Managers' Association of Slovenia

AN ACTION PLAN FOR HIGHER PRODUCTIVITY GROWTH

Research project proposing economic policy measures

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1 INTRODUCTION TO THE ACTION PLAN FOR HIGHER PRODUCTIVITY GROWTH

(research project proposing economic policy measures)

1.1 The basic idea of the action plan

In the second half of 2019, the Ministry of Economic Development and Technology (MGRT) has set an ambitious target of halving the productivity gap with Austria within four years. The focus of the MGRT on productivity is in line with the objectives of the Managers' Association of Slovenia (ZM) in terms of raising wages and tackling the demographic issue, as analysed by the Managers' Association of Slovenia Observatory (an advisory body).[1] Therefore, the MGRT has agreed with the ZM to:

a) develop an action plan as soon as possible to achieve the objectives (due to major political changes and the Corona virus crisis, the deadline for completing the project has been slightly extended to the beginning of the second half of 2020),
b) the Action Plan needs to focus on the most limited number of measures with the greatest impact on reducing Slovenia's productivity gap compared to Austria and Germany,
c) it must rank the measures as far as possible according to their impact, which is an extremely difficult task, as it is influenced by an extremely large number of factors that are far from static, e.g. the impact of the proposed measures over the next four years will depend very much on how effective the anti-corrosive measures are in mitigating the negative effects of the health crisis on the business performance of companies.

Managers' Association of Slovenia formed a team of researchers who designed the project on the following basis:

a. The Group's experience of the possibility of implementing necessary changes or taking urgent action is strongly in favour of a small number of well-prepared and effective measures, rather than the comprehensive and simultaneous action that would otherwise be theoretically more correct. This is the reality of political decision-making that is taken into account in this project.
b. Despite many very positive experiences with the identification and implementation of the necessary actions, the Group did not specifically assess the feasibility of each of the proposed actions within the given timeframe. However, in a rapidly changing environment, the Group did assess the context of available resources and some broader social acceptability of the actions, with appropriate impartial public information about the absolute urgency of immediate decisive action and a clear picture of the consequences of failing to take such action.
c. The project is therefore not a long-term strategy for Slovenia's economic development, which would comprehensively define the short- and long-term objectives for achieving productivity levels and all the measures or changes needed to achieve them.
d. The aim of the project is to define an action plan in which the proposed activities and their concrete and measurable objective have a limited duration.
e. Based on relevant experience, the group has thus followed the principle of focusing on:
    i. the factors and areas of productivity that have emerged as most important in empirical research,
    ii. the specific areas of productivity that can be most effectively addressed by action within a given timeframe,
    iii. the areas where Slovenia is lagging behind the most, as the group believes it can reduce the overall productivity gap faster - faster than by intervening in areas where Slovenia already has a priority position,

[1] See Managers' Association of Slovenia, Pogledi 2019 and Pogledi 2020

1.2 Collaborators on the project

The Observatory has been asked by the Managers' Association of Slovenia to design and coordinate the project in terms of content and organisation, by:

a) in addition to its own members, it seeks to recruit leading researchers in key areas of the project from the UL Faculty of Economics and some key top experts in relevant non-economic fields (the research team), who together prepare analyses, conclusions and proposals, and then
b) through the Managers' Association of Slovenia, also involve (a group of managers) who contribute to the quality of the Action Plan with their knowledge and extensive experience through the evaluation of the analyses, conclusions and proposals for action drawn up by the research team.

This led to the formation of the next group of researchers and managers:

Associate researchers: Dušan Mramor (coordinator 1), Polona Domadenik (coordinator 2) Janez Prašnikar (consultant), Jože Sambt, Matjaž Koman, Aljoša Valentinčič, Ali Žerdin.

Associate managers: Edita Krajnović, Marko Lotrič, Tomaž Lanišek, Medeja Lončar, Tone Stanovnik and Aleksander Zalaznik. The draft final report of this plan was also presented to the Management Board of Managers' Association of Slovenia, whose members discussed the plan in depth.

In the first phase, which identified areas for action, the Action Plan was prepared with the comments of Tjaša Redek, Peter Wostner, Primož Banovec, Metod Dragonja, Velimir Bole, v pripravi dela o ukrepih in končnega poročila pa tudi: Stanka Zadravec Caprirolo, Gonzalo Caprirolo, Martin Čopič, Marjan Divjak, Mateja Vraničar Erman, Peter Gašperšič, Saša Jazbec, Petra Juvančič, Stane Pejovnik, Sibil Svilan, Verica Trstenjak, Katarina Zajc, Matej Pregarc and Maja Zalaznik.

1.3 Starting point

Slovenia's demographic problem is so big that all scenarios without immediate and correct action have almost inconceivable negative consequences in the next 30 years. From the point of view of the stability of society, which is also strongly conditioned by the dynamics of the level of well-being of its members, given the scale of Slovenia's demographic problem, the very maintenance of well-being at its current level would be a remarkable result of action to address the problem of the rapid increase in the number of the older population that is not working and the decrease in the number of the younger population that is working.

In a different way to usual, Mramor and Sambt showed how action should be taken in a series of articles in the 2019 and 2020 Views. They did not use as a basis "structural reforms" to reduce pension and other entitlements so that, under normal projections of economic growth and demographic trends (the European Commission's projections), the costs of ageing would represent a sustainable level or share of GDP. On the contrary, they proposed action that would primarily increase the resources available for public financing of these rising costs. They list measures to increase the working age population as the first and evaluate the key ones. They then propose that the remaining shortfall in available resources should be eliminated as far as possible by increasing productivity. Shortly, they propose more people in work, who are more efficient in their work. By modelling different scenarios, they test the reality of the objective of preserving entitlements and, as a residual, they propose further measures to reduce these entitlements to the minimum extent necessary if the first two sets of measures fail to achieve the objective.

The feasibility of this logic for solving the demographic problem is demonstrated in several stages. First, they show the results of simulations of the necessary productivity growth rate over the period 2017 to 2050 to be able to maintain pension and health entitlements unchanged and to keep the share of these public expenditures in GDP at a sustainable level of 10.9%, given the projected demographic trends. As can be seen

from the table below, the required productivity growth rate of 9.8% per year (1.6% achieved in the period 1999 to 2019) is completely unachievable.

Table 1: Annual labour productivity growth needed under each scenario to maintain government expenditure on pensions at 10.9% of GDP

	Average annual productivity growth needed 2020-2060
Existing pension legislation	**9.8%**
+ 7 years longer job tenure	**6.0%**
+ two years faster labour market entry	**5.1%**
+ wage lag of 1 o.t. 2020-2030	**2.4%**
Independent actions:	
→ or: indexation 30 : 70 (wages : inflation)	**5.5%**
→ or: indexation 0 : 100 (wages : inflation)	**3.9%**

Source: Mramor & Sambt, 2019

They then analysed the required productivity growth rates if the selected effective measures were implemented, which would increase the size of the working population above that in the conventional projections. Sustainability would be substantially improved by staying in employment longer, following the Swedish example - 7 years longer in total. This would require both legislative changes to raise the retirement age and to curb early retirement. For example, there is much exploitation of unemployment status before retirement itself. It would also be useful to consider which occupations still require "benefiting" seniority and which no longer do, or can be done by redeployment to another post within the organisation. This would include adapting jobs for older people and probably also reducing the labour costs of older people, e.g. through lower contributions. Despite these measures, the elderly would still need to achieve an unattainable annual labour productivity growth of around 6.0%.

They further propose measures with a target of two years of faster labour market entry (e.g. as in Austria). This would be helped by public funding of only the number of years of study foreseen in the curriculum, abolition of first cycle diplomas, etc. This would reduce the necessary productivity growth to a still unachievable 5.1% per year. The effects of other measures to increase labour force participation are not estimated (e.g. foreign labour, fewer long-term unemployed), but the complementary or alternative measure of lagging wage growth behind pension growth by one percentage point per year until 2030 is evaluated. This would have a strong additional positive impact on sustainability, so that if used as a complementary measure, the required annual labour productivity growth would still be only 2.4% per year, which is achievable through the implementation of a series of productivity-enhancing measures.

As an alternative (and possibly in addition) to the above measures, there is also the stand-alone effect of a lower alignment of pension growth for pensioners with wage growth for employees, which implies a reduction in current entitlements. At present, the real adjustment is relatively high compared to other countries, at 60:40 (% wage growth rate: % inflation), while an adjustment of 30:70 would require an annual productivity growth of 5.5% and an adjustment of 0:100% would require an annual productivity growth of 3.9%. The need for these measures is correspondingly reduced in the case of a maximisation of productivity growth, which at the same time has a very positive impact on all the stakeholders in the economy. Higher productivity means that, for the same percentage of GDP spent on pensions, pensions, GDP, wages, etc. will be correspondingly higher.

In this Action Plan, we leave aside the issue of labour force participation, which is to some extent dealt with in the above-mentioned sections, and focus strictly on increasing productivity (halving the gap with Austria), as an extremely challenging but at the same time the most important area for well-being.

1.4 Baseline and definition of the need for an action plan

The project's collaborators start from the following facts about productivity in Slovenia:

Productivity in Slovenia lags behind the EU average

- In 2019, productivity in Slovenia was lower than the EU average (81.2% and 83.2% of the EU average, measured per number of employees and hours worked respectively).
- Comparing Slovenia with Austria, the latter had 43.5% higher productivity than Slovenia in 2019, measured by gross domestic product per employee (GDP, constant prices), and 52.2% higher productivity, measured in terms of hours worked. (OECD, 2020, Eurostat, 2020)
- Slovenia's biggest lags are in the sectors of water supply, sewage and waste management, environmental remediation, real estate[2] and mining. In manufacturing, Slovenia achieved only 45.5% of Austria's gross value added per employee in 2018, and 65.4% in trade. This lag has been relatively constant over the years (OECD, 2020, Eurostat, 2020).

Average productivity differences in Slovenia are relatively high between industries

- Average value added per employee, measured by the median, varied considerably across activities in Slovenia in 2018. Median productivity ranged from just over €14,000 to just over €54,000 per employee.
- The highest median productivity was in mining, at €54,354 per employee. The next industry was electricity, gas and steam supply, with a median productivity of €53,732.
- The activities with the lowest productivity are catering, with a median of €19,744 per employee, and other activities (S activity), with a median of €19,140 per employee. All other activities (with the exception of water supply, sewerage, waste management and environmental remediation (activity E) and health and social work activities (activity Q), which had median productivity of just over €30,000 and almost €40,000 respectively) had median productivity between €20,000 and €30,000.
- The distribution of value added per employee in Slovenia in 2018 by firm size reveals that there are no significant differences in the distribution between micro, small, medium and large firms (OECD, 2020, Eurostat, 2020, AJPES, 2020).

Baseline analyses of the causes of this situation

The project coordinator's experience in economic policy coordination and the *model assessments* of his co-author of the articles published in the Views were the initial substantive basis for the project. They classified the areas they judged to be the most lagging into two groups (Capital endowment and Total Factor Productivity).

The first task set by the research team is to identify the areas of capital endowment and total factor productivity where the lag is expected to be the largest or most important for the productivity gap in Slovenia. After several months of work, the team has developed a relevant database of internationally comparable data (e.g. Eurostat, OECD, etc.), information (e.g. IMD, WB and WEF competitiveness rankings) and research and their conclusions on productivity factors and their impacts.

[2] In the case of the real estate business, the lower value added per employee is also due to the high share of owner-occupied real estate.

1.5 Summary of research findings on productivity factors

Based on a review of the literature on productivity growth and the factors affecting total factor productivity, which is presented in more detail in Annex 3, we have classified the main determinants of productivity into five groups (Kim, Loayza, and Meza-Cuadra 2016): innovation, education, market efficiency, infrastructure and institutions. These factors are intertwined and influence each other.

- **Institutions** (political system, regulation, judiciary, policies) ensure social and economic stability, protect fundamental rights of citizens (e.g. property rights). The environment and the policies implemented by public institutions have a major impact on economic development (North 1990; Acemoglu, Johnson, and Robinson 2004). Numerous empirical studies confirm that a good system of governance, reflected in political stability, the rule of law, the protection of property and other property rights, the quality of bureaucracy, transparency and accountability, and the absence of corruption, has a positive impact on productivity and economic growth (Rodrik, Subramanian and Trebbi, 2004, Chanda and Dalgaard, 2008).

- **Adequate public infrastructure** (in quantity, quality and variety) in transport, telecommunications, energy, drinking water and wastewater, as well as in education and health, is an important complementary factor to private investment, as it increases the productivity of the factors of production at the firm level (both capital and labour) and has a positive impact on economic growth. Empirical studies confirm that adequate public infrastructure is an extremely important determinant of productivity. Straub (2008), among others, shows in a study of 140 countries over the period 1989-2007 that the size of infrastructure is positively correlated with economic growth, as firms can invest more in equipment, and employees are healthier and better educated, with better transport infrastructure reducing commuting times.

