

# International competitiveness of the economies of Mexico and Poland. Comparative analysis<sup>1</sup>

Competitividad internacional de las economías de México y Polonia. Un análisis comparativo

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## ABSTRACT

This article aims at presenting two economies in terms of competitiveness, using the methodology developed by the World Economic Forum (WEF) basing on 40 years of experience in the preparation of international rankings. A comparative analysis of the economies of Mexico and Poland based on the results obtained by both countries in the Global Competitiveness Index in 2019 has been presented. The aim of this article is to analyse the competitive position in the international context, against the global background and against the relevant regions, considering many factors that make up competitiveness. The strongest and the weakest variables that make up the competitiveness of countries have been identified, and areas where actions are required to improve competitiveness have been indicated. It is concluded that there are many common features of the analysed economies in terms of competitiveness factors and close collaboration between Mexico and Poland may lead to an increase in the level of competitiveness of both economies.

**Keywords:** Competitiveness, global competitiveness index, Mexico, Poland.

## RESUMEN

Este artículo tiene como objetivo presentar dos economías en términos de competitividad, utilizando la metodología desarrollada por el Foro Económico Mundial (WEF) a partir de 40 años de experiencia en la elaboración de rankings internacionales. Se ha presentado un análisis comparativo de las economías de México y Polonia en base a los resultados obtenidos por ambos países en el Índice de Competitividad Global en 2019. El objetivo de este artículo es analizar la posición competitiva en el contexto internacional, en el contexto global y en las regiones relevantes, considerando muchos factores que configuran la competitividad. Se han identificado las variables más fuertes y débiles que conforman la competitividad de los países y se han señalado áreas donde se requieren acciones para mejorar la competitividad. Se concluye que existen muchas características comunes de las economías analizadas en términos de factores de competitividad y la estrecha colaboración entre México y Polonia puede conducir a un aumento en el nivel de competitividad de ambas economías.

**Palabras claves:** Competitividad, índice de competitividad global, México, Polonia.



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## 1. - INTRODUCCIÓN

Mexico and Poland have been trading and investment partners for many decades, while the volume of trade as well as the value of investments remain below the expectations and possibilities of both countries. Both economies also cooperate in other fields, including in the field of scientific cooperation and academic exchange (Łapaj-Kucharska, 2020; Oberda-Monkiewicz, 2020; 2017; Gocłowska-Bolek, 2018). Countries retain similar economic potential, although the geopolitical and geoeconomics contexts differ and their paths of economic development keep their own specificity.

In the era of intensification of global processes and intensive technology development, it is worth examining the competitive potential of both economies to indicate in which areas there is the greatest convergence, and in which there is discrepancy in terms of competitiveness. The dynamics of trade is largely dependent on international competitiveness. In most countries, shaping the international competitiveness of the economy is one of the priority goals of the national economic policy; therefore, it is reasonable to indicate certain internal and external factors that determine the situation in the countries selected for analysis to the greatest extent. That is why it is worth analyzing the international competitive position of both economies, pointing to strengths and weaknesses and identifying areas, in short, the priority should be to increase competitiveness (Chursin, Vlasov, Makarov, 2017; Tyulin, Chursin, & Yudin, 2020). At the same time, the challenges generated by the sustainable development in the public policy agendas are valid, with regard to the coordination, continuity and effective implementation (Tijerina, 2017; Mota Veiga et al., 2020). Fostering competitiveness is essential for strengthening innovation, productivity and growth, but it also generates opportunities for entrepreneurship, and it helps to limit and reduce inequalities. Experience in many OECD countries shows that competitiveness is essential not only for creating wealth but also for ensuring a better distribution of that wealth, and for promoting more inclusive growth (OECD, 2018).

The aim of this article is to analyse the competitive position in the international context, against the global background and against the relevant regions, considering many factors that make up competitiveness (Grimm, 2019; Falahat, Yin, Ramayah & Soto-Acosta, 2020). The most popular and comprehensive indicator prepared by the World Economic Forum (WEF) was used to conduct this analysis. The analysis was based on the most recent data available, that is, the 2019 ranking data. The article identifies the strengths and weaknesses of Mexico and Poland that make up the overall competitive

position and indicates what kind of policy improvements are needed public to overcome the greatest weaknesses. The article ends with a list of factors that have a special impact on a specific competitive position on the world map and an indication of the benefits of strengthening cooperation between the two countries in the areas that require improvement.

