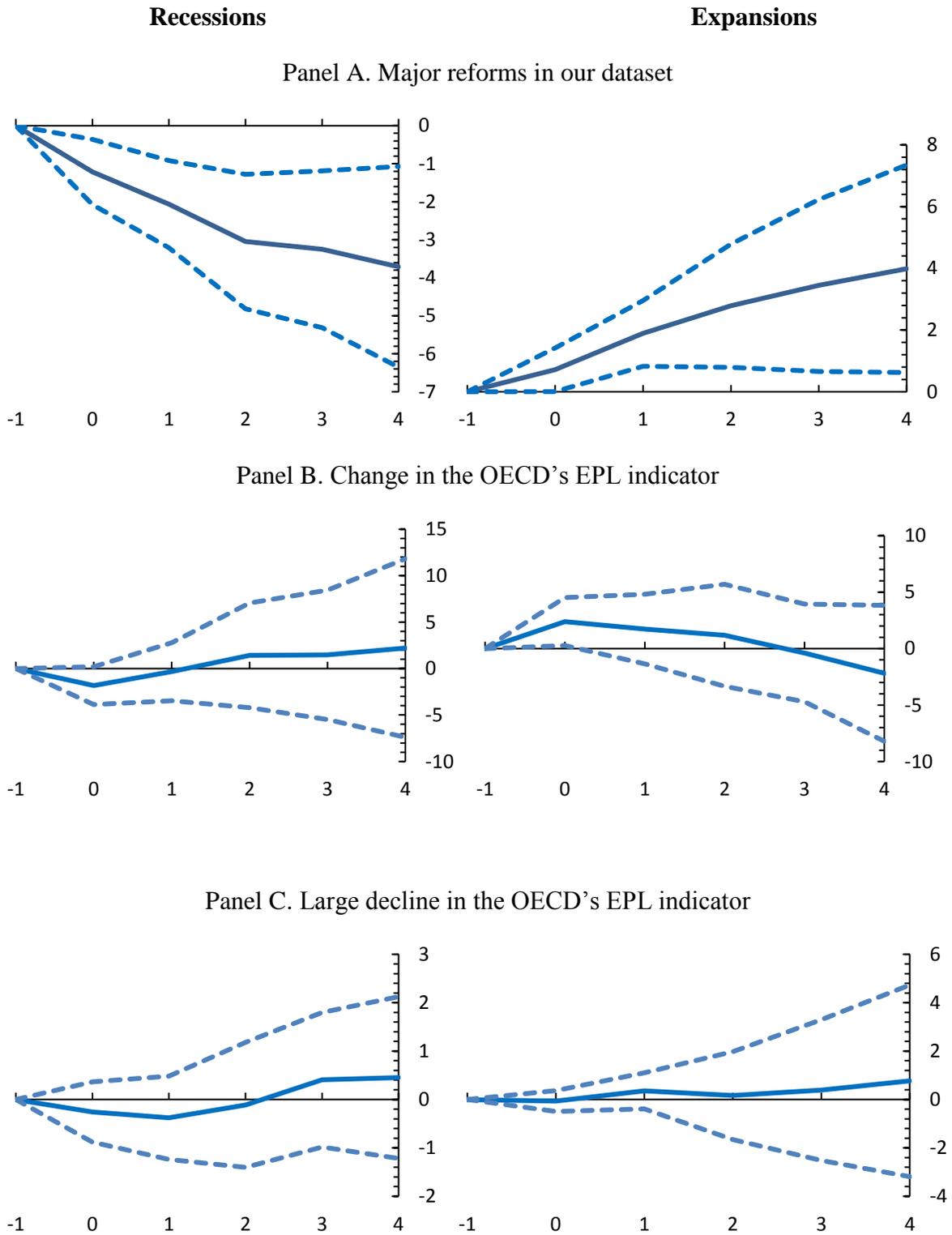
<sup>8</sup> As discussed in Duval and Furceri (2017) and Duval, Furceri and Jalles (2017), the theoretical rationale for this asymmetric effect across different economic regimes is that reform affects differently firms' hiring versus firing incentives in good and bad times. In a recession, firms seek to dismiss more existing workers and hire less new workers than in a boom, but stringent job protection partly discourages them from laying off (Bentolila and Bertola, 1990); relaxing that constraint triggers a wave of layoffs, increasing unemployment, weakening aggregate demand and delaying the recovery (Cacciatore et al., 2016b).

**Figure 5. The Average Effect of Major Unemployment Benefit Reforms on the Unemployment Rate (percentage points)**



Note:  $t=0$  is the year of the reform; dotted lines denote 90 percent confidence bands. Estimates based on Duval and Furceri (2017), using here the latest version of the dataset.

**Figure 6. The Average Effect of Major Employment Protection Legislation Reforms on Employment (%)**



Note:  $t=0$  is the year of the reform; dotted lines denote 90 percent confidence bands. Estimates based on Duval and Furceri (2017), using here the latest version of the dataset.

## V. REFERENCES

- Bassanini, Andrea and Romain Duval. 2009. “Unemployment, Institutions and Reform Complementarities: Re-assessing the Aggregate Evidence for OECD Countries.” *Oxford Review of Economic Policy* 25 (1), 40-59.
- Botero, Juan, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Schleifer. 2004. “The Regulation of Labor.” *The Quarterly Journal of Economics* 119 (4), 1339-82.
- Bouis, Romain, Romain Duval and Johannes Eugster. 2016. “Product Market Deregulation and Growth: New Country-Industry-Level Evidence.” *IMF Working Paper* No. 16/114. International Monetary Fund, Washington.
- Buti, Marco, Alessandro Turrini, Paul Van den Noord and Pietro Biroli. 2010. “Reforms and re-elections in OECD Countries.” *Economic Policy*, 25 (1), 61-116.
- Cacciatore, Matteo, Romain Duval, Giuseppe Fiori, and Fabio Ghironi. 2016a. “Short-Term Pain for Long-Term Gain: Market Deregulation and Monetary Policy in Small Open Economies.” *Journal of International Money and Finance* 68 (C): 358–385.
- Cacciatore, Matteo, Romain Duval, Giuseppe Fiori, and Fabio Ghironi. 2016b. “Market Reforms in the Time of Imbalance.” *Journal of Economic Dynamics and Control* 72 (C): 69–93.
- Devries, Pete, Daniel Leigh, Jaime Guajardo, and Andrea Pescatori. 2011. “A New Action-Based Dataset of Fiscal Consolidation.” *IMF Working Paper* No. 11/128, International Monetary Fund, Washington.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Schleifer. 2002. “The Regulation of Entry.” *The Quarterly Journal of Economics* 117 (1), 1-37.
- Draghi, Mario. 2015. “Monetary Policy and Structural Reforms in the Euro Area.” Presented at Prometeia40, Bologna, Italy, December 14.
- Duval, Romain. 2008. “Is there a role for macroeconomic policy in fostering structural reforms? Panel evidence from OECD countries over the past two decades.” *European Journal of Political Economy*, 24 (2): 491-502.
- Duval, Romain, and Davide Furceri. 2017. “The Effects of Labor and Product Market Reforms: The Role of Macroeconomic Conditions and Policies.” *IMF Economic Review*. Forthcoming.
- Duval, Romain, Davide Furceri and Joao Jalles. 2017. “Job Protection Deregulation in Good and Bad Times.” *IMF Working Paper*. Forthcoming. International Monetary Fund.

- Duval, Romain, Davide Furceri and Jakob Miethe. Forthcoming. “The Needle in the Haystack: Establishing the Drivers of Structural Reforms in OECD Countries.” *IMF Working Paper*. International Monetary Fund, Washington.
- Egert, Balazs. 2016. “Regulation, Institutions and Productivity: New Macroeconomic Evidence from OECD Countries.” *American Economic Review Papers and Proceedings* 106 (5): 109-113.
- Eggertsson, Gauti, Andrea Ferrero, and Andrea Raffo. 2014. “Can Structural Reforms Help Europe?” *Journal of Monetary Economics* 61 (C): 2–22.
- Gal, Peter and Alexander Hijzen. 2016. “The Short-Term Impact of Product Market Reforms: A Cross-Country Firm-Level Analysis.” *IMF Working Paper* No. 16/116. International Monetary Fund, Washington.
- Giuliano, Paola, Prachi Mishra and Antonio Spilimbergo. 2013. “Democracy and Reforms: Evidence from a New Dataset.” *American Economic Journal: Macroeconomics* 5 (4), 179-204.
- Hoj, Jens, Vincenzo Galasso, Giuseppe Nicoletti and Thai-Thanh Dang. 2007. “An empirical investigation of political economy factors behind structural reforms in OECD countries”. *OECD Economics Studies* 2006 (1), 87-136, OECD Publishing.
- IMF. 2016. “Time for a Supply-Side Boost? The Macroeconomic Effects of Labor and Product Market Reforms in Advanced Economies.” *World Economic Outlook, Chapter 3*, International Monetary Fund, Washington.
- Krugman, Paul. 2014. “Structural Deformity.” *New York Times*, November 20.
- Nicoletti, Giuseppe and Stefano Scarpetta. 2003. “Regulation, Productivity and Growth: OECD Evidence.” *Economic Policy* 18 (36), 9-72.
- Organisation for Economic Co-operation and Development (OECD). 2016. “Economic Policy Reforms: Going for Growth,” Paris.
- Prati, Alessandro, Massimiliano Gaetano Onorato and Chris Papageorgiou. 2013. “Which Reforms Work and Under What Institutional Environment?” *Review of Economics and Statistics* 95 (3), 946-68.
- Rodrik, Dani. 2015. “The Mirage of Structural Reform.” *Project Syndicate*, October 8.
- Romer, Christina D., and David H. Romer. 1989. “Does Monetary Policy Matter? A New Test in the Spirit of Friedman and Schwartz.” In *NBER Macroeconomics Annual*

- 1989, edited by Olivier J. Blanchard and Stanley Fischer, 121–70. Cambridge, Massachusetts: MIT Press.
- Romer, Christina D., and David H. Romer. 2004. “A New Measure of Monetary Shocks: Derivation and Implications.” *American Economic Review* 94 (4): 1055–84.
- Romer, Christina D., and David H. Romer. 2010. “The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks.” *American Economic Review* 100 (3): 763–801.
- Romer, Christina D., and David H. Romer. 2017. “New Evidence on the Aftermath of Financial Crises in Advanced Countries.” *American Economic Review* 107 (10): 3072–3118.
- Ostry, Jonathan, Antonio Spillimbergo, and Alessandro Prati. 2009 “Structural Reforms and Economic Performance in Advanced and Developing Countries.” IMF Occasional Paper No. 268. International Monetary Fund.

## APPENDIX. Detailed List of Major Labor and Product Market Reforms in the Dataset

**Table A1. Employment Protection Legislation, Regular Workers**

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Australia	2006	procedural inconvenience	The Workplace Relations Amendment (Work Choices) Act 2005 took effect in the first quarter of 2006 and sought to reinforce employers' prerogatives at the expense of employees (pg. 81, 2012)			yes for 2007	1
Australia	2010	procedural inconvenience, notice for individual dismissal	Work Choices removed unfair dismissal protections for employees of firms with fewer than 100 employees. The Fair Work Act restored these protections subject to minimum qualifying periods of one-year service for workers in firms with fewer than 15 employees and six months' service for workers in firms with 15 or more employees. In addition, a number of protections previously available under Work Choices were streamlined and broadened in the FW Act to protect workers against discrimination and adverse actions because they have a workplace right. (pg. 83-84, 2012)			yes for 2010	-1
Austria	2003	severance pay	... the system underwent thorough reform. In the new system, which became effective in January 2003, the management of severance pay is attributed to retirement accounts, which are legally independent from the employers and funded by employers via a monthly untaxed payment of some 1.5 per cent of gross wages. Accumulated entitlements rest in the employee's account until retirement, unless the work contract has been terminated by the employer, which makes cash payments admissible under certain conditions ... (pg. 66, 2003)			yes for 2003	1
Belgium	1970	notice for individual dismissal	In November 1970, the notice period, which had been lengthened from 21 to 30 days early in 1969, was increased to three months. The possibility of a further extension to five months was left open and the five months' period was applied in most cases. (pg. 27, 1971)			no data but would qualify if scoring applied	-1
Belgium	1971	notice for individual dismissal	In April 1971, the period of prior notice was reduced to two months (pg. 27, 1971)			no data but would qualify if scoring applied	1
Belgium	1985	severance pay	...various measures to increase labour market flexibility: authorisation for ailing businesses to pay severance allowances in monthly instalments, when obliged to terminate indefinite-term contracts; incentives for the development of fixed-term contracts in order to promote youth employment and temporary work; lengthening of probation periods from 3 and 6 months to 6 and 12 months (pg. 47, 1985)	A major effort has also been made to promote part time work, temporary work and fixed-term contracts... (pg. 31, 1986) A major effort has also been made to increase labour flexibility... (pg. 32, 1986)		no	1
Czech Republic	2007	procedural inconvenience	A new labour code was passed by the lower chamber of the parliament in early 2006. The code, if implemented, will allow a wider scope of employment contracts because it takes an "anglo-saxon" rather than "Napoleonic" legal form... (pg. 36, 2006) [NB: Amended Labor Code Act (No.262) eventually became law, see e.g. <a href="http://www.mpsv.cz/files/clanky/3221/Labour_Code_2012.pdf">http://www.mpsv.cz/files/clanky/3221/Labour_Code_2012.pdf</a> ]			yes for 2007	1

Czech Republic	2012	notice period, severance pay	2012 revision of labor code with effect from January 1st 2012 [see e.g. <a href="https://ec.europa.eu/europeaid/employment-labor-and-social-protection-social-reforms-czech-republic_en">https://ec.europa.eu/europeaid/employment-labor-and-social-protection-social-reforms-czech-republic_en</a> ...it has...introduced wider possibilities for employers to terminate the employment...The maximum duration of the probationary period extended to 6 months for executive employees...]			yes for 2012	1
Finland	1989	notice for individual dismissal	Protection of workers is improved. Periods of notice will be extended from 1989. Dismissal for economic reasons will be possible only if work has decreased significantly and permanently and if employees cannot be transferred or trained for new tasks. (pg.120, 1989)			no data but would qualify if scoring applied	-1
Finland	1997	notice for individual dismissal	In March 1996, several acts were submitted to the parliament regarding labour market reform aimed at stimulating new hiring... Employers' period of notice has been shortened to one month (from two months) and that for employees to fourteen days (from one month)... (pg. 78, 1996) Notice periods for employers and employees have been halved, to one month and two weeks, respectively (Pg. 63, 1997).		pg. 63, 1997	yes in 1997	1
France	1987	procedural inconvenience	Checks on the genuineness of redundancies in firms with fewer than 10 employees to be discontinued (and from 1st January 1987, official authorisation for lay-offs no longer necessary). (pg. 76, 1987)	...one area - employment - where a deliberately active economic policy is being pursued, with 1985 marking a major shift in the choice of instruments... the most important measure, at least from a psychological point of view, was the discontinuation of the requirement for official authorisation to lay off workers (with full effect from January 1987)... (pg. 37, 1987)	pg. 33 or 44, 1989, pg. 59, 1990	yes for 1987	1
France	2003	collective dismissal	...government introduced the Social Modernisation Law in 2002, significantly tightening the constraints on dismissal of more than 10 employees...in 2003 the new government suspended some of these provisions before introducing another law in 2004 which, while moderating some aspects of EPL, increased the obligation on employers to try to find alternative jobs for employees under threat of collective dismissal... The law permits "economic" dismissal only if it is necessary to preserve the competitiveness of the firm. Financial rationalisation by the management is not sufficient justification...in 2002 the Social Modernisation Law added a provision requiring that the financial position of the group to which the firm belongs should be taken into account, which means that an economic dismissal is not legally justified if the group is healthy. (pg. 105, 2005)	...the Social Modernisation Law in 2002, significantly tightening the constraints on dismissal of more than 10 employees... These provisions prevent firms from undertaking practically any reorganisation to increase productivity that might ensure the survival or faster growth of the firm in the future... (pg. 105-106, 2005).		yes for 2003	-1
France	2009	procedural inconvenience	Layoff law has been simplified by introducing the possibility of mutually agreed termination (rupture conventionnelle) of the CDI. (pg. 52, 2009)			yes for 2009	1
Germany	1994	notice for individual dismissal	Notice period for blue-collar workers extended to four weeks, thereby aligning it with that of white-collar workers [see e.g. OECD Employment Outlook 2004 pg. 119]			yes for 1994	-1
Germany	1997	procedural inconvenience	Legislation easing employment protection provisions...came into force in October 1996... The employment ceiling for enterprises above which employment protection is applicable was raised from five to ten employees per firm. The number of enterprises which are not subject to the general job protection law was thereby increased by some 15 per cent. These companies employ some 30 per cent of all	... the measures reduce the costs and uncertainty of taking on new workers, thereby increasing the possibility for the unemployed and new entrants into the labour market to make the transition into permanent employment... (pg. 132, 1997)		no	1

			employees... With respect to large scale redundancies, the general requirement to consider social criteria in selecting employees to be made redundant was relaxed, with greater emphasis given to economic factors... (pg. 132, 1997)				
Germany	2004	procedural inconvenience	The Protection against Dismissal Act (PaDA) states that a dismissal is "socially unjust" and, hence, invalid if there is no suitable reason (§ 1). A dismissal is socially justified only (1) in cases of personal misconduct, (2) lack of individual capabilities or (3) due to business needs and compelling operational reasons. Moreover, in the third case the PaDA requires that firms select workers or employees to be dismissed in accordance with social criteria such as age, tenure, alimony duties or individual disabilities. Until 2003, the regulations of the PaDA generally applied to all firms with more than a minimum number of five permanent employees. Since 2004, the four criteria of age, tenure, maintenance payments, and individual disability are listed explicitly in § 1(3) of the PaDA [see <a href="http://www.zew.de/en/publikationen/dffgflex/paperGoerke.pdf">http://www.zew.de/en/publikationen/dffgflex/paperGoerke.pdf</a> ]		yes for 2004	-1	
Greece	2011	notice for individual dismissal, severance pay, collective dismissal.	The following measures were introduced in 2010 (Laws 3863/2010 and 3899/2010) to facilitate job reallocation: <ul style="list-style-type: none"> <li>Reduction in notice period. The notice period prior to dismissal of white collar workers has been reduced substantially. For an employee working 28 years or more, for example, notification is reduced to 6 from 24 months. The new provisions lower total severance costs for white collar workers with long tenure. Employers now have a clear incentive to provide notice of dismissal for workers with long tenure, in which case their severance payments are halved.</li> <li>New rules for the settlement of severance payments...make it possible for severance payment, when it exceeds 2 months' pay, to be paid in installments.</li> <li>Redefinition of collective dismissal rules. The new law increases the threshold above which dismissals are characterised as collective to 6 employees for enterprises with 20-150 employees and 5% or 30 employees for those with more than 150 employees. This compares with thresholds of 4 employees per month for enterprises with 20-200 employees and 2-3% or 30 employees for enterprises with more than 200 employees under the 2000 law.</li> <li>Extension of probationary period. It was extended from 2 months to 1 year. (pg. 123, 2011)</li> </ul>		yes in 2011	1	
Greece	2012	severance pay	The length of prior notice of dismissal has been shortened to a maximum of four months, compared to 24 months for white-collar workers previously. The severance pay for white-collar workers has been reduced and subjected to a ceiling of 12 months' salary. (pg. 50, 2013)		yes for 2012	1	
Ireland	1973	notice for individual dismissal	Minimum Notice and Terms of Employment Act, 1973, introduces and defines minimum notice period for dismissal [see e.g. <a href="http://www.irishstatutebook.ie/eli/1973/act/4/section/4/enacted/en/html#sec4">http://www.irishstatutebook.ie/eli/1973/act/4/section/4/enacted/en/html#sec4</a> ]		no data but would qualify if scoring applied	-1	
Ireland	1977	procedural inconvenience, notice for individual dismissal	During the 1970s, extensive legislation was enacted in Ireland to protect employees' rights and conditions of employment. The most important of these are the Protection of Employment Act (1977), the Unfair Dismissals Act (1977) and the Employment Equality Act (1977). (pg. 89, 1987) [see <a href="http://www.irishstatutebook.ie/eli/1977/act/7/enacted/en/html">http://www.irishstatutebook.ie/eli/1977/act/7/enacted/en/html</a> ] <a href="http://www.irishstatutebook.ie/eli/1977/act/10/enacted/en/html">http://www.irishstatutebook.ie/eli/1977/act/10/enacted/en/html</a>		no data	-1	

Ireland	2006	notice for individual dismissal	<a href="http://www.irishstatutebook.ie/eli/1998/act/21/enacted/en/html">http://www.irishstatutebook.ie/eli/1998/act/21/enacted/en/html</a> Revision of the 1973 Minimum Notice and Terms of Employment Act (which had introduced and defined minimum notice period for dismissal [see e.g. <a href="http://www.irishstatutebook.ie/eli/1973/act/4/section/4/enacted/en/html#sec4">http://www.irishstatutebook.ie/eli/1973/act/4/section/4/enacted/en/html#sec4</a> ]			yes in 2006	1
Ireland	2012	severance pay	Before 2012, the Government paid a rebate to employers for redundancy payouts to employees. Up until 1 January 2012 this rebate amounted to 60%; between 1 January 2012 and 1 January 2013, the Government rebate was 15%; from 2013 onwards the Government rebate was abolished [see e.g. <a href="https://www.eurofound.europa.eu/observatories/emcc/erm/legislation/ireland-severance-pay/redundancy-compensation">https://www.eurofound.europa.eu/observatories/emcc/erm/legislation/ireland-severance-pay/redundancy-compensation</a> ]			yes in 2012	-1
Italy	1970	procedural inconvenience	The Act of 1970 referred to as the "workers' statute". Mechanism for reinstatement after a dismissal has been declared unlawful...laid down by Article 18 [see <a href="https://www.eurofound.europa.eu/efemiredictionary/workers-statute">https://www.eurofound.europa.eu/efemiredictionary/workers-statute</a> ]			No data but would qualify if scoring applied	-1
Italy	1991	procedural inconvenience	...the job allocation scheme was abolished in June 1991 (pg. 54, 1991)	A number of important measures...been taken in recent years to enhance the flexibility of the labour market, most prominent among them the abolition of the job allocation scheme in July 1991 (pg.19, 1994)	pg.19, 1994 pg.11, 1995 pg.134, 1999	no	1
Italy	2013	procedural inconvenience	Comprehensive labour market reform (with explicit provision for monitoring of its effects) including: relaxation of employment protection rules; reduced incentives to hire on non-permanent contracts.... potentially increase in flexibility on the firing side... (pg. 42, 2013) ...reform relaxed employment protection rules on permanent contracts, notably limiting the possibility of reinstatement following unfair dismissal. (pg. 27, 2015)		pg. 27, 2015	yes for 2013	1
Japan	2007	procedural inconvenience	Labor Contract Act of 2007 [see e.g. <a href="http://apirnet.iilo.org/resources/the-labor-contract-act-of-2007-and-other-legislative-developments/at_download/file1">http://apirnet.iilo.org/resources/the-labor-contract-act-of-2007-and-other-legislative-developments/at_download/file1</a> ].			yes in 2007	1
Korea	1998	procedural inconvenience, notice for individual dismissal, collective dismissals	The March 1997 labour law reform eased restrictions on layoffs by expressly allowing dismissals for "urgent managerial reasons", while specifying certain requirements that must be fulfilled beforehand by management... the Tripartite Commission agreed that it should be implemented in February 1998 to help firms restructure in the wake of the crisis... (pg. 166, 1998)		pg. 142, 2005 pg. 127, 2008 pg. 129, 2012	yes for 1998	1
Netherlands	1976	collective dismissal	Compulsory 3-month advance notification to employment exchange and trade unions required for the intended dismissal of 20 or more employees (pg.47, 1977). [Collective Redundancy Notification Act established rules applying to collective dismissals]			no data but would qualify if scoring applied	-1
Netherlands	1996	procedural inconvenience	The Government decides to shorten dismissal procedures. According to the new rules, an employer can dismiss his employee at the same time or even before asking permission from the director of the Public Employment Service. (pg. 122, 1996)			yes in 1995	1
New Zealand	2001	procedural inconvenience	The new Employment Relations Act...modifies provisions under the ECA in several significant ways... The ERA proposes to avoid undue litigation by making mediation a mandatory first step. If there is no resolution, the parties can then turn to the Employment Relations Authority, a new investigative body. If the parties do not		pg.83, 2002 pg.98, 2005 pg.117, 2013	yes for 2001	-1

				agree with its ruling, or if the Authority so decides, grievances and disputes are then turned over to an Employment Court. It can redirect the matter back to mediation, to the Authority or make a final judgement. (pg. 78-79, 2000)						
New Zealand	2012			The Employment Relations Act 2000 was amended to extend trial period provisions (for up to 90 days) from firms with fewer than 20 employees to all firms on 1 April 2011... (pg. 56, 2011)					yes for 2012	1
Norway	1977	procedural inconvenience		The main legislation concerning employment protection is the law on worker protection and the working environment which dates back to 1977. The law regulates a number of issues ranging from the terms of termination of employment, working hours, overtime and unfair dismissals... (pg. 164, 2004)		pg. 164, 2004		no data		-1
Portugal	1975	collective dismissal		Collective dismissal procedures become subject to regulation. (pg. 43, 1976)		pg. 12, 1979 pg. 67, 1989	Where employment is concerned, a law was passed in December 1974 which considerably limited the possibility of collective dismissals (pg. 35, 1976)	no data but would qualify if scoring applied		-1
Portugal	1976	procedural inconvenience		...to combat the rise in unemployment caused by the domestic and international recession and by the return of expatriates from the former colonies, the authorities enacted legislation virtually prohibiting all dismissals (pg. 9, 1976)		pg. 12, 1979 pg. 67, 1989		no data but would qualify if scoring applied		-1
Portugal	1978	procedural inconvenience		August 29: Authorisation for firms to suspend work contracts on account of economic difficulties. (pg. 40, 1977)				no data but would qualify if scoring applied		1
Portugal	1990	procedural inconvenience		the possibility of dismissal for failure to fulfill job requirements (pg. 19, 1992)		pg. 94, 1996		yes in 1990		1
Portugal	1992	procedural inconvenience		Changes in both lay-off legislation and legal framework governing collective labour contracts aim at making labour markets more flexible. (pg. 92, 1993)				yes in 1992		1
Portugal	2004	procedural inconvenience		The new Labour Code (Código do Trabalho), which came into force in December 2003, replaces individual and collective labour legislation with a unified text, deemed to be clearer and easier to apply...employers now have the right to oppose the reinstatement of workers in dismissal cases under certain conditions, such as in cases where it would harm or disrupt business activity. (pg. 78-79, 2004)  In the case of regular contracts, the 2003 changes eased somewhat the procedures for collective dismissal: the deadlines for initiating negotiations and taking the final decision were shortened; the priority given to trade union representatives and members of workers councils was eliminated. (pg. 128, 2008)				yes in 2004		1
Portugal	2010	procedural inconvenience, notice for individual dismissal, severance pay		The introduction of the new labour code in 2009, by reducing EPL for regular contracts, is an important step in the direction of reducing labour market dualism (pg. 42, 2010)		pg. 33, 2012	...an important step in the direction of reducing labour market dualism (pg. 42, 2010)	yes in 2010		1
Slovak Republic	2004	notice period, severance pay		Major amendments to the Labour Code were adopted in June 2003 and became effective as of 1 July 2003...More flexibility is introduced as regards an employer's right to terminate an employee's contract. When terminating an employment contract the employer is obliged to specify the reasons for termination. These are more extensive than previously allowed...In all cases the statutory notice period is				yes for 2003-2004		1

				reduced to two months regardless of the reason for termination. An employee working for the same employer for more than five years shall be given 3-months notice... (pg. 121-122, 2004)					
Slovak Republic	2012	notice period, severance pay		Amendments to the "new" 2003 labor code that eases legislation on regular contracts (shortening of length of notice period). [For details, see e.g. <a href="http://www.ilo.org/dyn/lex/docs/50/labour-code-full-wording-january-2012.pdf">http://www.ilo.org/dyn/lex/docs/50/labour-code-full-wording-january-2012.pdf</a> ]				yes for 2012	1
Spain	1978	procedural inconvenience		A Decree-Law of 4th March, 1977 made the regulations governing dismissals...considerably more flexible (pg. 13, 1977) ...legislation on layoffs, which is currently very restrictive, will be made more flexible, and employers will be allowed to lay off up to 5 per cent of their workforce... (pg. 34, 1978)		pg. 34, 1978 pg. 27, 1982		no data	1
Spain	1981	procedural inconvenience, collective dismissals		The new Workers Statute...changed legal framework provides in particular for liberalisation of dismissals... (pg. 27, 1981)		pg. 27, 1982	Two important laws were enacted in 1980. The new Workers Statute... (pg. 27, 1981) ...it was not until the promulgation of the Workers' Statute in 1980 that a comprehensive reform of labour law took place. (pg. 27, 1982)	no data	1
Spain	mid-1994/1995	procedural inconvenience, collective dismissals		The draft law simplifies lay-off procedures. Dismissal of a small number of workers (treated as if they were individual dismissals) would no longer require prior consultation with workers' representatives and administrative authorization. (pg. 81, 1994) ...the Government has presented a draft law modifying existing labour legislation significantly...Lay-offs of permanent employees will be made much easier, notably by abolishing in many cases the requirement of administrative authorization. (pg. 88-89, 1994)			... far-reaching labor market reforms aimed at lifting barriers to job creation. A decree was passed at the end of 1993 and a draft has been presented to Parliament and is expected to become law by the middle of 1994. (pg. 80, 1994) This draft law breaks with the corporatist philosophy of past legislation and is expected to increase labour market flexibility considerably. (pg. 88-89, 1994)	yes for 1995	1
Spain	1998	severance pay		Employers and trade unions agree on a labour market reform which would encourage the creation of indefinite-term jobs. Inter alia, it calls for the introduction of a new type of indefinite-term contract with reduced redundancy costs for certain groups of workers, a new definition of the grounds for economic redundancies and proposals for improving the collective bargaining process. (pg. 179, 1998)		pg. 57, 2000 pg. 66-68, 165, 2001 pg. 101, 2010	...The social partners have taken an important step... (pg. 76, 1998)	no	1
Spain	2002	procedural inconvenience, severance pay		New measures taken in early 2001 have broadened the 1997 reform... (pg. 65-66, 2001) In March 2001 the government approved a deepening of the 1997 labour market reform. The measures adopted include: – An extension of the new permanent contract introduced in the 1997 labour market reform beyond May 2001. – The permanent contract with reduced firing costs will continue to apply to specific groups (workers aged 18-29, workers with a temporary contract, workers aged over 45, workers that have been unemployed for more than one year, women in some professions), and has been extended to young workers (now defined as those aged between		pg. 66, 2003		no	1

