

IMPROVING THE BUSINESS REGULATORY ENVIRONMENT IN POLAND

ECONOMICS DEPARTMENT WORKING PAPERS No. 1764

By Javier Terrero-Davila, Cristiana Vitale and Eszter Danitz

OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).

Authorised for publication by Luiz de Mello, Director, Policy Studies Branch, Economics Department.

All Economics Department Working Papers are available at www.oecd.org/eco/workingpapers.

JT03523005

OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).

Working Papers describe preliminary results or research in progress by the author(s) and are published to stimulate discussion on a broad range of issues on which the OECD works.

Comments on Working Papers are welcomed and may be sent to the [Economics Department](#).

All Economics Department Working Papers are available at www.oecd.org/eco/workingpapers.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem, and Israeli settlements in the West Bank under the terms of international law.

© OECD (2023)

You can copy, download, or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites, and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for commercial use and translation rights should be submitted to PubRights@oecd.org.

ABSTRACT/RÉSUMÉ**Improving the business regulatory environment in Poland**

A competition-friendly business regulatory environment is essential for the well-functioning of markets. It ensures that important policy goals are addressed, and market failures tackled. However, regulation can also create barriers to the entry and expansion of firms that may limit and distort competition and hinder the efficient allocation of resources, negatively affecting productivity and growth. Some of these barriers are necessary, but others may go beyond what is needed to address the policy objectives and the market failure(s) regulation is intended to solve. This paper relies on the last vintage of the Product Market Regulation indicators to determine to what extent Poland's National Recovery and Resilience Plan aims to create a more competition-friendly business environment. The analysis suggests that only a limited number of the measures included in the Plan may address regulatory weaknesses identified by these indicators. Therefore, the paper suggests OECD best practices that the country could consider to remove unnecessary regulatory barriers and boost the benefits that the investments envisaged in the Plan could bring about.

JEL codes: D02, D24, D4, H54, K23, K32, L1, L2, L3, L4, L5, L8, L9, M20, O52

Keywords: Poland, National Recovery and Resilience Plans, European Union, Regulation, Competition, Product Market Regulation, Business Environment, Regulatory Environment, Productivity, Professional Services, Governance of State-Owned Enterprises, Public Procurement, Network Sectors.

****_**_*_*_*_*_*_*_*_*_***

Améliorer l'environnement réglementaire en Pologne

Un environnement réglementaire favorable à la concurrence est essentiel au bon fonctionnement des marchés. Il permet d'atteindre des objectifs politiques importants et de remédier aux défaillances du marché. Toutefois, la réglementation peut également créer des obstacles à l'entrée et à l'expansion des entreprises, susceptibles de limiter et de fausser la concurrence et d'entraver l'allocation efficace des ressources, ce qui a un impact négatif sur la productivité et la croissance. Certaines de ces barrières sont nécessaires, mais d'autres peuvent aller au-delà de ce qui est nécessaire pour atteindre les objectifs politiques et remédier aux défaillances du marché que la réglementation est censée corriger. Ce document s'appuie sur la dernière édition des Product Market Regulation indicators (indicateurs de réglementation des marchés de produits) pour déterminer dans quelle mesure le Plan National de Relance et de Résilience de la Pologne vise à créer un environnement commercial plus favorable à la concurrence. Cette analyse suggère que peu des mesures incluses dans le Plan corrigent les faiblesses réglementaires identifiées par ces indicateurs. Par conséquent, le document suggère les meilleures pratiques de l'OCDE que le pays pourrait adopter pour supprimer des obstacles réglementaires et accroître les avantages que les investissements envisagés dans le Plan pourraient apporter.

JEL codes: D02, D24, D4, H54, K23, K32, L1, L2, L3, L4, L5, L8, L9, M20, O52

Mots clés: Pologne, Plans nationaux de relance et de résilience, Union européenne, Réglementation, Concurrence, Réglementation des marchés de produits, Environnement des affaires, Environnement réglementaire, Productivité, Services professionnels, Gouvernance des entreprises publiques, Marchés publics, Secteurs de réseau.

Table of contents

Improving the business regulatory environment in Poland	5
1. Introduction	5
2. The OECD's 2018 PMR Indicators	6
3. Poland's National Recovery and Resilience Plan	10
4. Regulatory weaknesses identified through the PMR indicators	12
5. Assessment of the regulatory set-up in network sectors where the NRR Plan envisages infrastructure investments	20
6. Could the business regulatory environment be improved further?	25
Annex A. The OECD Product Market Regulation Indicators	28
References	33

FIGURES

Figure 1 The structure and content of the economy-wide PMR indicator in the last vintage	7
Figure 2. Structure of the PMR sector indicators in the last vintage	8
Figure 3. Latest overall economy-wide PMR scores for OECD countries and EU member states	9
Figure 4. The extent to which Poland's NRR Plan addresses the regulatory weaknesses identified by the PMR indicators relative to other EU countries	11
Figure 5. PMR low-level indicators on the Administrative Burden on Start-ups	13
Figure 6. PMR sector indicators for Professional Services*	15
Figure 7. PMR sector indicators for Retail Trade	17
Figure 8. PMR low-level indicators on Scope and Governance of SOEs*	19
Figure 9. PMR sector indicators for Energy, Rail and Road Transport, and E-communications	21
Figure 10. Indicators on the Governance of Sector Regulators for Energy, Rail Transport and Air Transport	24
Figure 11. Poland's overall economy-wide PMR score if the country adopted OECD best practices	27
Figure 12. The structure and content of the economy-wide PMR indicator	28
Figure 13. Structure of the PMR indicators for network sectors	31
Figure 14. Structure of the 2018 PMR indicators for professional services	32
Figure 15. The structure of the PMR indicators for retail trade	32

TABLES

Table 1. Measures in the NRR Plan that relate to regulatory features assessed in the PMR indicators	11
Table 2. Poland's costs of mandatory procedures to set-up an LLC and minimum paid-up capital are high relative to OECD best performers	14
Table 3. Investments in network sectors included in Poland's NRR Plan	20
Table 4. OECD best practices to improve the business regulatory environment.	26

Improving the business regulatory environment in Poland

By Javier Terrero-Davila, Cristiana Vitale and Eszter Danitz¹

1. Introduction

Regulation is essential for the well-functioning of markets. However, it can also create barriers to the entry and expansion of firms, which distort competition. Some of these barriers may be necessary, but others may go beyond what is needed to address the policy objectives and the market failures regulation is intended to address.

Ensuring that regulation fosters competition is key to economic performance. Competition allows more efficient firms to enter the market and gain market share at the expense of less efficient ones. Moreover, competition can promote innovation, as it puts pressure on firms to develop new products, services, and processes (Correa and Ornaghi, 2014^[1]). A pro-competition business environment also encourages technological diffusion (Andrews, Criscuolo and Gal, 2016^[2]), as firms need to adopt the most efficient technologies to avoid market exit. Finally, competition creates incentives for incumbents to improve their management practices (Van Reenen, 2011^[3]).

Through these mechanisms, pro-competition regulation has a positive effect on productivity, economic growth and consumer welfare, as highlighted by several industry and country-level empirical studies (Égert, 2017^[4]; Égert, 2018^[5]; Buccirosi et al., 2013^[6]). Furthermore, by increasing economic output and lowering barriers to the creation and expansion of firms, pro-competition regulatory environments can also foster employment in the long run, particularly for vulnerable groups such as women and the youth (Gal and Theising, 2015^[7]).

The OECD Product Market Regulation (PMR) indicators are a set of policy indicators that measure the presence of regulatory barriers to firm entry and growth in product and service markets. It covers both cross-sector regulatory areas, as well as the regulatory set-up in key network and service sectors. In this regard, the PMR indicators are useful to assess the extent to which a country's business regulatory environment fosters competition. Our analysis using these indicators suggests that, although Poland's overall regulatory environment is as competition-friendly as that of most OECD countries, there are specific domains where the country could better align with international best practices.

In the context of the COVID-19 crisis, the EU launched a coordinated effort to support members in their economic recovery and foster the digital and green transitions. The major output of this effort was the

¹ Javier Terrero-Davila, Eszter Danitz and Cristiana Vitale are members of the OECD Economics Department. We thank Alexis Durand and Martha Baxter, from the OECD Public Governance Directorate, and Zuzana Smidova, from the OECD Economics Department, for their insightful comments. This working paper owes much to the support of Jorge Durán Laguna and the country experts from the Directorate General for Economic and Financial Affairs of the European Commission, whose expertise was essential to facilitate the analysis. Carlotta Varriale offered statistical and research support. Sisse Nielsen provided valuable editorial assistance.

Recovery and Resilience Facility, which provides countries with funds to undertake reforms and investments. To benefit from the financial support of this Facility, all EU countries submitted a National Recovery and Resilience Plan (hereafter, the NRR Plan) to the European Commission². These NRR Plans lay out how they intend to use these funds to boost growth and improve the resilience and environmental sustainability of their economies.

Hence, the NRR Plans include a variety of infrastructure investments and regulatory reforms, which are not exclusively focused on improving product market regulation. Yet, considering the impact that pro-competition regulatory reforms can have on innovation, productivity and growth, the NRR Plans represent an opportunity for EU countries to address regulatory weaknesses related to their business environment. The OECD recently published a report assessing the extent to which the NRR Plans did exploit this opportunity (OECD, 2022^[8]), but Poland's NRR Plan could not be included as its approval by the European Council was delayed. This paper fills in this gap.

The structure of the paper is as follows. The next section relies on the last vintage of the PMR indicators to assess Poland's business regulatory environment and identify unnecessary regulatory barriers to competition. Section 3 considers to what extent the Polish NRR Plan addresses them. Section 4 identifies OECD best practices that could help the country to overcome those regulatory weaknesses that are not addressed in the NRR Plan. Section 5 evaluates the regulatory framework in the network sectors where the NRR Plan foresees large investments. The final section quantifies how the implementation of OECD best practices would impact Poland's performance in the PMR indicators.

2. The OECD's 2018 PMR Indicators

The PMR indicators were created in 1998 to turn qualitative information on countries' regulatory framework into quantitative indicators to better identify potential regulatory barriers to competition. Over time, these indicators have become an essential policy tool for the OECD, as well as for national governments, research institutions and other international organisations. This paper relies on the last vintage of these indicators for OECD countries, which was computed in 2018. Yet, the analysis throughout the paper also considers reforms that have taken place afterwards to avoid suggesting policy changes that have already been addressed.

The 2018 PMR indicators are based on a database that relies on information collected from national authorities through a detailed questionnaire, which is then vetted by the OECD. The indicator values are computed by scoring the information in the database against international best practices. The scores range from 0 to 6, with 0 representing the most competition-friendly regulatory set-up.³ These scores are then grouped into two sets of indicators: an economy-wide indicator and a set of sector-specific indicators.

The economy-wide PMR indicator provides a general quantitative measure of the extent to which a country's regulatory stance is competition-friendly across several policy areas, including the governance of state-owned enterprises (SOEs), the administrative burdens on new businesses, and the regulation of network sectors and professional services. Each policy area is assessed in one or more low-level indicators, which are then aggregated using equal weights into higher-level ones, following a pyramidal structure (Figure 1).

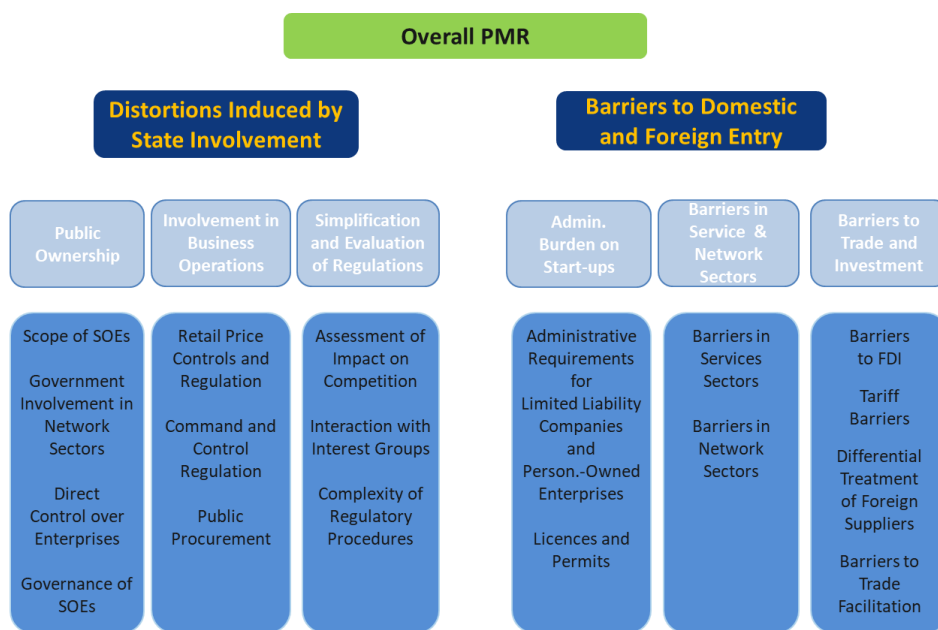
² More information on the National Recovery and Resilience NRR Plans is available on the EU's Recovery and Resilience Facility [website](#).