As a rule, this article does not consider global competitiveness indicators prepared by other institutions, although the position in the ranking prepared by International Institute for Management Development (IMD) is shortly discussed.

This is due to two reasons. First, the index prepared by the WEF is the most complex in methodological terms and includes the most variables that can be used for both comprehensive and detailed analysis. Secondly, the competitive position indicated for Mexico and the Polish parliament is similar in other rankings, which means that extending the analysis with other rankings will not necessarily bring new value and would require a short treatment of WEF raking. At the same time, it should be made a reservation that the considerations contained in this study constitute only a synthetic fragment of knowledge.

## **2. - THEORETICAL FRAMEWORK**

### *The relevance of the concept of competitiveness*

The concept of competitiveness is one of the most frequently used terms related to the assessment of the state of the national economy, its development prospects, and the effectiveness of economic policy. It is also widely used in political debate and economic analysis (both short-term and long-term).

Economic competitiveness is a multidimensional and complex category. Its internal and external aspects as well as static and dynamic ones interfere and interpenetrate each other. The analysis of the competitive position at the macroscale is the subject of interest of many entities (Fagerberg, 2012; Orłowski, 2018).

The competitiveness of the economy is an extremely relevant issue today. A necessary condition here is to define what competitiveness determines (in terms of factor and system competitiveness) and how these strengths are assessed from the perspective of business environments and the world of science. Confronting the strategic political vision with the interests of both domestic and international enterprises

allows, on the one hand, to correct the adopted direction of reforms early enough, and, on the other hand, to consolidate strengths and identify weaknesses (Agénor, Canuto, Jelenic, 2012; Köhler et al., 2019).

In most countries, shaping the international competitiveness of the economy is one of the priority goals of the national economic policy, therefore it is reasonable to indicate certain internal and external factors that determine the situation in the countries selected for analysis to the greatest extent. At the same time, it should be made a reservation that the considerations contained in this study constitute only a synthetic fragment of knowledge.

The term competitiveness has been dissected in the academic literature ever since it became a focus of the policy debate in the late 1980s and early 1990s (Chaharbaghi & Feurer, 1994; Krugman, 1994; Porter 1990; Porter, Ketels & Delgado, 2008; Ketels, 2016) and evolved intensively. For the purposes of this study, a fairly widely accepted definition has been adopted that the country's competitiveness is understood as its ability to permanently provide a high level of income to its inhabitants, thanks to its share in the global market and the ability to sell competitive goods on it (sold cheaper thanks to lower production costs or bringing a higher margin of added value) (Hsieh, 2015; Edler, Boon, 2018; Flejterski & Majchrzak, 2018; Orłowski, 2018). The different views on what competitiveness is and what value it has for economic development that emerged in the 20th century never really became the basis for reaching a consensus among researchers (Voinescu & Moisoiu, 2015; Castro-González, Peña-Vinces & Guillen, 2016; Ketels, 2016; Deleidi, Mazzucato, 2021). Defining and measuring competitiveness remains a subject of interest as well as debate: policy makers need to understand how competitive their country is relative to others, and how their competitive position evolves overtime. As such, well-known indicators of country performance have been developed over the years. Taking into account the lack of clarity as to the definition of the concept of competitiveness, it is worth remembering that this concept is broad and can be applied to various aspects, which also determines the different definitions (Castro-González, Peña-Vinces & Guillen, 2016; Fagerberg & Hutschenreiter, 2020; Falciola; Jansen & Rollo, 2020).

### *Competitiveness measurement dilemmas*

Countries' competitiveness can be measured in two ways. One is to look for an ex ante competitiveness index that will allow to forecast a more successful development of those countries that are more competitive. The second is the search for the ex post competitiveness index, i.e. the revealed competitive advantage that allowed for such development.

Competitiveness can be measured *ex post* using simple characteristics of foreign trade (such as, for example, trade balance, share in global exports, exports per capita, terms of trade), which, however, does not always give clear results. Numerous attempts have been made to measure with macroeconomic variables closely related to economic growth (such as GDP per capita, productivity, real income per capita, real exchange rate, the level of unit labor costs, the level of technological competitiveness approximated by expenditure on R&D) (Krugman, 1996; Siudek, Zawojka, 2014). However, such measures are often criticized (Flejterski, Majchrzak, 2018; Orłowski, 2018).

