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The Coronavirus Crisis, Sustainable Development and the Incentive State Model

SUMMARY: To combat the coronavirus crisis and to deal with the challenges of sustainable development state should be more active and more efficient than before. This study presents the "philosophy", directions, and first results of research aiming to define the new role of the state. By examining the effects of the positive and negative synergies of financial and ethical incentives on market participants, we may contribute to define new objectives and to implement them efficiently. Based on this approach and the related impact analysis, it can be stated that Hungary's crisis management proved to be the most effective in June 2020 and the third most effective in October in the European Union. Another avenue of our research is to implement a complex, four-dimensional model supplemented by financial sustainability for analysing development, with a special focus on environmental sustainability and competitiveness. In this model, especially in its dynamic version, economic development is determined by the global megatrends and the Hungarian policies supporting the fulfilment of UN Sustainable Development Goals.¹

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The exploration of the harmony among economic operators and the prevailing synergies during both economic upswings (permanent cyclic boom) and in economic crisis situations (recession) may contribute to responding to those national economy and social challenges which appear in the branches of the economic policy. The period between March and September 2020 showed that the coronavirus epidemic and the crisis resulting from it can be managed effectively and sustainably exclusively through maintaining

E-mail address: bagerg@gmail.com parraghb@mnb.hu these synergies while ensuring targeted and responsible state participation. We emphasise that the nature of the 2020 coronavirus crisis is completely different and unprecedented compared to the 2008-2009 economic and financial crisis, which appears in a wide spectrum of economic and social functions. The states manage this difficult and neverbefore-seen situation in their own ways and in accordance with their respective constitutional culture. Special situations require special legal solution in order to protect public order and in the interest of the public good (Koltay, 2020).

It follows from the above that it is crucial to protect and strengthen the synergic cooperation between the state and the market, and between the state and the society as a whole, which was realised as a part of the Hungarian model established from 2010. A new type of state model emerged in the dimension of the cooperation and harmonious functioning of the state and the market, which can be considered a transformation of economic history relevance (Parragh, 2019). The incentive state model created the harmony between the state and the market (*see Figure 1*).

Although several risks appeared from the world economy in 2019, the current epidemic could not be expected. In 2020, economic policy is facing significant challenges in multiple front again, which are the following: The management of the Covid-19 crisis and the economic crisis resulting from it; transition to sustainable economy: environmental and social sustainability; management of increasing indebtedness (Matolcsy, 2020a).

In our opinion, the management of the 2020 coronavirus crisis is a test of the Hungarian model, i.e. the active and incentive state under the new economic and social circumstances (Fundamental Law, legal instrument and economic instrument background, etc.). We have to solve the task of adaptation to the emerging megatrends of our era so that after the recovery from the coronavirus, setting the Hungarian economy on a course of development which is sustainable in the long term can be realised as dynamically as possible² (see Figure 2).

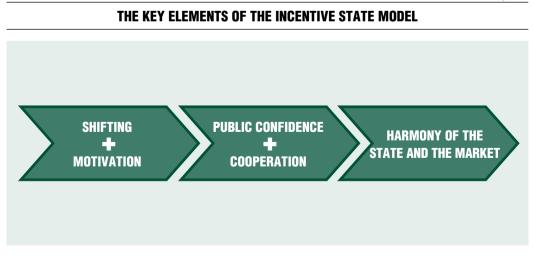
RESEARCH APPROACH AND METHODOLOGY

A general methodology framework of synergy research

An important characteristic of the general aspect followed in course of our research is dichotomy:

- in addition to the descriptive-analytical evaluation of the economic and social levels and structures, as well as the exploration of the conditions emerged
- another fundamental orientation is the presentation of the function and

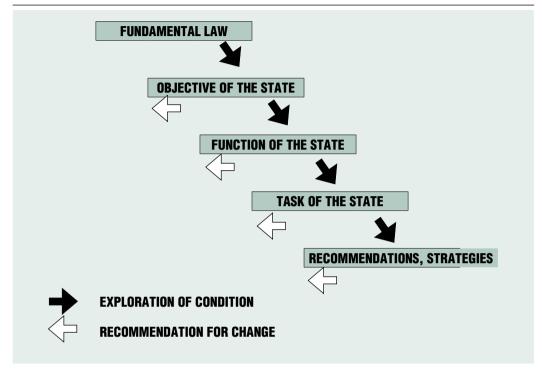
Figure 1



Source: Based on Parragh et al. (2020)

Figure 2

RELATIONSHIP BETWEEN THE EXPLORATION OF THE CONDITION AND THE RECOMMENDATION FOR CHANGE IN THE RESEARCH



Source: Based on Varga (2020), own edited, 2020

impacts, the directions and the room for manoeuvring of changes, as well as the related recommendations for state measures.

This dichotomy can be described well through the formula of the steps and stairs model, which is considered as the metaphor of *Hans Kelsen.*³ In our research the first orientation is constituted by the exploration of the economic and social conditions, while the other orientation is constituted by the recommendations made for the change of functioning and impact.

In case of the main categories of the research - except for the Fundamental Law - the exploration of condition and the recommendation for change can be interpreted simultaneously. Our interdisciplinary approach pays special attention to social correlations, conditions and impact in case of the specific categories (Polányi, 2004).

Objective of the state

The activity and tasks of the state are historic concepts which have been debated by both philosophers and practical professionals. The scopes of interpretation of the concepts range from the narrowest to the widest, to the totalitarian state. After the Fundamental Law, the interpretation of the purpose of the state as starting point ranges from the ideal, fair state (Plato, Aristotle), through the medieval *bonum commune*, the public good, and the invisible hand realising justice and public good (Adam Smith), to the Pareto optimality - which realises a welfare optimum despite the imperfections of the market - and Rawls' justice and social welfare.

In light of this, it is surprising that in the opinion of neoliberal theories, state and economic activities should be separated, and the state activity should be designated only to help sustaining the working ability of the people (education, health). In contrast to this liberal concept which prioritises the distribution of goods aspect, the International Covenant on Civil and Political Rights of the UN implies that humans are more complex, value-enforcing and the feeling beings than that, who are able to make comprehensive deliberations.

Considering all of the above, the conclusion follows that the first general purpose of the state is protection, while the second is ensuring social welfare. The objective need which the state intends to reach in the interest of continuous survival and development is expressed in these purposes of the state. This objective need appears in a subjective form, since these purposes are the institutionalised totality of the persons acting on behalf of the state, both in terms of ethics and politics. Naturally, the emergence of this comes with conflicts, for instance, in the form of recurrent differences between the ideas for objectives of the central government and the municipalities.

Protection

The first and oldest purpose of the state community is protection, which provides safety against external enemies and internal hostility, differences, as well as against natural disasters. For instances, the Article 2 of the Swiss federal constitution specified the protection task of the state as follows: *'The purpose of the confederation is to ensure the independence of the homeland against external forces, maintain internal peace and order, protect the freedom and rights of the allies and to promote the common welfare thereof.*' With respect to EXTERNAL PROTECTION - i contrast to the acquisition of territory of previous eras - the purpose of today's modern states is to preserve their sovereignty. This has to be like this not the least because the Charter of the UN allows the use of weapons of war only in the interest of protection and it prohibits military aggression.

The purposes of foreign policy have changed. Instead of the preservation of independence as before, the focuses of foreign policy activities are peace and solidarity, international cooperation, and in particular the cooperation being developed in the field of economy and space research.