³ The database, as well as details on the scores and the weights used to calculate the indicators, are available on the OECD PMR webpage: www.oecd.org/economy/reform/indicators-of-product-market-regulation/

The sector PMR indicators assess the regulatory framework in individual sectors that represent key inputs in other sectors of the economy: energy, e-communications, transport, professional services, and retail trade (Figure 2).

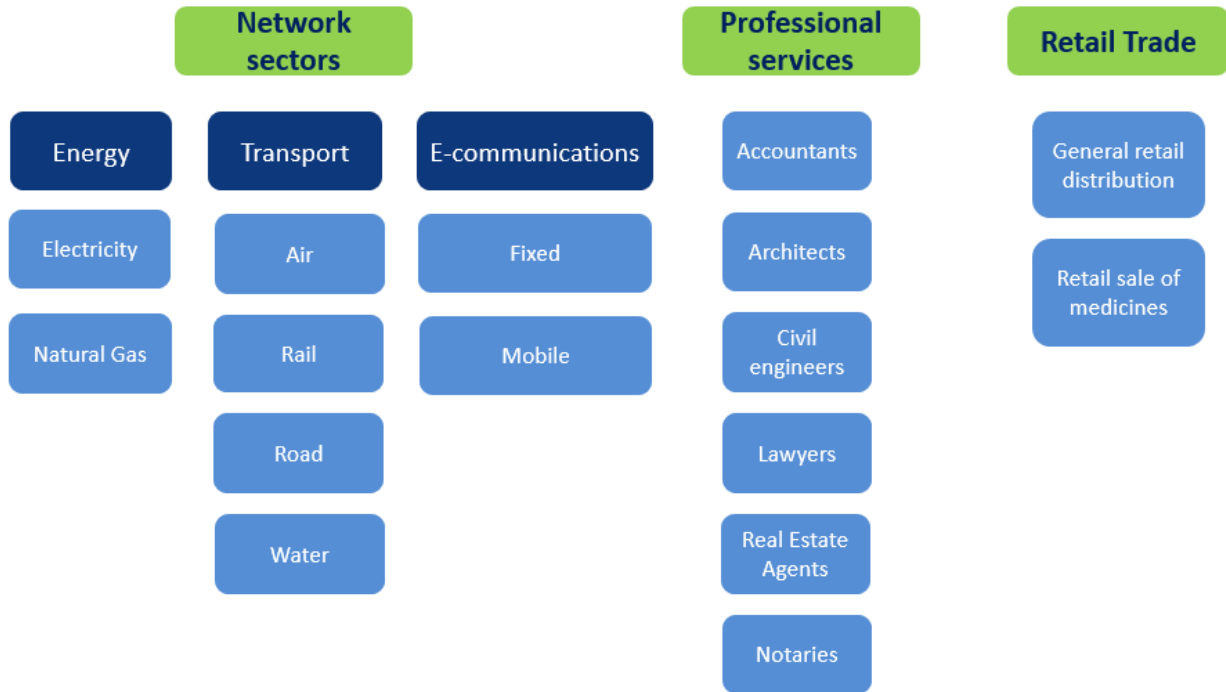
Annex 1 describes in more detail the structure and content of the PMR indicators.

Figure 1 The structure and content of the economy-wide PMR indicator in the last vintage



Source: (Vitale, Moiso and Wanner, 2020^[9])

Figure 2. Structure of the PMR sector indicators in the last vintage



Source: (Vitale, Moiso and Wanner, 2020^[9])

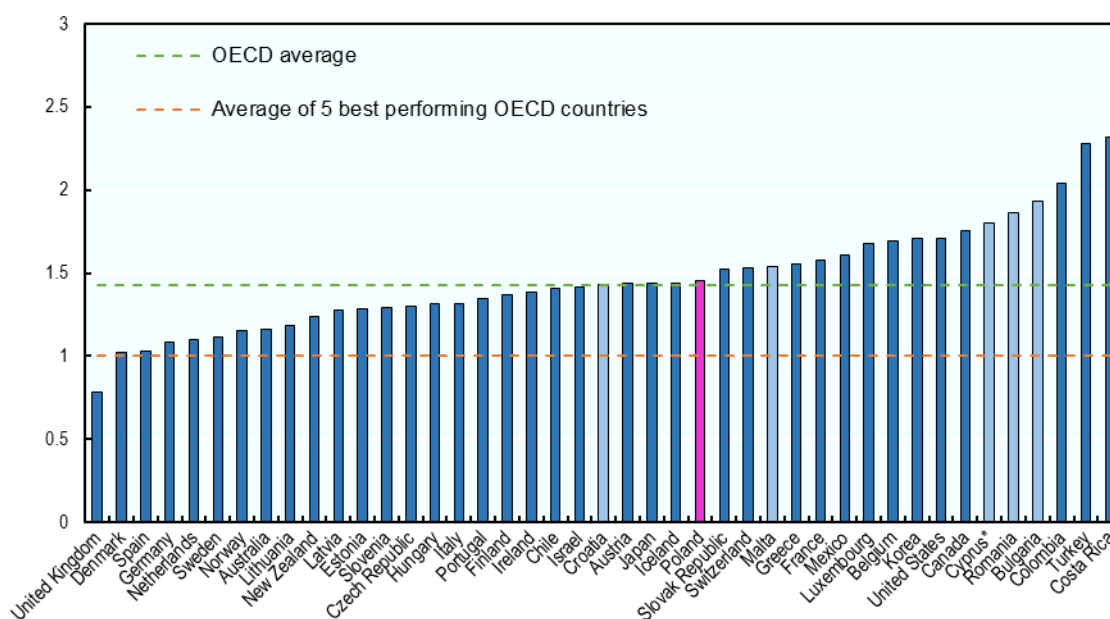
Poland’s performance in the PMR indicators

As the overall economy-wide PMR indicator incorporates all the information that the OECD collects on a country’s regulatory framework, it is a useful tool to determine at a glance the extent to which the business regulatory environment in a country is conducive to competition. Poland’s score in this indicator is very close to the average of all OECD economies (Figure 3). Nonetheless, Poland’s score is still far from that of the OECD’s best performers. This relative position does not change if we only consider EU member states.⁴

⁴ The EU average is almost the same as the OECD one.

Figure 3. Latest overall economy-wide PMR scores for OECD countries and EU member states

Countries shown in ascending order from most (0) to least (6) competition friendly.



* Footnote by Türkiye: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Türkiye recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Türkiye shall preserve its position concerning the "Cyprus issue".

* Footnote by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognized by all members of the United Nations with the exception of Türkiye. The information in this database relates to the area under the effective control of the Government of the Republic of Cyprus.

Note: The figure includes all OECD countries (dark blue bars) and those EU member states that are not part of the OECD (light blue bars). The purple bar identifies Poland. The OECD average includes all 38 member countries. The average of the 5 best performing OECD countries for the overall PMR indicator includes Denmark, Germany, Netherlands, Spain, and the United Kingdom. The indicators are based on the laws and regulations in force in these countries on 1 January 2018, except for Bulgaria, Costa Rica, Croatia, Cyprus, Estonia, Malta, Romania, and the US, for which the information refers to 1 January 2019.

Source: OECD 2018 PMR database.

Furthermore, if one examines Poland's score in the low-level indicators that compose the overall economy-wide PMR indicator, one can find substantial variations in how the country performs across different regulatory dimensions. Although Poland scores in line with the OECD average in most dimensions, the country scores worse than the average OECD economy in the following areas:

- The administrative burden on new firms, particularly on the creation of limited liability companies (LLCs);
- The regulatory framework in some network sectors, particularly energy and transport.
- The regulatory framework in several professional services; and
- The regulatory framework in retail trade, in particular in the retail sales of medicines.
- The scope and governance of SOEs.

3. Poland's National Recovery and Resilience Plan⁵

Like most other EU economies, Poland has applied for financial assistance from the European Recovery and Resilience Facility. This Facility provides a mix of grants and loans to finance investments in a broad range of areas, ranging from infrastructure to social and labour programmes, as well as to support regulatory reforms. The aim is to ensure a swift recovery from the COVID-19 crisis, modernize public administration, and foster the competitiveness of EU countries.

Poland is set to receive EUR 23.9bn in grants and EUR 11.5bn in loans from the European Recovery and Resilience Facility if the country fulfils the commitments outlined in its NRR Plan. This includes around 49 reforms and 53 investments. Close to three quarters of the financial support allocated to the NRR Plan will be dedicated to the greening and the digitalization of the economy, which includes large infrastructure investments in network sectors (Section 5). The rest will support reforms aimed at fostering growth and competitiveness in the country. It is estimated that the implementation of Poland's Plan could lead to real GDP gains of between 1.1% and 1.8% relative to a no-Plan scenario by 2026 (Pfeiffer, Varga and in't Veld, 2021^[10]). Yet, the implementation of some of these measures is currently delayed, which may have a negative impact on the expected economic gains (OECD, 2023^[11]).

As previously highlighted, Poland's business regulatory environment is not as conducive to competition as that of OECD best performers in the 2018 PMR indicators (Figure 3). The country is also lagging behind many OECD countries in the regulatory set-up of some network sectors where the NRR Plan envisages infrastructure investments. Therefore, the NRR Plan represented an opportunity to address regulatory weaknesses in these areas.

Yet, although the NRR Plan includes several reforms, few measures address the regulatory weaknesses identified by the PMR indicators. The focus of the NRR Plan is mostly on labour and education policies, green investments and the digitalization of public services. Indeed, only 2 measures out of 102 reforms and investments included in the NRR Plan *could have a positive impact* on Poland's PMR score (i.e., about 2% of all measures). This share is lower than that of other EU countries with similar PMR scores, such as Austria, Croatia and Ireland (Figure 4).

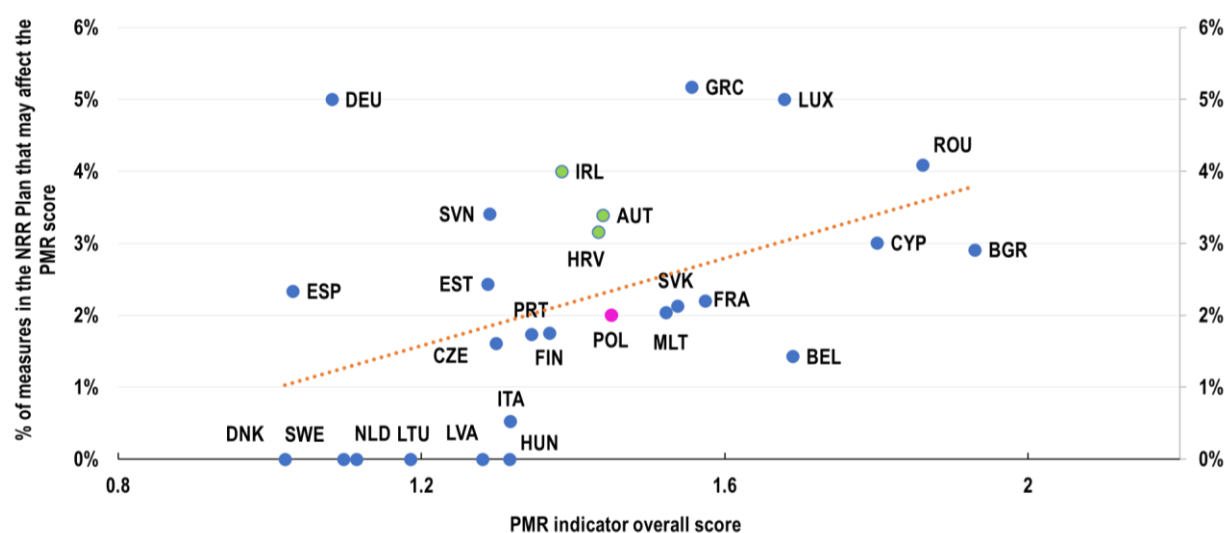
Figure 4 should be interpreted with caution⁶. First, the number of measures included in each NRR Plan varies substantially across countries, from 224 measures (Spain) to 20 (Luxembourg). Second, the measures included in the NRR Plans are a combination of policy reforms and infrastructure investments. The latter are essential for the recovery and future economic growth of EU countries but do not affect the PMR indicators, as these indicators focus on the quality of laws and regulations.

In the case of Poland, the two measures in the NRR Plan that could have an impact on the PMR indicators relate to the digitalization of administrative procedures. However, given the limited details included in the NRR Plan, it is not possible to determine if these measures will indeed have an impact on Poland's PMR values. This will depend on whether they reduce the administrative burden on new firms by decreasing the number of procedures required to establish a business or digitalising them, thus making it easier to comply with. The NRR Plan also includes one measure that could improve the regulatory framework in the e-communications sector, but its scope falls beyond the regulatory features assessed in the 2018 PMR indicators. Table 1 describes the key elements of these three measures.

⁵ The assessment is based on the [Proposal for a COUNCIL IMPLEMENTING DECISION](#) on the approval of the assessment of the recovery and resilience NRR Plan for Poland (European Commission, 2022^[42]) and its [ANNEX](#) (European Commission, 2022^[43]). The NRR Plan was approved by the EU Council on the 17th of June 2022.