An alternative to this approach is to search for measures that define *ex ante* competitiveness. The most popular research direction at present is the construction of aggregate indicators describing the country's resources, methods of managing these resources, technological advancement, and the quality of institutions (often dependent also on the deeply hidden “soft factors” underlying development, eg. cultural factors).

The best-known indicators of this type are: The Global Competitiveness Index published by the World Economic Forum (WEF) and the World Competitiveness Scoreboard published by the International Institute for Management Development (IMD). Both indicators are weighted averages from a number of indicators, aggregated using discretionary weights, both of which are used to rank countries' competitiveness.

There is no doubt that both indicators are calculated and are based on huge statistical material. They are also commonly used for various types of analyzes, as well as in the public discourse. However, it should be noted that the competitiveness measures constructed in this way are not based on a clear theoretical model and are not subject to any verification – a change in the set of indicators or a change in the weights used lead to a change in the value of the entire measure, without the possibility of any verification of the sensibility of such a change.

It can also be noticed that the adoption of a different set of indicators and weights greatly differentiates the results obtained in the construction of the WEF and IMD measures – for example, China, classified in the rather distant 28th place in the WEF ranking, in the IMD ranking is 14th, while 6th Japan in the WEF ranking ranks 30th in the IMD ranking. However, in the case of the countries discussed in this article, there are no fundamental differences: Mexico is ranked 43rd in the WEF ranking and 50th in the IMD ranking, while Poland is ranked 37th (WEF) and 38th (IMD). Both measures *ex*

*ante*, not *ex post*, and these are input rather than output indicators – they indicate the extent to which a country is theoretically prepared for a competitive struggle, preparation leads to effects in the form of better development (WEF, 2019; IMD, 2019).

There are also more and more new alternative concepts for calculating competitiveness (Orłowski, 2018), but for the purposes of this article they will not be analyzed.

### *Methodological assumptions of the WEF Report on Global Competitiveness*

The Global Competitiveness Index published by the World Economic Forum -WEF is the most useful index of competitiveness in this study, which will be discussed later in this article. It enables a comprehensive analysis of the components influencing the country's competitiveness by tracing the subcategories that make up the overall result. Covering 141 economies, the Global Competitiveness Index 4.0 measures national competitiveness – defined as the set of institutions, policies and factors that determine the level of productivity.

Initially, the Global Competitiveness Report was published by the WEF and IMD (International Institute of Management Development), but differences in definitions and how competitiveness was measured (then it was a competitiveness index) led to individual reports being published by those institutions. The World Economic Forum reports, published since 1979, pay particular attention to theoretical and methodological aspects.

Building on four decades of experience in benchmarking competitiveness, the index maps the competitiveness landscape of economies through 103 indicators distributed across 12 pillars (WEF, 2019):

#### Enabling environment:

- I. *Institutions* (26 variables). The institutional environment specifies juridical and administrative frameworks in which companies and governments can take actions to generate income and economic wealth. When calculating this indicator, the following are taken into account: security, social capital, public-sector performance, transparency, property rights, corporate governance and future orientation of government. The meaning of a good institutional environment is especially relevant during an economic crisis in the more direct role of the economy.

- II. *Infrastructure* (12 variables). A well-developed transport and utility infrastructure is necessary for the effective functioning of the economy. Infrastructure is an important determinant when planning the location of businesses and other kinds of operations or sectors, which can develop on the site. A well-developed infrastructure reduces the distance effect between regions, and it supports integrations between them.
- III. *ICT adoption* (5 variables): It refers to the mobile-cellular telephone subscriptions, mobile-broadband subscriptions, fixed-broadband Internet subscriptions, fibre Internet subscriptions (per 100 pop.), and Internet users (% of adult population).
- IV. *Macroeconomic stability* (2 variables). The economy cannot develop in a balanced way if the macroeconomic environment is not stable while the inflation is high. This issue evokes public interest and discussions about a strategy for reducing budget expenses as well as the growth of public debt and inflation in several countries.

Human capital:

- V. *Health* (1 variable). Healthy life expectancy is being measured (in years).
- VI. *Skills* (9 variables): Of growing importance for economic development are skills of current and future workforce. The amount and quality of basic education, and school life expectancy years are being calculated. A good basic education and vocational training increases the efficiency of the employees. It would be complicated or impossible for poorly educated employees to adapt to more advanced production processes and techniques. A lack of skilled employees can be an obstacle to the growth of business cooperation, when more and more advanced goods and services are produced. The quality of higher education has an important meaning for economies that demand more than just simple production processes.