The task of INTERNAL PROTECTION is to avert the dangers threatening the citizens. Instead of the justices of the peace of earlier times, today this task is fulfilled by the decentralised police organisation. In countries where it is justified, a police force responsible for law enforcement - such as the Federal Bureau of Investigation (the FBI) in the USA - or the Anti-Terrorism Police.

Ensuring social welfare

We list the areas of the welfare purposes of the modern state based on the summary of *Thomas Fleiner-Gerster* (1980). These are the following:

- the measures taken in order to ensure human life (the protection and support of families, the protection of the natural environment, avoiding the impossibility that accompanies unemployment, broadening social care and caring for the poor),
- ensuring the opportunity for evolving (fulfilling educational tasks, supporting further education, adult education, protection of the personality related to the evolution of individuals, facilitating the creative abilities of people), and
- tasks arising from coexistence (wellfounded, efficiently functioning justice

system, peaceful coexistence, the parties trust in each other, ensuring the conditions of good cooperation, creation and development of the infrastructure necessary for coexistence, promotion of the establishment of a healthy market and marketable enterprises).

The uniting category of these welfare areas in the public good, which the state is obliged to serve. It follows from these areas that public good goes beyond material goods and it extends to moral goods, moreover, it means the evolution of a living organism in which a happy human community can be realised with the help of human solidarity.

In the broader (philosophical) sense, public good is the human good aimed at justice, which serves justice and it shall be directed back to persons (Maritain, Jacques, 1998).⁴ In this case, the requirement according to which the purpose of the community should coincide with the purpose of the individual (Thomas Aquinas) becomes possible. If all these are realised, then it can be considered as good governance.

Public good contains three significant elements:

- respect for and promotion of the fundamental rights of human individuals,
- welfare, that is the growth of the intellectual and material goods of the society, and
- the peace and safety of the society and its members.

Once knowing the concept approach of public good, one can ask the questions: what or which authority is able to facilitate obtaining the public good? It is obvious that the role of two systems of institutions is crucial: that of the market and the state sector, and the harmony of their cooperation or the lack thereof. In connection with this, the general purpose of the state is to make efforts to resolve the unresolved tensions which hinder the emergence of the public good, while relying on the achievements of economic sciences, in particular that of welfare economics. One of these tensions is between market functioning and the opportunity of self-actualisation of people, the reason for which is that some persons belong to the club of the market, while others belong to the club of citizens, and therefore they have unequal financial situations, despite their equal rights. Another particularly important unresolved tension occurs between efficiency and fairness (justice), since the market ensures efficiency, however, promoting justice is a task of the state.

Several schools of economics (for example the school applying the early neoclassical approach or the new welfare economics approach) developed countless theories and measurement methods (Pareto optimality, Kaldor–Hicks efficiency, Benthamite welfare function, etc.), however, these were unable to provide decision-makers with steady guidance, with the help of which a higher level of the public good could be reached.

Public good, as the principle of harmonious realisation of individual and social interests can be interpreted from multiple facets, from the point of view of history of theory perspective. One of the main directions is individualism, while another is collectivism. Several attempts were made to resolve the differences in the approaches of individualism and collectivism. For example the representatives of the socalled neoliberalism (W. Eucken, F. Hayek, W. Röpke, etc.) recognised the dangers that come with establishing monopolies, and they wanted to strengthen the rule of law in order to protect free competition.

Partially theoretic, but mostly practical opportunity to synthetize the restrictive limitations arising from individual freedom and the social being nature of the individual has so far been provided best by the social market economy model.⁵ In this model there is opportunity to avoid market failures, to realise socially acceptable distribution of income, and for the members of the society to acquire property. The economic operators' willingness and endeavour to cooperate - i.e. solidarity - are parts of the model.

Initial framework of conditions for the practical implementation of public good through state participation is provided by the fundamental laws (primarily the Constitution), international conventions, as well as by those internal and external capabilities, circumstances which delimit the room for manoeuvring of development.

Although the role of state legislation is important, public good should go beyond the legal frameworks as well, and the law is solely a mean to facilitate certain ends, but it is not the only mean. According to 2nd century jurist *Juventius Celsus, 'Law is the art of the good and the equitable*.⁶ This principle is followed by *Endre Nizslovszky* (1931), according to whom '*law is the minimum of moral*'.

The Fundamental Law of Hungary which has been in force as of 1st January 2012 - mentions the concept of public interest in as many as 6 instances. We highlight the following reference from these instances: According to Article 38 (1) of the Fundamental Law, "the property of the State and of local governments shall be national assets. The management and protection of national assets shall aim at serving the public interest, meeting common needs and preserving natural resources, as well as at taking into account the needs of future generations. The requirements for preserving and protecting national assets and for the responsible management of national assets shall be laid down in a cardinal Act."

Based on these provisions, the Fundamental Law - with reference to public interest already contains state commitments related to increasing the level of standard of public good, since the state should serve the public good, i.e. it should generate goods which stand above the specific groups of any given nation. Public good is realised in the interest of the individual, the community and the entrepreneurs. In addition to the goals, the manner should be an important aspect as well, from the perspective of the state and the administration. What is most important in this respect is that the operation should be efficient and also competitive, which should appear in the system of the legal regulation.

Function of the state

The interests expressed in the purpose of the state are actually expressed and realised in the functions of the state, the main lines and areas of state activity. In this case the emphasis is on reality, the specific environment and not on the requirements, on the manifestations of 'have t', as it was shown in case of the purpose of the state. Consequently, those (statistical, audit, public opinion poll, etc.) data which provide information about the operation of the state functions and the social impacts thereof are especially important. This 'feedback' enables the state leadership to develop decision-making proposals designated to serve the economic and social changes. Thus it is important for categories displaying state functions to have relevant contents, and functions shall be considered as groups of activities which enable objective and relatively permanent assessment with regard to the social processes and relationships influenced.

With regard to the significance of the classification of the state functions it can be established that it proves to be useful help in the determination of the justified limits of the state activities (groups of activities).

The purpose of the research is to examine the synergy the state, the corporate sector and the society, and to examine especially the competitiveness of the country, as well as to provide reasons for making an attempt to evaluate the fulfilment of the state function groups in Hungary, with the aim of determining of those state function groups at the effect of which competitiveness could improve the best.

For the purpose of the expert evaluation we modified the Hungarian expert classifications so that we took into account the effect globalisation has on the functions, as well as the research carried out by the World Bank (1997) and *Francis Fukuyama* (2015), and the classification proposals of *Báger* (2006), as a result of which we specified 14 different groups of state functions. These are included in *Figure 3*, in a unique classification, such as minimal functions, intermediate functions and activating functions.

Having reviewed the functions, the question that occurs is how each function is fulfilled. The degree of fulfilment depends largely on the legal and institutional frameworks, since the scope the provision of public task is determined by the laws and is fulfilled

AINIMAL I		
1	Protection, law and order	
2	Security and protection of property rights	
3	Macroeconomic management	
4	Provision of public healthcare	
5	Social cohesion (improving the situation of the poor)	
6	Strengthening international (global) cooperation	
TERMED	IATE FUNCTIONS Enforcement of externalities in education and training	
	1	
8	Enforcement of externalities in environmental protection	
8	Enforcement of externalities in environmental protection Ensuring the appropriate quality of education	
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9 10 11 Tivatino	Ensuring the appropriate quality of education Regulation of competition and monopolies Pension fund, family aid, unemployment care	

GROUPS OF STATE FUNCTIONS

Note: Externalities occur if an economic activity or intervention affects a third party who does not participate directly in the activity, but the effect thereof cause advantage or disadvantage to others. Such as environmental pollution, when the smoke or other pollution of a company causes cleaning expenses for the population of a settlement.

