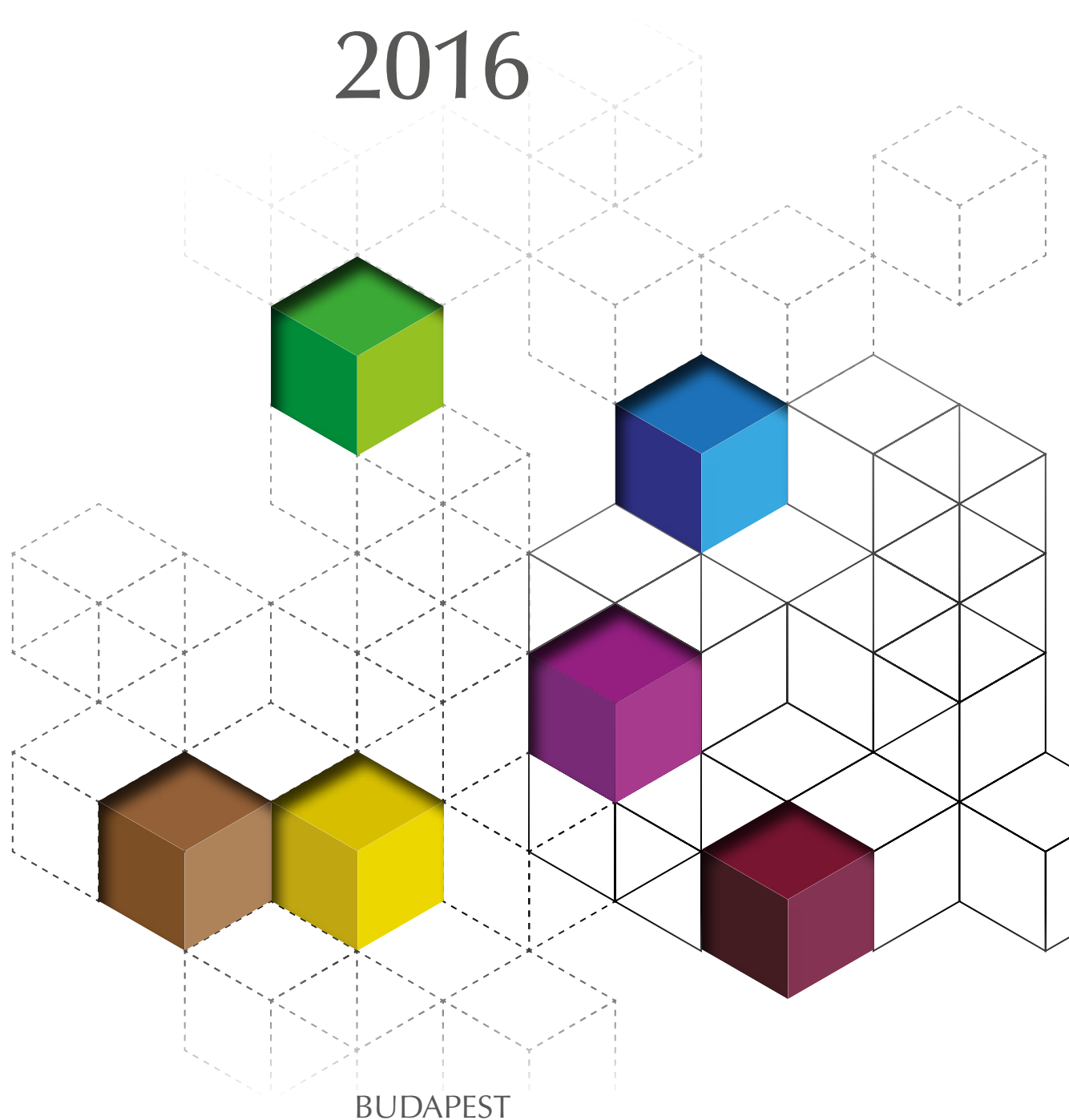


GOOD STATE AND GOVERNANCE REPORT 2016



GOOD STATE AND GOVERNANCE REPORT 2016

BUDAPEST

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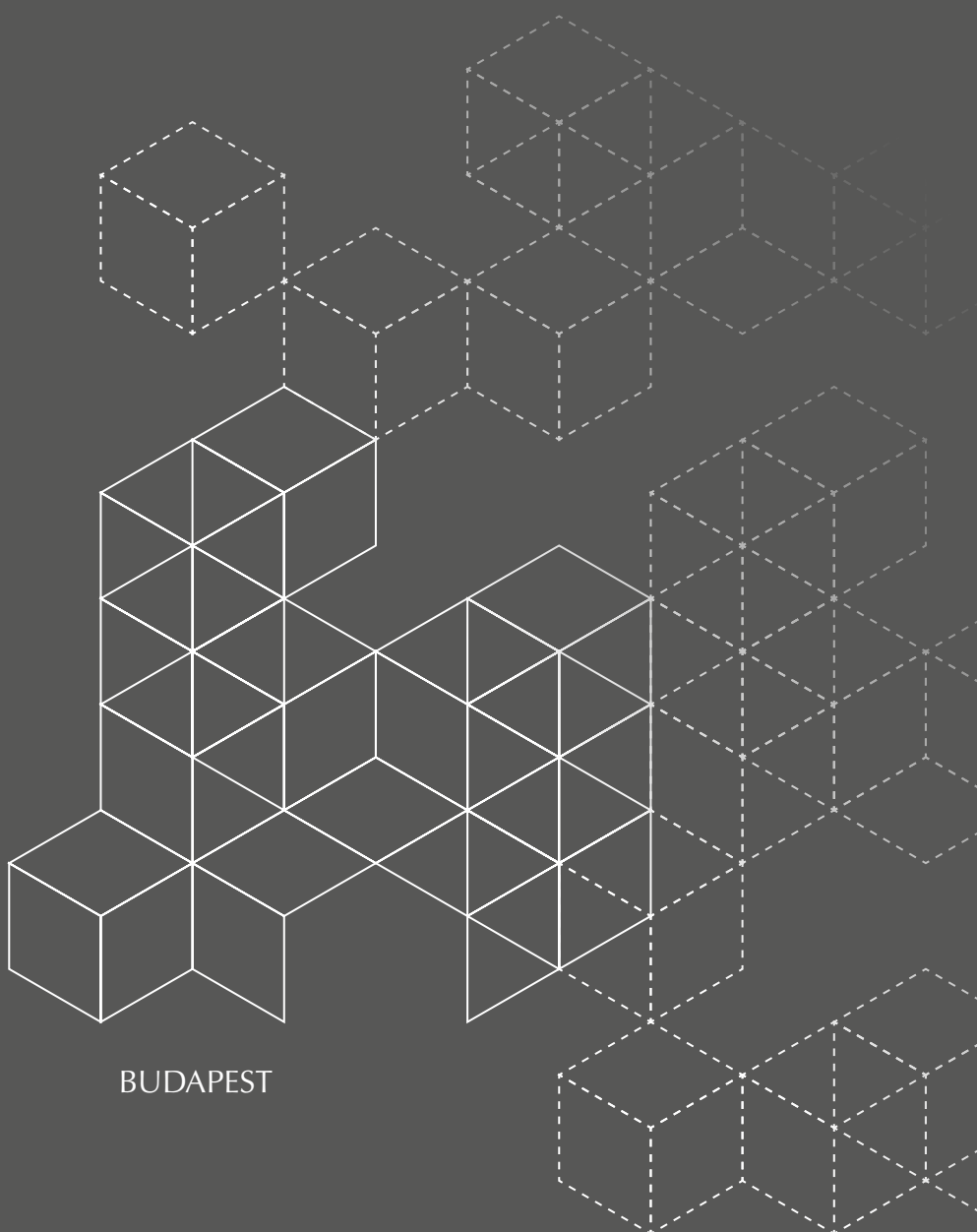
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2016



BUDAPEST

TABLE OF CONTENTS

Introduction	6
--------------------	---

IMPACT AREAS AND DIMENSIONS OF THE GOOD STATE



Security and Trust in Government	10
--	----

B.1. External security	12
B.2. Public safety and disaster prevention	16
B.3. Legal security	20
B.4. Public confidence in government and transparency	24
B.5. Secure livelihood	28



Public Well-being	32
-------------------------	----

K.1. Income position	34
K.2. Social exclusion	38
K.3. Health care and social safety net	42
K.4. Employment and education	46
K.5. The individual in society	50



Financial Stability and Competitiveness	54
---	----

G.1. Financial stability	56
G.2. Economic diversity	60
G.3. Investment and human capital	64
G.4. Innovation	68
G.5. Productivity and efficiency	72



Sustainability	76
----------------------	----

F.1. Climate change	78
F.2. Natural resources	82
F.3. Energy and water management	86
F.4. Environmental burdens (emissions)	90
F.5. Social sustainability	94



Democracy	98
-----------------	----

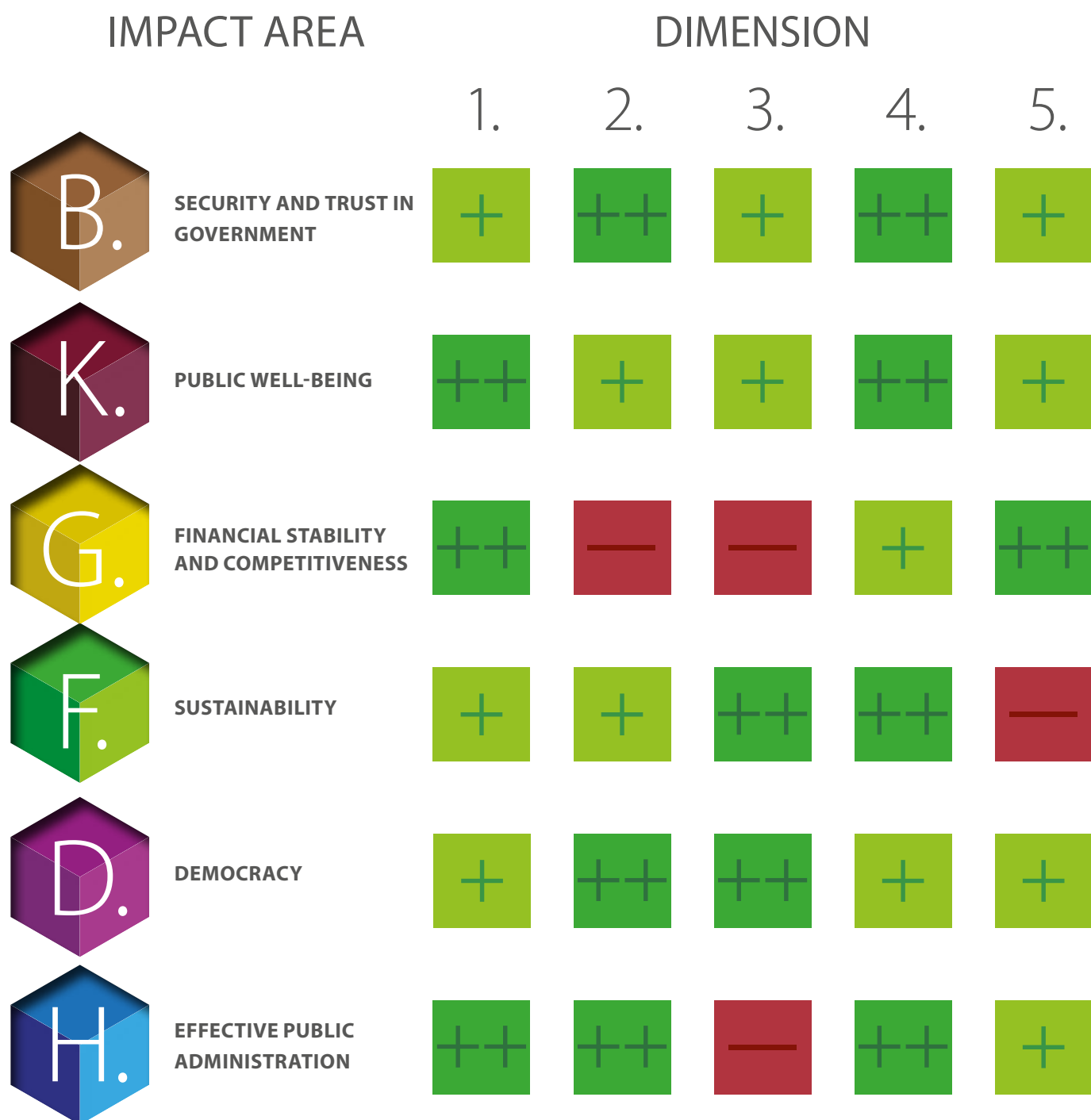
D.1. Ensuring political competition	100
D.2. Promoting political participation	104
D.3. Promoting social dialogue	108
D.4. Ensuring a democratic exercise of rights	112
D.5. Ensuring freedom of the press and freedom of speech	116



Effective Public Administration	120
---------------------------------------	-----

H.1. Accessibility	122
H.2. Administrative burden	126
H.3. Resource efficiency	130
H.4. Preparedness	134
H.5. Satisfaction	138

GOOD STATE AND GOVERNANCE MOSAIC



Legend:



growth



positive expectations



in need of development

INTRODUCTION

THE CONTEXT OF THE GOOD STATE AND GOVERNANCE REPORT, AND ITS STRUCTURAL AND METHODOLOGICAL FRAMEWORK

The developments of recent years, the financial and economic crisis, the effects of climate change, and measures to combat terrorism and illegal immigration have reinforced the government's state-centric approach and practice, on the basis of which the state must take on a role of creating and protecting value in the political, economic and social spheres in order to enforce the abstract system of ethical norms that serves the interests of the common good. It has been shown to be true that the unique position of the government makes it capable of institutionalising the various rules and norms in its own territory, as well as coordinating society, managing public assets and providing public services, and ensuring responsibility and accountability through its centrally managed bodies.

The 'Good State' concept, which is closely related to the idea of good governance and good administration that underpins the ethical norms of the common good and good public service, gives expression to this paradigm shift. The ever-increasing responsibility of the state and government, as well as the practice of an integrated approach necessary for performing increasingly multi-layered, often overlapping tasks requires increasingly significant capacities and institutional and administrative capabilities, the creation, "maintenance" and continuous development of which can be regarded as integral to the exercise of everyday governance. The gravity of the problem is demonstrated by the fact that numerous major international organisations (the OECD, UN, World Bank, WEF and International Institute for Management Development – IMD) engage in the complex evaluation of government performance, developing indicator systems necessary for such and preparing and publishing averages, trends and rankings suitable for comparison. The theoretical diversity reflecting the extraordinarily rich scholarly literature of the applied social sciences and the varying methodologies of the measurements and evaluations express a government's dilemmas and choices with respect to value, on one hand, while triggering debates and cognitive learning processes that contribute in large measure to the development of the quality and effectiveness of governance on the other.

Of the widely applied core concepts adopted from international practice, we consider 'state capacity' to be an explanatory factor referring to what potential capabilities the state possesses to implement and enforce the policies it has undertaken, as well as providing a variety of goods and services. From these quantitative variables, it is possible to draw conclusions about the development of governance capacities. The concept of 'governance capability' refers to the instrumental dimension of the exercise of power, or rather its implementation and/or development as part of a means-ends relationship involving the institutional, administrative, legal, financial, infrastructure and defence capabilities required to govern.

These categories, however, are strongly context-dependent, that is, their real meaning only really emerges from the practice of governance. It is precisely for this reason that when measuring state capacities and governance capabilities, it is important to determine whether the relevant interpretive frameworks are formed by the concept of a self-limiting state with restricted capability to act or, on the contrary, an actively engaged state that is capable of action. The former, in a constitutional sense, pertains to the balance of powers and internal checks, and the latter incorporates the responsibility and performance of the subsystems associated with carrying out the executive power of the government. On the basis of the above, it becomes necessary, in the interests of achieving effective operation, sustainable results and state reform capable of self-reflection, to develop and continuously operate a measurement and evaluation system that, by focusing on specific areas influenced by government activities (hereinafter referred to as impact areas) provides feedback on substantive elements of and changes to governmental effectiveness. The National University of Public Service (NUPS) considers it a task of paramount importance for its faculties, institutions, doctoral programmes and research sites to contribute to the development of a system of conditions for the operation of a modern state and effective national public administration through an interdisciplinary approach and by developing a research-based knowledge base. In relation to individual measures of Government Decree 1602/2014. (XI. 4.), ("State Reform II: the programme for reducing bureaucracy"), the Government expressed its agreement with the creation of the National University of Public Service as an institute of higher education dedicated to the sciences of state and governance. In order to carry out this important task, the NUPS Senate established, with Resolution No. 114/2014 (X.15.), the Institute of the Sciences of State and Governance (ISSG), which operates workshops to carry out research in the field of the political sciences and synthesise and integrate both existing and newly generated results. The name of the ISSG was amended to the Institute for Research and Development on State and Governance (IRD SG) on 1 February 2016 to reflect the shift in the focus of its activities from education and research to development and its coordination.