Markets:

- VII. *Product market* (7 variables): Domestic competition as well as trade openness are key factors for an effective economy. The best opportunities for the trading of goods and services rise when government intervention is limited. Competitiveness can be restricted by many factors influencing operations of market structures: concessions, permissions, suboptimal taxes, the level of customer knowledge, the extent of market dominance, trade the complexity of tariffs and non-tariff barriers.

- VIII. *Labour market* (12 variables): The efficiency and flexibility of the labour market are necessary to provide the most effective employees for the economy. Employers need the possibility to change employees and payment level without it having social repercussions. Labour market rigidity can be the reason for a slowdown in economic growth in many countries.
- IX. *Financial system* (9 variables). The recent financial crisis highlighted the main role of a solid and well operating financial sector. The economy needs a relevant banking system which offers loans and credit at optimal conditions for entrepreneurs, a properly regulated stock exchange and organized access to venture capital and other financial products. The importance of access to capital has been recently highlighted by the liquidity crisis of experienced entrepreneurs and the public sector in both developing and well-developed countries. The financial system should be reliable and transparent as well as supported by proper legal regulations that protect investors and other entities in the economy.
- X. *Market size* (2 variables). Large markets allow businesses use economies of scale. Dynamic market trade has a positive aspect for economic growth.

Innovation ecosystem:

- XI. *Business dynamism* (8 variables). The economic environment includes the quality of the national network of business relationships, the quality of business operations as well their strategies. The quality of the administrative requirements, which is measured by the cost of starting a business, time to start a business, and insolvency issues, is important. If recipients and suppliers of the current sector build close geographic groups, their efficiency is much higher, as are the possibilities for innovation, while barriers to entry for new businesses are limited.
- XII. *Innovation capabilities* (10 variables). Interaction and diversity workforce, international co-inventions as well as multi-stakeholder collaboration are becoming a very important factor in competitiveness. In the long-term perspective, the standard of living can only be improved through technological innovation. Less-developed countries can raise their productiveness by adopting an existing technology or by designing innovations in different branches incrementally. For countries which develop innovation, it is no longer sufficient to simply enhance productivity. Companies in those countries must design and develop modern products and processes to maintain their competitive advantage. This means financial

investments for research and development, also provided by the private sector. High profile research and development institutions should cooperate extensively with economic entities.

Each indicator shows how close an economy is to the ideal state or „frontier” of competitiveness. In accordance with the WEF framework, the economic competitiveness refers to the country’s ability to achieve high and stable GDP per capita. The holistic character of this approach allows us to compare a wide range of competitiveness indicators between economies.

Indicators are sourced from international organizations, academic institutions and non-governmental organizations. Forty-seven indicators, accounting for 30% of the overall GCI score, are derived from the World Economic Forum’s Executive Opinion Survey (every year based on the opinion of approximately 15,000 business executives).

### *Overall results for 2019*

In 2019, with a score of 84.8 (+1.3), Singapore is the world’s most competitive economy, overtaking the United States, which falls to second place. Hong Kong (3rd), Netherlands (4th) and Switzerland (5th) round up the top five.

Other G20 economies in the top 10 include the United States (2nd), Japan (6th), Germany (7th) and the United Kingdom (9th) while Argentina (83rd, down two places) is the lowest ranked among G20 countries. Asia-Pacific is the most competitive region in the world, followed closely by Europe and North America (WEF, 2019).

The report is a reminder to apply a holistic approach and to better balance short-term considerations against factors whose impact is felt beyond quarterly results and election cycles. For example, the results of the index show that labour and education policies have not been keeping up with the pace of innovation in most countries, including in some of the largest and most innovative economies.

For least developed and emerging economies, their fragile economic foundations make them highly vulnerable to shocks. With extreme poverty reduction decelerating and nearly one-half of humanity still struggling to meet basic needs, the report suggests the need for sustained, productivity enhancing economic growth remaining critical for improved living standards.

In parallel, the unfolding climate crisis requires urgent, decisive and coordinated action by policymakers. Supporting economic growth at all costs can no longer be a sole objective.

### *Mexico and Poland performance against the performance of their regions in the WEF ranking 2019*

In 2019, in the WEF ranking Poland ranks 37th (it was at the same position the year before), and Mexico 48th (it was 46th the year before). The position of both countries in relation to their regions is stable. Neither Poland nor Mexico are among the most competitive countries in their regions, although they maintain their positions and significant progress can be noted in selected areas, while there are also areas that need improvement.