Spain	2011	severance pay	<p>The labour market reform, approved in September 2010...aims to reduce the upper range of dismissal costs for permanent contracts and to smooth the difference in dismissal costs between temporary and permanent contracts:</p> <ul style="list-style-type: none"> <li>• First, the law aims to make it easier for firms to have dismissals accepted by the courts as justified. If this reform is effective, it will reduce severance payment of firms substantially, from the current practice of 45 days' wages to 20 days' wages.</li> <li>• Second, it broadens the base for which the permanent contract with reduced severance payment of 33 days' wages can be applied and guarantees that this reduced severance pay also applies now in cases where firms would prefer to declare the dismissal upfront as "unjustified" (to avoid litigation).</li> <li>• Third, the introduction of a capital-funded component, similar to the one introduced in the framework of the Austrian severance pay reform, further reduces the onetime costs of dismissal. (pg. 103, 2010)</li> </ul>	<p>The recent reform represents significant progress... The recent reform adopted by Parliament in September 2010 should lead to significant progress... (pg. 101, 2010)</p>	yes for 2011	1	
Spain	2013	procedural inconvenience, severance pay, collective dismissals	<p>The 2012 labour market reform aims to reduce further the duality in the Spanish labour market, with a reform of employment protection legislation...:</p> <ul style="list-style-type: none"> <li>• The law redefines the economic reasons for dismissal, further clarifying the conditions under which a dismissal for objective reasons could be justified. In this case, the employer pays 20 days' wages of severance pay per year of seniority.</li> <li>• If a dismissal is judged unjustified, the maximum severance pay is reduced to 33 days' wages per year of seniority up to a maximum of 24 months, compared with 45 days and a maximum of 42 months on the regular permanent contract before. This applies to all new contracts and for future years of service on existing contracts.</li> <li>• The law eliminates the need for administrative authorisation of collective dismissal, in line with current regulations in most European countries.</li> <li>• While it removes the option of express dismissal, according to which firms could declare the dismissal upfront as being "unjustified" and pay 45 days' wages per year of seniority to avoid litigation, firms no longer are obliged to pay interim wages during the period the case is adjudicated.</li> <li>• The law introduces a new type of permanent contract for companies with fewer than 50 employees. Hiring on this new contract is subject to an extended trial period of one year, compared with a previous maximum of six months, and various tax credits. (pg. 98, 2012)</li> </ul>	<p>...these reforms are a substantial step in the right direction... A potentially important part of the reform is clarifying what justified dismissal means... (pg. 34, 2012)</p>	yes for 2013	1	

Sweden	1975	notice for individual dismissal	<p>...introduction of the employment security act in July 1974, stipulating that employers are to give 6 months' warning in advance of layoffs... (pg. 21, 1976)</p> <p>The Act on Security of Employment, which took effect in 1974, stipulates that an employer must have acceptable reasons for laying off workers. Notice of dismissal, which may extend up to six months depending on age, can be contested in court and an employee is generally entitled to retain his employment pending a decision. Furthermore, employers must give the Employment Board 2 to 6 months notice of production cutbacks, depending on the number of employees affected... (pg. 36-37, 1980)</p>	pg. 36-37, 1980	no data but would qualify if scoring applied	-1
Sweden	1997	notice for individual dismissal	<p>The revised Employment Protection legislation enters into force, embodying modifications in i) the criteria determining the length of notice periods; ii) enterprises' rehiring obligation vis- a-vis laid-off workers; iii) a wider scope for fixed-term contracts; and iv) a strengthened position for part-time workers and workers on replacement contracts.</p> <p>... the government tabled a set of proposals which were adopted by Parliament in late 1996, to enter into force during 1997. Of particular importance are: i) the length of notice periods is to be determined on the basis of tenure and not of age, implying that the costs of hiring older workers will fall relative to other groups; ii) enterprises' rehiring obligation vis- a-vis laid-off workers will expire after nine instead of twelve months; iii) twelve-month fixed-term contracts with no restrictions applied to the nature of the work carried out has been introduced, with all enterprises regardless of size being allowed to employ up to five persons on such contracts and new establishments being allowed to extend them to eighteen months... (pg. 81-82, 1998)</p>	pg. 105, 1999	yes in 1997 and 1999	1
United Kingdom	2000	severance pay	<p>Quadrupling maximum compensation for unfair dismissals from October 1999 (pg. 116, 2000)</p>		yes for 2000	-1

Table A2. Employment Protection Legislation, Temporary Workers

Country	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Belgium	1985	fixed term employment contract	the government intends to introduce various measures to increase labour market flexibility. ...incentives for the development of fixed-term contracts in order to promote youth employment and temporary work (pg. 47, 1985)	A major effort has also been made to promote part time work, temporary work and fixed-term contracts... (pg. 31, 1986)		no	1
Belgium	1998	fixed term employment contract	...restrictions on temporary work have been reduced and fixed-term contracts made renewable. (pg. 56, 1999)			yes for 1998	1
Czech Republic	2005	temporary work agency employment	Amendments to the Labour Code in 2003 and 2004 established...a limit of two years on the maximum total duration of temporary contracts (exceptions will apply to working pensioners, substitutes for long term absent employees and operational or technological reasons on the side of the employer); the maximum cumulative duration of temporary contracts via temporary work agencies will remain unrestricted. (pg. 154, 2004)			yes for 2005	
Denmark	1995	temporary work agency employment	Role of temporary work agencies increasingly recognized by social partners and scope increased [see for example Table 7 in Janine Leschke, "Unemployment insurance and Non-Standard Employment: Four European Countries in Comparison", Springer, 2008]			yes for 1995	1
Finland	1998	fixed term employment contract	Job protection raised for atypical work forms (pg. 57, 1998) [Finnish law dating from 1998, see e.g. <a href="http://www.scandinavianlaw.se/pdf/43-11.pdf">http://www.scandinavianlaw.se/pdf/43-11.pdf</a> ]			yes for 1998	-1
France	1983	fixed term employment contract	Limits set on and redefinition of the scope of fixed-term work contracts. Limits set on and re-organisation of temporary work. (pg. 43, 1985)		pg. 86, 1997	no data	-1
France	1987	fixed term employment contract	Act authorizing the Orders concerning the relaxation of legislation with respect to fixed-term, temporary or part-time work contracts... new unlimited-term "intermittent" work contract was introduced... the introduction of redeployment contracts.... (pg. 37, 1987)		pg. 33, 1989	no	1
France	1991	temporary work agency employment	July 1990 passage of legislation tightening up the conditions under which agency-temporary work contracts may be offered. (pg. 20, 1991)			yes for 1991	-1
Germany	1986	fixed term employment contract	The recently voted Employment Promotion Law improves labour market flexibility in several areas. The possibility to conclude short-term labour contracts with formerly unemployed or employees threatened with unemployment is extended to cover eighteen months, which should induce firms to hire earlier in an upswing when business conditions are still insecure and reduce overtime work. For new firms with up to twenty employed, short-term contracts may reach two years. Also, the terms for leasing of employees by specialised firms are extended, which will make it easier, for example, to replace workers in case of illness... (pg. 43, 1985)		pg. 43, 1985; pg. 70, 1988; pg. 110, 1994; pg. 71, 2001	yes for 1986	1

				market. One of its major elements is the relaxation of rules relating to fixed-term contracts. These can now be concluded for up to eighteen months. The use of temporary workers was made easier than before... (pg. 23, 1986)				
Germany	1995	temporary work agency employment		The Employment Support Law, allowing establishment of (private) employment agencies, comes into force. (pg. 160, 1995)			yes for 1995	1
Germany	1997	fixed term employment contract		Legislation...widening the scope of fixed-term contracts came into force in October 1996... The maximum combined duration of fixed-term contracts was extended from 18 to 24 months, with the possibility of three renewals within this period... The employment promotion law has also made secondment of employees more flexible by extending the maximum duration from nine to twelve months. For certain types of secondment which required approval of the labour office, a mere notification is now sufficient. (pg. 132, 1997)			yes for 1997 and 1998	1
Germany	2002	Temporary work agency employment		New legislation for TWAs (Zeitarbeit) came into force in January 2002 extending the maximal continuous time period of sub-contracts with the same user enterprise from 12 to 24 months.	pg. 85, 2004 pg. 86, 2008		yes for 2003	1
Germany	2003	temporary work agency employment		The Hartz I-II reforms (2003) were aimed at improving the integration of job seekers by creating new opportunities for temporary work... (pg. 82, 2008) ...			yes for 2004	1
Germany	2012	temporary work agency employment		A reform in 2011 tightened regulation of temporary agency workers... (pg. 97, 2014). The German Act on Temporary Employment (Arbeitnehmerüberlassungsgesetz; AÜG) was revised at the end of 2011.			yes for 2013	-1
Greece	2004	fixed term employment contract		The renewal of a fixed term contract is permitted without any limitation if it is justified by an objective reason [see e.g. <a href="http://www.ilo.org/dyn/eplex/termsdisplay.empContracts?p_lang=en&amp;p_expandcomments=Y&amp;p_country=189">http://www.ilo.org/dyn/eplex/termsdisplay.empContracts?p_lang=en&amp;p_expandcomments=Y&amp;p_country=189</a> ]			yes for 2004	1
Greece	2011	fixed term employment contract, temporary agency employment		Temporary work agency contracts. The maximum duration of fixed-term contracts for employees hired through temporary work agencies was extended to 36 months from 18 months previously and limits on the number of times that a temporary work agency contract could be renewed have been abolished. A new law in June 2011, in the context of the implementation of the Medium Term Fiscal Strategy (MTFS), provided for an extension of the maximum cumulated duration of successive fixed-term contracts to 36 months from 24 months previously. (pg. 123, 2011)			yes for 2011	1
Ireland	2004	fixed term employment contract		Protection of Employees (Fixed-Term Workers) Act, 2003, tightened restrictions on use of temporary contracts [See <a href="http://hr.per.gov.ie/files/2011/08/Guidelines-on-Best-Practice-for-the-Recruitment-and-Management-of-Fixed-Term-Employees-in-the-Irish-Civil-Service.doc">http://hr.per.gov.ie/files/2011/08/Guidelines-on-Best-Practice-for-the-Recruitment-and-Management-of-Fixed-Term-Employees-in-the-Irish-Civil-Service.doc</a> ]			yes for 2004	-1
Italy	1988	fixed term employment contract		Parliament approves a reform of labor market regulations. Major changes are...greater flexibility for term contracts. (pg. 79, 1987)			yes for 1988	1

Italy	1997	fixed term employment contract, temporary work agency employment	The "Treu package" eases regulations for new apprenticeship (nuovo apprendistato) and work-training contracts (contratto di formazione-lavoro) and sets incentives for...temporary work via private agencies (lavoro interinale)... (pg. 119, 1999). In 1997, a series of reforms by Labour Minister Treu ("Pacchetto Treu") formalised evolving flexibility arrangements in Italian industry. The reforms enlarged the scope for...temporary contracts. Moreover, they permitted the opening of temporary work agencies, which even if rather limited in scope... (pg. 105-106, 2002)	... the 1997 (Treu) and the 2003 (Biagi) packages extensively liberalised the use of... fixed term and intermittent contracts... (pg 25, 2007)	pg. 105-106, 2002; pg. 26, 2013	yes for 1998	1
Italy	2000	temporary work agency employment	Creation of private employment agencies (pg. 142, 1997). Use of temporary work agencies is extended and restrictions concerning unskilled workers are removed [see e.g. OECD Employment Outlook 2004, pg. 1190].	There are strong indications of labor markets having become less rigid... this trend towards greater labor market flexibility should continue with the implementation of labor market measures introduced during the last three years, including the establishment of private employment agencies... (pg. 18, 1999)	pg. 18, 1999	yes for 2000	1
Italy	2002	fixed term employment contract	A new delegated law (decreto)... the government has liberalized fixed term contracts... (pg. 113-114, 2002)			yes for 2002	1
Italy	2003	fixed term employment contract, temporary work agency employment	In 2003, a new law (Biagi Law) gave the government the possibility to reform further the functioning of the labor market, with the objective of increasing employment among youth, women, older workers and job-seekers, particularly in the Mezzogiorno. The new instruments include...improved conditions for use by the firms of...non-standard forms of employment. (pg. 32, 2005)	... the 1997 (Treu) and the 2003 (Biagi) packages extensively liberalised the use of... fixed term and intermittent contracts... (pg 25, 2007)	Pg. 25, 2007	yes for 2003	1
Japan	1997	temporary work agency employment	...the regulations that had limited the activities of private-sector job placement agencies to 29 job categories were relaxed in 1997 ...As for temporary (dispatched) worker agencies, the number of job categories where such workers are allowed was increased from 16 to 26 in December 1996. (pg. 97, 1997)			yes for 1997	1
Japan	2000	temporary work agency employment	Until December 1996 temporary help agencies had been restricted to filling positions for 16 occupations. At that point the number was raised to 26, and in May 1998 a panel of the Ministry of Labor recommended that nearly all jobs be eligible. It also recommended that the duration of such contracts be limited to a maximum of one year. The authorizing legislation will be presented shortly to the Diet, with implementation set for FY 1999 (pg. 141, 1998)			yes for 2000	1
Korea	1999	temporary work agency employment	The labor law revision of February 1998 allows firms to shed redundant workers. Moreover, temporary work agencies were allowed and regulations on private job placement firms were relaxed... (pg. 138, 1999)			yes for 1999	1
Korea	2008	fixed term employment contract	The 2006 labour law reform imposes new regulations on non-regular employment by limiting fixed-term contracts to two years. A clause forbidding discrimination allows non-regular workers to complain to the Labour Relations Commission...In addition, the government has enacted a law to protect non-regular workers from "undue discrimination" and avoid their "excessive use"..."Unjustifiable discriminatory practices" against non-regular workers are prohibited. Employees claiming discriminatory working conditions or wages can submit complaints to the		pg. 124, 2012 pg. 107, 2014	no	-1

Netherlands	1999	fixed term employment contract	Labour Relations Commission, where firms must prove that their practices are not discriminatory. This provision was implemented in companies with at least 300 employees in July 2007 and those with 100 to 299 employees in July 2008. It will be extended to smaller companies from July 2009... Since July 2007, workers with fixed-term contracts in all firms regardless of size are regular employees after two years of work. (pg:124, 2012)						
			The Law on Flexibility and Security comes into force, changing the rules concerning the renewing of fixed term contracts... (pg. 90, 2002)						
			The Flexibility and Security Law (Flex Law) – introduced in January 1999 – has promoted the use of flexible working contracts and increased employment with a limited duration and a variable number of working hours. The Law has changed the rules on the renewal of fixed term contracts, with a maximum of two renewals in three years, after which period the employee is assumed to have a permanent position. Similar rules apply for employees of temporary work agencies, giving them the right of a permanent contract after three consecutive contracts with the agency... (pg. 60, pg. 115, 2000)		Pg. 90, 2002	yes for 1999			1
New Zealand	2001	fixed term employment contract	The Employment Relations Act modifies provisions under the Employment Contracts Act in several significant ways... (pg. 78-79, 2000) The ERA has also tended to limit the use of fixed-term contracts by requiring genuine reasons based on reasonable grounds to employ a worker under such a contract [see e.g. OECD Employment Outlook 2004 pg. 75 or <a href="http://www.ilo.org/dvn/eplcx/termdisplay.empContracts?p_lang=en&amp;p_expandcomments=Y&amp;p_country=NZ">http://www.ilo.org/dvn/eplcx/termdisplay.empContracts?p_lang=en&amp;p_expandcomments=Y&amp;p_country=NZ</a> ]	... it will probably reduce labour market flexibility relative to what had existed under the ECA... (pg. 79, 2000) The most important reform was the replacement of the 1991 Employment Contracts Act with the Employment Relations Act (ERA) in 2000. (pg. 131, 2003)	pg. 83, 2002 pg. 98, 2005 pg. 117, 2013	yes for 2001			-1
Norway	2000	temporary work agency employment	In 1999, Parliament adopted some reforms of the employment protection legislation (EPL), which are largely in line with the OECD Jobs Strategy recommendations, while further reforms are under review. It includes a complete liberalization of temporary work agencies. (pg. 60-61, 2000)	...largely in line with the OECD Jobs Strategy recommendations... (pg. 60-61, 2000)		yes for 2000			1
Norway	2001	temporary work agency employment	In July 2000... temporary work agencies are now allowed to hire out all staff categories to all sectors. Before, hiring out was only for secretarial, canteen and warehouse work. However, agencies can only hire out in the cases where temporary job contracts are or if agreed by union representatives... (pg. 59-60, 2001)		pg. 104, 2002, pg. 167, 2004	yes for 2001			1
Norway	2005	fixed term employment contract	A new "working environment" act has been passed ... protecting workers under such contracts against precarity by giving them permanent worker rights after 4 years. (pg. 54, 2005)			yes for 2006			1
Portugal	1997	temporary work agency employment	The need for greater flexibility of labor is recognized by the "Short-term Social Pact" of January 1996 which calls inter alia for a more flexible organization of working time, largely based upon reduced job demarcation. (pg. 119, 1996)			yes for 1997			1
Portugal	2002	fixed term employment contract	New legislation for fixed-term employment contracts came into effect in August 2001, tightening the rules of such contracts in the private sector. One of the objectives of the law was to ensure that workers who, de facto, were employed on permanent jobs would benefit from a standard		pg. 106, 2006	no			-1

Portugal	2004	fixed term employment contract	<p>permanent employment contract. As a result, temporary contracts are now covered by a set of strict rules governing their scope and termination conditions. In particular, they may be used only in special situations indicated in the law, corresponding to temporary labour force needs (Other features of the law include: i) the termination by the employer of a contract in force over 12 months, will imply that that job position cannot be filled by another employee for the next 6 months; and ii) employees with a fixed-term contract have the right to receive 6 months' basic pay if they are replaced by a new recruit who is given a standard contract to perform the same functions. ) The maximum legal length of general fixed-term contracts in the private sector is 3 years (Either consecutive or interrupted (i.e. in the cases where the employee is asked to take breaks between contracts.)) Then the legal status of the fixed-term contract is automatically changed into a standard (open ended) contract (pg. 115, 2003)</p> <p>The new Labour Code (Código do Trabalho), which came into force in December 2003, replaces individual and collective labour legislation with a unified text, deemed to be clearer and easier to apply</p> <p>...For temporary employment, the new labour code provides more flexibility in the use of fixed-term contracts, increasing the allowed duration of such contracts. Moreover, there is now more leeway to introduce flexibility in collective agreements at the firm level regarding dismissal rules and the rules on fixed-term contracting. (pg. 128, 2008)</p> <p>The new legislation provides more flexibility in the use of fixed-term contracts, which can now be renewed up to a maximum six years (instead of three years previously); at the same time it gives more transparency to these forms of contracting (The current regime for fixed-term contracts clarifies the rules for the use of successive contracts; it establishes specific training obligations for workers under this type of contracts and compensation to the worker if termination is decided by employer. (pg. 77-79, 2004)</p>	<p>A new labour code...had several commendable elements and its approval has been a decisive step... (pg. 129, 2006)</p> <p>pg. 131-133, 2006 pg. 128, 2008</p>	<p>yes for 2004</p>	1
Portugal	2008	temporary work agency employment	<p>In Portugal, the maximum permitted assignment was increased from one to two years by Law 19/2007 [see e.g. <a href="https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef0899en.pdf">https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef0899en.pdf</a>]</p>		<p>yes for 2008</p>	1
Slovak Republic	2004	fixed term employment contract, temporary work employment	<p>Major amendments to the Labour Code were adopted in June 2003 and became effective as of 1 July 2003. All...contracts can be concluded for a limited period of time and the employer is given the right to prolong them without being obliged to provide legal justification for doing so up to a maximum 3- year period. Some categories of employees are exempted from this maximum 3- year period which means limited period contracts can be prolonged in these cases indefinitely. (pg. 122-123, 2004)</p> <p>...the introduction of a new Labour Code in 2003. Changes included...an allowance for indefinite repetition of fixed term contracts.... (pg. 77-78, 2005)</p>	<p>The labour Code was thoroughly reformed in 2003, making hiring and firing easier. The labour Code now also facilitates temporary and part-time employment. (pg. 24, 2005)</p> <p>pg. 24, 78, 2005</p>	<p>yes for 2004</p>	1
Slovak Republic	2008	Fixed term employment contract, temporary work agency employment	<p>On 1 September 2007 extensive amendments of the Labour Code came into force...As regards fixed-term labour contracts the amendments of the Labour Code in 2003 allowed to use them very broadly...Now the Labour Code sets strict limits to the renewal of fixed-term labour contracts that can be concluded only once every three years. However, exceptions are allowed, for example regarding seasonal work, research activities or in case of a collective agreement...Since September 2007 the Labour Code regulates also the temporary assignment agreement concluded between</p>		<p>yes for 2008</p>	-1

			the employer or temporary employment agency and the using employer. The employer may agree on temporary assignment with the using employer only where there are objective operational reasons for such assignment [see e.g. <a href="http://www.labourlawnetwork.eu/national%3Cbr%3Elabour_law/national_legislation/legislative_developments/prm/109/v_detail/id_370/category_30/index.html">http://www.labourlawnetwork.eu/national%3Cbr%3Elabour_law/national_legislation/legislative_developments/prm/109/v_detail/id_370/category_30/index.html</a> ]				
Spain	1982	fixed term employment contract	...the flexible forms of contracts stipulated in the 1980 Workers Statute were introduced... Contracts for part-time as well as temporary work became legal in July 1981. A limit was set for the number of contracts for temporary work, expressed as a percentage of the workforce in each establishment according to its size. (pg. 34, 1982)			no data but would qualify if scoring applied	1
Spain	1985	fixed term employment contract	R.D. 1989/1984. 17th October and R.D. 2104/1984, 21st November Limited-duration contracts - Contracts without any specific eligibility criteria (before: available only to old-age, disabled or unemployed people or for first employment and within certain limits related to the size of the labour force of the establishment). The duration is between six months and three years (as before). Indemnification on termination of the contract is one day per month worked (non-existent before). New-enterprise contracts -Non-existent before. They apply to new firms as well as to established firms developing a new product or line of production. Their duration is between six months and three years. They require no indemnification on termination of the contract. (pg 76, 1986)			no data but would qualify if scoring applied	1
Spain	1995	fixed term employment contract	Temporary employment agencies ('empresas de trabajo temporal', ETTs) were first authorised and regulated in Spain by law 14/1994. Previously some companies hired out workers, but without legal recognition. Royal Decree 4/1995, of 13th January, develops the Law 14/1994 [see e.g. <a href="https://www.eurofound.europa.eu/fr/observatories/eurwork/comparative-information/national-contributions/spain/temporary-work-and-collective-bargaining-in-the-eu">https://www.eurofound.europa.eu/fr/observatories/eurwork/comparative-information/national-contributions/spain/temporary-work-and-collective-bargaining-in-the-eu</a> ] [By contrast:] The reforms tightened the rules concerning fixed-term contracts. Fixed-term contracts not justified by the content or temporary nature of the job were eliminated except for older workers and the long-term unemployed. 'Ordinary' fixed term contracts, which constitute the majority of all fixed-term contracts, were not affected by the reform. Individuals whose contract expired in 1994 were permitted to renew their contracts according to the terms of the old legislation, to a maximum of three years in total. (pg. 65, 1996)		pg. 55, 2000	yes for 1995	1
Spain	1998	fixed term employment contract	...trade unions and employers' representatives agreed on a labour market reform in April 1997. The main aim of the agreement, which was quickly passed into law (May 1997 labour legislation), was to foster stable employment and to improve the collective bargaining processes. Regarding the first objective, the new legislation attempts to reduce the large number of workers under fixed-term contracts. (pg. 71-72, 1998)  The 1997 agreement was valid for four years, and will expire in May 2001. Given strong job creation, and in view of the persistence of a large share of temporary work, the government encouraged the social partners to negotiate a deepening of the reform. Since the social partners could not come to an agreement after six months of discussions, the government approved new measures on EPL, together with other labor market measures... Firing costs have been introduced for temporary contracts, while the permanent contract with lower severance payments approved in 1997 has been prolonged beyond 2001, and its coverage has been extended. Male workers between 30 and 45 years are now the only group remaining on the old contract. (pg. 67-68, 2001)		pg. 57, 2000; pg. 66-68, 165, 2001; pg. 101, 2010	no	-1

Spain	2011	fixed term employment contract, temporary employment agencies.	The labour reform contained in Law 35/2010...also focuses on facilitating intermediation in the job market by authorizing not-for-profit matching agencies, which seeks to increase the effectiveness of the market and facilitate the matching process. [see e.g. <a href="http://ec.europa.eu/europe2020/pdf/nrp/nrp_spain_annex1_en.pdf">http://ec.europa.eu/europe2020/pdf/nrp/nrp_spain_annex1_en.pdf</a> ]			yes for 2011	1
Spain	2012	fixed term employment contract, temporary work agency employment	The 2012 labour market reforms aim to reduce further the duality in the Spanish labour market, with a reform of employment protection legislation.... It further restricts the use of temporary contracts, by reinstating the maximum period of extension of a temporary contract to two years. This law was temporarily suspended... (pg. 98, 2012)		pg. 40, 92, 2014	yes for 2012 and 2013	-1 (2012); 1 (2013)
Sweden	1997	fixed term employment contract	...following the preliminary assessment and guidelines given in the 1995 Growth Bill and the spring 1996 Fiscal Bill, the Swedish authorities tabled an Employment Bill in June 1996.... the main features of the program include...a reassessment of the balance between employment protection and enterprise adaptability, with a view to facilitating the expansion and reorientation of activities... enterprises may have five persons on fixed-term contracts of twelve months duration... (pg. 123-124, 1997)  The revised Employment Protection legislation enters into force, embodying modifications in...a wider scope for fixed-term contracts... After the social partners failed to agree on reforms to the employment security provisions in mid-1996, the government tabled a set of proposals which were adopted by Parliament in late 1996, to enter into force during 1997. Of particular importance are...twelve-month fixed-term contracts with no restrictions applied to the nature of the work carried out has been introduced, with all enterprises regardless of size being allowed to employ up to 5 persons on such contracts and new establishments being allowed to extend them to 18 months... (pg. 81-82, 1998)		pg. 75, 78, 80-82, 1998 pg. 72, 1999	yes for 1997	1
Sweden	2008	fixed term employment contract, temporary work agency employment	The duration of temporary contracts has been extended... The so-called general temporary employment contract has now been introduced in legislation, raising the maximum duration of standard temporary contracts from 12 to 24 months... These steps continue the reform approach followed over recent decades. While Swedish regulations for regular employment have remained unchanged, the restrictions on fixed-term contracts and temporary work agencies were eased between the late 1980s and late 1990s... (pg. 114, note on pg. 124, 2008)			yes for 2008	1
United Kingdom	2003	fixed term employment contract	Fixed-term employees (prevention of less favourable treatment) regulation enters into force on October 1 <sup>st</sup> 2002. [see for example <a href="http://www.ilo.org/dyn/eplex/termmain.showCountry?p_lang=en&amp;p_country_id=GB">http://www.ilo.org/dyn/eplex/termmain.showCountry?p_lang=en&amp;p_country_id=GB</a> ]			yes for 2003	-1

Table A3. Unemployment Benefit Systems, Replacement Rate and Duration

Country	Year	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform: overall	reform /counter-reform: replacement rate	reform /counter-reform: benefit duration
Austria	1977	1977 Unemployment Insurance Act (AIVG) results in increased benefits [see description e.g. in ILO Natlex database]			Yes	-1	-1	0
Canada	1972	The 1971 revisions to the Unemployment Insurance Act greatly increased the benefits, lengthened the maximum period of eligibility and reduced the minimum work period required to qualify for coverage. (pg. 50, 1985) They substantially increased its coverage, to virtually all paid workers, reduced the amount of previous work needed to qualify for benefits, and raised benefits as well as their maximum duration. (pg. 68, 1994)	The 1971 revisions to the Unemployment Insurance Act greatly increased the benefits, lengthened the maximum period of eligibility and reduced the minimum work period required to qualify for coverage. (pg. 50, 1985) ...the reforms in the 1994 Budget...should unambiguously contribute to a decline in the NARU (pg. 57, 1995).	pg. 89-91, 97, 1991 pg. 68, 1994 pg. 56, 1995	Yes	-1	-1	-1
Canada	1995	The 1990 amendments to the Unemployment Insurance (UI) Act tightened the benefit structure and re-invested resulting savings towards active support for unemployed workers. Further modifications in 1993 included a reduction in UI benefit rate from 60 to 57 per cent of insurable earnings and tightening of eligibility requirements. (...). The February 1994 Budget proposed further reforms along these lines, which became effective in July, ...the minimum period of work required to qualify for UI benefits was increased, the maximum duration of benefits reduced, and the benefit rate further lowered to 55 per cent... this will permit a rollback of the UI premium rate to the 1993 level from 1995. (pg. 55, 1994) The minimum entrance requirement is raised to 12 weeks. Benefit durations are reduced, so that a claimant in a low unemployment region can receive a maximum of 36 weeks of benefits. The replacement rate is lowered to 55 per cent (...). (pg. 78, 1996)	...the reforms in the 1994 Budget...should unambiguously contribute to a decline in the NARU (pg. 57, 1995).	pg. 57, 1995 pg. 78, 1996 pg. 134, 2001	No	1	1	0
Canada	1997	The federal government announces the replacement of the Unemployment Insurance programme by the Employment Insurance programme effective 1 July. Eligibility will be based on a minimum of 420 to 700 hours worked (...). Part-time workers will also be able to insure. The length of benefits is reduced to 45 weeks (from 50) and the maximum falls to C\$ 413 per week (from C\$ 448). Premiums are reduced to C\$ 2.95 per C\$ 1 000 of insurable earnings (from C\$ 3) and employers pay to C\$ 4.13 (down from C\$ 4.20). (pg. 99, 1996) At the beginning of 1992 the maximum duration of benefit was reduced to six months and the benefit to 60 per cent (from 65 per cent) of the previous net wage income for the first three months and 50 per cent (from 60 per cent) for the remaining period. (pg. 81, 1996)		pg. 62, 1997 pg. 54, 2003	Yes	1	1	0
Czech Republic	1992				No data but would qualify if scoring applied.	1	1	0
Czech Republic	1998	As of January 1998, the conditions governing the unemployment insurance system have been further restricted. The maximum replacement rates were reduced from 60 to 50 per cent during the first three months of an unemployment spell and from 50 to 40 per cent during the second three months, while the payment to trainees was reduced to 60 per cent (pg. 133, 1998)			No data but would qualify if scoring applied.	1	1	0
Czech Republic	2004	A new employment law has been in force since October 2004. It regulates the implementation of state employment policies, including rules ... entitlement for unemployment benefits,... The main changes introduced by this law are: ... – The amount of unemployment benefit is to remain the same for the first three months of unemployment (at 50 per cent of previous net earnings) but has been increased from 40 to 45 per cent thereafter, with the maximum amount remaining 2.5 times the personal minimum subsistence amount (Table 5.2). (pg. 138, 2004)	Major changes in tax and benefit systems: increase in unemployment benefit after three months raised to 45% of previous net wage.		No	-1	-1	0





