Istituto Bruno Leoni

# Index of Liberalizations 2014

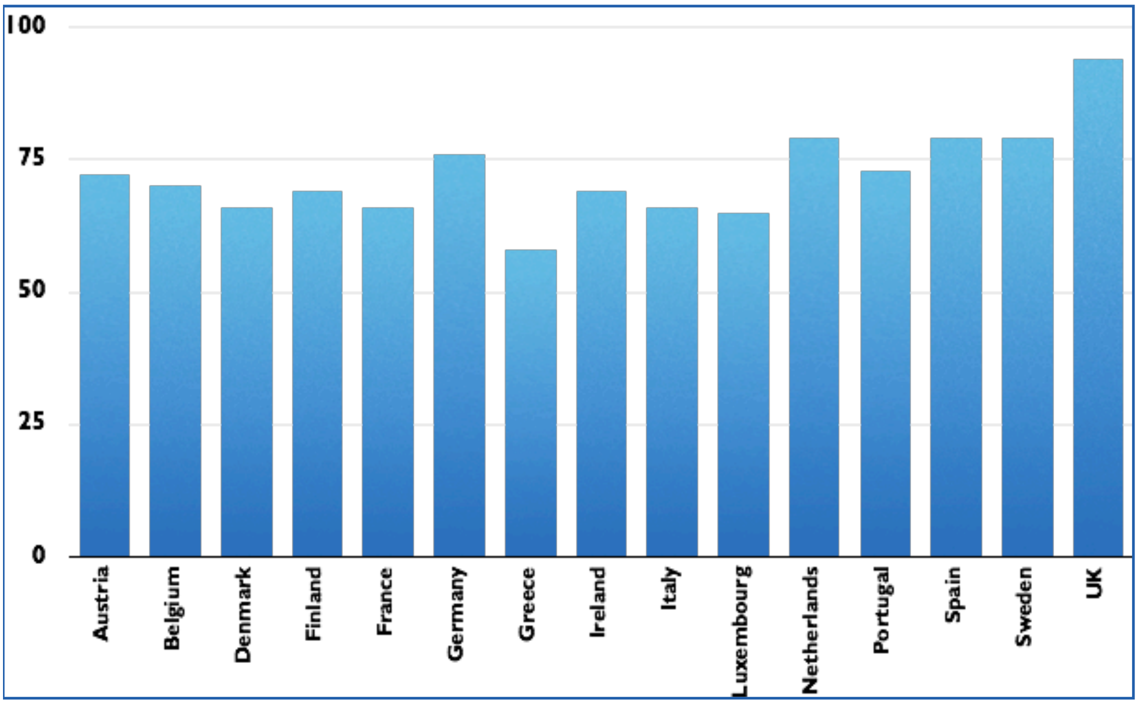
According to the Istituto Bruno Leoni's Index of Liberalizations 2014, the most liberalized country in the EU15 is the United Kingdom, with a score of 94%, followed by the Netherlands (79%) and Sweden (79%). The least liberalized countries are Greece (58%), Luxembourg (65%) and France (65%).

The Index of Liberalizations ranks the degree of market openness in 10 sectors of the economy for 15 member states of the European Union. The surveyed sectors are: gasoline retail distribution, natural gas market, labor market, electricity market, postal services, telecoms, TV broadcasting, air transportation, rail transportation, and insurance market. The EU15 countries are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the UK.

For each sector a number of indicators are gathered that allow to assess whether—and to what extent—competition is possible. Each country is scored in such a way that, for any given sector, the most liberalized country gets a score of 100. Therefore, the score of any other country reflects the "distance to the leading edge." IBL thus aims at assessing the degree of liberalization with respect to the most effective, actually working model, rather than with respect to a theoretical idea of what competition should look like. The sectorial results are then averaged, resulting in a comprehensive, country-specific index of liberalization.

| | Fuel | Nat. Gas | Labour | Elec-tricity | Mail | TLC | TV | Air Trans port | Rail Trans-port | Insur-ance | Index 2014 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | 100 | 62 | 89 | 74 | 75 | 78 | 78 | 51 | 58 | 53 | 72 |
| Belgium | 75 | 73 | 73 | 96 | 70 | 77 | 79 | 59 | 30 | 65 | 70 |
| Den-mark | 79 | 46 | 95 | 59 | 65 | 73 | 77 | 55 | 65 | 48 | 66 |
| Finland | 76 | 46 | 94 | 83 | 79 | 73 | 80 | 63 | 51 | 49 | 69 |
| France | 87 | 53 | 77 | 48 | 66 | 99 | 99 | 38 | 26 | 66 | 66 |
| Ger-many | 99 | 90 | 83 | 90 | 87 | 73 | 79 | 46 | 52 | 64 | 76 |
| Greece | 68 | 39 | 70 | 55 | 64 | 70 | 84 | 63 | 13 | 53 | 58 |
| Ireland | 56 | 38 | 90 | 67 | 65 | 83 | 78 | 97 | nr | 47 | 69 |
| Italy | 57 | 60 | 72 | 81 | 59 | 87 | 75 | 65 | 48 | 60 | 66 |
| Luxem-bourg | 81 | 48 | 87 | 58 | 54 | 53 | 96 | nr | nr | 42 | 65 |
| Nether-lands | 85 | 56 | 92 | 69 | 100 | 100 | 100 | 61 | 68 | 59 | 79 |
| Portugal | 83 | 79 | 79 | 99 | 70 | 70 | 98 | 70 | 19 | 59 | 73 |
| Spain | 83 | 91 | 76 | 97 | 70 | 94 | 88 | 85 | 40 | 65 | 79 |
| Sweden | 71 | 94 | 93 | 68 | 87 | 90 | 91 | 65 | 100 | 33 | 79 |
| UK | 89 | 100 | 100 | 100 | 83 | 89 | 84 | 100 | 95 | 100 | 94 |