Source: Based on Báger (2006), own edited, 2020

Figure 3

by the institutions. Legal frameworks have another role of exceptional importance, i.e. the environment they create for the business sector and the activity of the population.

The Delphi method was applied based on the consideration listed above, so that the based on the answers given to the questions related to the dimensions presented and the specific functions,

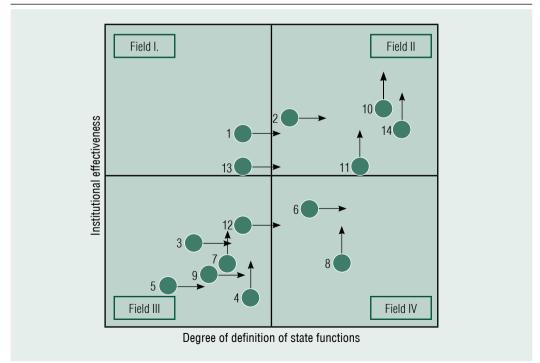
- the effectiveness of the public task fulfilment by government institutions can be determined, and
- the level of standard of the legal definition of the state functions can be determined.

This method was used for the first time in 2010. The group of experts who answered the questions raised was comprised of the employees of the State Audit Office and Research Institute, 7 ministries, 3 research institutes and 4 universities.

Based on the answers given to the expert questions we established two main result criteria: 1. the effectiveness of fulfilling the function or public task and 2. the legal definition of the function, based on which we evaluated the groups of state function. Basis for the first was provided by the answers given to comprehensive operational results and governmental management performances, while for the second basis was provided by answers given in connection with law-making and the application of law.

We show the result of the analysis in *Figure 4*, in which we present the groups of state functions (Table 1) in the dimension resulting from the two result criteria,

Figure 4



STATE FUNCTIONS AND THE EFFECTIVENESS THEREOF

Source: Based on Báger, Kovács (2010)

divided into four fields. Basis of one of the dimensions - the rectangle - represents the degree of definition, clarification of the state functions, the level of establishment of the institutional and legal background, while the other dimension - the perpendicular side represents the implementation ability of the state institutions which fulfil the functions, and the effectiveness of the fulfilment of the functions. The axes separating the four fields indicate that the dimensions concerned are compliant based on the given criterion for effectiveness. The four parts of the field delimited by the axes shows that the degree of definition of functions is better or less clear, as well as whether the functions are fulfilled by the institutions efficiently or less efficiently. Based on this it is evident that field II contains the functions which are fulfilled the best in terms both aspects, the rate of which is determined by how close they are to the upper right peak. Field III is the reverse of all of the above.

On the level of the groups of state functions we mark the direction of the changes deemed necessary with vectors (points and arrows attached to them), more precisely, the change priority related to the condition evaluated by the experts. Naturally, this does not mean that we refer to solely one-way development, we merely illustrate the aspect of ranking order, importance with this, i.e. that we give priority to the improvement of the degree of definition (horizontal arrow) or - as the case may be - to increasing the effectiveness of implementation (vertical arrow).

As it can be seen in Figure 4, as for our topic is concerned, the function of strengthening competitiveness (marked by number 12) can be found in Field III, where the degree of both results criteria is low. With respect to institutional effectiveness, the answers explained this primarily by the uncertainty of the sustainability of macroeconomic and financial indicators (government deficit, debt repayment), as well as by the insufficiency of development funds (including the magnitude of R+D spending). From this aspect it can be considered as an important reason that the management activity characteristic for the elaboration of the goals and programmes designated to improve competitiveness is poor.

If we look at the results of the examination from the side of the types of state functions - minimal, intermediate and activating functions - then we can see that the most important activating function, i.e. strengthening the competitiveness, belongs to the least favourable Field III (macroeconomic management, provision of public healthcare and social cohesion), as well as the two intermediate functions (enforcement of externalities in education, training, and ensuring the appropriate quality of education).

What we wanted to point out by recalling this earlier survey of state functions for methodological purposes is that it would be advisable to carry out the same or a similar survey again, in order to carry out a comparative analysis, and to - based on the present - explore the progressive lines of measures.

Task of the state

The versatility of tasks

The fourth level of the examination of the state activity is the state task or the totality of state tasks. In this case the activity is interpreted in detail, in as much depth as - for example - the state budget funds the versatile activities of the state. The number of cases of this can be estimated between 3000 and 3500, in contrast to the 14 state functions (in our case). This level is considered by several experts as the level of specific policies, and consider the groups of activities made up of

state tasks as specific policies (for example rural development, environmental policy, government debt management policy). Through the analysis of these economic and social conditions the deeper, content and mutual correlations existing between the specific policies can be established, which are also essential for substantiating progressive decisions. From the practical point of view, using the category of state task is also important because at this point the content interpretation of the category is complemented by the public authority and institutional frameworks, the human resources necessary for the implementation, as well as the sources of financial aid for maintenance.

The state activity related to this fulfilment of tasks takes place through two channels:

- one the one hand, by fulfilling the regulatory and economic organisation tasks (market creation, shifting of incentives, support, authorisation), the state enables business enterprises to contribute effectively;
- on the other hand, through the public finances system the state ensures the realisation of the state and municipal tasks which are important for day-to-day life.

In connection with the functioning of these two sectors it is essential to enforce the requirement according to which - having recognised their interdependency - both sectors should contribute to the continuous satisfaction of social needs in the spirit of optimising the joint problem solution. Furthermore, it is also necessary that - as the third partner - the civil society sector participated in this creative process as an active operator.

Naturally, no research is able to evaluate the fulfilment of state tasks completely based on on one year or several years of budget. What we can establish as a realistic research goal is that we focus on the following from the state tasks:

- the tasks which are important but are not fulfilled sufficiently from the point of view of social efficiency (for example the topic of quality management of state-owned and municipality-owned companies);
- or the tasks which are designated to increase the competitiveness of the country;
- or the exploration of the new courses of development which are crucial for the future (for example the space industry).

In this respect the more detailed determination of the research priorities and creating the reasonable ratios thereof require further thorough considerations.

Analysis of the tasks in view of the incentive state model

In the research we analyse the realisation of the state tasks - within the scope selected - within the framework of approach of the cooperative incentive state model, in order to contribute to the achieving the goals of knowledge-based economy and sustainable development.

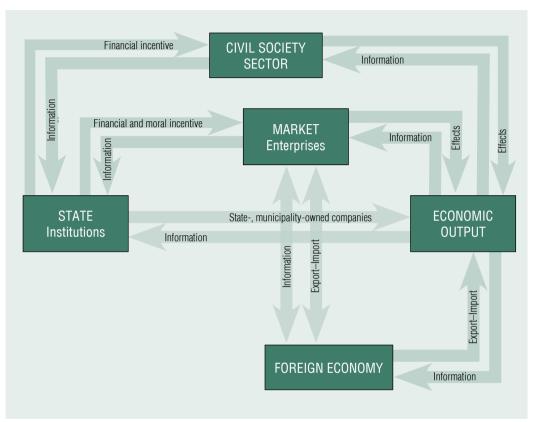
The main characteristics of the incentive model are the following:

The version of the market-driven economy which fulfils the functions of the state (see previous section), but which does not intervene in the corporate (microeconomic) processes and market coordination.