Ireland	1994	In the 1994 Budget, the government reformed the unemployment insurance system by abolishing the earnings-related supplement that was previously payable during the first year of unemployment, and by making benefits taxable. This orientation was continued in the 1995 Budget by keeping unemployment benefits in line with prices while reducing taxes on the low paid... (pg. 103, 1995)				Yes	1	1	0
Ireland	2011	Benefits were reduced by around 4% in both 2010 and 2011. Reduced rates were introduced for youths (2009) and those under 25 (2010). (pg. 29, 42, 2011)				Yes	1	1	0
Korea	1996	In July 1995, the government implemented the "Employment Insurance System" (EIS). (...) In addition, the EIS introduced benefits for unemployed workers. The duration of this basic allowance depends on the worker's age and the length of time insured. (...) the duration of benefits can be extended for workers who receive training authorised by the Public Employment Security (PES) office. (pg. 95-102, 1996)			pg. 155-157, 1998 pg. 84, 2008 pg. 38, 2014	No	-1	-1	-1
Luxembourg	1975	Unemployment compensation began only in 1975; benefits are paid at the rate of 80 per cent of insured earnings and are financed by the "solidarity tax" on personal incomes and on business profits. (pg. 33, 1991)				no data but would qualify if scoring applied.	-1	-1	-1
Netherlands	1985	The 1985 Budget Memorandum proposes a number of measures designed to achieve further cuts in the social security budget in 1985... The most important measures are: i) The replacement rate for disability benefits and unemployment benefits is to be reduced to 70 per cent with effect from 1st January... ii) The replacement rate for sickness benefit is to be reduced to 75 per cent with effect from 1st January, and will become subject to social insurance contributions. (pg. 55, 1985)	It is certain that lower unemployment and disability benefits will help to reduce the size of the public sector and of private sector contributions. (pg. 20-21, 1985)	pg. 46, 1986		No	1	1	0
Netherlands	2007	The government plans to lower the maximum duration of unemployment benefit from 5 years to 38 months in October 2006. (pg. 15, 2006) (See also e.g. <a href="http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/netherlands/the-netherlands-social-partners-involvement-in-unemployment-benefit-regimes">http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/netherlands/the-netherlands-social-partners-involvement-in-unemployment-benefit-regimes</a> ]				Yes	1	0	1
New Zealand	1991	The specific benefit reforms introduce a marked reduction in the Unemployment Benefit and tighter eligibility criteria. This includes an increase in the stand-down period for those voluntarily unemployed from 6 to 26 weeks. Entitlement to the Unemployment Benefit was also removed for 16 and 17-year olds... (pg. 57, 1993) See also: "In April 1991 maximum weekly benefits were cut by an average of approximately 10 per cent", pg. 276 in <a href="http://online.library.wiley.com/doi/10.1111/1468-0335.00283/pdf">http://online.library.wiley.com/doi/10.1111/1468-0335.00283/pdf</a>	... a marked reduction in the Unemployment Benefit... (pg. 57, 1993)			No	1	1	0
Norway	1976	Major reforms of unemployment insurance: Maximum duration 40 weeks per calendar year since 1975. (pg. 69, 1994)				Yes	-1	0	-1
Norway	1984	Major reforms of Unemployment insurance: Maximum duration 80 weeks with a minimum of 26 weeks between spells since 1984. (pg. 69, 1994)				Yes	-1	0	-1
Norway	1997	A new legislation, limiting the combined duration of unemployment benefit and active labour market programmes, entered into force at the beginning of 1997... setting a time limit on unemployment benefits has been shown to decrease the disincentive effects associated with unemployment compensation. The new law governing unemployment benefits has limited the duration of benefits to up to three years. (pg. 88, 1997) Various income replacement programmes have been modified over the period under review, with time limits being introduced for benefit entitlements. Most prominently, as of 1 January 1997, the unemployment insurance (UI) system has been converted from an indefinite income support scheme into temporary compensation for unemployed persons actively seeking work. The access to UI benefits has been tightened by raising the past minimum earnings entitling an unemployed person to a UI benefit, and limiting the benefit duration to 1/2 or 3 years, depending on prior earnings. (pg. 66, 1998)			pg. 66, 1998	No	1	0	1
Norway	2003	The government recently took some important steps towards improving work incentives in the unemployment compensation system. The 2003 budget reduced from three years to two the	The government recently took some important			No	1	0	1



Spain	1984	<p>[see e.g. <a href="https://www.elborsalmon.com/historia-de-la-economia/la-historia-de-la-prestacion-por-desempleo-en-espana-historia-de-altibajos-mejoras-y-recortes">https://www.elborsalmon.com/historia-de-la-economia/la-historia-de-la-prestacion-por-desempleo-en-espana-historia-de-altibajos-mejoras-y-recortes</a> and N. Bermeo (2013), "Unemployment in Southern Europe: Coping with the Consequences", pg. 96]</p> <p>Law No. 31/1984... The law makes important modifications to the previous system... The changes apply to both the contributory level (related to previous social contributions) and to the assistance level (relevant after the contributory level are exhausted) which make up the system... The maximum duration of the benefit is raised from eighteen to twenty-four months. The average duration is also raised reducing the ratio of the contribution to the benefit period. Eligibility criteria are relaxed... The average value of the benefit is raised by: setting a minimum equal to the minimum wage; including in the contributory base for the calculation of the benefit those contributions not utilised during any previous unemployment spells... Assistance level - The maximum duration of the paying-out period is raised from nine to eighteen months. Coverage (which before included only the unemployed with dependent relatives or else returned emigrant workers) is broadened to include inter alia... those individuals with dependent children and income no higher than the minimum wage who have paid only between three and six months of contributions and who, therefore, do not qualify for the contributory level. The duration of the subsidy is in this case equal to the months of contributions paid. The unemployed over 55 years old as long as the subsidy will help them to achieve a pension at the age of 60. (pg 75-76, 1986)</p>	The law makes important modifications to the previous system (pg 75-76, 1986)	Yes	-1	-1	-1	pg. 32, 1986
Spain	1993	<p>To redress the (unsustainable fiscal) situation the government raised the unemployment contribution rates by almost one-fifth in the 1992 Budget, and reduced unemployment benefits in relation to contributions in April 1992. The minimum employment period giving right to unemployment benefits was increased from 6 to 12 months, the duration of benefit corresponding to the different previous employment periods was shortened by about one-third, and the level was reduced by 12.5 per cent. (Note: The duration of benefit for people having contributed for 12 months was lowered from 6 to 4 months, for 24 months from 12 to 8 months, for 36 months from 18 to 12 months.) (pg. 44, 1993)</p> <p>In 1974, the duration of unemployment insurance benefits was increased from 150 to 300 days for workers below 55 years of age and set at 450 days for those above 55 years, while cash transfers (KAS) were introduced to cover workers ineligible for Unemployment Insurance. (pg. 155, 1999)</p> <p>The statutory replacement rate of unemployment insurances is lowered from 90 to 80 per cent. (pg. 157, 1999)</p> <p>NB: Note further below a further cut from 80 to 75 per cent in 1995</p> <p>From 2007, the higher ceiling during the first 20 weeks of unemployment benefits is abolished. The replacement rate is lowered from 80% to 70% after 40 weeks and 65% after 60 weeks. (pg. 46, 2007)</p>		No	1	1	1	pg. 79-80, 1994
Sweden	1974	<p>In 1974, the duration of unemployment insurance benefits was increased from 150 to 300 days for workers below 55 years of age and set at 450 days for those above 55 years, while cash transfers (KAS) were introduced to cover workers ineligible for Unemployment Insurance. (pg. 155, 1999)</p> <p>The statutory replacement rate of unemployment insurances is lowered from 90 to 80 per cent. (pg. 157, 1999)</p>		Yes	-1	0	-1	
Sweden	1994	<p>NB: Note further below a further cut from 80 to 75 per cent in 1995</p> <p>From 2007, the higher ceiling during the first 20 weeks of unemployment benefits is abolished. The replacement rate is lowered from 80% to 70% after 40 weeks and 65% after 60 weeks. (pg. 46, 2007)</p>		No	1	1	0	
Sweden	2007	<p>From 2007, the higher ceiling during the first 20 weeks of unemployment benefits is abolished. The replacement rate is lowered from 80% to 70% after 40 weeks and 65% after 60 weeks. (pg. 46, 2007)</p>		Yes	1	1	0	
Switzerland	1976	<p>June 1976: introduction of mandatory unemployment insurance for all wage earners, financed by contributions. A few months later, an Act grants daily benefits covering 65% to 70% of the wage loss for 150 days. [see <a href="http://www.historiedelascuritesociale.ch/synthese/1976/">http://www.historiedelascuritesociale.ch/synthese/1976/</a>]</p>		Yes	-1	-1	-1	
Switzerland	1984	<p>June 1983: Legislation (Federal Law on Unemployment Insurance) extending the duration of entitlement to daily unemployment benefit from 150 to 240 days depending on need ...[and]... decision by the Federal Council to double to 0.6 per cent, as from 1st January 1984, employer and employee unemployment insurance contributions. (pg. 58, 1985)</p>		Yes	-1	-1	-1	
Switzerland	1992	<p>At the beginning of 1992, the amount of benefit was standardized at 80 per cent for all persons insured. The descending scale of daily benefit was abolished for workers aged 45 and over, and the duration of compensation for that category as well as for the disabled was extended to 300 days (pg. 77, 1993)</p> <p>The graduated scale of unemployment benefits was abolished in several cantons and then in Switzerland as a whole on 1 January 1993. (pg. 77, 1993)</p>		Yes	-1	0	-1	pg. 78, 1996 pg. 71, 1997 pg. 98, 2000
Switzerland	1994	<p>The Swiss people approve a change in the law on unemployment insurance. For the next two years this envisages the reduction - under certain conditions - of unemployment benefits to 70 per cent of the insured salary and the extension of the payment period from 300 to 400 days. (pg. 111, 1993)...</p> <p>The latest changes enacted by urgent legislation in April 1993 were motivated by the appearance of a high proportion of long-term unemployed (about 14 per cent). The maximum period of compensation, which had already been lengthened to 300 days for all insured persons on 1 January, was extended to 400 days. On the other hand, the benefit for an insured person who does not receive a child allowance and who is not bringing up a child as a single-parent was cut to 70 per cent of the insured income if</p>		Yes	-1	1	-1	



			National Electricity Market in eastern and southern Australia, including commitments for interconnection by both Queensland and Tasmania... (pg. 76, 1998)						
Austria	1999	Market access and structure	In accordance with the EU directive, a new law for the electricity sector (Elektrizitätswirtschafts- und Organisationsgesetz, ELWOG) came into force in February 1999, designed to partially open the sector to competition from February 1999 onwards. The law determines that networks are obliged to grant access to generators and eligible customers. (pg. 70, 1999)  ... electricity liberalization laws in force. Regulated third party access rather than single buyer adopted for electricity sector. (pg. 76-77, 1999)	With respect to the network industries, significant progress has been made in opening up telecommunications and electricity to competition. (pg. 17, 1999)	1	Yes			
Austria	2001	Market access and structure	The energy liberalisation act passes Parliament, envisaging the full opening of the electricity and gas markets by October 2001 and October 2002, respectively. (pg. 158, 2001)	The liberalisation of the electricity market – effective since 1 October 2001 – is much more rapid than required by the relevant EU directives... (page 82, 2001)  ...significant steps are under way in regulatory reform, notably in terms of sharpening general competition legislation and stepping up competition in the electricity and gas markets. (pg.67-68, 2001)	1	Yes	pg. 94-96, 2003		
Belgium	2000	Market access and structure, public ownership	The government decides that the opening up of the electricity market for customers consuming a minimum of 20 Gwh per year (42 per cent of the market) has to come into effect by 31 December at the latest. (pg. 142, 2001)	A stepping up of the liberalisation process in the electricity sector: following the first steps in this direction taken in April 1999, the government decided in April 2000 to speed up the liberalisation process... (pg. 78, 2001)	1	Yes	pg.126, 2009		
Belgium	2006	Market access and structure	The Flemish Parliament decided in July 2000 to liberalise the market for electricity already by 1 January 2006. At that date end-users will be free to choose their suppliers, though the control and management of the distribution networks will remain the responsibility of the communes. These changes are meant to result in a fall in the price of electricity in Flanders... (pg. 81, 2001)	The government intends to accelerate the liberalisation of the electricity sector, making a clearer distinction between production, transmission and distribution, with the regulation of the transmission network in the hands of an independent regulatory body. (pg. 92, 2001)	1	Yes	pg. 190, 2005		
Canada	1998	Market access and structure	Ontario passed the Energy Competition Act in 1998 to restructure Ontario Hydro and to introduce competition in the province's electricity market. Ontario Power Generation Inc. (OPG)... is a provincially owned corporation that generates three-quarters of the electricity in Ontario. Hydro One, also government owned, is a separate company that has assumed the transmission and distribution assets of the former Ontario Hydro. Hydro One provides non-discriminatory open access and transmits wholesale electric power to municipal utilities that in turn retail it to customers in their service areas. (pg. 97, 2004)	A stepping up of the liberalisation process in the electricity sector: following the first steps in this direction taken in April 1999, the government decided in April 2000 to speed up the liberalisation process... (pg. 78, 2001)	1	Yes	pg. 55, 2006		
Canada	2000	Market access and structure	... progress in some provinces...injecting more competition into electricity markets. (pg. 45, 2006) In April 1999, Ontario Hydro was split into two new companies: Ontario Power Generation (OPG) and the Ontario Hydro Services Company (OHSC)... In addition, two not-for-profit corporations have been established: an Independent Electricity Market Operator, which monitors the wholesale electricity market and ensures fair access to the transmission system; and an Electrical Safety Authority to install and inspect electrical equipment. A fifth body, the reconstituted Ontario Energy Board, is responsible for approving all rates for transmission and distribution and ensuring a level playing field with private operators once competition begins. (pg. 94, 2000)	Significant changes are underway to create a fully competitive electricity sector in Ontario, to be in place by November 2000. This should boost productivity and set an example for other provinces to follow. (pg. 94, 2000)	1	Yes	pg. 76, 2003 pg. 96, 2004		
Czech Republic	2001	Market access and structure	... the passage of a new Energy Act in November 2000 that paves the way for the gradual introduction of international and domestic competition into the electricity and natural gas sectors and the establishment of two new independent regulators in the telecom and energy sectors. (pg. 129, 2001)	...the Czech government has taken several important steps to introduce competition and effective regulation into the telecommunication, electrical, gas and rail markets. (pg.129, 2001)	1	Yes	pg. 131, 2003		
Denmark	1998	Market access and structure	A decision by the Competition Council for one of the two dominant distributors to open its transmission grid to a competitor has led to a modification of the Electricity Supply Act with effect from January 1, 1998. The opening of the market applies to the seven largest final consumers (with a market share of 3 percent) and 55 distribution companies (with a market share of 90 percent), which are allowed to shop around for energy supplies. Counting in the formal opening of the market for distribution companies, present regulations allow Denmark to exceed the initial requirement of 22 percent	The market is to become fully open for both businesses and households in 2006. (pg. 131, 2003) A decision by the Competition Council, which demanded that one of the two dominant distributors open its transmission grid to a competitor, has led to a modification of the Electricity Supply Act with effect from 1 January 1998, implying some strengthening of competitive pressures. (pg. 78, 1999)	1	Yes in 1996			

				liberalization of the total electricity market contained in the 1996 EU directive which will enter into force in February 1999. (pg. 78-79, 1999)					
Denmark	1999	Market access and structure		A reform of the electricity sector is adopted by parliament, thereby implementing the EU-directive on the internal market for electricity. (pg. 158, 2000)  The electricity reform adopted in 1999 will gradually introduce competition in that sector from 2000 onwards (for the largest users). Businesses with an annual consumption of 10 GWh or more will have free choice of electricity supplier from 2001 and households from 2003. (pg. 98, 2000)  The 1999 Energy Supply Act introduced competition in generation and retail trade... Corporate separation of previous monopolies operating in all these fields was implemented to reduce the risk of cross-subsidisation, resulting in the establishment of holding companies with various subsidiaries operating in different parts of the market. The reform also opened up the market for competition from the demand side by introducing free choice of supplier for customers. (pg. 114, 2005)		Yes	pg. 98, 2000 pg. 114, 2005		1
Denmark	2005	Market access and structure		In June 2004, a new law was passed by Parliament involving a number of changes to the regulatory framework in the electricity sector, constituting the first major follow-up on the 1999 reform. (pg. 134, 2005)		No	pg. 57, 2006.		1
Finland	1995	Market access and structure		The electricity market has been fully liberalised and has been integrated in the Nordic electricity market. Deregulation started in 1995. Since then, electricity users with power demand exceeding 500 kW can invite tenders from all electricity suppliers. In early 1997, this limit was abolished, but small users could not fully benefit from the system in the first phase as the acquisition of relatively expensive hourly consumption metering equipment was required (pg. 57, 2000)  The opening of the electricity market was completed in 1998 with the introduction of load profiling for small consumers, expanding the free supplier choice to all customers. In addition, the integration into the Nordic electricity market (Nord Pool) countered the ability of large incumbents to dominate the market, although the limited international interconnector capacity still leads to market power during peak load demand periods. (pg. 97, 2004)		Yes	pg. 97, 2004		1
Finland	2000	Public ownership		Privatisation mandates are broadened by Parliament. The government now has authorisation to reduce the government ownership to 50.1 per cent in Alita Group and Vapo, to 20 per cent in Rautaruukki, to 15 per cent in Kemira Group, 10 per cent in Outokumpu and zero in Inspecta. (pg. 151, 2002)		Yes			1
France	2000	Market access and structure		The bill opening up the electricity market to competition is voted: 30 percent immediately and 34 percent in 2003. (pg. 164, 2000)  Electricity sector partially opened up to competition as from February 2000. (pg. 102, 2000)		Yes	pg. 17, 2001		1
Germany	1998	Market access and structure, public ownership		The electricity market is dominated by vertically-integrated conglomerates in generation and distribution as well as more than 500 publicly-owned local monopolies ("Stadtwerke") in local distribution... with limited flexibility due to tight regulation on activities, although no sector specific regulator is in place... electricity network owners have often refused third-party access to the grid or to cut transmission fees widely judged to be too high. But in autumn 1999, the German Federal Cartel Office reinforced a ruling that local distributors had to open their grids to competitors. (pg. 90, 2001)		Yes	pg. 100, 2001		1
Germany	2005	Market access and structure		New legislation setting the rules for the regulation of network access in the electricity and gas industries was introduced in July 2005. In a transitory phase expected to last for a year, the FNA and state regulators are approving all network access prices in the gas and electricity industries on the basis of average cost benchmarks for groups of network operators with similar cost characteristics. The regulators are subsequently expected to move to price-cap regulation. Moreover, the powers of the new regulators have been strengthened... The burden of proof in court cases has been shifted to network operators. The move to benchmark and price cap regulation, backed up by stronger powers		Yes	pg. 140, 2008		1

				of the regulator, generates scope for lowering network access prices while preserving incentives for operators to reduce operation costs. (pg. 137, 2006)				
Greece	2002	Market access and structure, public ownership		Introduced ex ante regulation of network access in electricity... Introduced an incentive regulation of third party access fees in the energy sector. (pg. 49, 2008)	The reform of the electricity sector is probably the most critical area of reform... The general direction of the proposed reform is in line with the 1996 EC Directive for the sector. (pg. 165, 1998)	pg. 131, 1998, pg. 78, 2001, pg. 116, 2002, pg. 144, 2002	Yes	1
Greece	2005	Market access and structure		The electricity market has been partly privatised in February 2001, and the state-owned Public Power Corporation (PPC) has been transformed to a société anonyme. (pg. 122, 2002) Action taken: Liberalisation of the telecommunication and electricity markets in early 2001. (pg. 144, 2002)			Yes	1
Iceland	2004	Market access and structure		The Greek wholesale electricity market has been organised as a pure mandatory pool since its inception in 2005, so as to allow competition to emerge in a context with a severe constraint: no structural reforms were implemented on PPC, the previous monopolist, such as plant divestures or consumers release, as elsewhere in Europe. The incumbent remained dominant in both generation and retail sectors, retaining exclusive access to cheap lignite and hydro resources, while retail prices, despite the gradual removal of cross-subsidies, remained not linked to wholesale costs. This combination of market features posed severe obstacles to new entry in early years of market liberalisation, signifying capacity shortage over the following years. The capacity certificates introduced in 2006 created incentives for new investment... [See <a href="http://www.rae.gr/site/en_US/categories/electricity/market/wholesale/intro.csp">http://www.rae.gr/site/en_US/categories/electricity/market/wholesale/intro.csp</a> ]	...the Act goes beyond that directive by covering not only opening of the electricity market to supply competition, transmission access and account separation, but also competition in sales. (pg. 106, 2005)		Yes in 2003	1
Ireland	2000	Market access and structure		The Electricity Act, which was passed in March 2003, lays down the current legal framework for activities and regulation in the electricity sector. Although the main impetus for the Act came from Iceland's obligation to conform with EU directives, the Act goes beyond that directive by covering not only opening of the electricity market to supply competition, transmission access and account separation, but also competition in sales. The National Energy Authority (Orkustofnun) is designated as the industry regulator. According to the Act, the generation and sale of electricity are competitive activities subject to public licenses. Licenses to construct and operate power generating stations, which beforehand required approval by Parliament... Municipal utilities, which hitherto had exclusive rights to distribution and sales in their area of operation, retain their exclusive rights to distribution, but sales will be gradually opened up until full deregulation at the beginning of 2007. The generation and sale of electricity is under the surveillance of the competition authorities. (pg. 106, 2005) As the first step in a phased liberalisation of the electricity sector, since February 2000, 350-375 large users, using more than 4 million kWh annually (representing about 30 per cent of electricity demand) may choose their supplier. By 2002 this share is expected to reach 40 per cent and there is a commitment to fully liberalise the electricity supply market in 2005. (pg. 71, 2001)	The legal framework for operations in the electricity sector changed substantially with the coming into force of the Electricity Act in July 2003. (pg. 95, 2005)	pg. 84, 2003	Yes	1
Ireland	2007	Market access and structure		Market opening for non-households is being extended as a step toward full liberalization in 2005. The third auction of Virtual Independent Power Producers (VIPP) was conducted in 2002 and 60 per cent of eligible users switched suppliers. (pg. 84, 2003) An all-island wholesale electricity and gas market took effect in November 2007. By the end of 2008, ownership of the transmission network will be transferred from ESB to EirGrid. The regulator has ordered ESB to sell some generation plants to reduce its market share to 40% by 2010. (pg. 27, 2008)			Yes	1
Ireland	2010	Market access and structure		The electricity regulation (Single Electricity Market, SEM) Act 2007 was signed in March 2007. The SEM Act amended the 1999 Electricity Regulation Act to establish and operate a single competitive market on the island. A cross-border wholesale electricity market between northern Ireland and the Republic of Ireland in the south became operational in 2007. [see <a href="http://www.irishstatutebook.ie/eli/2007/act/5/ enacted/en/html">http://www.irishstatutebook.ie/eli/2007/act/5/ enacted/en/html</a> ] The European Communities (Internal Market in Electricity) Regulations 2010 represent the first step taken in Ireland towards the transposition of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity. The 2010 Regulations provide for the strengthening of independent regulation, better levels of consumer			Yes	1

			protection, the licensing of a public electricity supplier, the designation of a supplier of last resort and the enhancement of security of supply provisions. (see <a href="http://www.irishstatutebook.ie/eli/2010/si/450/made/en/print">http://www.irishstatutebook.ie/eli/2010/si/450/made/en/print</a> )			
Italy	1999	Market access and structure	Bord Gáis Éireann's (BGE) electricity supply and generation businesses being sold, leaving BGE as a network company. The current arrangements of the transmission assets being owned by ESB, but operated by an separate independent company, Eirgrid, as the transmission system operator, was certified by European Commission decision in May 2013. (pg. 46, 2013) In April 1998, parliament approved legislation to liberalise the electricity market, setting the stage for ENEL to be split into three divisions (production, transmission and distribution) in accordance with the EU directive. Another initiative in this direction was taken in November 1998. (pg. 121, 1999) March 1999: The government approves a legislative decree allowing for a greater number of operators in the electricity sector, wider access to the network and reduced controls. (pg. 197, 2000) Vertically-integrated players already operating in the electricity sector have been required by the Regulatory Authority to comply with a clear administrative separation between regulated and unregulated activities. This measure would assure greater market access through making it more difficult for the incumbents to subsidise competitive activities using revenues from regulated businesses. (pg. 143, 2000) ...the pace of privatisation gathered significant momentum in 1999, reflecting to a great extent the sale in October of the first tranche of ENEL (electricity). (pg. 136, 2000)	pg. 141-143, 2000	Yes	1
Italy	2000	Market access and structure, public ownership	October 1999: The Treasury sells the first tranche of ENEL, the national electricity company, through a public placement (L 32 trillion). (pg. 198, 2000) Competition law further widened so as to cover electricity... (pg. 165, 2000)	pg. 128, 2001	Yes	1
Italy	2005	Market access and structure, public ownership	Since the beginning of 2003, all consumers have been free to choose their gas supplier. Since April 2003, the same is true for electricity consumers with an annual demand of more than 100 000 kWh. Since July 2004, free electricity choice has been expanded to the whole business sector. Demand liberalisation will be finalised in July 2007 when all households will be free to choose their electricity supplier thanks to a recently approved law. Concessionary electricity prices are still available for low-income and low-consuming households... (pg. 121, 2005) In May 2004, the government decided on the unification of Terna with GRITN by October 2005. Companies operating in the electricity market will not be allowed to hold more than 20% in Terna-GRITN after July 2007. Thus, ENEL is obliged to reduce its participation in the company by then and in June 2004 it already started to divest 50%. (pg. 122, 2005)	On the supply side, electricity generation is now fully liberalised. (pg. 121, 2005) Government ownership in electricity and gas companies has fallen substantially, and in other sectors the number of publicly-owned companies has fallen. The decline in indicators related to barriers to entrepreneurship is partly the result of implementing EU directives in national legislation, as opposed to "indigenous" initiatives. Since 2003, EU directives implemented in Italy have concerned: (...) electricity and gas; (...). Having traditionally been rather a laggard in implementing EU legislation, Italy has caught up significantly since 2006. Indeed, in some areas (... electricity and rail) Italy has implemented directives faster than other countries. (pg. 80, 2009)	No	1
Italy	2010	Market access and structure	Law 125/2007 enacting the Directives 2003/54/CE e 2003/55/CE on internal market of energy and gas. The law provides for the full opening of the electricity demand. (pg. 35, 2009)	The law provides for the full opening of the electricity demand. (pg. 35, 2009)	No	1
Japan	2000	Market access and structure	Following the opening of the generating market to new entrants, retail sales of electricity of more than 2000 kW have been liberalized since March 2000, breaking down the monopolies of the ten integrated regional utilities. The liberalization accounts for 30 per cent of the market. At the same time, the competition law has been modified removing the exemption of gas and electricity. (pg. 121, 2000)	pg. 83, 112, 2001 pg. 155, 2002 pg. 132, 2004	Yes	1
Korea	2001	Market access and structure	The generating capacity of Korea Electric Power Company is split into six companies; in preparation for privatisation, which may begin as early as 2002. Beginning in 2001, large customers are to be allowed to purchase either directly from an independent power producer (IPP) or a KEPCO subsidiary at an agreed price or from a cost-based pool (pg. 167, 2000)		Yes	1

Luxembourg	2001	Market access and structure, public ownership	<p>A law has been passed on the progressive opening of the electricity market to competition over 2001-05. (pg. 68, 2001)</p> <p>Some 40 per cent of the market is already open to competition and a law passed this year provides for the progressive liberalization of the market over the next few years. In the first stage of this reform, customers buying over 20 gigawatts will have free choice of supplier from January 2001. This limit will be reduced to nine gigawatts in January 2003 and one gigawatt in January 2005. This reform should reduce electricity prices for business customers. (pg. 75, 2001)</p> <p>1999 February: The Dutch electricity market is opened to competition. No licence is required for the production of electricity and large energy users are free to choose among suppliers. Electricity contracts are traded at the Amsterdam Power Exchange (Chapter III). (pg. 128, 2000)</p> <p>The Electricity Act of 1998 has recently come into force... The production of electricity has been liberalised and a licence is no longer needed. Large energy users are free to choose among suppliers. (pg. 69, 2000)</p>	Yes	1
Netherlands	1999	Market access and structure	<p>The 1992 Electricity Act introduced the potential for competition between energy retailers by allowing the sale of electricity to any consumer using the current distribution. This has been implemented in two steps: normal consumers in April 1993, and large consumers in April 1994. Increased private sector involvement has also emerged, with local supply authorities participating in both the distribution and retailing of electricity changing their ownership arrangements towards those of companies. Two retail companies are now listed on the Stock Exchange and five other partial privatizations are planned for 1994. (pg. 50, 1994)</p> <p>Greater competition in electricity generation by investigation of further break-up of the state-owned Electricity Corporation of New Zealand Ltd. The ECNZ restructuring commenced in February 1996. The New Zealand Wholesale Electricity Market (NZEM) formally opened in October 1996. [see <a href="http://lawprofessors.typepad.com/files/utilities-ir-article.pdf">http://lawprofessors.typepad.com/files/utilities-ir-article.pdf</a>]</p> <p>In April 1998, the authorities announced a series of reforms aimed at reducing electricity prices for both businesses and households; giving smaller consumers a greater choice of electricity suppliers; and increasing efficiency within the sector. Legislation governing the reform process was passed by Parliament in July 1998. ECNZ is to be split into three separate competing State-owned Enterprises (SOEs) from April 1999. (pg. 59, 1999)</p> <p>Electricity Industry Reform Act 1998 [see <a href="http://lawprofessors.typepad.com/files/utilities-ir-article.pdf">http://lawprofessors.typepad.com/files/utilities-ir-article.pdf</a>]</p>	No	1
New Zealand	1993	Market access and structure	<p>The 1992 Electricity Act introduced the potential for competition between energy retailers by allowing the sale of electricity to any consumer using the current distribution. This has been implemented in two steps: normal consumers in April 1993, and large consumers in April 1994. Increased private sector involvement has also emerged, with local supply authorities participating in both the distribution and retailing of electricity changing their ownership arrangements towards those of companies. Two retail companies are now listed on the Stock Exchange and five other partial privatizations are planned for 1994. (pg. 50, 1994)</p>	Yes	1
New Zealand	1997	Market access and structure	<p>Greater competition in electricity generation by investigation of further break-up of the state-owned Electricity Corporation of New Zealand Ltd. The ECNZ restructuring commenced in February 1996. The New Zealand Wholesale Electricity Market (NZEM) formally opened in October 1996. [see <a href="http://lawprofessors.typepad.com/files/utilities-ir-article.pdf">http://lawprofessors.typepad.com/files/utilities-ir-article.pdf</a>]</p>	Yes	1
New Zealand	1999	Market access and structure	<p>In April 1998, the authorities announced a series of reforms aimed at reducing electricity prices for both businesses and households; giving smaller consumers a greater choice of electricity suppliers; and increasing efficiency within the sector. Legislation governing the reform process was passed by Parliament in July 1998. ECNZ is to be split into three separate competing State-owned Enterprises (SOEs) from April 1999. (pg. 59, 1999)</p> <p>Electricity Industry Reform Act 1998 [see <a href="http://lawprofessors.typepad.com/files/utilities-ir-article.pdf">http://lawprofessors.typepad.com/files/utilities-ir-article.pdf</a>]</p>	Yes in 1998	1
Norway	1991	Market access and structure	<p>A new Energy Law, providing an encompassing reform of the electricity market, passed Parliament in June 1990. The Law, which will be effective from 1st January 1991, prepares the ground for a division of production and distribution of electricity. While free competition will be encouraged between producers, the transmission and distribution network system - in substance "natural" monopolies - will be directly regulated with no discrimination of producers being permitted. A reorganization of the State Power Board, producing 30 percent of electricity and in possession of most of the transmission network, including abolition of the State Power Board's monopoly on exports and imports of electricity is considered. (pg. 23-24, 1991)</p> <p>State-owned utility EDP separated into 19 units in 1994 in preparation for privatization. These included the generating sector CPE, the grid company Rede Electrica Nacional and four regionals. The new framework consists of a state owned sector, the Public Electricity Service, and an independent Electricity System for independent generators with third party access to the grid. An independent regulator will be created. [See <a href="http://www.windpowermonthly.com/article/957847/where-deregulation-europe---overview">http://www.windpowermonthly.com/article/957847/where-deregulation-europe---overview</a>]</p>	Yes	1
Portugal	1995	Market access and structure, public ownership	<p>Gradual opening of a third of the electricity market. (pg. 131, 2001)</p> <p>By late 2000, almost 70 per cent of its capital had been sold. These measures were accompanied by the gradual opening of a third of the Portuguese electricity market starting in early 1999, in accordance with EU Directives. (pg. 132, 2001)</p> <p>The restructuring of the energy sector has started, with the pro-competitive redeployment of electricity and gas assets. An agreement was reached at the end of 2005 between the government and</p>	Yes	1
Portugal	2000	Market access and structure, public ownership		Yes	1
Portugal	2005	Market access and structure		Yes	1

				the other shareholders of the companies involved, including major European energy players, such as the Italian firm ENI. According to the project, two large energy players are expected to compete in the domestic market, whereas the transport and storage segments of the industry (high pressure gas distribution, electricity transmission, and gas storage) would be held by a separate company under a concession contract. Appropriate third-party access clauses would be incorporated into the contract, which will be subject to regulatory oversight. (pg. 127, 2006)			
Slovak Rep.	2002	Market access and structure		The electricity sector has been dominated by Slovenske Elektrarne (SE), which operates the transmission network and generates 84 per cent of total power, and by three regional electricity distribution companies, which cover the western, central and eastern regions of the country. All are completely government-owned. In 2001, SE was split into a transmission company, which will remain 100 per cent government-owned, and a generating company... The government has approved the sale of a 49 per cent share in the distribution companies to three strategic foreign investors...As for the restructured SE, which no longer includes the transmission function, the government hopes to sell a 45 per cent share by the end of 2002. In 2002, electricity market liberalization became effective, enabling large corporate consumers to import electricity from abroad. (pg. 127-128, 2002)	Yes	1	
Slovak Rep.	2003	Public ownership		September 2002: The antimonopoly office approved the sale of 49% in regional power distributors Zapadoslovenska Energetika (ZSE), Vychodoslovenska Energetika (VSE), Stredoslovenska Energetika (SEE) to, respectively, Germany-based E.ON Energie, Germany-based RWE Plus, and France-based Edf. (pg. 158, 2004)	Yes	1	
Slovak Rep.	2005	Public ownership		The government sold 66% stake in the monopoly electricity producer Slovenske Elektrarne (SE) to Italian ENEL in February 2005. (pg. 110, 2005)	Yes in 2004	1	
Slovak Rep.	2008	Market access and structure		Implemented most EU regulation on legal and managerial separation: managerial separation of electricity distribution to be completed by July 2007. (pg. 45, 2007)  Managerial separation has been put in place in both the gas and electricity transport networks. Legal unbundling of companies operating gas and electricity network is virtually complete, with legal unbundling of electricity distribution networks to be finalized by July 2007, in line with the deadlines set in European Union legislation. Moreover, ownership of the electricity transmission network was legally unbundled from ownership of electricity generation assets before the partial privatization of the incumbent company owning most generation capacity (SE), which allows ownership separation to be achieved in electricity transmission. (pg. 103, 2007)	Yes in 2009	1	
Spain	1998	Market access and structure, public ownership		Parliament passed a new electricity law in November 1997 which introduces a major restructuring of the sector and should provide, along with the envisaged full privatization of Endesa, a significant boost to competition in the sector. The main components of the new legislation are the following: 1. Competition and efficiency in generation will be enhanced by a new wholesale spot market where orders will be accepted according to the attractiveness of price bids, and the marginal price of the pool will determine the price for electricity generation. 2. Firms are required to separate generation and transmission by end-2000. 3. The transmission grid will henceforth to be operated by a privately owned company (Red Electrica) in which ownership shares are capped and electricity companies cannot own more than 40 per cent in total... 4. Competition will gradually be introduced into the supply of electricity, as large consumers are gradually allowed to choose their suppliers; (pg. 104-106, 1998)	Yes	1	
Sweden	1992	Market access and structure		The Spanish electricity reform law, passed in December 1997, has created a wholesale market, introduced choice for the largest electricity customers and cut prices for those remaining under regulated tariffs. Amendments in December 1998 and April 1999 widened the choice for medium-sized consumers, further cut regulated prices, and encouraged greater activity in the wholesale market by lowering access tariffs. (pg. 71, 2000)  The 1997 reform law concerning the electricity sector outlined a liberalisation process that would have ended in 2007. (pg. 79, 2001)  The nation-wide electricity grid was recently (January 1992) separated from the state electricity company, which is by far the largest producer of electricity. (pg. 83, 1992)	No	1	