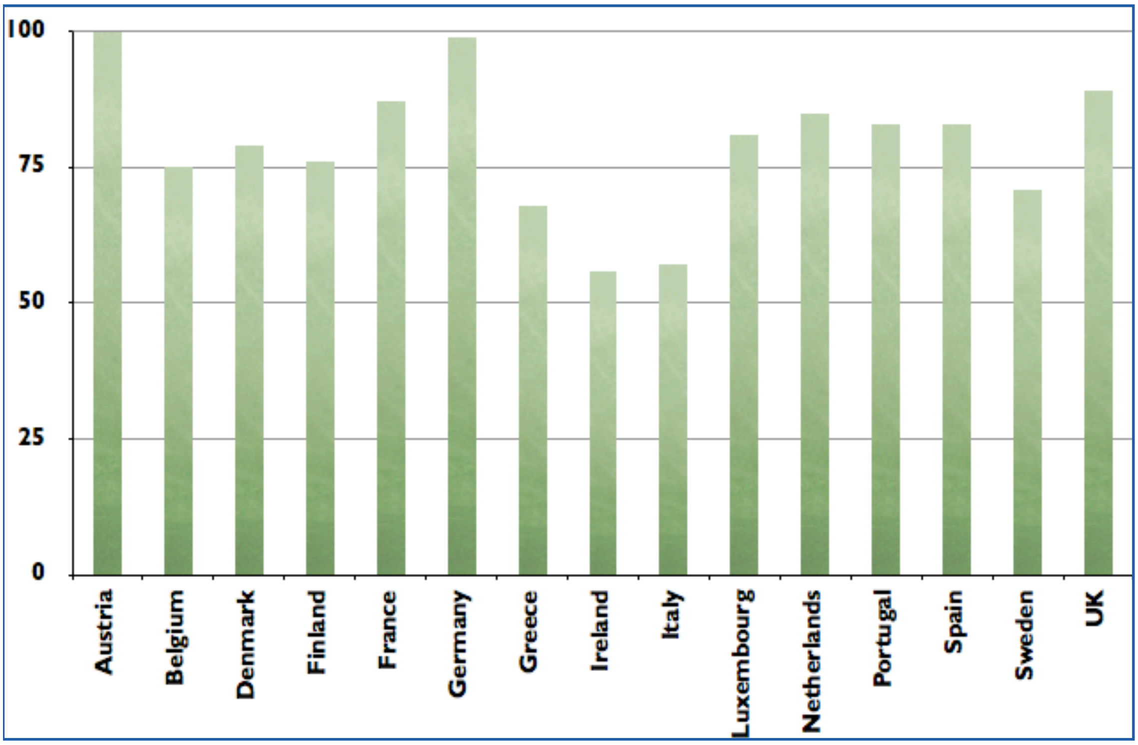
The figure shows the overall results. The results of each country by sector are detailed below in dedicated paragraphs.




The best performing country, i.e. the UK, ranks first in five sectors (natural gas, labor, electricity, air transportation and insurance) and does very well in all others. The same applies to other top performers (the most notable exception being Sweden that, while having good scores in most sectors, is the least liberalized country in the insurance market). On the opposite, countries that get low scores tend to show poor degree of market openness in most sectors. This suggests that there appears to be some sort of consistency in the approach that countries have towards liberalization: countries either tend to liberalize the whole economy, or tend to resist all opening efforts. In fact in many cases it can be easily seen that member states only liberalize to the extent that they are required by EU directives. This is a double-edged sword: on the one hand it reveals the importance of EU-wide liberalization efforts, on the other it raises two broad threats. One is that EU-led regulations may do good as well as harm to member states: when Brussels pushes towards more market opening it can make it easier for reforms to happen, but when the Commission promotes re-regulation or excessive regulation in some sectors the consequences are widespread. Secondly, countries that do not adopt reforms because they believe in their usefulness, but just because they are forced to do so by their commitment to the EU often fail to implement the required changes in a proper way. By so doing they fail to exploit the tremendous growth potential that is inherent in opening up the economy to free market competition.

By relying on ex ante (institutional) as well as ex post (performance) indicators, the Index of Liberalizations shows what countries were more effective in implementing reforms, and what institutional arrangements proved to be more successful in spurring actual competition. In this way, it provides useful information to the governments of the member states about what models proved to be more robust and positively correlated with economic growth. Integrating European markets—a key goal of the European Union—also means that member states should be willing to look at the best practices—and to import them in their own legislations. The Index of Liberalizations provides an useful overview of the best practices and where laggard countries should improve their own institutions to make them more competition-friendly.

# Gasoline retail market



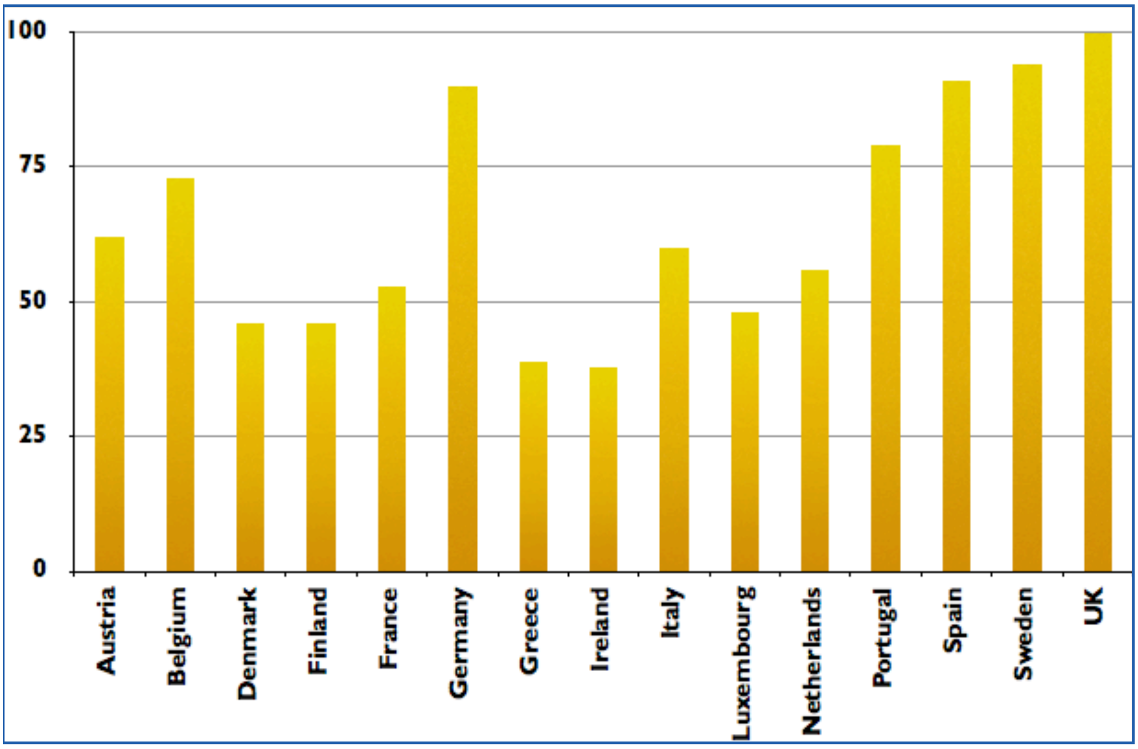

According to the 2014 Index of Liberalizations, the EU15 member state with the most liberalized gasoline retail market is Austria (that scores 100% according to the Index methodology), followed by Germany (99%) and the UK (89%). The least liberalized countries are Ireland (56%), Italy (57%) and Greece (68%).