- **Innovation** refers to the ability to create and absorb new technologies, leading to higher value added through new products, processes or improvements to existing ones. The most innovative countries in the world are very successful in developing new technologies, based on high private and public investment in R&D, while the rest are followers, mainly developing competences in the use of new technologies (linked to the field of education). Many empirical studies using the volume of R&D investment, number of patents, number of scientific papers as indicators of innovation have shown that the development and use of new technologies contributes positively to the growth of total factor productivity. Interestingly, Van Ark, O'Mahony and Timmer (2008) found that the reason why European firms' productivity lagged behind that of US firms in the 1990s (up to 2005) was due to the lower contribution of ICT technology to productivity growth in Europe, the lower share of technology industries and the lower progress in the use of ICT innovations. Comin and Hobijn (2010) and Comin and Mestieri (2018), using data on the diffusion of more than 15 different technologies in a large sample of countries over the last 200 years, show that different patterns of technology use and diffusion contribute at least 25% to income divergence between countries and as much as 75% of the income gap between rich and poor countries.

- **Education** is an important factor both in terms of building the human capital that can create and use new technologies, and in terms of the diffusion of new technologies in the economy. The education system must provide a strong basic foundation and sufficient specialisation of knowledge, both in terms of quantity and quality, and it must be as accessible as possible to all those who wish to be educated (Barro 2001; Hanushek and Woessmann 2015). Empirical studies show that there is a positive correlation between factors measuring the quantity and quality of education (average years of schooling, share of education expenditure, performance on international tests (PISA, PIAAC)) and total factor productivity.

- **Market efficiency** is a productivity-enhancing factor, as it ensures an efficient and flexible allocation of resources between economic activities and between firms, generally by encouraging less efficient firms to exit, enabling the most productive firms to grow and encouraging the entry of new firms. Market efficiency is the result of several components, including a well-functioning product market, a well-functioning financial system and a well-functioning labour market. The quality of the regulatory framework has an important impact on the efficiency of resource reallocation (dynamics of market entry and exit, structural transformation) (Djankov et al. 2002; Loayza and Servén 2010). Bergoeing, Loayza and Piguillem (2016), among others, have shown that regulatory barriers to entry and exit of firms contribute as much as 26% to the income gap between the US and 107 developing countries, because they make the use of new technology significantly more difficult.

1.6 Results of the analytical verification of the relevance of the proposed areas of delays

On the basis of an analytical review and a study of the literature, the research team decided to make the following changes to the classification of the areas with the largest productivity gaps in Slovenia compared to those identified in the Views:

a. Separation of groups of factors into government and firm level, i.e. those that promote productivity growth by influencing critical fixed and soft infrastructure, partly or wholly directly financed by the government, and firm-specific factors specific to the industry, ownership and size of the firm. In general, the theory divides these factors into those related to capital and labour and those affecting total factor productivity. The State can use its measures to encourage firms to adopt productivity-enhancing practices at the level of the individual firm. However, it should be noted that the focus of the project is on the identification of fixed and "soft" infrastructure, through which the State creates the conditions for achieving higher productivity for all firms operating in Slovenia, and thus indirectly also stimulates investment at the firm level.
b. Separation of factors into strongly interlinked and independent: the productivity factors with the largest lag are very different in terms of their impact on each other. Some are of such a nature that it would be impossible to eliminate the backlogs of other factors without a corresponding reduction in their lag. Thus, the Group first identified the logic of corporate governance as a key "system condition" for full impact in the implementation of this Productivity Action Plan. It then went on to single out three more factors which it considered to be "preconditions" for successfully reducing the backlog in other factors and in Slovenia as a whole.

c. Changes in the definition of critical productivity areas: while analysing the proposed areas of backlog, it also emerged that some areas were not among the most important, so the team excluded them and added some that proved to be very important.

In the following, we first present the summary result of the first phase of the project, identifying the areas with significant backlogs, and then break down the causes of the backlogs for each area.[3] Although the (direct) determinant of productivity is not the labour force participation of the population, in view of the two key objectives of this Action Plan, namely a certain increase in wages and a partial solution to the demographic problem, labour force participation is also an important factor in achieving these two objectives. Moreover, in a properly designed financial system, an ageing population and the associated increased savings make it

[3] Comparison of the final set of factors shown on the next page with the initial set shown in Annex 2 shows the changes due to the lessons learned from this phase of the project.

possible to increase the capital endowment of the working population and its productivity. This last aspect is addressed under the heading "Quality and professionalism of the financial system, institutions and markets".

2 KEY FACTORS OF THE PRODUCTIVITY LAG IN SLOVENIA

Productivity, and hence gross domestic product, and hence economic development and prosperity in an economy, depend on a number of factors, which we have grouped into three categories for the purposes of this report:

- It is based on the so-called **logic of social ordering**, which is based on a long-term oriented and considered reaction to events in the environment, rather than on "ad-hoc" reactions;

- This is linked to the broader institutional factors which are:
  o The political system,
  o Legal country;
  o The environmental system.

  These factors are the "prerequisites" that enhance the success of the other measures (stand-alone factors).

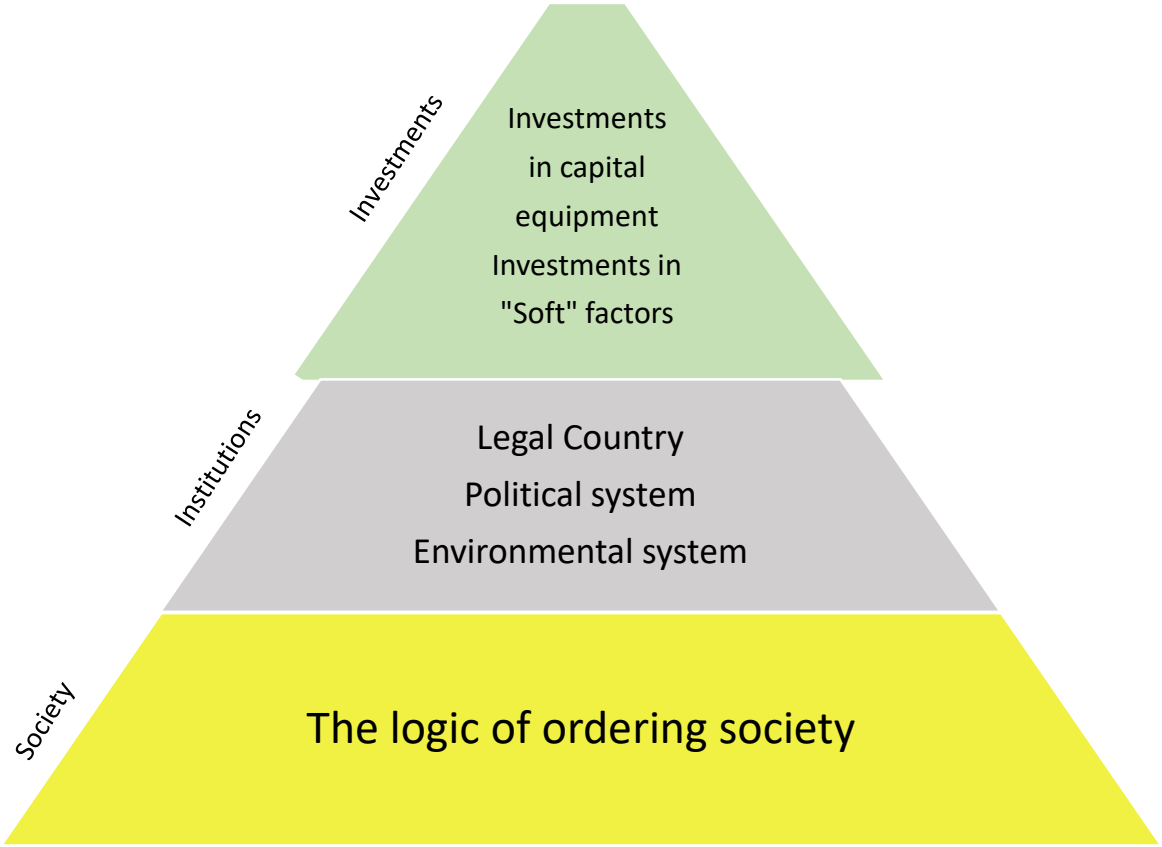
- These are followed by the independent factors, which we have grouped into several categories:
  - **Investments in capital equipment**
    Country level
    - Public (and private) investment in critical infrastructure: energy, regional roads, railways;
    - Public investment in health;
    - Public investment in research infrastructure and basic research (scientific equipment and facilities; tertiary education, training of research personnel);

    Enterprise level
    - Private investment in fixed assets, R&D, artificial intelligence, digitisation and robotics

  - **Investments in "soft" factors** (common factor) productivity
    Country level
    - Corporate governance of state-owned enterprises and organisations (e.g. political influence in state-owned enterprises);
    - Quality and adequacy of the financial system, institutions and markets;
    - Public finances (expenditure structure, indebtedness);
    - Education and training (quality of higher education, lifelong learning, alignment with labour market needs, dual system);
    - Cooperation between research and development;
    - Public administration efficiency and administrative barriers

    Enterprise level
    - Employee education and training;
    - Development of new technologies;
    - Business governance.

Image 1: Chart of productivity factors



This is followed by a more detailed presentation of the key causes of the lagging productivity growth in the identified areas, with proposals for measures to reduce the lagging. The set of measures is based on an extensive analysis of competitiveness factors and productivity surveys, using Slovenia as an example, as well as data from the European Statistical Office, the OECD and other data sources (competitiveness rankings from IMD, WB and WEF). The set of measures is based on an extensive analysis of competitiveness factors and productivity surveys using Slovenia as an example. It describes Slovenia's lagging behind Austria, Germany and more broadly in terms of key factors

2.1 THE LOGIC OF ORDERING SOCIETY

The logic of "ad hoc" regulation of society, e.g. by immediately reacting to an undesirable event of an individual or a group with new rules of behaviour that impose severe restrictions on the whole society, or the transposition of the European legal order in the most restrictive version (colloquially: more papal than papal) and the proverbial aversion to income disparities between populations, are examples of the logic of regulation of society that prevent the achievement of a high level of productivity. For example, in the transposition of the European legal order, Slovenia's regulation is in many areas much stricter than that of Austria, Germany and beyond. On the other hand, Slovenia is one of the most egalitarian countries in the world in terms of net disposable income differences, which, while creating social cohesion, does not motivate the most able individuals in a way that would allow them to achieve better labour outcomes - read higher productivity. In this respect, we should start from the **general principle** that Slovenia will set above-average productivity growth as a short- and long-term "bright" goal, which alone can significantly alleviate accumulated social problems. It will therefore be even less restrictive than Austria and Germany in regulating society in areas that

limit competition or potential growth. It will also seek the best solutions by taking its lead in specific areas from EU Member States whose national regulatory systems do not add to the complexity of EU regulation, which must be properly transposed into national regulation. It will also use the EU Presidency to encourage maximum activity in the already foreseen de-bureaucratization of the EU, while at the same time taking successive measures to reduce the large difference between the incentive system for rewarding the best performers in Slovenia and Austria and Germany.

2.2 BROADER FACTORS OF INSTITUTIONAL DESIGN

2.2.1 Political system

An effective policy system allows decisions to be taken that are well-informed, set in the broad context of existing legislation, supported by financial and other impact analyses, and timely. Compared to Germany and, to a lesser extent, Austria, Slovenia lags significantly behind in the effectiveness of its political system. Significant shortfalls include:

- Stability, viability and quality of the political system;
- Constitutional order and irrational (overly complex) political decision-making processes:
    - Complex procedures, especially when forming a government,
    - the easy and facile use of the most difficult "weapons" of parliamentary struggle (e.g. interpellation, constitutional impeachment),
    - political defensiveness is more important than the effectiveness
    - the large number and confusing and overlapping tasks of the different agencies.
- Number of parliamentary political parties:
    - Inadequate electoral legislation, which leads to too many parliamentary parties due to a low threshold for entry to the National Assembly,
    - "culture" (high egos of small party leaders) - coalitions of 3-5 parties have little chance of finding common programmatic ground,
    - Political instability,
    - the inability to take difficult but urgent decisions,
    - populism.
- HR:
    - the degradation of officials: low salaries and status,
    - an aggressive political "culture" with personal recriminations against officials,
    - lack of demonstrable qualifications in the legislative and executive branches: knowledge, experience, evidence of performance in relevant areas,
    - unprofessionalism in the drafting of "ad hoc" legislation,
    - disregard for important and necessary parts of the procedures (e.g. financial impact assessment, constitutionality, etc.) when drafting legislation,
    - the duality of staff in the civil service: qualified professionals versus better paid party cadres without qualifications.

- Government integrity is weaker than in Austria or Germany (see Table 1).
- According to managers, Slovenia faces a higher risk of political instability than Austria or Germany, has extremely low flexibility in government policies and government decisions are more inefficiently implemented than in Austria or Germany.