⁶ It is worth acknowledging that the reforms included in the NRR Plans vary in reach and scope. A recent report by the OECD analyses the extent to which each country's measures are likely to impact its business regulatory environment (OECD, 2022^[8])

Figure 4. The extent to which Poland's NRR Plan addresses the regulatory weaknesses identified by the PMR indicators relative to other EU countries



Note: The horizontal axis shows the 2018 PMR indicator score (on a scale 0 to 6 from most to least competition-friendly regulatory framework). The orange dotted lines show the correlation between PMR values and the share of measures included in the NRR Plan that may affect the PMR score. The pink dot identifies Poland. The green dots identify countries with a close PMR score.

Source: OECD 2018 PMR database. The indicators are based on the laws and regulations in force in these countries on 1 January 2018, except for Bulgaria, Croatia, Estonia and Romania, for which the information refers to 1 January 2019.

Table 1. Measures in the NRR Plan that relate to regulatory features assessed in the PMR indicators

Measure Number	PMR related measure (Indicated timeline for completion of the measure)	Assessment of impact on PMR indicator
C2.1.1. Reform	<p>Public e-services, IT solutions improving the functioning of administrations and economic sectors, and breakthrough technologies in the public sector, the economy and society</p> <p>The reform aims at increasing the provision of e-services. The measure includes the development of 39 projects to achieve, among other objectives, i) the construction of nine new or expanded public data sharing and e-service platforms; ii) the construction of 30 new or expanded public IT systems; iii) the implementation of 65 new, modified or integrated public e-services; iv) and the provision, adaptation, and expansion of 400 e-services, including API services on new or expanded platforms. (Q2 2026)</p>	<p>The PMR indicators assess the digitalization of administrative procedures related to the creation of new firms and how this digitalization may reduce the number of procedures that have to be undertaken and/or institutions that have to be contacted to establish a new firm, hence reducing the administrative burden on entrepreneurs.</p> <p>In this regard, both reforms C2.1.1 and A1.2 could have a positive impact on the <u>Admin. Requirements for Limited Liability Companies (LLCs) and Personally Owned Enterprises</u> PMR low-level indicator if, as a result of the reforms, all procedures required to set up a limited liability company could be carried out through a single online portal.</p>
A1.2. Reform	<p>Further reduce regulatory and administrative burdens</p> <p>The objective of the reform is to reduce the administrative and regulatory burden affecting businesses in Poland, as well as to foster private investment, particularly in SMEs. The reform aims at (i) simplifying administrative and legal procedures, (ii) minimizing legal requirements for businesses and entrepreneurs, (iii) speeding up decision-making, (iv) providing the right conditions for businesses to invest, especially in less developed regions; and (v) facilitating the communication between citizens and businesses with public authorities.</p> <p>Among the concrete policy measures, the following relate to the PMR indicators:</p> <ul style="list-style-type: none"> Digitalizing at least eight administrative procedures, related for example to the submission of declarations by tourist operators and entrepreneurs to the Insurance Guarantee Fund and the 	<p>However, Reform C2.1.1 does not provide specific examples of which procedures will be digitalised. The examples indicated in Reform A1.2. are not exhaustive. Hence, the NRR Plan is not detailed enough to guarantee that these measures will indeed lead to an improvement in the country's PMR score.</p> <p>Poland already applies the 'silence is consent' rule for granting most licenses and permits. The expansion of this rule to additional procedures, as per reform A1.2, will not affect the scores of the PMR indicators.</p>

	<p>submission of applications for social benefits by students as well as regarding the geodetic proceedings.</p> <ul style="list-style-type: none"> • Simplifying administrative and silent procedures in at least 12 procedures, in particular related those to the seafarers' professions and the trading and commercialization of alcoholic beverages. <p>(Q4 2023)</p>	
C1.1. Reform	<p><u>Facilitating the development of network infrastructure to ensure universal access to high-speed internet</u></p> <p>This reform aims at guaranteeing universal access to high-speed internet and digital services throughout Poland, including the so-called 'white spots' where no high-capacity broadband infrastructure exists. This objective shall be achieved firstly by removing legislative barriers to broadband investment and secondly by aligning national legislation with the EU-wide Connectivity Toolbox of 25 March 2021, a set of best practices to boost the deployment and roll-out of very high-capacity networks (VHCN). The legal changes envisage, inter alia, amendments to the Regulation on Telecom Infrastructure Inventory and to the Regulation on the Single Information Point (SIP) system. (Q3 2023).</p>	<p>Although positive, the reform will not improve Poland's score in the 2018 PMR indicators since these regulatory features were not assessed in the 2018 PMR vintage.</p> <p>Still, the alignment of national legislation with the 2021 EU Connectivity Toolbox⁷ will bring benefits to the regulatory framework of the e-communications sector, including lower barriers to investments in e-communications networks, greater transparency on the location and use of infrastructure and better guidelines on the shared use of infrastructure. This can boost competition in the sector and accelerate the deployment of 5G and high-capacity broadband, which is lagging relative to most OECD and EU countries (OECD, 2023^[11]).</p>

4. Regulatory weaknesses identified through the PMR indicators

As discussed in the previous section, Poland's NRR Plan does not contain many measures that could improve the country's business regulatory environment, as measured by the PMR indicators, and make it more conducive to competition. This is not particularly surprising, as many of the measures included in the Plan are infrastructure investments and the policy reforms included in the Plan aimed at several objectives beyond removing barriers to competition.

However, since removing barriers to competition plays an important role in fostering productivity and economic growth, the remainder of the paper focuses on identifying these barriers (Sections 4 and 5) and on suggesting best practices adopted in other OECD countries to address them (Section 6).

The country's performance in the 2018 PMR vintage can be useful in identifying those areas where reforms are most needed. As mentioned in section 2, there are regulatory domains where Poland's performance in the PMR indicators lags behind many OECD economies. These are the areas where the country has larger scope for improvement.

Hence, in this section, we assess the regulatory areas and sectors where Poland's score is worse than the OECD average in the relevant indicators. The paper examines separately the low-level indicators composing the economy-wide one and the network sector indicators (Section 5). Therefore, where there is an overlap between these latter indicators and the economy-wide ones, the relevant issues will be discussed later.

The indicators in which Poland scores worse than the OECD average are:

- Administrative Burden on new firms;
- Regulation of some Professional Services;
- Retail trade, in particular Retail Sale of Medicines;
- Scope and Governance of State-owned Enterprises (SOEs);

⁷ The EU Connectivity Toolbox is a set of best practices for the timely rolling out 5G and fast broadband. These are the result of exchanges between Member States, in cooperation with the Commission.

Administrative Burdens on Start-ups

Two indicators measure the administrative burden that entrepreneurs face when starting a business. The indicator on Licences and Permits measures the existence of rules and policy initiatives to simplify licensing procedures, while the indicator on the Administrative Requirements for Limited Liability Companies (LLCs) and Personally-Owned Enterprises (POEs) includes information on the requirements that need to be completed and the number of bodies that need to be contacted to set up those firms.

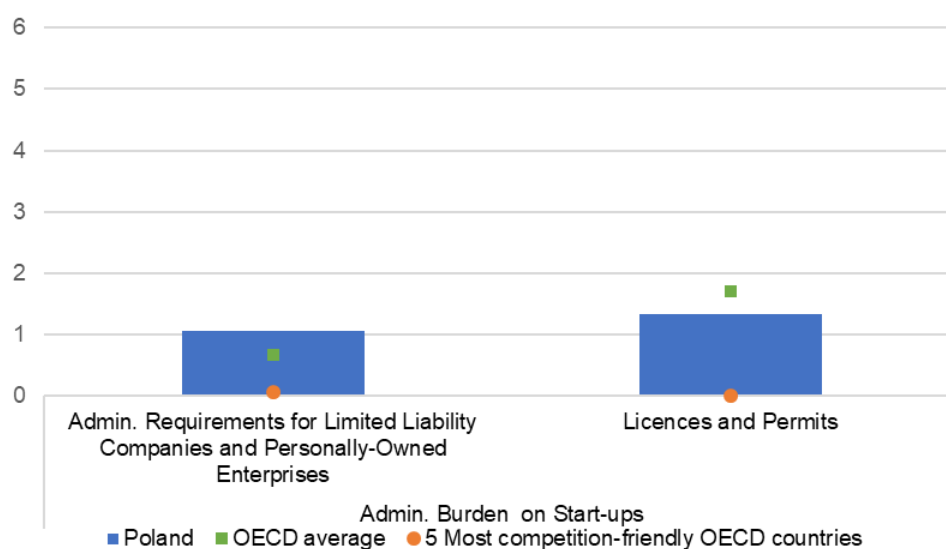
High administrative burdens to create new businesses reduce the entry of firms. Several empirical studies find a negative correlation between the costs, length and number of administrative procedures required to set up a business and the number of firms that enter the market (Alfaro and Charlton, 2006^[12]; Bripi, 2015^[13]; Teruel and de Wit, 2017^[14]). In contrast, the creation of one-stop shops where entrepreneurs can carry out all the administrative procedures at the same time has a positive effect on entry rates (Amici et al., 2016^[15]).

Klapper et al. (2006^[16]) find that, countries where the barriers to set up a business are high, are also those where incumbents are less productive. This is not surprising, as easier entry forces incumbents to become more efficient to avoid losing market share to newcomers (Andersson, Braunerhjelm and Thulin, 2012^[17]). In addition, administrative burdens can undermine the entry into markets of new innovative firms. Ultimately, these mechanisms translate into lower GDP growth in countries where administrative burdens on new firms are high (Bassanini, Scarpetta and Hemmings, 2001^[18]).

Although obtaining licences and permits is less burdensome in Poland than in many OECD countries, the administrative requirements that must be met to open new businesses are more cumbersome (Figure 5).

Figure 5. PMR low-level indicators on the Administrative Burden on Start-ups

Index scale 0 to 6 from most to least competition-friendly regulatory framework



Note: Information refers to laws and regulations in force on 1 January 2018, except for Costa Rica, Estonia and the United States, for which the information refers to 1 January 2019.

Source: OECD 2018 PMR database.

Poland's relatively high score in the indicator on Administrative Requirements for LLCs and POEs is mostly driven by the number of procedures required and the costs associated with setting up an LLC. Although

Poland has a one-stop shop (EKRS)⁸, not all procedures needed to open an LLC can be carried out through this platform, requiring entrepreneurs to contact different public bodies. Entrepreneurs could benefit if all administrative procedures could be completed through the one-stop shop (OECD, 2020_[19]). Moreover, the aggregate costs of completing all procedures required to set up an LLC, and the minimum paid-up capital needed to start such a company, are high relative to the OECD best performers (Table 2).⁹ These barriers stand in contrast with the minimal administrative requirements and costs needed to set up POEs, and the existence of a single online portal where all procedures needed to set up these firms can be completed (CEIDG).¹⁰

It must be acknowledged that Poland has recently pursued efforts to reduce the red tape and financial costs associated with setting up new businesses. In 2021, the government created a new legal form, the Simple Joint Stock Company, which combines features of the Limited Liability Company and the Joint Stock Company. The Simple Joint Stock Company requires only a simplified registration procedure, which can be fully completed online. Moreover, the minimum paid-up capital needed to set up these firms is substantially lower than that required to set up an LLC (1 PLN or 0.20 USD vs 5,000 PLN or 1,145 USD).

Although the reform was designed to foster the creation of innovative start-ups, there are no formal restrictions on the type of firms that can adopt this business form or the sector in which it can be adopted. Therefore, the reform can facilitate entry across the whole economy. Still, the LLC continues to be the legal form used by most Polish start-ups in 2022 (Dziewit, 2022_[20]), which highlights that this reform may not be sufficient. Hence, Poland could consider simplifying costs and administrative procedures also for setting up LLCs. The NRR Plan incorporates reforms to digitalize and simplify administrative procedures (Table 1). However, it is not detailed enough to assess whether these will have an impact on the procedures required to set-up LLCs.

Table 2. Poland's costs of mandatory procedures to set-up an LLC and minimum paid-up capital are high relative to OECD best performers

	Poland	OECD average	Average of the 5 best OECD performing countries*
Cost of mandatory procedures to set-up an LLC	778 International \$ (1420 PNL)	535 International \$	22 International \$
Minimum paid-up capital needed to start an LLC	2742 international \$ (5000 PNL)	3150 International \$	0 International \$

* The five OECD countries with lower costs of mandatory procedures to set up an LLC are Austria, Colombia, Korea, Latvia and the United Kingdom. Almost one third of the countries covered by the PMR require no minimum paid-up capital to start an LLC.

Note: The costs were provided in local currency when PMR data were collected. They have been converted to International \$ 2021 using the most up-to-date PPP exchange rates available at the OECD: [Conversion rates - Purchasing power parities \(PPP\) - OECD Data](#).

Source: OECD 2018 PMR database.

Professional Services

The PMR indicators on Professional Services assess barriers to entry and conduct for six different professions: Lawyers, Notaries, Accountants, Architects, Civil Engineers, and Real Estate Agents.

These professions are often strictly regulated to protect consumers. Yet, the wide variation in the PMR scores across different countries, even for those with similar legal systems, suggests that regulation in

⁸ The portal can be accessed at <https://ekrs.ms.gov.pl/>.

⁹ The best performers in each low-level indicator may be different from the best performance in the overall economy-wide indicator.

¹⁰ The portal can be accessed at <https://www.biznes.gov.pl/pl/opisy-procedur/-/proc/736>.