The Index is comprised of three macro indicators, that are built by aggregating both qualitative and quantitative indicators of the degree of market openness and competition in the retail gasoline markets. The first indicator captures the burden of direct as well as indirect taxation, under the assumption that higher taxes relative the industrial price of gasoline lower the incentive for the customer to switch provider, as the price difference is perceived as being lower. A second indicator reflects the after-tax price differentials: since the wholesale cost of gasoline differs only across a limited range across Europe, most of the retail price differentials can be attributed to inefficient cost structures or other competition-related issues. Finally, an indicator is considered on the sector organizations, that takes into account the degree of penetration of modern channels of distribution such as the diffusion of self-service and the share of gas stations that sell non-oil products.

Of the three indicators, the price-related one shows the lower variability, suggesting that most competition issues related to the behavior of market participants have been properly addressed. What still hinders competition is on the one hand the heavy burden of taxation, and on the other the rigidities in the development of the retail organization. Both issues are closely related to specific policies. With regard to taxation, several EU member states still regard gasoline as an easily accessible tax source, leading to end prices being leveled across

European countries by excise taxes and, to a lower extent, VAT. As far as the organization of the industry is concerned, with particular regard to the adoption of modern organizational settings, some countries still design their regulatory arrangements on the basis of an outmoded perception of the industry, thus hindering any attempt to adjust to technological evolution and the consumers' evolving preferences. (carlo stagnaro)

# Natural Gas market



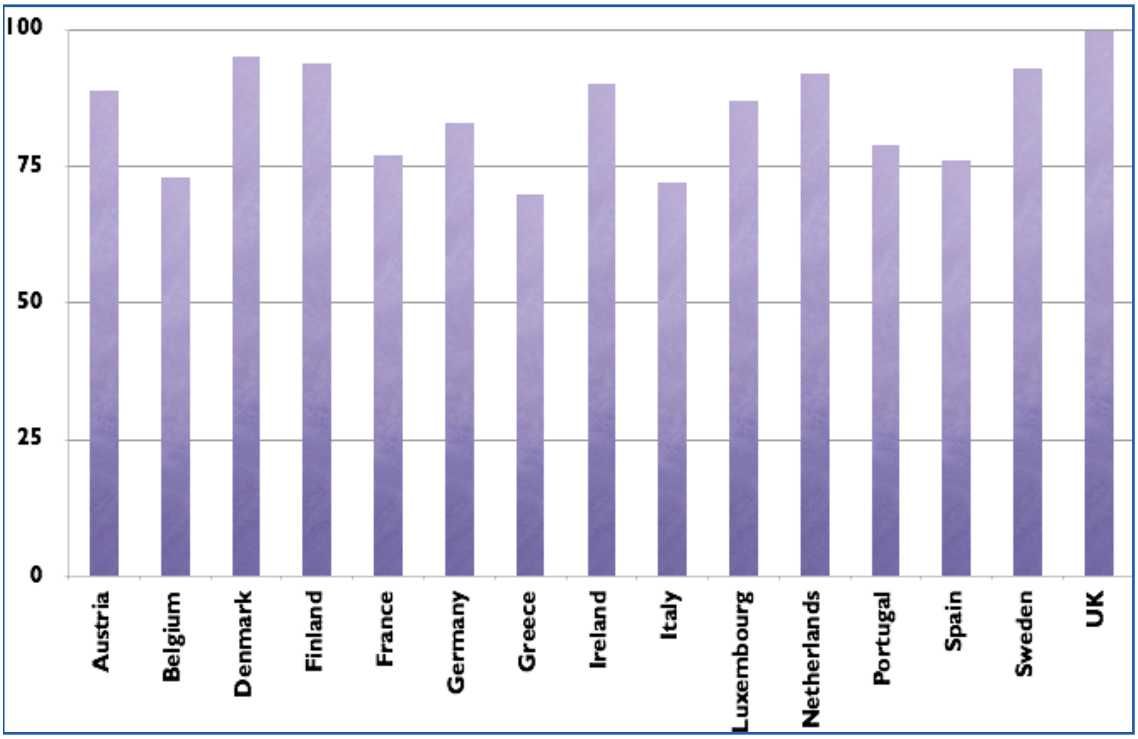

The IBL Liberalization Index for the gas sector assesses the degree of liberalization and competition characterizing the following market segments: production and import, transmission, distribution, and supply of natural gas.

According to the 2014 Index of Liberalizations, the most liberalized country in the EU15 is the UK (scoring, under the 2014 Index methodology, 100%), followed by Sweden (94%) and Spain (91%). The least liberalized countries are Greece, Ireland, Finland and Denmark.

For all the market segments considered, the following indicators have been examined: the extent of public participation in the capital stock of the main operator, and the extent of vertical separation between the main operator of the segment and those managing network infrastructures (i.e. whether no separation, accounting, functional, or ownership unbundling occurs). Additional measures have been considered for gas production/import and supply: the market share of the main operator engaged in the segment, the existence of retail price regulation, and the switching rate of domestic customers.

For each indicator, countries have been ordered from the least to the most liberalized: e.g. countries with the lowest extent of public participation in the gas sector, or the strongest type of implemented unbundling, or having fully liberalized retail prices, rank behind those countries showing the highest level of public participation in the sector, or characterized by the absence of vertical separation among segments. The average of these rankings, computed within each segment, determines the country ranking with reference to the production/import, transmission, distribution, and supply sector. The average of these four country rankings identifies the IBL Liberalization Index for the gas market. (simona benedettini)

# Labor market




The degree of liberalization of the labor market is measured by the following two indicators, "design" and "performance", that are weighed 2/3 and 1/3 of the total, respectively.