Table 2: Comparison of critical factors of the political system

Critical factors	Slovenia	Difference Slovenia – Germany	Difference Slovenia - Austria
RISK OF POLITICAL INSTABILITY (0-10) 0 =high, 10 = low 2018	6.49	-1.43	-1.86
FLEXIBILITY OF GOVERNMENT POLICIES (0-10) 0 = low, 10 = high 2018	2.75	-1.07	-1.29
DECISIONS OF THE EXECUTIVE BRANCH OF GOVERNMENT (0-10) 0 = not effectively implemented, 10 = effectively implemented 2018	3.31	-2.07	-1.6
GOVERNMENT INTEGRITY (0 - low ; 100 - high)	67.4	-14.8	-16.6

Source: Summarised from World Competitiveness Report, IMD (2019) and Heritage (2019).

Actions and guidelines 1: Political system

Goal: *A stable and operational political system*

Guidelines and actions:

1. In the current electoral system, raising the minimum electoral support for a party to enter the National Assembly (e.g. 5%), substantially simplifying the procedures (especially the post-electoral procedures in the National Assembly) and abolishing the Council of State.
2. Improving the performance and staffing of officials:
    - Raising the status of officials in the government and the National Assembly by creating a system of incentives to attract the best, including a significantly higher salary depending on the relative performance of the government and the National Assembly (performance in governance measured by the normalized difference in productivity growth and, to a lesser extent, GDP growth, relative to the target), with opposition officials also participating, but to a lesser extent;
    - the adoption of demanding guidelines on the qualifications of officials (appropriate education and specific testing of knowledge of the organisation and functioning of the state) and media pressure to comply with these guidelines. At the same time, support for officials with a stable and high quality administration, without constant turnover when coalitions change.
3. A major tightening of the conditions for extraordinary sessions (of the DZ, its commissions, the Economic and Social Council), for interpellations, for constitutional impeachments and for the consideration of laws which, in the opinion of the competent institutions, are not in line with the Constitution and the financial means.

2.2.2 Legal Country

A **legal system** that effectively enforces the rule of law is the second necessary precondition for the desired effects of stand-alone productivity-enhancing measures to be achieved. In this respect, Slovenia lags significantly behind Austria and Germany in key elements of the legal system. Radical changes are needed, in particular because of these large gaps:

- The length of court proceedings is a major problem: the average length of proceedings is almost twice as long as in Austria and once as long as in Germany, especially the length of the court proceedings and the enforcement of the judgment, which takes 330 days on average (compared to only 90 days in Austria and Germany). It should also be noted that the legal protection of the parties in credit agreements lags behind the EU average.
- Legal protection of parties in contractual relationships is much weaker, not only because of the length of proceedings, but also because of the risk (unpredictability) of substantive (in)fairness or professional incorrectness of final judgments.
- Based on the information and data available, it can be assumed that more disputes or cases per capita are admitted to court. In addition, more appeals and other legal remedies are then lodged against the decisions of the lower instances. In the case of instance proceedings (more often than in the countries with which we are comparing), the case is often referred back for a retrial, which leads to a time-bar. Although we do not have fully methodologically comparable data, anecdotal evidence suggests that the reasons for referring cases back to a lower instance are generally procedural rather than substantive.
- There are several reasons for this: (1) Negative staff selection in the courts does not contribute to the quality of decision-making. (2) The aggressive approach of lawyers to the way they defend their clients, where it is irrelevant whether the client is substantively correct or whether a procedural error has been made in the proceedings. These problems lead to additional procedural rules, which in turn lead to a vicious circle - the more procedural rules there are, the sooner they are broken, the sooner there are delays in decision-making and ultimately the more time-barred the cases become. (3) Problems of "black letter" decision-making instead of taking into account modern methods of interpretation, e.g. what was the purpose of the law (hence the procedures)[4] ; furthermore, disregard of the principle of proportionality in decision-making, which allows the law to be interpreted contrary to the purpose of the law (e.g. foreclosure of a house because of a €100 debt). (4) Procedural (procedural) legislation which allows prolongation of proceedings. (5) Enforcement of judges' liability for cases where cases are time-barred or other cases of breach of law (e.g. loss of thousands of wills in the courts for which no one was held accountable, compensation paid by the State), breach of the law and equality before the law (e.g. the loss of thousands of wills in the courts for which no one was held accountable, the State paying compensation). violation of the principle of impartiality and the extremely long duration of proceedings (examples: TEŠ, Trojane Tunnel, where the dispute with the Italian company is still ongoing), debts with high interest are paid by taxpayers, foreigners are withdrawing). (6) The problem of trust in the judiciary: according to the OECD 2018 statistics, Slovenia is at the tail end of the countries, not only in Europe, but in the world

[4] Although the same EU Regulation applies in Slovenia and Austria and the facts are similar, the procedure in Slovenia takes much longer.

(almost all countries in Europe are ahead of it, but also e.g. Mexico, Australia, Israel,), followed by e.g. India, Russia.

- This results in a significantly lower efficiency in terms of time and substance of the judicial branch of government (see Table 2);
- According to managers, in Slovenia:
    - Transparency is significantly worse than in Germany and Austria, and the legal country is worse;
    - Weaker legal environment for companies (labour law, competition protection);
    - Weaker protection of property rights (protected by Article 17 of the EU Charter of Fundamental Rights). The latter is also confirmed by other studies (e.g. Heritage, see Table 3).

Table 3: Comparison of critical rule of law factors

Critical factors	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
Total duration of procedures in case of enforceability of contracts (in days)	1160	-661	-763
Duration of court proceedings for enforceable contracts (in days)	800	-420	-523
Duration of enforcing a judgment in the case of enforceable contracts (in days)	330	-240	-240
LEGAL AND REGULATORY FRAMEWORK (0-10) 0 = restricts business competitiveness, 10 = promotes business competitiveness; 2018	3.53	-1.9	-0.41
COMPETITION PROTECTION LEGISLATION (0-10) 0 = not effective in preventing abuses, 10 = effective in preventing abuses; 2018	5.04	-2.25	-1.54
PERSONAL SECURITY AND PROPERTY RIGHTS (0-10) 0 = not adequately protected , 10 = adequately protected; 2018	6.97	-1.71	-1.75
TRANSPARENCY (0-10) 0 = poor, 10 = satisfactory; 2018	3.59	-2.64	-1.65
Rule of law index (0-1)	0.67	-0.16	-0.14
EMPLOYMENT LAW (0-10) 0 = hinders entrepreneurial activity , 10 = does not hinder entrepreneurial activity	2.85	-1.88	-1.87
LEGISLATION FOR THE UNEMPLOYMENT CASE (0-10) 0 = no incentive to look for work , 10 = incentive to look for work	3.04	-2.37	-0.71
Protection of property rights, 0 = low, 100 = high	76.5	-4.0	-10.8
Efficiency of the judiciary, 0 =low, 100 =high	48.6	-25.7	-24.6

Source: Summarised fromWorld Competitiveness Report, IMD (2019), Heritage (2019) and Doing Business (2020).

Actions and Policies 2: Legal country

Goal: *Effective legal country*

Guidelines and actions

1. Reduce the number of court cases and disputes to those that are proportionate and cost-justified (e.g. court costs and litigants' costs should not represent more than 10% of the value of the dispute) by strengthening case law and thus the understanding of when it is reasonable to litigate, by identifying litigation as a last resort to achieve a fair solution and by strengthening institutions that offer alternative dispute resolution channels.
2. To provide more modern decision-making opportunities, taking into account modern methods of interpretation and the use of technology, and to increase efficiency (not the number of judges[5]) and consistently enforce accountability in the judiciary:
    - Simplify procedures and prevent procedures from taking precedence over substance, including by ensuring that higher courts rule rather than remanding to lower courts for reconsideration. In doing so, a much greater emphasis should be placed on the fairness of substantive decisions. This means more discretion for judges, more need for legal and economic skills, more ongoing training, more professional accountability for decisions and a shift in the assessment of a judge's performance from the current norm (how many cases he or she has to resolve, where a case is 'resolved' even if it is time-barred) to substantive integrity.
    - Change the composition of the Judicial Council and professionalise the status of the members of the Judicial Council.
    - Increase protection of free economic initiative (protected by Article 16 of the EU Charter of Fundamental Rights), including simplification of administrative procedures for setting up and operating businesses, obtaining permits (e.g. building permits).
    - In line with trends in developed countries, higher education in law also needs to change towards a more in-depth knowledge of specialised areas[6] and practical legal problem-solving.
3. Significantly reducing the volume (from around 23.000 to at least 30% in four years) and increasing the quality of legislative and, above all, regulatory acts, and focusing on substantive rather than procedural decision-making by public authorities. In this context, the current logic of regulating society by "prescriptive law" should be changed, the number of courts and judges should be reduced and their specialisation should be supported, with the help of the most eminent legal experts (both domestic and foreign).

[5] According to CEPEJ (2018), Slovenia has the highest number of judges per million inhabitants in Europe.

[6] For example, the US, where law is a postgraduate course after, for example, an undergraduate degree in business or economics, the Netherlands, with its emphasis on specialised study, and so on.

2.2.3 Environmental system

The environmental system significantly reduces Slovenia's competitiveness even after calibration for demographic and environmental impacts.

- Managers consider that environmental legislation is a much bigger obstacle to competitiveness than in Austria or Germany.
- There is a bottleneck in the implementation of building and environmental legislation. This is reflected in the difficulty of obtaining building permits.
- International comparisons in the field of permits show that the key problem lies in the number of procedures, the duration (in days) and the cost of obtaining permits, which is 2.7% of the construction value, compared to only 1.1% in Austria and Germany. For the other criteria relating to quality control of construction (before and after the start of construction), Slovenia is on a par with Austria and Germany.
- Protected areas, both on the surface of the country's territory and in coastal and marine areas, cover as much as once more area than in Austria and 40% more than in Germany, relative to the total territory of each country.

Table 4: Comparison of critical environmental protection factors

Critical factors	Slovenia	Difference Slovenia - Germany	Difference Slovenia – Austria
Total number of procedures for obtaining building permits (in days)	17	-8	-6
Duration of procedures for obtaining building permits (in days)	247.5	-121.5	-25.5
Cost of obtaining construction permits (as a % of the total investment)	2.7	-1.6 o.t.	-1.6 o.t.
ENVIRONMENTAL LEGISLATION (0-10) 0 = hinders entrepreneurial activity , 10 = does not hinder entrepreneurial activity 2018	5.96	-0.85	-0.39
Protected areas on the surface of the country as % of total land area	53.6	15.8	25.2
Protected coastal and marine areas as % of total land area	55.1	16.3	26.7

Source: Summarised from World Competitiveness Report, IMD (2019), Doing Business (2020) and Eurostat (2020).

Actions and Policies 3: Environmental protection

Goal: *The environmental protection system does not hamper economic productivity growth.*

Guidelines and actions:

1. Given the disproportionate share of protected areas in Slovenia, which hampers the infrastructure development needed to achieve the necessary productivity growth, it is necessary to:
    - Make full use of the possibilities offered by the EU legal framework to ensure that the public interest relating to encroachment on protected areas is pursued;
    - Follow the ways in which commitments with the EU and good practices developed by other countries can be followed to pursue the public interest in economic development while at the same time taking care of the environment.
2. Permanent regulation of the issue of representativeness and the role of civil organisations in environmental and other environmental protection issues (e.g. cultural landscapes) and a simultaneous commitment of these organisations and the Environment and Spatial Planning Agency to engage constructively, from an environmental perspective, in the search for acceptable solutions to the economic development imperative, as illustrated in the introduction to this Action Plan.
3. All consents for planning permission (significantly reduced in number) should be dealt with in one place at the same time - without the need for the necessary prior opinions, a request to complete the application can only be made once for all consents, within one week of submission, and thereafter a single time limit applies, with the logic of silence of the authority. This should halve the cost and time of obtaining building permits - de-bureaucratizing procedures (digitisation makes it possible to obtain all information within the public administration).

2.3 INDEPENDENT FACTORS OF CAPITAL ENDOWMENT

2.3.1 KEY PUBLIC INFRASTRUCTURE

2.3.1.1 Energy sector[7]

- Potentially very large increases in national economic productivity can be achieved by changing the structure of energy consumption. Such a change is, of course, linked not only to a change in the capital endowment of the various sectors of the economy, but also to significant changes in technology, i.e. to very large investment interventions in the economy.