The fundamental aim of the State Reform Centre (SRC), which operates within the organisational structure of the IRD SG, is to conduct research activities that are partially empirical and partially anticipatory to provide a theoretical and scientific background with the specialist support of the Measurement and Methodology Office (MMO) established within the framework of the centre. A key element of its activities is to maintain the autonomous, scientifically grounded measurement and evaluation methodology and database established in the interests of operating, developing and continuously reforming

the Good State and Governance Report. This methodology is specialised and applicable to the state's relationships, but also comprehensible and acceptable internationally.

The specific aim of the research and measurements pertaining to the national-level government performance evaluation systems is to monitor changes to and the development of governmental effectiveness in realising the values of the Good State, and, founded on methodologically and statistically based indicators, to therefore measure changes in governance capabilities in the recent past. The indicators also identify which governmental capabilities are able to contribute most effectively to realising government aims. All of this also means that the targets, conceptual frameworks and indicators of the Good State and Governance research are based on the assignment of values, and are therefore built on the aforementioned concept of a state and government that is capable of action.

The results of the Good State and Governance research were presented within the framework of workshop debates and academic conferences organised by the University of Public Service, as well as a series of publications and workshop reports. Following the completion of the individual research phases, we will publish the Good State and Governance Report on an annual basis, the purpose of which is to develop and continuously operate an autonomous evaluation methodology drawing on its own database that provides feedback on changes in the effectiveness and quality of government. Questions related to the conceptual and methodological basis for the report are addressed in the Measurability of Good State and Governance volume of studies. These studies introduce the assumptions and objectives of the research associated with the individual impact areas, and the criteria for selecting and evaluating the indicators that provide the basis for measurability. The researchers heading the impact areas accept and take full responsibility for the methodologies, analysis and conclusions provided in the reports.¹ The Good State and Governance Report is the intellectual property of the National University of Public Service research community, and the methodologies used and associated analysis fall under the professional responsibility of the heads of the impact area workgroups.

The first phase of the research was completed with the publication of the 2015 Good State and Governance Report (hereinafter: 2015 Report) in June 2015, which also defined the structural and methodological framework of the subsequent reports. The Report was not created with the aim of repeating and adhering to the normative perspective of international rankings and the competitive and comparative approach based on such. Instead, it is built upon the approach taken by international evaluations of performance, whereby government performance is inseparable from the given country's socio-economic position, as well as its special attributes and

problems, and is therefore able to provide a reliable benchmark for the comprehensive measurement of government performance. The value of the Good State and Governance Report – as its own “genre” – stems, first and foremost, from the merging of the specific methodological characteristics of the “scoreboard” and “government dashboard”. In other words, the Report – as intended – is among the available tools to support government decisions, so its primary target audience are the players and professional bodies and workshops involved in preparing decisions. At the same time, allowing feedback from the government and academic research to build on one another creates an opportunity for ongoing development to the technical and methodological elements of the Good State and Governance Report, which is to be published annually from 2015, and for the measurements and analyses to be carried out for specific areas of individual industries and sectors. The ‘scoreboard’ function is an indicator-based approach that allows data to be systematically quantified numerically. Government capabilities can be determined on the basis of a set of general yet holistic indicators (e.g. GDP per capita, mortality rate, child mortality, road networks). There are also “one-dimensional” measurements (fiscal policy, tax bureaucracy and creativity), but the most common solution is to “multi-dimensionally” break down capacities and capabilities based on specific criteria. The goal set by the SRC to capture the added value of government capability across various impact areas is best served by the hierarchically devised, complex index indicator system created on the basis of the expert opinions developed within the workgroups.

In accordance with this, the structure of each Good State and Governance Report is formed by four levels layered one over the other. The first level (1) is the complex phenomenon of the Good State. Below this uppermost level are the impact areas (2). Impact areas express the interrelationships between major sectors from the point of view of economics, society and public administration, which can be captured either separately or comprehensively and which together provide a measurable picture of the government capabilities fundamentally determining the functioning of the Good State. The indicators formulated during the Good State and Governance research measure the strengths and weaknesses of government capabilities across the six impact areas listed below:

1. Security and trust in government
2. Public well-being
3. Financial Stability and economic competitiveness
4. Sustainability
5. Democracy
6. Effective public administration

The third level (3) is formed by the dimensions. While each impact area pertains to a major, general subject area, it is through the dimensions that the strongest specific phenomena are captured within a given impact area. A dimension can be homogeneous, that is, the indicators used in the system are really different measurements pertaining to a given area and, accordingly, are measured on the same scale. The approach of the reports, in contrast to this, is multi-dimension-

¹ The 2015 Good State and Governance Report is available for download from the website of the Institute for Research and Development on State and Governance: http://akfi.uni-nke.hu/uploads/media_items/jo-alam-jelentes-1.original.pdf

nal (heterogeneous), since according to their starting points, the impact areas of governance are not units and can thus be broken down into further sub-areas.

In order to measure these sub-areas, indicators associated with the individual dimensions are used to make up the fourth level (4). The complete set of all associated indicators forms the indicator system. Arranged into groups, the indicators fit into sub-areas, which go hand in hand with the methodological variegation, in which the indicators measure a variety of scales that cannot be directly compared. Throughout development of the system of indicators, we continuously paid attention to using indicators from credible, official sources, based on methodologies with a minimum of subjective factors that are able to ensure consistency over time. On the basis of this principle, we indicated in the chapter section containing the definition of the key indicators and sub-indicators any instances where the data source is not an organisation belonging to the official statistical data provider named in Article 3 of Act XLVI of 1993.

The structure of the indicators that have been selected and defined is also methodologically hierarchical; in other words, the indicator system breaks down into multiple levels. Based on the opinions of the experts and the methodological procedures and international practices analysed, we have defined key indicators for certain dimensions of the six listed impact areas to help establish a sound understanding of the characteristics of the Good State. Emphasising key indicators separately from other indicators serves the purpose of establishing indicators that are suitable for giving a brief characterisation of the given dimension. Similarly, if a brief glance at the entire impact area is needed, then the key indicators represent the dimensions. The relationship between the key indicator and the sub-indicators can best be captured if the key indicator is first among equals.

On the basis of all of this, the report's structure forms a 6x5x5 matrix: five dimensions for each of the six impact areas, and five indicators (one key indicator and four sub-indicators) for each dimension. Observing the principle of persistence and permanence of data over time, we applied this same structure to compiling the 2016 Good State and Governance Report (hereinafter: 2016 Report). At the same time, we allowed some scope for individual indicators to be replaced to a limited degree and in cases where this could be justified, insofar as a more appropriate indicator was available that better described government capability or changes to it over time, or if updating data would prove problematic for an indicator used previously. More significant changes to two impact areas (sustainability, democracy) were justified on the basis of changes to the measurement and evaluation concept.

The Good State and Governance Opinion Survey carried out in parallel to the compilation of the 2016 Report represented an opportunity to expand on the previously used, primarily "hard" statistical indicators with "soft", perceptual (emotional) indicators. It must be noted that the topic areas included in the survey were not evenly distributed across the individual impact areas given their unique characteristics. The collection

of multivariable, nationally representative data also provided an excellent opportunity to disseminate their constituent detailed indicators and related analysis in the form of an independent publication. Further development of the study offers the possibility to create a comprehensive customer-satisfaction methodology to allow the comparison of individual services on the basis of various criteria on one hand, and to encourage the introduction of new and innovative development projects on the other.

A further new feature of the 2016 Report is the addition of the international dimension of indicators. In the interests of including this, the diagram showing the domestic timeline has been supplemented by the "temperature gauge" of the international comparison diagram that includes data – sourced and most recently updated from international databases – from the Visegrad (V4) countries in all cases, as well as other nations considered to be of relevance and appropriate methodologically by the individual impact area workgroups. However, it is important to note that it is only worth regarding the international data as a framework for evaluating domestic values as it is not possible to determine the actual state and performance of a country based on a single year's data (a good example of this is the change in the minimum wage). The data for the international indicators was largely provided by the HCSO on the basis of Eurostat data, but we wish to make it clear even now that international comparisons are not available for all indicators. There may be several reasons for this: international data are not available or accessible, and if they are, a divergent methodology may make them unsuitable for comparison. In some cases, the time series data differs from the data for international comparison, for the following possible reasons:

- Different unit of measurement: while the domestic data set is available in petajoules, the international database contains TOE (tonne of oil equivalent) values.
- Different currency, where the distorting effect of exchange rates is greater for older data.
- In the interests of international comparison, the data are provided in relation to population or GDP, for instance.
- Issues associated with rounding of data from public databases that cannot be traced back also cause minor deviations.
- The reporting dates for data may diverge as, for a given year, one source may use the annual mean, while the other may take the value on a particular day.
- Deviations may also occur due to minor corrections applied by Eurostat.

Regardless of the above, the international comparisons are founded on official data and can be considered statistically reliable.

The report's 'governmental dashboard' function is based on a system of indicators whose impact areas and indicators remain mathematically independent from one another, but nevertheless constitute a unified whole owing to the fit of their content and their structural and formal similarity. Therefore, the SRC rejected the possibility of developing a composite

indicator summarising the entire Good State indicator system already in the first stage of research. Although this would make the index quantifiable each year, it would be situated at the top of a highly intricate indicator system and therefore oversimplify what is a remarkably complex calculation. In addition, the numerous elements of the indicator system are substantively independent of each other, so changes within the indicator system complement one another. This, however, raises the question of how change can be technically presented, interpreted, and applied to the observed phenomenon, that is, to the Good State and Governance and to government capabilities.

In order to avoid the above anomalies, the 'dashboard' approach deemed important by the report is built on benchmark-based correlation, which also means that if a basis year is not available, then generating the basis becomes one of the research tasks. The value factors (positive or negative) assigned for the indicators express the direction of change in the qualification. The measurements, starting from a base value, receive a positive or negative valuation, and this allows for the evaluation of the changes as positive (improvement) or negative (deterioration). Value-based conclusions can only be drawn on the basis of quantitative variables if the effects against the quantity of the obtained value (low or high), or the result (an increase or decline in the government capability), also become perceptible. From all of this, it follows that the aggregation of governmental aims, results and effects can only be rendered measurable by employing a certain methodological complexity.

The 'scoreboard' and 'dashboard' functions of the reports both contribute to the development of the database of content elements and changes and the measurement system. An important element of this is the specialist and administrative contribution of the Measurement and Methodology Office, which operates within the framework of the NUPS State Reform Centre, towards achieving the goals of set by the so-called Good State and Governance indicators defined by the beneficiaries within the framework of priorities 1 and 2 of the Public Administration and Civil Service Development Operative Programme (PACSDOP).

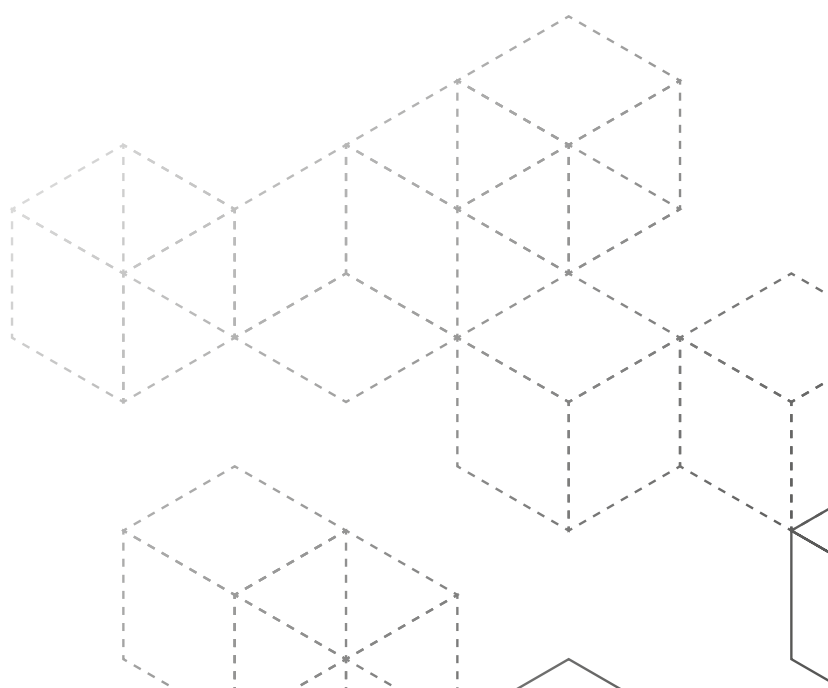
We have summarised the results of the Report in an easily reviewable, coloured table (The Good State and Governance Mosaic) resembling a chessboard. The matrix assesses each dimension of the six impact areas on a three-degree scale (strengthening, optimistic expectations, requires improvement). Taken as a whole, the mosaic illustrates short-term changes to government capabilities broken down into dimensions.

The analysis performed by the experts of the SRC is therefore

re based on the smallest elements of the dimensions, which are considered to carry equal weight and define the structural breakdown of the Good State and Governance concept. During the course of the analysis, the short-term trends of three or four years for the five indicators in each dimension are rated on a three-point scale (deterioration, stagnation, improvement) by experts on the individual impact areas. Following this, the value for the dimension in the Good State and Governance Mosaic (strengthening, optimistic expectations, requires development) is set on the basis of consolidation subject to the weighting assigned according to the significance of these within the given dimension. Their breakdown into indicators is covered in the further sections of the report, which introduce and analyse the individual impact areas in detail. Last, but certainly not least, we would like to express our thanks to the management and staff of the Hungarian Central Statistical Office for lending their expertise to the preparation of the 2015 and 2016 Reports. Given that a large proportion of the indicators used are founded on data provided by the HCSO, we indicated their source as the HCSO in every instance.

The Report's 2016 chapters are constructed based on the following uniform structure:

- A brief summary of conclusions regarding the impact area (positioning of the impact area, criteria for selecting dimensions and indicators, explanation of the governmental capabilities relating to the given impact area).
- A list with definitions of the main indicators and secondary indicators associated with the various dimensions of the given impact area.
- Analysis and visual depiction of the individual main and secondary indicators associated with the specific dimension; an inset, graphically highlighted key statement formulates the conclusion drawn based on the analysis of the indicator.
- The 'temperature gauge' positioned on the sides of the pages to allow international comparison of the indicators.
- The glossary of acronyms used in the report at the end of the publication.



SECURITY AND TRUST IN GOVERNMENT

SUMMARY¹

A sense of security is one of the most fundamental requirements for both people and actors in the business and NGO sectors. Creating security and a perception of (public) safety is one of the most important tasks of good governance, and a key factor in the establishment of trust in government.

The Good State and Governance Report measures the processes, results and effects of government competence and activities in five dimensions across the impact area of societal security and trust:

- external security;
- public safety and disaster prevention;
- legal security;
- public trust in government and transparency;
- security of livelihood.

The external security (1) indicators show a government's capability to provide protection against an external attack (violence or aggression) and to prevent, avoid or deter the use of external military force. On the military force side, the quantitative factors show slight fluctuations and a slow decline; according to international measurements, however, Hungary's military force and security potential have not weakened. State defence capabilities have been provided at an unchanged level since 2010.

The comprehensive approach includes military, political, economic, social and ecological security. Used to measure these are complex international indicators such as the Global Firepower index and the security policy measurement system of the European Council of Foreign Relations. Public safety (2) covers the government's capability to prevent and discover phenomena that are hazardous or harmful to public order and to mete out punishment to those responsible. This includes the disaster prevention capability, which assures protection against harmful natural and industrial events.

The HCSO has conducted statistically verified domestic surveys on the changing perceptions of public safety over the last three years. An examination of trends regarding "the population's perception of safety in public areas and their home environment" can be based upon these results. According to the data gathered by the HCSO from 2013–2015, the population's perception of safety has improved each year. Among those polled, almost two-thirds were satisfied with the public safety of their environment on average. A quantifiable improvement in the government's crime prevention and law enforcement capability over the

last five years is indicated by a numerical drop in a sample group of reported violent crimes.

Law enforcement capacities have strengthened, state expenditures on public order show a positive trend and the number of law enforcement personnel has also increased.