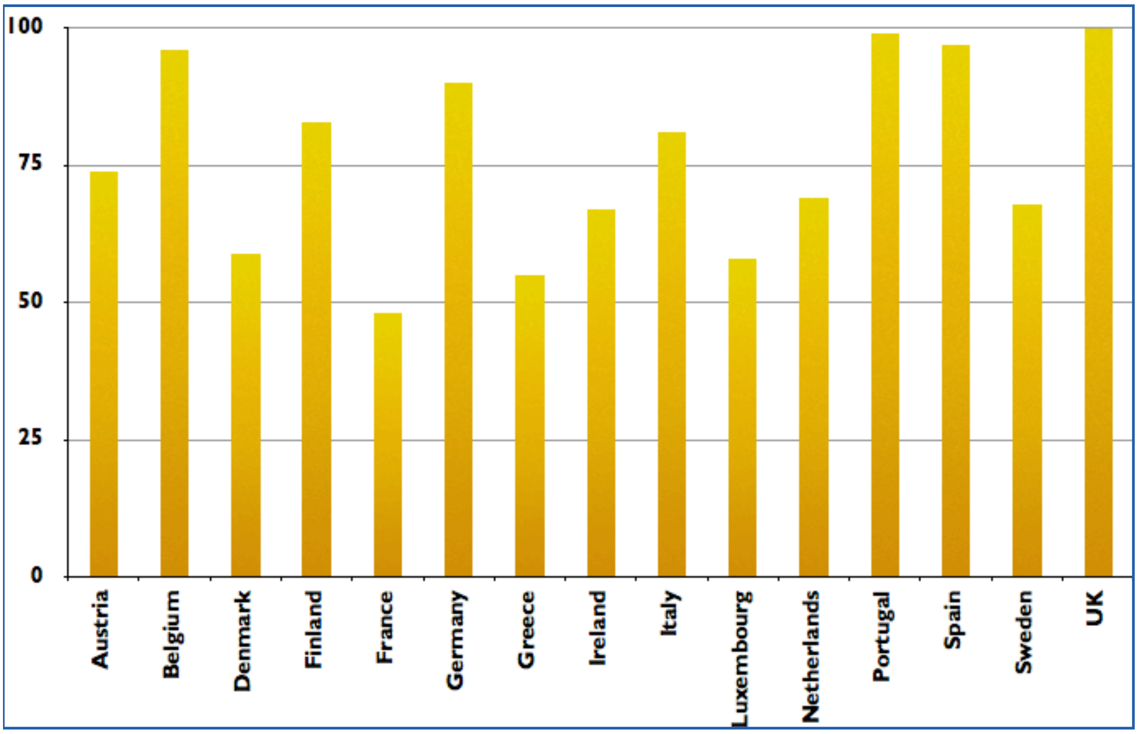
The "design" indicator consists of two components:

- The "Employment Protection Legislation" indicator, obtained by calculating the average of the OECD data relating to the protection of permanent workers against individual and collective dismissals, as opposed to the regulation of temporary forms of employment. It measures the degree of rigidity of the employment protection legislation in place at 31 December 2013 in each of the countries considered. The presence of a very rigid regulation with regard to employment relationships can deter employers from hiring workers, especially when the costs related to the dismissal cannot be easily predicted. Therefore, the greater the flexibility, the more a country is liberalized.
- Labor taxes are expressed as a percentage of the weight of the tax wedge on labour costs. A high tax wedge produces a distorting effect on the labour market and drains resources for companies to make investments, innovate and, ultimately, create new jobs or guarantee higher wages to the existing ones.

The "Performance" indicator is made up of two elements, too: Long-term and youth employment. The higher this ratio, the more static the labour market, as it is being distorted by strict rules of employment protection. Furthermore, youth unemployment and the rigidity of a labour protection system appear to be directly correlated, as the latter precludes young people from entering into the labor market.

In 2014, the EU15 member state with the most liberalized labor market was the UK that, under the 2014 Index of Liberalizations methodology, was assigned a score of 100%, followed by Denmark (95%) and Finland (94%). The least liberalized countries were Greece (70%), Italy (72%), and Belgium (73%). The results show a significant heterogeneity under all indicators. If the performance indicators are somehow exposed to the economic cycle, the design indicators capture structural elements of the labor regulation. Several EU15 member states can take significant steps on both indicators to improve their labor environment and achieve faster job creation and lower unemployment levels. (fabiana alias)

# Electricity market




The IBL Liberalization Index for the electricity sector evaluates the degree of liberalization and competition characterizing electricity market segments such as generation, transmission, distribution, and supply.

According to the 2014 Index of Liberalizations, the EU15 member state with the most liberalized electricity market is the UK (that under the 2014 Index methodology scores 100%), followed by Portugal (99%) and Spain (97%). The least liberalized country is France (48%), followed by Luxembourg (58%) and Denmark (59%).

To this purpose, the following measures have been assessed for all segments: the extent of public participation in the capital stock of the main operator, and the extent of vertical separation between the main operator of the segment and those managing network infrastructures (i.e. whether no separation, accounting, functional, or ownership unbundling occurs). Additional measures have been considered for electricity generation and supply: the market share of the main operator engaged in the segment, the pervasiveness of the regulation subsidizing renewable generation (i.e. whether feed-in tariff, green certificates, quota obligations or a combination of the three), the type of capacity support scheme adopted to ensure long-term generation adequacy (i.e. whether an energy only market solution, a strategic reserve, a capacity market, or a capacity payment), the existence of retail price regulation, and the switching rate of domestic customers.

For each indicator, countries have been ordered from the least to the most liberalized: e.g. countries that feature the lowest extent of public participation in the electricity market, or the strongest kind of unbundling, or a full liberalization of retail prices, rank below those countries showing the highest level of public participation in the market, or characterized by the absence of vertical separation among segments, or by the adoption of subsidies for renewable and conventional generation. The average of these rankings, computed within each segment, determines the country ranking with reference to the generation, distribution, transmission, and supply sector. The average of these four country rankings identifies the IBL Liberalization Index for the electricity market.