- Final energy consumption in Slovenia differs from the corresponding consumption in Austria and Germany mainly due to two features: 1) a nearly 30% higher share of oil and oil products and over one third less natural gas consumption and 2) a noticeably lower share of final energy consumption flows to industry and a higher share of energy consumption in transport compared to Germany and Austria. Table 4 briefly summarises the relevant structure of energy flows before entering final consumption.
- As the histogram of GDP (in million euro) per kg of oil equivalent (KGOE) for EU countries shows (Figure 1), Slovenia has a relatively high energy consumption (relative to GDP produced). The value for Slovenia (5.9 million) is highlighted. Slovenia is apparently only in the sixth decile of the (33) European countries considered.
- A more detailed assessment of energy (structural) (in)efficiency shows that Slovenia is in the ninth or last decile of the 33 European countries analysed in terms of energy structural inefficiency. Based on the analysis, we conclude that with an optimal (realised in the sample of countries) technological structure of energy products, a given volume of GDP could be achieved with a lower consumption of total energy (between 15% and 30%) or a lower volume of greenhouse gas emissions.
- The analysis of the corresponding output-oriented models shows even noticeably larger inefficiencies (i.e. noticeably larger potential productivity gains).
- Based on the results in Tables 2 and 3 in Annex 6.1, it can also be concluded, among other things, that the more stringent targets set by the "Green Deal" presented by the European Commission in autumn 2019 would not only be achievable by changing the energy mix (for a given GDP structure), but also that there would have to be significant changes in the composition of GDP.
- The opinion of managers in the IMD survey (2018) shows that, on a scale of 1 to 10, the adequacy of energy infrastructure is rated on average 7.47 by managers in Austria and Germany, and 8.4 and 7.8 respectively.

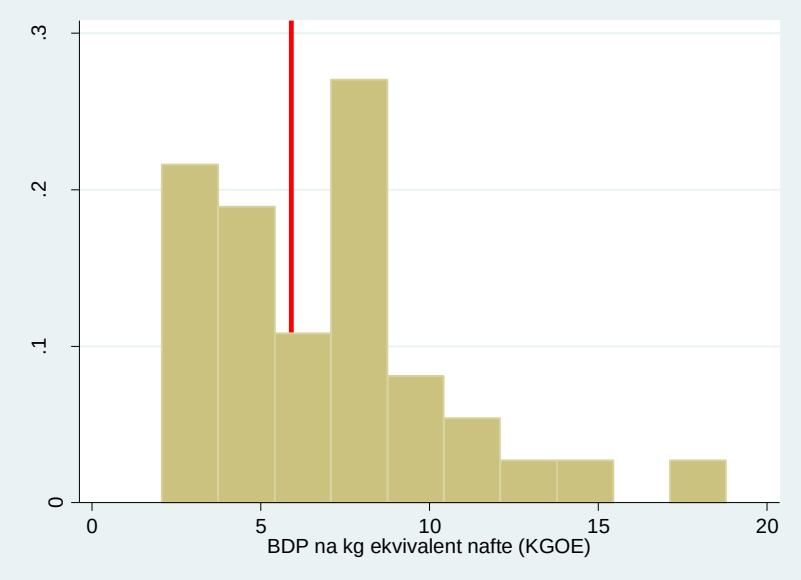
[7] A more detailed analytical overview is provided in Annex 6.1. Source: unpublished analysis by V.Bole, 2018, "Efficiency of Infrastructure Sectors", EIPF.

Table 5: Structure of balance flows of final energy consumption (%)

Type of energy	Slovenia	Austria	Germany
Solid fuels	0.83	1.26	1.87
Gas	12.1	18.12	26.48
Petroleum products	45.95	36.2	35.22
Biofuels	12.68	15.7	7.86
Electricity	23.87	20.83	21.96
Heat	3.54	6.49	4.75

Source: Eurostat; own calculations.

Image 2:Distribution of GDP per unit of energy consumed (red bar represents Slovenia)



Source: Eurostat; own calculations
Note: GDP per kg of oil equivalent (KGOE) in millions; 2018

Actions and guidelines 4: Electric energy

Goal: *A timely and comprehensive focus on electricity generation, mainly from renewable and clean sources, transmission and energy rehabilitation, in line with transport and other trends.*

Guidelines and actions:

1. Construction of NEK2, completion of part of the Sava hydroelectric power plant system (the largest multiplier effects), completion of the gas-fired thermal power plant, construction of wind farms and construction of various energy storage facilities.
2. The renewal of the electricity distribution network with a multiplied increase in capacity and changes in the parameters of the high fragmentation of production and consumption (smart grids), and a certain increase in the gas network as well;
3. Increase investment in energy efficiency in public buildings (multiplier effect) and private sector buildings.

2.3.1.2 Regional roads[8]

When considering the possible **expansion of the road network**, its feasibility (in terms of regional economic flows) needs to be well assessed, as the current scale shows a low technical output efficiency of the road network.

- The density of the road network in Slovenia is roughly at the median of the sample of OECD and non-OECD EU countries, with a much higher share of the motorway network in Slovenia than in the above-mentioned sample of countries. In terms of the share of motorways, Slovenia ranks among the top 20% of countries with the highest share of the motorway network. Slovenia has the highest share of motorways in the top 20% of countries with the highest share of the motorway network.
- Compared to Austria and Germany, the density of the road network in Slovenia is much lower, at the end of 2016 it was more than 50% lower than in Germany and 40% lower than in Austria. In Germany and Austria, network density has been increasing since 2008, while in Slovenia it is practically stagnating. Although road density is much higher in Germany and Austria, the corresponding share of the motorway network is noticeably lower than in Slovenia. In Slovenia, the share of motorways is around 3.9%, while in Austria and Germany it is below 2%. However, this share is decreasing in Slovenia, Austria and Germany.
- Although the density of the road network is at the median of the sample of the compared countries and the share of motorways is noticeably higher, freight traffic on these roads is significantly lower in Slovenia. On the other hand, passenger traffic is significantly higher, as Slovenia is among the 20% most congested countries in terms of passenger traffic.
- Total (investment and maintenance) expenditure on road infrastructure is lower in Austria than in Slovenia (0.33% of GDP in Austria and as much as 0.77% of GDP in Slovenia), although the density of the road network is higher. However, the share of expenditure on road maintenance is roughly the same in both Slovenia and Austria (around 58%).
- In terms of the efficiency of the road network, the analysis presented in Annex 6.2 suggests that technical input efficiency is high, with Slovenia even at the frontier of achievable input efficiency for overall transport and passenger transport, while for freight transport it ranks 12th among OECD countries with an efficiency of 70%. Slovenia's freight transport volumes in 2016 could therefore be carried on a road network that is on average 30% smaller than the current one, if the network were as well used as the most efficient networks in the OECD.
- The output version of the model shows even more clearly the low efficiency of the road network in Slovenia (compared to the OECD countries with the most efficient road networks), especially for freight transport. For total transport, the technical output efficiency of road infrastructure use is only 33% (i.e. 67% lower than in the most efficient countries), so that Slovenia ranks 20th among OECD countries in terms of the technical efficiency of road network use. However, the efficiency of road network use for passenger transport is much higher. Compared to the most efficient countries, Slovenia (with the same assumed network) has about 41% less passenger traffic. The extremely low technical efficiency of the road network is particularly evident in the freight traffic load, where Slovenia ranks only 30th in terms of technical efficiency, and 94% behind the achievable efficiency of OECD countries.

[8] Source: unpublished analysis Bole, V., 2018, "Efficiency of Infrastructure Sectors", EIPF.

Actions and guidelines 5: The road network

Goal: *Rehabilitation of the existing road network and construction of missing road infrastructure on the third development axis.*

Guidelines and actions:

1. Upgrade the existing regional road infrastructure through reconstruction and rehabilitation (resurfacing). Increase the carrying capacity by about one third and allow the network to be used more productively for freight traffic.
2. Improve the regions' accessibility to domestic and international markets by investing in new transport connections of secondary roads to the TEN-T network. Improved competitiveness and thus higher productivity, increased mobility, creating the conditions for the establishment of distribution networks at regional and national level, as a result of shorter transport times and lower transport costs;
3. Build the missing regional road infrastructure on the third development axis, relocate the fourth development axis (Posočje, Cerkljansko), connect Zasavje to the motorway and resolve bottlenecks (e.g. bypass roads). Siting and permitting the completion of (short) unfinished sections of the motorway network.

2.3.1.3 Railway network[9]

- The density of the railway network in Slovenia is approximately 6 km per 100 square kilometres. and is high relative to developed OECD and other non-OECD EU countries, being in the second decile of countries with the highest density (see figure in Annex 6.3). In terms of the modernisation (electrification) of the electricity network, Slovenia is very close to the median of the sample of developed countries analysed, with just over 40% of lines electrified.
- The density of the rail network seems to be slowly declining in both Austria and Germany, with a drop of around 15% in both countries since 2000. In Slovenia, the density (and therefore the length) of the rail network has remained unchanged, but the process of electrification of the network has stalled. The electrification of the network has increased markedly in Germany and Austria since 2000, but in Slovenia it has stagnated at around 41% of the total network. The data therefore show that in Slovenia the concern for the (technical and cost) efficiency of the rail network has stalled, as the unused parts of the network are not being shrunk and the more used parts of the network are not being modernised (electrified).
- The most significant infrastructure deficits, based on in-depth interviews, were found in the vicinity of large cities, where efficient suburban transport affects the mobility of the productive population.
- The volume of rail freight transport (per unit of GDP) in Slovenia places us in the top quarter of countries (OECD and non-OECD EU countries) with the highest traffic, while passenger transport (per GDP) is close to the median.[10]
- A major problem is capital maintenance, which is the result of high depreciation of the lines, a large number of sections with reduced speeds, reduced line capacity and the uncompetitive nature of the network. Slovenia is among the countries that spend slightly more on maintenance than the median of all developed countries shown. This histogram also shows a large asymmetry, with around a quarter of countries spending several times more on maintenance than the other countries.
- Input DEA models show that Slovenia has a better utilisation of rail network inputs than the median of developed countries, although the efficiency (θ) falls well short of the achievable technical efficiency frontier. Indeed, efficient countries could still transport the same volume of freight and the same number of passengers as Slovenia by making efficient use of a shrunk network.
- Slovenia's relatively high ranking in the rail transport input efficiency ratings, despite its large gap (around 60%) behind the achievable efficiency frontier, only shows the gross neglect of rail transport in most developed countries, relative to the small number of them that have a significantly higher technical efficiency in the use of the rail network. Even more striking is this characteristic (of the very small number of developed countries that significantly outperform in terms of rail transport efficiency) in the output models. Thus, countries with technically efficient utilisation of the rail network exceed Slovenia's rail system utilisation efficiency by as much as 91% in total traffic. So, hypothetically, they would be able to transport ten(!) times(!) more freight and passengers on the rail network that Slovenia has than Slovenia actually does.
- Despite Slovenia's lagging behind in the efficiency of rail system utilisation, Slovenia is still not at the tail end of the developed countries in terms of the efficiency of rail system utilisation. For example, in the output model for total transport, it is still almost at the median of all the countries analysed in terms of technical efficiency (22nd among 40 countries), although it is

[9] Source: unpublished analysis Bole, V., 2018, "Efficiency of Infrastructure Sectors", EIPF.

[10] It is important to note that both histograms are highly asymmetric to large values, i.e. there are a small number of countries among the developed countries with significantly higher volumes of rail freight and passenger traffic (per unit of GDP they have more than 10 times the traffic of Slovenia).

91% behind the achievable efficiency threshold. The output model for passenger transport shows particularly low efficiency in the use of the rail network in Slovenia, with Slovenia lagging behind the most efficient countries by as much as 97%; despite this, there is another quarter of developed countries that are even less efficient (lagging behind) than Slovenia.

Actions and guidelines 6: Railway network

Goal: *Upgrading and developing rail infrastructure, leading to improved capacity (including speed), safety and throughput.*

Guidelines and actions:

1. Reconstruction of railway infrastructure to fully meet TEN-T requirements for core networks (line speeds of 100 km/h, 740 m train lengths and 22.5 t axle load capacity, as well as electrification). At the same time, development of railway infrastructure on the Mediterranean and Baltic-Adriatic corridors of the core network (e.g. additional track Ljubljana - Jesenice). Both are less demanding in terms of siting and therefore can be implemented quickly.
2. It is crucial to create business zones alongside the upgraded railway infrastructure, e.g. from Koper to Postojna, which will take advantage of the exceptional location and infrastructure for the development of business activities. This is a prerequisite for a significant increase in the productivity of the Slovenian economy through these investments, otherwise only transshipment and transport will have a very low impact (low added value).
3. Financing projects which (also in the context of these business zones mentioned under point 2) would increase the capacity of the rail infrastructure to increase the handling of goods and the number of passengers (e.g. rail and logistics centres such as the Austrian KELAG). It is also important to ensure good suburban rail infrastructure (e.g. in Ljubljana the Ljubljana Rail Hub - LŽV project).