The state establishes the conditions necessary for the realisation of the functions and the tasks, and it achieves through incentives that the enterprises contribute to this and that the enterprises deviate from a goal possibly already set, provided that the state is met with the interests and agreement of the enterprises.

State incentive is realised through selective material (financial) systems which encourage abiding by the morals and the rules, by corporate observations, recommendations related to incentive are fed back to the state institutions *(see Figure 5).* These two

Figure 5



THE INTERPRETATION FRAMEWORK OF THE INCENTIVE STATE MODEL (DIRECTIONS OF EFFECT AND FEEDBACK)

Source: own edited, 2020

incentive systems complement each other, and the importance of moral incentives and community motivations should not be underestimated, considering that economic thinking is related to prioritising self-interests.

As it is shown in Figure 5, by displaying the needs of households and stating opinions about the fulfilment of state tasks, the civil society sector also has a significant role in the functioning of the incentive state. In addition, the production and service activities of the sector are also essential for the efficient altruistic/person-focused functioning of the economy. According to the narrower interpretation of the incentive model, the public service and the economic development courses are shaped directly by four factors: the material (financial) incentive, the moral incentive, the civil society sector, and the activity of stateowned and municipality-owed companies. These factors are closely related to each other and the entrepreneur sector, therefore - in the interest of better efficiency - coordination is required to create harmonious cooperation and balance. The four roles of the public administration which coordinates these tasks:

- it provides legal-institutional framework for the four factors and the entirety of the economy, as well as provides incentive through regulation;
- provides services (education, healthcare, construction and maintenance of the infrastructure) to the economic and social sectors;
- protects the interests of society groups in need, protects the natural environment;
- facilitates and encourages that the integrity approach and practice which support community efforts and prevent irregularities (for example corruption) are enforced and strengthened not only in the internal organisational functioning of institutions and enterprises but in their relationships between them as well.

Through the balance of harmonising factors and economic sectors it can be achieved that the synergy effects evolve to a high degree in both organisational and individual levels and that the synergies support the achievement of sustainable development goals. In connection with this it is also important to fulfil the requirement that our goals and public policies should be in line with the international efforts.

In connection with sustainable competitiveness we discuss the interpretation thereof which is relevant to our synergy research. The word 'synergy' is of Greek origin, it means cooperation: 'syn' as in together and 'ergos' as in working (Bakos, 1994). We note that synergy includes not only cooperation but the effects arising from it as well. The theoretical background of synergy is provided the management studies, and within that the related scientific literature on strategy. Accordingly, we interpret synergy as a concept accompanied by positive consequences, which supports some kind of effect or mitigates or eliminates negative consequences. The opposite of synergy is the antagonism or

anti-synergy which prevent value-creation, i.e. loss of value, the extent to which the level of the synergy realised is decreased compared to the synergy potential. The German scientific literature has a comprehensive theoretical background about dis-synergies (Reissner, 1992; Hirtzel Leder, Partner, 1993). The systems theory directed the attention to the system of relations of the elements of the system, the interaction prevailing among them, as well as their changes. Nevertheless, as far as our synergy research is concerned, the examination of the interactions are put in focus, since the emphasis is shifted to the cooperation of the actors (elements). The relationship between systems theory and company management is linked to the researches of Johnson, Kast and Rosenzweig (1969), where in connection with the targeted nature of the interactions it is understood as an ensemble of resources which is aimed at the fulfilment of tasks via interactions. According to the broader interpretation, value creation means is understood as the realisation of the potential synergy (Salter-Weinhold, 1979). In course of the analysis of synergy effects we also have to take the efficiency (Marosi, 1978), economies of scale and industry effects into consideration. Michael Porter (1980) analysed the connections between the industry factors and the effects of competition, in which analysis the main question was the reasons for the differences in the effectiveness of business units, therefore the industry or portfolio synergy effects. One-time synergies mean the advantages related to growth (economics of expansion), as a result of the effects of which the market position of a company is strengthened. This occurs as a one-time effect, since it is built in the output of the company immediately. The dynamic, change-focused synergy approaches deem coevolution as the most valuable form of synergies (Eisenhardt-Galunic, 2000), while according to the research

of *Child and Faulkner* (1988), one of the most important factor is the trust between partners. The researches of *Németh* (2020) point out the favourable consequences and the cooperative cooperation of trust, social and moral capital through the example of the vole dilemma. The realisation of this requires on the one hand the successful incentive of cooperation based on the rational interest of all parties, and on the other hand, the resolution of the inadequacies of those socio- psychological factors which make cooperation difficult, with that neither can lack the various forms of trust.

We consider it reasonable to analyse and identify the synergy effects especially in the field of research and development and innovation (R+D+I), which are closely related to the competitiveness and sustainability topic.

THE MAIN LINES OF THE RESEARCH

The mode of action of the coronavirus crisis and the conditions of recovery

The wide range of the examination of the mode of action of COVID-19 by analysts which has been started include the modelling of the developments of case numbers, microeconomic surveys, the analysis of long series of past data and the evaluation of sets of macroeconomic indicators (Brodeur-Islam-Gray-Bhuiyan, 2020).

We summarise the potential economic and financial effects of the crisis in two approaches, through the use of macroeconomic indicators from this rich collection of the approaches used. One focuses on economic real processes (Carlsson, Szlezak et al. 2020), while the other focuses on financial processes (Baldwin, 2020). The two different but still cohesive and complementary approaches are illustrated by *Table 1.*

With respect to demand and concerning the real processes, one of the largest effect is the decrease in aggregated demand. Within that the magnitude and the structure of the demand of households for goods and services is decreasing significantly - after the initial panic-like food purchases - and the income and employment situations are changing as well, as a result of the feeling of uncertainty about the future. The household and corporate demand for investment in noticeably decreasing as well.

On the side of the financial processes, the income available to households is decreasing,

Table 1

Mechanisms	Transmission channels				
	Demand (direct)	Financial markets (indirect)	Supply (direct)	Income effects (indirect)	
Real processes	Aggregated demand, savings	Financial markets, shocks	Supply output, economic growth	Employment, salaries	
Financial processes	Household income, savings	Import and export developments	Domestic and international supplies	Salaries, productivity	

THE POTENTIAL ECONOMIC AND FINANCIAL EFFECTS OF THE CRISIS

Source: own edited, 2020

which results in the decrease of consumption and savings. In connection with this it appears as a priority task that the crisis - mainly due to the loss or reduction of employment opportunities - affects lower-income households more compared to the average.

The second transmission channel of the crisis - in the case of real processes - mediates the impact of financial markets on the developments of the real economy. This effect is mainly reflected in the development of the financial wealth and the level of savings of households. However, also in the form of money market movements such as declining stock prices and yields on long-term government securities, for which ample examples are provided by the US, the Eurozone, China and South Korea following the outbreak of the coronavirus. These money market indicators are also important indicators of the volatility of global liquidity. In order to mitigate the adverse effects on money markets, governments and central banks are implementing large-scale crisis and asset purchase programs that increase the role and proportion of public participation to a similar extent as in the First and Second World Wars. According to the IMF, this year, rich countries will finance their 4.2 trillion USD in spending and tax breaks to run the economy with a loan equivalent to 17 percent of their combined GDP. This influx of money poses a great risk to the future and, in the long run it determines the cooperation between the state and the business sector in debt management.