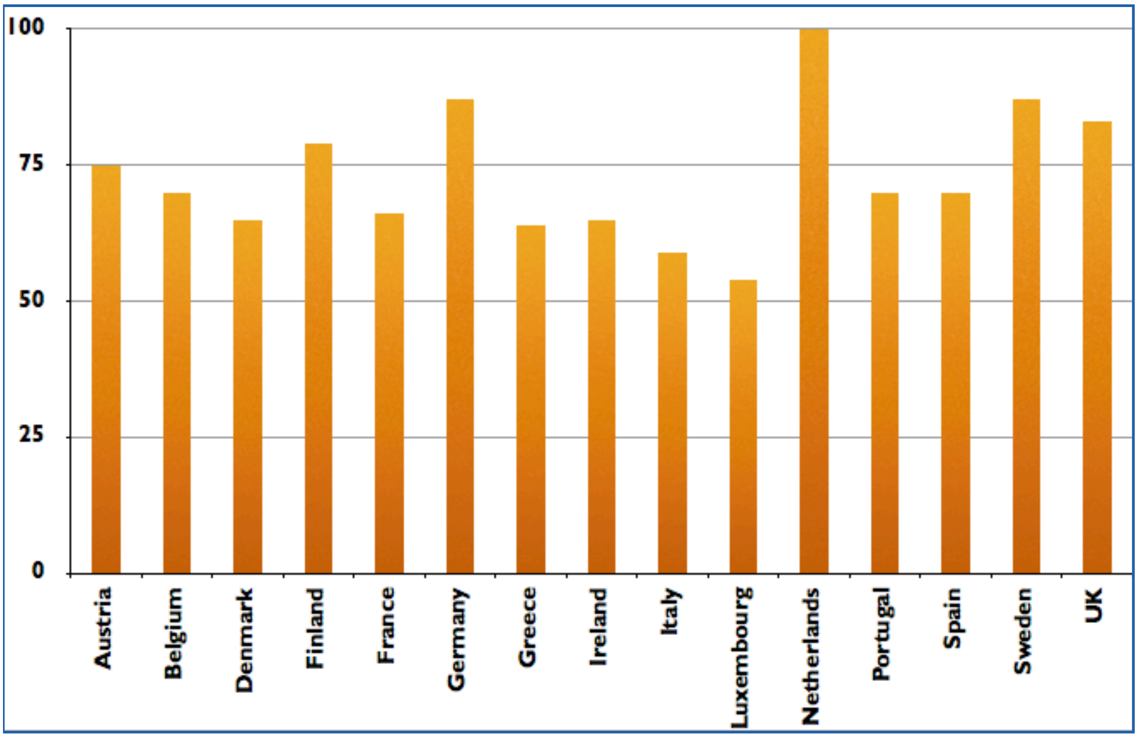
The Index shows that the heterogeneity observed within the 15 countries considered in our analysis is mainly due to the different market structure and regulation affecting the retail segment. Actually, while these countries are characterized by remarkably similar degrees of public intervention, extent of unbundling, and subsidies to renewable generation, significant differences occur in terms of switching rates and retail price regulation. Similar considerations apply to capacity support schemes concerning conventional generation.

Consistently with the recommendations of the main supranational regulatory authorities of the sector, these findings shed a light on the importance of completing the full liberalization of retail markets to achieve a coherent and harmonized regulatory arrangement within European electricity markets.

In addition, the removal of any form of price regulation is fundamental to acknowledge the benefits of the full liberalization occurred in wholesale markets as well as to promote a smarter role of customers to achieve a more sustainable electricity sector.

Consistently, any additional form of subsidies at the wholesale level—such as capacity support schemes—should be avoided lest the positive outcomes achieved with the effective liberalization of the generation segment are jeopardized. (simona benedettini)

# Postal services

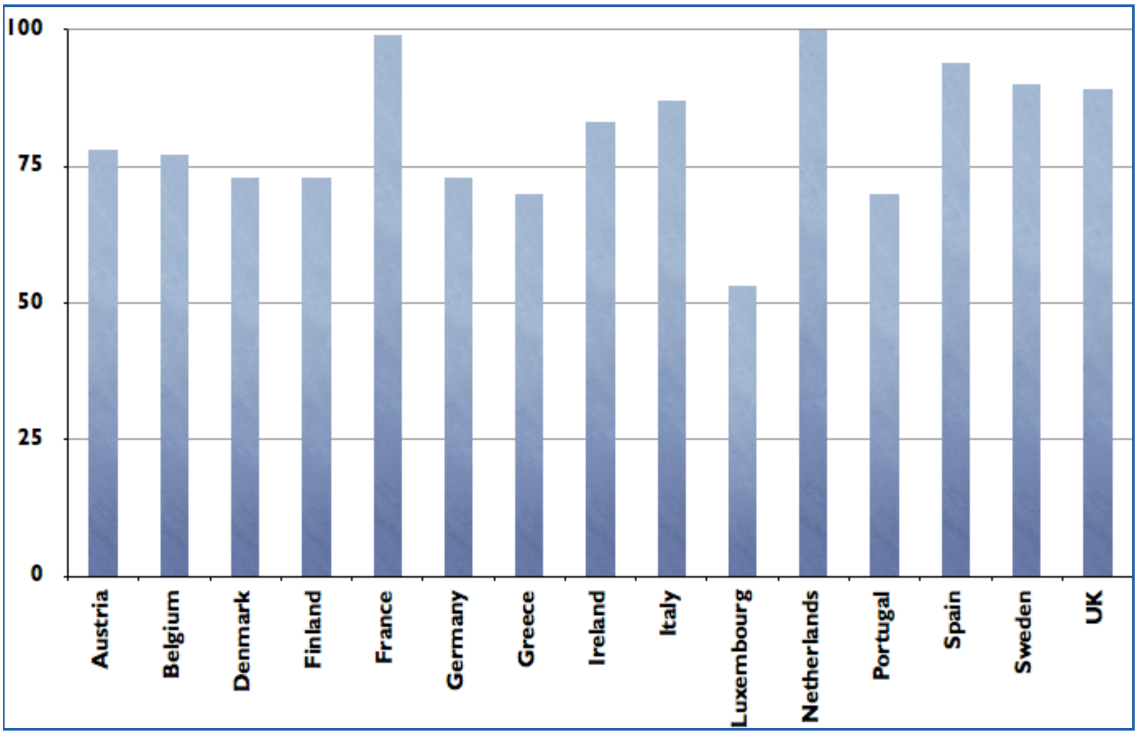



According to the 2014 Index of Liberalizations, the EU15 member state with the most liberalized postal market is the Netherlands (that scores 100% according to the Index methodology), followed by Germany and Sweden (87%). The least liberalized countries are Luxembourg (54%), Italy (59%) and Greece (64%).