The subject of the legal security (3) area of competence is the government's capability to strengthen trust in the legal system and to create security guaranteed by law. The most fundamental aspect of legal security is trust in legislation and due process.

Since 2013, the HCSO has indicated a steady increase in trust in the legal system and a steady decrease in lack of trust. The broadening of online accessibility to the legislative process and legal statutes, systematic deregulation and the introduction of a mandatory preliminary legislative impact assessment system (2011) all entail improvement in the quality of legislation.

Financial resources for the judicial system have grown. A moderate improvement can be seen in the time required to administer civil lawsuits. Judicial appeals data show a slowly improving satisfaction on the part of petitioners with regard to the judiciary's decisions, but results fluctuate slightly each year. Also improved is the acceptance of decisions from first-instance courts in civil suits. Following several years that saw a steady reduction in the time it takes for the litigation process to run its course, this period slightly increased in 2014. However, owing to the constitutional autonomy of the judicial system, these indicators only indirectly reflect government capabilities.

Public trust in government and transparency (4) is a fundamental value of the rule of law and democracy. Transparency indicates governmental capability for openness. Transparency is fundamentally a result, the effect of which is trust. The essence of transparency lies in the availability of governmental information of public interest and the openness of policy analysis and decision-making processes.

The means for strengthening transparency and trust is the government's capability to prevent corruption. Since 2010, growing public trust and political stability has been measurable in governance, with the important indicator for this being the ratio of parliamentary mandates won at the election as a proportion of all mandates. In a democracy, government stability can only be regarded as a virtue if democratic values are in maximum effect. Public trust in government and transparency of governance coexist in the strongest logical correlation.

The fluctuating growth in the number of public information requests made of the Hungarian National Authority for Data Protection and Freedom of Information (HNDP)

¹ The author of this chapter is prof. Norbert Kis, Ph.D. (workgroup leader).

that result in findings of illegality is a function of an increase in civil initiatives along with increasing implications of legality in proportion to this.

The primary factor in assessing the quality of governance is social sentiment in relation to government trust and corruption. Transparency is the indicator of government integrity, i.e. resistance to corruption.

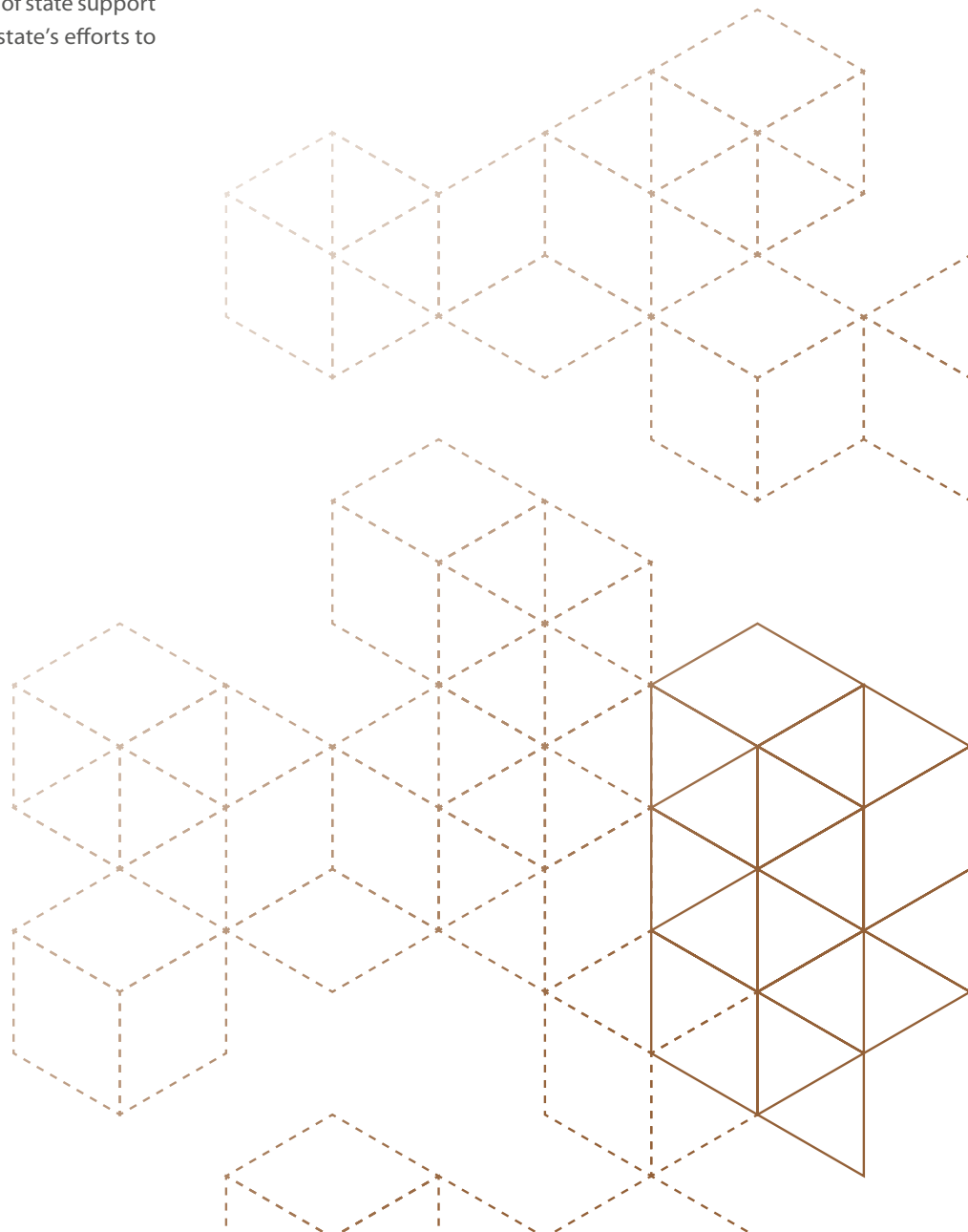
The State Audit Office of Hungary (SAO) operates a system to measure the risk of corruption in public institutions. Since 2012, the number of voluntarily participating budgetary institutions has risen each year. This increase indicates that institutions in the governmental sphere are, to an ever-greater degree, accepting of the objective measurement of transparency, which in turn suggests an increase in integrity and transparency. The Risk Reducing Controls Factors (RRCF) index employed in the SAO audit is reflected in its data for the past three years (2013–2015) and showed a steady increase in the number of anti-corruption controls used by budgetary entities.

Government support for non-profit organisations represents an indirect step in the direction of civil control, that is, transparency. The growth in the extent of state support for non-profit organisations reflects the state's efforts to promote open governance.

The household livelihood security (5) indicators relate to the ability of the government to assure a minimal livelihood. Household livelihood security assesses the governmental capability to guarantee the minimal conditions of existence.

Unemployment, the regular absence of income, is the greatest risk factor endangering an individual and their family's security of livelihood. Reducing unemployment results in a fall in the threat to livelihood to an increased extent each year. Another foundation for the perception of security of livelihood is the security of housing. The existence of a residence and the quality of the housing are defined by the number of people per room.

The population's optimism in relation to their personal financial situation has improved each year from 2012. In terms of public policy measures, the security of livelihood criterion is present in the maintenance of income security. The minimum wage has increased since 2011 and continues to do so.



B.1. EXTERNAL SECURITY DIMENSION

Key indicator: ANNUAL DEFENCE SPENDING PER 1,000 PERSONS IN NOMINAL TERMS

Data on total defence expenditures for the subject year collected by the HCSO from administrative sources and the Ministry of Defence, divided by the population figure shown for 1 January of the subject year (per thousand persons). The data comes from the basic information in the Hungarian Statistical Yearbook. It includes expenditures for the Hungarian Army, military educational institutions, military health-care institutions, the Ministry of Defence and its organisations, the Military National Security Service, military research and development, as well as international peacekeeping missions. *Source: HCSO*

Sub-indicator 1: POSITION IN THE RANKING OF THE INTERNATIONAL GLOBAL MILITARY POWER INDEX SURVEY

The Global Firepower (GFP) index is an international measurement system to assess countries' conventional military power through more than 50 indicators. From this, a power index ("Pwrindx") forms an indicator that can be "put in order" to create a generalised list of states' military power. The comparative algorithms are designed to enable the GFP to compare larger, developed countries with smaller, developing countries. Although the military power index measures combat potential across a broad dimension, in the interests of comparability, it also employs corrective factors that make the comparison realistic (for example, comparison of naval powers with landlocked countries). The GFP takes into account all types of combat operations of the armed forces, their human, financial and natural resources, their logistical capabilities, as well as the country's geographical position. Hungary has been included in the measurements since 2013. *Source: GFP**

Sub-indicator 2: TOTAL NUMBER OF HUNGARIAN COMBAT FORCES

The combat force data recorded by the HCSO (which can be broken down into multiple sub-units according to function). The data set obtained from administrative sources and the Ministry of Defence is contained in the basic information of the Hungarian Statistical Yearbook. It includes the headcount of the Hungarian Army, military educational institutions, military health-care institutions, the Ministry of Defence and its organisations and the Military National Security Service. Since the abolition of general conscription, rank-and-file troops have been renamed "enlisted personnel". *Source: HCSO*

Sub-indicator 3: HUNGARY'S FOREIGN POLICY SCORECARD (ECFR)

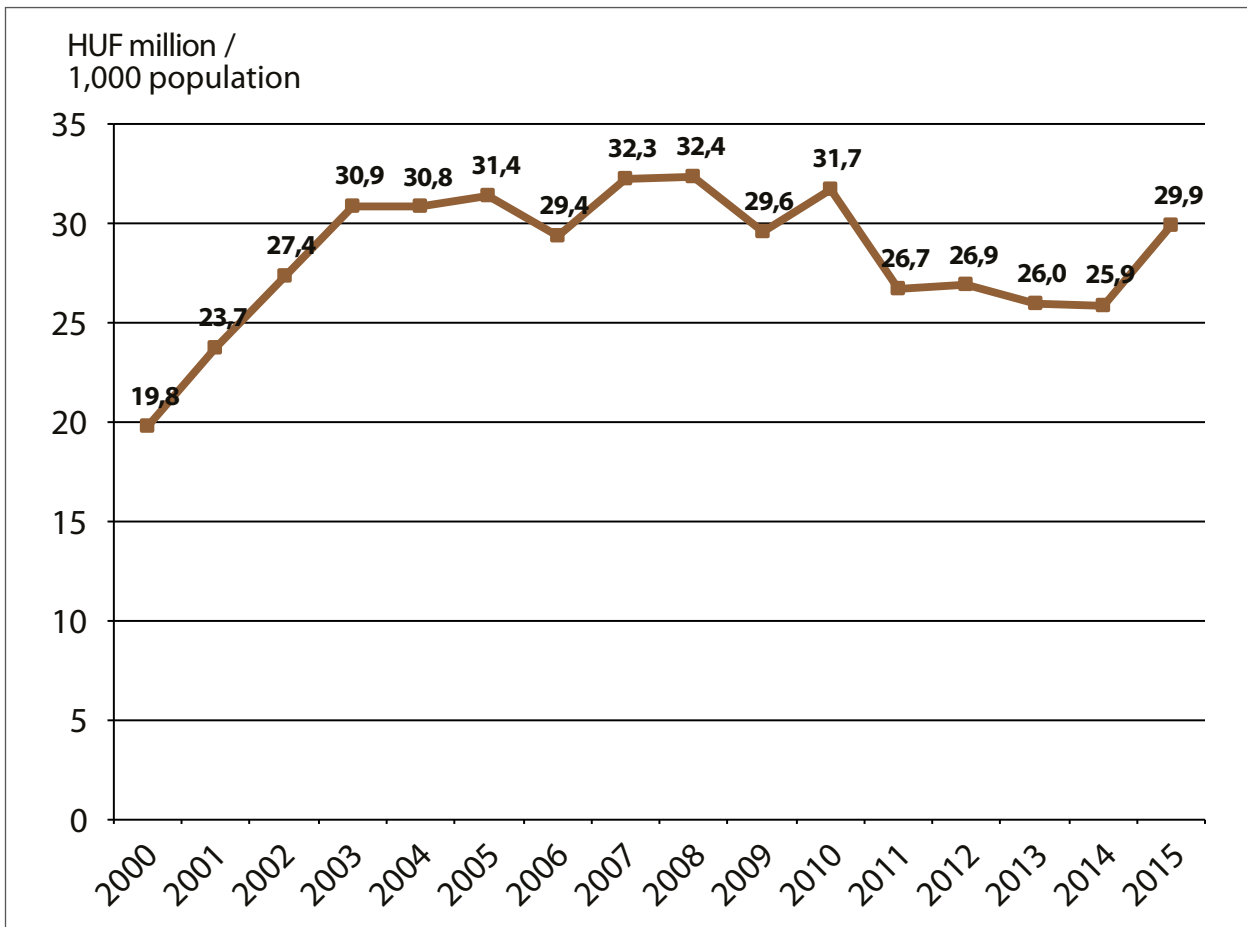
The ECFR's indicator list is the European Union's complex measurement system for foreign policy. Member States are evaluated across 30 indicators for their contribution to Europe's external security in the key areas of the EU's activity. It is on this basis that Member States receive evaluations of "leader" and "slacker". The indicators always measure national support and contributions to issues, matters, initiatives, negotiations and actions that are important from the perspective of the EU's foreign policy, and in the course of which the evaluation examines the extent to which the member state's actions conform with EU goals (unity), the extent of the political and financial resources it devotes to the area, and what the results of its activities are. An increase in the number of "leader" classifications is a positive trend, whereas an increase in the number of "slacker" classifications shows a negative trend. Data has existed for Hungary since 2012.

Sub-indicator 4: ANNUAL FOREIGN MILITARY ASSISTANCE EXPENDITURE PER 1,000 POP.

To measure government functions, various international institutions have adopted, under UN guidance, the so-called COFOG classification standard. This nomenclature lists the functions typically provided by the state and government, and by classifying government expenditures according to this structure, it allows for the quantification of both the extent of the government sector from a financial perspective and the functions provided. Grouped according to functions, it can therefore show what sums the state devotes to which goals. Starting from reporting year 2010, the HCSO has also shown statistical data on government expenditures, based on national accounts, according to the COFOG breakdown. The data contained in COFOG sub-section 2.3.0 accounts for the costs of support for those defence expenditures assigned to military activities taking place in a foreign country. The indicator shows the entire sum per 1000 population, based on population data for 1 January. *Source: HCSO, COFOG*

*This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.

B.1.1. ANNUAL DEFENCE SPENDING PER 1,000 POPULATION IN NOMINAL TERMS



Source: HCSO

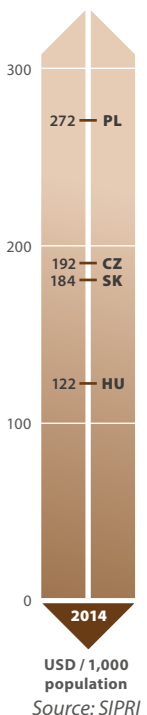
The external security indicators show the government's ability, which, in the face of an external attack (violence or aggression) can provide defence against, repel, avoid or halt the use of external military aggression. Consequently, the dimension for this impact area contains one of the state's fundamental responsibilities: upholding territorial sovereignty and defending citizens from outside attack.

From the (input) resources side, military expenditures show changes to the indicators for quantitative capability, but as is true for all indicators in such cases, it must also be noted that the sum of the budget dedicated to a given region is in itself nominally a positive. With respect to the state budget, it is a fundamental expectation that its resources are deployed within an appropriate framework

and in a cost-effective manner, and that investments are made to ensure cost-effectiveness.

Military expenditures at current prices have showed deviations of 15-20% since 2002, with a significant drop in 2011, after which expenditure per 1,000 of the population stabilized around HUF 26 million. What this also means is that there has been a decline in expenditure since 2010, particularly in real terms. Since this did not correspond to a weakening of the country's military potential, this change can, for the time being, be considered positive. Of the numerous available databases suitable for international comparison, data from the Stockholm International Peace Research Institute (SIPRI), which are prepared according to widely adopted methods, are presented in the diagram to the right.