2.3.1.4 Public investments in health

- In 2018, the share of health spending in GDP was just 8.28% in Slovenia, compared to 11.47% and 10.32% in Germany and Austria (see table below).
- The share of public expenditure in total health expenditure in Slovenia was 72.2% in 2018, compared to 74% in Austria and 84.4% in Germany.
- There is a huge difference in the size of health expenditure per capita. In 2017, Slovenia spent €1,703 on healthcare, Austria €4,371 and Germany €4,459 per capita. A huge gap remains even if the difference in development is taken into account in any way[11].
- The number of doctors and the number of hospital beds per 100,000 inhabitants in Slovenia is significantly lower than in Austria or Germany.
- On average, OECD countries spent about 5.6% of total health expenditure on tangible fixed assets in health, which is about 0.5% of GDP (or 8.8% of GDP for the health system as a whole). However, there are large differences between countries. In the EU countries, Germany, Belgium and the Netherlands spend the most on health care. Germany spends more than 1% of GDP or 9.6% of total health spending on tangible fixed assets. In Austria, the share of expenditure on tangible fixed assets is 7.7% of total health expenditure, while in Slovenia it is only 5.1%.
- According to the Health Consumer Powerhouse[12] (see Table 5, last three indicators), access to a doctor at primary level is significantly worse in Slovenia, and waiting times for surgery are longer than in Austria and Germany.
- The IMD (2018) survey of managers shows that, on a scale of 0 to 10, on average, they rate the adequacy of the health infrastructure for society's needs as 4.57, while managers in Austria and Germany rate it as 7.56 and 7.89 respectively.
- The scope of services provided by the health system in Slovenia exceeds the EU average, although the physical resources (number of doctors and beds per 100,000 inhabitants) and the level of financing are much more modest than the EU average.[13]
- If we judge the quality of the health system by the number of deaths from treated diseases, Slovenia is around the median of developed OECD countries, reflecting the quality of the secondary and especially tertiary level of the system. However, for preventable diseases, Slovenia ranks at the bottom of the seventh decile of developed OECD countries in terms of mortality, reflecting the (in)quality of the primary level of the health system and the nature of lifestyles.
- In the output-oriented models, Slovenia is about at the median of developed countries in terms of the efficiency of the use of technological equipment in the health system, lagging behind the most efficient countries by about 20%, similar to Germany and Austria.
- However, the health of the working population and its access to health services is an extremely important aspect in terms of boosting the productivity of the Slovenian economy. The analysis of sickness absenteeism, based on NIJZ data and presented in the annex, shows that the average length of absence is increasing, mainly due to injuries outside work, which we attribute to longer waiting times for operations.
- According to the authors of the monograph Renovation of the Economic Aspects of Slovenian Health Care (SEB UL, 2015)[14] the current Slovenian healthcare system is critical in several respects:

[11] In purchasing power parity terms, per capita health expenditure in 2018 is EUR 2,060 in Slovenia, EUR 3,875 in Austria and EUR 4,300 in Germany (Source: ZZZS Annual Report 2019, p. 149).
[12] The full publication is available at: https://healthpowerhouse.com/media/EHCI-2018/EHCI-2018-report.pdf.
[13]Source: unpublished analysis by V.Bole, 2018, "Efficiency of Infrastructure Sectors", EIPF.
[14] For more information see Tajnikar, M., Došenovič Bonča, P., Čok, M., Domadenik, P., Korže, B., Sambt, J., Skela Savič, B. (2015) Renovation of the economic aspects of Slovenian healthcare, SEB LU Publishing House, Ljubljana.

- The public part of healthcare, financed through the NHIF, does not coordinate the available resources and the scope of the basket of public health goods - consequences: long waiting lists and inability to finance a better quality of supply leads to a rapid increase in sickness absence and systemic losses for moderately efficient providers.
- An unlimited health basket makes it impossible to align the monetary resources of compulsory health insurance with the size of the health basket and gives the impression of apparent full access to health services.
- The legally enforced passive role of voluntary health insurance has turned insurance companies into "auxiliary coffers" of compulsory insurance, even though they could provide a larger volume of resources for health care in Slovenia. The unlimited scope of the basket of health goods covered by compulsory health insurance, however, sets limits to the development of the market part of health care.
- The public health network must be based on state-owned providers, as too much dependence on private providers could jeopardise the stability of the network in a pandemic situation.
- Neglecting the instruments of the payment system for an efficiently organised and quality-assured supply of providers in the public health network.[15]

Table 6: Comparison of critical factors of health-related infrastructure

Critical factors	Slovenia	Difference Slovenia – Germany	Difference Slovenia – Austria
Total health expenditure as % of GDP (2018)	8.28	-3.19	-2.04
Public expenditure as a share of total health expenditure (2018)	72.2	-1.8	-12.2
Total health expenditure per capita (PPP EUR, 2017)	2.059.76	-2.276,82	-1.807,76
Share of expenditure on tangible fixed assets in total health expenditure in %	5.1	-4.5	-2.6
Number of doctors per 100.000 population (2018)	310.11	-114.77	-208.17
Number of beds per 100.000 population (2018)	449.77	-350.46	-286.85
Proportion of people (aged 16 and over) reporting unmet need for medical examination or treatment (%, 2018)	3.9	-3.2 o.t.	-3.4 o.t.
Proportion of people waiting more than 3 months for routine surgical procedures (2016)	80%	No data	No data
European Health Care Index (scores 0 -1000, source: EHCI, 2018)	678	-107	-121
Access to a doctor at primary level (in points, source: EHCI, 2018)	1.857	-326	-220
Waiting time for selected surgery (qualitative, 1-4, source: EHCI, 2018)	2.833	-1.108	-0.083

[15] As Tajnikar et al. (2015) point out in their monograph, although the Slovenian payment system is currently based on modern forms of provider payment, such as principal, fee-for-service, per case (groups of comparable cases) and lump sum, they are outdated in quantitative terms, as they do not reflect the cost norms that exist in practice today, they do not keep pace with the evolution of technology and the changing range of health services and do not encourage providers to develop technology and increase quality.

1: 90% of patients will be operated on within 3 months 2: Most patients wait less than three months 3: Most patients wait more than three months			

Source: Summarised from EHCI (2018) and Eurostat (2020).

Actions and guidelines 7: Health system

Goal: Increased resources and more efficient use of public funds to reduce waiting lists and increase the health of the active population - resulting in less sickness absence and higher productivity due to better health.

Guidelines and actions:[16]

1. A gradual increase in total health spending, so that in four years' time, total health spending will be more than 10% of GDP per year. Private investment in health should be encouraged. The additional public part will be partly financed by the positive result of the introduction of a property tax and partly by increased supplementary health insurance, while the private part will be partly financed by co-payments for doctor's visits, prescriptions, first day's pay and partly by a reduction in the share of the regular wage as compensation during sickness. Of these additional resources:
    - The first half is earmarked for increasing the number of doctors (especially at primary level, thus relieving the burden on the secondary level), while at the same time increasing enrolment at both medical faculties and reducing the time taken to study, or in particular to specialise, by calling for an adequate number of specialisations in the areas where waiting times are longest, so that young doctors can start the work they need as quickly as possible.
    - The other half is earmarked for increasing the number of operations (to reach the waiting times in Austria), prevention programmes and modernisation of equipment/property.
2. Reorganisation to strengthen public health by: defining the network of health facilities, services provided under compulsory health insurance, refreshing the system of costing by diagnosis (over 20 years old and dysfunctional), further defining how providers are identified, modernising processes with ICT and AI.
3. Priority treatment and surgery for patients who are part of the active population and are unable to work without surgery, where the longer waiting time of those remaining in the queue does not endanger their lives. Additional priority treatment for doctors in order to reduce queues (by working rather than queuing).

[16] Measures relating to improving the governance of publicly owned organisations (in this case public bodies) are covered in section 2.1.

2.3.1.5 Public investment in research infrastructure and basic research (scientific equipment and facilities, tertiary education, research training)

- In Slovenia, there is an upward trend in expenditure on R&D activities, but the growth is too low to reach the 3% of GDP target. In 2018, Slovenia spent 1.95% of GDP on R&D investment overall, compared to the Euro area average of 2.22% of GDP in that year, 3.13% in Germany and 3.17% in Austria (all figures in the table below).
- According to Eurostat, Slovenia had significantly fewer researchers per 1 000 employees in 2016 than Austria or Germany. The same applies to the share of researchers employed in the corporate sector.
- Investment in scientific equipment over the last 15 years has been extremely modest and the current equipment is unmatched even by countries such as Estonia or Portugal.
- The relatively low level of investment in R&D also leads to a low share of high-tech exports. In Germany, this was as high as 15.1% in 2018, in Austria 13.8%, and in Slovenia only 5.8% of total exports. It should be borne in mind, of course, that the share of exports in GDP is significantly higher than in Germany or Austria. Nevertheless, it is worrying that this share has remained relatively constant for at least a decade, while Austria has significantly increased its exports of high-tech products between 2011 and 2013.
- The number of inventions per unit of R&D expenditure at country level is significantly lower in Slovenia than in Austria or Germany.
- According to managers:
    - Slovenia's attractiveness to researchers on a scale of 0-10 is rated at 4.22, while in Germany and Austria it is rated at 6.61 and 6.23;
    - Research-related legislation encourages patent activity in Slovenia to a lesser extent (5.29) than in Germany (6.48) or Austria (6.58) on a scale of 0-10.
    - Total public expenditure on higher education in Slovenia in 2016 was less than one per cent of GDP. In Germany, the share was one-third higher, and in Austria it was almost twice as high as in Slovenia.

Table 7: Comparison of critical factors for R&D-related infrastructure

Critical research infrastructure factors	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
Total R&D expenditure in GDP (2018)	1.95	-1.18	-1.22
Total R&D expenditure per capita (2018)	431.6	-834.5	-956.3
Total public R&D expenditure in GDP (2017)	0.43	-0.42	-0.41
European Innovation Index (2019)	92.42	-38.06	-35.44
Share of high-tech exports (2018)	5.8	-9.3	-8.0
Number of researchers per 1000 employees in enterprises (2016)	4.615	-0.38	-1.35
Total expenditure on higher education as a share of GDP (2016)	0.95	-0.30	-0.84

Source: Eurostat (2020), European Innovation Scoreboard (2020).

Actions and guidelines 7: Public investment in research and development

Goal: *Increasing public investment in R&D, funding the missing research infrastructure for functional integration with the economy.*

Guidelines and actions:

1. Immediately raise budgetary R&D funding by 0.5 percentage points to 1% of GDP and substantially increase investment in all research equipment (Packages) over the next 5 years - bringing it up to the EU average. Both in the context of a fiscally neutral restructuring of public expenditure and receipts.
2. Largely EU-funded construction:
    - Missing research infrastructures to functionally integrate available and upgraded research infrastructures into national and regional research infrastructure centres. Particular attention should be paid to the development of infrastructures in cooperation with economic operators.
    - A science and technology campus where 5 faculties and an institute (in addition to BF, FKKT, FRI and NIB, which is about to start construction of a new building) will be concentrated at BRDU with new buildings for the Faculty of Mechanical Engineering and the Faculty of Pharmacy. This is part of the plan for a "Medical Valley" science city at Brdo, together with a technologically advanced economy in the Technology Park.[17]
3. Reintroduce the "young researchers in business" or "young applied researchers" mechanism, including in the context of doctoral funding.

[17] Defined in point 2.5

2.3.2 PRIVATE INVESTMENTS IN FUNDAMENTAL ASSETS, R&D, ARTIFICIAL INTELLIGENCE, DIGITALISATION AND ROBOTISATION (at enterprise level)

- Business fixed investment is only 19.2% of GDP in Slovenia (2018), significantly lower than the 23.95% of GDP share in Austria and below the EU15 and EU27 average.
- In Slovenia, they are comparatively more volatile. They declined sharply in the recession and then started to rise rapidly in the expansion. The fall in investment during the economic crisis could be attributed to the poorer access to finance and the burden of repaying loans.
- Slovenia lags far behind Germany and Austria in the number of patents applied for, with Austria growing and Germany declining. At 55 patents per million inhabitants (2017), Slovenia is below the EU28 average of 107 patents per million inhabitants.
- With 144 robots per 10,000 employees in manufacturing, Slovenia is comparable to many countries, but only in a few sectors (mainly automotive, followed by chemicals, metals).
- Of the Industry 4.0 technologies, companies are making more intensive use of simpler and cheaper technologies (many of which are also more widely applicable). These include, for example, cloud working (45% of all respondents), smart mobile devices (42%), ERP systems (37%), CRM (35%), automated manufacturing (35%), robots (35%), CPM (34%), connected processes (31%)[18] .
- Managers in the IMD survey conclude that there is a higher risk of reallocation of R&D activities in Slovenia than managers in Germany or Austria, incentives for foreign investors are less attractive and funding for technological development is less accessible.