The Index is comprised of three macro indicators, that are built by aggregating both qualitative and quantitative indicators of the degree of market openness and competition in postal markets. The first indicator looks at the legislative framework, based on whether and when the market was fully liberalized and on whether regulation of the industry is entrusted to an independent entity. The second indicator reflects the continued presence of barriers to entry, with regards to the following factors: the range of services covered by universal service obligations, the funding mechanism for universal service, the licensing regime, the prevision and scope of tax exemptions for postal services. The third indicator addresses the actual degree of competition within the market, in light of the newcomers' market shares, state ownership of the incumbent and the amount of mail revenues as a percentage of its total revenues, which may suggest that cross-subsidization is occurring.

While all countries considered are mostly liberalized from a legal perspective, as a result of EU-demanded reforms that brought about the annulment of monopoly rights and the opening of postal markets to new players, significant differences arise when looking at barriers to entry and the actual market environments, which in most countries still appear to be dominated by government-controlled quasi-monopolists. (massimiliano trovato)

# Telecommunications

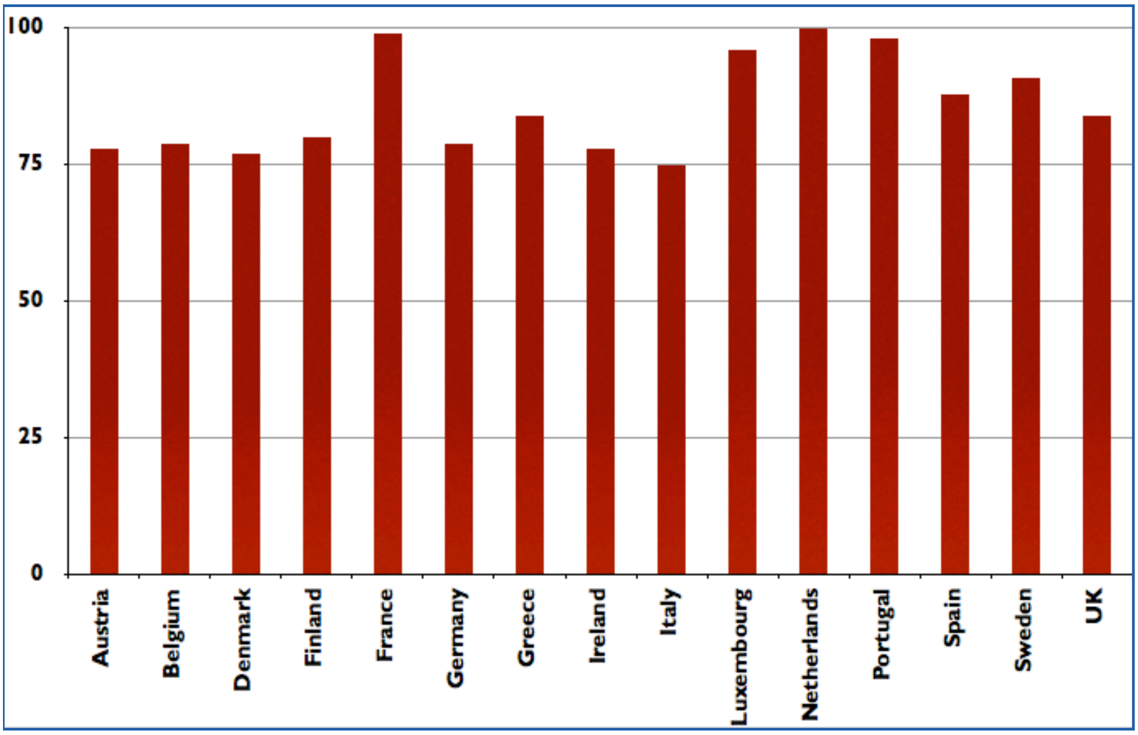



According to the 2014 Index of Liberalizations, the EU15 member state with the most liberalized telecom market is the Netherlands (that scores 100% according to the Index methodology), followed by France (99%) and Spain (94%). The least liberalized countries are Luxembourg (53%), Greece and Portugal (both at 70%).

The Index is comprised of three macro indicators, that are built by aggregating both qualitative and quantitative indicators of the degree of market openness and competition in telecom markets. The first indicator considers market openness, by comparing the market shares of newcomers in fixed voice and broadband and of the two major players in the mobile market. The second indicator looks at platform competition, weighted according to the following scale: in the fixed market, Wholesale Line Rental gets one point, Bitstream gets two, Shared Access gets three, Local Loop Unbundling gets four and a newcomer's own network gets five; in the mobile market, virtual networks get one point, 3G networks get eight, LTE networks get ten. The third indicator reflects customers switching, by taking into account both the churn rate and the time required for number portability procedures to be completed.

There are significant differences on display among different indicators, although they tend to balance out a bit in the end: very few countries get consistent results across the board. However, platform competition seems to be the most significant driver of the total index, suggesting that the way to push forward telecom liberalizations in Europe is not by means of the (ri)monopolization of the infrastructure, a prospect which some have been advocating, in some fashion or another, as a strategy to spur investments. (massimiliano trovato)