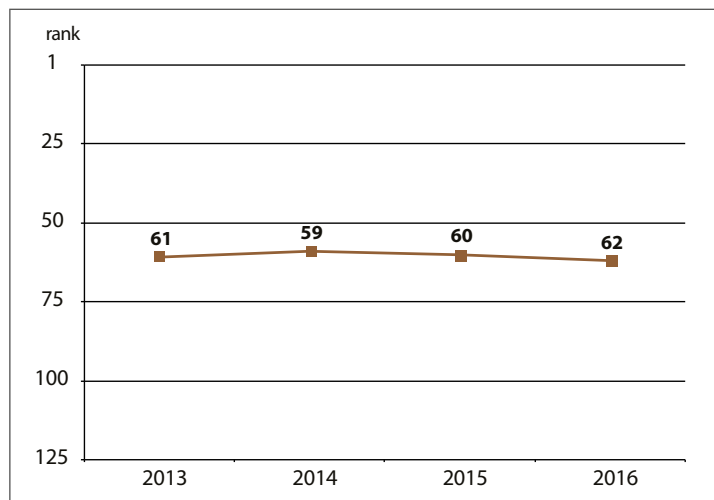
Quantitative factors show slight fluctuation and a slow decline in defence resources; according to international measurements, however, the country's military power and security potential have not weakened (Global Firepower index).



B.1.2. RANKING IN THE INTERNATIONAL GLOBAL FIREPOWER INDEX

A country's strength with respect to security challenges can now no longer be measured purely on the basis of military strength or military spending.

The conceptual approach to comprehensive security includes military, political, economic, societal and ecological security. Complex international indicators exist for the measurement of these, such as the Global Firepower index (GFP). The GFP ranks a total of 126 countries according to more than 50 factors. The index takes into account the country's geographic attributes, natural resources, and local industrial distinctiveness. For example, it does not consider merely the available stock of weapons as its basis, but also its variety, so smaller, but more technologically advanced nations can compete with larger but less technologically advanced nations. Among the variables that make up the index, the available number of personnel is also of key importance,



Source: GFP

therefore more populous countries are assigned a higher position in the ranking.

Hungary ranked 61st in 2013, 59th in 2014, 60th in 2015, and 62nd in 2016.

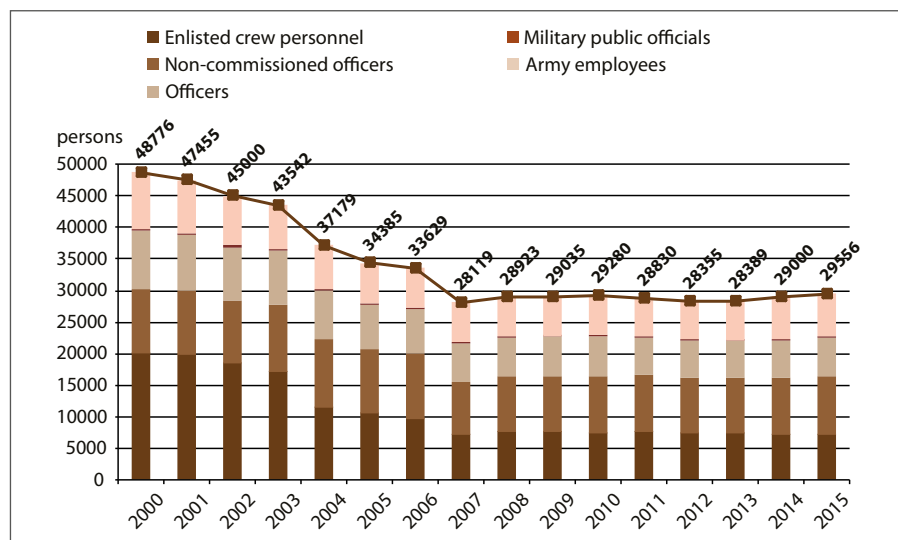
According to the GFP index, the country's defensive military power remained stable between 2013 and 2016.

B.1.3. TOTAL HEADCOUNT OF HUNGARY'S MILITARY FORCES

The external security (1) indicators show the government's capability to provide protection against a potential external attack (force or aggression) and to prevent, avoid or deter the use of external military force. From the (input) resources side, the number of military personnel showed a change in the factors for quantitative capability.

The number of enlisted crew personnel rapidly shrank up until 2007, only showing small fluctuations since. While the number of enlisted personnel consisted of 20,095 in 2000, by 2007 this figure had shrunk to 7,104, and was 7,230 in 2014.

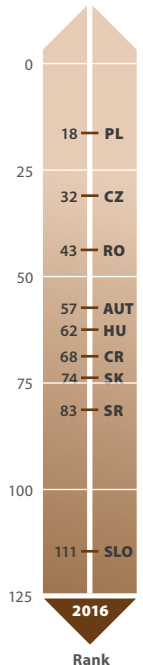
The number of officers fell from 2007 to 2014. In 2007, there were 6,090 officers, which grew to 6,448 in 2010, but once again fell by 2014 to 5,948 officers. The number of non-commissioned officers has stagnated in recent years, moving between 8,830 and 8,890 since 2008. In contrast,



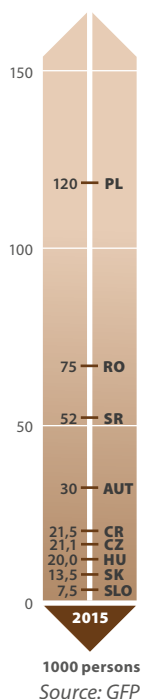
Source: HCSO

the number of public servants employed by the military showed a gradual increase since 2008 (growing from 6,201 in 2007 to 6,753). The group of military public officials was the smallest and had the greatest number in 2005 with 287 individuals, falling below 200 after 2007, where it has remained ever since.

According to the quantitative factors on the resources side, the government's ability to ensure defence from external threats (force or aggression) has remained unchanged since 2007.



Source: GFP



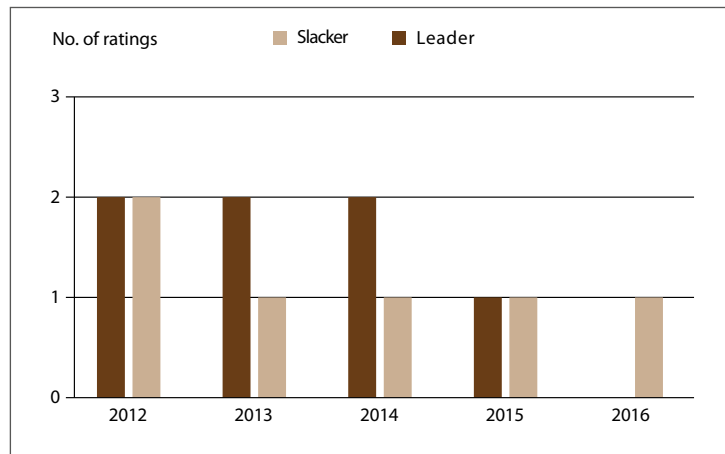
Source: GFP

B.1.4. HUNGARY'S FOREIGN POLICY SCORECARD (ECFR)

The indicator list published by the European Council of Foreign Relations (ECFR) evaluated EU Member States across 30 indicators for their contribution to Europe's external security in the key areas of the EU's activity. It is upon this basis that Member States receive evaluations of "leader", "supporter" and "slacker".

The indicators always measure national support for and contributions to questions, issues, initiatives, negotiations and actions that are important from the perspective of the EU's foreign policy, and in the course of which the evaluation examines the extent to which the member state's actions conform with EU goals (unity), the extent of the political and financial resources it devotes to the area, and what the results of its activities are.

In 2012, the country was rated a "leader", that is, positively, and a "slacker" in two categories each, and in one each in



Source: ECFR

2015. The "leader" classification was not achieved at all in 2016, and the country received a "slacker" rating with respect to financial aid for the humanitarian crisis in the Middle East.

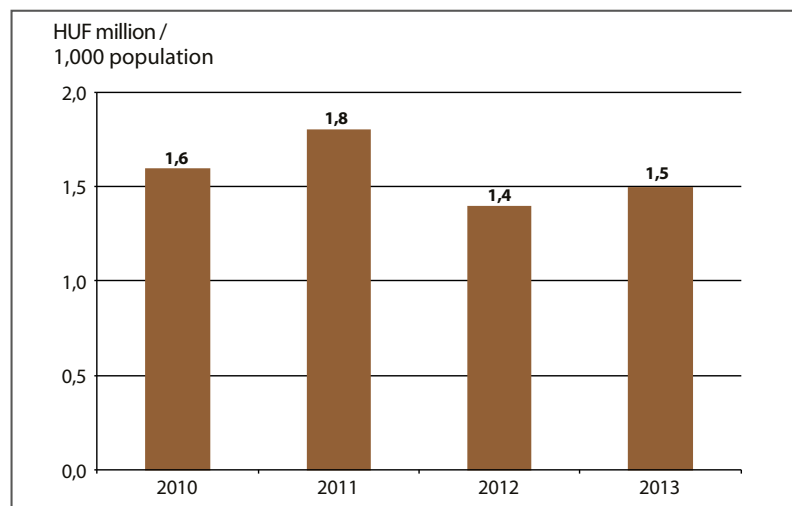
Hungary's EU foreign policy scorecard has weakened relative to 2012.

B.1.5. ANNUAL FOREIGN MILITARY ASSISTANCE EXPENDITURE PER 1000 POPULATION

Annual expenditures on foreign military assistance indicate the extent of potential military power, and at the same time, their extent depends in large measure on changes in the international environment and the need for Hungary to provide assistance in relation to this.

Soldiers of the Hungarian Defence Forces primarily participate in joint peacekeeping and humanitarian activities by NATO, the EU, the UN and other international organisations. The military currently has a presence in 11 countries, among them Afghanistan, Kosovo and Bosnia-Herzegovina. An advantage of serving in international military missions is that it allows Hungarian soldiers to gain experience in the field.

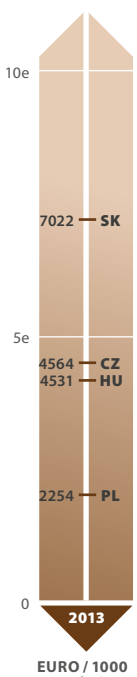
Annual expenditures on foreign military assistance show a slight fluctuation between 2010 and 2012, indicating that



Source: HCSO, COFOG

the country's military power and security potential did not weaken.

The country participates in international peacekeeping missions in proportion to its military firepower.



Source: Eurostat

B.2. PUBLIC SAFETY AND DISASTER PREVENTION DIMENSION

Key indicator: THE POPULATION'S PERCEPTION OF SAFETY IN PUBLIC AREAS AND IN THEIR HOME ENVIRONMENT

The HCSO's data is founded on measurements of popular perception, the source for which is the annual survey on Household Budgets and Living Conditions listed under ID no. NSDCP 2154 and based on a sample of approximately 13,000 households. The basis for the indicator is the following question on the questionnaire: "How safe do you feel when you walk around your neighbourhood after dark?" The four possible responses are 1. "I feel very safe", 2. "I feel quite safe", 3. "I feel slightly unsafe" and 4. "I feel very unsafe". The answers can be broken down into further groups according to the characteristics of the respondents. In addition to community type, it is also possible to analyse answers by age group and level of education. *Source: HCSO, SILC, SWB*

Sub-indicator 1: THE POPULATION'S TRUST IN THE POLICE

This indicator originates from data collected in the annually conducted NSDCP 1968 supplementary module to the Household Budgetary and Living Conditions Survey. The size of the sample is around 13,000 people. The indicator is given by the average of the answers, on a scale of 0–10, of the distribution according to different groups of respondents to the question: "How much do you personally trust the police?" In addition to age group, the distribution can also be shown by gender and level of educational. *Source: HCSO, SILC, SWB*

Sub-indicator 2: NUMBER OF REPORTED INTENTIONAL HOMICIDES, INTENTIONAL ASSAULTS AND ROBBERIES

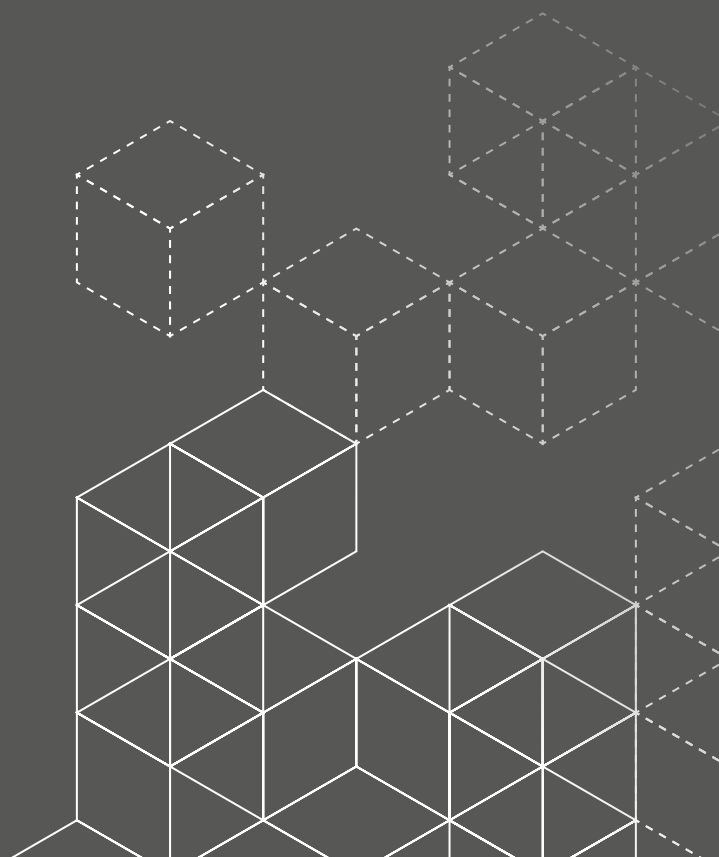
The three felony types represent the extent of violent crime as a proportion of all crime. The new Penal Code (Act C of 2012) that entered into force on 1 July 2013 did not substantively affect findings regarding intentional homicides (completed homicides, including unpremeditated murders), intentional bodily harm and robbery, and thus also did not affect the chronological comparison of statistical indicators. *Source: Unified System of Criminal Statistics of the Investigative Authorities and of Public Prosecution*

Sub-indicator 3: ANNUAL GOVERNMENT EXPENDITURES ON PUBLIC ORDER, CIVIL DEFENCE, FIRE AND DISASTER PREVENTION

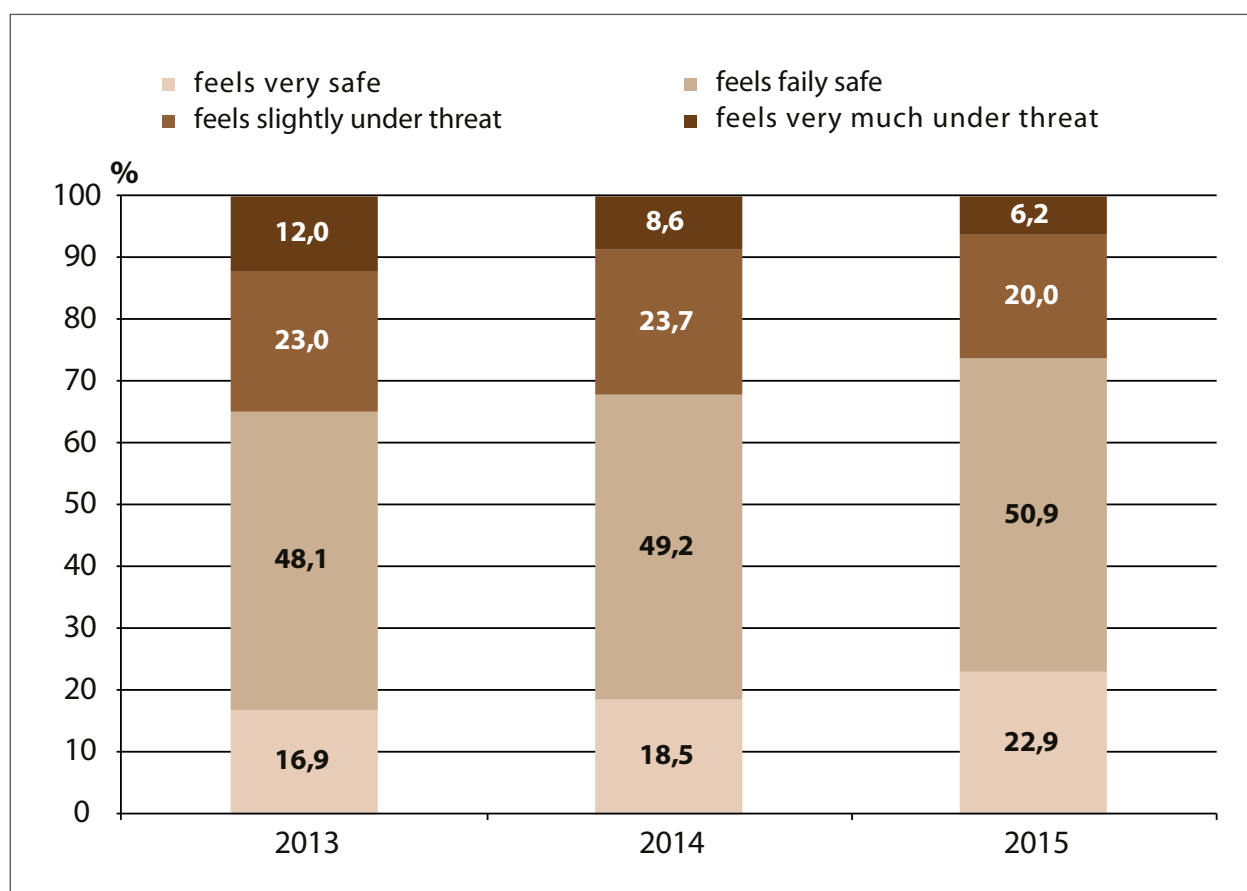
In order to measure government functions, various international institutions have, under the guidance of the UN, implemented the so-called COFOG categorisation standard, which displays, grouped into tasks, the sums a state spends on particular aims. Starting from the year 2010, the HCSO has also published statistical data on government expenditures broken down according to COFOG and based on national accounts. COFOG sub-section 2.2.0 comprises state support for the operation of the Civil Guard and stockpiled food and medicine for disaster situations, sub-section 3.1.0 does the same for the operation of the police and border security, and sub-section 3.2.0 assesses both professional and volunteer fire brigades. The indicator reflects total expenditures for all these distributed over the year per 1000 population based on the population figure as of 1 January. *Source: HCSO, COFOG*