Table 8: Comparison of critical drivers of private investment at company level

Critical drivers of private investment at firm level	Slovenia	Difference Slovenia – Germany	Difference Slovenia – Austria
Fixed capital formation as % of GDP (2018)	19.17	-1.99	-4.78
Business fixed investment in value added as % of GDP (2018)	21.46	0.49	-5.24
Return on equity in % (2018)	11.15	-67.24	-23.33
INVESTMENT INCENTIVES (0-10) 0 = not attractive for foreign investors, 10 = attractive for foreign investors (2018=	5.61	-0.73	-0.27
FOREIGN INVESTORS (0-10) 0 = not free to take control of domestic firms, 10 = free to take control of domestic firms (2018)	6.41	-1.43	-1.97
Business R&D expenditure as a share of GDP (2018)	1.45	-0.71	-0.77
Number of researchers per 1000 employees in enterprises (2016)	4.61	-0.38	-1.35
R&D department reallocation threat (0-10) 0 = exists, 10 = does not exist (2018)	4.04	-0.91	-0.89
Patent applications at the EPO per million inhabitants (2017)	55.30	-173.51	-176.05
RESOURCES FOR TECHNOLOGICAL DEVELOPMENT (0-10) 0 =not available, 10 = available (2018)	5.98	-0.63	-0.54
USE OF DATA ANALYTICS (0-10) 0 = very poor at using data analytics for decision-making, 10 = very good at using data analytics for decision-making (2018)	4.8	0.2	-0.35

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

[18] For more information see Čater T., Čater B., Černe M., Koman M., Redek T., 2019.

Actions and guidelines 8: Business investment in development and new technologies

Goal: *increasing capital investment by companies and creating a support system for the commercialisation of innovations.*

Guidelines and actions:

1. A commitment by owners (through managers) to substantially increase capital investment in companies to EU levels - the same share of retained earnings in net profits and recapitalisations. Also, the potential substantial increase in the return on equity in companies to EU levels (from around 11% to around 22%), if the proposed measures of this Action Plan are implemented, such as better corporate governance, more appropriate wage agreements with trade unions (basis: level and growth of productivity) and a substantial improvement in the business environment, will increase the basis for financing investment.
2. Re-establishing an independent Technology Agency, along the lines of Finland, Denmark and other development breakthroughs. Its tasks:
    - -Stimulating innovation processes, technological and non-technological innovations aimed at commercialisation and related investments;
    - Support for projects to develop and test innovations in practice, e.g. setting up pilot lines, early validation, advanced production facilities and initial production, while introducing ICT solutions);
    - Support for demonstration projects to showcase, test new solutions for direct practical application and demonstration of use (e.g. Living Labs, Internet of Things, cloud computing, crowd data, new integrated e-services and service platforms, creativity enhancement such as CreativeHubs, etc.).
    - Innovative financial instruments, developed and implemented in cooperation with the Development Bank - SID, will be used to finance the incentives.
3. Creating common platforms:
    - to stimulate investment in the development of robotics and smart factories (institutes, user companies, developer companies) - the case of Denmark and Austria.
    - In the form of cooperative sustainable (energy self-sufficient) industrial zones for micro and small enterprises. The role of the state (municipality) would be to provide and build the common component (infrastructure and common spaces). When planning this, it is important to take into account several factors or needs of companies relating to the reduction of real estate investment and operating costs for companies (centralised management of the zone, reduction of multiplier and logistics costs, joint acquisition of environmental certificates, access to knowledge and links with universities).

2.3.3 INVESTING IN »SOFT« (TOTAL FACTOR) PRODUCTIVITY FACTORS AT COUNTRY LEVEL

2.3.3.1 Corporate governance of state-owned enterprises and public bodies (political influence)

- Slovenian Business Productivity Survey (Domadenik, Prašnikar, Svejnar, 2016)[19], which refers to data between 2000 and 2010, shows that those with more politically active supervisory board members have lower productivity than the industry average.
- According to managers surveyed by IMD:
    - management bodies (supervisory boards, non-executive directors on boards) do not effectively supervise management. Managers in Austria and Germany have a much better view of this;
    - State ownership poses a threat to business activities to a significantly greater extent than in Austria and Germany;
    - large corporations in Slovenia are less efficient by international standards than corporations in Germany or Austria;
    - the credibility of management is slightly lower in Slovenia than in Germany, while it is significantly higher in Austria.

Table9: Comparison of critical corporate governance factors

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia – Austria
GOVERNANCE ORGANISATIONS (0-10) 0 = do not supervise management effectively, 10 = supervise management effectively (2018)	4.02	-1.93	-3.27
STATE OWNERSHIP IN COMPANIES (0-10) 0 = poses a threat to business, 10 = poses no threat to business (2018)	3.43	-3.45	-3.9
LARGE CORPORATIONS (0-10) 0 = not effective by international standards, 10 = effective by international standards (2018)	5.49	-2.21	-2.45
MANAGER CREDIBILITY (0-10) 0 = low 10 = high (2018)	5.01	-0.48	-2.01

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 9: Corporate governance of state equity investments and public bodies

[19] Read more in Domadenik, P., Prašnikar, J., Svejnar, J. Political connectedness, corporate governance, and firm performance. *Journal of business ethics*, 2016.

Goal: *depoliticising and professionalising management in state-invested enterprises and public bodies.*

Guidelines and actions:

1. SDH is a politically independent financial institution that manages **all** the country's strategic capital investments in a primarily professional manner. These are equity investments in companies and financial institutions that also perform very important "public service" tasks.
    - Key governance objectives shall be set by defining the required return and the content of comparable investments (domestic and foreign) and by evaluating the cost of the "public service" of strategic investments in terms of percentage points of return on these investments. The sustainability aspect shall also be taken into account.
    - The returns on comparable investments, less the "public service" costs, define the required return on each individual strategic investment of the State, which must be guaranteed by the SDH, of course in addition to the full performance of the "public service".
    - Salaries in the SDH system are strongly linked to the achievement of the Asset Management Objectives (performance defines more than 50% of the salary), which is also partly the case for government officials as members of the SDH Assembly. Thus, the failure to achieve the SDH annual plans, according to the formula adopted, reduces the performance component of the salary of government officials. Once the data are known, the performance component of the salary is adjusted back one year.
2. Capital stakes in companies and financial institutions qualified by the State as portfolio (and significant) investments are fast-tracked through the SDH through a process that allows each investment to find a way to be sold in a controlled manner at the best price. These investments are valued in advance, a lower limit is set on the still acceptable price and a performance fee is set, which SDH ties to a very wide deviation from the estimated value and the speed of the sale (e.g. 50% above the estimated value implies a performance fee for the manager of 5% of the surplus and a further 3% if the sale is realised within a certain period of time, e.g. three years). In the event that the market value of the share reaches a contractually defined growth rate within a certain period of time, the sale price is increased by the difference.
3. With a clear definition of the public service and the appropriate corporate governance arrangements (similar to commercial organisations), amend the Law on Institutions immediately to include modern definitions in terms of the definition of the agent in the case of public operators and its professional (autonomous and non-political) role and powers in business decisions (including remuneration). On this basis, immediately adopt changes to the legal framework to enable public institutions to be reformed, particularly in the areas of health, higher education and research.

2.3.3.2 Quality and adequacy of the financial system, institutions and markets

- Corporate indebtedness has been declining since the end of the financial crisis in 2012. For 2019, aggregate net financial debt to EBITDA is likely to be below 3.0 (all data in the table below).
- No equity issuance - the role of the capital market and the Ljubljana Stock Exchange is minor. The stock market index was significantly more volatile in 2007 and 2008 than after 2013, and the per capita trading volume on the organised market in Slovenia was only 1% of the per capita trading volume in Germany and only 4% of the turnover in Austria. Access to venture capital is also worse in Slovenia than in Austria or Germany, according to managers.
- The poor functioning of the capital market makes pension saving unattractive, which will lead not only to social problems for future pensioners, but also to less savings, less availability of equity capital and, as a consequence, lower capital endowment and productivity. In Germany, the pensioner finances more than 50% of post-retirement expenses by cashing in invested assets, in Slovenia negligibly little, also due to the "rich and secure" pay-as-you-go pension system.
- According to the managers, despite the highest share of bank deposits of the population in GDP in the EU, the securities market in Slovenia does not provide sufficient funding for companies, and the cost of capital is a bigger obstacle to business development than in Austria or Germany.
- Slovenia's credit rating and investment risk rating are worse than in Austria or Germany.
- Slovenia has a significantly lower share of banking assets in GDP than Austria and Germany, and interest margins are significantly higher (no economies of scale in commercial banking).

Table 10: Comparison of critical financial system factors

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
Capitalisation of the organised securities market (% of GDP, 2018)	12.19	-45.68	-21.87
M&A ACTIVITY Number of deals per listed company (average 2014-2016)	0.3	-1.89	-1.51
SECURITIES MARKET (0-10) 0 = does not provide sufficient funding for companies, 10 = provides sufficient funding for companies (2018)	3.73	-3.54	-2.18
TRADE VOLUME ON THE ORGANISED SECURITIES MARKET (US$ per capita, 2018)	189	-18589	-4357
COST OF CAPITAL (0-10) 0 = hinders business development, 10 = encourages business development (2018)	5.52	-1.79	-1.42
SHAREHOLDERS' RIGHTS (0-10) 0 = not adequately implemented, 10 = adequately implemented (2018)	6.16	-1.78	-1.73
CAPITAL MARKETS (0-10) 0 = not easily accessible, 10 = easily accessible (2018)	6.42	-1.63	-1.49
RISK CAPITAL (0-10) 0 = not easily accessible to businesses, 10 = easily accessible to businesses (2018)	4.61	-1.28	-0.1
COUNTRY BONNITY RANKING Ranked on a scale of 0-100 by Institutional Investor Magazine (2016)	64.9	-29.8	-22.5
INVESTMENT RISK Euromoney country risk overall (scale 0-100) (2015)	59.56	-21.3	-19.26
FINANCIAL RISK FACTORS (0-10) 0 = not adequately taken into account, 10 = adequately taken into account (2018)	5.75	-0.84	-1.33

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
Banking asset ratio (% of GDP, 2018)	91.84	-85.83	-63.67
INTEREST MARGIN Interest rate on loans minus interest rate on deposits (2018)	2.19	0.69	0.57
CENTRAL BANK POLICY (0-10) 0 = negative effect on the economy, 10 = positive effect on the economy (2018)	5.58	-0.79	-0.71
FINANCIAL AND BANKING REGULATION (0-10) 0 = not entirely appropriate, 10 = entirely appropriate (2018)	5.8	-0.65	-0.55

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 10: Capital and financial markets

Goal: *Improved access of the Slovenian economy to adequate financial resources on the same terms as companies in Austria and Germany.*

Guidelines and actions:

1. Banks need to go beyond their role as traditional savings banks and support the capital endowment of businesses - the action in this and the next point must enable them to do this, and it is therefore necessary:
    - To transform the population's huge bank deposits into riskier investments suitable for financing the economy by offering domestic investment instruments (e.g. bonds, investment funds) and voluntary pension insurance, which will be automatically extended to every employed citizen of the Republic of Slovenia, who will have the option to opt-out after a certain period of time ("opt-out").
    - Conditions should be created to encourage such savings.
    - A certain part of the savings (premiums) collected should be invested in promising Slovenian companies, while a certain part should be diversified internationally.
2. The State shall provide the conditions for the rapid implementation of innovations and technological developments in the provision of financial services, such as:
    o Verifying the identity of persons, even without their presence, using video and electronic identification,
    o the use of biometrics, direct marketing, automated decision-making, alignment with cross-border regimes, including the abandonment of national specific regimes in the execution of financial transactions (e.g. also in the taxation of capital instruments),
    o Ensuring a uniformly responsible, transparent and fair use of data for all users and taking measures to strengthen information and cyber security.
    All these measures lead to higher productivity, increased competitiveness, growth in business volumes with the possibility to exploit economies of scale (including through the possibility to market products across borders), greater flexibility of the financial sector and thus lower costs and more appropriate forms of financing for the economy.

2.3.3.3 Public finances

Public finances have an enormous impact on the level of productivity in a country, on the one hand by defining the financial and commercial operating conditions of economic agents, through the perception of the country's financial soundness (including through credit ratings), and, on the other hand, by guiding the more or less successful counter-cyclicality of fiscal policy, thereby stabilising economic conditions. In turn, through the volume and structure of public expenditure and receipts, they define the scope and quality of the broader infrastructure and its costs.

Budgetary rigidities, the inadequate structure of budget revenues and incomes, the high uncertainty of the economy in budgetary planning, the relatively high public debt, the difficulty of complying with fiscal rules in Slovenia compared to Austria and especially Germany are some of the causes of the productivity gap that can be attributed to the area of public finances. The gap is largest in the following areas (all data in Table 11):

- In Slovenia, public financial management is significantly too counter-cyclical, or even pro-cyclical, given the greater intensity and responsiveness required than in Austria and Germany.
- The structure of public spending on purposes that have a strong impact on productivity (e.g. infrastructure, R&D, higher education, health, etc.) is worse than in Germany and Austria.
- According to managers in Slovenia:
  - personal income taxes give people less incentive to work than in Austria or Germany, as individuals earning more than 2.5 times the average wage, in particular, are taxed at higher-than-average contribution rates;
  - an ageing population is a greater burden on economic development than in Austria or Germany and there is greater concern that pension funding is inadequate;
  - public finances are less well managed - especially subsidies: from agriculture to employment and the corporate sector and institutes and universities (especially for RRI), especially not in the direction of repayment and financial engineering, as most EU Member States are doing;
  - the threat of taxpayers being charged with tax evasion is more real (lack of clarity of rules).