In Europe, the Netherlands (4th), Switzerland (5th), Germany (7th), Sweden (8th), the United Kingdom (9th) and Denmark (10th) all feature in the top 10. The region's most improved country is Croatia (63rd).

In Latin America and the Caribbean, Chile (33rd) is the most competitive economy thanks to a stable macroeconomic context (1st, with other 32 economies) and open markets (68.0, 10th). It is followed by Mexico (48th), Uruguay (54th), and Colombia (57th). Brazil, despite being the most improved economy in the region is 71st; while Venezuela (133rd, down 6 places) and Haiti (138th) close out the region.

Contrasts are often stark even within sub-regions or between two neighbouring countries. For instance, in the EU, Germany's overall competitiveness score (81.8) is 20 points higher than Greece (62.6). There are approximately 20 points between the GCI performance of Colombia (62.7) and Venezuela (41.8) as well as between the Dominican Republic (58.3) and Haiti (36.3).

### **3. - METHODOLOGY, SAMPLE PERIOD AND DATA USED**

#### *Design*

To meet the objectives of the study, an analysis of the international competitive position of two economies was carried out: Mexico and Poland. From among many variables, those which are most important for the competitive position were selected. Data from the international competitiveness ranking prepared by the WEF in 2019 were used to conduct this study comprehensive data for the Mexican and Polish economies were used, presenting them against a wider global and regional background.

### *Participants*

Two economies were considered in the analysis: Mexico and Poland.

### *Instruments*

The competitiveness analysis uses data on 103 variables arranged in 12 categories (or pillars), with a radar chart drawn up, showing graphically the similarities and differences between countries. A list of the competitive strengths and weaknesses of both economies was also compiled. The use of data from the ranking prepared by the WEF was purposeful and sufficient due to its extensive and comprehensiveness.

### *Procedures*

In the initial stage of the analysis, the data for both countries in the 2019 WEF ranking were identified and a graph was drawn up to compare the achievements in the main categories. Then, a list of the best and least developed variables was made, presented in the form of tables. Having made advantage of the most popular reports issued by international organisations (WEF and IMD) and referring to statistical data on the Mexican and Polish competitiveness the author identified a great deal of the most important weaknesses and strengths of their economic systems. Finally, conclusions were drawn as to the areas where increasing competitiveness requires a specific state policy and as to possible benefits in terms of cooperation between Mexico and Poland.

## **4. - RESULTS**

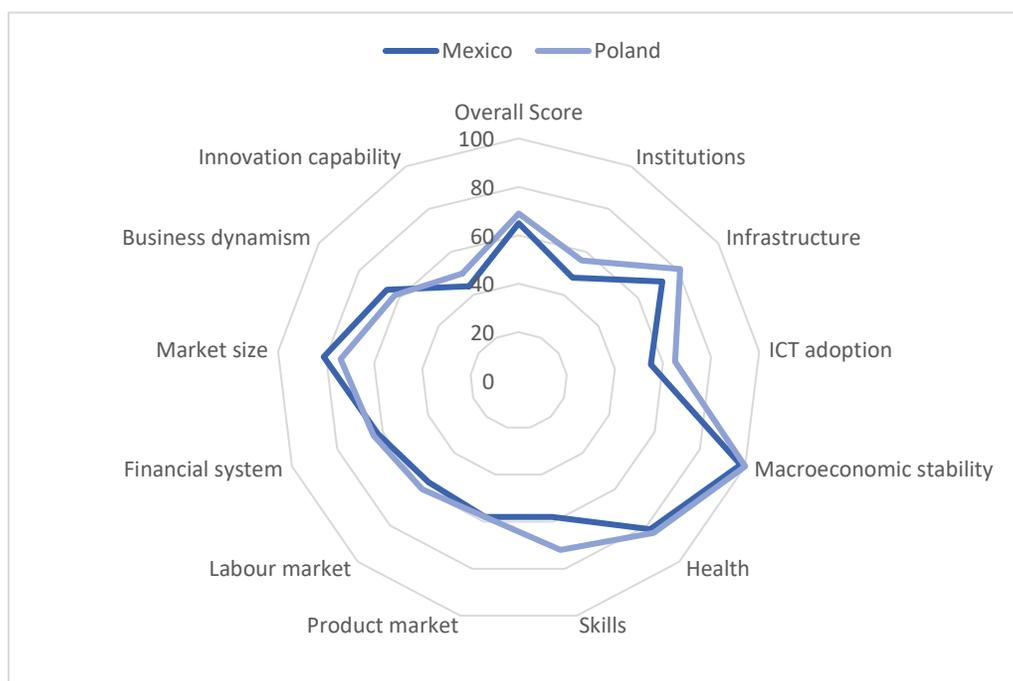
Mexico is improving its score performance by 0.3 points and is 48th in 2019, yet it drops two places due to other countries improving at a faster rate (Mexico ranked 50th in 2018, and 51st in 2017). Mexico's competitiveness performance is mixed. On one hand it has achieved some progress on all its four lowest ranked pillars (WEF, 2019: 18): Institutions (+0.6 points, 98th), Labour market (+1.4, 96th), Skills (+0.4, 89th) and ICT adoption (+3.7, 74th). On the other hand, these improvements have been, to some extent, insufficient to fill the gap with other more competitive economies. For instance, in terms of skills, education attainment is still low (8.6 years on average, 84th) and curricula are not up to date (digital skills, 99th, critical thinking, 103rd). Similarly, improvements to institutions have been concentrated in the public sector's administrative efficiency (+4.5 points, 59th), while security (138th) and transparency