				...competitive forces have been given greater leverage in the electricity market. In 1992, the responsibility for electricity transmission – the national grid – was separated into a government-owned utility (Svenska kraftnat) while government-owned generation facilities was regrouped into an incorporated entity (Vattenfall AB). (pg. 158, 1997)	pg. 158, 1997		
Sweden	1996	Market access and structure		The government has proposed to open up the electricity market to competition as from January 1996. (pg. 54, 1995) [See also <a href="http://www.vaasaett.com/wp-content/uploads/2010/01/Electricity-Market-Reforms.pdf">http://www.vaasaett.com/wp-content/uploads/2010/01/Electricity-Market-Reforms.pdf</a> , pg. 17]		Yes	1
Switzerland	2001	Market access and structure		In 2000, the Swiss Parliament approved a reform of the electricity market that will phase in competition over six years. The law broadly follows the EU's liberalization approach. The two pillars of the reform are third party access to the electricity network and separation of generation, transmission and distribution. (pg. 100, 2002)		No	1
United Kingdom	1990	Market access and structure		The opening of the market will take place in three steps, giving first large customers (30 per cent of total consumption) the provider choice; medium-sized customers (adding up to 50 per cent of the market) will be able to choose three years later, and the other consumers after a further three years. Transmission will be operated by a single company, which will ensure equal conditions for all actors (generators, suppliers, traders and consumers) on the highest tension level of the grid. (pg. 100, 2002)	pg. 106, 2003		
				The promotion of the privatisation of 12 regional electricity companies in England and Wales begins. Competition has been introduced into electricity generation in England and Wales by the creation of two companies, which will compete with each other and with Scottish, French, nuclear and private generators. The twelve regional distribution companies will be privatised in the Autumn of 1990 and are also competing to attract large customers. (pg. 44, 1990)	pg. 168, 2004	Yes	1
United States	1992	Market access and structure		Electricity generation, transmission and distribution were split into vertically separate, privatised companies in 1990...Competitive markets now exist in both gas and electricity wholesale market. (pg. 168, 2004)	pg. 69, 1999 pg. 145, 2001	No	1
United States	1996	Market access and structure		In 1992 and 1996, federal and many states' electricity policies were changed to encourage market restructuring and the development of competitive wholesale electricity markets. Prior to these changes, regulated, vertically integrated utilities provided generation, transmission and distribution services to customers. (pg. 145, 2001)		No	1
				In 1992 and 1996, federal and many states' electricity policies were changed to encourage market restructuring and the development of competitive wholesale electricity markets. Prior to these changes, regulated, vertically integrated utilities provided generation, transmission and distribution services to customers. The 1996 federal regulatory changes required the electric utilities to functionally unbundle their transmission operations from their generation and distribution services and to provide open access to the interstate transmission grids for all producers. To strengthen this ruling, federal regulators announced in 2000 that they would encourage the development of regional transmission organizations to replace the utilities as operators of the transmission system. Since 1996, electricity markets have been restructured in half of the states, although progress in a number of other states has been slowed by recent developments in some deregulated markets. Deregulation proceeded first in states with the highest electricity prices, such as California, Pennsylvania, and New York, and has been relatively slow to advance in low-cost states. (pg. 146, 2001)			

Table A5. Product Market Regulation, Gas Sector

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Australia	1998	Market access and structure	In November 1997, the State and Federal Governments signed the Natural Gas Pipelines Third Party Access Agreement which set out the terms and conditions under which deregulation was to occur. Full retail contestability occurred in Victoria in October 2002, in South Australia in July 2004 and in Queensland from 1 July 2007. From 1 July 2008, the Australian Energy Regulator ( <a href="http://www.aer.gov.au">www.aer.gov.au</a> )			Yes	1

Australia	2005	Market access and structure	<p>took over responsibility for economic regulation of the gas distribution and transmission sectors [See <a href="http://www.australiangasnetworks.com.au/our-business/regulation-and-network-tariffs/regulatory-regime/">http://www.australiangasnetworks.com.au/our-business/regulation-and-network-tariffs/regulatory-regime/</a>]</p> <p>Natural gas was deregulated in Western Australia in 2004 to give customers the power to choose. There are approximately three licensed energy retailers competing for consumer gas business in the Western Australian market...The NCP programme comprised a similar reform of the gas market with the main elements being structural separation of transmission, distribution, production and retail sectors; the introduction by all governments of third party access regulation for natural gas pipelines; and the provision for all gas consumers to choose their supplier. These reforms of the gas market are largely complete, although there is a need to consider the regulatory framework underlying the natural gas industry, which has been addressed through the establishment of a new energy regulator. (pg. 110, 2006)</p> <p>The full opening of the natural gas market, envisaged for 2002, makes Austria one of the first EU countries committed to full liberalization... (pg. 82, 2001)</p>	...significant steps are under way in regulatory reform, notably in terms of sharpening general competition legislation and stepping up competition in the electricity and gas markets. (pg. 68, 2001)	Yes	1
Austria	2002	Market access and structure	<p>Austria has fully opened up its telecommunications (1997), electricity (2001) and gas (2002) sectors in advance of the deadlines imposed by EU directives. (pg. 94, 2003)</p> <p>Among the transactions that occurred that year (1996), the initial public offer (16.60 per cent of capital) of the Belgian gas treatment, transmission and storage monopoly Distrigaz is to be mentioned. The Belgian government later sold its remaining share in the company, but retains one golden share... [see <a href="http://www.privatizationbarometer.com/atlas.php?id=6&amp;mn=PM">http://www.privatizationbarometer.com/atlas.php?id=6&amp;mn=PM</a>]</p>		Yes in 2001 and 2002	1
Belgium	1996	Public ownership	<p>Where the gas market is concerned, final customers consuming 25 million m<sup>3</sup> per year or more will be eligible (to choose suppliers) as from 10 August 2000. This corresponds in principle to a 47 per cent opening up of the Belgian market, but a minimum of 20 per cent should be achieved by 10 August. (pg. 142, 2001)</p>		Yes in 1995	1
Belgium	2000	Market access and structure	<p>In the gas market, transport and retail have been unbundled and the eligible part of the market broadened in July 2001 and now covers some 58 per cent of the total market. Consumers will get free choice of suppliers in October 2006. (pg. 146, 2003)</p>	(pg. 146, 2003)	Yes	1
Belgium	2003	Market access and structure, public ownership	<p>All companies become eligible to choose their gas and electricity provider in Flanders. Liberalisation is to be extended to the general public on 1 July. The Flemish region has been more pro-active than other regions in liberalizing the electricity and gas markets, granting all clients free choice of supplier by mid-2003. At the national level, access prices to the gas transport network have switched from being negotiated to being regulated... (pg. 20, 2003)</p>	Elaboration of the detailed terms of third-party access is well advanced in the electricity and gas markets. (pg. 19, 2003)	Yes	1
Canada	1986	Market access and structure	<p>The single most significant deregulation initiative was the Western Accord (March 1985) which removed oil and gas price controls, in principle, as well as taxes and restrictions on imports and exports. Some controls remain in principle, although their application has been somewhat modified ... The Accord was followed by the Natural Gas Agreement which largely deregulated the industry and allowed prices to be negotiated by buyers and sellers. Before this, federal regulations kept natural gas prices below oil-price equivalents to encourage substitution. (pg. 73, 1988)</p>	The single most significant deregulation initiative was the Western Accord... (pg. 73, 1988)	Yes in 1986/88	1
Czech Republic	2001	Market access and structure	<p>... the Czech government has taken several important steps to introduce competition and effective regulation into the gas market. These include the passage of a new Energy Act in November 2000 that paves the way for the gradual introduction of international and domestic competition into the natural gas sector and the establishment of new independent regulators in the energy sectors. (pg. 129, 2001)</p>	...several important steps to introduce competition and effective regulation into the gas market. These include the passage of a new Energy Act in November 2000... (pg. 129, 2001)	Yes in 2000	1
Czech Republic	2002	Public ownership	<p>The privatisation agency receives € 4.1 billion for the state's 97 per cent stake in the natural gas company Transgas. Having effectively restored an integrated gas industry in 2001, the government sold its controlling stakes in the transit firm Transgas and six regional distributors, as well as large minority stakes in the remaining two distributors to RWE of Germany... (pg. 126, 2003)</p>		Yes	1
Czech Republic	2005	Market access and structure	<p>One step towards opening the gas market was made in 2004 with the introduction of account unbundling that will increase the transparency of pricing. Amendment of the Energy Act, in the process of parliamentary approval in autumn 2004, will introduce several steps towards creating a better regulatory environment for competition. These include introducing regulated third-party access to the pipeline and gas storage, definition of last-resort suppliers and obligation to legally</p>	Amendment of the Energy Act...will introduce several steps towards creating a better regulatory environment for competition... (pg. 120, 2004)	Yes	1

Czech Republic	2009	Market access and structure	<p>separate transmission from other activities. The implementation of the amended Energy Act therefore looks set to bring welcome increase in market access. (pg. 120, 2004)</p> <p>First alternative gas suppliers entered in 2008 with significant deliveries starting in 2009 in the key account segment. [See p. 10 in <a href="http://www.energyrisksitevents.com/digital_assets/6498/Jiri_Milynar.pdf">http://www.energyrisksitevents.com/digital_assets/6498/Jiri_Milynar.pdf</a>]</p> <p>Present liberalisation opens up competition for 15 large consumers from 2003. State-owned Danish National Oil and Gas (DONG) remains a de facto monopoly, although it has been required to separate transmission and storage from supply. DONG's position has been weakened in the last couple of years, however, starting with the requirement of corporate separation of monopoly and competitive activities and the introduction of regulated third-party-access to the networks from 2003. Furthermore, DONG's near-monopoly on purchasing gas produced by the privately owned DUC was broken in 2003 when the two companies reached a settlement with Danish and European competition authorities involving the sale of 17% of DUC's gas to other companies. Finally, on 1 January 2004 operation and ownership of the transmission net was transferred to a new state-owned company, which is fully independent of DONG. (pg. 118, 2005)</p> <p>From 2004, households have had free choice of supplier. The gas transmission network has been separated from the dominant producer and distributor, DONG. (pg. 94, 2005)</p> <p>Under the Natural Gas Supply Act, a corporate unbundling of transmission, distribution, and storage activities and the supply of non-eligible customers from commercial trade should be affected from 1 January 2003...The market has been fully opened by 1 January 2004 [see pg. 8, <a href="http://ec.europa.eu/social/objservlet?docId=3452&amp;langId=da">http://ec.europa.eu/social/objservlet?docId=3452&amp;langId=da</a>]</p>		Yes in 2010	1
Denmark	2003	Market access and structure, public ownership	<p>The Neste natural gas unit was incorporated, and Gasum Oy was established. The company's majority owner was Neste (75%) and the minority owner was the Russian Gazprom (25%). [See <a href="http://www.gasum.com/Corporate_info/Gasum-in-brief/History/Milestones-in-Finland/">http://www.gasum.com/Corporate_info/Gasum-in-brief/History/Milestones-in-Finland/</a>]</p> <p>French Gas Act 2003, transposing EU directive, aims to gradually liberalize the gas market. [see <a href="https://www.eni.com/en_FR/products-services/natural-gas-market-france-natural-gas-market-france.shtml">https://www.eni.com/en_FR/products-services/natural-gas-market-france-natural-gas-market-france.shtml</a>]</p>		Yes	1
Finland	1994	Market access and structure, public ownership	<p>EU regulations on competition in the electricity sector have been transcribed into French law. The historic electricity and gas monopolists (EDF and GDF) are being transformed into joint stock companies [in 2005]. Vertical separation in the gas and electricity sector was enforced in December 2006. (pg. 41, 2007)</p>		Yes	1
France	2003	Market access and structure	<p>The natural gas market was liberalised in 1998 and the first Associations' Agreement came into force in mid-2000. (Note: German produced natural gas covers about a fifth of domestic demand. Nearly all import of natural gas is undertaken by six of the supra-regional companies long-term take-or-pay contracts with Russia (45 per cent of all imports), Norway (27 per cent) and the Netherlands (22 per cent). The agreement was amended twice in 2001 to include access to storage facilities and networks, rules for ensuring the free choice of gas provider by the final customer, and consumer profiles for smaller customers. (pg. 133, 2002)</p>		Yes	1
France	2005	Market access and structure, public ownership	<p>New legislation setting the rules for the regulation of network access in the electricity and gas industries was introduced in July 2005. In a transitory phase expected to last for a year, the FNA and state regulators are approving all network access prices in the gas and electricity industries on the basis of average cost benchmarks for groups of network operators with similar cost characteristics such as population density. The regulators are subsequently expected to move to price-cap regulation. (pg. 135, 2006)</p>		Yes	1
Germany	1998	Market access and structure	<p>The 2003 law opened the (gas) market, as of July 2005, for all power producers and co-generators with consumption exceeding 25 million cubic meters per year. It also introduced regulated third-party access for the gas transmission system. (note 10 on pg. 135, 2007)</p>		Yes	1
Germany	2005	Market access and structure	<p>Bord Gáis has split into four business units. The business unit for transmission has a separate management and operates independently of the remainder of the company and, under Bord Gáis' code of practice, is to offer the same services at the same prices to the remainder of Bord Gáis as it offers to third parties and must not share business sensitive information obtained in the course of carrying out its transmission business with other units. Under the corporate governance Bord Gáis has imposed upon itself, each business unit is to operate in a commercial, arm's length and transparent manner, and not cross subsidize. Each business unit keeps separate accounts and</p>	Germany has taken considerable steps to open product markets to competition. Germany moved early in allowing consumers to choose their suppliers in network industries, notably in the electricity and gas industries. (pg. 118, 2006)	Yes	1
Germany	2005	Market access and structure		pg. 140, 2008	Yes	1
Greece	2006	Market access and structure, public ownership			Yes	1
Ireland	1995	Market access and structure			Yes	1

Ireland	2001	Market access and structure	<p>presents financial statements as though they were separate incorporated entities. [See <a href="https://www.oecd.org/regreform/2511011.pdf">https://www.oecd.org/regreform/2511011.pdf</a>, pg. 16]</p> <p>Since 1995, gas consumers with annual usage above 25mcm/year and since August 2000, all power generators irrespective of size, have been able to choose their gas supplier and transport the gas through Bord Gáis' network (pg. 71, 2001 and <a href="https://www.oecd.org/regreform/2511011.pdf">https://www.oecd.org/regreform/2511011.pdf</a>, pg. 7)</p> <p>With respect to gas supply, in March 2001 the Government proposed to accelerate liberalisation by allowing customers with annual consumption below 2 million cubic meters to have regulated access to the gas network (this amounts to about 100 customers) and to aim for liberalisation of all consumers by 2005 (<a href="https://www.oecd.org/regreform/2511011.pdf">https://www.oecd.org/regreform/2511011.pdf</a>, pg. 18)</p> <p>In May 2010 Airticity enters domestic gas market. In April 2011, Electric Ireland enters domestic gas market. In October 2011, the business market segments were deregulated. [See <a href="http://www.cer.ie/docs/001035/CER15112%20The%20Electricity%20and%20Gas%20Retail%20Market%20Report%202014.pdf">http://www.cer.ie/docs/001035/CER15112%20The%20Electricity%20and%20Gas%20Retail%20Market%20Report%202014.pdf</a>]</p>	Yes	1
Ireland	2010	Market access and structure	<p>Completion of privatization of ENI, whose subsidiary Snam dominates the gas market, and some increase in competition regarding access to network [see e.g. <a href="http://www.oecd.org/regreform/sectors/1920080.pdf">http://www.oecd.org/regreform/sectors/1920080.pdf</a>]</p>	Yes	1
Italy	1998	Market access and structure, public ownership	<p>Under the Directive 98/30, EU member countries are requested to open at least 20 per cent of their gas markets from August 2000 and a further 13 per cent over the following decade. The draft decree aimed at transposing the gas directive was approved by the government in February 2000. (pg.143, 2000)</p> <p>The Italian Ministry of Industry has recently announced that the EU Directive 98/30/CE aimed at liberalising the European natural gas market will be adopted by the end of February 2000 on the basis of the guiding principles recently indicated by Parliament in art. 41 of law n° 144 of 17 May 1998. [see <a href="http://www.oecd.org/regreform/sectors/1920080.pdf">http://www.oecd.org/regreform/sectors/1920080.pdf</a> ]</p>	Yes	1
Italy	2000	Market access and structure	<p>Phase two of Japan's gas liberalization was adopted in May 1999 and went into effect in November 1999. These revisions expanded the contestable market to eligible consumers of at least one million m3 per year, or approximately 993 large-lot users. Designated general gas companies were also ordered to grant third-party access to gas pipelines on a non-discriminatory basis. [see e.g. <a href="https://www.routledge.com/Energy-Security-in-Japan-Challenges-After-Fukushima/Vivoda/n/book/9781409455301">https://www.routledge.com/Energy-Security-in-Japan-Challenges-After-Fukushima/Vivoda/n/book/9781409455301</a> ]</p>	Yes	1
Japan	2000	Market access and structure	<p>...a new law that will bring Luxembourg into conformity with its Single Market commitments should be legislated next year. A Bill transposing the EU Directive 98/30/CE of 11 May 1998, concerning common rules for the natural gas market was presented to Parliament on 17 August 2000 and will be voted on as soon as constitutional procedures have been implemented. The project provides for the opening of more than 51 per cent of the market from the beginning. This should rise to more than 70 per cent by the end of 2001 and then steadily increase to around 100 per cent in 2010... (pg. 75, 2001)</p>	Yes	1
Luxembourg	2001	Market access and structure, public ownership	<p>The Gas Act – which is in line with the EU Gas Directive – has been sent to Parliament and is expected to come into force in 2000. Under this Act, licences will be needed only to service captive users. Tariffs for these users will be subject to a price cap system, supervised by the Competition Authority (NMA). (pg. 70, 2000)</p>	Yes	1
Netherlands	2001	Market access and structure	<p>Owing to the 2000 Gas Act, which is in line with the EU Gas Directive, in August 2000 the gas market was liberalised for large-scale consumers, and next year medium-size consumers will also be free to choose their gas supplier. For the time being, the national distribution network is still managed by only one company (Gasunie). In 2002 the gas market will have to be completely liberalised. Like in the electricity market the management and the legal ownership of networks will be separated (pg. 99, 2002)</p>	Yes in 2000	1
New Zealand	1988	Public ownership	<p>Gas industry reforms began in 1987 and the sector was largely privatised. The government is still a party in the Maui gas contracts, although the effective purchasers are the major gas users. (pg. 68, 2005)</p>	Yes	1

New Zealand	1993	Market access and structure	1992 Gas Act...legislation injected competition in the gas market through the termination of exclusive franchise arrangements, introduced information disclosure regulation and removed price control (the 1992 Gas Act and the 1997 Gas Information Disclosure Regulations). (pg. 68, 2005)		Pg.68, 2005	No	1
New Zealand	1999	Market access and structure	NGC (Natural Gas Corporation of New Zealand Limited) operated as part of Fletcher Challenge until 1992, when FCL floated off two-thirds of NGC, a third to Sydney-based Australian Gas Light Company (AGL), and a third to the public via the NZX. In 1999, AGL acquired FCL's one-third interest to become a two-thirds majority shareholder of NGC. [See <a href="http://www.gasindustry.co.nz/dmsdocument/4128">www.gasindustry.co.nz/dmsdocument/4128</a> ]			Yes	1
New Zealand	2007	Market access and structure	Vector Pipeline Code. Code-based regime replaces bilateral contract approach to Vector (formerly NGC) transmission system. [See <a href="http://www.gasindustry.co.nz/dmsdocument/4128">www.gasindustry.co.nz/dmsdocument/4128</a> ]			Yes	1
Norway	2002	Market access and structure, public ownership	Norway's Oil and Energy Ministry Dismantled the gas sales monopoly on January 1st 2002. The shift in policy means that all gas producers and operators on the Norwegian continental shelf are now free to negotiate sales contracts on an individual basis [See "Norway: Doing Business and Investing in Norway Guide—A Practical Guide", 2015, International Business Publications, USA, pg. 237]			Yes in 2003	1
Portugal	2000	Public ownership	GALP was partially privatized in 2000. Creation of Petróleo e Gas de Portugal (GALP), merging the national oil company (PETROGAL) and the national gas company (GDP). (pg. 133, 2001)			Yes in 1999	1
Portugal	2003	Market access and structure	...transposition of Directive No. 2003/55/CE in June 2003. The Directive set general principles for the organization and functioning of the national natural gas sector, the exercise of the activities of reception, storage, transmission, distribution and supply of natural gas and the organization of natural gas market. Reception, storage and transmission activities will have unbundled ownership. There would also be third party regulated access to the reception, storage, transmission and distribution infrastructure. [see <a href="http://www.ceer.eu/portal/page/portal/FEER_HOME/FEER_ACTIVITIES/FEER_INITIATIVES/GRI/South/M eetings1/RCC_meetings/2nd_South_RCC/DD/2ndRCCMeeting%20presentac%C3%B3n%20portugues es.pdf">http://www.ceer.eu/portal/page/portal/FEER_HOME/FEER_ACTIVITIES/FEER_INITIATIVES/GRI/South/M eetings1/RCC_meetings/2nd_South_RCC/DD/2ndRCCMeeting%20presentac%C3%B3n%20portugues es.pdf</a> ]			Yes	1
Portugal	2006	Market access and structure, public ownership	The restructuring of the energy sector has started, with the pro-competitive redeployment of electricity and gas assets. An agreement was reached at the end of 2005 between the government and the other shareholders of the companies involved, including major European energy players, such as the Italian firm ENI. According to the project, two large energy players are expected to compete in the domestic market, whereas the transport and storage segments of the industry (high pressure gas distribution, electricity transmission, and gas storage) would be held by a separate company under a concession contract. Appropriate third-party access clauses would be incorporated into the contract, which will be subject to regulatory oversight. ... As regards the opening of the Portuguese gas market, implementation of the EU directives benefits from derogation until 2007. In view of the introduction of natural gas supply in Portugal and the foreseen creation of MIBEL, the government has started to take steps to open up. (pg. 127, 2006)			Yes	1
Portugal	2010	Market access and structure	January 1, 2009: Liberalization of commercialization of natural gas applies to big consumers. January 1, 2010: Liberalization of commercialization of natural gas accessible to all Portuguese consumers. [see <a href="http://galbgasnaturaldistribuicao.pt/Quem-somos/Hist%C3%B3ria">http://galbgasnaturaldistribuicao.pt/Quem-somos/Hist%C3%B3ria</a> ]			Yes	1
Slovak Republic	2002	Market access and structure, public ownership	In 1999, the new government repealed the 1995 law and allowed the privatization of some of the strategic enterprises, subject to the advice of Parliament. In the case of the gas and electricity sectors, though, it was stipulated that the state must maintain a permanent share of at least 51 percent. The government announced in 2000 a list of 60 state-owned enterprises to be privatized. (pg. 126, 2002)			Yes	1
Slovak Republic	2007	Market access and structure	Slovak Gas Company privatized in December 2001. [see <a href="http://www.imi.org/external/np/loi/2001/svk/01">http://www.imi.org/external/np/loi/2001/svk/01</a> ] The Slovak Republic implemented wide-ranging reforms to introduce competition in energy markets... Managerial separation has been put in place in both the gas and electricity transport networks. Legal unbundling of companies operating gas and electricity network is virtually complete. (pg. 105, 2007)	... wide-ranging reforms to introduce competition in energy markets... (pg. 105, 2007)		Yes	1

Slovak Republic	2009	Market access and structure	<p>First alternative gas suppliers entered in 2008 with significant deliveries starting in 2009 in the key account segment. [see <a href="http://www.energiriskevents.com/digital_assets/6498/fin_mvlnar.pdf">http://www.energiriskevents.com/digital_assets/6498/fin_mvlnar.pdf</a> ]</p> <p>The start of competition in natural gas market in the segment of corporate clients have been much more convincing. Approximately one year after RWE Gas Slovensko entered the market in the segment of corporate clients, SPP as the predominant player and former gas monopoly lost its biggest customer – Duslo Šala. It happened in 2009... Besides Duslo Šala, RWE Gas Slovensko acquired also other big companies like Tepláreň Košice, Mondi SCP Ružomberok, Heineken Slovensko, Vetropack Nemšová or SHP Harmanec. [See <a href="http://www.energislovakia.sk/2012/11/slovak-market-gradually-deregulates.html">http://www.energislovakia.sk/2012/11/slovak-market-gradually-deregulates.html</a> ]</p>	Yes in 2010		1
Spain	1995	Market access and structure, public ownership	<p>Enagás, which was founded in 1975 by the Spanish government for the establishment of a national gas infrastructure, was privatized in 1994. [see <a href="https://www.citiadr.idmanagedsolutions.com/stocks/profile.idms?cusip=292481104">https://www.citiadr.idmanagedsolutions.com/stocks/profile.idms?cusip=292481104</a> and <a href="http://gide.unileon.es/admin/UploadFolde/47.pdf">http://gide.unileon.es/admin/UploadFolde/47.pdf</a> ]</p> <p>Third party access to the transportation system has been restrictive despite the September 1996 reform which permitted access to very large consumers. Draft legislation introduced in December 1997 should improve third party access and facilitate the entry of new operators. (pg. 117, 1998)</p>	Yes		1
Spain	1998	Market access and structure	<p>The 1998 Hydrocarbon law has liberalized gas supply to large consumers and power generators, and provided third party access to pipelines and LNG terminals (pg. 73, 2000)</p>	Yes	pg. 62, 2005	1
Spain	2003	Market access and structure	<p>The government presents a liberalization package that includes measures on many sectors, including telecommunications, electricity, natural gas, oil distribution and retailing. Full liberalization has been brought forward from 2008 to January 2003. By that date all consumers will be able to choose their provider. The supply of natural gas has been fully liberalized and at present, more than 35 suppliers are registered and may present competitive offers to all consumers. (pg. 103, 2003)</p> <p>Reduction in public ownership through privatization operations [see <a href="http://www.privatizationbarometer.net/atlas.php?id=11&amp;mm=PM">http://www.privatizationbarometer.net/atlas.php?id=11&amp;mm=PM</a> ]</p>	Yes	pg. 58, 76, 85, 2001 pg. 103, 2003	1
Sweden	1995	Public ownership	<p>A new Natural Gas Act entered into force on 1 August 2000. The new act entails adapting Swedish regulations to the EC Directive concerning common rules for the internal market in natural gas. At present, approximately 50 per cent of the natural gas market is open to competition. By 2003, the entire gas market is to be open to competition, taking existing binding agreements into consideration. [See <a href="http://www.government.se/49b737/contentassets/9028a384eb0b4269918653526e21a712/national-report-on-economic-reform-2001">http://www.government.se/49b737/contentassets/9028a384eb0b4269918653526e21a712/national-report-on-economic-reform-2001</a> ]</p>	Yes		1
Sweden	2001	Market access and structure	<p>The second liberalization directives were adopted in 2003 and were to be transposed into national law by Member States by 2004, with some provisions entering into force only in 2007 [EU legislation applicable to the electricity and gas markets]. The Swiss gas industry established a self-regulation system for third-party access. [See OECD, "Reviews of Regulatory Reform: Switzerland", 2004]</p>	Yes in 2000		1
Switzerland	2004	Market access and structure		Yes		1