Sub-indicator 4: LAW ENFORCEMENT PERSONNEL RESOURCES

Total headcount (which can be broken down further) of police officers, criminal prosecutors, trial judges and correctional personnel. *Source: HCSO statistics based on Prosecutor General's summary ("Crime and Justice 2005–2013") based on information provided by the National Police, the Prosecutor General's Office, the National Office for the Judiciary and the Hungarian Prison Service Headquarters.*



B.2.1. THE POPULATION'S PERCEPTION OF SAFETY IN PUBLIC AREAS AND IN THEIR HOME ENVIRONMENT



Source: HCSO, EU-SILC

The government's ability to prevent, investigate and punish activities that threaten or disrupt public order (crimes or offences) is a key aspect of public safety. The importance of the subjective public safety key indicator is that, in addition to defining societal expectations regarding public safety, it can also affect decisions taken by citizens on where to live, the creation of businesses, the purchase of assets or even the likelihood of engaging in criminal activity.

That is, the subjective feeling of public safety influences the government's crime prevention and crime investigation abilities, as well as numerous other objective factors beyond this, such as the perception of police presence, perceptions developing on the basis of the success of detective work or media communication in relation to public safety.

Over the previous three years, the HCSO has taken regular and statistically verifiable domestic surveys that follow changing

perceptions of public safety. Analysis of trends can be based upon these outcomes regarding "the population's perception of safety in public areas and in their living environment". Participants in the study were offered four possible responses, depending on how safe they consider themselves to be in public areas. Nearly half the population responded that they "feel sufficiently safe" in public areas.

According to the data obtained by the HCSO from 2013–2015, the population's perception of safety has improved each year. While 35% responded in 2013 that they feel under threat and 12% that they feel they are very much under threat, these percentages had fallen considerably by 2015: those perceiving themselves to be under threat were 26%, and those feeling themselves to be very much under threat were only 6%, while, in parallel to this, those who perceived themselves as being in great safety rose from 17% to 23%.

The population's perception of safety is improving: while approximately two-thirds of those asked perceived themselves to be safe in public areas in 2013, nearly three-quarters of those asked responded that way by 2015.

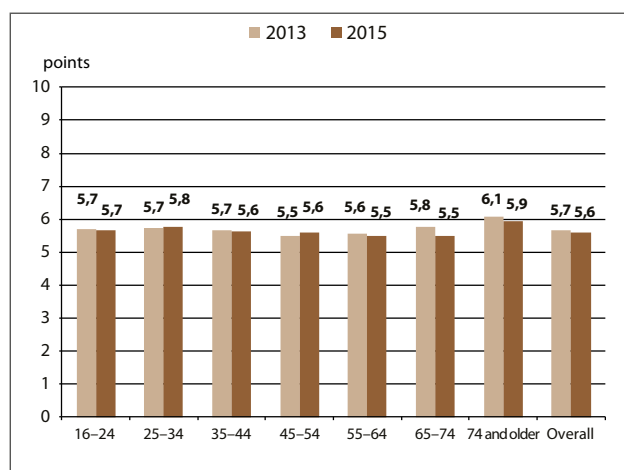
B.2.2. PUBLIC TRUST IN THE POLICE FORCE

From the perspective of government capabilities in relation to public safety, the performance of the police force is exceptionally important, primarily in preventing, investigating and punishing activities that threaten or disrupt public order (crimes or offenses). The subjective perception of public safety forms opinions on police performance and confidence in the police to a high degree.

The changing perception of public safety has been measured by the HCSO since 2013 in a statistically verified manner: a large representative sample is used to measure the development over time of the "population's confidence in the police".

Using a scale from 0 to 10, the average level of 5.7 measured in 2013 has remained essentially unchanged at 5.6 in 2015, with a small fall recorded among those over the age of 65.

Additionally, the confidence trends were reinforced in the survey by TÁRKI on institutional confidence, which revealed a significant improvement in public trust in the police from 4.5 points in 2009 to 5.3 points in 2013. Among the public institutions examined by TÁRKI, the police received the highest confidence



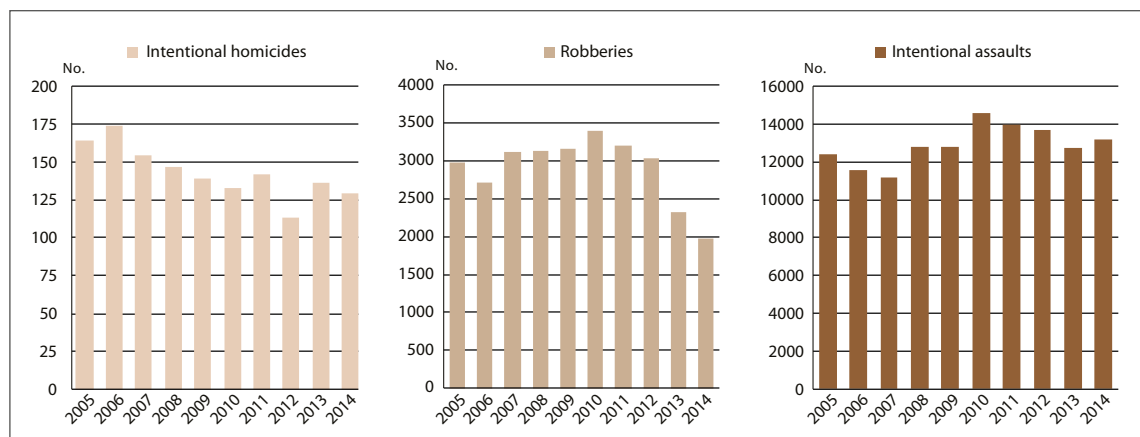
Source: HCSO

index after the Hungarian Academy of Sciences (ahead of, for example, the National Assembly, the Hungarian National Bank or the State Audit Office of Hungary).

Compared internationally, attitudes toward the Hungarian police are the best in our immediate region.

Public confidence in the police has improved significantly since 2009, and is among the highest among public institutions.

B.2.3. NUMBER OF REPORTED INTENTIONAL HOMICIDES, INTENTIONAL ASSAULTS AND ROBBERIES



Source: SIPACS

The subjective population indicators introduced previously are effective in complementing the objective indicators on the reported number of crimes, and within that three types of crimes (intentional homicide, intentional assault and robbery), which provide trend figures for violent crimes. In addition, these crimes can be expected to have a shorter latency than crimes that have less severe consequences. In two of the three analysed categories on violent crime (inten-

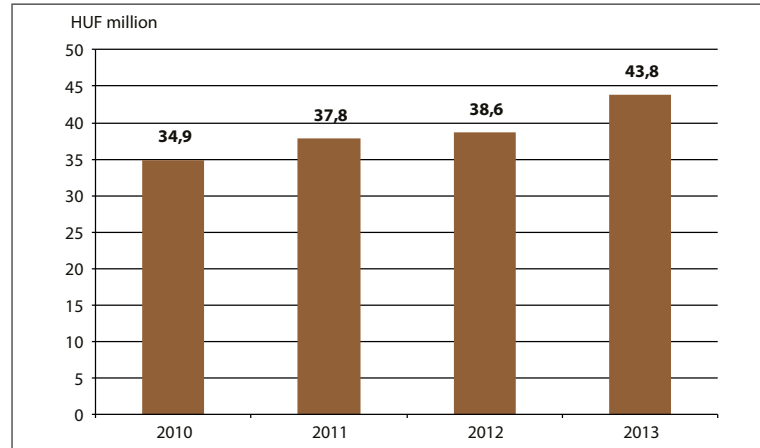
tional homicide and robbery), the number of reported crimes has shown a marked decrease – by nearly a third – over the previous 5–7 years, with smaller fluctuations each year, while a smaller reduction was observed for intentional bodily harm. The statistical data points to an improvement in the crime rate, for which a key, although not exclusive, factor is the capability to prevent crime and the improved deterrent effect of criminal investigations.

The numerical decrease in representative categories of violent criminal offences indicates an improvement in the government capability to prevent and investigate crime over the past five years.

B.2.4. ANNUAL GOVERNMENT EXPENDITURES ON PUBLIC ORDER, CIVIL DEFENCE, FIRE AND DISASTER PREVENTION PER 1000 POPULATION

One of the most important components of the state resources dedicated to public safety is the sum dedicated to upholding and developing the already established capacities from central budget resources. State expenditures dedicated to public order by population between 2010–2013 clearly show that public safety expenditures have grown in the time period analysed.

In addition to revealing the extent of the burden of upholding public safety, the annual figure can also be calculated in proportion to the population to support international comparison. On this basis, it can be determined that expenditure on upholding public order was among the lowest in the region in 2013, while satisfaction with public safety also lagged behind the regional average. At the same



Source: HCSO, COFOG

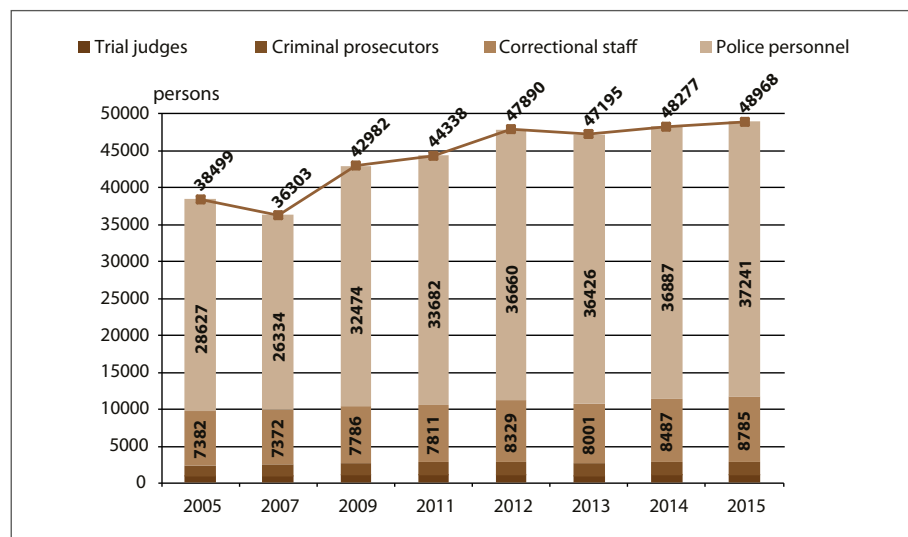
time, confidence in the police can be considered high by international comparison, which suggests that police work in Hungary is of a high quality.

State expenditures on public order significantly increased in the three years following 2010.

B.2.5. LAW ENFORCEMENT PERSONNEL RESOURCES

Effective law enforcement is unimaginable without ensuring the appropriate numbers and quality of personnel. Efforts to improve levels of public order took place in parallel to an increase in human resources: numbers of police, prosecutors and prison staff have seen a marked increase on figures ten years previous. As a result, there has been an increase in numbers of police and prosecutors of 25–30%, while numbers of prison staff and criminal judges have experienced an increase of 5–8%.

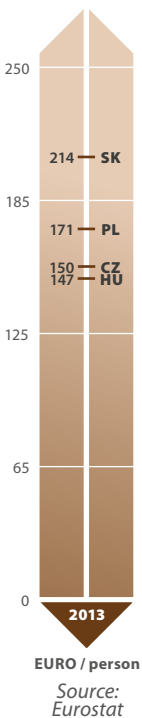
Accordingly, while the numbers of law enforcement personnel was 38,499 in 2005, by 2014 it was 47,789, representing an increase of 24.2%. At the same time, it is important to note that the most significant period



Source: HCSO

of growth was from 2007 to 2009. Since then, growth has been much more reserved, while the effectiveness of law enforcement work has shown a significant increase.

Criminal investigation capacities have strengthened, and criminal investigation personnel resources have expanded.



B.3. LEGAL SECURITY DIMENSION

Key indicator: THE POPULATION'S CONFIDENCE IN THE LEGAL SYSTEM

An indicator originating from the data collected in supplementary module NSDCP 1968 to the annual survey on Household Budgets and Living Conditions. The size of the sample is approximately 13,000 individuals. The indicator is derived from the average of the answers, on a scale of 0–10, of a distribution of respondents based on different groups to the question, “How much trust do you personally have in the legal system?” In addition to age group, the distribution can also be shown by gender and level of educational. *Source: HCSO, ILC SWB*

Sub-indicator 1: ANNUAL GOVERNMENT EXPENDITURES ON THE JUSTICE SYSTEM AND CORRECTIONS PER 1000 POPULATION

In order to measure government functions, various international institutions have, under the guidance of the UN, implemented the so-called COFOG categorisation standard, which displays, grouped into tasks, what amounts a state spends on what aims. Starting from the year 2010, the HCSO has also published statistical data on government expenditures broken down according to COFOG and based on national accounts. COFOG sub-section 3.3.0 contains expenses for civil and criminal courts, ombudsmen and public defence lawyers, and sub-section 3.4.0 contains expenses for the operation of gaols and prisons, and other institutions engaging detainees. The indicator reflects total expenditures for all of these distributed over the subject year per 1000 population as shown by the population figure as of 1 January. *Source: HCSO, COFOG*

Sub-indicator 2: NUMBER OF LITIGATED CASES INVOLVING PUBLIC ADMINISTRATION TAKEN TO FIRST-INSTANCE COURTS IN THE SUBJECT YEAR (No.)

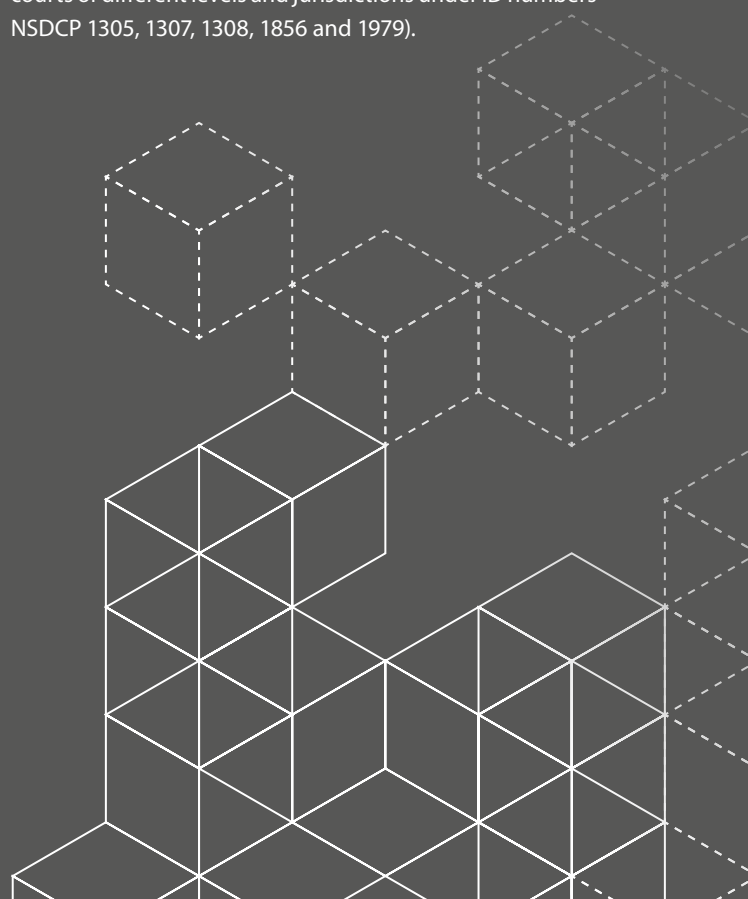
The indicator shows the number of public administrative resolutions taken to court for legal remedy and attempts to portray the change over time in the acceptance of administrative resolutions. The source of the data is the statistics of the Hungarian National Office for the Judiciary (Prior to 2012: the Hungarian Office of the National Council of Justice) recorded by the HCSO (Reports on the cases of courts of different levels and jurisdictions under ID numbers NSDCP 1305, 1307, 1308, 1856 and 1979).