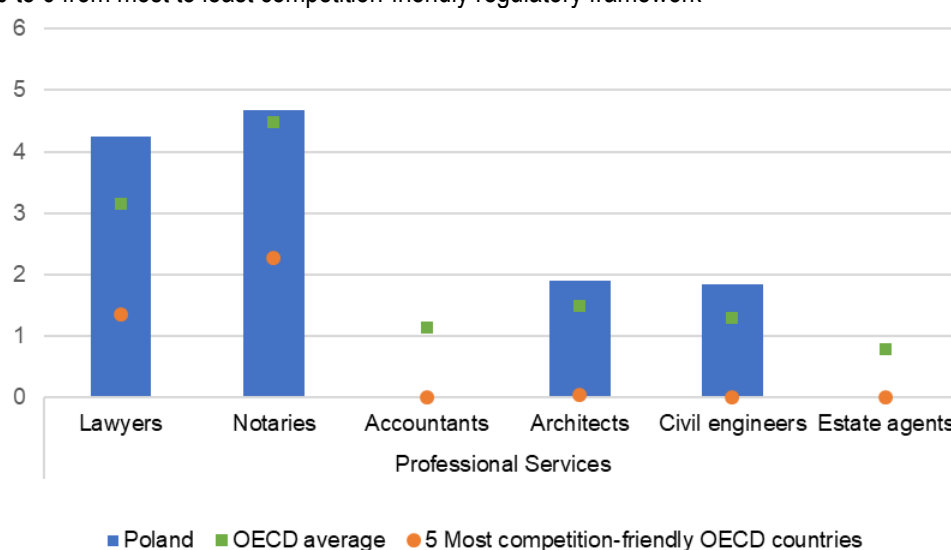
some countries may not strike the right balance between protecting consumers and fostering competition and innovation.

The empirical literature suggests that reducing excessive regulatory constraints in professional services can be positive for both the firms operating in these markets and the broader economy. First, removing entry barriers can increase employment in these sectors and reduce prices, increasing overall welfare (Kleiner and Soltas, 2019^[21]). Moreover, easing entry into the profession also has a positive effect on the productivity of professional firms (Bambalaitė, Nicoletti and von Rueden, 2020^[22]). In addition, excessive conduct restrictions may limit the sources of funding on which these firms can rely, reduce the set of managerial skills that professional firms can access, and inhibit the emergence of innovative business models. As these services are used extensively by most sectors of the economy, a pro-competition regulatory set-up in professional services can also increase the productivity of firms operating in downstream industries (Canton, Ciriaci and Solera, 2014^[23]). All these economic benefits are likely to boost economic growth. For instance, the reforms pursued by countries following the 2006 EU Services Directive, which aimed at reducing barriers to competition in professional services across EU countries, have led to an increase of 1.5% in GDP relative to a no-Directive scenario, according to recent estimates (Barbero et al., 2022^[24]).

Poland's results in the PMR indicator for professional services suggest that, while the regulatory set-up for Accountants and Estate Agents is conducive to competition, the country could consider removing some of the regulatory requirements imposed on Lawyers, Notaries, Architects and Civil Engineers, as these might distort competition (Figure 6).

Figure 6. PMR sector indicators for Professional Services*

Index scale 0 to 6 from most to least competition-friendly regulatory framework



* When comparing the indicators across countries, it should be kept in mind that the activities undertaken by specific professions may vary between countries.

*In civil law countries, notaries exercise administrative and judicial tasks by virtue of power delegated by the state; hence, they play a special role in the legal services market in the concerned countries and in this aspect, they are different from the other professions included in the OECD's PMR indicator.

Note: If the blue bar for one or more indicators does not appear on the chart, it means that its value is 0. Information refers to laws and regulations in force on 1 January 2018, except for Costa Rica, Estonia and the United States, for which the information refers to 1 January 2019.

Source: OECD 2018 PMR database

Lawyers

Poland's high score in this indicator arises from stricter conduct regulation relative to the average OECD economy. This imposes constraints that limit competition beyond what could be justified by the need to protect consumers. In particular, the fees lawyers charge for their services are regulated, and lawyers cannot advertise their services. Moreover, law firms cannot have limited liability, and only lawyers can hold ownership or voting rights in law firms. Furthermore, lawyers can only set up a practice with other lawyers. Yet, access to the profession is not very restrictive. Unlike in most EU countries, three pathways can be followed to become a lawyer.¹¹

Notaries

In civil law countries, notaries exercise administrative and judicial tasks by virtue of power delegated by the state. Hence, they play a special role in the legal services market that justifies specific regulation. However, there is still margin to reassess and potentially reduce some of the regulatory constraints imposed on this profession, as the positive experiences of France and the Netherlands demonstrate¹². In particular, the country should consider liberalising their fees. Contrary to most OECD countries, Poland does not impose any restrictions on the number of notaries allowed to practice. As the empirical evidence suggests, liberalizing tariffs when there are no restrictions on the number of notaries can foster consumer welfare and lead to market expansion (Verboven and Yontcheva, 2022_[25]).¹³

Architects and Civil Engineers

The high scores that Poland has in these PMR sector indicators are driven by the existence of regulatory barriers that restrict entry into these professions. In particular, there is only one pathway to acquire the qualifications needed to practice these professions, and this pathway requires passing an examination administered by the relevant professional organization on top of obtaining a degree. Furthermore, membership in a professional organization is required to practice. There are also limits on foreign entry. For instance, professionals that acquired their qualifications in countries outside the European Economic Area (EAA) are not allowed to practice in Poland, unless they undertake a local examination. This is not the case in other EU economies, such as Spain, where there is a clear and transparent path that can be followed to have professional titles earned in non-EAA countries recognized, and no local examination is required.

¹¹ One requires to graduate in law, undertake a practice period of 3 years and pass the bar exam. The second is open to people with high legal qualifications, e.g. law professors, postdoctoral law students, judges, or notaries, who can access the profession with a law degree, but without having to undertake the 3 year practice period nor sit the bar exam. The third, which is open to some types of legal scholars, requires to pass the bar exam but not to undertake the 3 year practice period.

¹² The benefits of opening to competition the notary profession in France have been documented by the French Competition Regulator in a report (Concurrence, 2021_[61]).

¹³ A presentation with the key findings of the paper can be found here: "[Private Monopoly and Restricted Entry – Evidence from the Notary Profession](#)".

Retail Trade

Two PMR sector indicators assess the regulatory set-up in the retail trade sector: Retail Distribution and Retail Sales of Medicines. The former covers a broad set of regulatory issues affecting retail businesses, including shop opening hours, price regulation, and licensing requirements. The latter focuses on demographic, geographic and ownership restrictions that may be imposed on pharmacies, as well as other restrictions related to the retail sale of prescription and non-prescription medicines.

Poland has a very high score in the indicator of Retail Sales of Medicines, while it is close to the OECD average in the one on Retail Distribution (Figure 7).

The country's high score in this PMR sector indicator is mostly driven by the presence of restrictions on the minimum physical distance between two pharmacies and on the number of pharmacies located in a given geographical area.¹⁴ The country had no restrictions on the establishment and location of pharmacies until 2017. Geographic restrictions were then introduced to address an excessive concentration of pharmacies. According to national authorities, this led pharmacies to undertake activities that affected the availability of medicines, such as excessive sales of medicines outside the country. In addition, the 2017 legislation established that only pharmacists could own new pharmacies¹⁵. Other OECD countries have succeeded in ensuring a stable supply in a liberalized environment, reaping the benefits of higher competition in the sector.

Figure 7. PMR sector indicators for Retail Trade

Index scale 0 to 6 from most to least competition-friendly regulatory framework



Note: All the averages include only OECD countries. Information refers to laws and regulations in force on 1 January 2018, except for Costa Rica, Estonia and the United States, for which the information refers to 1 January 2019.

Source: OECD 2018 PMR database.

¹⁴ In practice, the Ministry of Health can issue an authorisation for the establishment of a new pharmacy irrespective of these demographic and geographic requirements, if the Ministry considers it necessary. However, this is an exception.

¹⁵ Pharmacies established before the entry into force of the regulation do not need to adapt to the new requirements.

Poland has in place an official register of online medicine retailers, and physicians are required to provide prescriptions in electronic format.¹⁶ However, pharmacies are not allowed to sell prescription medicines online, as national authorities consider that ensuring patient safety should always be a priority and are concerned that the supervision that could be guaranteed in the case of online sales would be inadequate and that an inappropriate use of prescription medicines could lead to adverse health effects.

Since the online sale of prescription medicines can improve access for patients with mobility difficulties and for those living in remote areas, around one third of OECD economies, including EU countries such as Germany, Finland, and the Netherlands, have permitted the online sales of prescription medicines for some years.¹⁷ Their experience highlights that it is possible to have prescription medicines sold online without putting the safety of patients at risk.

Scope and Governance of SOEs

The PMR indicators measure the potential distortions caused by the presence of SOEs in markets where they operate in competition or potentially in competition with private firms. The rationale for this is that the state, as the owner, can distort the efficient behaviour of these enterprises and can influence the rules of the sectors in which they operate, potentially introducing distortions in the competitive process. Indeed, SOEs tend to be less productive than private companies, particularly in countries where their governance is weak (OECD, 2020^[26]). Moreover, widespread distortion in the allocation of resources between SOEs and private firms can reduce the efficiency in markets where SOEs operate. Governance rules are required to minimise these distortions.

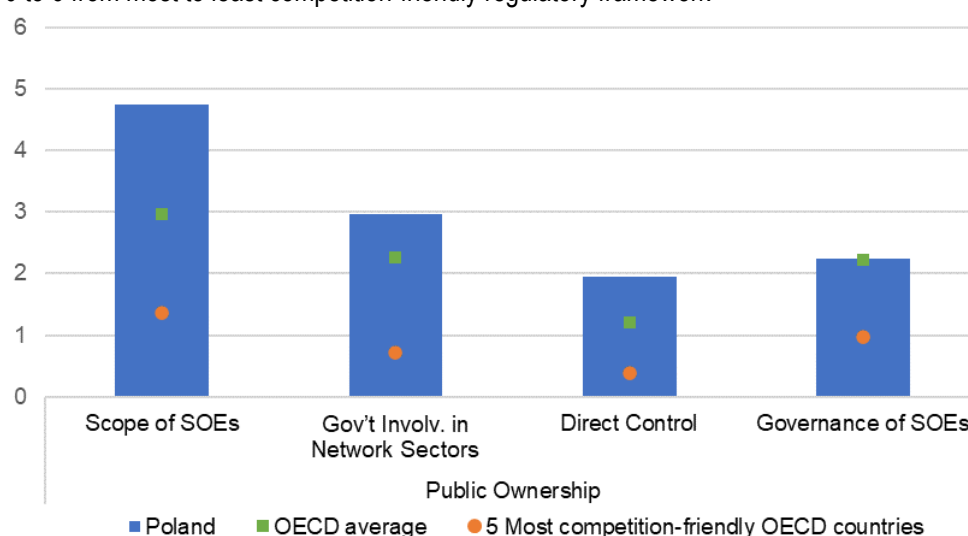
Four PMR low-level indicators measure the presence of SOEs in the economy and the quality of their governance. The Scope of SOEs indicator measures whether the government directly controls at least one firm in several business sectors. The Direct control indicator contains information on whether the government indirectly controls firms by holding special voting rights and on constraints to the sale of government stakes in publicly controlled firms. The Government involvement in network sectors indicator assesses the size of the government's stake in the largest firm in key network sectors. Finally, the Governance of SOEs indicator evaluates the degree of insulation of state-owned enterprises from market discipline and the degree of political interference in the management of these firms when they are involved in commercial activities. More specifically, the indicator assesses compliance with key best practices included in the OECD Guidelines on Corporate Governance of State-Owned Enterprises (OECD, 2015^[27]). The results for Poland are shown in Figure 8.

¹⁶ The register can be found here: <https://www.gov.pl/web/gif>

¹⁷ The full list of OECD countries that allow the online sales of prescription medicines include: Australia, Denmark, Estonia, Finland, Germany, Iceland, Israel, Netherlands, New Zealand, Norway, Sweden, and Switzerland.

Figure 8. PMR low-level indicators on Scope and Governance of SOEs*

Index scale 0 to 6 from most to least competition-friendly regulatory framework



Note: Information refers to laws and regulations in force on 1 January 2018, except for Costa Rica, Estonia and the United States, for which the information refers to 1 January 2019.

* The value of the low-level indicator on Governance of SOEs is based on the 2018 PMR database, hence it does not take into account the 2019 re-centralisation of SOE ownership rights.

Source: OECD 2018 PMR database

Public ownership is more extensive in Poland than in most OECD countries. Indeed, the government controls at least one firm in twenty-one sectors of the economy out of the twenty-five assessed in the PMR indicators (Scope of SOEs). The government also owns most of the voting shares in the largest firm in several network sectors, namely electricity generation and retail supply, gas production, import, storage, and retail supply, as well as rail and air transport (Government Involvement in Network Sectors).