# TV BROADCASTING

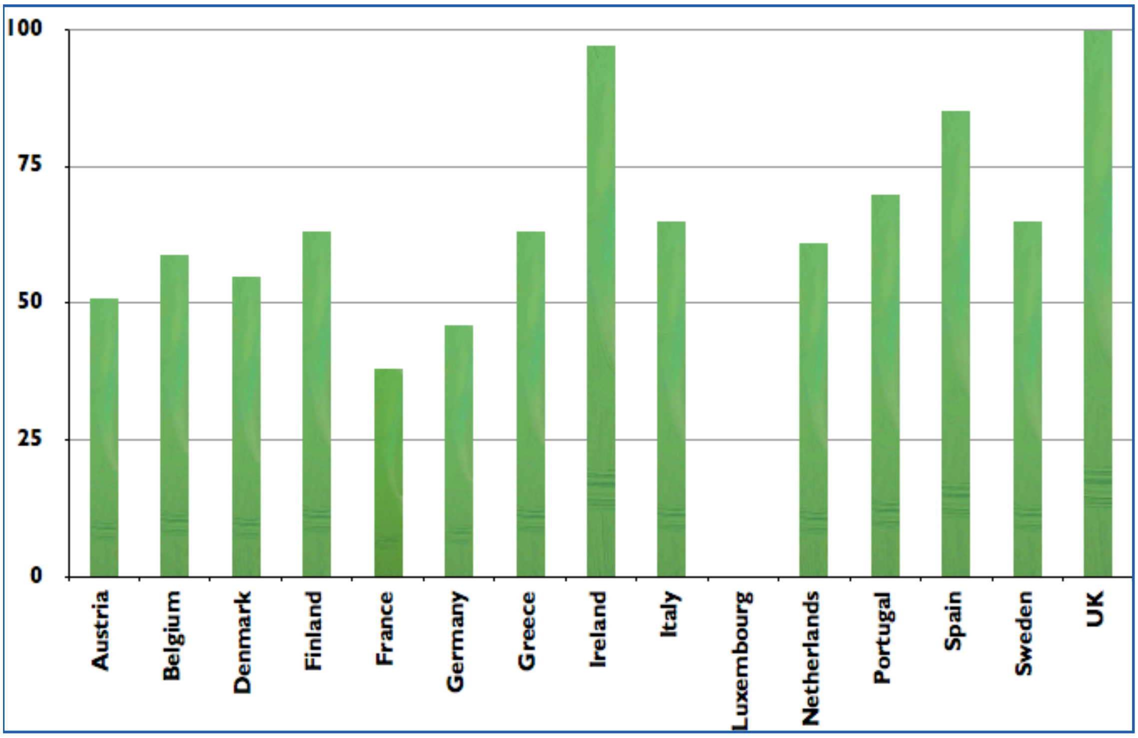



According to the 2014 Index of Liberalizations, the EU15 member state with the most liberalized television broadcasting market is the Netherlands (that scores 100% according to the Index methodology), followed by France (99%) and Portugal (98%). The least liberalized countries are Italy (75%), Denmark (77%) and Ireland (78%).

The Index is comprised of three macro indicators, that are built by aggregating both qualitative and quantitative indicators of the degree of market openness and competition in television markets. The first indicator considers the role of public broadcasting services, based on the relative amounts of license fees and commercial revenues as well as on their audience shares. The second indicator looks at platform competition, as shown by the availability of competing technologies and the penetration of pay-TV services. The final indicator deals with the competitive environment, by taking into account market shares in audience as well as in advertising, the number of active players (weighted for country population) and the availability of foreign TV services.

Even though EU regulation in the field tends to focus on content requirements and thus it has had little impact on market structures, there is a very limited gap between the most and the least liberalized countries, with the worst-ranking one (Italy) scoring 75%. This has to do with the fact that government-owned PBSs still play a major role in all countries considered. A higher degree of variety can be observed in platform competition. (massimiliano trovato)

# Air transport



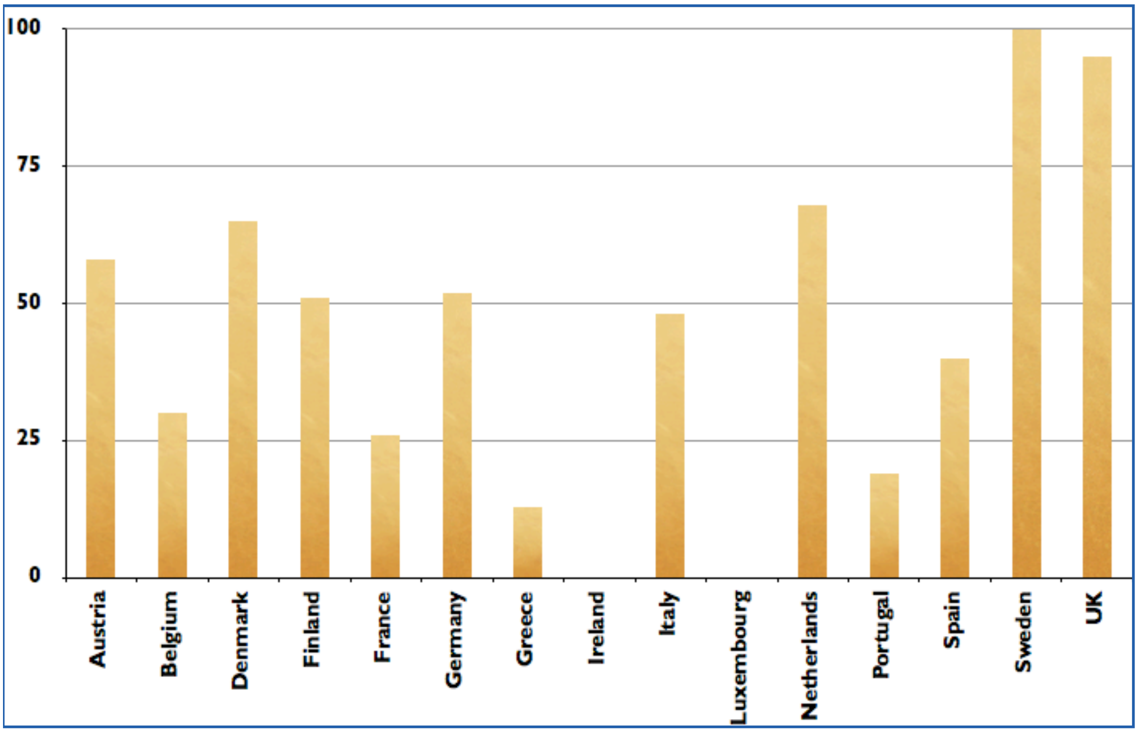

In 2014 the EU15 country with the most liberalized air transportation sector was the UK (which, according to the 2014 Index of Liberalizations methodology, corresponds to a score of 100%), followed by Ireland (97%) and Spain (85%). The least liberalized countries were France (38%), Germany (46%), and Austria (51%). Low liberalization scores are typically associated with efforts to protect a "national champion."

The 2014 Index of Liberalizations for air transport takes into account two macro-indicators, related to Regulation, Legal and Airport Barriers, and Public Interventionism (RBI) and to the actual market results.

The RBI Indicator is built by considering: the regulator's independence; the existence of legal barriers to entry in the market; the existence of barriers for a newcomer to start flying from any given airport; the number of public interventions in the market in the past five years. Legal or airport barriers have been introduced in many EU15 member states with particular regard to low-cost airlines. By the same token, several European countries intervened repeatedly in the market either to prevent low-cost carriers to compete on a level playing field with traditional carriers, or to bail out or help the "national champion."