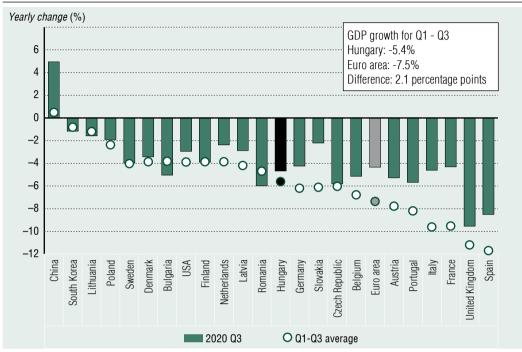
With regard to financial processes, the role of the second transmission channel is taken into consideration only narrowly, and the impact of lower household incomes on imports is mostly taken into account. This effect is accompanied by a reduction in demand for imports, which in turn results in a decline in global exports through declining incomes in the rest of the world. This global impact mechanism adversely affects primarily the open and small economies.

In terms of supply, the third transmission channel tells the slight decline in the economic performance of the countries than before: in the third quarter the GDP dropped by - 4.7 % in Hungary; by -2.2 % in Slovakia; by -5.8 % in the Czech Republic; by -6.0 % in Romania; by -5.2 % in Bulgaria; and by -2.0 % in Poland (*see Figure 6*).

In this regard we note that the Hungarian economy expanded by 11.3 percent compared to the second quarter of 2020, which means that the recovery from the economic crisis started in the third quarter, which is supported by the performance expansion of a wide range of sectors of the national economy. We think it is reasonable to evaluate the data of the first three quarters of 2020 - which reflect the development of domestic economic performance - in a European context as well. In this respect, it can be established that the relative values of Hungarian economic performance show that domestic industrial performance declined slightly (-2.6 per cent), while the construction and the services (including community services) industries performed poorly, although the narrowing in market services followed the European average. The economy of Germany - Hungary's main foreign trade partner - shrank by 4.2 percent in the third quarter.

Considering that investments provided an important basis for the previous domestic economic performance⁷ - the investment rate was 28.6 percent in 2019 - and that the coronavirus epidemic also attacked this high-performance strength of the Hungarian economy, we consider it crucial - taking into account especially the recovery which started in May but came to a halt in July that investments are stimulated through the available government instruments.

Figure 6



GDP CHANGES IN CERTAIN COUNTRIES

Note: Based on data adjusted seasonally and by the calendar effect. The data of the Netherlands are adjusted only by the calendar effect and Slovakia only by the seasonal effect. Based on data available for the status on 24th November 2020.

Source: Eurostat, based on the data of the national statistical offices, MNB, 2020

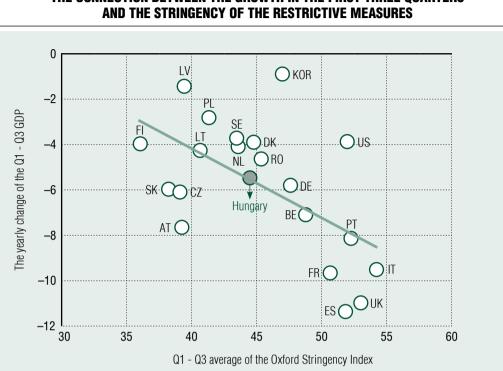
If the severity of the safeguard measures imposed is assessed in the context of the decline in economic performance, it can be concluded that economic performance has decreased in line with the proportion of restrictive measures. On the one hand, this was related to the date of the domestic appearance of the virus and, on the other hand, it was related to the rapid introduction of restrictive measures. The GDP of several countries declined already in the first quarter (see Figure 7).

The decline in our country's economic performance slightly exceeded the rate of decline in the Euro area (-4.4 per cent) and the European Union (-4.3 per cent), and it declined close to the European average on an annual basis, which was explained by the

exposure to the automotive industry, and the downturn of the regionally significant tourism and of investments. Examining the first three quarters together in terms of growth performance relative to the growth of the European Union - which is very decisive for the catching-up of Hungary - it can be established that the convergence of the real economy has continued.

Nevertheless, economic performance shrank by 2.9 percent in the United States, while economic performance in China expanded by 4.9 percent in the third quarter of 2020. In knowledge of all these data, it can be stated that Hungary is in the middle of the range.

This seriously negative global effect is the result of the total or partial cease of production



THE CONNECTION BETWEEN THE GROWTH IN THE FIRST THREE QUARTERS

Source: Edited by the MNB based on Eurostat, OECD data, 2020

processes in order to slow down the spread of the infection threatening human life, which was also accompanied by a total or significant temporary decline in employment (redundancies, temporary stops, reductions in working hours, part-time work, unpaid leave).

Supply performance is also reduced by two other important factors. One is the change in the size and structure of household demand as a result of the crisis, as a result of which neither market information nor organisational conditions were available in the manufacturing and service sectors for the rapid adjustment of the supply. The other determining factor - also in terms of financial processes - is the disruption or in some cases the termination of the established internal and external production chains, as well as the

accompanying consideration of whether it is reasonable to bring the supply chains back to a given country and thus reduce dependence on foreign suppliers.

Figure 7

While the real economic analysis of the mode of action of the 2020 coronavirus crisis focuses on the structure of the processes involved, the tracking of income trends also warns about the size of income-side GDP, income ratios of income owners (employers and employees), and the size of earnings.

Finally, with regard to the mode of action of the current crisis we note that the circumstances did not allow for the most optimistic V-shaped recovery of the known recovery scenarios, which followed the Spanish flu outbreak in 2018, the Hong Kong flu outbreak in 1968 and the 2003 SARS outbreak.

A key issue in the period of recovery from the 2020 coronavirus crisis is primarily the protection of life and health, and secondly the preservation of the strong foundations of the Hungarian economy - which were built over a decade - and thus putting the economy back on the course of sustainable growth.

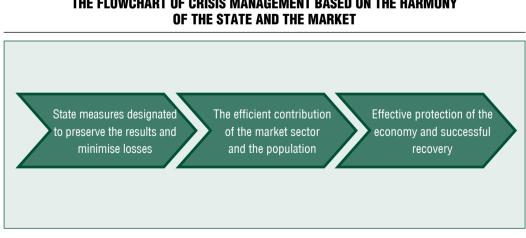
In the Hungarian incentive state model, at times of crisis the state relies on economic stimulus measures instead of restrictions, the main guideline of which is those health and life protection measures which are proportionate in severity during the coronavirus pandemic, as well as targeted incentives intended to preserve the economic results (see Figure 8).