United Kingdom	1986	Public ownership	Privatization/sale of British Gas (35 percent) and British Gas debt. (pg. 68, 1987)			Yes	1
United Kingdom	1996	Market access and structure	The 1995 Gas Act provides for the extension of full competition into the market below 2500 therms and this will be progressively introduced over the period to 1998. (pg. 62, 1996)		pg. 92, 2013	No	1
United Kingdom	1997	Market access and structure	In February 1996, British Gas announced plans to split into two separate companies: Transco International will operate the distribution network in the United Kingdom, and exploration, production and distribution activities abroad. British Gas Trading includes the gas supply business within the UK, and production from two large gas fields in the UK. (note on pg. 121, 1996)			No	1
United Kingdom	2004	Market access and structure	As a result of increased retail competition, price controls in retail markets in gas and electricity were lifted in April 2002 (pg. 168, 2004) The Second Gas Directive was transposed into UK law by the Gas (Third Party Access) Regulations 2004 (the 2004 Regulations), which came into force on 26 August 2004. [see <a href="https://www.ofgem.gov.uk/ofgem-publications/41339/948176104.pdf">https://www.ofgem.gov.uk/ofgem-publications/41339/948176104.pdf</a> ]			Yes	1

Table A6. Product Market Regulation, Telecommunications Sector

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Australia	1992	Market access and structure	<p>Cabinet approval was given for the merger of Telecom and the Overseas Telecommunications Corporation. The merger will be finalised in January 1992 with the formation of the Australian and Overseas Telecommunications Corporation (AOTC). The sale of the domestic satellite carrier AUSSAT was announced as the basis of introducing a second, private, telecommunications carrier into Australia. It was also announced that the resultant duopoly would remain for five years (to 1997) with fully open competition in telecommunications thereafter. (pg. 100, 1992)</p> <p>...the Telecommunications Act 1991 sought to move towards sustainable competition in telecommunications facilities and services by permitting limited infrastructure competition together with full resale of telecommunications services...A duopoly in fixed line carriage services was introduced...[First] Telecom and OTC were merged in January 1992 to become the publicly owned Australian and Overseas Telecommunications Corporation (AOTC — later known as Telstra). The two carriers were to continue as separate divisions within AOTC, to avoid any crosssubsidisation. [Second] The loss-making Aussat was privatised and formed part of the package for the second carrier licence, awarded to Optus... Where a carrier 'reasonably requested' another carrier to supply services necessary or desirable for the access seeker to supply its services to its customers, the access provider was obliged to do so on terms agreed by the parties or, failing agreement, on terms determined by AUSTEL [the regulator]. [See <a href="http://www.pc.gov.au/inquiries/completed/telecommunications/competition/report/telecommunications3.pdf">http://www.pc.gov.au/inquiries/completed/telecommunications/competition/report/telecommunications3.pdf</a>]</p>	Significant progress has been made in...introducing competition into telecommunications... (pg. 57, 1992)		Yes	1
Australia	1998	Market access and structure, public ownership	<p>On 1 July a new regulatory regime for the telecommunications industry came into operation. The Telecommunications Act 1997 establishes open market access for both telecommunications infrastructure providers and service providers. (pg. 163, 1998)</p> <p>Reform efforts have also been undertaken in...telecommunications, where the Commonwealth Government enacted legislation which provides full and open competition with no restriction on the number of providers or installers of network structure, and no industry-specific limits on foreign investment in new carriers as from July 1997. (pg. 77, 1998)</p>	...provides full and open competition with no restriction on the number of providers or installers of network structure, and no industry-specific limits on foreign investment in new carriers... (pg. 77, 1998)	pg. 68, 1995 pg. 87, 1998 pg. 115, 2000 pg. 133, 2003 pg. 135, 2004	Yes in 1997	1
Australia	2007	Public ownership	<p>Telstra was privatized. [See <a href="http://onlineibrary.wiley.com/doi/10.1111/1467-8462.12072/full">http://onlineibrary.wiley.com/doi/10.1111/1467-8462.12072/full</a>]</p>			Yes	1
Austria	1998	Market access and structure, public ownership	<p>...progress has been made in the telecommunications sector, where a new telecommunications law came into force in August 1997. The law establishes the regulatory framework for introducing competition into the market for telecommunications. With respect to infrastructure, it allows the establishment of telecom networks without approval and without fees. Suppliers of telecom services with a dominant market position are required to grant competitors open access to their network. (pg. 113, 1998)</p> <p>As for the completion of the privatisation process, at present, the government's shares in Telekom Austria, the Post Office (gebilbe Post) and the Post Bus (Postbus) are combined in a holding (Post und Telekom Austria Aktiengesellschaft, PTA). In October 1998 25 percent of Telekom Austria was sold to STEI/Telecom Italia. (pg. 54, 1999)</p>	...progress has been made in the telecommunications sector... (pg. 113, 1998)	pg. 68, 1999 pg. 94, 2003	Yes in 1999	1
Austria	2000	Public ownership	<p>In May 2000, new legislation came into force allocating federal ownerships in the postal and telecommunication sectors under the roof of Austria's public sector industrial holding (ÖIAG). The ÖIAG was commissioned to sell a large share of federally-owned entities over the next couple of years, according to a pre-specified plan. Substantial privatisations followed, comprising inter alia almost 30 per cent of Austria Telekom and all federal shares in Austria Tabak. Although in some cases shares were sold to other public sector owners... (pg. 62, 2001)</p>	...the programme marks significant progress in Austria's privatisation policies (pg. 62, 2001)			

Belgium	1996	Public ownership	A participation of 49.9 per cent. in the national telecommunication firm, Belgacom, is sold to a consortium comprised of Ameritech, Tele Danmark and Singapore Telecom. Belgacom became a Société anonyme and was subsequently partially privatised in December 1995. A participation of 49.9 per cent. has been sold for a total amount of BF 73.3 billion to a foreign consortium. Furthermore, the Belgacom monopoly in mobile telephony has been transformed into a duopoly... This has followed the opening up of the EU market for mobile telephony in January 1996 (pg.132, 1997).			Yes	1
Belgium	1998	Market access and structure	The government decides to liberalise telecommunications markets completely from 1 January 1998. (pg. 104, 1999)	The government decides to liberalise telecommunications markets completely from 1 January 1998. (pg. 104, 1999)		Yes in 1999	1
Belgium	2000	Market access and structure	In the telecommunications sector, the government took a number of measures in October 1999 to fully erase the lag in the transposition of EC directives, especially concerning the portability of numbers. Other projects adopted include: the way that interconnection operates; the determination of the accounting principles to be complied with by large operators; and the conditions on which such operators will lease their lines. European regulations governing privacy in telecommunications will also be transposed into Belgian law. The federal government approves the contract specifications for a third mobile telephone (GSM) network. Creation of Telenet-Flandres, a telecommunications network which will compete with the federal telephone company Belgacom. (pg. 81, 2001)	The liberalisation process has been quite rapid...in the telecommunication sector. (pg. 15, 2001)		No	1
Canada	1985	Market access and structure	In 1984 competition in telecommunication services was liberalized when CRTc allowed limited resale and shared use of private-line services. (see <a href="http://www.crtc.ca/eng/archive/1994/DT194-19.HTM">http://www.crtc.ca/eng/archive/1994/DT194-19.HTM</a> and Crandall R. and L. Waverman (1995), "Talk is Cheap: The Promise of Regulatory Reform in North American Telecommunications", The Brookings Institution, Washington D.C. pg. 8)			Yes	1
Canada	1991	Market access and structure	The Canadian Radio-television and Telecommunications Commission allows open entry in the long-distance telephone market. [See <a href="http://www.crtc.ca/eng/archive/1992/dt92-12.htm">http://www.crtc.ca/eng/archive/1992/dt92-12.htm</a> ]			Yes	1
Canada	1994	Market access and structure	In 1993 Canada established a new Telecommunications Act (pg. 62, 1997)		pg. 74, 2003	Yes in 1995	1
Czech Republic	1995	Market access and structure, public ownership	In July 1995 a consortium of foreign firms took a 27% stake in SPT Telecom, reducing public ownership together with a concomitant decline in barriers to entry. (See World Bank (1999), "Czech Republic: Toward EU Accession: Main Report", World Bank Group, Washington D.C, pg. 231-232)			Yes	1
Czech Republic	2001	Market access and structure	Following the collapse of talks between the dominant fixed-line operator (Cesky Telecom) and its competitors, the telecoms regulator sets interconnection rates charged for network access, paving the way for increased competition in fixed-line telephony. As of 1 January 2001 the monopoly of the state controlled Cesky Telecom (CT) was abolished and alternative carriers have since entered the fixed-line voice telephony market. (pg. 130, 2001)	...the monopoly of the state controlled Cesky Telecom (CT) was abolished....(pg. 130, 2001)		Yes	1
Czech Republic	2003	Market access and structure	The authorities have approved a new National Telecommunications Policy that will describe steps to strengthen regulation, encourage further liberalisation of the market and open it up to competition. Moreover, a new draft Telecom law has passed its first reading in the parliament. (pg. 88, 2000) [See <a href="http://www.oecd.org/regreform/2906517.pdf">http://www.oecd.org/regreform/2906517.pdf</a> ]			No	1
Czech Republic	2006	Public ownership	The introduction of call-by-call carrier selection in July 2002 and carrier pre-selection as well as number portability in January 2003...should start showing some effects...if the regulator (Czech Telecommunications Office or CTO) ensures that effective implementation procedures are in place (pg. 124, 2003)	...should start showing some effects... (pg. 124, 2003)	pg. 114, 2004	Yes	1
Denmark	1992	Market access and structure, public ownership	Telefonica bought Cesky telecom in April 2005. [see <a href="https://www.telefonica.com/en/web/shareholders/investors/">https://www.telefonica.com/en/web/shareholders/investors/</a> ] Competition in the product market will be enhanced by a liberalisation in some segments of the telecommunications market...In addition, the government expects to raise some Dkr 2.5 billion in 1993 by selling shares in state companies, including 25 per cent of the shares in Copenhagen Airport and the Postal Giro and 49 per cent of the shares in TeleDanmark, the Telecom holding company which now covers all publicly-owned telecommunications. (pg. 99, 1993)			Yes in 1992	1
			Liberalisation of the cellular communications market for GSM system in 1992.				

Denmark	1995	Market access and structure	<p>[see <a href="https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p> <p>Tele Denmark, the national provider of telecommunication services is scheduled to be exposed to competition along the lines of EU's Telecommunication Directive. As a first step toward liberalisation, the company's monopoly on operating the network was curtailed... (pg. 106, 1996)</p>	...the company's monopoly on operating the network was curtailed... (pg. 106, 1996)	No	1
Denmark	1998	Public ownership	<p>The privatisation of Danish Telecom is completed with the sale of the government's remaining 34.4 per cent share of stocks to an American company, Ameritech, for Dkr 21 billion. (pg. 147, 1998)</p> <p>Since 1 January 1994 the Posts and Telecommunications (PTT) have been transformed into a joint stock company with the government retaining full ownership (pg. 43, 1995)</p>	...liberalisation of the telecom industry in Finland appears to be progressing more than required by the EEA and EU agreements (pg. 43-44, 1995)	Yes	1
Finland	1994	Market access and structure	<p>As of 1 January 1994, private suppliers of long distance domestic telecom services have been allowed to operate. Moreover, with effect from 1 July 1994, two private suppliers of international telecommunication services have been admitted to the market, which so far has been the exclusive domain of the state-owned PTT. With these measures, the liberalisation of the telecom industry in Finland appears to be progressing more than required by the EEA and EU agreements (pg. 43-44, 1995)</p>	...liberalisation of the telecom industry in Finland appears to be progressing more than required by the EEA and EU agreements (pg. 43-44, 1995)	Yes	1
Finland	2003	Market access and structure, public ownership	<p>The regulatory framework in the sector was modernised with the incorporation of the EU Electronic Communication Directives into the Communications Market Act in 2003, making the telecommunications regulator (FICORA) the independent regulatory authority of telecommunications with a mandate of promoting competitive markets. The latter implies that FICORA can declare operators to have significant market power and imposes obligations to eliminate impediments to competition. (pg. 103, 2004)</p>	...liberalisation of the telecom industry in Finland appears to be progressing more than required by the EEA and EU agreements (pg. 43-44, 1995)	Yes	1
France	1996	Market access and structure	<p>The 1996 telecommunications law embodied comprehensive European guidelines. The objective was to achieve full liberalisation of telecommunications services in Europe as of January 1, 1998. (pg. 92, 2001)</p> <p>Implementation of the Telecommunications Regulation Law in July 1996 [see <a href="https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p>	...1996 telecommunications law embodied comprehensive European guidelines. (pg. 92, 2001)	Yes	1
France	1997	Market access and structure, public ownership	<p>The Council of Ministers adopts a bill changing the status of France Telecom. In 1997, the enterprise will be incorporated and partly privatised. In 1998, the enterprise monopoly will end. Liberalisation will make a step forward with the partial privatisation of France Telecom and the dismantling of the remaining barriers to competition. (pg. 14, 1997)</p> <p>The mobile telecommunication market has been opened to competition. (pg. 97, 1997)</p>	...the enterprise monopoly will end. Liberalisation will make a step forward with the partial privatisation of France Telecom... (pg. 14, 1997)	Yes	1
France	1998	Market access and structure	<p>An important step was taken at the beginning of 1998 when the telecommunications sector was opened up to competition. The Telecommunications Regulation Authority (ART), set up in early 1997, enforces compliance with the new rules of the game, manages numbering, assigns frequencies and determines the technical and financial conditions for interconnection. (pg. 69, 1999)</p> <p>Telecommunications sector opened up to competition as from 1 January 1998. (pg. 81, 1999)</p> <p>Licenses issued [in Spring 1997] to competing public network and voice telephony operators, effective from 1 January 1998. The telecommunications market opened to full competition on January 1<sup>st</sup> 1998. [see <a href="https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p>	An important step was taken at the beginning of 1998 when the telecommunications sector was opened up to competition. (pg. 69, 1999)	Yes	1
Germany	1989	Market access and structure	<p>The Post Office and Telecommunications Reform Act of 1989 has reorganised the activities of the Deutsche Bundespost, splitting it into three separate entities (the Post, Telecom and the Postal Bank) and restricted cross subsidisation. While broadly maintaining the monopoly of network transmission and telephone services, the remaining telecommunications services, including data transmission, and the market for telecommunication equipment have been opened to private competition. (pg. 42, 1990)</p>	...a first important step to increasing competition in a market which...offers ample opportunities for greater efficiency and future employment gains. (pg. 79, 1988)	No	1
Germany	1996	Market access and structure, public ownership	<p>In the postal and telecommunications field, the so-called Postreform II was introduced from the beginning of 1995, entailing the organisation as joint-stock companies of the three main units: Telekom, Post and Postbank. A first tranche of Telekom shares will be floated in 1996. Moreover, the telecommunications sector will be fully deregulated by 1998, in line with the timetable set by the EC</p>	Important progress has been made in the liberalisation of...telecommunications... (pg. 13, 1997)	Yes	1

Germany	1997	Market access and structure, public ownership	<p>commission. Meanwhile, licences to operate voice telephony in corporate networks will be available to all firms satisfying certain criteria concerning safeguards to guarantee Deutsche Telekom's monopolies and the integrity of the network. (pg. 75, 1995)</p> <p>Liberalisation of the telecommunications sector has proceeded rapidly over the last year (pg. 126, 1998)</p>	<p>Liberalisation of the telecommunications sector has proceeded rapidly over the last year (pg. 126, 1998)</p>	<p>Yes</p>	<p>1</p>
Germany	1998	Market access and structure, public ownership	<p>Continuing the liberalisation in the telecommunications sector, the monopoly of the Deutsche Telekom with respect to wire-bound voice telecommunication is abolished and a new regulatory authority is established. With voice telephony open since the beginning of 1998, competition has spread quickly. The new regulatory authority has been established and decided quite early against the old telephone monopoly (<i>Telekom</i>) by reducing substantially the inter-connection fee it was demanding from potential competitors. Transferability of numbers has also been ensured. (pg. 126, 1998)</p>	<p>Liberalisation of the telecommunications sector has proceeded rapidly over the last year (pg. 126, 1998)</p>	<p>Yes</p>	<p>1</p>
Greece	1993	Market access and structure, public ownership	<p>The monopoly of the Hellenic Telecommunications Organisation (OTE) has been curtailed by allowing the entry of private companies to the areas of high value added products and the provision of mobile telephones. (pg. 42, 1993)</p>	<p>The monopoly of the Hellenic Telecommunications Organisation (OTE) has been curtailed (pg. 42, 1993)</p>	<p>Yes</p>	<p>1</p>
Greece	1996	Market access and structure, public ownership	<p>Partial privatisation of OTE, the Greek Telecommunication Corporation. (pg. 85 and 101, 1996)</p>		<p>Yes</p>	<p>1</p>
Greece	2000	Market access and structure, public ownership	<p>Liberalisation of all telecommunication services, except public voice telecommunication, and full liberalisation of mobile market allowing OTE to participate. [see <a href="https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p> <p>July 1999: Sale of a fourth tranche, 14 per cent, of the Hellenic Telecommunications Organisation (OTE). (pg. 164, 2001)</p>		<p>Yes</p>	<p>1</p>
Greece	2001	Market access and structure, public ownership	<p>As an important development, the government has decided to lift the upper privatisation limit in some key utilities. To this end, legislation was passed in late 2000 permitting the sale of more than 49 per cent of Hellenic Telecommunications Organisation (OTE)... The government has recently announced its intention to abrogate the current privatisation law banning private majority ownership... (pg. 116, 2002)</p> <p>New telecommunications law passed by the Greek Parliament in early December 2000. The law has five basic aims: protect the consumer; safeguard free and healthy competition; safeguard personal information; the provision of universal service; and the growth of telecommunications. [see <a href="https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p>	<p>As an important development, the government has decided to lift the upper privatisation limit in some key utilities (pg. 116, 2002)</p> <p>Concerning product markets, the privatisation agenda has progressed and liberalisation of the telecommunications sector is largely a success. (pg. 18, 2001)</p> <p>The liberalisation of the telecommunications sector has progressed well...the telecommunications sector is fully open to competition since early 2001. (pg. 15, 2001)</p>	<p>Yes</p>	<p>1</p>
Iceland	1998	Market access and structure	<p>May 1998, the national telephone company, Iceland Telecom, began facing its first competitor when Tal hf. started offering mobile phone service. Competition has been fierce. Half of all Icelanders now own a mobile phone with Tal controlling one-sixth of the market. At the end of 1998 another company, Skuma Ltd. began offering international service via the Internet at rates 20-30 per cent less than those offered by Iceland Telecom. A third telephone company, Islandssimi, is to be launched soon, offering comprehensive telecommunications services. (pg. 85, 1999)</p> <p>The government has also started a programme to reorganise publicly owned utilities. As part of the Telecommunications Agreement made in March 1997 under the auspices of the WTO, Iceland agreed to liberalise essentially all basic telecom services. (pg. 86, 1998)</p>	<p>Iceland Telecom, began facing its first competitor...Competition has been fierce. (pg. 85, 1999)</p>	<p>No</p>	<p>1</p>
Iceland	2000	Market access and structure	<p>In order to stimulate competition, the parliament recently passed two new laws governing the telecommunications sector, thereby bringing Iceland into line with most OECD countries in terms of regulatory structures and safeguards imposed on incumbent operators. They are designed to promote competition and ensure that Icelandic law complies with the country's obligation, as a member of the European Economic Area, to implement European Union directives. The overriding objective of these laws (The Telecommunications Act of 28 December 1999) was to prevent anti-competitive behaviour. (pg. 83-84, 2001)</p> <p>The second act, which came into effect on 1 January 2000, gives the regulatory powers defined in the Telecom Act to the Post and Telecom Administration (PTA), an independent government agency</p>	<p>...bringing Iceland into line with most OECD countries. (pg. 83-84, 2001)</p>	<p>Yes in 1999</p>	<p>1</p>

			reporting to the Minister of Communications. It has the responsibility of issuing licences according to the terms of the Telecommunications Act and ensuring compliance with all the provisions of the licences that are granted. (pg. 83-84, 2001)				
Iceland	2001	Market access and structure	The regulator has also acted to reduce the monopoly power of the public operator in the residential market. As from March 2000, it mandated the use of carrier selection and pre-selection in the residential market for international calls. These facilities allow the selection of a carrier for each call or the automatic routing of all calls to a selected carrier. As from October 2000, the services provided by Landsíminn have had to be charged separately. This offers the possibility of other network operators obtaining access to Landsíminn's local loop. This should allow the new operators, Íslandsíminn and Lina.net (a subsidiary of the municipally owned Reykjavík power company), to make maximum use of their joint fibre-optic network. (pg. 85, 2001)			Yes	1
Iceland	2003	Market access and structure	The following 2002 EU directives have been incorporated into a new telecommunication legislative package: - Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive); - Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive); - Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive); - Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive). (See p. 8 of following April 2003 document: <a href="https://www.ttu.tu.int/ogsg/spv/ni/promotelegrafband/cesestudies/iceland.pdf">https://www.ttu.tu.int/ogsg/spv/ni/promotelegrafband/cesestudies/iceland.pdf</a> )			Yes	1
Iceland	2006	Public ownership	The privatisation of Iceland Telecom has been completed. In July 2005, the Icelandic government privatized Landsíminn Islands and sold its 98.8% share to Skipti ehf. In December 2005, three companies, Landsíminn Islands, Íslenzka sjónvarpsfélagið and the parent company, Skipti ehf., merged and the name was subsequently changed to Síminn hf. (See <a href="https://en.wikipedia.org/wiki/S%C3%ADminn#Privatization">https://en.wikipedia.org/wiki/S%C3%ADminn#Privatization</a> )			Yes in 2005	1
Ireland	1996	Market access and structure, public ownership	A strategic alliance for Telecom Eireann was finalised at the end of 1996, which included the sale of 20 per cent of the government's share to a consortium consisting of the Dutch and Swedish telephone companies. The terms of the sale, which were cleared by the EU Commission, allow the consortium to purchase another 15 per cent of the equity of Telecom Eireann after three years, or alternatively, for the government to sell that amount to the public. (pg. 114, 1997)			Yes in 1995	1
Ireland	1999	Market access and structure	Telecommunications (Miscellaneous Provisions) Act, 1996 was passed. It provided the main framework for regulation in the fully liberalised market. [see <a href="https://www.cesifo-group.de/foHome/facts/iber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/foHome/facts/iber/fileBinary/history-telecom-liber.pdf</a> ]			Yes in 1998	1
Italy	1992	Public ownership	The government decides to liberalise voice telephony in December 1998, and an independent telecommunications regulator is set up. (pg. 116, 1999)	Full deregulation of the telecoms sector has now been achieved. (pg. 21, 1999)		Yes	1
Italy	1995	Market access and structure	A new telecommunications company (Telecom Italia) is created through the merger of Sip, the old domestic operator, and Italcable, the old international operator. The Parliament approves a new decree law on privatisation, which introduces proportional representation on the board of privatised companies. (pg. 78, 1993)			No	1
Italy	1998	Public ownership	March 1994: Competition is introduced in the cellular telephone market, with a second licence awarded to a consortium led by Olivetti. (pg. 141, 1995)	Competition is introduced (pg. 141, 1995)		Yes	1
			1995: Liberalisation of telecommunications services except voice telephony, mobile and satellite services and network provision. Start of services of the second mobile operator (Olivetti) [see <a href="https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a> ]			Yes	1
			November 1997: the Treasury sells 32.9 per cent of the capital of Telecom Italia through public placement and 6.6 per cent through private sale to a "stable core" of shareholders, reducing its stake			Yes	1

Italy	1999	Market access and structure	from 44.7 per cent to 5.2 per cent. At 122.9 trillion this is the largest: privatisation operation mounted in Italy. (pg. 141, 1999)	In the telecommunications sector, where a new regulatory authority became operative in May 1998, the government granted national mobile and fixed telephone licences to new suppliers with foreign participation, which should ensure a degree of national and international competition... (pg. 15, 1999) The Government has formally privatised NTT (Nippon Telegraph and Telephone), the State domestic telephone and telecommunication company. (pg. 32, 1985)	Liberalisation of the telecommunication sector where competition is developing rapidly. (pg. 165, 2000)	pg. 165, 2000	Yes	1
Japan	1985	Market access and structure, public ownership	The corporate status of NTT was changed to joint-stock ownership in April 1985, and a substantial portion of shares is to be sold to the Japanese public over the next few years, with the government eventually retaining a blocking minority of one-third. By end-1987 about one-quarter of the shares had been sold; at present, non-Japanese are not allowed to purchase shares... (pg. 88-89, 1988)			pg. 88, 1988 pg. 103, 1992 pg. 118, 1995 pg. 76, 1996 pg. 93, 1997	Yes	1
Japan	1995	Market access and structure	On 28 June 1994, the government announced a package of 279 deregulation measures in four priority areas that had been established in the "External Economic Reform Measures". Telecommunications: make entry regulations for Type I telecommunications firms more transparent and revise the number of rates subject to approval (pg. 134-135, 1994)			Pg. 68, 1995	No	1
Korea	1991	Public ownership	Partial privatization of Korea Telecom. The government was able to commence the sale of its shares of KT with the recovery of the Korean economy beginning in 1991. The government sold 20% of its shares of KT between 1991 and 1994... [See Dal Yong Jin, paper published in Telecommunications Policy, 2006: <a href="http://acc.els-cdn.com/S0308596105001084/1-s2.0-S0308596105001084-main.pdf?_tid=40babac2-9934-11e5-87ff-00000aabb0726&amp;acdnat=1449088720_d6b3b64339ee13f289d1dd6c6179f67">http://acc.els-cdn.com/S0308596105001084/1-s2.0-S0308596105001084-main.pdf?_tid=40babac2-9934-11e5-87ff-00000aabb0726&amp;acdnat=1449088720_d6b3b64339ee13f289d1dd6c6179f67</a> ]				Yes	1
Korea	1995	Market access and structure	July 1994 reform: to facilitate the introduction of new services and expand the scope of business lines by scrapping restrictions; to enhance the efficiency of and increase the opportunity for market participation by introducing competition; and to ensure greater independence in management through deregulation... [see <a href="http://www.prip.harvard.edu/pubs_pdf/lung/lung-p00-6.pdf">www.prip.harvard.edu/pubs_pdf/lung/lung-p00-6.pdf</a> ]				Yes in 1994	1
Korea	1998	Market access and structure	For local telephone calls, a new provider is to be selected by 1997. (pg. 110, 1996) With the licensing of a second firm in the local market in 1997, all parts of the telecommunication service market are, in principle, open to competition (pg. 168, 2000)				Yes	1
Korea	2002	Public ownership	Privatization of Korea Telecom, May 2002 [see <a href="http://www.its.ohio.edu/bernt/ITS407-507/korean%20privatization.pdf">http://www.its.ohio.edu/bernt/ITS407-507/korean%20privatization.pdf</a> ]				Yes	1
Luxembourg	1999	Market access and structure	EU Single Market directives shape reform of product market regulation in Luxembourg, as in other EU countries. Implementing these directives has entailed substantial reforms in major network industries... this has involved separating natural monopoly elements from potentially competitive elements and creating a regulatory environment conducive to competition in the latter. Of the major network industries, most progress has been made in liberalising telecommunications. This industry was opened to competition in July 1998 with the exception of the "fast mile", and an independent regulator was established. (pg. 73, 2001)	... substantial reforms in major network industries... most progress has been made in liberalising telecommunications... (pg. 73, 2001)			Yes	1
Netherlands	1993	Market access and structure, public ownership	A new telecommunication bill is adopted in line with EU legislation. One of the objectives of this law is to attract new activities in the area of communications services. Competition has also increased in mobile telephony since a second operator entered the market in 1998. (pg. 73, 2001) Early this year the Government decided to admit private suppliers of satellite services and mobile communication systems (car telephones and radiophones) to the telecom market (when Telecom was privatised in 1988, its monopoly in the area of telecommunication infrastructure, including satellite services and mobile communication systems, was maintained, while the supply of peripheral equipment was liberalised). (pg. 54, 1992)			pg. 65, 1993 1992.	Yes	1
Netherlands	1996	Market access and structure, public ownership	Partial privatisation of KPN (involving a sale of 30 per cent of the shares) [see <a href="https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a> ] The second instalment of the flotation of KPN (Post and Telecommunications) raises more than Gld 6 billion. The government share in KPN has been reduced to 45 percent... The Government decides to auction the licences for the mobile telephone network. (pg. 29, 1996)				Yes	1

Netherlands	1998	Market access and structure	In July 1997, two new national telephone operators were allowed to enter the market. In the mobile telephony market the government plans to auction additional frequencies. (pg. 76, 1998)		Yes in 1997	1
Netherlands	1999	Market access and structure	In 1998, two national licences were auctioned in addition to the two existing ones. (pg. 68, 2000) A new Telecommunications Act took effect in December 1998 covering practically all aspects of telecommunications. The act abolishes the need for licences for infrastructure or services, except in the case of the spectrum for which a licence still has to be obtained. The newly established regulatory authority OPTA (Onafhankelijke post en telecommunicatie autoriteit) is responsible for guaranteeing a level playing field. (pg. 68-69, 2000)	...covering practically all aspects of telecommunications. (pg. 68-69, 2000)	Yes	1
New Zealand	1988	Market access and structure	The State-Owned Enterprises Act allows for the establishment of nine new state corporations. Telecom New Zealand is corporatized in 1987. (see <a href="http://ha.uow.edu.au/hs/research/UOW018686.html">http://ha.uow.edu.au/hs/research/UOW018686.html</a> )	pg. 10, 1987 pg. 51, 1989 pg. 61, 67, 1991 pg. 122, 1994	Yes in 1987	1
New Zealand	1990	Market access and structure, public ownership	All statutory protections of Telecom's monopoly will be removed by April 1989; other firms will be able to provide network services in competition with Telecom. By July 1989, Telecom will allow competitors connections with Telecom's own network on fair and reasonable terms. (pg. 53, 1989) The sale of Telecom to a consortium comprising two American companies, American Information Technologies Corporation and Bell Atlantic Corporation, and two New Zealand companies, Fay Richwhite and Freightways for \$4 250 million was announced. (see <a href="http://www.teara.govt.nz/en/telecommunications/page-6">http://www.teara.govt.nz/en/telecommunications/page-6</a> )	All statutory protections of Telecom's monopoly will be removed (pg. 53, 1989)	Yes	1
Norway	1998	Market access and structure	... the EEA agreement requires that the state monopoly embodied in the telecommunications company Telenor be abolished by 1 January 1998, permitting market access for both domestic and foreign competitors. (pg. 77, 1998) In 1998, the remaining exclusive rights of Telenor were removed and additional providers were authorised to offer telephone services (pg. 133, 2001)	pg. 70, 1999 pg. 133, 2001 pg. 113, 2002 pg. 135, 2004	Yes	1
Norway	2001	Market access and structure, public ownership	In 1999, competition between the incumbent and other providers was stepped up by the introduction of carrier preselection (transmission of calls without having to dial the selected provider prefix) and operator portability. The latest reform step was the partial privatisation of Telenor in December 2000. In anticipation of the privatisation, responsibility for managing the Norwegian state's shareholding in Telenor was transferred from the Ministry of Transport and Communications to the Ministry of Trade and Industry to eliminate potential frictions between the role of the government as supervisor and owner. (pg. 133, 2001)		Yes	1
Portugal	1996	Market access and structure, public ownership	June 1995: Privatisation of 27.3 per cent of Portugal Telecom, through a combination of direct sale and public offer, yields receipts of Esc 142.6 billion. (pg. 129, 1996)	pg. 119, 1999	Yes in 1995/97	1
Portugal	1999	Market access and structure, public ownership	Privatisation (4th phase) of 13.4 per cent of Portugal Telecom... Some barriers remain in the fixed line (voice telephony) sector, where Portugal Telecom still benefits from certain privileges. These restrictions are expected to be phased out by January 2000. (pg. 119, 1999)		Yes	1
Portugal	2001	Market access and structure, public ownership	Liberalisation of the long-distance telecommunications market (domestic and international calls). Award of four mobile telephony licences (UMTS). Privatisation (5th phase) of 8 per cent of Portugal Telecom. Liberalisation of the local and regional telecommunications market. (pg. 129, 2001)		Yes	1
Slovak Republic	2001	Market access and structure	In 1999, the new government repealed the 1995 (privatisation) law and allowed the privatisation of some of the strategic enterprises, subject to the advice of Parliament. ...One of the most important was the sale of a 51 percent stake in Slovak Telecom to Deutsche Telekom in 2000, with the government and the National Property Fund holding the remaining. (pg. 126, 2002)		Yes in 2000/02	1
Slovak Republic	2003	Market access and structure	May 2003: Parliament passed a revision to the telecommunications law to unbundle local loops, change license proceedings and strengthen the powers of the market regulator, i.e. the Telecommunications Office. (pg. 160, 2004)		Yes	1