(116th) are still problematic. Further, there are a few areas where performance declines. Inflation, for example, has increased (5.5%, 111th), healthy life expectancy has fallen by 0.9 years (60th), and lack of improvements in transport infrastructure (-1.3, 51st) require the implementation of a solid, long-term policy in this area (WEF, 2019: 18). It is likely that competitiveness will be affected by the effects of the Covid-19 pandemic – still difficult to quantify – which is ravaging the country extremely intensively, including the Mexican economy.

Poland ranks 37th globally, the same position as last year despite a score improvement of 0.7 points (Poland ranked 37th in 2018, and 39th in 2017). Notably, the macroeconomic environment (1st) has improved substantially and stays the strongest element of the country's GCI performance. Poland's competitiveness performance is mixed, as well. There are numerous pillars where the score is high and improving over years: Macroeconomic stability (1st), Health (34th), Market size (22nd), Infrastructure (25th), and even more where improvement is still needed: Labour market (70th), Product market (50th), Financial system (57th), Institutions (60th). Poor improvement in Innovation capability category further efforts to advance Mexico's competitiveness closer to the frontier and to that of the top-ranked economies (WEF, 2019). Chart number 1 and table 1 shows below the information in detail:

Chart 1.

*Mexico and Poland's performance in the Global Competitiveness Index (2019), by pillars*



*Source:* Own compilation based on the WEF data (2019).

Table 1.

*Selected contextual indicators for Mexico and Poland (2019)*

| Indicator                                 | Mexico  | Poland |
|---|---------|--------|
| Population (millions)                     | 124.7   | 38.4   |
| GDP (PPP) per capita (US\$)               | 33 538  | 20 703 |
| GDP US\$ billions)                        | 1 258.3 | 589.9  |
| GDP (PPP) % world GDP                     | 1.9     | 0.9    |
| 10-year average annual GDP growth (%)     | 2.6     | 3.1    |
| 5-year average FDI inward flow (% of GDP) | 2.7     | 2.6    |
| Direct investment stocks inward (\$ bn)   | 485.8   | 231.8  |
| Direct investment flows inward (% of GDP) | 2.30    | 2.55   |
| Current account balance (% of GDP)        | -0.19   | 0.47   |
| Unemployment rate (%)                     | 3.37    | 3.30   |
| Income GINI                               | 48.3    | 31.8   |

*Source:* WEF (2019), the World Bank Group (2019), IMD (2019).

Reflecting the performance of Mexico and Poland in each of the competitiveness categories (i.e. a breakdown of the scores attributed to each of the 12 competitiveness pillars according to the WEF breakdown) in the radar chart leads to interesting conclusions (see Figure 1).

Basically, there is a great similarity between the results for both countries, and in those categories in which Mexico performs worse, Poland also has shortcomings. There is no category in which these results are significantly different. Poland has an overall score 4 basis points higher (69 points against 65 for Mexico). Poland achieves noticeably better results in the following categories: Skills (14 points), ICT adoption (10 points), Infrastructure (9 points), Institutions (8 points), Innovation capability and (6 points) and while Mexico is overtaking Poland mainly in terms of Market size (7 points) and Business dynamism (4 points).