If the state is able to create an economic policy mix based on optimal state involvement to offset those unfavourable processes of economic protection measures resulting from a prolonged coronavirus pandemic which will turn into a social, economic and then a financial crisis, then we can use the crisis opportunities to support recovery from the second wave of the coronavirus crisis and minimise the losses. According to László Domokos, it is not simply the crisis caused

by the epidemic that needs to be addressed but the changes accelerated by the pandemic need to be managed well.8 Effective action by governments is essential, while economic thinking is also significantly transformed as a result of the crisis and the competitive equilibrium model is no longer applicable (Stiglitz, 2020). Changes in the labour market made for in the interest of security necessarily point in the direction of robotisation and the replacement of human labour.9

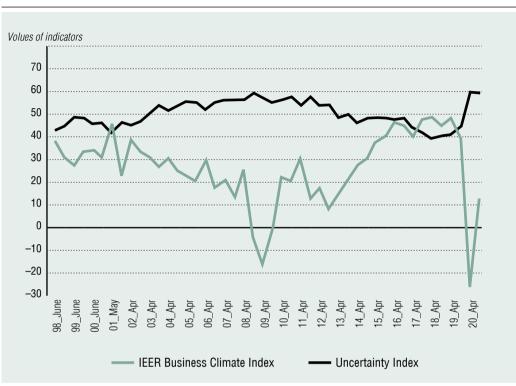
The health and economic crisis emerging from the 2020 global coronavirus epidemic had a negative impact beyond the extent of the economic recession caused by the in 2008-2009 NPV (see Figure 9). The approximately three years before 2020 constituted an outstanding period of economic history that created an exceptionally favourable business environment for businesses in terms of predictability and stability. The stable business environment is well illustrated by the persistently lower level of the uncertainty indicator compared to the business climate indicator. Referring back to our opinion mentioned earlier, the next transition

Figure 8



THE FLOWCHART OF CRISIS MANAGEMENT BASED ON THE HARMONY

Source: own edited, 2020



THE DEVELOPMENT OF THE IEER BUSINESS CLIMATE INDEX AND UNCERTAINTY INDEX

Source: Chamber of Commerce and Industry IEER, 2020

period can also be considered as a test of the Hungarian model that has been successful for ten years. The never-before-seen opening of the two indicators points out the novelty of the situation, which means that the new crisis requires new solutions. Our findings are strengthened from two sides by that

- on the one hand, according to the October 2020 data the level of uncertainty has not changed for half a year, which implies that the Hungarian enterprises assess the situation is versatile ways and their assessment is polarised, similar to the first months of the outbreak of the epidemic in Hungary,
- on the other hand, the recovery that started after the low point of the recession shows in the upturn that offsets the downturn by

approximately 60 percent, however, this positive tendency is very fragile and the figures of the indicator could change in both directions during the coming period.

Figure 9

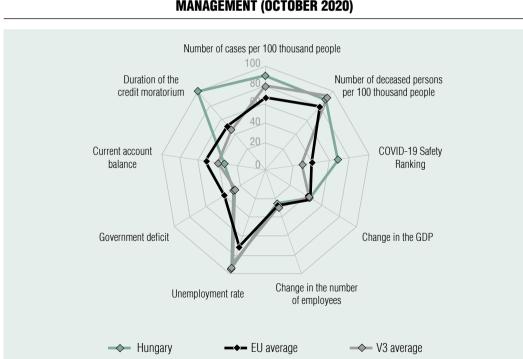
Based on the institutional system of the Hungarian cooperative incentive state model which has proved to be effective so far, and on the basis of the social trust that has been building for a decade, our country can take advantage of the transition that will follow the recovery from the coronavirus crisis. The Hungarian economy can benefit from the new type of socio-economic conditions which changed as a result of the new type of coronavirus crisis of unknown nature, with efficient and smart state involvement and trust-based cooperation of economic actors. The first milestone of this is preserving of the strong foundations of the economy as much as possible. As a second milestone, the growthfocused, performance-oriented Hungarian model which aims at sustainability requires a state approach that is based on innovative incentives

In our opinion, the Pandemic Management Competitiveness Indicator developed by the Central Bank of Hungary is an exceptional, innovative initiative, which allows for the comparison of the effectiveness of international pandemic crisis management strategies in several dimensions, as well as for the competitiveness-based evaluation of pandemic management in EU member states (Asztalos, Baksay, Szalai, 2020). Based on the experience gained so far,¹⁰ our country responded to the first challenges caused by the pandemic in a timely and appropriate manner, as a result of which the pandemic management of Hungary proved to be the most effective in the European Union in June 2020 and the third most effective in the European Union in October 2020.¹¹

Therefore, the effective crisis management allowed Hungary to strengthen its relative competitiveness position within the European Union once the first wave of the pandemic subsided, while Hungary was also able to find the balance between economic and health victims (see Figure 10).

With respect to the results shown in the figure we highlight one of the tasks which required the most urgent solution and which

Figure 10



THE MOST IMPORTANT INDICATORS MEASURING THE COMPETITIVENESS OF THE PANDEMIC MANAGEMENT (OCTOBER 2020)

Note: Higher values mean more favourable positions, based on the latest data available on 8th October 2020 *Source:* MNB calculation, 2020 was solved successfully: mitigating the social impact of the labour market shock. This is relevant because it is a good illustration of the complexity of the simultaneous challenge of protecting the economy and economic incentive, since the incentive employment systems can have an important role for not only the demand but for the supply side as well. Efficient and fast stabilisation is crucial in this regard as well.

The scope of impact of the coronavirus crisis includes the fear and trust that emerged as a result of the virus, and the role and effect of the business and social trust have a great significance for the functioning and the sustainability of the state (Kis, 2018). We consider trust as the social - business connective tissue of successful crisis management. The role of the State Audit Office of Hungary, the Central Bank of Hungary and the Fiscal Council has great significance in the topic of public trust and smart financial trust. Based on the principles of controlling, they provide strong support for the provision of high-quality public services and objectivity (independence), and maintaining authenticity and trust.

THE CHALLENGES OF SUSTAINABILITY

There is a myriad of scientific works about the examination of the complex correlational of sustainable, as well as the experience of a significant number of international and country-level - including several outstanding - programmes, which were tested in practice as well. In spite of this, a generally accepted sustainability definition has not been established so far, and therefore it is difficult to draw social and economic policy conclusions. It is also cause for difficulties that the three-dimensional model of sustainable development - which is applied in our country as well - does not prove to be satisfactory even if all dimensions are examined broken down to their respective elements, but still in a consolidated manner.

Due to these inadequacies and others, our objective is to examine sustainability so that

- instead of the three-dimensional model, we use a four-dimensional model - which is amendment by financial sustainability in our research (Matolcsy, 2020b),
- we analyse certain dimension in greater detail - due to the exploration and presentation of the state incentive effects and the synergy effects, and
- the influencing role of the unique economic structure, ownership and economies of scale particularities characteristic for Hungary, the sustainable competitiveness abilities, the domestic and the foreign market environment, as well as the professional and the general-intellectual creative abilities can prevail versatilely.

In order to achieve these objectives, we want to analyse the relationships among the sustainability goals: we identify the clusters and the feedback cycles, and through actual and virtual experiments, or through the lessons of the 'when, if' scenarios we contribute to building a better foundation for the system of sustainability goals. This analysis method allows decision-makers to identify the synergies and the undesirable deviations in the process of sustainable development.

In order to build a foundation for such analyses, we make an attempt to develop a sustainability model of new content and structure which - in the spirit of the incentive state - enables the interactive impact analysis of government measures.

The starting points for this are provided by the Good State Report research which has been conducted at the University of Public Service since 2015, and the results of the application of the model developed in the Hungarian Central Statistical Office. The Good State research is a valuable starting point for our research not only in its entirety, with respect to its scope of impact but regarding especially one of the sustainability impact area, as well as the sustainability model of the Hungarian Central Statistical Office, which follows mainly the methodology of Eurostat, and which covers five dimensions (climate changes, natural resources, energy and water manager, environmental impacts and social sustainability). The model contains 149 indicators in total, including 9 first-level Eurostat indicators, 30 second-level and 110 third-level indicators, which are indicators produced by the Hungarian Central Statistical Office.