Slovak Republic	2005	Market access and structure, public ownership	<p>Parliament passed a revision to the telecommunications law to unbundle local loops, change license proceedings and strengthen the powers of the market regulator, i.e. the Telecommunications Office. The legal regulation for liberalisation of the Slovak fixed line market was passed in 2002 and became valid by 1 January 2003, finally allowing competition in the sector of fixed lines. [see <a href="https://en.wikipedia.org/wiki/Telecommunications_in_Slovakia">https://en.wikipedia.org/wiki/Telecommunications_in_Slovakia</a>]</p> <p>...cost-based regulation of call termination in the fixed telephone network was...introduced in December 2005...The first reference offer for access to the unbundled local loop was introduced in August 2005 only after intervention of the National Competition Authority, following a decision that the absence of such a reference offer constituted abuse of the dominant market position of the incumbent. (pg. 107, 2007)</p>	pg. 107, 2007	Yes	1
Spain	1994	Market access and structure, public ownership	<p>Value-added telecommunications services were partly liberalised, but the telecommunications monopoly of Telefonica for domestic and international connections was, with the agreement of the EC...an early liberalisation in cable TV transmission, mobile phones, data transmission networks and communication between satellites and ground stations for channeling long distance calls, will be very beneficial for users and will also exert pressure on Telefonica to prepare itself better for intense competition after 2002. (pg. 41, 1993)</p>		Yes	1
Spain	1998	Market access and structure	<p>The Council of Ministers approves the full liberalization of telephone communications by 1 January 1998. A second basic telephony licence was granted to a public entity which started operating in January 1998. A third licence for basic telephony is to be granted in January 1999. (pg. 123, 1998)</p> <p>Telecommunications (liberalisation) Act 24 April 1997. [see <a href="https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber-fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/foHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber-fileBinary/history-telecom-liber.pdf</a>]</p>	pg. 101, 2003	Yes in 1999	1
Spain	2000	Market access and structure	<p>The government presents a liberalisation package that includes measures on a large number of sectors, including telecommunications, electricity, natural gas, oil distribution and retailing.</p> <p>The government is aware of the importance of regulatory reform in the present context and has implemented a comprehensive package of measures through a set of Royal Decrees (March and October 1999, and June 2000). These measures aim at accelerating and improving the liberalisation process in some key product markets. Some of these measures have already produced a direct effect...especially in the telecommunications sector... (pg. 58, 2001)</p>	pg. 58, 76, 85, 2001 pg. 103, 2003	Yes	1
Sweden	1992	Market access and structure	<p>Telecommunications Act and Radio Communication Act. The market is being opened to competition on equal terms. [See <a href="http://www.statskontoret.se/globalassets/publikationer/2000-2005-english/200508.pdf">http://www.statskontoret.se/globalassets/publikationer/2000-2005-english/200508.pdf</a>, p.37]</p>		Yes	1
Switzerland	1998	Market access and structure, public ownership	<p>At the beginning of 1998, the telecommunications market was opened up to competition. (pg. 15, 1998)</p> <p>New telecommunications legislation comes into effect in January 1998, which provides for a full opening of the telecommunications market and the partial privatisation of Swisscom, the former telecommunications arm of the Swiss PTT in parallel with the EU's telecoms market. (pg. 80, 1998)</p>	pg. 83, 2000	Yes	1
Switzerland	2000	Market access and structure, public ownership	<p>Major events in the telecommunications market since the summer of 1999 have been in accordance with these recommendations. One of them is the sale of Swisscom's stake in Cablecom to a foreign company in March 2000. This enhances the potential for competition in the fixed-line network, as Cablecom has access to about 1.3 million customers in Switzerland through a fibre optic network, which can be used for telephone and internet services. (pg. 83-85, 2000)</p>	pg. 103, 2002	Yes in 1999	1
United Kingdom	1982	Market access and structure	<p>The British Telecommunications Act of 1981 had already begun to break the state monopoly in telecommunications. A licence was issued to the Mercury Consortium to provide a new telecommunications network to compete with British Telecom. The monopoly over the supply of equipment was gradually removed. (pg. 23, 1985)</p> <p>The specific provisions in the Act designed to ensure competition were:</p> <ol style="list-style-type: none"> <li>1. The end of British Telecom's monopoly on running telephones and telecommunications;</li> <li>2. Obligations on licensed telecommunications operators to promote fair competition, to be</li> </ol>		No	1

			<p>monitored by OFTEL:</p> <p>3. New powers for OFTEL to order licensees to comply with conditions in their licence and to vary licences if necessary;</p> <p>4. Amendment of arrangements for licensing cable programme services, thus ending British Telecom's privileged role. (pg. 23, 1985)</p> <p>British Telecommunications Bill reintroduced in the autumn of 1983 (pg. 23, 1985)</p>				
United Kingdom	1985	Market access and structure, public ownership	<p>...the Bill was reintroduced in the autumn of 1983 and privatisation of British Telecom, which had first been announced in July 1982, went ahead with the shares flotation in November 1984... (pg. 23, 1985)</p> <p>In August 1984 an Office of Telecommunications (OFTEL), similar to the Office of Fair Trading, was set up under the Government's auspices to ensure fair competition and fair prices in the telecommunications industry. (pg. 23, 1985)</p> <p>1985: First cable television licences issued. Licences issued to Cellnet and RacalVodafone to run competing cellular networks. [see <a href="https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p> <p>Privatization/sale of ...British Telecom (34 per cent). (pg. 66, 1987)</p> <p>The government also sold a second tranche of shares in British Telecom in 1991, amounting to a quarter of its equity... (pg. 58, 1993)</p> <p>Cable television operators also allowed to run voice telecommunications systems. [see <a href="https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf">https://www.cesifo-group.de/ifoHome/facts/DICE/Infrastructure/Communication-Networks/Liberalisation-Process/history-telecom-liber/fileBinary/history-telecom-liber.pdf</a>]</p>	Yes	1		
United Kingdom	1991	Market access and structure, public ownership	<p>UK Communications Act 2003; The telecommunications licensing regime was replaced by a general authorisation for companies to provide telecommunications services subject to general conditions of entitlement, while BT retained its universal service obligation. [see <a href="http://www.legislation.gov.uk/ukpga/2003/21/contents">http://www.legislation.gov.uk/ukpga/2003/21/contents</a>]</p>	Yes	1		
United Kingdom	2003	Market access and structure	<p>...the most important deregulatory move in telecommunications came with the antitrust suit against AT&amp;T by the U.S. Department of Justice which was filed in 1974 and settled in early 1982. As part of the settlement, AT&amp;T agreed to divest itself of the local portions of its twenty-two Bell operating companies, which were restructured into seven separate regulated monopolies. These seven new operating firms were permitted to buy terminal equipment from any source they chose (not just AT&amp;T), and (after a modification of the decree) they were allowed to market (but not manufacture) the equipment as well. AT&amp;T can continue to provide long-distance service and to manufacture terminal equipment, but customers can choose any long-distance carrier they wish.</p>	Yes	1		
United States	1983	Market access and structure	<p>This choice is enhanced by the equal access provisions of the decree, which require that all long-distance companies get (by 1986) the same connection to local networks as that afforded to AT&amp;T. In return, the government has removed the restrictions limiting AT&amp;T to provision of common carrier services, and has permitted AT&amp;T to enter the information systems area. (pg. 69-70, 1986)</p> <p>Senate passes a bill further deregulating the telecommunications sector. The landmark bill is enacted as the Telecommunications Act of 1996.</p> <p>The new law will subject the telecommunications industry to the most extensive restructuring since 1984... it is intended to open all sectors of the telecommunications industry to competition - including the now monopolised local telephone exchange and cable television sectors - by removing legal, regulatory and monopolistic barriers to entry.</p> <p>Incumbent local telephone companies, including the seven regional Bell companies, will be required to permit rivals to use their local networks and to make network elements available on an unbundled basis for resale. In return, the regional Bell companies will be allowed to enter the long distance and equipment manufacturing markets once they satisfy the Federal Communications Commission that their local networks have been satisfactorily opened to competition.</p> <p>The new law also removes regulatory barriers to competition among cable television firms, telephone companies and other service providers in providing video programming... (pg. 63, 1996)</p>	...the most important deregulatory move... (pg. 69-70, 1986)	pg. 80, 1989 pg. 158, 2004	No	
United States	1996	Market access and structure		The landmark bill... the most extensive restructuring since 1984... (pg. 63, 1996)	The Telecommunications Act of 1996 began the national effort to spur local service competition. (pg. 160, 2004)	No	1

Table A7. Product Market Regulation, Postal Services Sector

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Austria	1990	Market access and structure	Even before the start of the EU-initiated liberalisation process there were alternative providers in Austria in the field of parcel and express services and in advertising (at the start of the 1990s the parcels service for business customers had already been lifted off from the state monopoly). [see <a href="http://www.boeckler.de/pdf/wsi_pl_pig_post_europe.pdf">http://www.boeckler.de/pdf/wsi_pl_pig_post_europe.pdf</a> ]			Yes	1
Belgium	1999	Market access and structure	In the postal sector, where the market for letters and parcels above 350 grams was opened up in 1999, the limit is scheduled to come down to 100 grams in 2003 (pg. 152, 2003)			Yes	1
Belgium	2011	Market access and structure	The liberalisation of postal services market is proceeding slowly, in line with the requirements of the European Commission. It stipulates the eventual full opening of the market to competition with postal services by January 2011. (pg. 137, 2009)			Yes	1
Czech Republic	2000	Market access and structure	The modern development of the sector dates from the beginning of 1993 when ČP was set up and when the Czech Republic joined the World Postal Union and ČP became a member of Post Europ. In 2000 law 29/2000 on postal services went into effect...lowering of the limit on the postal monopoly in the Czech Republic and other measures in the field of liberalising postal services...as well as changes to the regulatory framework of postal services... In 2000 the...law on postal services reduced the postal exception to 350g and 27 CZK. ( <a href="https://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/czech-republic/industrial-relations-in-the-postal-sector-czech-republic">https://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/czech-republic/industrial-relations-in-the-postal-sector-czech-republic</a> )	The new law on postal services should make access to business in postal services possible for all entities, except for the transport of letter post, which will be exclusively licensed ( <a href="http://www.oecd.org/regreform/sectors/1920548.pdf">http://www.oecd.org/regreform/sectors/1920548.pdf</a> , pg. 171)		Yes in 1998	1
Czech Republic	2013	Market access and structure	From January 2013 the monopoly held by the state enterprise Czech Post (CP) over deliveries of postal items that weigh up to 50 grammes with stamps up to EUR 0.7 was removed. In the next five years, Czech Post will be the sole holder of the postal licence, responsible for the universal service obligation, after which the postal licence will be awarded by tender (pg. 81, 2014)			Yes in 2011	1
Denmark	1995	Market access and structure	The main legislation of the postal sector in Denmark is the Postal Activity act. This Postal Activity act constitutes the legal framework for the regulation of postal activity in Denmark. The Postal Activity act entered into force February 23 1995, and among other things sets up the limits of the reserved area and the universal service obligation. ( <a href="http://www.oecd.org/regreform/sectors/1920548.pdf">http://www.oecd.org/regreform/sectors/1920548.pdf</a> , pg. 173)			Yes in 1992	1
Denmark	2008	Market access and structure, public ownership	On April 1, 2008, Post Danmark announced its intention to merge with the Swedish postal company Posten AB. The joint company, (...), will be owned by the Danish state, the Swedish state, and CVC Capital Partners. On June 24, 2009, Post Danmark merged with Posten AB to form the new holding company Posten Norden AB, currently known as PostNord (with the Swedish government owning 60% of the company and the Danish government 40%). [ <a href="https://en.wikipedia.org/wiki/Post_Danmark">https://en.wikipedia.org/wiki/Post_Danmark</a> ]			Yes	1
Finland	1994	Market access and structure	For postal services, the monopoly was abolished in 1994 but standard letters remain to some extent regulated. Other services, such as parcels, newspapers...are, however, fully liberalised. A license can also be granted for a standard letter postal service but a fee has to be paid aimed at securing the provision of postal services in sparsely populated areas...A second license was granted in 1997 to Suomen Suoramainonta, but it has not started its operations yet due to the introduction of the fee and the state-owned Finland Post Group kept its monopoly. (pg. 58, 2000)			Yes in 1995	1
France	1998	Market access and structure	First postal directive (Premiere Directive Postale) [see e.g. <a href="http://www.touteurope.eu/les-politiques-europeennes/concurrence/synthese/la-liberalisation-des-services-postaux.html">http://www.touteurope.eu/les-politiques-europeennes/concurrence/synthese/la-liberalisation-des-services-postaux.html</a> and <a href="https://www.senat.fr/rap/03-162/03-162_mono.html#toc10">https://www.senat.fr/rap/03-162/03-162_mono.html#toc10</a> ]			Yes	1
France	2003	Market access and structure	Second postal directive (Deuxieme Directive Postale) [see e.g. <a href="http://www.touteurope.eu/les-politiques-europeennes/concurrence/synthese/la-liberalisation-des-services-postaux.html">http://www.touteurope.eu/les-politiques-europeennes/concurrence/synthese/la-liberalisation-des-services-postaux.html</a> and <a href="https://www.senat.fr/rap/03-162/03-162_mono.html#toc10">https://www.senat.fr/rap/03-162/03-162_mono.html#toc10</a> ]			Yes in 2002	1
France	2011	Market access and structure	In February 2008, the EU pushed through plans to open up postal markets across the continent by 1 January 2011, or two years later for most countries that joined the bloc after 2004.			Yes	1



Iceland	2003	Market access and structure	Postal Service Act 13/2002. Adoption of EU directive 97/39/EC. Entered into force on January 1 <sup>st</sup> 2003. [see <a href="https://ec.europa.eu/neighborhood-enlargement/sites/near/files/pdf/iceland/key-documents/screening_report_03_is_internet_en.pdf">https://ec.europa.eu/neighborhood-enlargement/sites/near/files/pdf/iceland/key-documents/screening_report_03_is_internet_en.pdf</a> and <a href="https://circabc.europa.eu/webdav/circabc/FISMA/markt_consultations/Library/postal_services/studies/iceland.pdf">https://circabc.europa.eu/webdav/circabc/FISMA/markt_consultations/Library/postal_services/studies/iceland.pdf</a> ]	Yes	1
Ireland	2002	Market access and structure	Communications Regulation Act 2002. Under Section 12 (1) of the Act, the Commission for Communications Regulation has a statutory objective to promote the development of a postal sector and in particular the availability of a Universal Postal Service within, to and from the State at an affordable price for the benefit of all users. [see <a href="http://www.irishstatutebook.ie/eli/2002/act/20/enacted/en/html">http://www.irishstatutebook.ie/eli/2002/act/20/enacted/en/html</a> ]	Yes	1
Italy	2003	Market access and structure	The postal law was amended in 2003 by Legislative Decree 384/2003, implementing Directive 2002/39/CE. [see <a href="https://circabc.europa.eu/webdav/circabc/FISMA/markt_consultations/Library/postal_services/studies/italy.pdf">https://circabc.europa.eu/webdav/circabc/FISMA/markt_consultations/Library/postal_services/studies/italy.pdf</a> ]	Yes in 2002	1
Italy	2011	Market access and structure	The Postal Services Directive has been transposed in Italy by Legislative Decree 58/2011 that amended Legislative Decree 261/1999 of 22 July 1999 which transposes Directive 97/67/EC (the provision in question is subject of its Article 3). In Italy the postal regulatory authority (AGCOM) is in charge of overseeing that this obligation is respected. [see <a href="http://www.europarl.europa.eu/sides/getDoc.do?type=COMPARL&amp;reference=PE-569523&amp;format=PDF&amp;language=EN&amp;secondRef=02">http://www.europarl.europa.eu/sides/getDoc.do?type=COMPARL&amp;reference=PE-569523&amp;format=PDF&amp;language=EN&amp;secondRef=02</a> ]	Yes	1
Japan	1994	Market access and structure		Yes	1
Japan	2001	Market access and structure, public ownership	A reform of the postal service is likely to proceed in two steps. In January 2001 the implementation section of the state-run operations of mail, postal savings and insurance services will be shifted to a "postal services agency", which is scheduled to be granted independent fund management authority from April of that year. Then in 2003 a postal public corporation (Japan Post), which will be allowed increased management freedom, will take over the "postal services agency". (pg. 119, 1999)	Yes	1
Korea	2011	Market access and structure, public ownership	Postal Service Act 2011. [see <a href="http://elaw.kiri.re.kr/eng_mobile/viewer.do?hseq=32595&amp;type=part&amp;key=43">http://elaw.kiri.re.kr/eng_mobile/viewer.do?hseq=32595&amp;type=part&amp;key=43</a> and <a href="http://trade.ec.europa.eu/doclib/docs/2009/october/tradoc_145197.pdf">http://trade.ec.europa.eu/doclib/docs/2009/october/tradoc_145197.pdf</a> ]	Yes	1
Luxembourg	2001	Market access and structure, public ownership	Regarding postal services, the bill transposing the Directive 97/67/CE concerning common rules for the development of the domestic market in postal services in the EU and for the improvement of service quality was passed by parliament on 30 November 2000. (...) 7 percent of the postal market has been opened to competition, compared with 3 percent for the European Postal market. (pg.76, 2001)	Yes in 1998	1
Netherlands	1994	Market access and structure, public ownership	On January 1, 1989, the postal service itself was restructured as Royal PTT Netherlands NV, a private stock company, yet all shares were still owned by the state. In 1994 the company's stock was listed on the Amsterdam stock exchange and, in the pivotal year 1996, majority control of PTT Post passed from the Dutch government to private hands. In that same year the company acquired TNT, a world-wide delivery service from Australia. [see <a href="http://www.postalconsumers.org/postal_freedom_index/images/2012_CPC_IPF_WEB.pdf">http://www.postalconsumers.org/postal_freedom_index/images/2012_CPC_IPF_WEB.pdf</a> ]	Yes	1
Netherlands	1998	Market access and structure, public ownership	...shares in KPN, the Dutch state post and telecommunications company, were floated on the Amsterdam Stock Exchange in June 1994. The government sold 138 million shares in KPN, representing a 30 percent stake, to raise f. 6.9 billion. The sale of a second tranche in October 1995 raised more than f. 6.0 billion. [see <a href="http://documents.worldbank.org/curated/en/807611468769265001/pdf/multi-page.pdf">http://documents.worldbank.org/curated/en/807611468769265001/pdf/multi-page.pdf</a> ]	Yes	1
Netherlands	1998	Market access and structure, public ownership	Implementation of EU Postal Directive in 1998. In 1998, TNT and PTT Post were joined as TNT Post Group (TPG) independent of the telecom arm of the business. [see <a href="http://www.postalconsumers.org/postal_freedom_index/images/2012_CPC_IPF_WEB.pdf">http://www.postalconsumers.org/postal_freedom_index/images/2012_CPC_IPF_WEB.pdf</a> ]	Yes	1
			A third tranche of KPN shares is expected to be sold by the end of 1997.		

Netherlands	2004	Market access and structure, public ownership	<p>[see <a href="http://documents.worldbank.org/curated/en/807611468769265001/pdf/multi-page.pdf">http://documents.worldbank.org/curated/en/807611468769265001/pdf/multi-page.pdf</a>]</p> <p>In 2004, government sold 15.7 percent of TPG, the postal operator, raising some US\$1.9 bn and reducing its stake in the company to 19 percent. The Netherlands government will keep its controlling "golden share".</p> <p>[see <a href="http://www.privatizationbarometer.com/atlas.php?lang=en&amp;id=8&amp;mn=PM">http://www.privatizationbarometer.com/atlas.php?lang=en&amp;id=8&amp;mn=PM</a>]</p> <p>In November 2006, the Dutch state sold its 46 million shares in TNT Post: 27.8 million to Citibank and UBS, and 18.2 million to TNT. In addition, the Dutch state gave back, under pressure from the Court of Justice, its 'golden share' in TNT Post.</p>	Yes	1
Netherlands	2007	Market access and structure, public ownership	<p>[see <a href="https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Netherlands%20final.pdf">https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Netherlands%20final.pdf</a>]</p> <p>The Postal Services Act 1987 implemented a reserved area within 500 grams to which New Zealand Post had the exclusive right to perform postal services.</p>	Yes	1
New Zealand	1987	Market access and structure	<p>[see <a href="https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Report%20New%20Zealand%20final.pdf">https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Report%20New%20Zealand%20final.pdf</a>]</p> <p>The Lange government's Postal Services Act 1987...reduced the monopoly of New Zealand Post to a limit of \$1.75 and 500 grams. It was gradually reduced to 80 cents in December 1991 until the 1998 legislation took effect.</p> <p>[see <a href="https://en.wikipedia.org/wiki/New_Zealand_Post">https://en.wikipedia.org/wiki/New_Zealand_Post</a>]</p> <p>Full postal competition is permitted. (pg. 134, 1999)</p> <p>Postal Services Act 1998. In 1991, the reserved area was further dropped but completely abolished in 1998 with the introduction of the Postal Services Act 1998. Also, in February 1998, New 1074 Country report New Zealand Zealand Post concluded a new Deed of Understanding with the Crown, in which service standards were stipulated. In May 1998, the Postal Services (Information Disclosure) Regulations were implemented, which obliged New Zealand Post to disclose information regarding the number of delivery points, post centres and post shops, the quality of service and separate profit and loss statements for letters carried within New Zealand (for which a charge of not more than 80 cents is made) and other services.</p> <p>[see <a href="https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Report%20New%20Zealand%20final.pdf">https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Report%20New%20Zealand%20final.pdf</a>]</p>	Yes	1
New Zealand	1999	Market access and structure	<p>The Norwegian postal market is being liberalised in line with EU directives. A number of EU members have moved more decisively than stipulated in the relevant EU directive by lowering the monopoly rights well ahead of the timetable, while Norway Post (the publicly-owned incumbent) was allowed to maintain monopoly rights for letters less than 350 grams until mid-2003. It is expected that in line with the EU deregulation programme for postal services, monopoly rights will be reduced to 50 grams by 2006 and abolished by 2009. As part of the liberalisation process, Norway Post was incorporated in 2002 under the responsibility of the Ministry of Transport and Communication (pg. 138, 2004)</p> <p>Revision of the universal postal service concession signed between the Portuguese state and CTT took place in 2000 (September J). This reduced barriers to entry in line with the 1997 EU Postal Directive that makes a fundamental distinction between services outside and services within the scope of the universal service.</p> <p>Decree-Law no. 150/2001, of 7 of May on "Access regime for exercise of the activity of provision of postal services in a competitive market".</p> <p>[see <a href="https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Portugal%20final.pdf">https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Portugal%20final.pdf</a>]</p>	Yes in 1998	1
Norway	2002	Market access and structure	<p>Slovak Post facing some competition in non-reserved area.</p> <p>[see <a href="https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Slovakie%20final.pdf">https://cirabc.europa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Slovakie%20final.pdf</a>]</p>	Yes	1
Portugal	2001	Market access and structure		Yes	1
Slovak Republic	1998	Market access and structure		Yes	1

Slovak Republic	2004	Market access and structure	Act No. 507/2001 Coll. on postal services (Postal Act 2001). This act was updated in December 2003 (Act No. 15/2004 Coll.), effective from 1 May 2004. [see <a href="https://circabceuropa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Slovakia%20final.pdf">https://circabceuropa.eu/webdav/CircaBC/FISMA/markt_consultations/Library/postal_services/studies/CS%20Slovakia%20final.pdf</a> ]		Yes in 2003	1
Sweden	1993	Market access and structure	In the communications sector, the monopoly on handling of "standard" letters is planned to be abolished in 1993. Competitive conditions in the sector could be further enhanced by the proposal to turn the telecommunications and postal services into joint stock companies by 1993. (pg. 93, 1992)  Following the full liberalisation of the postal market the incumbent has been forced to refrain from engaging in exclusive contracts with customers and discriminatory pricing practices... (pg. 149, 1997)  In 1993 [1 <sup>st</sup> January], legislation was passed that, in measured steps, began transforming Posten into a "private" corporation and eliminating the sole postal monopoly in light letters. Home and business post office boxes were opened to competition completely, and initiatives were begun to make core elements of postal infrastructure accessible to every new, duly licensed postal operator that sought to deliver the mail.  [see <a href="http://www.postalconsumers.org/postal_freedom_index/images/2012_CPC_IPF_WEB.pdf">http://www.postalconsumers.org/postal_freedom_index/images/2012_CPC_IPF_WEB.pdf</a> ]	Pg.149, 1997	Yes in 1994	1
Sweden	2009	Public ownership	24 June 2009, Post Danmark merged with Posten AB to form the new holding company Posten Norden AB, currently known as PostNord. Posten Norden AB has been renamed PostNord AB, with the Swedish government owning 60% of the company and the Danish government 40%. [see <a href="https://en.wikipedia.org/wiki/Post_Danmark">https://en.wikipedia.org/wiki/Post_Danmark</a> ]		Yes	1
Switzerland	1999	Market access and structure	The Swiss Postal Law of 1998 was the key organizational reform. There were five officially stated goals of the law: (1) gradual liberalization of the postal market; (2) guaranteed universal service; (3) providing the financial means for universal service; (4) increasing commercial freedom for Swiss Post; and (5) coping with EU developments in the postal sector. The Swiss Postal Law of 1998 provides the legal framework for Swiss Post, including the process for liberalizing segments of the postal market, the rules for universal service and its financial support, and the scope of commercial activities Swiss Post is permitted to undertake. [see <a href="https://www.aei.org/publication/the-structure-and-effect-of-international-postal-reform/">https://www.aei.org/publication/the-structure-and-effect-of-international-postal-reform/</a> ]		Yes in 2000	1
Switzerland	2006	Market access and structure	In 2004, the parcel market in Switzerland was deregulated and made open to competition. The Swiss Postal Law of 1998 provides the legal framework for Swiss Post, including the process for liberalizing segments of the postal market, the rules for universal service and its financial support, and the scope of commercial activities it is permitted to undertake. The law was revised in 2004 for implementation in 2006. Express mail and international parcels were excluded from the post's monopoly. The law limited the reserve monopoly to just the size needed to guarantee universal service. [see <a href="http://www.postalconsumers.org/postal_freedom_index/Switzerland_-_Swiss_Post.shtml">http://www.postalconsumers.org/postal_freedom_index/Switzerland_-_Swiss_Post.shtml</a> ]		Yes in 2005	1
United Kingdom	1981	Market access and structure	The postal monopoly has been tempered by the ending of the Post Office monopoly for parcels and the opening up of express delivery services... (pg. 23, 1985)  A partial reduction in the postal monopoly in 1981 has led to the creation of a vibrant private sector competing for the delivery of packets, parcels, express mail, newspapers, journals and advertising material... (pg. 63, 1996)	pg. 63, 1996	No	1

Table A8. Product Market Regulation, Rail Transport Sector

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Australia	1997	Market access and structure, public ownership	Australian National [former Australian Railways National] was privatised in 1997. Its Tasmanian operations and infrastructure (TasRail) were sold to Australian Transport Network which was taken over by Pacific National in 2004. South Australian branch lines were sold to Genesee & Wyoming. Its passenger operations were taken over by Great Southern Railway... [see <a href="https://en.wikipedia.org/wiki/History_of_rail_transport_in_Australia#Privatisation">https://en.wikipedia.org/wiki/History_of_rail_transport_in_Australia#Privatisation</a> ]			Yes in 1996	1
Australia	1999	Market access and structure	In 1998 the Government sold AN's interstate freight and interstate passenger services to three operators. The Government also transferred the rail infrastructure to the newly formed Government owned Australian Rail Track Corporation (established in July 1998). [see <a href="https://infrastructure.gov.au/rail/trains/background/">https://infrastructure.gov.au/rail/trains/background/</a> ]	...these reforms go in the right direction... (pg. 119, 2000)	Pg. 131, 2003	Yes	1
Austria	2004	Market access and structure	This step is intended to increase competition and contestability in the industry. The Australian Rail Track Corporation is negotiating access arrangements for the track that it does not already own and will then be lodging an undertaking with the ACCC seeking endorsement of its own access regime. The Australian Transport Council has agreed a process to harmonise interstate operational regulations and to review an intergovernmental agreement on the mutual recognition of safety accreditation. Another step that should contribute to increased competition and efficiency is the in-principle agreement by governments to sell National Rail. (pg. 118, 2000)			Yes	1
Belgium	2005	Market access and structure	...the railway sector will be opened up as of 2003, one year ahead of the EU-imposed [EU directive] deadline. (pg. 94, 2003) In conformity with the Directive on unbundling railway services, the Government has passed a law changing the structure of the incumbent (NMBS/SNCB) so that from January 2005 it consists of two public limited liability companies that are independent of each other within the framework of a holding company (NMBS/SNCBholding): the railway infrastructure manager (Infrabel); and the railway operator (NMBS/ SNCB). A new regulator has been created. Infrabel is supposed to offer access to the network on non-discriminatory terms and the regulator to ensure that this occurs. A number of features of the new setup increase the likelihood that non-discriminatory access and significantly greater interoperability will be achieved. (pg. 172, 2005) In 2005, the incumbent railway company was reorganised in connection with market liberalisation into three national companies: an infrastructure manager, an operator and an overarching holding company. (pg. 100, 2013)	The new structure is an important step towards removing explicit and implicit subsidies to the (freight) operator as well as assuring non-discriminatory access to the infrastructure for other service providers – necessary framework conditions for introducing more competition in the sector. (pg. 100, 2013)	pg. 100, 2013	Yes	1
Canada	1996	Market access and structure	Canada Transportation Act 1996. It substantially reduced the amount of rail freight regulation in Canada, particularly regarding network access. [see European Conference of Ministers of Transport (2001), "Railway Reform: Regulation of Freight Transport Markets", OECD, Paris, pg. 107-108]		pg. 75, 1997 pg. 74, 1999	Yes	1
Czech Republic	1995	Market access and structure	...the government intends to improve the efficiency of Canada's transportation network by removing or revising outmoded regulations and reducing or eliminating subsidies... (pg. 102, 1995) In the Czech Republic, equal access to the state-owned railway infrastructure is guaranteed for all carriers that meet the terms defined by the Act No. 266/1994 Coll. [Railways Act 1994] on Rail Systems. As of 1 January 1995 the Czech Republic introduced a standard system for granting licences to operate rail transport... [see <a href="http://www.oecd.org/dataoecd/1/1/1995001.pdf">http://www.oecd.org/dataoecd/1/1/1995001.pdf</a> ]			Yes	1
Czech Republic	2000	Market access and structure	An amendment to the Railways Act 1994 was passed in November 1999. [see European Conference of Ministers of Transport (2001), "Railway Reform: Regulation of Freight Transport Markets", OECD, Paris, pg. 59-61]	...the Czech government has taken several important steps to introduce competition and effective regulation into the...rail markets. (pg. 129, 2001)		No	1