Table 11: Comparison of critical factors in public finances

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia – Germany	Difference Slovenia - Austria
TOTAL STATE AID (% of GDP, 2018)	0.8	-0.1	-0.7
SUBSIDIES (0-10) 0 = distort fair competition and economic development, 10 = do not distort fair competition and economic development (2018)	5.1	-0.53	-0.53
INCOME TAXES ON INDIVIDUALS (0-10) 0 = does not encourage people to work, 10 = encourages people to work (2018)	2.73	-2.26	-1.04
AGING OF POPULATION (0-10) 0 = is a burden on economic development, 10 = is not a burden on economic development (2018)	2.34	-0.73	-2.3
PENSION FINANCING (0-10) 0 = not relevant, 10 = relevant (2018)	3.2	-1.17	-1.09
PUBLIC FINANCE (0-10) 0 = not effectively managed, 10 = effectively managed (2018)	3.14	-2.56	-0.78
CORPORATE INCOME TAXES (0-10) 0 = inhibit entrepreneurial activity, 10 = do not inhibit entrepreneurial activity (2018)	5.08	-0.58	-0.05
TAX TAXATION (0-10) 0 = is a threat, 10 = is not a threat (2018)	4.22	-1.33	-1.74

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 11: Public finances and fiscal policy

Goal: Aggressive counter-cyclical fiscal policy, simplifying the tax system and restructuring public spending to support projects that have the biggest impact on raising productivity.

Guidelines and actions:

1. The country embarks on an aggressive counter-cyclical fiscal policy. To this end, it creates a flexibility component of around 7% of public expenditure (around 5 o.t. of investment), by which it can reduce public expenditure in case of overheating or, in crisis situations, direct it to the purposes with the highest GDP multiplier (the content-development budget). It must therefore also have appropriate projects in place to this extent, with a predefined possibility of postponement of up to three years, for example, as well as projects ready for immediate implementation. The same applies to non-investment expenditure.
2. In order to achieve an AAA- (or at least AA+) rating from all three rating agencies, which ensures that the private sector operates in business conditions (not only financial) that are broadly similar to those in Austria and Germany, it is necessary, taking into account demographic and environmental challenges, to achieve a long-term stable public sector indebtedness of less than 60% of GDP (e.g. close to 40% of GDP). Rapid GDP growth and deficit-free public finances over the business cycle are key preconditions. Public expenditure is redirected to those with the highest GDP multiplier, while rationalising where it does not contribute to productivity growth.
3. Complete simplification of the tax system by removing 80% of exemptions, thereby broadening the tax base and lowering tax rates, further reducing the progression of income tax and introducing an estate tax are necessary measures to make the tax system simpler, less risky for taxpayers, cheaper to administer and more favourable to taxpayers. The changes also reward the most productive people and companies more.
4. All increases in public expenditure outlined in this Action Plan are counterbalanced by reductions or non-realisation of other public expenditure, by the acquisition of EU funds for a purpose that would otherwise be financed from domestic public coffers, by the introduction of a property tax, or by other means of increasing public revenue.

2.3.3.4 Education and training (quality of higher education, lifelong learning, alignment with labour market needs, dual system)

- In Slovenia, the share of students who have completed part of their studies abroad is significantly lower than in Austria or Germany; Slovenia also receives six times fewer foreign students per 1000 inhabitants than Austria and one third fewer than Germany (see table below).
- The quality of Slovenian universities is, according to foreign auditors (ARWU, Times), significantly lower than that of universities in Germany, where 4 universities are ranked among the top 100 in the world by the Shanghai Ranking (ARWU), and Austria, where 1 university is ranked among the top 200 in the world by the Shanghai Ranking. The University of Ljubljana is ranked between 501 and 600 of the world's top universities in this ranking, and its ranking has been declining since 2016.
- The proportion of employees in Slovenia who are in education or training at work is declining. In 2010, 22.8% of employees were in training, while in 2019 only 14.7% are still in training. In the EU-15 Member States, 17.1% of all employees are in training in 2019.
- According to managers in Slovenia:
  - The apprenticeship system is not effectively integrated into the education system;
  - The education system is less effective in meeting the needs of the economy than in Germany or Austria; in particular, we are concerned that the lag is greater in the area of university education.
  - Employee training is not as high a priority for companies as it is in Germany and Austria;
  - Management education covers the needs of the business community to a lesser extent than in Austria or Germany;
  - There is slightly less availability of skilled labour than in Austria and Germany.

Table 12: Comparison of critical education and training factors

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia – Austria
MOBILITY OF SLOVENE STUDENTS Number of students studying at foreign higher education institutions per 1000 inhabitants 2016	1.36	-0.06	-0.63
MOBILITY OF FOREIGN STUDENTS Number of foreign students studying in Slovenian higher education institutions per 1000 inhabitants 2016	1.14	-1.66	-6.92
Quality of higher education institutions: number of universities in the top 100, ARWU (Times) ranking, 2019	0	-4 (-8)	0
Quality of higher education institutions: number of universities in top 200 ARWU (Times) ranking, 2019	0	-10 (-23)	-1 (-1)
PRACTICES (0-10) 0 = not effectively integrated, 10 = effectively integrated (2018)	3.29	-4.75	-4.55
EDUCATION SYSTEM (0-10) 0 = not aligned with the needs of the economy, 10 = aligned with the needs of the economy (2018)	5.8	-1.58	-1.14
UNIVERSITY EDUCATION SYSTEM (0-10) 0 = not aligned with the needs of the economy, 10 = aligned with the needs of the economy (2018)	5.57	-1.95	-1.83
EMPLOYEE TRAINING (0-10) 0 =not a high priority in business, 10 =is a high priority in business (2018)	6.42	-0.94	-1.27
MANAGEMENT TRAINING (0-10) 0 = not aligned with the needs of the business community, 10 = aligned with the needs of the business community (2018)	5.86	-0.86	-1.32

PROFESSIONALS (0-10) 0 = not available, 10 = available (2018)	5.55	-0.13	0.81

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 12: Education

Goal: Increasing the efficiency of education at higher education level and introducing dual education in secondary schools.

Guidelines and actions:

1. To increase the efficiency of higher education in terms of students completing their studies within the time limits of the programmes: introduction of student vouchers during the duration of the study programme, a maximum of 3 times of examinations and only in the academic year of the enrolled courses, adaptation of the programmes with new teaching and examination methods that allow students to complete their obligations on time. Student work may only be carried out by students who are fulfilling their study obligations.
2. Reduce the teaching commitment of teachers at universities to a level comparable to that of developed countries (increase the number of teachers through the merging of research departments of institutes, international calls for proposals, exchanges and visits). introduce incentives to reward high achievement, tighten the conditions for evaluating the performance of research and introduce evaluations of the relevance and quality of the work of teachers in terms of their impact on society. UL shall set itself the target of being ranked among the top 300 in the world in the Shanghai ranking within six years, with appropriate support from the State.
3. Introduce a dual system along the lines of Austria and Germany and establish a system of 'dual education'. "Establish a system of 'school councils' at the level of vocational and technical education, with representatives of the business sector, and a system of 'school councils' at the level of higher education, with representatives of the business sector. "A system of 'advisory bodies' at each member of all universities, composed of representatives of business and with a role as co-designers of curricula..

2.3.3.5 Research and development cooperation and partnerships

- According to managers in Slovenia:
  - The legal environment is somewhat more restrictive than in Austria or Germany in terms of technology development and use;
  - Public-private partnerships are less supportive of technological development;
  - Knowledge transfer between universities, institutes and companies is significantly less than in Austria or Germany;
  - There is significantly less technological cooperation;
  - Innovation capacity is relatively high, but much lower than in Austria or Germany
  - Scientific research is of lower quality than in Austria or Germany.

Table 13: Comparison of critical factors for cooperation between research and development

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
TECHNOLOGY DEVELOPMENT AND USE (0-10) 0 = legal environment completely inhibits, 10 = legal environment completely supports (2018)	5.86	-0.66	-0.89
PUBLIC-PRIVATE PARTNERSHIPS (0-10) 0 = not supportive of technological development, 10 =supportive of technological development (2018)	4.89	-1.02	-1.03
KNOWLEDGE TRANSFER (0-10) 0 = lacking between companies and universities, 10 = highly developed between companies and universities (2018)	4.79	-2.19	-2.16
TECHNOLOGICAL COLLABORATION (0-10) 0 = lacking, 10 = developed (2018)	5.53	-1.11	-1.07
INNOVATIVE CAPABILITY (0-10) 0 = low in your economy, 10 = high in your economy (2018)	6.16	-1.2	-1.24
SCIENTIFIC RESEARCH (0-10) 0 = low quality by international standards, 10 = high quality by international standards (2018)	6.16	-1.63	-0.79

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 13: Cooperation between government and business in research and development

Goal: *Improve the integration and cooperation between business and science in innovation breakthroughs.*

Guidelines and actions:

1. The State establishes a key body composed of 5 of Slovenia's top researchers (the best in the world), who provide fully autonomous substantive direction for the majority of state-funded R&D activities. The State shall strictly (without "tinkering") focus on the creation of strong multi and interdisciplinary (including creativity, art, design and other non-technological solutions) R&D cores (researchers and technologies), including by merging institutes (e.g. IJS, CI) with universities (UL) in scientific research work. Applied research with business (partly funded by the state, partly by business) should become a key activity of the institutes. After the reorganisation, the institutes should become a central centre of applied knowledge for business - development and innovation hubs and partnerships, with the support and cooperation of universities.
2. The State stimulates the transfer of innovation to the economy through science funding models and the adoption of legal and implementation frameworks:
    - Establishing a national knowledge transfer agency to fund "proof of concept" developments and patents;
    - The instruments also encourage participation in international innovation and development hubs (fostering integration into international supply chains);
    - Establish a protocol on how to allow other research institutions, foreign partners and companies to use research infrastructure and better exploit the research potential of researchers, their international mobility, mobility between academia and business..
3. A major project to increase the productivity of the economy is supported:
    - As already mentioned, the creation of the technological and scientific city of the Medical Valley, with the completion of the BRDO Natural Science and Technology Campus, in conjunction with the Technology Park and the large companies that have bought premises there (RIKO, POMGRAD, MEDIS, GORENJE...) or have plans to build in this area (GEN-I and KOLEKTOR).
    - The project would invest exclusively in companies with high growth potential in identified promising high-tech areas (pharmaceuticals, biomedicine, space science, materials science for the development of alternative energy storage and generation (hydrogen, batteries), artificial intelligence, etc.).
    - Based on research where Slovenia is world-leading, e.g. biomedical research in cell biology, pharmaceutics, medicine, translational medicine (development from basic research to therapies), nuclear science, chemistry, it is planned to create new large producers of prosthetics, robotics in medicine, tests for COVID and other genetic tests, the SEE Regional Centre for Proton Irradiation of Cancer Tumours, etc. Such a project is expected to trigger the emergence of a chain of new high-tech companies based on competitive indigenous know-how.

2.3.3.6 Public administration efficiency and administrative barriers

- According to managers in Slovenia:
  - the parallel economy has a much more negative impact on economic development than in Austria or Germany;
  - bribery and corruption are significantly more widespread;
  - business development is more hampered by bureaucracy;
  - local self-government supports rather than hinders business development, but the positive effect is on average higher in Austria and Germany;
  - regulation is a disincentive for business in both Slovenia and Austria, but less so in Germany.
- The global cost of corruption is estimated at $360 billion (WEF, 2018), or 5% of global GDP (UN, 2018). Due to perceived (not necessarily actual) corruption in Slovenia:
  - The cost of capital is up to 3 percentage points higher than it would otherwise be,
  - 3 percentage points higher cost of capital for a volume of equity of EUR 45 billion (AJPES) corresponds to EUR 1.35 billion. The hidden cost of perceived corruption per year is EUR 1.35 billion,
  - Just approaching Austria with a 1.56 percentage point lower risk premium would result in annual savings for the economy of €700 million.