When analyzing the level of competitiveness, the contextual factors of both economies should also be considered, relating to macroeconomic variables and the level of economic and social development. These indicators are summarized in Table 1. Mexico's economy is much larger than that of Poland in terms of population (which translates into greater labour resources and market absorption), as well as GDP, while Poland is far ahead of Mexico in terms of GDP per capita or indicators reflecting the level of development, especially social development.

*List of strengths and weaknesses of the competitiveness of Mexico and Poland*

Below is a list of the strongest and weakest elements of the competitiveness of the Mexican and Polish economies (Table 2 and Table 3). The strongest points were those categories in which a given economy reached at least the 25th position on the list of world economies, while the weakest points were those categories in which the economies were ranked below 100th (141 economies of the world were taken into account in the ranking).

Mexico reached top categories (over 26th in the global ranking) in the case of 8 variables, while Poland in the case of 17 variables. In the case of Mexico, 23 variables were distinguished which place the country below the 100th position on the list of countries in the world, in the case of Poland there are 17 variables. Table 2 and 3 shows below the information in detail:

Table 2.

*Strengths of the economies of Mexico and Poland in terms of competitiveness (Global rank < 26)*

| Mexico                                      | Rank/141 |
|---|----------|
| Credit gap (%)                              | 1        |
| Electricity access                          | 2        |
| Budget transparency                         | 6        |
| Market size                                 | 11       |
| Airport connectivity                        | 15       |
| e-Participation                             | 17       |
| Road connectivity                           | 22       |
| Research institutions prominence            | 22       |
| Poland                                      | Rank/141 |
| Macroeconomic stability                     | 1        |
| Inflation                                   | 1        |
| Debt dynamics                               | 1        |
| Credit gap %                                | 1        |
| Electricity access                          | 2        |
| Mobile-broadband subscriptions per 100 pop. | 3        |
| Trade tariffs %                             | 7        |
| Insolvency regulatory framework             | 9        |
| Pupil-to-teacher ratio in primary education | 13       |
| Research institutions prominence            | 18       |
| Extent of market dominance                  | 20       |
| Market size                                 | 22       |
| Gross domestic product PPP                  | 23       |
| Mean years of schooling                     | 24       |
| Transport infrastructure                    | 25       |
| Electricity supply quality                  | 25       |
| Scientific publications                     | 25       |

*Source:* Own compilation based on the WEF data, 2019 (2019).

Table 3.

*Weaknesses of the economies of Mexico and Poland in terms of competitiveness (Global rank > 100)*

| Mexico  | Rank/141 |
|---|----------|
| Organized crime   | 140      |
| Reliability of police services                                  | 139      |
| Security  | 138      |
| Homicide rate   | 129      |
| Social capital  | 121      |
| Freedom of the press  | 118      |
| Transparency  | 116      |
| Labour tax rate %   | 116      |
| Burden of government regulation                                 | 116      |
| Government long term vision                                     | 114      |
| Mobile-cellular telephone subscriptions per 100 pop.            | 112      |
| Inflation %   | 111      |
| Government's responsiveness to change                           | 109      |
| Hiring and firing practices                                     | 107      |
| Terrorism incidence   | 103      |
| Redundancy costs (weeks of salary)                              | 103      |
| Critical thinking in teaching                                   | 103      |
| Skills of future workforce                                      | 102      |
| Active labour market policies                                   | 102      |
| Meritocracy and incentivization                                 | 102      |
| Distortive effect of taxes and subsidies on competition         | 102      |
| Cost of starting a business % of GNI per capita                 | 102      |
| Banks' regulatory capital ratio % of total risk-weighted assets | 101      |
| Poland  | Rank/141 |
| Diversity of workforce  | 131      |
| Internal labour mobility  | 127      |
| Time to start a business  | 127      |
| Government ensuring policy stability                            | 123      |
| Efficiency of legal framework in challenging regulations        | 121      |
| Judicial independence   | 118      |
| Ease of hiring foreign labour                                   | 118      |
| Multi-stakeholders collaboration                                | 116      |
| Hiring and firing practices                                     | 113      |
| Complexity of tariffs   | 113      |
| Burden of government regulations                                | 113      |
| Quality of vocational training                                  | 110      |
| Companies embracing disruptive ideas                            | 109      |
| Labour tax rate %   | 108      |
| Efficiency of legal framework in setting disputes               | 107      |
| Government long-term vision                                     | 102      |
| Skillset of graduates   | 101      |

*Source:* Own compilation based on the WEF data (2019).