			Since the previous Survey, the Czech government has taken several important steps to introduce competition and effective regulation into the telecommunication, electrical, gas and rail markets (pg. 129, 2001)				
Denmark	1997	Market access and structure	Parliament adopts a framework for improving competition in the rail transport sector. Maintenance of tracks is split out from the operating service, with easier access for new operators. (pg.137, 1997)	deregulation has been proceeding at a fairly rapid pace in most utilities sectors, the main exceptions are the energy sectors... (pg.78, 1999)	Yes	Pg. 77, 1999	1
Finland	1996	Market access and structure	A separation of the network from current operations has been undertaken for railroad transport and entry opened up in freight transport... On the passenger side, a market separation exists, private lines co-existing with the main government-owned provider (DSB). But such lines have remained on their own networks and have not sought to expand their activities... (pg. 77, 1999)		Yes		1
Finland	2011	Market access and structure	...the Posts and Telecommunications (PTT) have been transformed into a joint stock company with the government retaining full ownership; the same will be the case for the State Railways as of 1 July 1995. (pg. 43, 1995) ...international rail passenger transport within the EU was ... liberalised in 2010. [see <a href="http://www.lvm.fi/en/railway_transport">http://www.lvm.fi/en/railway_transport</a> ]		Yes		1
France	1997	Market access and structure	Passenger transport has confronted changes recently, as the new high-speed train Allegro started operations on 12th December 2010. Allegro trains are owned by a joint company of VR and RZD, called Karelian Trains. [see <a href="http://alk.tiehallinto.fi/julkaisut/pdf3/irs_2011-15_progression_of_web.pdf">http://alk.tiehallinto.fi/julkaisut/pdf3/irs_2011-15_progression_of_web.pdf</a> ] An undertaking that wishes to provide rail transport services on Finnish railways must apply for an operating licence from the Ministry of Transport and Communications. VR Group Ltd. holds a licence for the provision of passenger and freight transport services by rail. In May 2012, the Ministry of Transport and Communications granted a licence to Ratarahiti Oy for local freight transport. [see <a href="http://www.lvm.fi/en/railway_transport">http://www.lvm.fi/en/railway_transport</a> ] Adopts legislation reforming the SNCF, which transfers infrastructure management to a new entity, the Réseau Ferre de France. [see <a href="http://www.cerre.eu/sites/cerre/files/161206_CERRE_PassRailComp_CaseStudy_France.pdf">http://www.cerre.eu/sites/cerre/files/161206_CERRE_PassRailComp_CaseStudy_France.pdf</a> ] Besides, trans-European freightway-type corridors were opened in late 1997 under a co-operation agreement among several infrastructure managers (in this case, the French, Belgian, Luxembourg, Spanish and Italian railways). (pg. 71, 1999)	In the rail transport sector, a major move was the separation, in early 1997, of infrastructures from transport services as such. (pg. 71, 1999)	Yes	pg. 72, 1999 pg. 99, 2001 pg. 88, 2003	1
France	2004	Market access and structure	In the rail transport sector, European liberalisation directives work in two directions: i) separation of physical infrastructure activities and actual operation of trains, and ii) gradual opening of the freight sector to competition, beginning with international freight as of 2003, and expanding to embrace all goods transport. Three European Directives require that the main rail tracks in Member states be liberalised for international freight by 15 March 2003 and that a toll be paid to the network manager. The French government transposed these directives by means of a decree signed in December 1998. (pg. 100, 2001)		Yes		1
Germany	1994	Market access and structure	Liberalisation of international freight effectively took place on march 7 <sup>th</sup> 2003, with entry being effective in June 2005 [see e.g. <a href="https://fr.wikipedia.org/wiki/Ouverture_%C3%A0_la_concurrence_du_transport_ferroviaire_en_France#Transport_de_marchandises">https://fr.wikipedia.org/wiki/Ouverture_%C3%A0_la_concurrence_du_transport_ferroviaire_en_France#Transport_de_marchandises</a> ] With respect to rail transport, at the beginning of 1994 the "Bahnreform" became effective, motivated by the fact that the national railways have not only lost ground in the transportation market but also proved to be a growing burden for public budgets. Under a publicly-owned joint stock company, four separate units (short-distance and long distance passenger traffic, freight traffic and the rail network) have been established. Since January 1994, the Government has been responsible for investment in the rail network. In a medium-term perspective, the new organisational structure - despite not being a "real" privatisation - should lead to a more efficient management of the railways and to better cost transparency, thereby stimulating competition in the transportation sector. (pg. 98-99, 1994) ... the railway reform of 1994 implied the corporatisation of the Federal Railway system and its division into four different units. A new price system was introduced from 1995... (pg. 73-74, 1995)	pg. 98, 110, 1994 pg. 73, 1995 pg. 78-79, 2001 pg. 131, 143, 2006 pg. 150, 2008 pg. 71, 2010	Yes		1

Germany	2001	Market access and structure	In Germany, railway reforms started in January 1994 and included: the setting-up of a state-owned enterprise under private law (Deutsche Bahn AG); separate organisation and business accounting for passenger transport, freight transport and infrastructure management; and the allocation of responsibility for all regional rail services to the states and their municipalities. [see <a href="http://www.oecd.org/environment/envtrade/2387068.pdf">http://www.oecd.org/environment/envtrade/2387068.pdf</a> ]						
Germany	2005	Market access and structure	The second stage in the reform process, as provided for in the original legislation in 1993, was the transformation of divisions into subsidiaries. On January 1, 1999, the joint stock companies were founded and they were entered on the commercial register on June 1, 1999. Each company must produce its own annual report and accounts and is responsible for its business performance.					Yes	1
Greece	2006	Market access and structure	In June 1998, DB and NS (Netherlands Railways) announced their intention to merge their freight businesses to form a new company called Railion – this merger took place on January 1, 2000...A joint venture (not a merger) for international freight has also been formed between Italian and Swiss Railways.					Yes	1
Italy	2000	Market access and structure	[see see European Conference of Ministers of Transport (2001), "Railway Reform: Regulation of Freight Transport Markets", OECD, Paris, pg. 68-70]					Yes	in 2001
Japan	1987	Market access and structure	The powers of the railway authority are expanded to ensure non-discriminatory access. (pg. 198, 2002) The railway industry is characterised by a high level of public ownership, barriers to entry and vertical integration. Recent reform efforts have focused on unbundling railway operations from infrastructure, in accordance with the First EC Railway Package, which was implemented in 2005, with a two year delay. The state-owned Hellenic Railways Organisation (OSE) has founded two new companies, namely Railway Operator and Infrastructure Manager....[pg. 129-130, 2007]					Yes	1
Japan	2000	Market access and structure	January 2000: the legal separation between railway services and infrastructure becomes operational. (pg.199, 2000)					Yes	in 2001
Japan	1987	Market access and structure	JR East was incorporated on 1 April 1987 after being spun off from the government-run Japanese National Railways (JNR)... Following the breakup, JR East ran the operations on former JNR lines in the Greater Tokyo Area, the Tohoku region, and surrounding areas. [see <a href="https://en.wikipedia.org/wiki/East_Japan_Railway_Company">https://en.wikipedia.org/wiki/East_Japan_Railway_Company</a> and <a href="https://www.ireast.co.jp/e/data/index.html">https://www.ireast.co.jp/e/data/index.html</a> ]				pg. 88, 1988 pg. 103, 1992 pg. 118, 1995 pg. 76, 1996 pg. 93, 1997	Yes	1
Japan	2000	Market access and structure, public ownership	In 2000, the Ministry of Transport announced a new policy for dividing category-3 operators into two sub-categories—companies aiming to achieve revenues exceeding costs, and those with no such profit motive... Since 2000 [in 2000-2001], the government has also moved decisively towards deregulation. Restrictions on market entry were loosened by changing from a licensing system to a permission system under which the government cannot reject entry applications without giving open and good reasons. This means that existing operators cannot block entry of a newcomer simply because they fear competition. A newcomer is now able to build a new station near a competitor's existing station. [see <a href="http://www.jrtc.net/jrt7/s48_ter.html">http://www.jrtc.net/jrt7/s48_ter.html</a> , June 2001]					Yes	1
Korea	2004	Market access and structure	In 2004-2005, the government established two new state-owned corporations which replaced the Korean National Railroad, implying a re-shaping of the industry from vertical integration to vertical separation, also concomitant with lower barriers to entry. [see <a href="http://www.oecd.org/dataoecd/21/14/3488211wp221en.pdf">http://www.oecd.org/dataoecd/21/14/3488211wp221en.pdf</a> ]					Yes	in 2004
Netherlands	1996	Market access and structure	In 1995, an agreement under private law known as "Over de wissel tussen markt en overheid" [on cooperation between the market and the government], was drawn up between the government and NS on the reorganisation of responsibilities. The government remained responsible for the policy relating to the infrastructure and the quantity, planning, costs and charges for the use of the railway infrastructure. The operation of rail transport services had to take place on a commercial basis and the NS subsidies would be phased out completely by the year 2000. [see <a href="http://aef.pitt.edu/3488211wp221en.pdf">http://aef.pitt.edu/3488211wp221en.pdf</a> ]					Yes	in 1996
			The railway reform initiated in 1995 [phased in over a 1996-2000 transition period] in the Netherlands aimed to increase the market share of railways in overall transportation and intended to lead to a						

Netherlands	1999	Market access and structure, public ownership	<p>lower burden on the public purse (van de Velde, 2005). NS undertakings were split up in 1995 (within the NS holding) into a number of separate companies each with its own account. [see <a href="https://repository.tudelft.nl/islandora/object/uuid:c38fd403-caf1-4ae0-afab-8954368359c5/datastream/OBI">https://repository.tudelft.nl/islandora/object/uuid:c38fd403-caf1-4ae0-afab-8954368359c5/datastream/OBI</a>]</p> <p>Completion of reform initiated in 1995.</p> <p>The freight sector NS Cargo became part of the <u>Deutsche Bahn</u> after its merger with <u>Railion</u> in 2000, now known as DB-Schenker rail. [see <a href="https://en.wikipedia.org/wiki/Nederlandse_Spoorwegen">https://en.wikipedia.org/wiki/Nederlandse_Spoorwegen</a>]</p>		Yes	1
New Zealand	1994	Market access and structure, public ownership	<p>The New Zealand Government sold its 100 percent shareholding in New Zealand Rail Limited to Wisconsin Central Transportation Corporation, Berkshire Partners III LP., and Fay, Richwhile and Company Limited on 20 July 1993 for NZ\$ 328.2 million. (pg. 50, 1994)</p> <p>The Bolger National government, elected following the defeat of the fourth Labour government in elections held in October 1990, privatised New Zealand Rail Limited in 1993. [see <a href="https://en.wikipedia.org/wiki/Tranz_Rail">https://en.wikipedia.org/wiki/Tranz_Rail</a>]</p>	pg. 86, 2005	Yes	1
Norway	1997	Market access and structure	<p>In 1990, to improve economic management of the railway sector, separate accounting within the fully state-owned railway company NSB was introduced for rolling stock, track and other infrastructure. In 1996, this was followed by the transfer of most tracks from NSB to the state-owned Norwegian National Rail Administration, with NSB paying for the track use. (pg. 135, 2001)</p> <p>The first step to liberalise railway transportation was taken in the mid-1990s (December 1<sup>st</sup> 1996), when the incumbent railway company was split into a service provider (NSB) and a track owner, both fully owned by the government. At the same time, a regulatory authority was established, although it is mostly pre-occupied with technical regulation. (pg. 142, 2004)</p>	pg. 142, 2004	Yes	1
Norway	2001	Market access and structure	<p>In the 2000s the freight segment was deregulated and a number of freight companies have started competing with the NSB partial subsidiary CargoNet. 2001 was the starting year for this deregulation. [see <a href="https://en.wikipedia.org/wiki/Rail_transport_in_Norway">https://en.wikipedia.org/wiki/Rail_transport_in_Norway</a>]</p>		Yes	1
Norway	2007	Market access and structure	<p>Competition allowed in state purchases of passenger rail transport services. The first contested contract (Gjøvikbanen) was assigned in May 2005, requiring operation to start up in June 2006. (pg. 39, 2005)</p>		Yes	1
Portugal	2000	Market access and structure	<p>...the national railway company was split in two, effective as of January 1999, with the infrastructure management separated from the provision of transportation services. This has allowed the entry of a private consortium for the franchise provision of a new suburban passenger service in Lisbon, which started in mid-1999... (pg. 133, 2001)</p>		Yes in 2001	1
Slovak Republic	2002	Market access and structure	<p>July 1999: Start-up of the services of the private concessionaire (FERTAGUS) for rail passenger transport on a new line serving the Lisbon suburbs (pg. 172, 2001).</p> <p>In October 2000, the government approved a strategy for the transformation of Slovak Railway over the period 2002 to 2007 that is intended to create the conditions for the liberalisation, and eventually the privatization, of its commercial activities. The company was divided in two, with Železnica Spolocnost (ZS) taking over cargo and passenger transport and other commercial activities, while Železnice Slovenskej Republiky (ZSR) operates the railway infrastructure network and related activities. The reform is also aimed at improving the transparency of financial operations. (pg.130, 2002)</p>		Yes	1
Spain	2005	Market access and structure	<p>The new Railroad Law, which was approved in 2003 but only fully implemented in 2005, introduced managerial and legal separation between network management and transport activities, as required by EU law. The former operator, Renfe, was split into two independent, state-owned companies – Renfe and ADIF. The local and international freight transport market was subsequently liberalised, and private companies have already been granted operating licenses to compete with Renfe... A new regulatory body, the Railway Regulation Committee, was created as part of the Ministry of Public Works and charged with granting licenses and with overseeing the two public companies... (pg. 118, 2008)</p>		Yes	1
Spain	2013	Market access and structure	<p>Implemented by the end of 2012. Passenger rail services will be fully opened to market entrants in 2013. The incumbent operator has been split into 4 companies. (pg. 44, 2012)</p> <p>In September 2012, ...approval of Royal Decree-Law 22/2012 (R.D.-L), the act designed</p>	Passenger rail services will be fully opened to market entrants in 2013.	No	1

				to implement new measures on infrastructure and railway services in Spain... [see <a href="http://www.oecd.org/daf/competition/Rail-transportation-Services-2013.pdf">http://www.oecd.org/daf/competition/Rail-transportation-Services-2013.pdf</a> ]				
Sweden	1988	Market access and structure		The first steps towards liberalisation were taken in 1988, when the national railway was separated into a public enterprise, Swedish State Railways (SJ), and a government agency, the National Rail Administration, which is responsible for the infrastructure. In addition, passenger services were deregulated for local services on the county lines. (pg. 86, 2004)		pg. 86, 2004	Yes	1
Sweden	1996	Market access and structure		Rail infrastructure was vertically and institutionally separated from train operations in 1988. [see <a href="http://www.sou.gov.se/wp-content/uploads/2014/11/4d9d8ee7.pdf">http://www.sou.gov.se/wp-content/uploads/2014/11/4d9d8ee7.pdf</a> ]		pg. 87, 2004	Yes	1
Switzerland	1999	Market access and structure		Further liberalisation took place in 1996, when county public transport authorities were given the right to operate passenger traffic on the main trunk network within the counties... (pg. 87, 2004)		pg. 85, 1999 pg. 86, 2000 pg. 109, 2007	Yes	1
United Kingdom	1993	Market access and structure, public ownership		Deregulation of freight services in 1996. [see <a href="http://www.sou.gov.se/wp-content/uploads/2014/11/4d9d8ee7.pdf">http://www.sou.gov.se/wp-content/uploads/2014/11/4d9d8ee7.pdf</a> ]		Pg. 115, 2002 Pg. 175, 2004	Yes	1
				January 1999 - The reform of the railway system comes into effect, which transforms the Swiss Federal Railways into a state-owned company with greater freedom to act as a business. The reform also gives other companies access to the railway network for merchandise and non-regular passenger transport. (pg. 167, 1999; pg. 177, 2000)				
				The privatisation of the public monopoly British Rail was initiated by the Railways Act 1993. In 1993 the track was separated from train operations. A new entity, Railtrack, became responsible for operating all track and infrastructure, while passenger services were run by British Rail until they were franchised (pg. 115, 2002)				
				The 1993 Railways Act separated the ownership and operation of the infrastructure (track, stations, signaling) from the operation of train services. The ownership and operation of passenger rolling stock was also separated. The vertically integrated state-owned monopoly was privatised and separated into around a hundred different companies. This structure reflected the view that the track is a natural monopoly while the operation of train services and maintenance are potentially competitive activities. The 1993 Act created an independent regulator, the Office of the Rail Regulator (ORR) and a franchising authority accountable to ministers, the Office of the Passenger Rail Franchising (OPRAF). The OPRAF also regulated passenger fares. (pg. 175, 2004)				
United States	1980	Market access and structure		Bankruptcy of the Penn Central focused interest on the plight of railroads, and in 1976 the Railroad Revitalisation and Regulatory Reform Act (the 4R Act) was passed. In 1980, Congress passed the Staggers Act for railroads and the Motor Carrier Act for trucking. The two pieces of railroad legislation codified the view that competitive spheres and market-dominated spheres coexisted. Rate regulation and price intervention was to be maintained only in those captive markets where effective competition was missing. (pg. 68, 1986)		pgs. 68 and 76, 1986 pg. 80, 1989	No	1
				The Staggers Act set a new precedent by authorising railroads to negotiate prices with shippers rather than charging fixed, regulated rates... (pg. 76, 1986)				

Table A9. Product Market Regulation, Air Transport Sector

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Australia	1991	Market access and structure	The domestic airline industry was deregulated, allowing for the entrance of new carriers into the industry and greater competition on routes and fares. The two-airline policy - which effectively reserved the major routes to Ansett and Australian Airlines - was terminated in early 1991, and a third operator - Compass Airlines - began service shortly thereafter. (pg. 75, 1992)		pg. 51, 75, 1990	Yes	1
Australia	1993	Public ownership	The Australian Labor Party announced approval for government plans to sell Australian Airlines and 49 per cent of Qantas. Plan for privatization of Qantas and the Australian Airlines is established in 1991. Qantas purchases Australian airlines in 1992. British Airways purchases 25 percent of Qantas in march 1993. [see Fairbrother P., M. Paddon and J. Teicher (2002), "Privatisation, globalisation and labour: Studies from Australia", The Federation Press, pg. 27.]			Yes	1
Australia	1996	Public ownership	The sale of 25 per cent of a merged Qantas and Australian Airlines to British Airways was completed in March 1993. The remaining 75 per cent of the merged airline is to be sold through a public float in June-July 1995. [see Fairbrother P., M. Paddon and J. Teicher (2002), "Privatisation, globalisation and labour: Studies from Australia", The Federation Press, pg. 27.]			Yes	1
Australia	1997	Market access and structure	Single Aviation Market Arrangement with New Zealand in November 1996. [see <a href="https://www.icao.int/sustainability/CasesStudies/StatesReplies/Trans-Tasman_EN.pdf">https://www.icao.int/sustainability/CasesStudies/StatesReplies/Trans-Tasman_EN.pdf</a> ]			Yes	1
Austria	1988	Public ownership	The Government's share in Austrian Airlines was reduced to 75 per cent in 1988 and, after a capital increase in 1989, further to some 61 per cent. (pg. 56, 1990)			Yes in 1989	1
Austria	1993	Market access and structure	Austria applies air transport liberalization measures featured in the "Third Package" of EU single-market reforms, which took effect on 1 January 1993 (see brief description under "Belgium 1993" below).			Yes	1
Austria	2009	Public ownership	Lufthansa buys Austrian airlines (merger) [see <a href="http://europa.eu/rapid/press-release_IP-09-1255_en.htm">http://europa.eu/rapid/press-release_IP-09-1255_en.htm</a> ]			Yes	1
Belgium	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms. The Third Package which took effect on 1 January 1993. The Third Package gave practical effect in the air transport sector to the right of establishment provisions of the Treaty of Rome by introducing common licensing criteria for air carriers across the whole of the EU. It replaced national ownership and control restrictions with the concept of a "Community air carrier", under which EU airlines must be majority owned and effectively controlled by EU Member States. Once an airline has been granted an Operating Licence by any EU Member State it is afforded the rights laid down in the Market Access Regulation. The Air Fares Regulation also establishes the right in principle for airlines to set their own fares freely. European Single Aviation Market to be completed in 1997, when the last restrictions on cabotage are removed. [see e.g. <a href="http://www.icao.int/sustainability/CasesStudies/StatesReplies/Europeliberization_EN.pdf">http://www.icao.int/sustainability/CasesStudies/StatesReplies/Europeliberization_EN.pdf</a> , <a href="http://aei.pitt.edu/6282/1/6282.pdf">http://aei.pitt.edu/6282/1/6282.pdf</a> or <a href="https://www.econstor.eu/bitstream/10419/109162/1/818410752.pdf">https://www.econstor.eu/bitstream/10419/109162/1/818410752.pdf</a> ]			Yes	1
Belgium	1995	Public ownership	The Belgian national carrier, Sabena, was entirely owned by the government until recently. 49.5 per cent of Sabena's shares are now owned by Swissair... (pg. 139, 1997)			Yes	1
Belgium	2001	Public ownership	In 1995, Swissair purchased a 49 percent stake in Sabena and took over management. [see <a href="https://en.wikipedia.org/wiki/Sabena">https://en.wikipedia.org/wiki/Sabena</a> ]			Yes	1
Belgium	2001	Public ownership	Sabena bankruptcy in 2001. A group of investors managed to take over Delta Air Transport, one of Sabena's subsidiaries, and transformed it into SN Brussels Airlines. [see <a href="https://en.wikipedia.org/wiki/Sabena">https://en.wikipedia.org/wiki/Sabena</a> ]			Yes	1
Canada	1988	Market access and structure, public ownership	The airline industry was largely deregulated in the late 1980s. The 1987 National Transportation Act relaxed entry controls, ended license restrictions on flight frequency and aircraft type and permitted discounting. (pg. 99, 2004)			Yes for public ownership, no for entry	1
			In 1988 Air Canada was privatized, and 43% of shares are sold on the public market, with the initial public offering completed in October of that year. By this time, long-haul rival CP Air had become Canadian Airlines International following their acquisition by Pacific Western Airlines.				

Canada	1989	Public ownership	<p>[see <a href="https://en.wikipedia.org/wiki/Air_Canada">https://en.wikipedia.org/wiki/Air_Canada</a> ]</p> <p>Public sale of Air Canada was completed in 1989. (pg. 52, 1990)</p>		Yes	1
Canada	1997	Market access and structure	<p>The Canada Transportation Act (CTA) came into force on 1 July 1996 to update and replace the National Transportation Act, 1987. The CTA removed remaining economic regulation of air transport in northern Canada. [see e.g. <a href="http://publications.ec.gc.ca/Collection-R/LoPbDrp/ClR/892-e.html">http://publications.ec.gc.ca/Collection-R/LoPbDrp/ClR/892-e.html</a> ] and <a href="http://www.eskema.eu/DownloadFile.aspx?tableName=tblSubjectArticles&amp;field=PDF%20Filename&amp;idField=subjectArticleId&amp;id=204">http://www.eskema.eu/DownloadFile.aspx?tableName=tblSubjectArticles&amp;field=PDF%20Filename&amp;idField=subjectArticleId&amp;id=204</a> ]</p>		Yes	1
Czech Republic	1992	Public ownership	<p>Privatization of CSA Czech Airlines in 1992 (but government buying back shares in 1994, see below) [see <a href="http://www.icao.int/sustainability/documents/privatizedairlines.pdf">http://www.icao.int/sustainability/documents/privatizedairlines.pdf</a> ]</p>		Yes	1
Czech Republic	1994	Public ownership	<p>Government increases its stake in CSA Czech Airlines after earlier privatization in 1992. [see <a href="http://www.icao.int/sustainability/documents/privatizedairlines.pdf">http://www.icao.int/sustainability/documents/privatizedairlines.pdf</a> ]</p>		Yes	-1
Czech Republic	2001	Market access and structure	<p>Domestic air transport liberalisation along path toward EU accession.</p>			
Czech Republic	2004	Market access and structure	<p>Czech Republic becomes an EU member; further decline in barriers to entry with full membership of EU aviation market.</p>		Yes	1
Denmark	1993	Market access and structure	<p>Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)</p>		Yes	1
Denmark	2001	Market access and structure , public ownership	<p>The ownership structure of SAS was changed in June 2001, with a holding company being created in which the holdings of the governments changed to: Sweden (21.4%), Norway (14.3%) and Denmark (14.3%) and the remaining 50% publicly held and traded on the stock market. [see <a href="https://en.wikipedia.org/wiki/Scandinavian_Airlines">https://en.wikipedia.org/wiki/Scandinavian_Airlines</a> ]</p>		Yes	1
Finland	1994	Market access and structure	<p>Finland applies air transport liberalization measures featured in the "Third Package" of EU single-market reforms, which took effect on 1 January 1993 (see brief description under "Belgium 1993" above).</p>		Yes	1
France	1993	Market access and structure	<p>Sweden, Finland and Norway have had an agreement with the Community under which they adopted the Community's aviation legislation. The European Economic Area (EEA) was set up in 1994 to extend the EU's provisions on its internal market to the European Free Trade Area (EFTA) countries. [see <a href="http://www.intervistas.com/downloads/Economic_Impact_of_Air_Service_Liberalization_Final_Report.pdf">http://www.intervistas.com/downloads/Economic_Impact_of_Air_Service_Liberalization_Final_Report.pdf</a> and <a href="http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuid=FTU_6.5.3.html">http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuid=FTU_6.5.3.html</a> ]</p>		Yes	1
France	1999	Market access and structure	<p>Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)</p>	Such deregulation is all the more important in light of the recent moves towards concentration among French airline companies	Yes	1
France	2005	Public ownership	<p>The commitment to liberalise...in 1993 (and permission for cabotage) should result in improved services and lower fares to certain destinations. Such deregulation is all the more important in light of the recent moves towards concentration among French airline companies. (pg. 60-61, 1990)</p>		Yes	1
France	1999	Public ownership	<p>Air France's partial privatisation. Its shares were listed on the Paris stock exchange on 22 February 1999. [see <a href="https://en.wikipedia.org/wiki/Air_France#Acquisitions_and_privatisation">https://en.wikipedia.org/wiki/Air_France#Acquisitions_and_privatisation</a> ]</p>		Yes	1
France	2005	Public ownership	<p>On 30 September 2003, Air France and Netherlands-based KLM Royal Dutch Airlines announced the merger of the two airlines, the new company to be known as Air France-KLM. The merger became reality on 5 May 2004. At that point former Air France shareholders owned 81% of the new firm (44% owned by the French state, 37% by private shareholders), former KLM shareholders the rest. The decision of the government to reduce the French state's shareholding in the former Air France group from 54.4% to 44% of the newly created Air France-KLM Group effectively privatised the new airline. In December 2004 the state sold 18.4% of its equity in Air France-KLM. The state's shareholding in Air France-KLM subsequently fell to just under 20%. [see <a href="https://en.wikipedia.org/wiki/Air_France%E2%80%99sKLM">https://en.wikipedia.org/wiki/Air_France%E2%80%99sKLM</a> ]</p>		Yes	1
Germany	1993	Market access and structure	<p>Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)</p>		Yes	1
Germany	1998	Public ownership	<p>From April 1997, air transport has been liberalised along the lines of the directive by the EC. The government sold its remaining 35.7 per cent stake in Lufthansa to a state owned bank, with the shares to be sold to the public in the second half of 1997. The reason for the delay is the need to establish a mechanism which would ensure a majority of German nationals in the shares of Lufthansa after privatisation. This is a necessary condition for a further privatisation, since without a domestic majority, some bilateral air traffic agreements with other states would become invalid. (pg. 141, 1997)</p>	Important progress has been made in the liberalisation of air transport sector. (pg. 148, 1997)	Yes	1

Greece	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)	pg. 127, 2002	Yes	1
Greece	1999	Market access and structure	Olympic Airways' monopoly on domestic flights has also been partly lifted. (pg. 42, 1993) Further opening of the Greek air traffic market to competition, including the removal of any constraints on charter services and full access to the Greek islands, as well as the elimination of Olympic Airways' monopoly on ground handling. (pg. 184, 1998)	pg. 81, 2001	Yes	1
Greece	2009	Public ownership	The state-owned air-carrier Olympic Airways was privatised. (pg. 55, 2009)		Yes	1
Iceland	1995	Market access and structure	As of 1 July 1994, the third package [of EU air transport liberalization measures] is also fully applicable within the framework of the Agreement establishing the European Economic Area (EEA), thus further including Norway and Iceland. [see <a href="http://aei.pitt.edu/6282/1/6282.pdf">http://aei.pitt.edu/6282/1/6282.pdf</a> ]		Yes	1
Iceland	1998	Market access and structure	Competition has also been improved through deregulation. In the summer of 1997 the domestic airline industry was liberalised... (pg. 83, 1998).		No	1
Ireland	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)		Yes	1
Ireland	2007	Public ownership	Aer lingus gradually privatized starting from late 2006. The company began conditional (or "grey-market") share dealings on 27 September 2006 and was formally admitted to the Official Lists of the Irish Stock Exchange and London Stock Exchange on 2 October 2006. At the time of the flotation the Irish government maintained a 28% shareholding. [see <a href="https://en.wikipedia.org/wiki/Aer_Lingus#Flotation">https://en.wikipedia.org/wiki/Aer_Lingus#Flotation</a> ]		Yes	1
Italy	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)		Yes	1
Italy	1999	Public ownership	18.4 percent of Alitalia sold to private investors [see e.g. R. Charl (2015), "Life after privatization", Oxford University Press, pg. 54].		Yes	1
Italy	2009	Public ownership	Full privatisation of Alitalia, the national airline company. [see <a href="https://en.wikipedia.org/wiki/Alitalia-Linee_Aeree_Italiane">https://en.wikipedia.org/wiki/Alitalia-Linee_Aeree_Italiane</a> ]		Yes	1
Japan	1986	Market access and structure	(...) the government has allowed the three domestic airlines (JAL, ANA and JAS) to fly the same routes beginning in 1986, but ticket prices are not allowed to vary between airline. With the setting of fares still under strict government control, the airlines are able to compete only on the basis of service. The government has encouraged a decline in ticket prices through the introduction of various discount ticket systems. The entry of new domestic airlines is restricted by the lack of airport capacity, particularly in Tokyo and Osaka (pg. 66, 1994)		Yes	1
Japan	1988	Public ownership	Japan Air Lines was privatised, first by modifying its legislative framework, and then through the sale of the shares owned by the government (34.5 percent of the total) in December 1987; (pg. 84, 1988)		Yes in 1987	1
Korea	2005	Market access and structure	Access to domestic air transport market made easier [see <a href="https://www.icao.int/Meetings/ATConf6/Documents/WorkingPapers/ATConf6_IP_01.4.2_en.pdf">https://www.icao.int/Meetings/ATConf6/Documents/WorkingPapers/ATConf6_IP_01.4.2_en.pdf</a> ]		Yes	1
Luxembourg	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)		Yes	1
Netherlands	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)		Yes	1
New Zealand	1985	Market access and structure, public ownership	Domestic air services have been effectively deregulated... (pg. 85, 2005) A liberal air transport policy was set in 1985. [see <a href="http://www.transport.govt.nz/air/airpolicystatement/internationalairtransportpolicyreview/">http://www.transport.govt.nz/air/airpolicystatement/internationalairtransportpolicyreview/</a> ]		Yes for public ownership, no for entry	1
New Zealand	1988	Market access and structure, public ownership	Partial privatization of Air New Zealand. Current policy imposes a 50 percent limit on foreign ownership unless other countries reciprocate, although an exception was made for the Australian airline, Ansett New Zealand. (pg. 47, 1989) The government sold Air New Zealand to a consortium in 1988.		Yes	1