As public ownership is so pervasive, the corporate governance of SOEs plays a major role in ensuring that these firms compete on a level playing field with private firms when they carry out economic activities. The assessment of the Governance of SOEs low-level indicator reveals that the country could better align its governance to OECD best practices. In 2017, Poland liquidated the central state ownership entity – the Treasury – and gave the ownership rights to the line ministries in charge of the sectors in which these SOEs operated, with a coordinating role for the Prime Minister (OECD, 2020_[28]). This removed the separation between ownership and regulatory functions. When the same body owns an SOE and regulates the markets where this SOE operates, conflicts of interest may arise (OECD, 2015_[27]) and the regulatory outcome could favour these firms over their private competitors (Edwards and Waverman, 2006_[29]). To avoid this outcome, it is best practice to centralise all ownership rights in a single entity that does not exercise regulatory functions over the markets in which these SOEs are active. In 2019, the Polish government took important steps towards re-centralisation and assigned the ownership rights of a substantial part of the economically significant SOEs to the newly established Ministry of State Assets (International Monetary Fund, 2022_[30]).¹⁸ This policy change now guarantee separation between the ownership and regulatory functions of these SOEs.

Still, the country could go further. In Poland, there is no obligation for SOEs to ensure accounting or functional separation between activities provided under public service obligations and commercial

¹⁸ The webpage of the Ministry of State Assets is available [here](#).

activities, apart from those sectors where EU legislation requires it. Accounting or functional separation¹⁹ are important to prevent cross-subsidization between these activities, which could distort competition in the markets where the SOEs undertake their commercial activities (OECD, 2015^[27]). If Poland required some form of separation between competitive and non-competitive for all SOEs, it would guarantee a more level playing field in business environment.

5. Assessment of the regulatory set-up in network sectors where the NRR Plan envisages infrastructure investments

Poland's NRR Plan envisages investments in various network sectors assessed in the PMR indicators (Table 3). According to a recent study by the OECD (Demmou and Franco, 2020^[31]), pro-competition regulation in network industries is associated with stronger productivity growth in firms operating in downstream markets. In addition, sound governance of the sector regulators is likely to magnify the downstream productivity effects of infrastructure investment, as it can improve the efficiency of firms operating in network industries. More specifically, by improving the allocation of resources, better network regulation can also boost the digital and green transitions. In particular, pro-competition regulation in the e-communications is associated with greater adoption of digital technologies (Nicoletti, von Rueden and Andrews, 2020^[32]), while removing regulatory barriers to competition in the energy sector can have a positive impact on green innovation (Agyeman and Lin, 2023^[33]). For these reasons, assessing the effectivity of the regulatory framework of network sectors, as well as the governance of the regulators overseeing these sectors, can shed light on whether the country has the scope to pursue reforms that can maximize the positive economic impact of these investments.

Table 3. Investments in network sectors included in Poland's NRR Plan

Network sector	Investment measures included in the NRR Plan
Energy	<p>B2.2.1. 'Development of transmission networks, intelligent electricity infrastructure', connecting 400 kV transmission lines to relevant stations.</p> <p>B2.2.2. 'RES installations implemented by energy communities', supporting projects leading to the installation of RES at the local level.</p> <p>B.2.2.3 'Construction of terminal infrastructure offshore', aiming at the construction of port infrastructure to the installation and service of offshore wind farms.</p> <p>B2.2.3. 'Construction of offshore wind farms'.</p>
E-communications	<p>C1.1.1. 'Providing access to very fast internet in white spots', aiming at providing at least 80% of households with 100Mb/s internet connection.</p> <p>C1.2.1. 'Strengthening the potential of commercial investments in modern electronic communications networks', including investments to expand the coverage of 5G networks.</p>
Transport	<p>E2.1.1. 'Railway lines', aiming at projects modernising over 478km of railway lines, including 300km of the TEN-T network.</p> <p>E2.1.2. 'Passenger rolling stock', providing investment into zero-emission vehicles (70 units for regional lines and 38 units for long-distance lines).</p> <p>E2.3.1. 'Passenger rolling stock of the regional railway', aiming at renewing the rolling stock (75 units for regional lines).</p> <p>E2.2.2. 'Transport digitization', aiming at the development of the European Train Control System (ETCS) and the implementation of remote control at 35 railway traffic stations.</p> <p>E2.1.3. 'Intermodal transport', for the construction, expansion and modernization of reloading terminals, sidings leading to terminals and sidings in terminals.</p> <p>E2.2.1. 'Transport safety', including the reconstruction of intersections, roads and rail crossings, roundabouts etc.).</p>

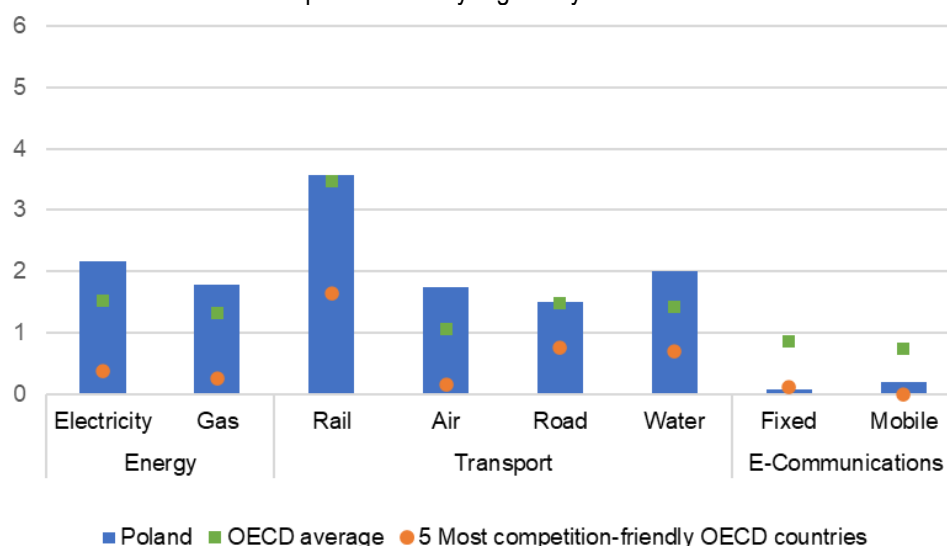
¹⁹ Functional separation means that public service activities and commercial activities are organized and provided via different units within the same company.

Insights from PMR network sector indicators

These indicators suggest that Poland has scope to make its regulatory set-up more conducive to competition in most network sectors where its NRR Plan foresees infrastructure investments. The only exception is E-communications, where Poland's score is in line with the best OECD performers (Figure 9).

Figure 9. PMR sector indicators for Energy, Rail and Road Transport, and E-communications

Index scale 0 to 6 from most to least competition-friendly regulatory framework



Note: All the averages include only OECD countries. Information refers to laws and regulations in force on 1 January 2018, except for Costa Rica, Estonia and the United States, for which the information refers to 1 January 2019.

Source: OECD 2018 PMR database

In sectors where Poland lags behind OECD economies, the country's worse performance often reflects the involvement of government through ownership, price regulation and/or complex licensing procedures.

- **Electricity:** Poland scores worse than most OECD economies in this sector indicator for several reasons. First, although the market is open to competition and all consumers can choose their electricity supplier, the Energy Regulatory Office still offers regulated tariffs for domestic consumers. This applies to consumers that have not switched to market-based offers. Although this represents only a partial regulation of prices, it can distort competition and undermine the entry of new retailers. Second, the rights and obligations of demand response aggregators are not defined in national legislation (Saviuc et al., 2022^[34]), even when consumers are allowed to sell demand response to third parties in wholesale and balancing markets and there are explicit demand response schemes organised by the transmission system operator.²⁰ Demand response aggregators are crucial, as they act as intermediaries between electricity end-customers (demand response providers) and network operators (demand response buyers). Hence, the lack of clear rules for demand response aggregation undermines the participation of consumers, particularly small non-domestic and domestic ones, for which aggregation is crucial (Saviuc et al., 2022^[34]).

²⁰ In explicit demand response schemes (sometimes called "incentive-based" or "volume-based" or "dispatchable" demand response), consumers receive a compensatory payment to change their consumption upon request. This request may stem from a constraint in the network or an unexpected shortage in electricity supply. The result of demand response actions is sold upfront on electricity markets. Demand response may be purchased by the network operator or by aggregators, which then sell aggregated demand response products on the wholesale electricity market.

Participation in explicit demand response schemes can contribute to the green transition by enhancing the flexibility of the grid and making it more resilient to irregular patterns of production (IEA, 2019^[35]), which are likely to become more frequent as the country relies increasingly on renewable energy sources. In fact, the complex management of fluctuating production is one of the factors hindering the expansion of renewables in the country (OECD, 2023^[11]). Finally, the government controls the largest firm in electricity generation (i.e., PGE GIEK S.A) and retail services (i.e., PGE Obrót S.A).

- **Natural gas:** the regulatory framework in this sector is also less conducive to competition than that in most OECD countries. In particular, the government still regulates the tariffs for domestic and small non-domestic consumers, even if the market has been open to competition for several years and all consumers are free to choose their gas supplier. The government also controls the firm that has the largest market share in the generation, transmission, storage, and retail gas sectors (PGNiG).

It is important to consider that this assessment refers to the structure of the energy sector and its regulation from a long-term perspective. The current energy crisis has led some OECD countries to introduce temporary measures to protect consumers and guarantee supply, some of which include retail price regulation and increasing government ownership in energy firms. These measures may be justified to address the crisis but can distort competition if sustained over time.

- **Rail transport:** Poland's score in 2018 was just above the OECD average in this sector indicator. The score reflected the fact that public service contracts were not always awarded through competitive tenders. However, since then, Poland has been gradually introducing more competition in the allocation of public service contracts.²¹ In 2020, competitive tendering has become mandatory for all new public contracts for the provision of passenger regional services. In addition, from December 2023, competitive tenders will also be required for all new public contracts for the provision of inter-regional and international passenger rail services in Poland. These changes will foster a more efficient allocation of contracts and will lead to an improvement in Poland's score in this indicator.
- **Road transport:** Poland's score shows that the country has margin to improve the regulatory set-up in this sector. Entry in both the markets for long-distance transport of passengers by coach and for freight transport could be facilitated by replacing the current licensing regime with a leaner notification system. In addition, licences to operate in freight transport should not be subject to a duration limit, and firms providing domestic long-distance passenger transport should be left free to select the routes they wish to serve.
- **Air transport:** Poland's score is worse than the OECD average in this PMR sector indicator. There is no regulatory supervision, either ex-ante or ex-post, on the charges levied by airports or on the revenues they earn. This supervision is necessary to ensure that airports that enjoy local market power do not set excessively high charges. In addition, the government controls *Polish Airlines LOT*, the country's largest airline.
- **Water transport:** Poland's poor score in this sector indicator is due to the lack of separation between port authorities and operators of terminal facilities offering commercial services. Moreover, entry in both the water freight and water passenger transport sectors could be eased by replacing the current licensing regime with a simpler notification system.

²¹ In 2018 Poland adopted the "Act of March 22, 2018 amending the Act on public collective transport" (Ustawa z dnia 22 marca 2018 r. o zmianie ustawy o publicznym transporcie zbiorowym, Dz. U. poz. 907) available at <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20180000907>. This implements Regulation (EU) No 2016/2338 of the European Parliament and of the Council of 14 December 2016 amending Regulation (EC) No 1370/2007 concerning the opening of the market for domestic passenger transport services by rail (OJ L 354, 23.12.2016, p. 22.), available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R2338>

Insights from OECD Indicators on the Governance of Sector Regulators

The OECD regularly calculates a set of Indicators on the Governance of Sector Regulators²². These indicators provide an overview of the governance arrangements of regulators in network sectors by focusing on three key institutional components:

- *Independence* captures the degree to which a regulator operates independently and with no undue influence from the political power and the actors in the sector(s) it regulates.
- *Accountability* reflects the accountability of the regulator vis-à-vis relevant stakeholders, including the government, parliament, the regulated industry, and the general public; and
- *Scope of action* sheds light on the range of activities that the regulator carries out, including tariff-setting, issuing standards, enforcement activities and sanctioning powers.

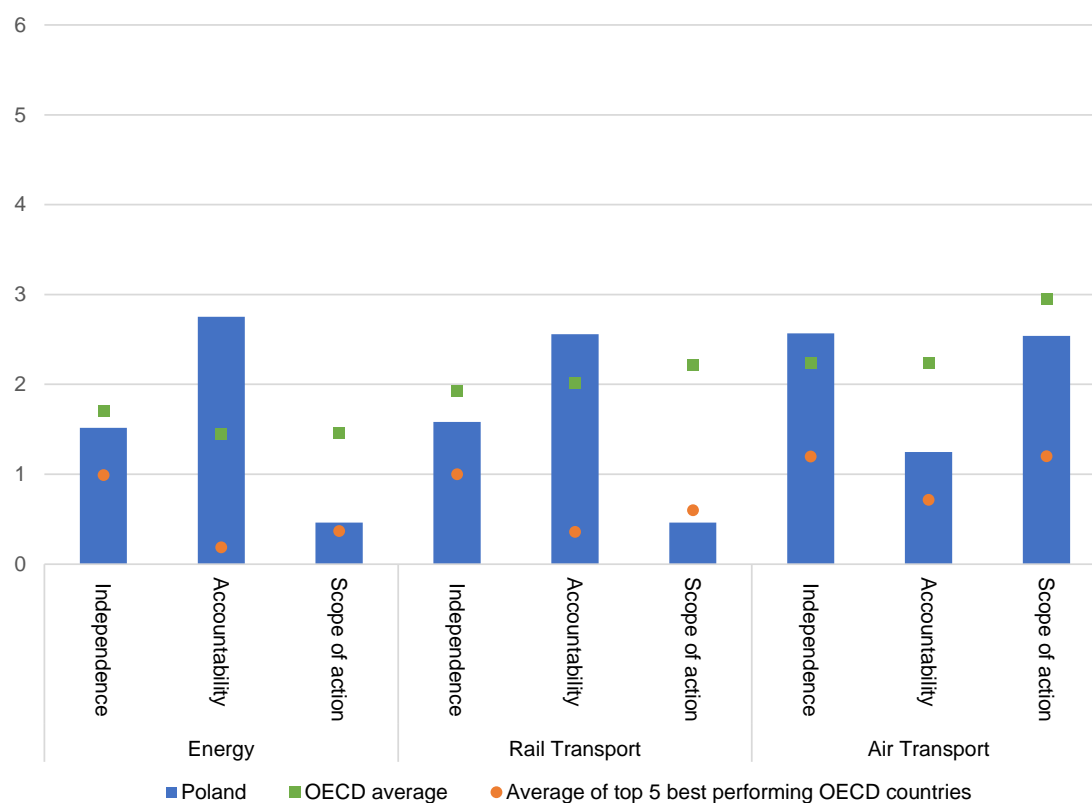
These indicators complement the overview of the regulatory environment in the network sectors provided by the PMR sector indicators. While the PMR indicators focus on the regulatory framework, the Indicators on the Governance of Sector Regulators assess the governance of the bodies responsible for the implementation and enforcement of the regulatory framework. Like the PMR indicators, Indicators on the Governance of Sector Regulators range from 0 to 6, where a higher score indicates that the regulator is further from good practice in the independence and accountability components and has a narrower range of functions in the scope of action component.