Sub-indicator 3: PROPORTION OF CIVIL LITIGATION CASES IN WHICH FIRST-INSTANCE COURT DECISION IS APPEALED (%)

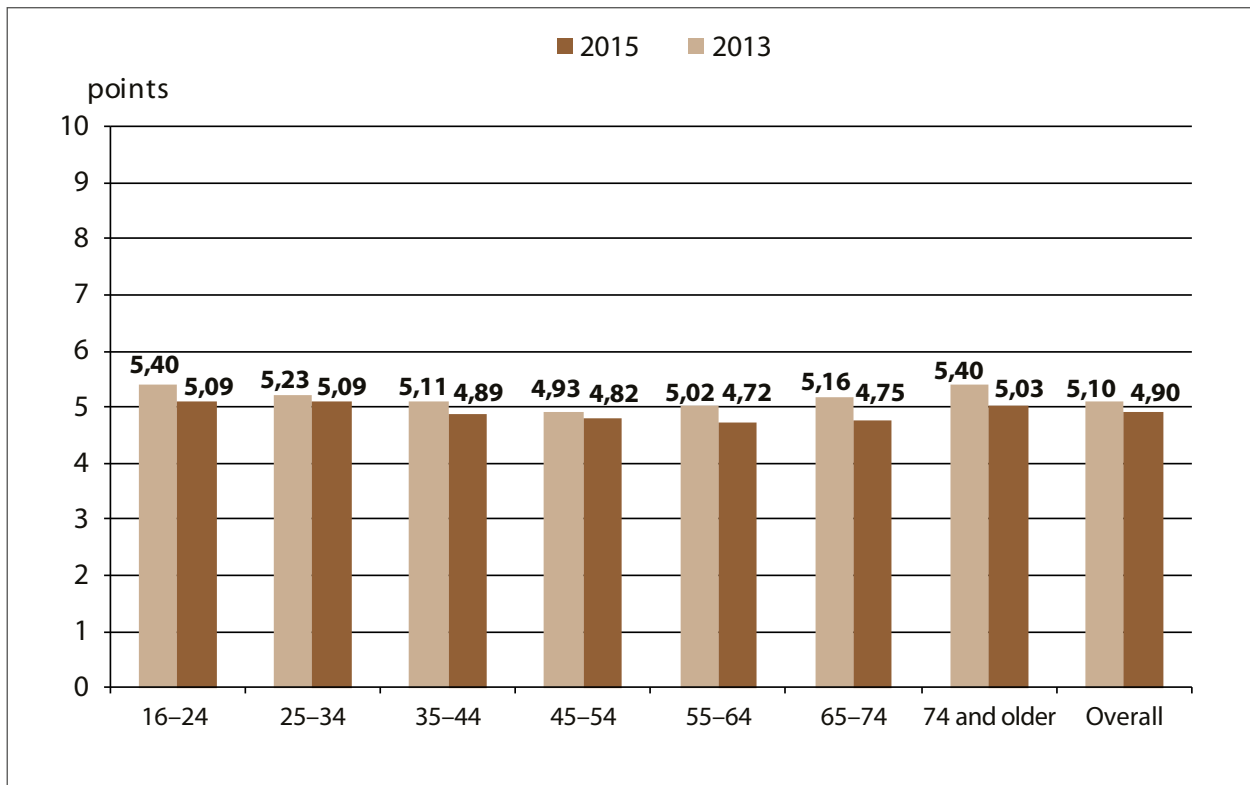
This indicator shows the level of acceptance of first-instance decisions in cases of civil litigation through the ratio of the number of cases of civil litigation submitted for appeal in the given year as a share of all cases of first-instance civil litigation submitted in the same subject year. It should be noted that the HCSO data allows for comparison between first- and second-instance submissions of cases in the subject year, but not their completion. The source of the data is the statistics of the Hungarian National Office for the Judiciary (Prior to 2012: the Hungarian Office of the National Council of Justice) recorded by the HCSO (Reports on the cases of courts of different levels and jurisdictions under ID numbers NSDCP 1305, 1307, 1308, 1856 and 1979).

Sub-indicator 4: PERCENTAGE OF PROLONGED FIRST-INSTANCE CIVIL LITIGATION COURT PROCEDURES COMPLETED MORE THAN TWO YEARS AFTER BEING SUBMITTED (%)

The percentage (%) of first-instance civil litigation procedures which, as prolonged cases, are completed during the subject year after more than two years relative to the number of all first- and second-instance civil litigation cases completed in the given year. The source of the data is the statistics of the Hungarian National Office for the Judiciary (Prior to 2012: the Hungarian Office of the National Council of Justice) taken over by the HCSO (Reports on the cases of courts of different levels and jurisdictions under ID numbers NSDCP 1305, 1307, 1308, 1856 and 1979).



B.3.1. THE POPULATION'S TRUST IN THE LEGAL SYSTEM



Source: HCSO

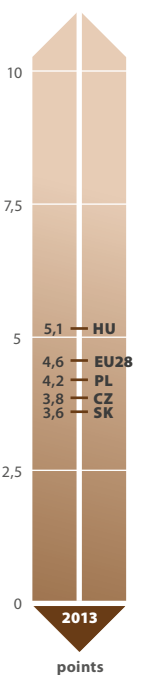
Legal security is subject to the government's ability to engender trust in the legal system and to create a sense of security safeguarded by law. The most basic requirements of a legal system are confidence in legislation and jurisprudence, which we consider to be the key indicators of the impact area dimension. And, just as with the public safety key indicator, it is also important to call attention to the fact that confidence in the legal system fundamentally impacts the decisions of citizens and legal entities. These decisions exist in a broad spectrum from contractual relationships to economic decisions and efforts to pursue legal remedies. Subjective judgment of the legal system is influenced by the justice system's capacity, preparedness and independence, alongside numerous other objective factors such as the clarity of judicial decisions and media communications related to the functioning of the legal system.

Widespread, regular and statistically verified domestic surveys of attitudes toward the justice system have been prepared by the HCSO since 2013, while the period of 2010–2013 is covered by surveys conducted by TÁRKI. Based on these, a trend of improvement can be observed.

The scale from 0 to 10 in the data collected by HCSO to measure the confidence index showed a result of just over the average value of 5 by 0.1 for "the population's confidence in the legal system" in 2013. The data from 2015, however, reveal that the confidence index had fallen below the average value (by just one tenth). On this basis, it can be stated that those surveyed tended not to trust the legal system.

In international comparison, confidence in the Hungarian legal system in our immediate region is far and beyond the highest, and is even above the EU average.

The surveys conducted by the HCSO since 2013 have shown a slight decrease in confidence in the legal system.



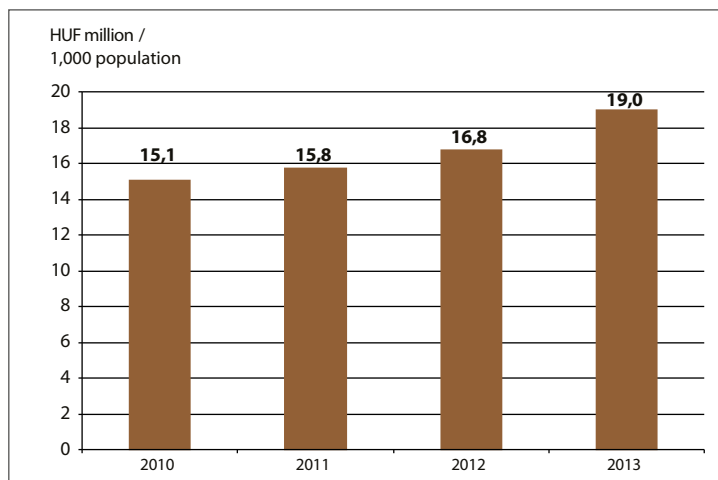
Source: Eurostat

B.3.2. ANNUAL GOVERNMENT EXPENDITURES ON THE JUSTICE SYSTEM AND CORRECTIONS PER 1000 POPULATION

Trust in the legal system also includes the application of justice and of the law in public administration. The application of justice is an independent branch of power in which government interference is restricted by law, which is why influence indicators of the effectiveness of the courts in service of justice only reflect government capabilities indirectly and in exceptional cases. At the same time, the capacity and quality of the justice system are determined by the financial resources available.

In 2013, the EU launched a measurement system (Justice Scoreboard) for this area, which builds on the EU data from the European Commission for the Efficiency of Justice (CEPEJ).

The justice system's financial resource indicators, that is, annual government expenditure on justice and law enforcement per 1,000 population from 2010–2013, showed an increase at current prices, which also represents an increase in real value.



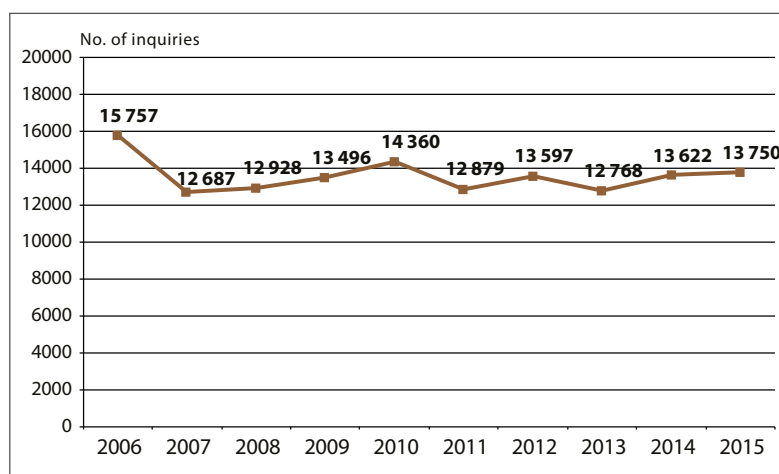
Source: HCSO, COFOG

When compared internationally, our experience was that the total of Hungarian expenditures can be considered low in our region, while Slovak expenditures are extremely high.

The justice system's financial resource indicators show an improvement in governmental capability to increase confidence in the administration of justice.

B.3.3. NUMBER OF LITIGATED CASES INVOLVING PUBLIC ADMINISTRATION TAKEN TO FIRST-INSTANCE COURTS IN THE SUBJECT YEAR

One of the most common tools for determining the quality of initial administrative resolutions is to examine the number of appeals. In relation to this, it is important to note that this method does not provide an average level of quality, but the number of cases that can be challenged from a legal perspective, and where the plaintiffs believe it is worthwhile to initiate the legal process. For this reason, examining the number of appeals is only of limited use for determining the quality of decisions, since the increase in the number of reviews may not only be due to a drop in the quality of decisions, but other factors as well, such as the costs associated with the appeal (time and financial costs), and how they all relate to the likelihood of overturning the decision. The number of litigated cases involving public administration submitted to courts of first-instance has varied between 12,500 and 14,000 over the past 10 years. The change in the number of appeals



Source: NOJ

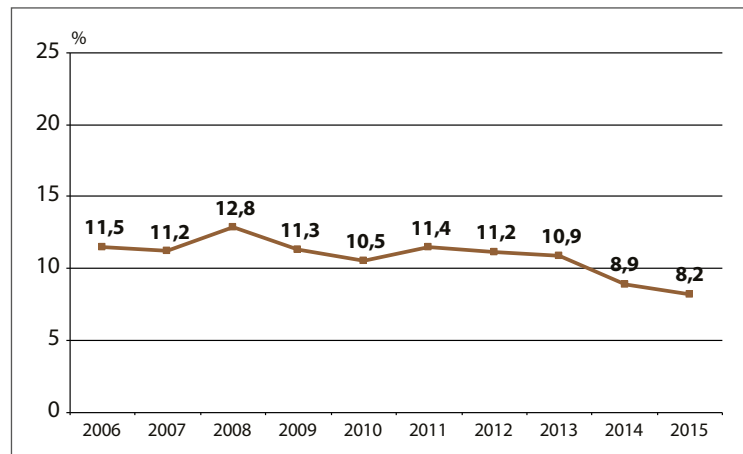
has not shown any trends, with the dataset showing instead two exceptional years (2006 and 2010). Accordingly, the fact that number of appeals is below 14,000 from 2011 onwards suggests satisfaction with respect to public administration decisions.

Data on judicial legal remedy shows slowly improving satisfaction on the part of citizens with respect to public administrative decisions, but the result fluctuates slightly each year.

B.3.4. PERCENTAGE OF CIVIL LITIGATION CASES IN WHICH FIRST-INSTANCE COURT DECISION IS APPEALED

The share of litigated civil court cases submitted to a second-instance court for appeal as a proportion of all first-instance litigated cases in the given year shows the degree to which first-instance decisions are accepted in litigated civil cases. Just as in the case of the previous indicator, it is also exceptionally important to note that the number of appeals is influenced by subjective factors. Accordingly, the explanation for the fall in the indicator could not only be due to the improvement in quality of first-instance decisions but also that the costs of taking cases further may be too high when compared to the potential positive outcome of the second-instance decision.

The data show that the rate of appeals varied between 10–12% over the last ten years, and reveal a slightly falling tendency that culminated in the years 2014 and 2015. What this means is that there is increasing acceptance of first-in-



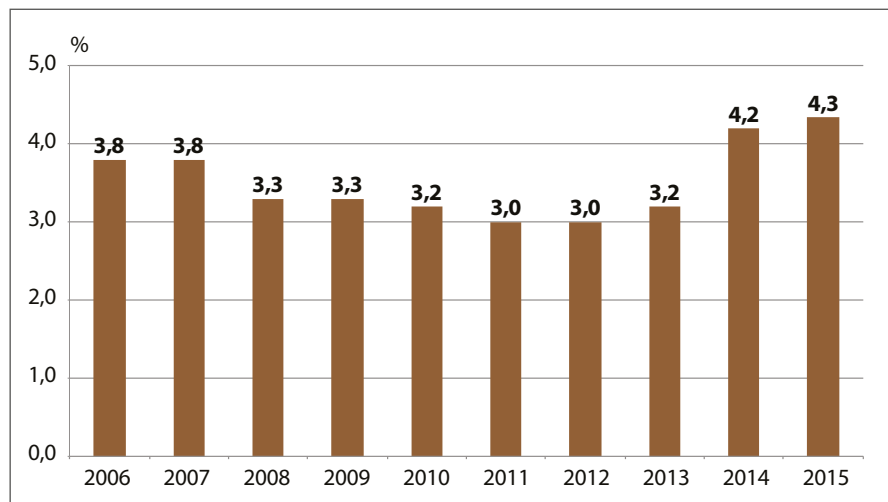
Source: NOJ

stance decisions compared to previous years, but also that, in comparison to the higher rates in earlier years, the data from 2014 projects a further increase in the acceptance of first-instance decisions.

The level of acceptance on the part of concerned parties of judicial decisions passed in civil cases is improving since 2011.