New Zealand	1997	Market access and structure	[see <a href="http://www.treasury.govt.nz/downloads/commercial/mixed-ownership-mode/mom-shppnz-wilson-dec10.pdf">http://www.treasury.govt.nz/downloads/commercial/mixed-ownership-mode/mom-shppnz-wilson-dec10.pdf</a> ] Single Aviation Market Arrangement with Australia in November 1996 [see <a href="https://www.icao.int/sustainability/CasesStudies/StatesReplies/Trans-Tasman_EN.pdf">https://www.icao.int/sustainability/CasesStudies/StatesReplies/Trans-Tasman_EN.pdf</a> ]		pg. 85, 2005	Yes	1
New Zealand	2002	Public ownership	Air New Zealand...returned to majority government ownership in 2001 after near bankruptcy due to the failed tie up with Australian carrier Ansett Australia. [see <a href="https://en.wikipedia.org/wiki/Air_New_Zealand">https://en.wikipedia.org/wiki/Air_New_Zealand</a> ]		pg. 74, 85, 2005	Yes	-1
Norway	1994	Market access and structure	As of 1 July 1994, the third package [of EU air transport liberalization measures] is also fully applicable within the framework of the Agreement establishing the European Economic Area (EEA), thus further including Norway and Iceland. [see <a href="http://aei.pitt.edu/6282/1/6282.pdf">http://aei.pitt.edu/6282/1/6282.pdf</a> ] From 1 April 1994, both public and private domestic airlines have access to all domestic routes. From 1997, foreign airlines will be given access to the domestic market as well. These measures complement the EEA-agreement which implied that international flights within the EEA-area should be opened to all airlines as of 1 July 1994; [pg. 42, 1995]	In the area of air transport, both the July 1992 agreement between Norway, Sweden and the EC and the implementation of the EEA treaty should greatly increase competitive pressures (pg. 47, 1994)	pg. 96, 1997 pg. 77, 1998 pg. 133-135, 2001 pg. 108, 2002 pg. 122, 2004	Yes	1
Norway	2001	Public ownership	SAS Norge ASA was merged to create the SAS Group in 2001. [see <a href="https://en.wikipedia.org/wiki/Norwegian_Air_Lines">https://en.wikipedia.org/wiki/Norwegian_Air_Lines</a> ]			Yes	1
Portugal	1976	Public ownership	Nationalisation of...the Portuguese Air Transport Company... (pg. 5, 1976) April 16 <sup>th</sup> 1975: TAP becomes a State-owned company through Decree-Law number 205-E/75 [see <a href="http://www.tapportugal.com/pridir/ftvtab/mediaRep/editors/Contentimages/INSTITUTIONAL/PDF/TAP/Relatorios/annual/2011/TAP_AR_2011_EN.pdf">http://www.tapportugal.com/pridir/ftvtab/mediaRep/editors/Contentimages/INSTITUTIONAL/PDF/TAP/Relatorios/annual/2011/TAP_AR_2011_EN.pdf</a> ]		pg. 32, 1983 pg. 59, 1986 pg. 60-61, 1988	No but would qualify if OECD indicator structure was used.	-1
Portugal	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above) Domestic air transport liberalization. A new charter company, Linhas Aéreas Charter, was created in 2000 in partnership with Abreu Viagens. TAP created alliances with LAM, PGA-Portugália, and Finnair during the same year. The "Modernization of the Organization" Project of 2000 reorganized TAP into Airline, Handling, and Maintenance business units. In February, the government announced a privatization plan in which SairGroup-Swissair's parent--would take a 34 percent holding in TAP. Swissair agreed to pay Esc 31 billion for the stake. Pilots and other employees were also to be given 10 percent ownership in the airline modification to the deal announced in June 2000. However, in February 2001, SairGroup withdrew from the agreement. [see <a href="http://www.fundinguniverse.com/company-histories/tap-air-portugal-transportes-a%C3%A9reos-portugueses-s-a-history/">http://www.fundinguniverse.com/company-histories/tap-air-portugal-transportes-a%C3%A9reos-portugueses-s-a-history/</a> ]			Yes	1
Portugal	2000	Market access and structure	Open skies agreement with the US in December 1999. [see <a href="https://www.state.gov/e/eb/rfs/otnr/ata/267129.htm">https://www.state.gov/e/eb/rfs/otnr/ata/267129.htm</a> ]			Yes	1
Slovak Republic	1998	Market access and structure	Domestic air transport liberalization.			Yes	1
Slovak Republic	2001	Market access and structure	Air transport liberalization along path to EU accession.			Yes	1
Slovak Republic	2005	Public ownership	OECD experience shows that competition is often restricted in industries in which the state has ownership involvement. It is therefore a very positive sign that Slovakia has continued with its privatisation agenda, including the sale of a majority 62% stake in the national air carrier Slovenske Aerolinie [Slovak Airlines] to Austrian Airlines in late 2004... (pg. 111, 2005) In January 2005 Austrian Airlines acquired the majority stake (62%) in the company. [see <a href="https://en.wikipedia.org/wiki/Slovak_Airlines">https://en.wikipedia.org/wiki/Slovak_Airlines</a> ]	It is...a very positive sign that Slovakia has continued with its privatisation agenda, including the sale of a majority 62% stake in the national air carrier Slovenske Aerolinie to Austrian Airlines... (pg. 111, 2005)		Yes	1

Slovak Republic	2007	Public ownership	Slovak Airlines ceased operations after Austrian Airlines repossessed two aircraft, having withdrawn financial support in January 2007. The company filed for bankruptcy on 2 March 2007. Large portion of employees and offices was taken over by small Seagale Air. [ <a href="https://en.wikipedia.org/wiki/Slovak_Airlines">https://en.wikipedia.org/wiki/Slovak_Airlines</a> ]		Yes	1
Spain	1994	Market access and structure	Greater emphasis is now put on deregulation and privatisation of state monopolies in order to inject greater competition and promote efficiency. Since 1993, the monopoly of Iberia on domestic flights has been broken... (pg. 41, 1993)	... the monopoly of Iberia on domestic flights has been broken... (pg. 41, 1993)	Yes in 1995	1
Spain	2001	Public ownership	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)		Yes	1
Spain	2008	Public ownership	In 2001, privatisation was completed and Iberia shares were listed on stock exchanges. On April 3, 2001, Iberia was privatised and included in the IBEX-35 stock index of the Madrid stock exchange. [see <a href="https://en.wikipedia.org/wiki/History_of_Iberia_(airline)#Privatisation_282001.E2.80.932009.29">https://en.wikipedia.org/wiki/History_of_Iberia_(airline)#Privatisation_282001.E2.80.932009.29</a> ]		Yes	1
Sweden	1992	Market access and structure	The Sociedad Española de Participaciones Industriales (SEPI) [attached to the Ministry of Finance] sells its remaining 5 percent stake in Iberia. [see <a href="http://www.economista.es/flash/294132/index.html">http://www.economista.es/flash/294132/index.html</a> ]		Yes	1
Sweden	2001	Public ownership	The domestic air transport market was liberalised in 1992... (pg. 88, 1999)		Yes	1
Sweden	2001	Public ownership	The ownership structure of SAS was changed in June 2001, with a holding company being created in which the holdings of the governments changed to: Sweden (21.4%), Norway (14.3%) and Denmark (14.3%) and the remaining 50% publicly held and traded on the stock market. [see <a href="https://en.wikipedia.org/wiki/Scandinavian_Airlines">https://en.wikipedia.org/wiki/Scandinavian_Airlines</a> ]		Yes	1
Switzerland	2002	Market access and structure	Air transport liberalization as part of the June 1999 agreement signed with the EU, which effectively incorporates Switzerland in the EU aviation market. The agreement came into force in June 2002. [see <a href="https://www.admin.ch/dam/000/000/1999/000/19994646/index.html">https://www.admin.ch/dam/000/000/1999/000/19994646/index.html</a> ] and <a href="https://www.eda.admin.ch/dam/000/000/1999/000/19994646/index.html">https://www.eda.admin.ch/dam/000/000/1999/000/19994646/index.html</a> ]		Yes	1
Switzerland	2005	Public ownership	In March 2005 Swiss was taken over by the German carrier Lufthansa, the national carrier of Germany. [see <a href="https://en.wikipedia.org/wiki/Swissair">https://en.wikipedia.org/wiki/Swissair</a> ]		Yes	1
United Kingdom	1987	Public ownership	British Airways is due to be privatised in early 1985 (pg. 25, 1985). This materialized only in 1987 – see Table on the privatization program Annex II.2 RHS; line corresponding to 1987: Sale of British Airport Authorities, British Airways (51 per cent) (pg. 110, 1989)	page 110, 1989	Yes	1
United Kingdom	1993	Market access and structure	Air transport liberalization as part of implementation of "Third Package" of EU single-market reforms (see brief description under "Belgium 1993" above)		Yes	1
United States	1979	Market access and structure	In 1978, legislation was passed which will decentralize entry and price regulation of domestic airlines by 1982 and 1983, respectively. (pg. 26, 1979)	pg. 68, 1986, pg. 80, 1989	No	1

Note: The list of major reforms does not include open skies agreements with the US, which are featured in the OECD indicator for product market regulation in air transport. For a comprehensive list of such agreements, see: <https://www.state.gov/e/eb/rls/othr/ata/267129.htm>

Table A10. Product Market Regulation, Road Transport Sector

	Year	Area	Content	Normative language	Mention in other reports	Large change in OECD indicator	reform /counter-reform
Austria	1987	Market access and price regulation	Regulator does no longer have any power to limit industry capacity. [see <a href="http://www.oecd.org/tad/services-trade/46348780.pdf">http://www.oecd.org/tad/services-trade/46348780.pdf</a> , Annex 5] This follows a ruling by the Austrian constitutional court that the transport of goods law ("Güterbeförderungsgesetz") had to be changed, including as regards how to get a commercial transport license. After this ruling, to obtain a concession e.g. for road haulage it was no longer necessary that there be a need for this commercial service—all that was needed was to show evidence of formal qualification and proof of financial solvency. Furthermore, in its decision the government no longer needed to consider impacts on economic well-being of existing companies as well as capacities of other modes of transport capable to offer similar services.			Yes	1
Belgium	1988	Market access and price regulation	Deregulation of licensing and freight rates. [see <a href="http://staging.ilo.org/public/libdoc/ilo/1996/96809_102_eng1.pdf">http://staging.ilo.org/public/libdoc/ilo/1996/96809_102_eng1.pdf</a> ] The measures relating to the deregulation of road freight haulage entered into force on 1st November 1987 and concern: An increase from 25 to 75 kms in the range of operations covered by a transport permit; Abolition of the categories for a general domestic transport permit based on vehicle payloads; Greater flexibility in the requirements for general domestic transport permits. [see European Conference of Ministers of Transport (1991), "OECD ECMT Round Tables: The Role of the State in a Deregulated Transport Market", ECMT, Paris, pg.107.]			Yes in 1987	1
Belgium	1991	Market access and price regulation	All restrictions lifted. [see <a href="http://www.bath.ac.uk/e-journals/itep/pdf/Volume_32_Part_1_113-131.pdf">http://www.bath.ac.uk/e-journals/itep/pdf/Volume_32_Part_1_113-131.pdf</a> ]			Yes in 1990	1
Canada	1988	Market access and price regulation	Federal deregulation of the transport sector begins. Ontario introduces deregulation of trucking. Federal economic regulations of air and surface transport will be phased out in the course of this year though its control over safety measures remains in full force. Restrictions on the entry of air carriers were relaxed from 1st January 1988. Barriers to intra-carrier competition, restrictions on entry and regulations to protect modes of transport will be dismantled. (pg. 73, 1988) Several new pieces of legislation have established a new approach to the economic regulation of transportation, including the National Transportation Act 1987, and the Motor Vehicle Transport Act 1987, which came into force on 1st January 1988. [see European Conference of Ministers of Transport (1991), "OECD ECMT Round Tables: The Role of the State in a Deregulated Transport Market", ECMT, Paris, pg.108.]		pg. 53, 1989 pg. 36, 52-53, 65, 1990 pg. 42, 1991 pg. 32, 49, 1992 pg. 54, 1994 pg. 62, 1997	Yes	1
Czech Republic	1991	Market access and price regulation	In what became the Czech Republic, the process of liberalisation in the road freight transport started in 1991 when regulation of prices was abolished. Today, prices are established on a contractual basis, and no price control is exercised by industry associations. Privatisation of the sector commenced in 1991. There remains residual government participation in the road freight sector, but this is not significant. Under Act no. 455/1991 Coll the conditions for establishing enterprises (including road freight enterprises) were set. [see <a href="https://www.oecd.org/regreform/2506510.pdf">https://www.oecd.org/regreform/2506510.pdf</a> ]			Yes	1
Czech Republic	2005	Market access and price regulation	EU membership becomes effective on May 1 <sup>st</sup> 2004. The 2000 Act on Road Transport had adapted Czech provisions on access to the profession to EU law. [see OECD (2001), "OECD Reviews of Regulatory Reform: Regulatory Reform in the Czech Republic", OECD, Paris, pg. 291]			Yes	1
Denmark	1989	Market access and price regulation	A new law on road transport entered into force on 1 st January 1989. The purpose of the law is deregulation of the road haulage sector. Furthermore, it provides an incentive for the hauliers to reorganise their enterprises adequately ahead of entering the European Single Market in 1993. The repealed law on road			Yes	1

				haulage provided for quantity- as well as quality-regulating criteria of the haulage sector. In the current legislation the former criterion has been abolished as it proved impossible to confine the number of hauliers by objective standards. Previously, an authorisation was needed to carry out regular road haulage services. This mode of transport is no longer subject to any special regulation. [see European Conference of Ministers of Transport (1991), "OECD ECMT Round Tables: The Role of the State in a Deregulated Transport Market", ECMT, Paris, pg. 110.]				
Finland	1985	Market access and price regulation		Denmark (1989)...have deregulated completely [prices]. [see <a href="http://www.bath.ac.uk/e-journals/itep/pdf/Volume_32_Part_1_113-131.pdf">http://www.bath.ac.uk/e-journals/itep/pdf/Volume_32_Part_1_113-131.pdf</a> ] Professional bodies no longer involved in setting entry regulation. [see <a href="http://www.oecd.org/tad/services-trade/46348780.pdf">http://www.oecd.org/tad/services-trade/46348780.pdf</a> , Annex 5]		Yes in 1984		1
Finland	1986	Market access and price regulation		Deregulation of prices of road freight services. [see <a href="http://www.oecd.org/tad/services-trade/46348780.pdf">http://www.oecd.org/tad/services-trade/46348780.pdf</a> , Annex 5]		Yes		1
Finland	1992	Market access and price regulation		Abolishing needs-testing in road transport of goods (1991). [see <a href="http://www.oecd.org/regreform/2510156.pdf">www.oecd.org/regreform/2510156.pdf</a> ]		Yes		1
France	1986	Market access and price regulation		New transport policies for all transport freight and passenger operations went into effect. They are designed to deregulate the freight transport licensing procedure. [see International Labour Organisation (1992), "Recent Developments in Inland Transport Policies", 12 <sup>th</sup> session, Geneva, pg. 90.]		Yes		1
France	1989	Market access and price regulation		In the road haulage sector, entry conditions have been partially liberalised: for long-distance haulage, licences have been granted without any quotas since 1986, while for short and medium distance haulage, enterprises are simply required to be on the road hauliers' register. (pg. 75, 1991) The compulsory rates for freight are to be abolished on 31st December 1988 and replaced by reference rates. [see European Conference of Ministers of Transport (1991), "OECD ECMT Round Tables: The Role of the State in a Deregulated Transport Market", ECMT, Paris, pg. 114.]	pg. 75, 1991 pg. 105-106, 1997	Yes		1
Germany	1994	Market access and price regulation		The mandatory pricing system was abolished in 1986, and there followed a three-year transitional period (pg. 75, 1991) In Germany, restrictions on freight rates, size of vehicles, loading and transport for third party in long distance freight were relaxed in January 1994. [see <a href="http://staging.ilo.org/public/ldoc/ilo/1996/96809_102_eng.pdf">http://staging.ilo.org/public/ldoc/ilo/1996/96809_102_eng.pdf</a> ]		Yes		1
Germany	1999	Market access and price regulation		In Germany...price controls were ended from the beginning of 1994 (in practice they had not been enforced since about 1991/920). [see <a href="http://www.bath.ac.uk/e-journals/itep/pdf/Volume_32_Part_1_113-131.pdf">http://www.bath.ac.uk/e-journals/itep/pdf/Volume_32_Part_1_113-131.pdf</a> ] Regulator does no longer have any power to limit industry capacity. German Freight Traffic Act, 1st July 1998. [see <a href="http://www.oecd.org/tad/services-trade/46348780.pdf">http://www.oecd.org/tad/services-trade/46348780.pdf</a> , Annex 5]		Yes		1
Germany	2005	Market access and price regulation		In 1998 the German government decided to abandon its restrictive national transport license system for regional and long-distance commercial road haulage for trucks with a total admissible weight of 3.5 tons. Professional body no longer involved in setting entry regulation. [see <a href="http://www.oecd.org/tad/services-trade/46348780.pdf">http://www.oecd.org/tad/services-trade/46348780.pdf</a> , Annex 5]		Yes		1
Iceland	1998	Market access and price regulation		Regulator does no longer have any power to limit industry capacity. [see <a href="http://www.oecd.org/tad/services-trade/46348780.pdf">http://www.oecd.org/tad/services-trade/46348780.pdf</a> , Annex 5]		Yes		1

Ireland	1986	Market access and price regulation	<p>The 1986 Transport Act completely liberalised road haulage, as far as basic EC requirements allow. By availing itself of the deregulatory steps taken by the EC and ECMT, access to the international haulage market has been expanded and opportunities for the Irish road haulage industry widened. There are no operational regulations, such as price controls, rent controls, fee structures or restraints on advertising in the road freight sector, and in principle, anybody reaching the required standard of professional competence may be allowed an operating licence. (pg. 96, 1993)</p> <p>The Road Transport Act (1986) provided for the replacement of existing carriers licenses, restricted road freight and road freight certificates by a new Carriers' Licence. The new licenses have no restrictions as to their area of operation, the type of goods carried and the number of vehicles which can be operated by a license holder. The new licenses were phased in over a two-year period with full liberalisation from 30th of September 1988.</p> <p>[see <a href="http://www.oecd.org/officialdocuments/publicationsbydocumentpdf/?cote=DAFFE/CLP/WP2/WVD(2000)62&amp;docLanguage=En">http://www.oecd.org/officialdocuments/publicationsbydocumentpdf/?cote=DAFFE/CLP/WP2/WVD(2000)62&amp;docLanguage=En</a>]</p>	The 1986 Transport Act completely liberalised road haulage (pg. 96, 1993).	Yes	1
Ireland	1988	Market access and price regulation	<p>Price liberalization completes the deregulation process started with the Road Transport Act (1986).</p>		Yes	1
Italy	2001	Market access and price regulation	<p>In March 1998 Parliament approved two laws aimed at completing the liberalisation of the trucking industry by January 2001. The first law simplifies the issuing of licenses which are to be assigned at the level of the company and no longer according to truck-ownership. In this way, the law seeks to encourage mergers, a rise in the average company size being needed to meet the competitive challenges posed by the opening to European-wide competition from July 1998. The second law ensures that the criteria establishing access to the profession are harmonised with EU norms. (pg. 102, 1999)</p>		Yes	1
Italy	2005	Market access and price regulation	<p>tariff liberalisation introduced by Legislative Decree No 286 of 21 November 2005. [see <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?url=CELEX%3A62016C00121">http://eur-lex.europa.eu/legal-content/EN/TXT/?url=CELEX%3A62016C00121</a>]</p>		Yes	1
Japan	1990	Market access and price regulation	<p>Abolition of entry regulation and authorisation system for fares and charges for the trucking and forwarding businesses (pg. 65, 1994)</p> <p>...the 1990 act abolished demand-supply balancing for new entries. It is still necessary to acquire a license, the criteria for a new license was simplified to focus on only the applicant's operational ability. Additionally, the minimum number of trucks - a main criterion of operational ability - was decreased. Therefore, it became easier for new trucking companies to enter the field. With regard to Truck Load (TL) operation, carriers have been able to consolidate plural shippers' consignments after 1990 while only Less than Truck Load (LTL) carriers could consolidate consignments before 1990. Furthermore, since 1990, trucking carriers can freely increase (or decrease) their number of trucks (A prior notice to the MOT is necessary) so that carriers can change their fleet to meet transportation demands...</p> <p>[see <a href="http://www.esri.go.jp/archiv/dls/dls062/dls062e.pdf">http://www.esri.go.jp/archiv/dls/dls062/dls062e.pdf</a>]</p> <p>[see <a href="http://www.wctrs-society.com/wp/wp-content/uploads/abstracts/berkeley/G3/849/WCTR2007proceeding(Jun%20MIZUTANI).pdf">http://www.wctrs-society.com/wp/wp-content/uploads/abstracts/berkeley/G3/849/WCTR2007proceeding(Jun%20MIZUTANI).pdf</a>]</p>	pg. 79, 1996	Yes	1
Japan	1998	Market access and price regulation	<p>In December 1989, the Japanese Diet passed two bills that aimed to reform the regulation of the trucking business and forwarders... The names of the new laws are the Motor-truck Transport Business Law and the Freight Forwarding Business Law. The former provides new regulation of the trucking business, and the latter deals with freight forwarders... trucking services are concerned mainly with the Motor-truck Transport Business Law... The most important feature of the Motor-truck Transport Business Law was the relaxation of regulations of entry and price setting.</p> <p>[see <a href="http://www.esri.go.jp/archiv/dls/dls062/dls062e.pdf">http://www.esri.go.jp/archiv/dls/dls062/dls062e.pdf</a>]</p>		Yes	1
Japan	2000	Market access and price regulation	<p>End of price controls. Advance notification of tariffs to Ministry of Transport used to be required, and the Ministry could order tariff modification including on the grounds of unfair competition.</p> <p>[see OECD (1999), "OECD Reviews of Regulatory Reforms: Regulatory Reform in Japan", Paris, pg. 26.]</p> <p>A minimum number of trucks is required for entry. Restriction on business area for trucking is applied in licensing. MOT announced it would expand area for licensing in 1998 and reduce minimum truck number gradually by 2000.</p> <p>[see OECD (1999), "OECD Reviews of Regulatory Reforms: Regulatory Reform in Japan", Paris, pg. 26.]</p>		Yes in 2001	1

Korea	2000	Market access and price regulation	<p>Trucking businesses were permitted to operate in wider zones in 1999, while the door is to be opened to smaller entrants in FY2000, by reducing minimum requirements on truck ownership. [see IMF (2000), "Japan: Economic and Policy Developments", Staff Country Reports, November, pg. 100 ]</p> <p>With respect to road freight..., the licensing requirement was replaced by registration in July 1999...The licensing requirement prompted some local autonomous bodies to suspend the granting of licenses for several years, citing oversupply. This resulted in the significant premiums on existing licenses and other serious problems of market distortion. Eventually, the regulatory reform plan put forward by the KFTC was accepted by the MOCT and was approved by the Economic Deregulation Committee in Nov. 1995, which led to the amendment of relevant law in 1997. In July 1999, registration was newly adopted... The types of the road freight services were also streamlined from six to three. Effective from Jan. 1, 2000, the registration condition involving the number of freight vehicles was additionally loosened, from more than 25 to five. As a result, there are in effect no entry regulations in this sector. [see <a href="http://www.oecd.org/regreform/sectors/2379173.pdf">http://www.oecd.org/regreform/sectors/2379173.pdf</a>]</p>	Yes in 1998	1
Luxembourg	1999	Market access and price regulation	<p>Implementation in Luxembourg of EU-wide liberalization of cabotage. On 1 July 1998 road cabotage in the movement of freight has been fully liberalised. This means that from that date a haulier from a Member State who holds a Community license, can transport goods, on a temporary basis, between two points within another Member State. [see <a href="http://www.etf-europe.org/cabotage-road-haulage.cfm">http://www.etf-europe.org/cabotage-road-haulage.cfm</a>]</p>	Yes	1
Netherlands	1992	Market access and price regulation	<p>In road transport...by 1992, capacity and price controls had been eliminated and barriers to entry substantially reduced. [see OECD (1999), "OECD Reviews of Regulatory Reforms: Regulatory Reform in The Netherlands", Paris, pg. 25]</p> <p>The Netherlands (1992)...have deregulated completely [prices]. [see <a href="http://www.bath.ac.uk/e-journals/ieop/pdf/Volume_32_Part_1_113-131.pdf">http://www.bath.ac.uk/e-journals/ieop/pdf/Volume_32_Part_1_113-131.pdf</a>]</p> <p>Road haulage was deregulated in 1983. Licensing was liberalised... (pg. 46, 1989)</p>	Yes	1
New Zealand	1984	Market access and price regulation	<p>In November 1983 the Transport Amendment Act (No 2) began the deregulation phase in New Zealand's road freight transport. There were two notable changes to the operation of the industry, firstly the quantitative road transport licensing system was replaced with a qualitative system on June 1 1984 so that the main issue of concern was the fitness of the applicant to run a trucking service, and secondly the 150 km restriction on road carriage [that protected Government railways against competition from road transport] began to be phased out. Although the route, distance and price constraints had been removed on 1 November 1983 under the Transport Amendment Act, where road haulage was in competition with railways beyond 150 km distance, operators were still required to pay for a permit from the Ministry of Transport. This phased withdrawal of the 150 km restriction meant that operators were still charged for a permit but on a per tonne-day basis. When these permits were completely phased out in October 1986, entry to road transport became totally unrestricted. [see <a href="http://www.treasury.govt.nz/publications/research-policy/wp/1999/99-10/twp99-10.pdf">http://www.treasury.govt.nz/publications/research-policy/wp/1999/99-10/twp99-10.pdf</a>]</p>	Yes in 1983	1
Norway	1987	Market access and price regulation	<p>Reducing statutory barriers to entry can play an important role in encouraging competition and there have been some moves towards deregulation in recent years. The road haulage market was completely deregulated in 1987... (pg. 66, 1990)</p> <p>Norway's full deregulation of freight transport took place in 1987. [see International Labour Organisation (1992), "Recent Developments in Inland Transport Policies", 12<sup>th</sup> session, Geneva, pg. 23.]</p>	Yes	1
Portugal	1987	Market access and price regulation	<p>Deregulation of freight rates. [see <a href="http://staging ilo.org/public/libatoc/ilo/1996/96B09_102_eng.Lpdf">http://staging ilo.org/public/libatoc/ilo/1996/96B09_102_eng.Lpdf</a>]</p> <p>On the eve of Portugal integration into EEC, the replacement for PRN 1945 comes to the light by the Law 380/85 of 25 September 1985, the Plano Rodoviário Nacional de 1985. [see <a href="https://en.wikipedia.org/wiki/Roads_in_Portugal">https://en.wikipedia.org/wiki/Roads_in_Portugal</a>]</p>	Yes	1
Portugal	1996	Market access and price regulation	<p>Deregulation of licenses. [see <a href="http://www.oecd.org/tao/services-trade/46348780.pdf">http://www.oecd.org/tao/services-trade/46348780.pdf</a>, Annex 5]</p>	Yes	1

Slovak Republic	1991	Market access and price regulation	In what became the Slovak Republic, the process of liberalisation in the road freight transport started in 1991 when regulation of prices was abolished. [see <a href="https://www.oecd.org/regreform/2506510.pdf">https://www.oecd.org/regreform/2506510.pdf</a> on Czech Republic.]			Yes	1
Slovak Republic	2011	Market access and price regulation	Regulator does no longer have any power to limit industry capacity.			Yes	1
Spain	2000	Market access and price regulation	Regulator does no longer have any power to limit industry capacity.		pg. 66, 2000 pg. 58, 83, 2001	Yes	1
Spain	2002	Market access and price regulation	The road haulage sector is liberalized, with prices set freely, and market access opened to every firm that fulfils the quality and safety requirements to obtain a license. (pg. 83, 2001)		The road haulage sector is liberalized (pg. 83, 2001)	Yes	1
Sweden	1987	Market access and price regulation	In the Spring of 1987, the control of establishment -involving decisions on whether new capacity was needed- was abolished in the forwarding industry. [see <a href="http://www.konkurrensverket.se/globalassets/english/publications-and-decisions/regulatory-reform-in-sweden.pdf">http://www.konkurrensverket.se/globalassets/english/publications-and-decisions/regulatory-reform-in-sweden.pdf</a> , pg. 20]			Yes	1
United Kingdom	1980	Market access and price regulation	Road transport deregulation has taken the form of allowing free entry in the market for coach services, first on long-haul express coaches (1980) and later on urban area bus services (1986) (pg. 72, 1988)			No	1
United Kingdom	1986	Market access and price regulation	Road transport deregulation has taken the form of allowing free entry in the market for coach services, first on long-haul express coaches (1980) and later on urban area bus services (1986) (pg. 72, 1988)			No	1
United States	1980	Market access and price regulation	In 1980, Congress passed the Staggers Act for railroads and the Motor Carrier Act for trucking... Rate regulation and price intervention was to be maintained only in those captive markets where effective competition was missing... The U.S. trucking reform liberalised entry policies by shifting the burden of proof to opponents to show that entry of new firms would be harmful to consumers. The Act did not eliminate antitrust immunity for collective rate-making, although it did grant a zone of rate freedom. (pg. 68, 1986)  The deregulation of the interstate trucking industry took place...with the Motor Carrier Act of 1980, which removed entry barriers and eliminated price-setting bureaus. [see <a href="http://repository.law.umich.edu/cgi/viewcontent.cgi?article=1051&amp;context=law_econ_archive">http://repository.law.umich.edu/cgi/viewcontent.cgi?article=1051&amp;context=law_econ_archive</a> ]  1980 Motor and Carrier Act deregulates entry and freight rates for inter-state road freight transport. [see <a href="http://staging.ilo.org/public/1/bdoc/10/1986/96809_102_eng.pdf">http://staging.ilo.org/public/1/bdoc/10/1986/96809_102_eng.pdf</a> ]		Greatly reduced federal regulation of trucking is enacted in 1980. (pg. 68, 1986)	No but would qualify if OECD indicator structure was applied	1
United States	1995	Market access and price regulation	Adoption in 1980 of...the Motor Carrier Act which...deregulated road freight transport by curtailing the right of the Interstate Commerce Commission to reject rates filed by carriers, easing market entry requirements, and lifted the anti-trust immunity for rate-setting and mergers of motor carriers... [see International Labour Organisation (1992), "Recent Developments in Inland Transport Policies", 12 <sup>th</sup> session, Geneva, pg. 23.]  Interstate Commerce Commission Termination Act. With the abolition of the ICC in 1995, rate regulations and tariff filing were finally eliminated... With the ICC Termination Act of 1995, requirements for operating authority were eliminated and the states were pre-empted from imposing economic control over the industry... In 1994, Congress directed states' regulations to be no more stringent than ICC rules. The restrictions on state power were retained after the ICC was abolished a year later [see <a href="http://transportation.mit.edu/sites/default/files/documents/MIT_Trucking_Productivity_2013_VParming.pdf">http://transportation.mit.edu/sites/default/files/documents/MIT_Trucking_Productivity_2013_VParming.pdf</a> or <a href="https://www.ftc.gov/sites/default/files/attachments/us-submissions-oecd-and-other-international-competition-fora/iberp-trucking.pdf">https://www.ftc.gov/sites/default/files/attachments/us-submissions-oecd-and-other-international-competition-fora/iberp-trucking.pdf</a> ]			No but would qualify if OECD indicator structure was applied	

Note: The authors would like to thank Hans-Joachim Schramm (Institute for Transport and Logistics Management, WU Vienna) for background discussions regarding the Austria 1987 and Germany 1999 reforms.