The other starting point of the new sustainability model are comprised of the global megatrends, as factors which - through their changes - dynamize the process of sustainable development constantly. With respect to our country, is reasonable to calculate with the structuring effects of primarily 8 of the 17 to 20 megatrends currently interpreted and to build the goals thereof into the model of sustainable development (Báger, 2019). These are the following:

THE MEGATREND 'IMBALANCED GROWTH OF THE GLOBAL POPULATION' means the challenge of decreasing population, the task of increasing the fertility rate, encouraging starting a family, as well as keeping the labour market in balance for our country.

THE MEGATRENDS 'CLIMATE CHANGE IS THE TWILIGHT OF FOSSIL ENERGY' AND 'INCREASE OF GREEN TAXES' indicate primarily the task of progress in the field of green growth, the decarbonising of the economy and the everexpanding irrigation farming for our us.

THE MEGATREND 'ROBOTS AND ARTIFICIAL INTELLIGENCE AS NEW PRODUCTION FACTORS' draws the attention of the decision-makers to the long-term management and resolution of the labour market polarisation tensions connected to the new technological innovation and the tensions related to investments processes.

FOLLOWING THE MEGATREND 'THE DIGITI-ZATION OF MONEY, THE ERA OF ZERO INTERESTS' puts maintaining the stability of the financial sector in focus, and thereby the security of continuous funding of sustainable goals and the requirement to avoid financial disturbances in the modern financial system.

The megatrend 'dynamic development OF THE SPACE SECTOR AND THE SPACE INDUSTRY draws the attention to technological development, technology and changes thereby to the new industries of the future. Numerous technological achievements related to the space industry - as the perspective industry of the future - became parts of our day-to-day life. In this regard, we examined the opportunities and role of the Hungarian space economy and space industry on tomorrow's and on a longer timescale of the Hungarian economy, and as a new field which determined future development and which requires the cooperation of the state and the private sector (Parragh et al., 2020).

Since we agree with Domokos and *Pulay's* (2020) formulation of the dynamic definition of fiscal sustainability, it is justified to set a higher standard for the abilities and opportunities of future generations, which goes beyond the protection of opportunities and considers the development of the resources necessary as well.

SUSTAINABILITY AND COMPETITIVENESS: AS MIRROR IMAGES

There is a strong connection between sustainability and competitiveness due to the long-term interdependency, as well as the multifaceted content connections of the factors. Several state institutions and research workshops deals with this relationship - from different sides - in our country as well. The most comprehensive prospective programmes was developed and published by the Central Bank of Hungary (MNB? 2019). Considering our agreement with the programme and the support thereof as well, we want discuss the wide topic of competitiveness in two respect and with two goals.

One of the goals is the impact assessment of the competitiveness measures of the incentive state from the point of view of sustainable development. In order to achieve this goal we analyse and evaluate the following:

- the (positive) synergy effects of state measures,
- the (negative) deterrent effect of the measures,
- we develop recommendations for the improvement and necessary adjustment of the set of incentive tools.

We plan to solve this task in two important areas. One direction is the analysis of the relationship between competitiveness and sustainability in the small and medium enterprises sector, taking into consideration the developments in recovering from/overcoming the Covid-19 crisis, the requirements of digitization and robotization, as well as the changing segments of the labour market needs.

From this point of view, the other prioritised area of our research is the analysis of state-owned enterprises from the point of view of the sustainable quality of public services. The contribution to good governance of large enterprises providing public services is inconceivable without transparent and accountable operation. Providing opportunity for the users to express their opinions about the quality of the public services may improve the reaction ability of the public sector, and thereby the satisfaction of the users may increase. The role of state-owned companies

providing quality public services is crucial in the improvement of quality of life.¹² However, it is important that the improvement of the corporate financial situation shall not cause the depletion of public assets or the deterioration of the quality of the public services provided, therefore contribution to the public good in the most complete manner possible is crucial According to the principles set out in the Fundamental Law, the management of national assets shall not serve private interests but shall be used for the benefit of the community, while paying special attention to their finitude as well as that it is necessary that the national assets are available for the future generations as well, to the extent necessary (Domokos, 2019b). The development of the Hungarian state and corporate management - in connection with the increase of the economic activity of the state - is fundamentally determined by the dynamic SAO model built on the experience gained from audits conducted by the audit office, as well as by the consulting role of the State Audit Office of Hungary.

The other foal is the constant evaluation of whether the state measures designated to improve competitiveness encourage the long-term improvement and maintaining of competitiveness in a sufficient manner and to a sufficient extent. Emphasising long-term improvement in connection with competitiveness is made necessary by that according to experience - often the analysis of only the past and the present are prioritised, which does not prove to be sufficient for the improvement of sustainable competitiveness which provides a foundation for sustainability, or more precisely, for sustainable development *(see Figure 11).*

Therefore, in the research we attempt to develop a heuristic methodology in which the financial-financing and social-economic aspects (economic policy, budget, business

Figure 11



THE CONTEXT OF SUSTAINABLE DEVELOPMENT AND COMPETITIVENESS

Source: Balkyté-Peleckis, 2010

ethics and practice, financial stability and security, global and local responsibility, education, research-innovation-development, as well as culture) are given a larger role, in addition to the traditionally interpreted dimensions (economy, environment, society). In today's knowledge-driven global economy, it is worth for the national economy relying on ensuring sustainable development to invest in the creation of knowledge (K+F), the transfer of knowledge (education), the opportunities of economic exploitation of knowledge (to allow invention to become innovation), which investment may result in exceptional achievements and sustainable competitiveness, especially in the long term (Parragh, 2015). From the point of view of sustainable competitiveness, the multifaceted interpretation of not only the social capital but the entire national asset is essential, which includes the preservation of the national assets with respect to the economic effects of climate change.

THE COMPARATIVE ANALYSIS OF THE HUNGARIAN SUSTAINABLE DEVELOPMENT AND THE UN SUSTAINABLE DEVELOPMENT PROJECTS

The attitude of international organisations (e.g. OECD) and the countries (e.g. Austria, Netherlands, Germany) to the sustainable development programme of the UN ending in 2030 (Agenda 30) usually appears in three dimensions (based on the scientific literature).

The establishment and coordination of policies serving sustainable development, in order to achieve the most complete harmony.

The quality and operational efficiency of the state institution system which carries out the coordination and incentive of sustainable development.

The results of the objectives set and the implementation process, as well as the pace of the progress.

For our research, the three elements designated to ensure the harmony of

sustainable development policies are the following:

- political commitments and those opinions, announcements the practice of which facilitates on action level that the commitments are realised,
- coordination practice which eliminates inconsistencies and conflicts, and
- efficient analysis and monitoring information systems for exploring and following up on the effects of the measures and the incentive policies.

In connection with the elements, we want to devote special attention to the influencing international political factors, in order to ensure that their effects which influence the international processes adversely do not prevail or only slightly.

We want to carry out the harmony test of sustainable development policies primarily in the especially relevant problem areas. Such problem areas are encouraging green growth and investments, and supporting it from the financing side.

In connection with the institution system serving sustainable development, we want to present - in an international comparison - the key characteristics of its functioning and efficiency. Related to this, four mechanisms are prioritised in our research.

The first: is the requirement according to which promoting sustainable development should be the responsibility, task of the entire government, public administration fulfilled?

The second: is their authorisation and appropriate capacity to manage the policy tensions, differences and synergies appearing among the sectoral policies, with regard to domestic and international policies as well, of course?

The third: examining whether the past and future processes (tendencies) are separated consistently or linked properly.

The fourth mechanism: the widespread

involvement of civil society organisations and the representatives of the business sector in the sustainable development decision-making.