B.3.5. PERCENTAGE OF PROLONGED FIRST-INSTANCE CIVIL LITIGATION COURT PROCEDURES COMPLETED MORE THAN TWO YEARS AFTER BEING SUBMITTED

Reducing the reasonable amount of time required for procedures to be completed, and the time required for public administration, is also one of the basic indicators for the efficiency of legal administration in the EU CEPEJ measurement system. Those civil litigation procedures that are completed within two years can be considered to be reasonable. The percentage of first-instance civil litigation procedures that were delayed by more than two years varied between 3.0–3.3% between 2008–2013, which can be considered a significant improvement over the years preceding it, and also shows an increase in the speed of litigation procedures. Compared to these years, 2014 brought about a drastic increase in the delay of litigation procedures, but this cannot be considered an exceptional year based on data from 2015. Taking the above into account, we can state that civil litigation

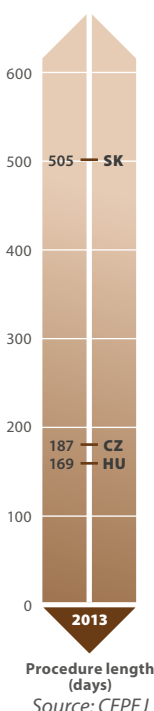


Source: NOJ

procedures that are prolonged for unreasonably long periods only occur once for every 25 to 30 cases.

International data is lacking in plenty of instances. Using Czech and Slovak litigation procedure times for comparison, we can state that average litigation procedure times in Hungary are relatively short.

Following a period in which the trend showed a reduction in litigation periods, 2014 saw a significant increase, and figures for 2015 did not suggest an immediate return to former levels.



B.4. PUBLIC CONFIDENCE IN GOVERNMENT AND TRANSPARENCY

Key indicator: CONFIDENCE IN THE GOVERNMENT EXPRESSED BY THE POPULATION AT PARLIAMENTARY ELECTIONS (%)

In the given election year, the proportion of parliamentary mandates won by the governing party or by the party coalition or party alliance as a percentage of all mandates (%) in the parliamentary elections for the given year. (The source of the data is the official data of the National Election Office (NEO))

Sub-indicator 1: NUMBER OF PUBLIC INFORMATION INQUIRIES ENDING IN A FINDING OF ILLEGALITY BY THE HUNGARIAN NATIONAL AUTHORITY FOR DATA PROTECTION AND FREEDOM OF INFORMATION (HNDF)

One of HNDF's tasks is to monitor and promote the enforcement of the law on the transparency of information of public interest or in the public interest. This is the number of public information inquiries ending in a finding of illegality, based on HNDF data. *Source: HNDF*

Sub-indicator 2: DATA ON INSTITUTIONS' (VOLUNTARY) PARTICIPATION IN THE STATE AUDIT OFFICE OF HUNGARY'S (THE SAO'S) CORRUPTION RISK MEASUREMENT SYSTEM (number of institutions)

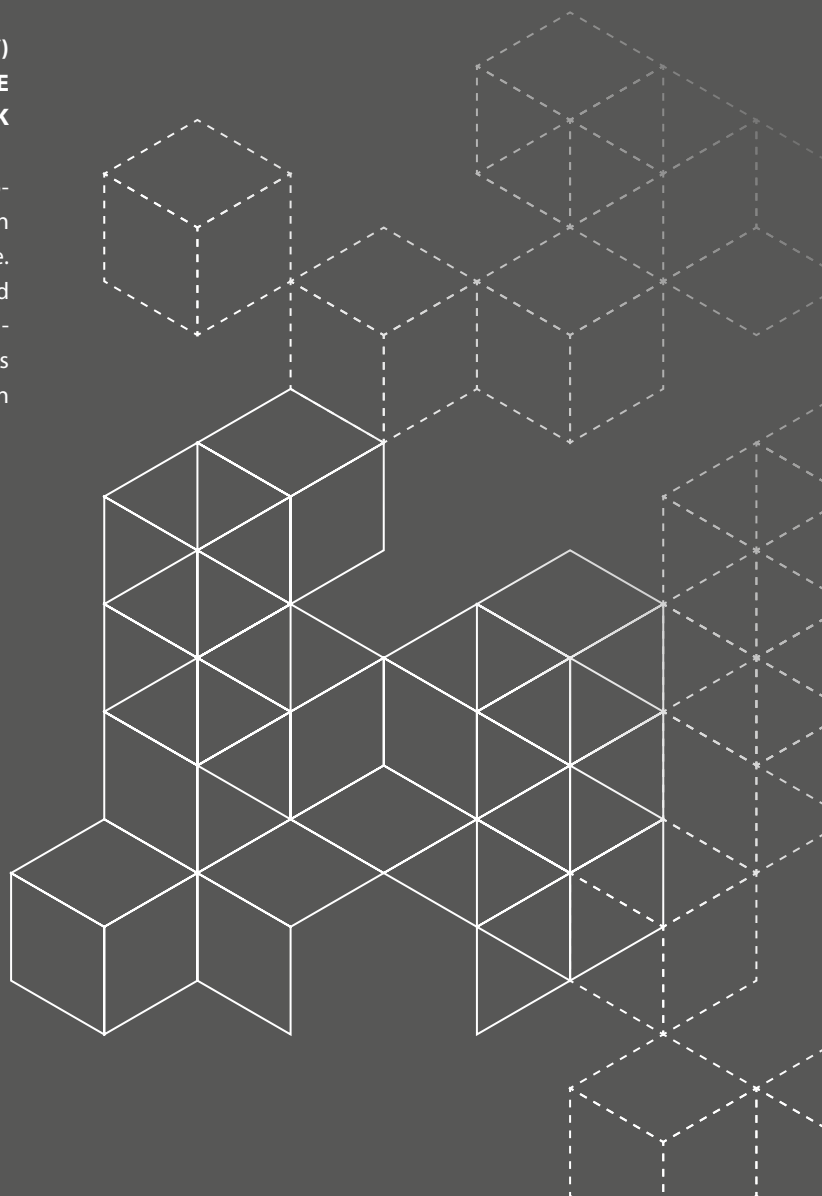
The State Audit Office of Hungary oversees the integrity project realised from EU funds known as Mapping Corruption Risks: Strengthening Integrity Based Administrative Culture. The aim of this was to measure, on the basis of self-reported data, the exposure to corruption risks within public administration, as well as the level of so-called integrity controls that seek to reduce it. The budgetary entities participate in the survey voluntarily. *Source: SAO*

Sub-indicator 3: THE SAO'S CONTROLS MITIGATING CORRUPTION RISKS FACTOR (KMKT) INDEX

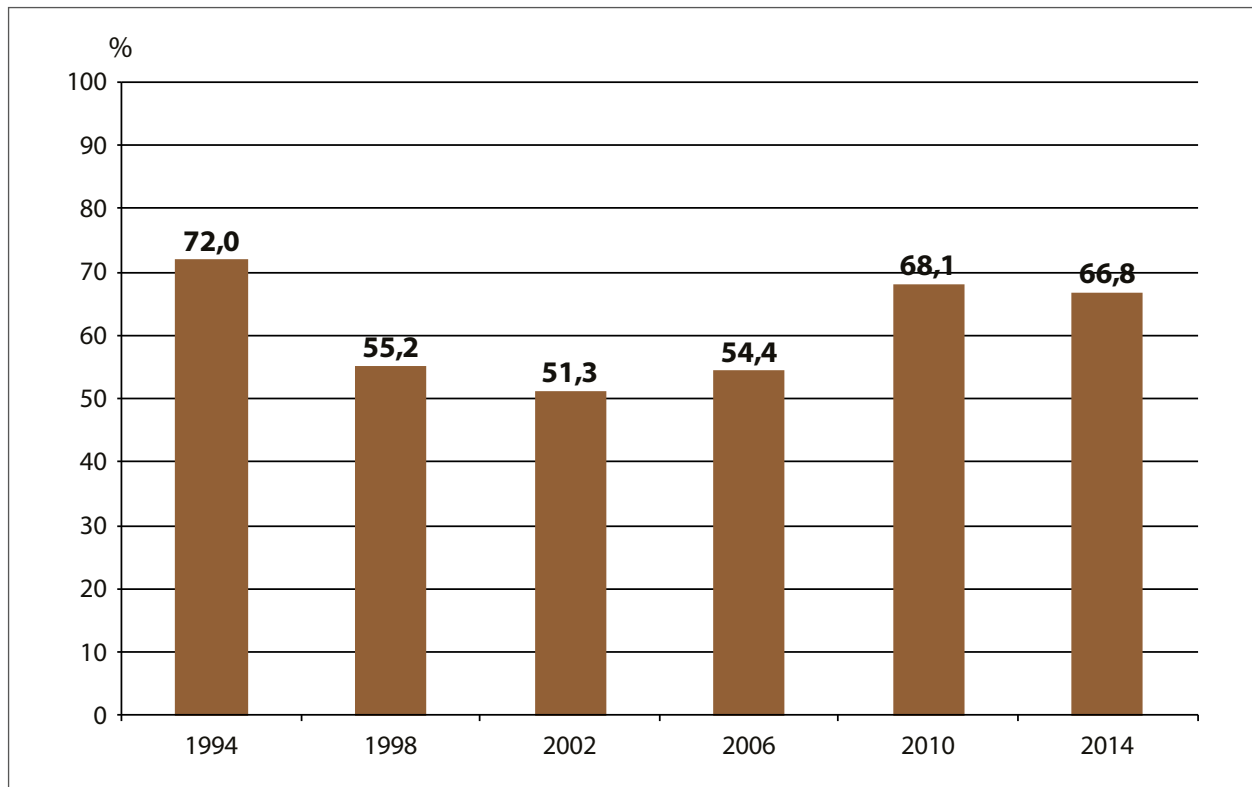
The Controls Mitigating Corruption Risks Factor (KMKT) Index reflects whether institutional controls exist at the given organisation and whether these are actually in effect and fulfil their intended purpose. *Source: SAO*

Sub-indicator 4: STATE SUPPORT FOR NGOS

All financial state support for non-governmental organisations, broken-down by the source of the funding. The data comes in part from governmental financial statistics and in part from the comprehensive data collection performed annually by HCSO, such as the NSDCP 115 statistical report on the activities of non-profit organisations. The data for the year 2010 was available in a different breakdown, which is why it was not possible to compare this year according to types of support. *Source: government financial statistics, HCSO*



B.4.1. CONFIDENCE IN GOVERNMENT EXPRESSED BY THE POPULATION AT PARLIAMENTARY ELECTIONS (%)



Source: NEO

Public trust in the government results in political stability in governance that forms a substantive element of the quality and effectiveness of government. A government's political ability to take action and its stability, as well as a particular government's overall political stability, is a sensitive factor in determining security and trust within a party political system.

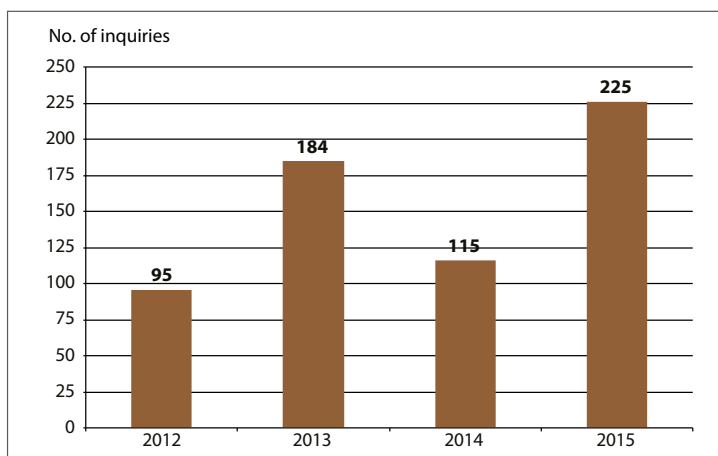
In a democracy, a government's stability can only be deemed to be of value if the core values of democracy are in full effect. An important indicator of public confidence towards the governing party (parties) is the percentage of parliamentary mandates as a function of the total number of mandates, which also fundamentally determines government capa-

bility. While the percentage of total government mandates won by the governing party (or parties) remained below 55% in 2002 and 2006, this figure was over 66% following the parliamentary elections in 2010 and 2014. During the current government cycle, the by-elections that took place up to 2016 have resulted in a minor reduction in the percentage of mandates won in 2014 (66.3%), which somewhat limits the governing parties' room for movement in terms of introducing laws that require a two-thirds majority. The OECD's latest Government at a Glance (GoG 2015) report once again showed a significant increase in the confidence in government institutions index: while this value was only 20% in 2009, it had grown to 33% by 2013.

Compared to the period prior to 2010, the government's political stability has significantly grown, and with this the government's ability to act has strengthened.

B.4.2. NUMBER OF PUBLIC INFORMATION INQUIRIES ENDING IN A FINDING OF ILLEGALITY BY THE HUNGARIAN NATIONAL AUTHORITY FOR DATA PROTECTION AND FREEDOM OF INFORMATION (HNDF)

Government transparency is a core value of the rule of law and of democracy. Transparency shows the government's capability for openness. Transparency is fundamentally a result, one which has the effect of trust. The essence of transparency is the release of public-interest information by the government, especially policy analysis in advance of decision-making and of the decisions themselves. One of the HNDF's tasks is monitoring and promoting the enforcement of the law regarding the openness of information of public interest or in the public interest. The surging growth in the number of public information inquiries ending in a finding of illegality by the HNDF represents an increase in civil initiatives, and in proportion with these, implications for increasing legality.



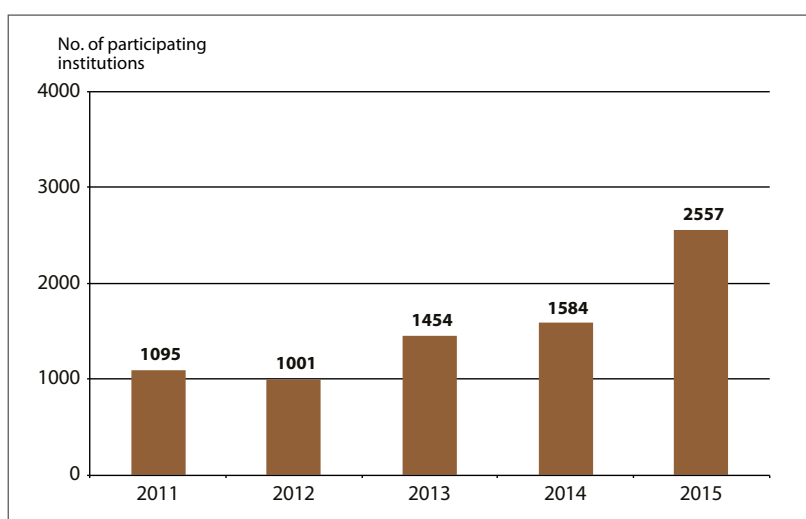
Source: HNDF

This data covers the full spectrum of organisations and individuals performing public functions and economic activity involving public assets.

Government transparency is reinforced by the increase in the number of freedom of information inquiries, in terms of which the year 2013 can be considered an outlier based on the current data series.

B.4.3. DATA ON INSTITUTIONS' (VOLUNTARY) PARTICIPATION IN THE STATE AUDIT OFFICE OF HUNGARY'S (SAO'S) CORRUPTION RISK MEASUREMENT SYSTEM (NO. OF INSTITUTIONS)

The primary factor in determining quality of governance is social sentiment regarding trust in government and government corruption. Transparency is the indicator of the government's integrity, or in other words, of resistance to corruption. The State Audit Office of Hungary (SAO) runs an integrity project aimed at measuring corruption risks. The intention of the measurement was to assess, based on self-reporting responses to data requests, the exposure to corruption risks of institutions in the public sphere, and to mitigate their level of so-called integrity controls. The budgetary entities participate in the survey voluntarily. The number of volunteering institutions has slowly increased each year since 2012, while 2015 saw a



Source: SAO

significant increase in the number of participants: more than 2,500 budgetary entities of varying size and profile joined the survey.

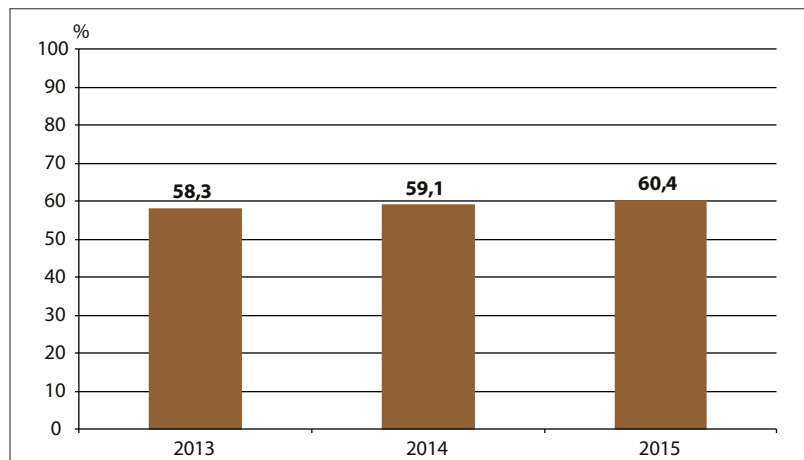
The institutions in the orbit of government are submitting to objective measurement of transparency in greater numbers, which points to a strengthening of integrity and transparency.