Table 14: Comparison of critical factors of public administration efficiency and administrative barriers

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia – Austria
GENERAL ECONOMY (0-10) 0 = negatively affects economic development, 10 = does not negatively affect economic development (2018)	4.94	-1.8	-1.78
CORRUPTION AND CORRUPTION (0-10) 0 = exists, 10 = does not exist (2018)	3.86	-3.83	-3.62
LOCAL SELF-GOVERNMENT (0-10) 0 = not supportive of business development, 10 = supportive of business development (2018)	6.51	-1.19	-1.49
PUBLIC SECTOR EMPLOYEES (% of total employment, 2016)	24.54	10.38	6.54
BUREAUCRACY (0-10) 0 = inhibits business development, 10 = does not inhibit business development (2018)	2.42	-1.17	-0.39
PUBLIC PROCUREMENT (0-10) 0 = not sufficiently accessible to foreign suppliers, 10 = sufficiently accessible to foreign suppliers (2018)	5.08	-2.47	-2.46
BUSINESS DEVELOPMENT (0-10) 0 = regulation hinders business development, 10 = regulation supports business development (2018)	4.22	-1.11	-0.07

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 14: Public administration efficiency

Goal: *reducing the cost of administrative burdens, reducing the number of rules and increasing the quality of public administration services.*

Guidelines and actions:

1. Set measurable targets for reducing administrative burdens on a year-by-year basis, in particular:
    - Introduce or develop a methodology for measuring the cost of administrative burdens (e.g. based on the Dutch SCM - standard cost method);
    - Introduce a mandatory assessment of the administrative costs of each new regulation and prohibit the adoption of a regulation unless another regulation or an amendment to a regulation is adopted which reduces administrative costs at least to the extent estimated or unless another regulation is abolished;
    - Adopt an annual plan on how and by how much these costs and the volume of regulations will be reduced;
    - Procedural reform to ensure that the silence of the authority implies acceptance of the proposed solution and prohibits the abuse of procedural possibilities to prolong the official decision.
2. Increase the efficiency of the administrative authorities:
    - o Changing the public sector pay system by linking 50% of the performance bonus to customer satisfaction (satisfaction surveys) and lifelong learning;
    - o Achieving a change of mindset in the public sector, e.g. in licensing procedures, not to look for reasons in the regulations to stop the process as soon as possible, but to find a positive solution within the same regulations (the public sector should provide services to citizens);
    - o Strengthen controls on corruption (according to Transparency International, 2019), we are still ranked 35th, Austria 12th and Germany 9th, which reduces trust in business cooperation with Slovenian companies.
3. To establish single points of contact (upgrading of the one-stop shop) for business information, e-procedures, e-reporting, which will help to reduce the number of data sent by businesses to state authorities, while ensuring one-stop access to, use and exchange of data. Digital upgrading of one-stop-shop services and strengthening of ICT applications for e-government, e-learning, e-inclusion, e-culture and e-health, following the eSpace model.

2.3.4 INVESTING IN SOFT FACTORS OF PRODUCTIVITY AT FIRM LEVEL

Continuous updating of staff skills and competences, the development and use of new technologies and effective corporate governance are the areas where, according to our analysis, the greatest reductions in the productivity gap can be achieved through action at enterprise level.

2.3.4.1 Employees' education and training

- According to managers in Slovenia
  - Staff productivity is not competitive by international standards;
  - International experience is worse than in Germany or Austria;
  - The business environment in Slovenia is less attractive for foreign professionals than in Austria or Germany, and the recruitment of foreigners is more hampered by legislation;
  - Brain drain hinders the competitiveness of the economy to a greater extent;
  - Talent recruitment and retention is a priority for fewer companies than in Austria or Germany;
  - National culture is less favourable to foreign ideas than in Austria or Germany.
- The data show that the differences in remuneration are significantly lower than in Austria or Germany.
- Data on training and education show that significantly fewer people over 24 are in education and training in Slovenia than in Austria. The situation is particularly acute for less educated staff.
- In 2005, almost 12% of employees reported that they had received training or education within the company or organisation where they are employed, while in 2017 only 10% reported that they had received training or education within the company or organisation where they are employed.
- The proportion of managers who have received training or education in the last four weeks in Slovenia is only 20%.

Table 15: Comparison of critical factors for employee education and training

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia – Austria
INTERNATIONAL EXPERIENCE (0-10) 0 = weak 10 = important (2018)	5.25	-1.16	-1.06
EMPLOYEE PRODUCTIVITY (0-10) 0 = not competitive by international standards, 10 = competitive by international standards (2018)	5.86	-2.26	-2.02
FOREIGN PROFESSIONALS (0-10) 0 = not attracted by the business environment, 10 = attracted by the business environment (2018)	3.27	-3.05	-2.77
IMMIGRATION LEGISLATION (0-10) 0 = prevents companies from hiring foreigners, 10 = does not prevent companies from hiring foreigners 2018	5.12	-1.13	-0.01
BRAIN DRAIN (0-10) 0 = hinders the competitiveness of the economy, 10 = does not hinder the competitiveness of the economy (2018)	3.65	-2.92	-2
TALENT USE AND RETENTION (0-10) 0 = not a priority for business, 10 = a priority for business (2018)	6.2	-1.45	-1.72
GAP IN COMPENSATION Ratio between CEO salary and personal assistant salary (2015)	8.41	-7.77	-3.6
NATIONAL CULTURE (0-10) 0 = closed to foreign ideas, 10 = open to foreign ideas (2018)	5.57	-0.99	-0.72
Percentage of the population with low educational attainment who received education or training in the last 4 weeks (2019)	2.3	3.4	1.8
Percentage of population with secondary education who received education or training in the last 4 weeks (2019)	7.7	3.1	-0.7

Share of employees with tertiary education who received education or training in the last 4 weeks (2019)	20	4.5	-7.6
Percentage of employees in managerial positions who received education or training in the last 4 weeks (2019)	19.2	0.2	-10.3

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 15: Human resources development in enterprises

Goal: *strengthen the scope and quality of lifelong education and training, the development of employee talent, and substantially increase investment in specific skills directly relevant to the workplace, while also raising awareness among all stakeholders of the need for continuing vocational and general education.*

Guidelines and actions:

1. A commitment by employers to invest in education and training at a pre-determined value (earmarked funds) and a commitment to create a system of incentives for employees to undertake such training, based both on the impact on wage levels and on the possibility of obtaining a higher level of formal education.
2. The provision of these programmes exploits potential synergies in terms of cost and quality, for example by bringing together different enterprises and institutions, institutions and the public sector in an interdisciplinary way in lifelong learning, such as:
    - Danfoss-Talent Coud business-to-business experience exchange,
    - public sector-business exchange of practice with the Amcham Partnership for Change,
    - lifelong learning through part-funded public training programmes (mentoring, etc.).

    The content of improved lifelong learning and training programmes is developed on the basis of systematic involvement of business, chambers (development of competences, flexibility of knowledge, skills, etc.) with the help of competence centres that would design education and training systems tailored to the company and the worker. This would also make use of active employment policies, waiting time or part-time work, with a requirement to participate in relevant training programmes. Recognition of new skills and competences acquired as a result of such in-house academies shall be carried out in accordance with the procedures laid down by the ECTS system, thus allowing for the possible recognition of part of the formal levels of education.
3. Management associations commit themselves to all working towards a significant improvement in the quality of management through continuous training and education (informal and formal). An example of the informal part of the training of top managers is the "Competence Day", where employees in key positions in the company can devote two days a month to upgrading their knowledge as they choose (acquiring systems thinking through participation in webinars, on-line learning of new content, independent research into content related or unrelated to their work, etc.). In addition to the system of encouraging employee training, managers will thus also, by example, establish and develop a culture of continuous learning, which must become one of the main values in the operation of companies.

2.3.4.2 Development of new technologies

Key findings relating to the development of new environmentally friendly technologies (all data in table below):

- Slovenia's energy intensity is significantly higher than the energy consumption per USD 1,000 in MTOE in Austria and Germany, and its CO2 emissions per USD 1 million of GDP are significantly higher.
- Exposure to particulate pollution is slightly higher in Slovenia than in Austria or Germany.
- In Slovenia, the invention of environmentally friendly technologies among all technologies has been increasing in the post-2008 period, reaching 9.7% in 2016, which is similar to Austria and Germany and comparable to the EU28 and OECD.
- In Slovenia, the per capita invention of environmentally friendly technologies increased until 2013, but is now declining and amounted to 7.71 units of invention per capita in 2016, which is significantly lower than the EU average (17 units per capita) and OECD countries (21 units per capita). In Germany, the number of green technology inventions is almost 42 units per capita, compared to 30 in Austria.
- The share of environmentally friendly technology among all patents worldwide in Slovenia has fallen drastically since 2013. Interestingly, 85% of all these patents come from OECD countries - a decline that is also noticeable (the China effect).
- According to managers in Slovenia:
    - Sustainable development is a priority for a smaller share of companies than in Austria or Germany;
    - Pollution problems affect the economy to a greater extent than in Germany or Austria.

Table 16: Comparison of critical factors for the development of new environmental technologies

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
EXPOSURE TO PARTICULATE MATTER POLLUTION Average population exposure to PM2.5, Micrograms per m3 (2015)	17.11	2.85	1.41
ENERGY INTENSITY Total energy consumption for every US$ million of GDP in MTOE	111	46	40
EMISSIONS INTENSITY CO2 emissions based on internal combustion in m3 per million US$ GDP (2015)	298	81.8	135.4
Renewable energy (%) Share of renewable energy in total energy consumed, % (2015)	16.1	3.6	-13.3
SUSTAINABLE DEVELOPMENT (0-10) 0 = not a business priority, 10 = is a business priority (2018)	5.82	-1.63	-2.16
POLLUTION PROBLEMS (0-10) 0 = serious threat to the economy, 10 = not a serious threat to the economy (2018)	6.59	-0.6	-2.05
ENVIRONMENTAL TECHNOLOGIES Development of environmental technologies as % of global inventions (2014)	0.04	-12.58	-0.9

Source: Summarised from World Competitiveness Report, IMD (2019) and Eurostat (2020).

Actions and guidelines 16: Developing new technologies

Goal: *Increase investment in the development of new technologies and the creation of breakthrough networks bringing together business, research, science and innovative start-ups.*

Guidelines and actions:

1. Increasing investment both in tangible capital, e.g. digitalisation, new innovative technologies, green technologies, and, due to the complementarity effect that leads to higher rates of return on these investments, also in appropriate forms of intangible capital. Such investments also enable new products and services to be brought to the market more quickly, which in turn requires a more intensive introduction of agile management methods in companies. Management can only use these if the measures described in the section on »KEY PUBLIC INFRASTRUCTURE«
2. Creating innovation-propulsive breakthrough networks that connect companies with research, science and innovative start-ups. Develop additional domestic standards and participate in the development of international standards and classifications in the field of sustainable business, which require an increase in the required awareness and activity of companies. Companies commit themselves to comply with these standards and to obtain domestic and international sustainable business certifications.

2.3.4.3 Business governance

- According to managers in Slovenia (all data in the table below):
  - SMEs are less efficient by international standards than in Austria or Germany;
  - Maintenance and development are less adequately planned and financed than in Austria or Germany;
  - Corporate social responsibility in Slovenia is worse than in Austria or Germany, and corporate values are less inclusive of employee-related values;
  - Employee motivation is significantly lower in Slovenia than in Austria or Germany;
  - Companies' indebtedness is a greater barrier to competition than in Austria or Germany;
  - Accounting practices are less effectively implemented in business than in Austria or Germany, as are ethical principles.

Table 17: Comparison of critical business governance factors

Critical factors (managers' perception / data)	Slovenia	Difference Slovenia - Germany	Difference Slovenia - Austria
SMALL AND MEDIUM-SIZED ENTERPRISES (0-10) 0 = not efficient by international standards, 10 = efficient by international standards (2018)	7.16	-1.27	-1.11
MAINTENANCE AND DEVELOPMENT (0-10) 0 = not adequately planned and funded, 10 = adequately planned and funded (2018)	5.78	-1.06	-2.26
SOCIAL RESPONSIBILITY (0-10) 0 = low, 10 = high (2018)	5.82	-0.37	-1.58
CORPORATE VALUES (0-10) 0 = does not take into account employee values, 10 = takes into account employee values (2018)	5.94	-1.24	-2
EMPLOYEE MOTIVATION 0-10) 0 = low, 10 = high (2018)	5.31	-1.9	-2.22
COMPANY DEBT (0-10) 0 = limits the ability of companies to compete, 10 = does not limit the ability of companies to compete (2018)	5.11	-2.19	-2.06
ACCOUNTING PRACTICES (0-10) 0 = not effectively implemented in business, 10 = effectively implemented in business (2018)	6.57	-1.37	-1.99
ETHICAL PRACTICES (0-10) 0 = not effectively implemented in business, 10 = effectively implemented in business (2018)	5.88	-1.9	-2.06

Source: Summarised from World Competitiveness Report, IMD (2019).

Actions and guidelines 17: Business governance

Goal: *a new contract to raise productivity ('social contract' at company level) between all stakeholders in companies, with clear commitments to higher levels of investment by owners, proactive action by trade unions, upgrading the way companies are run and involving all stakeholders in decision-making.*

Guidelines and actions:

1. Put value creation at the heart of corporate practices and management processes:
    - Develop business models that improve the position of companies in value chains.
    - Encourage employee co-management, either through co-ownership or participation in management bodies, including in smaller companies (example of Dewesoft).
    - Raise governance standards with emphasis on ethics, compliance, integrity, social responsibility. Best practices are recognised and rewarded within professional organisations..
2. 2. The introduction of "sustainable management" or "enlightened" management, as defined by the Manager's Association, as a new paradigm in management (broader view: society, environment, economic aspects and ways of working).
3. Increasing diversity in companies (increasing the proportion of women and foreigners in management positions by 10 percentage points). Corporate practices and management processes will be adapted in line with the ageing of the population and, in this context, the lengthening of working lives.

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