Keeping these approach-content elements of sustainable development, we evaluate the Hungarian practice with the goal to find out to what extent it complies with the requirements of Agenda 2030. This task - in line with the OECD practice (OECD, 2016) - can be answered by answering the following six questions.

• How and to what extent are we able to join the UN programme with our sustainable development strategy and goals?

2 What steps are required to integrate the goals of the UN programme into a coherent international political framework?

• How can we develop the institutional frameworks and strengthen the coordination mechanisms in order to realise the goals of sustainable development?

4 Does the country use the generational approach when it determines its policy to achieve the UN sustainable development goals?

S Will the monitoring mechanism be able to catch up to the tracing of Agenda 2030?

G Have efforts been made to involve a wide scope of the population (business and civil society sectors) in the process of sustainable development?

The third dimension of the international of sustainable comparative analysis development is related to the goals of sustainable development and the process of the implementation thereof. The basis of comparison of the analysis is justifiably and reasonably provided by the 17 goals and 169 targets of the sustainable development programme of the UN (Agenda 2030), which can be considered as standard globally (see in the framed text). The nature and the content of this set of goals go well beyond the goals of the previous international development program, the Millennium Development

Goals. The progress is especially spectacular in the highlighting of the role of social welfare, as well as considering that the programme can be interpreted for all counties, regardless of the level of development.

For this reason we think it is justified to analyse and measure the sustainable development performance of Hungary by comparing it to the UN goals as one of the main lines of our research, however, we could also say that we present the contribution of the country to the achievement of the international sustainable development goals.

In this way we want to explore those goals in case of which synergies can be detected in the process of sustainable development, and the points where neutral or possible negative effects prevail. Based also on this, an opportunity for gaining valid international experience will occur, regarding those incentive state measures which are necessary to expand the scope of synergies.

RECOMMENDATIONS, STRATEGIES

The short-term results of the realisation of research programmes based on state functions and state tasks may be recommendations for improvements (reforms) for economic and specific policies, while in the medium and long terms these results may be the development of various strategies or actual contribution to the development of such strategies. We consider

The sustainable development goals

1. End poverty in all its forms everywhere

2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

3. Ensure healthy lives and promote wellbeing for all at all ages

4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

5. Achieve gender equality and empower all women and girls

6. Ensure availability and sustainable management of water and sanitation for all

7. Ensure access to affordable, reliable, sustainable and modern energy for all

8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

10. Reduce inequality within and among countries

11. Make cities and human settlements inclusive, safe, resilient and sustainable

12. Ensure sustainable consumption and production patterns

13. Take urgent action to combat climate change and its impacts

14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

17. Strengthen the means of implementation and revitalize the global partnership for sustainable development both of these results equally important, however, it is natural that the results in the first stage of the research can be utilised rather in the short term, and long-term results can be expected only later.

For both cases - and especially for the development of strategies - the following common starting points should be kept in mind.

The presentation of the factors that hallmark the ten-year economic successes of the country, how we were able to achieve it in the midst of the big global and regional transformations; which are the reform turns which had an exceptional role in increasing the economic and social performance.

It is exceptional that the patriotic features strengthened in the economic activities despite the fact that the Hungarian economy is one of the most open market economies on the international scale, and one of the most integrated into the world economy. Our case proves *Károly Polányi's* opinion, according to which an excessively liberal project leads to the farthest in practice in the economic intervention of the state.

We have to solve the task of adaptation to the emerging megatrends of our era so that setting the Hungarian economy on a course of development which is sustainable in the long term can be realised. ▶In addition to solving the economic development tasks, launching and then accelerating the social innovation processes are also essential.

As far as the development of medium and long-term strategies are concerned, the scope of these can range from a group of state tasks (for example, the quality management of the management of state-owned companies or the development of the space industry), through state functions (for example, improving the competitiveness of the economy), to comprehensive country strategies (for example, the elaboration of the conditions and courses of long-term sustainable economic and social development).

So far we have found few examples in Hungary for the development of economic and social strategies which are based on research with interdisciplinary approach. Such strategies were prepared primarily in various topics of sustainable development, at the initiative of the National Assembly. Most recently it was the Central Bank of Hungary which developed and published strategies of great importance about the courses of economic catch-up to the development level of the developed EU Member states and about the conditions necessary for sustainable development.

Notes

¹ The main starting points and areas of the research program titled "The Synergy of the Economy, the State and the Society", which is in progress at the University of Public Service and is led by Bianka Parragh. Research into the role of the state is a part of the scientific mission of the University of Public Service, and one of its priority areas is the main line of research related to the Hungarian incentive state model. ² In addition to solving the economic development tasks, it is also essential to launch and then accelerate the social innovation processes, in the same way as we have to use the achievements of technological development, digitization and artificial intelligence smartly in the interest of public good, while also using the perspective opportunity of the industries of the future for the benefit of the domestic national economy.

- ³ The step and stairs theory with respect to the legal system is quoted by Csaba Varga for demonstrating the relationship between law-making and the application of law (Varga Csaba, 2002).
- ⁴ Quoted by János Frivaldszky (2016).
- ⁵ It is recalled that the contents of this were developed primarily by *L. Erhard* (1977), *W. Eucken* (1950), *W. Röpke* (1961) and A. Rüstow (1950), and the practical implementation of the model took place in post-Second World Germany first.
- ⁶ In Latin: 'Ius est ars boni et aequi'. In: András Földi, Gábor Hamza : A római jog története és institúciói. (History and Institutions of Roman Law) Nemzeti Tankönyvkiadó, Budapest, 2012.
- According to the research of Báger, Cseh (2020), the domestic investment rate reached 25 percent in 2018, compared to 20.4 percent in the European Union, and after Sweden and the Czech Republic, Hungary was the third largest among the EU member states. Achieving this outstanding investment performance was significantly supported by the use of European Union funds, the growth in the influx of foreign direct investment, and the large-scale expansion of investment subsidies in addition to the turnaround in corporate lending encouraged by the Central Bank of Hungary's proactive, innovative monetary policy. The cumulative GDP growth impact of the growth loan programs of the Central Bank of Hungary was 4.4 percentage points in 2013–2018. See in detail: Báger, Cseh (2020): Top Performance

in Investments in the Hungarian Economy, Public Finance Quarterly, Issue 2020/1., pp. 84-111.

- ⁸ László Domokos (2020) draws attention to the fact that after the epidemic everything will be – a little or a lot - different. In course of dealing with the economic effects of the epidemic, priority shall be given to measures that ensure the competitiveness of the Hungarian people and Hungarian enterprises during the transformation accelerated by the epidemic.
- ⁹ According to Stiglitz (2020), the rules of the game of globalisation need to be reformed, considering that so far they have served the interests of companies primarily and not those of workers or the environment.
- ¹⁰ Based on data available on 15th June 2020 and 8th October 2020.
- ¹¹ According to the October 2020 data, the first five countries are in order: Germany, Malta, Hungary, Lithuania, the Netherlands. Poland is the 13th; Austria is the 14th; while the average V3 ranking is 17th; and the EU average placed 19th according to the Competitiveness Index prepared by the Central Bank of Hungary based on 9 indicators. It should be noted that methodology of standardisation and aggregation of the indicators is consistent with the methodology of own development, which was used for the first time for compiling the Competitiveness Index of the Central Bank of Hungary; based on the latest data available on 8th October 2020.
- ¹² In addition: safety, health, welfare.

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