Poland's scores in the three components of the Indicators on the Governance of Sector Regulators suggest that the governance arrangements for the Energy, Rail Transport and Air Transport sectors could be closer to OECD best performing economies (Figure 10).

This is particularly the case when it comes to the independence of the Air Transport regulator and the accountability of the Energy and Rail Transport ones, where Poland performs worse than the OECD average.

²² For more information on these indicators see (Casullo, Durand and Cavassini, 2019^[59]).

Figure 10. Indicators on the Governance of Sector Regulators for Energy, Rail Transport and Air Transport



Note: In the energy sector, the averages include all OECD countries. In the rail transport sector, the averages include all OECD countries except Iceland and Korea. In the air transport sector, the averages include all OECD countries except Finland, Germany, Iceland, Korea, Slovak Republic and Slovenia. Information refers to governance arrangements in force on 1 January 2018, except for Costa Rica, Estonia and the United States, for which the information refers to 1 January 2019.

Source: OECD 2018 Database on the Governance of Sector Regulators.

Energy

The energy regulator in Poland has in place a greater number of good practice governance arrangements than most energy regulators in other OECD countries when it comes to its independence. Even though , the Prime Minister has the power to dismiss the president of the national regulatory authority before the end of his 5-year term of office, this power is limited to strictly defined circumstances (violation of the law, conviction by court, illness etc.)²³ On the other hand, the government alone is responsible for the nomination and final appointment of the president and board members of the regulator: involving the parliament could potentially strengthen the appointment procedures. Moreover, introducing a cooling-off period for the agency's head and board members after their term can reduce the risks associated with 'revolving doors' and avoid conflicts of interest.

²³ See Article 21. (2m) of the Energy Act, available at: <https://sip.lex.pl/akty-prawne/dzu-dziennik-ustaw/prawo-energetyczne-16798478>.

Several governance arrangements could also be introduced to improve the accountability of the regulator. The regulator could be required to publish online all its draft decisions, as well as information on the quality of the regulatory process and a forward-looking action plan. It could also present a report on its activities to parliamentary committees. Moreover, to ensure greater accountability through stakeholder engagement, the regulator could be asked to collect stakeholders' comments on regulatory proposals and draft decisions and respond to them.

Rail Transport

The rail regulator's performance is less accountable than in the average OECD country. Its accountability could be strengthened by requiring the regulator to publish online all its draft decisions, as well as information on the quality of the regulatory process, its compliance with legal obligations, and its financial performance. Stakeholder engagement could also be improved by requiring the regulator to collect their comments and respond to them. In other OECD countries, such as the United Kingdom and Italy, the regulator is legally obliged to perform all these tasks.

Despite scoring below the OECD average, Poland could further protect the independence of the rail transport regulator. In particular, the government alone has the power to dismiss the agency head and the board members. In this regard, additional 'checks' could be introduced to limit the possibility of arbitrary dismissal.

Air transport

The air transport regulator performs well in terms of accountability and scope of action, while it underperforms when it comes to independence. Indeed this body is a ministerial agency. This is not uncommon for air transport regulations in OECD countries but establishing an independent body could better shield the regulator from undue influence. Moreover, the government has broad discretion to dismiss the agency head or the board members. Adopting a set of clear criteria could safeguard against the arbitrary dismissal of these officials.

6. Could the business regulatory environment be improved further?

A detailed analysis of the OECD PMR indicators has shown that Poland's regulatory set-up has room for improvements when it comes to the governance of SOEs, the administrative burden on the creation of new firms and the regulatory set-up of some network and services sectors. Although the NRR Plan envisages numerous measures, this paper highlights that the Plan does not address most of the regulatory weaknesses identified by the PMR indicators. Other OECD countries have tackled such weaknesses and the best practices adopted in other OECD countries to address regulatory weaknesses identified in this paper can provide options for Poland (Table 4).

Adopting these best practices has the potential to foster a more competitive and innovative business environment, and boost innovation and long-term growth. Moreover, some of these best practices can maximize the economic returns of the infrastructure investments in network sectors envisaged in Poland's NRR Plan. For instance, the prevalence of SOEs across network sectors in Poland is high. Ensuring that the governance of SOEs in these sectors is in line with international best practices is likely to have a positive effect on their productivity (Baum et al., 2019^[36]), which in turn can foster the efficient deployment and use of the relevant infrastructure. In addition, reducing barriers to competition in network sectors can boost the productivity of downstream firms that rely on network services as inputs (Demmou and Franco, 2020^[31]).

Table 4. OECD best practices to improve the business regulatory environment.

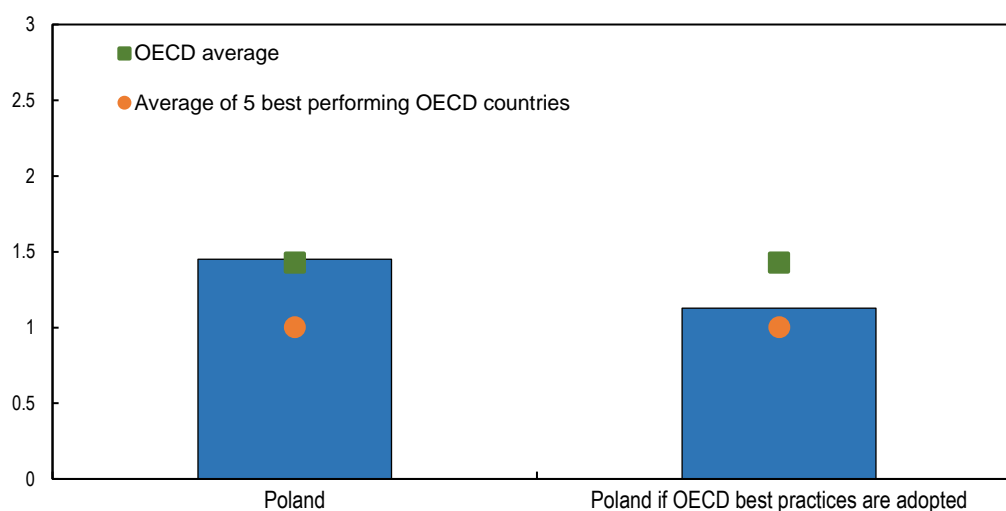
Area of product market regulation	Options based on the PMR indicators
Governance of SOEs	<ul style="list-style-type: none"> Separation of competitive and non-competitive activities of SOEs in all sectors is mandated (e.g. Latvia, Lithuania).
Administrative Requirements for Limited Liability Companies and Personally Owned Enterprises	<ul style="list-style-type: none"> Procedures required to set up an LLC can be carried out through a single online portal (e.g. Canada, Latvia). Costs of all mandatory procedures to set up an LLC are below 1% of GDP per capita (e.g. Austria, United Kingdom). Minimum paid-up capital to start an LLC are below 5% of GDP per capita (e.g. Czech Republic, Estonia).
Professional services	<p><i>Lawyers</i></p> <ul style="list-style-type: none"> No regulation of fees for legal services (e.g. Netherlands, Denmark). Lawyers face no restrictions to advertising their services (e.g. Norway, Spain). No restrictions on who can hold voting and ownership rights in law firms (e.g. United Kingdom, Australia). Inter-professional business cooperation between lawyers and other professionals is allowed (e.g. Italy, Spain). <p><i>Notaries</i></p> <ul style="list-style-type: none"> Fees that notary firms can charge for their services are liberalised (e.g. Italy, Netherlands). <p><i>Architects and Civil Engineers</i></p> <ul style="list-style-type: none"> Several pathways to access the professions (e.g. Netherlands, Finland). No requirement to join the professional organization to legally practice (e.g. Lithuania, Sweden). Clear and transparent process for recognizing education titles that have been earned abroad (e.g. Netherlands, Spain). Foreign professionals do not need to pass a local examination to practice (e.g. Estonia, France).
Retail distribution	<ul style="list-style-type: none"> No authorization needed to open a retail outlet (e.g. Spain, Slovenia). No need for additional licenses – beyond those related to health and safety - to open retail outlets when their surface exceeds 2000 sqm (e.g. Ireland, Lithuania)
Energy	<p><i>Electricity</i></p> <ul style="list-style-type: none"> The regulation incorporates a clear model of aggregation for participation in explicit demand response (e.g. France). Retail electricity prices for domestic consumers is fully liberalized (e.g. Germany) – excluding temporary measures to address specific shocks, such as the current energy crisis. <p><i>Gas</i></p> <ul style="list-style-type: none"> Retail natural gas prices for domestic and small non-domestic consumers are liberalized (e.g. Austria, Spain) – excluding temporary measures to address specific shocks, such as the current energy crisis.
Transport	<p><i>Road</i></p> <ul style="list-style-type: none"> Only a notification – not a license – is required for firms that wish to provide road freight and long-distance passenger transport services by coach to start operating (e.g. Chile). Firms providing long-distance passenger transport services by coach can choose the domestic routes they wish to serve without requiring government approval (e.g. United Kingdom, Sweden). <p><i>Water</i></p> <ul style="list-style-type: none"> Only a notification – not a licence – is required for firms that wish to provide water freight and passenger transport services to start operating (e.g. Slovenia, Lithuania). Functional or structural separation between port authorities and operators of terminal facilities offering commercial services is mandated (e.g. Germany, Spain).

Quantification of the impact on economy-wide PMR score

The OECD has quantified the impact that adopting the best practices discussed in this paper and listed in the Table above would have on Poland's score in overall economy-wide PMR indicator. This would decrease from 1.45 to 1.13, which would bring the country's business regulatory environment, as captured by the PMR indicators, practically in line with that of best performing OECD economies (Figure 11)²⁴.

Figure 11. Poland's overall economy-wide PMR score if the country adopted OECD best practices

Score ranges from 0 (most competition friendly) to 6 (less competition friendly).



Note: The EU average includes the 27 member countries. The OECD average includes all 38 member countries. The average of the 5 best performing countries includes the 5 OECD member countries that perform best in the overall economy-wide PMR indicator, namely United Kingdom, Denmark, Spain, Germany and the Netherlands.

Source: OECD 2018 PMR database.

²⁴ The simulation assumes that the best practices provided in Table 4 are implemented. The bar on the right also accounts for the adoption of a centralized model for the exercise of ownership rights in SOEs, which was introduced place in 2019. It also accounts for competition in the allocation of public service contracts for the provision of national and international passenger rail transport, as this is not included in the Plan but will be mandated by the EU from the end of 2023.

Annex A. The OECD Product Market Regulation Indicators

This Annex provides further information regarding the content and the structure of the two sets of PMR indicators: the economy-wide PMR indicators and the sector PMR indicators.

The economy-wide PMR indicator

The economy-wide PMR indicators are constructed from two high-level indicators capturing two potential sources of barriers to competition in the economy:

- i) those that may arise from state involvement in the economy, and
- ii) those that may arise from regulations affecting the entry and expansion of domestic and foreign firms.

Each of these two high-level indicators is composed of three low-level indicators, which are in turn composed of several low-level indicators that refer to specific regulatory domains (Figure 12).

Figure 12. The structure and content of the economy-wide PMR indicator



Source: (Vitale, Moiso and Wanner, 2020^[9])

Indicators of Distortions Induced by State Involvement in the economy

This high-level indicator captures distortions that can be caused by the state's involvement in the economy through the activity of state-owned enterprises (SOEs) and other forms of controls and obligations imposed by the state on private firms. It covers three key regulatory domains, represented by the three medium level indicators (the light blue boxes on the left-hand side in Figure 12). These are:

1. Presence of state-owned enterprises in the economy and their governance (*Public Ownership*),
2. Controls and obligations imposed on private firms (e.g., price regulation) including the rules regulating public procurement (*Involvement in Business Operations*), and
3. Rules in place to evaluate new and existing regulations in order to minimise negative impacts on competition and efforts to simplify the administrative burden businesses face when interacting with the government (*Simplification and Evaluation of Regulations*).