Based on the lists of strengths and weaknesses of the competitiveness of Mexico and Poland, challenges in the nearest future can be identified.

First, economic, and social policies for an accelerated recovery from the lockdown effects of the Covid-19 pandemic should be implemented. In the case of Mexico the economy seems to be more seriously affected by the pandemic which requires deeper reflection on how to get out of the crisis – in Poland the GDP is expected to decline by 4.2%, while in Mexico as much as 7.5% (The World Bank Group, 2020).

In both countries a policy aimed into improvement of the relationship with relevant economies in the world is needed as well as stable, predictable and user-friendly legislation. In Mexico and in Poland – although to different extent – broader and easier access to healthcare can improve competitiveness in the category of human capital and workforce quality.

In the case of Mexico decisive action is needed to improve the sense of security and efficiency of the judiciary and to ensure a stable business environment. Promotion of structural reforms on education and energy can be a key element of the competitiveness performance in the future. Such conclusions are consistent with the results obtained in their research by other researchers dealing with the directions of development and effectiveness of public policy in Mexico (Cárdenas-Cabello, 2020).

Poland is strong in education and security categories, but still there are several improvements needed in enhancing digital skills, vocational training and R&D investments to boost employability and productiveness. Also in this case, the conclusions and results of the study are coherent with those presented by the European Union institutions responsible for shaping the competitiveness policy (Europarl, 2020).

## **5-. CONCLUSION**

Based on the results obtained by Mexico (48<sup>th</sup>) and Poland (37<sup>th</sup>) in the global ranking of competitiveness prepared by the WEF in 2019, a comparative analysis of both countries was carried out. The conducted analysis does not allow to draw a clearly optimistic picture regarding the economic (competitive) potential of Mexico and Poland.

Although the overall result for the economy of Poland and Mexico is high, there are many categories in which it is necessary to carry out economic reforms or to propose tools to improve the

quality of functioning. In the case of Mexico, these imperfections are relatively numerous. It should be emphasized that there are many common features of the analyzed economies in terms of competitiveness factors, as shown in Chart 1.

The above observation leads to an additional conclusion: on the one hand, it would be desirable to cooperate between Mexico and Poland in identifying and counteracting specific weaknesses in terms of competitiveness, because both economies face similar challenges. On the other hand, it would be helpful to cooperate in terms that differ significantly in the two countries, and especially for Mexico, Poland's experience in developing competitiveness could be useful, as it achieves higher results in selected categories. Particular attention should be paid, for example, to the Polish strategy in terms of effective educational policy or stabilizing the economy.

The conclusions of the comparative analysis also allow us to propose recommendations in terms of increasing the competitiveness of both economies. It is worth emphasizing that one of the main challenges and necessary conditions for increasing the level of competitiveness of both economies remains stimulating innovation. As the analysis above shows, it is the low level of innovation that is the weak point of both economies. In this respect, one could consider designing and implementing strategies that would help to solve this problem for the benefit of both economies.

Poland and Mexico have recently been emerging as two of the most interesting countries to watch on the economic map of the world, *inter alia* due to their economic successes and systemic and decisive approaches to the development of innovation, education and science policy. Moreover, Poland and Mexico have unexplored potential for cooperation. Mexico, which has outperformed several Latin American countries in economic growth for the last decade, has a highly open, emerging market with strong links to the rest of the world, including a free trade agreement with the EU. Furthermore, the reforms planned in the future, in particular in the energy, car parts and components, tourism and food sectors, may result in Mexico's many industries opening up to foreign participation. At the same time, Poland is improving its economic and political standing in the EU and is looking for closer cooperation with non-European economies.

However, even though there are of several constraints to the development of Polish–Mexican cooperation some opportunities, one has to be aware of numerous opportunities. Despite striking differences in foreign policy (Poland focuses primarily on the EU and Mexico on the U.S.), a difference

in market scale, and international positions, bilateral relations have good foundations for further exploration in the near future, especially as both countries plan to diversify their markets. Both countries could also consider deepening cooperation within the framework offered by the EU strategic partnership with Mexico which can help to improve competitiveness especially in the category of human capital and workforce quality. The greatest challenge for the development of mutual cooperation constantly remains the very limited knowledge that each country has of the other and a lack of sufficient incentives to boost genuine mutual interest.

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