The Market Indicator looks at the growth rate of the market; the market share of the newcomers; and the degree of market concentration as measured by means of the HHI Index. (andrea giuricin)

# Rail transport



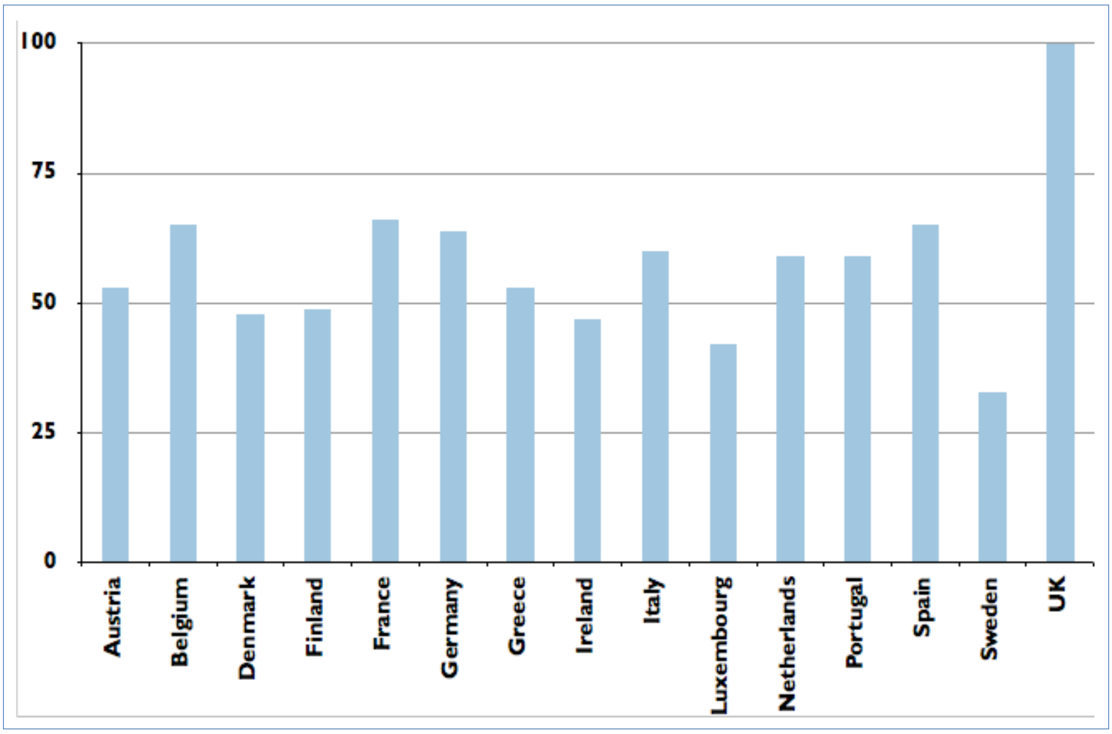

In 2014 the EU15 member state with the most open railway market was Sweden (which, under the Index of 2014 Liberalizations methodology, is assigned a score of 100%), followed by the UK (95%) and the Netherlands (68%). The least liberalized countries were Greece (13%), Portugal (19%), and France (16%). As the distance between the first two countries and the third one suggests, this is a sector where EU directives were not strong enough to promote a fair degree of market openness all across Europe. In fact only two countries went as far as to fully open their markets—in particular by implementing network ownership unbundling—while most member states chose to formally comply with the EU regulations without compromising the incumbent's dominant position. Moreover, incumbents are frequently state-owned.

The Index of Liberalizations comprises two macro-indicators: the former looks at the regulatory setting, the latter at actual market results.

As far as the regulatory setting is concerned, the following informations are considered: the regulator's level of independence; the regulator's ability to actually exercise its monitoring and sanctioning functions; and the degree of separation of the railway network, ranging from weak forms of accounting separation (as in most of the surveyed countries) to ownership unbundling (as in the UK and Sweden).

The market macro-indicator, instead, takes into consideration: the formal liberalization of regional railway transport (i.e. whether competition in the market is allowed and whether public service contracts are awarded under an open, competitive tender scheme); the actual competition in the high-speed segment, where applicable; and the growth in railway transport demand since 1995, i.e. since the EU directive on market opening in the railways sector, under the assumption that, all else being equal, liberalizations result in better service quality and increasing demand, hence the latter may be also seen as a proxy for the former. (giacomo reali)

# Insurance market




The liberalization of insurance market is established on the basis of two indicators: Design and Structure. The "Design" indicator consists three sub-indicators, accounting for the existence of mandatory insurance schemes against accidents at work; the weight of alternatives distribution channels of insurance products (ie, broker, direct sales and bancassurance); and the extent and distortive potential of taxation on insurance products. The "Structure" indicator comprises the following variables: aggregators, concentration, and foreign operators, that are useful in evaluating the competition in the market. "Aggregators" measures the maturity of the aggregators' market looking at the penetration on population. "Concentration" indicates the market share of the largest five insurance groups. "Foreign operators" is a proxy for the openness degree of the market, as expressed by the number of foreign operators on the total.

The most liberalized market is the United Kingdom's (that scores 100%), characterized by both the number of foreign operators and the development of aggregators market, that make offers more transparent and consumers more willing to switch policies. Other countries with a relatively high degree of market openness are France (66%), Belgium (65%) and Spain (65%). On the other end of the ranking, the least liberalized countries are Sweden (33%), Luxembourg (42%) and Ireland (47%). A significant result of our analysis is the huge gap from the most liberalized country (the UK that, under the 2014 Index methodology, scores 100%) and the second one, France, that lags behind at 66%. Sweden scores a mere 33%. This suggests that most EU15 member states still regulate heavily their insurance markets, preventing customers from enjoying lower prices and more diversified and effective insurance products. (paolo belardinelli)

# Istituto Bruno Leoni

Istituto Bruno Leoni (IBL) is the premier free-market think tank in Italy. IBL's efforts focus on providing ideas from a free-market and classical liberal perspective for public policy in the fields of competition policy, regulations, healthcare and pension reform, environmental and energy issues.

Established in November 2003, IBL has established itself as an authoritative voice in the Italian political debate. IBL organizes seminars and public events, and publishes papers and books, with the goal of building a more competitive and market-friendly intellectual and political environment.

Established in late 2003, IBL advances a free-market and classical liberal perspective on public policy issues, such as competition, energy, liberalisation, taxation, privatization and the welfare state. IBL's mission is to provide an authoritative voice to a different and neglected standpoint in the Italian political landscape, making policy- and opinion-makers—as well as the general public—aware of a realistic alternative to the widespread and pervasive statism that characterizes the Italian political discourse.

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