The ten low-level indicators (i.e., the dark blue boxes in the left hand side of Figure 12) focus each on a specific regulatory area, in particular:

- *Scope of state-owned enterprises (SOEs)*: measures whether the government controls at least one firm in several business sectors, with a higher weight given to the key network sectors on which the PMR exercise focuses.
- *Direct control over business enterprises*: measures the existence of special voting rights by the government in privately owned firms and constraints to the sale of government stakes in publicly controlled firms (based on same sectors and weights as the indicator above).
- *Government involvement in network sectors*: measures the size of the government's stake in the largest firm in key network sectors.
- *Governance of state-owned enterprises*: measures the degree of insulation of state-owned enterprises from market discipline and degree of political interference in the management of these firms. This low-level indicator is based on the principles underlying the *2015 OECD Guidelines on Corporate Governance of State Owned Enterprises* (OECD, 2015^[27]), herein the *2015 OECD Guidelines*.
- *Retail Price Controls*: measures the extent and type of retail price controls in the key network and service sectors.
- *Command and control regulation*: measures the extent to which the government uses command and control regulations, as opposed to incentive-based ones, across key network and service sectors.
- *Public procurement*: measures the degree to which procurement rules ensure a level playing field in access to public contracts for the provision of goods, services and public works.
- *Assessment of Impact on Competition*: measures the level of assessment of the impact of new and existing regulations on competition to ensure minimization of distortions to competition²⁵.
- *Interaction with Interest Groups*: measures the existence of rules for engaging stakeholders in the design of new regulation to reduce unnecessary restrictions to competition and for ensuring transparency of lobbying activities²⁶.
- *Complexity of regulatory procedures*: measures the government's efforts in reducing and simplifying the administrative burden of interacting with the government.

²⁵ For OECD countries, half of the information used in calculating this indicator comes from the OECD iREG database, which presents in-depth evidence on countries' regulatory policy and governance practices: www.oecd.org/gov/regulatory-policy/indicators-regulatory-policy-and-governance.htm. Since Indonesia is not included in this database, the information was collected directly from the Indonesian authorities.

²⁶ As above.

Indicators of Barriers to Domestic and Foreign Entry

This high-level indicator captures barriers to firms' entry and expansion across various sectors of the economy. It covers three key regulatory domains represented by the three medium level indicators (the light blue boxes in the right-hand side of Figure 12).

1. The administrative burden that new firms have to face when starting their business (*Administrative Burden on Start-ups*),
2. The qualitative and quantitative barriers firms face to enter and operate in specific key economic sectors (*Barriers in Service and Network Sectors*),
3. The barriers that could limit the access to domestic markets by foreign firms and foreign investors (*Barriers to Trade and Investment*).

The eight low-level indicators (i.e., the dark blue boxes on the right-hand side of Figure 12) focus each on a specific regulatory area, more specifically:

- *Administrative requirements for limited liability companies and personally owned enterprises*: measures the extent of the administrative requirements necessary to set up new enterprises, with a focus on two specific legal forms: limited liability companies and personally owned enterprises.
- *Licences and permits*: measures the existence of initiatives to simplify licensing procedures, such as 'one-stop-shops' for informing business about licences and notifications and for issuing/accepting them, 'silence is consent' rule and programs to review and reduce number of licences.
- *Barriers in services sectors*: measures the extent of the qualitative and quantitative barriers to competition arising from existing incentive-based regulation in key service sectors²⁷.
- *Barriers in network sectors*: measures the extent of the qualitative and quantitative barriers to competition arising from existing incentive-based regulation in network sectors²⁸.
- *Differential treatment of foreign suppliers*: measures the level of discrimination that foreign firms may experience when participating in public procurement processes, and the barriers to entry that foreign firms may experience relative to domestic firms in key network and service.
- *Barriers to FDI*: measures the restrictiveness of a country's FDI rules in 22 sectors in terms of foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel and operational restrictions. This indicator reflects the value of the FDI Regulatory Restrictiveness Index developed by the OECD Directorate for Financial and Enterprise Affairs.²⁹
- *Tariff barriers*: reflects the value of a cross-product average of effectively applied tariffs. The source of the relevant information is the UNCTAD Trade Analysis Information System database.³⁰
- *Barriers to trade facilitation*: measures the level of complexity of the technical and legal procedures for international trade, ranging from border procedures to the simplification and harmonisation of trade documents. This indicator reflects the value of the average of a subset of the Trade Facilitation Indicators developed by the OECD Trade and Agricultural Department.³¹

27 This indicator captures the barriers to competition that can exist in service sectors that are related to incentive-based regulation. The low-level indicator Command and Control Regulation measures the barriers created by the government's use of coercive regulations in the same sectors.

28 As above, but with reference to network sectors.

29 More information on the FDI restrictiveness index can be found at www.oecd.org/investment/fdiindex.htm.

30 The UNCTAD Trade Analysis Information System database can be accessed at <https://wits.worldbank.org/>

31 More information on the OECD Trade Facilitation Indicators can be found at www.oecd.org/trade/topics/trade-facilitation/

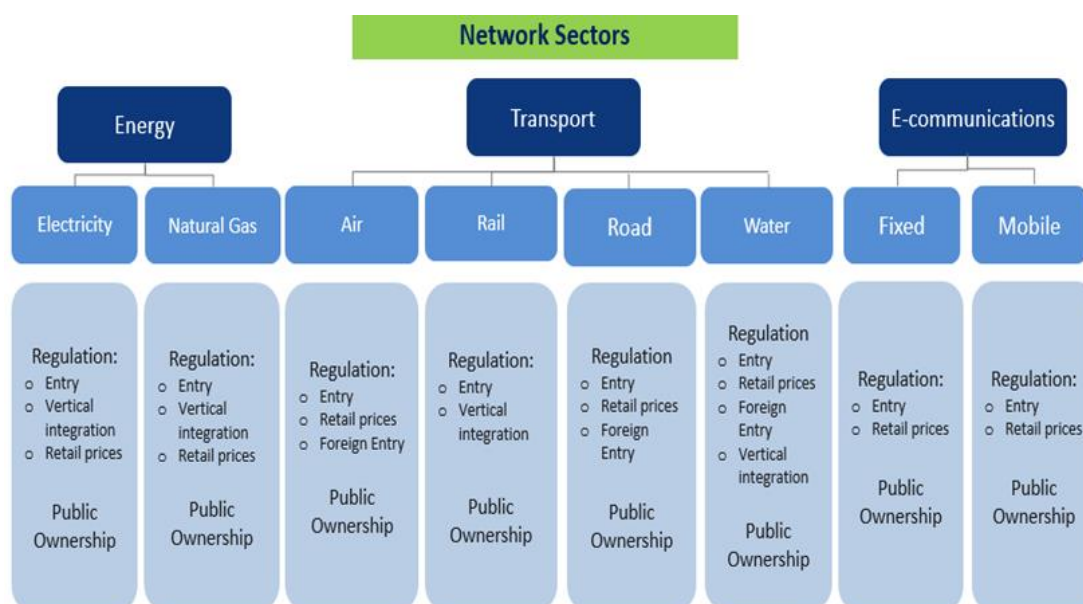
PMR Sector Indicators

The PMR sector indicators summarise information by sector, and not by regulatory domain, as in the economy-wide indicator. These indicators cover three broad sectors: network industries, professional services and retail distribution.

The indicators for network sectors assess eight sectors: electricity, natural gas, air transport, rail transport, road transport, water transport, as well as fixed and mobile e-communications. E-communications are traditionally referred to as telecommunications, but to highlight the relevance of data transmission in the PMR questionnaire and indicators they are referred to as e-communications. Each of these indicators include information on how entry and conduct in the relevant sector is regulated, and on the level of public ownership.

These eight indicators are then aggregated into three indicators, one for each industry (energy, transport and e-communications), and in one single overall indicator covering all network sectors (Figure 13).

Figure 13. Structure of the PMR indicators for network sectors



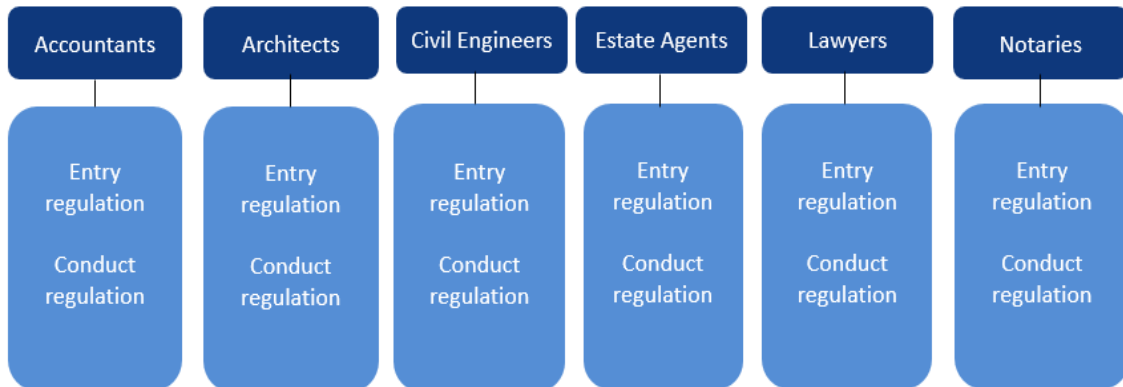
Source: (Vitale, Moiso and Wanner, 2020^[9])

The service sector indicators cover six professions (accountants, architects, civil engineers, real estate agents, lawyers, and notaries), as well as general retail distribution and retail sales of medicines.

The professional services indicators include information on entry requirements and conduct constraints (Figure 14), whereas the retail trade indicators cover a broad set of regulatory issues, ranging from shop opening hours to licensing and retail price regulation (Figure 15).

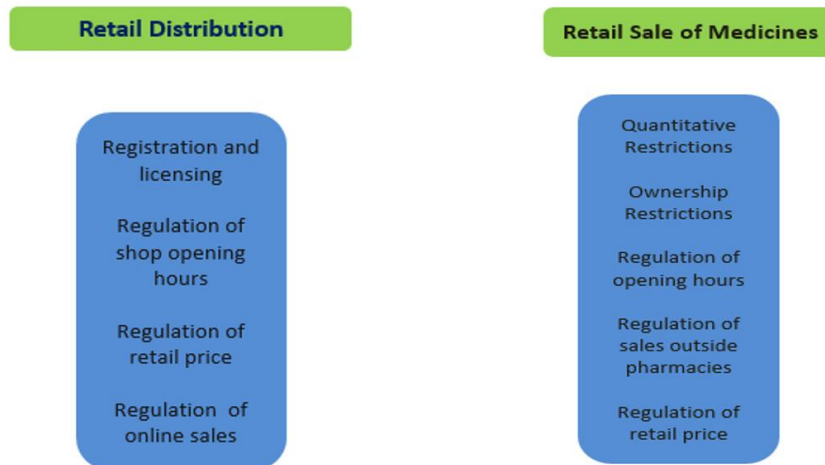
There is no aggregate indicator covering these eight sectors because of the very different nature of the sectors covered. In addition, there is no single indicator on the regulation of all professional services because some professions do not exist in all countries; hence, a single average would distort comparisons.

Figure 14. Structure of the 2018 PMR indicators for professional services



Source: (Vitale, Moiso and Wanner, 2020^[9])

Figure 15. The structure of the PMR indicators for retail trade



Source: (Vitale, Moiso and Wanner, 2020^[9])

References

- Adedeji, B. et al. (2020), "Corporate governance and performance of medium-sized firms in Nigeria: does sustainability initiative matter?", *Corporate Governance: The International Journal of Business in Society*, Vol. 20/3, pp. 401-427, <https://doi.org/10.1108/cg-09-2019-0291>. [63]
- Aghion, P. et al. (2023), "Environmental Preferences and Technological Choices: Is Market Competition Clean or Dirty?", *American Economic Review: Insights*, Vol. 5/1, pp. 1-19, <https://doi.org/10.1257/aeri.20210014>. [65]
- Agyeman, S. and B. Lin (2023), "The influence of natural gas (De)regulation on innovation for climate change mitigation: Evidence from OECD countries", *Environmental Impact Assessment Review*, Vol. 98, p. 106961, <https://doi.org/10.1016/j.eiar.2022.106961>. [33]
- Alfaro, L. and A. Charlton (2006), "International financial integration and entrepreneurship", *Centre for Economic Performance, London School of Economics and Political Science CEPDP* (755). [12]
- Amici, M. et al. (2016), "Red tape reduction and firm entry: New evidence from an Italian reform", *Economics Letters*, Vol. 146, pp. 24-27, <https://doi.org/10.1016/j.econlet.2016.06.031>. [15]
- Andersson, M., P. Braunerhjelm and P. Thulin (2012), "Creative destruction and productivity: entrepreneurship by type, sector and sequence", *Journal of Entrepreneurship and Public Policy*, Vol. 1/2, pp. 125-146, <https://doi.org/10.1108/20452101211261417>. [17]
- Andrews, D., C. Criscuolo and P. Gal (2016), "The Best versus the Rest: The Global Productivity Slowdown, Divergence across Firms and the Role of Public Policy", *OECD Productivity Working Papers*, No. 5, OECD Publishing, Paris, <https://doi.org/10.1787/63629cc9-en>. [2]
- Arnold, J. et al. (2015), "Services Reform and Manufacturing Performance: Evidence from India", *The Economic Journal*, Vol. 126/590, pp. 1-39, <https://doi.org/10.1111/eoj.12206>. [52]
- Bambalaite, I., G. Nicoletti and C. von Rueden (2020), "Occupational entry regulations and their effects on productivity in services: Firm-level evidence", *OECD Economics Department Working Papers*, No. 1605, OECD Publishing, Paris, <https://doi.org/10.1787/c8b88d8b-en>. [22]
- Barbero, J. et al. (2022), "A general equilibrium analysis of the economic impact of the post-2006 EU", *JRC Working Papers on Territorial Modelling and Analysis*, Vol. No. 03/2022. [24]
- Barone, G. and F. Cingano (2011), "Service Regulation and Growth: Evidence from OECD Countries", *The Economic Journal*, Vol. 121/555, pp. 931-957, <https://doi.org/10.1111/j.1468-0297.2011.02433.x>. [54]
- Bassanini, A., S. Scarpetta and P. Hemmings (2001), "Economic Growth: The Role of Policies and Institutions. Panel Data Evidence from OECD Countries", *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.265091>. [18]
- Baum, M. et al. (2019), "Governance and State-Owned Enterprises: How Costly is Corruption?.", *International Monetary Fund*. [36]
- Bourlès, R. et al. (2013), "Do Product Market Regulations in Upstream Sectors Curb Productivity Growth? Panel Data Evidence For OECD Countries", *The Review of Economics and Statistics*, Vol. 95/5, pp. 1750-1768, https://doi.org/10.1162/rest_a_00338. [53]

- Boylaoud, O. and G. Nicoletti (2003), "Regulatory reform in retail distribution", *OECD Economic Studies*, https://doi.org/10.1787/eco_studies-v2001-art8-en. [50]
- Bripi, F. (2015), "The Role of Regulation on Entry: Evidence from the Italian Provinces", *The World Bank Economic Review*, Vol. 30/2, pp. 383-411, <https://doi.org/10.1093/wber/lhv063>. [13]
- Buccirossi, P. et al. (2013), "Competition Policy and Productivity Growth: An Empirical Assessment", *The Review of Economics and Statistics*, Vol. 95/4, pp. 1324-1336, https://doi.org/10.1162/rest_a_00304. [6]
- Canton, E., D. Ciriaci and I. Solera (2014), "The Economic Impact of Professional Services Liberalization", *European Economy*, Vol. Economic Papers 533. [23]
- Casullo, L., A. Durand and F. Cavassini (2019), "The 2018 Indicators on the Governance of Sector Regulators - Part of the Product Market Regulation (PMR) Survey", *OECD Economics Department Working Papers*, No. 1564, OECD Publishing, Paris, <https://doi.org/10.1787/a0a28908-en>. [59]
- Concurrence, A. (2021), *Assessment and prospects of opening up the french notarial profession to competition in 2015*, <https://www.oecd.org/economy/reform/Reform-of-the-regulation-of-notaries-in-France-and-its-impact.pdf>. [61]
- Correa, J. and C. Ornaghi (2014), "Competition & Innovation: Evidence from U.S. Patent and Productivity Data", *The Journal of Industrial Economics*, Vol. 62/2, pp. 258-285, <https://doi.org/10.1111/joie.12050>. [1]
- Demmou, L. and G. Franco (2020), "Do sound infrastructure governance and regulation affect productivity growth? New insights from firm level data", *OECD Economics Department Working Papers*, No. 1609, OECD Publishing, Paris, <https://doi.org/10.1787/410535403555>. [31]
- Dziewit, W. (2022), *Polish Startups 2022*, Startup Poland, <https://startuppoland.org/wp-content/uploads/2022/12/Polish-Startups-2022-ENG-www.pdf>. [20]
- Edwards, G. and L. Waverman (2006), "The Effects of Public Ownership and Regulatory Independence on Regulatory Outcomes", *Journal of Regulatory Economics*, Vol. 29/1, pp. 23-67, <https://doi.org/10.1007/s11149-005-5125-x>. [29]
- Égert, B. (2018), "Regulation, Institutions and Aggregate Investment: New Evidence from OECD Countries", *Open Economies Review*, Vol. 29/2, pp. 415-449, <https://doi.org/10.1007/s11079-017-9449-9>. [5]
- Égert, B. (2017), "The quantification of structural reforms: Extending the framework to emerging market economies", *OECD Economics Department Working Paper*. [4]
- Egert, B., T. Kozluk and D. Sutherland (2009), "Infrastructure and Growth: Empirical Evidence", *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.1360784>. [40]
- Égert, B. and I. Wanner (2016), "Regulations in services sectors and their impact on downstream industries: The OECD 2013 Regimpact Indicator", *OECD Economics Department Working Papers*, No. 1303, OECD Publishing, Paris, <https://doi.org/10.1787/5jlwz7kz39q8-en>. [51]
- European Commission (2022), "Analysis of the recovery and resilience plan of Poland", *Commission staff working document*, https://ec.europa.eu/info/system/files/swd_2022_161_2_en.pdf. [41]

- European Commission (2022), *Annex to the Proposal for a COUNCIL IMPLEMENTING DECISION on the approval of the assessment of the recovery and resilience plan for Poland*, https://ec.europa.eu/info/files/annex-proposal-council-implementing-decision-approval-assessment-recovery-and-resilience-plan-poland_en. [43]
- European Commission (2022), "Proposal for a COUNCIL IMPLEMENTING DECISION on the approval of the assessment of the recovery and resilience plan for Poland", https://ec.europa.eu/info/system/files/com_2022_268_1_en.pdf. [42]
- European Commission (2020), *Recommendation for a COUNCIL RECOMMENDATION on the 2019 National Reform Programme of Poland and delivering a Council Opinion on the 2019 Convergence Programme of Poland*. [45]
- European Commission (2019), *Digital Economy and Society Index (DESI) - Poland*. [66]
- European Commission (2019), *Recommendation for a COUNCIL RECOMMENDATION on the 2019 National Reform Programme of Poland and delivering a Council opinion on the 2019 Convergence Programme of Poland*, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0521&from=EN>. [44]
- Gal, P. and A. Theising (2015), "The macroeconomic impact of structural policies on labour market outcomes in OECD countries: A reassessment", *OECD Economics Department Working Papers*, No. 1271, OECD Publishing, Paris, <https://doi.org/10.1787/5jrqc6t8ktif-en>. [7]
- Hermanto, Y., L. Lusy and M. Widyastuti (2021), "How Financial Performance and State-Owned Enterprise (SOE) Values Are Affected by Good Corporate Governance and Intellectual Capital Perspectives", *Economies*, Vol. 9/4, p. 134, <https://doi.org/10.3390/economies9040134>. [62]
- IEA (2019), *Demand Response*. [35]
- Impullitti, G. and O. Licandro (2017), "Trade, Firm Selection and Innovation: The Competition Channel", *The Economic Journal*, Vol. 128/608, pp. 189-229, <https://doi.org/10.1111/eoj.12466>. [37]
- International Monetary Fund (2022), *Republic of Poland: Technical Assistance Report-Public Investment Management Assessment*, <https://www.imf.org/en/Publications/CR/Issues/2022/09/30/Republic-of-Poland-Technical-Assistance-Report-Public-Investment-Management-Assessment-524111> (accessed on 2 May 2023). [30]
- Klapper, L., L. Laeven and R. Rajan (2006), "Entry regulation as a barrier to entrepreneurship", *Journal of Financial Economics*, Vol. 82/3, pp. 591-629, <https://doi.org/10.1016/j.jfineco.2005.09.006>. [16]
- Kleiner, M. and E. Soltas (2019), *A Welfare Analysis of Occupational Licensing in U.S. States*, Federal Reserve Bank of Minneapolis, <https://doi.org/10.21034/sr.590>. [21]
- Lee, C. (2009), "Competition favors the prepared firm: Firms' R&D responses to competitive market pressure", *Research Policy*, Vol. 38/5, pp. 861-870, <https://doi.org/10.1016/j.respol.2009.01.005>. [38]

- Monteagudo, J., A. Rutkowski and D. Lorenzani (2012), “The economic impact of the Services Directive: A first assessment following implementation”, *European Economy*, Vol. Economic Papers 456. [46]
- Nicoletti, G., C. von Rueden and D. Andrews (2020), “Digital technology diffusion: A matter of capabilities, incentives or both?”, *European Economic Review*, Vol. 128, p. 103513, <https://doi.org/10.1016/j.euroecorev.2020.103513>. [32]
- OECD (2023), *OECD Economic Surveys: Poland 2023*, OECD Publishing, Paris, <https://doi.org/10.1787/6fc99a4b-en>. [11]
- OECD (2022), “Assessment of the links between the European National Recovery and Resilience Plans and the OECD Product Market Regulation Indicators”, https://www.oecd.org/economy/reform/final_assessment_of_the_recovery_and_resilience_plan_2022.pdf. [8]
- OECD (2021), *Recommendation of the Council on Competitive Neutrality*, <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0462>. [57]
- OECD (2021), *The promotion of competitive neutrality by competition authorities*, <https://www.oecd.org/competition/globalforum/the-promotion-of-competitive-neutrality-by-competition-authorities.htm>. [64]
- OECD (2020), *Implementing the OECD Guidelines on Corporate Governance of State-Owned Enterprises: Review of Recent Developments*, OECD Publishing, Paris, <https://doi.org/10.1787/4caa0c3b-en>. [28]
- OECD (2020), *LALALA*. [60]
- OECD (2020), *New horizons: Structural policies for a strong recovery and a sustainable, inclusive and resilient future*, <https://www.oecd.org/economy/growth/G20-new-horizons-november-2020.pdf>. [26]
- OECD (2020), *One-Stop Shops for Citizens and Business*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, <https://doi.org/10.1787/b0b0924e-en>. [19]
- OECD (2015), *G20/OECD Principles of Corporate Governance*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264236882-en>. [56]
- OECD (2015), *OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264244160-en>. [27]
- OECD (2014), *Economic Policy Reforms 2014: Going for Growth Interim Report*, OECD Publishing, Paris, <https://doi.org/10.1787/growth-2014-en>. [55]
- Office for Fair Trading (2003), *The control of entry regulations and retail pharmacy services in the UK*, <https://assets.publishing.service.gov.uk/media/555de41b40f0b666a20000ec/oft609.pdf>. [49]
- Office of Fair Trading and DotEcon (2010), “Evaluating the impact of the 2003 OFT study on the Control and Entry regulations in the retail pharmacies market”, https://webarchive.nationalarchives.gov.uk/ukgwa/20140402142426/http://www.oft.gov.uk/shared_oft/reports/Evaluating-OFTs-work/OFT1219.pdf. [48]

- Pfeiffer, P., J. Varga and J. in't Veld (2021), "Quantifying Spillovers of Next Generation EU Investment", *Directorate General Economic and Financial Affairs (DG ECFIN), European Commission*. No.144. [10]
- Rostam-Afschar, D. and M. Unsorg (2021), "Entry regulation and competition: Evidence from retail and labor markets of pharmacists", *Hohenheim Discussion Papers in Business, Economics and Social Sciences, Universität Hohenheim*, <https://www.econstor.eu/bitstream/10419/235531/1/1761105094.pdf>. [47]
- Saviuc, I. et al. (2022), . [34]
- Schaumans, C. and F. Verboven (2008), "Entry and regulation: evidence from health care professions", *The RAND Journal of Economics*, Vol. 39/4, pp. 949-972, <https://doi.org/10.1111/j.1756-2171.2008.00045.x>. [68]
- Schivardi, F. and E. Viviano (2010), "Entry Barriers in Retail Trade", *The Economic Journal*, Vol. 121/551, pp. 145-170, <https://doi.org/10.1111/j.1468-0297.2009.02348.x>. [58]
- Teruel, M. and G. de Wit (2017), *Determinants of high-growth firms: why do some countries have more high-growth firms than others?*, Edward Elgar Publishing, <https://doi.org/10.4337/9781783472666.00010>. [14]
- Van Reenen, J. (2011), "Does competition raise productivity through improving management quality?", *International Journal of Industrial Organization*, Vol. 29/3, pp. 306-316, <https://doi.org/10.1016/j.ijindorg.2011.02.001>. [3]
- Verboven, F. and B. Yontcheva (2022), "Private Monopoly and Restricted Entry - Evidence from the Notary Profession", *CEPR Press Discussion Paper* No. 17367.. [25]
- Vitale, C. et al. (2020), "The 2018 edition of the OECD PMR indicators and database: Methodological improvements and policy insights", *OECD Economics Department Working Papers*, No. 1604, OECD Publishing, Paris, <https://doi.org/10.1787/2cfb622f-en>. [39]
- Vitale, C., C. Moiso and I. Wanner (2020), *A detailed explanation of the Methodology used to build the OECD PMR Indicators*, <https://www.oecd.org/economy/reform/OECD-PMR-detailed-explanation-methodology-used-to-build-PMR-indicators.pdf>. [9]
- Vogler, S. (2014), *Liberalization in the pharmacy sector. Competition issues in the distribution of pharmaceuticals*.. [67]