B.4.4. THE SAO'S CONTROLS MITIGATING CORRUPTION RISKS FACTOR (KMKT)

The State Audit Office of Hungary (SAO) runs the integrity project to measure corruption risks. The aim of the measurements is to assess, based on self-reported data requests, exposure to corruption risks in the public sphere and the level of so-called integrity controls used to reduce them.

The Controls Mitigating Risk Factors (CMRF) index reflects whether or not institutionalised controls exist at the given organisation and whether they actually are in operation and are fulfilling their intended purpose.

A change in comparison to the 2015 Good State and Governance Report is that the data series shows the 2015 index values for all of the 2,557 respondents surveyed, as well as the development of the 2013 and 2014 annual



Source: SAO, weighted values

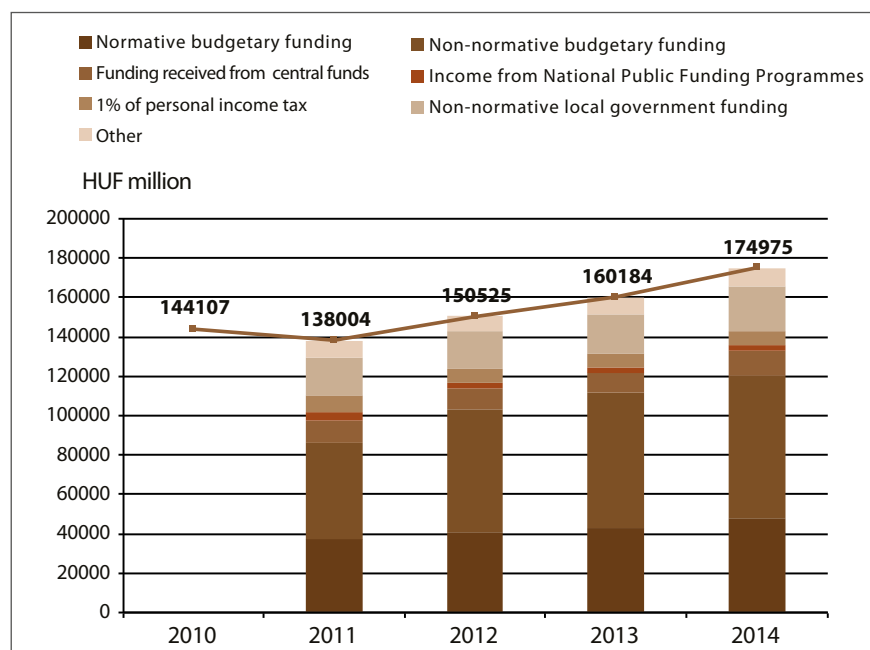
indicator numbers weighted according to the 2015 participation data. From the data of the previous three years (2013–2015), we can see a gradual increase in the number of anti-corruption controls employed by budgetary entities.

The number of anti-corruption controls at budgetary institutions has been growing.

B.4.5. STATE SUPPORT FOR NGOS

Government support for NGOs is an indirect step in the direction of civil control, which is to say towards transparency. The aims of non-governmental organisations are quite diverse, and a significant proportion of them are not present in the political sphere in any capacity (leisure, hobby or sport association, etc.), while we also account for national and local organisations. From a governing perspective, the former, and from a municipal perspective, the latter are relevant. An increase in total subsidies provides an opportunity to reinforce open governance.

Since 2011, primarily the normative (from HUF 37 billion to nearly 48 billion) and non-normative budgetary subsidies (from HUF 48 billion to 72 billion) have grown, as well as subsidies from central funds. Income from the National Civil Fund and the 1% of per-



Source: HNDF

sonal income taxes has fallen since 2011, the former from HUF 4.2 billion to 3.3 billion, and the latter from HUF 8.9 billion to 6.8 billion.

The growth of state support for the NGO sector suggests toward more open governance.

B.5. SECURE LIVELIHOOD DIMENSION

Key indicator: UNEMPLOYMENT RATE

The Unemployment Rate expresses the percentage of those without employment within the economically active part of the population. Those considered economically active includes those who in a given week perform at least one hour of paid work, or have a job from which they are temporarily absent. The unemployed are those who in a given week have not worked even a single hour, or do not have a place of work, from which they are temporarily absent.

Source: HCSO, COFOG

Sub-indicator 1: SECURITY OF HOUSING

Security of housing is measured through the proportion of the population per 100 residential rooms. A room is defined as an area at least 4 square metres in size with direct natural light and ventilation (doors and windows) that can be used for sleeping or daytime activities. Source: HCSO

Sub-indicator 2: EXPECTATIONS REGARDING THE POPULATION'S FINANCIAL SITUATION

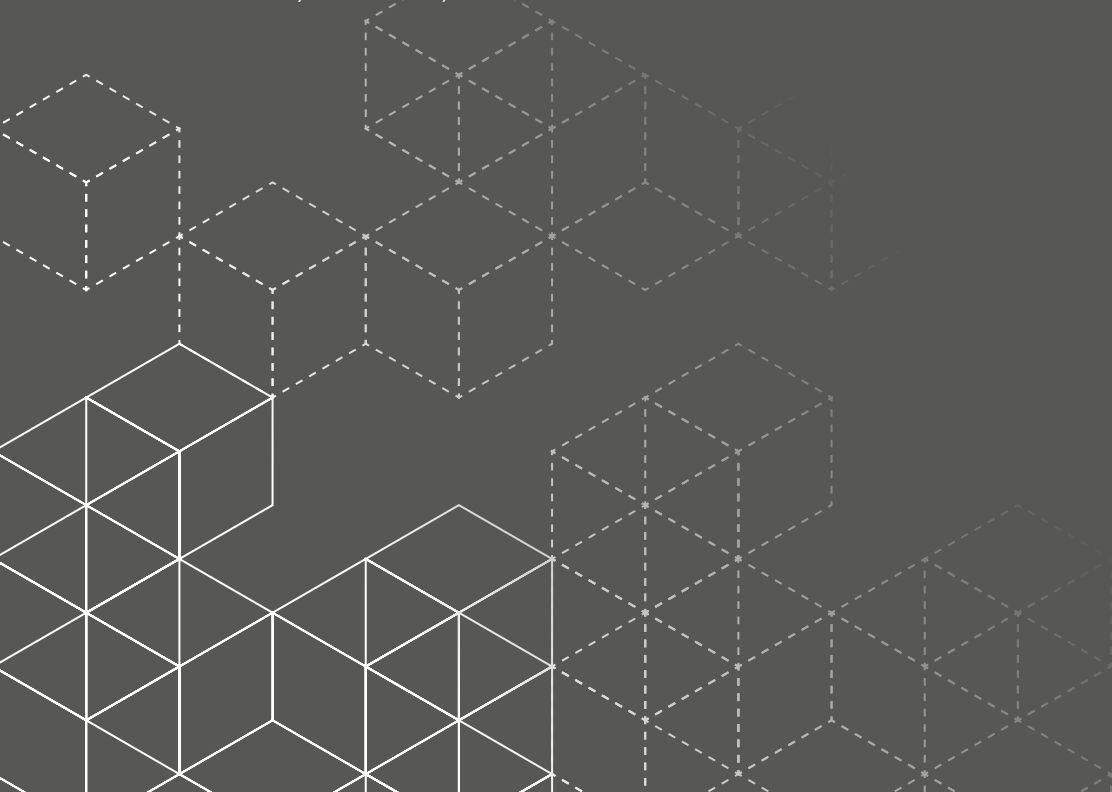
The HCSO's data is based on a measurement of public perception, the source for which is the NSDCP 2154 Household Budget and Living Conditions survey, with approximately 13,000 households participating as a national sample. The basis of the indicator is the following question on the questionnaire: "How do you think your household's financial situation is likely to change over the next 12 months? Will it improve, remain unchanged, grow worse, or don't you know?" The possible responses are available in various breakdowns (according to age of the primary wage earner, community type, level of education of the primary wage earner, and the composition of the household in terms of individuals). Source: HCSO, SILC

Sub-indicator 3: THE POPULATION'S SENSE OF FINANCIAL SECURITY

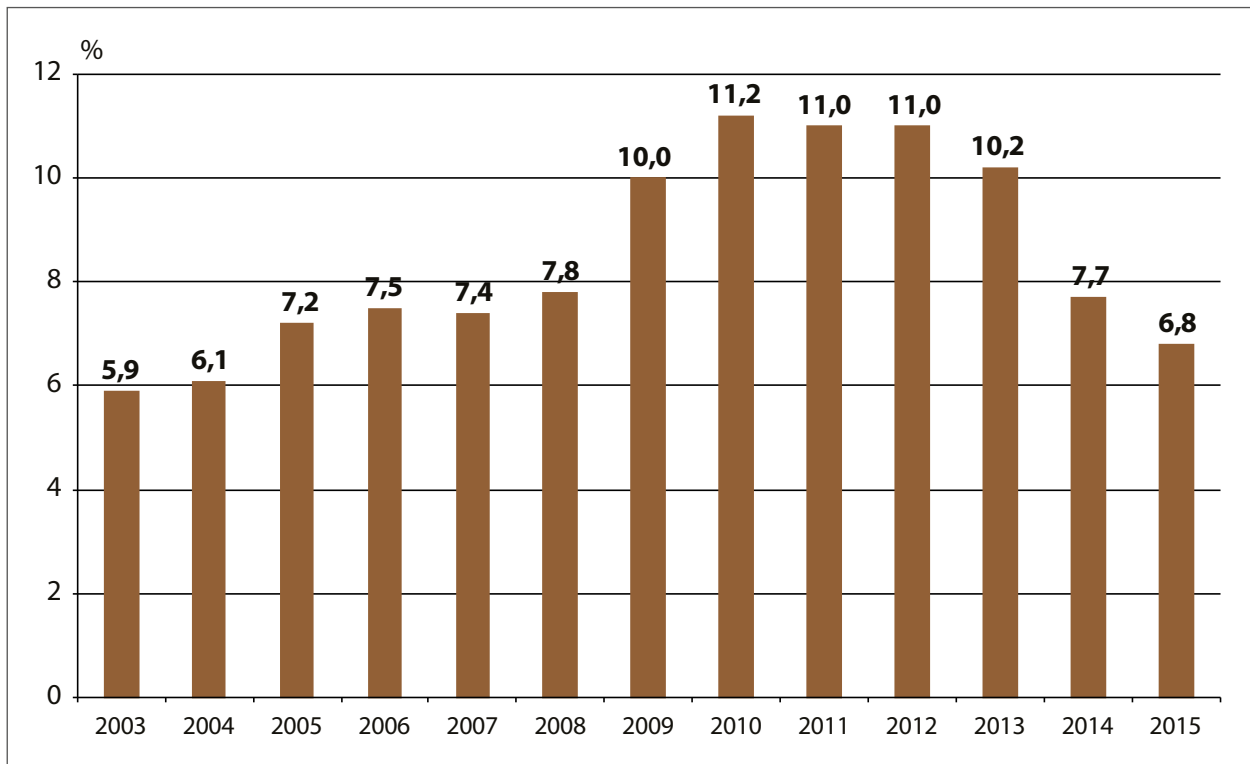
The HCSO's data is based on a measurement of public perception, the source of which is the NSDCP 2154 Household Budget and Living Conditions survey with approximately 13,000 households participating as a national sample. The basis of the indicator is the following question on the questionnaire: "Would your household be able cover a major unexpected expense from its own funds?" The answer provided ("yes" or "no") is also available in various breakdowns (according to age of the primary wage earner, community type, level of educational attainment of the primary wage earner, and the composition of the household in terms of individuals). Source: HCSO, SILC

Sub-indicator 4: CHANGE IN REAL VALUE OF THE MINIMUM WAGE

The difference in a given year between the nominal rise in the minimum wage (expressed as a percentage relative to the previous year) and the level of inflation. The minimum wage is fixed by government decree for each year, and the annual consumer price index is calculated and published by the HCSO. (The data shows the degree to which the rise in the value of the minimum wage relative to the previous year was greater or lower than the general consumer price index. A positive value means that the real value of the minimum wage grew, since it grew more than the change in the consumer price index, while a negative value means that the real value of the minimum wage declined, since its rise remained lower than the increase in inflation in the same year.) Source: HCSO



B.5.1. UNEMPLOYMENT RATE



Source: HCSO, COFOG

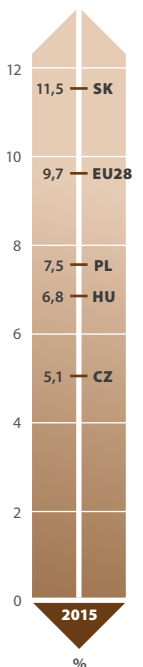
Security of livelihood indicators measure the government's activities that result in improved ability to ensure and provide opportunities to achieve subsistence minimums. This individual security must be valued according to different criteria (public safety, legal security) of equal importance. Security of livelihood assesses the government's capability to support minimum living conditions.

From the perspective of providing the conditions for security of livelihood, receiving an income is exceptionally important, although it is important to separate three groups: the youngest, who do not have independent incomes, the elderly, who in Hungary typically subsist on their pensions, as well as the active and inactive from the perspective of the labour market, who are taken from among those of active age. The group of active age, within a legal framework, are those older than 16, no longer required to attend school, but who have not yet reached retirement age (currently 64). Among those of active age, numerous inactive groups from a labour

market perspective can be found: those on maternity leave, childcare leave, housewives, those on disability pensions, etc. The unemployment rate statistic, from a labour market perspective, is taken from those who belong to the active age of the labour market, therefore it is an important factor that those who are considered unemployed have the intention to work. In their case, the regular absence of an income is the greatest risk factor to their and their family's livelihood, and accordingly the change in the number of those unemployed is in direct correlation with livelihood circumstances.

The unemployment level is traditionally closely associated with economic output, and consequently the effects of the 2008 financial crisis resulted in a high unemployment rate in Hungary. A drastic drop in unemployment can be witnessed from 2014, in parallel with the stabilisation of the domestic economic situation.

On the basis of an international comparison, Hungary's unemployment rate can be considered favourable.

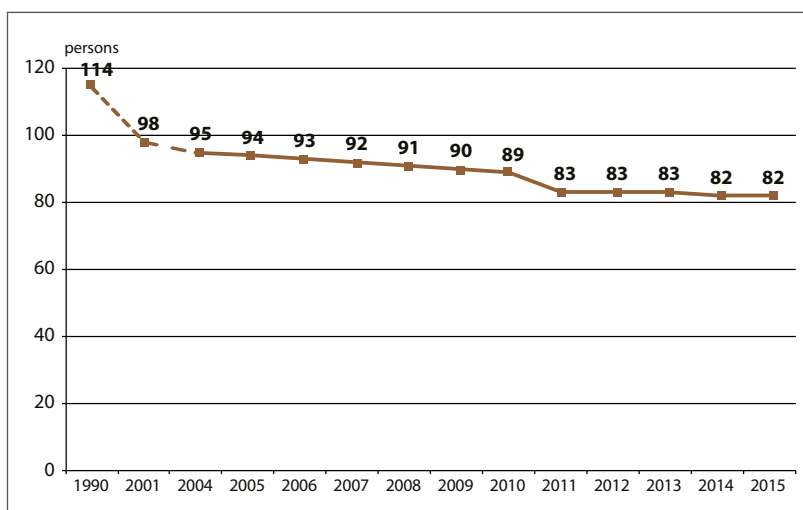


Source: Eurostat

The reduction in employment results in lower risks to livelihood, in a ratio that improves each year.

B.5.2. SECURITY OF HOUSING

At the bottom of Maslow's widely accepted hierarchy of needs pyramid are the physiological needs (hunger and thirst), immediately above which are physical safety, and within this can be found the need for shelter. Consequently, residential security is the foundation for the feeling of security of livelihood. At the same time, from the perspective of residential security, an unavoidable issue is the quality of residence, which is demonstrated through the number of persons per room. The logic for this conclusion is that the fewer persons per room, the better the numerous fundamental living comfort factors. Naturally, taking into consideration the numerous individual parameters in relation to residency and the circumstances of the living environment can be important, such as the distance between the residence and work/educational options. The population number per 100 rooms significantly dropped



Source: HCSO

following the regime change, and this in part is explained by the fall in the population, in addition to which the modernisation of residential dwellings also markedly appears in the improving data.

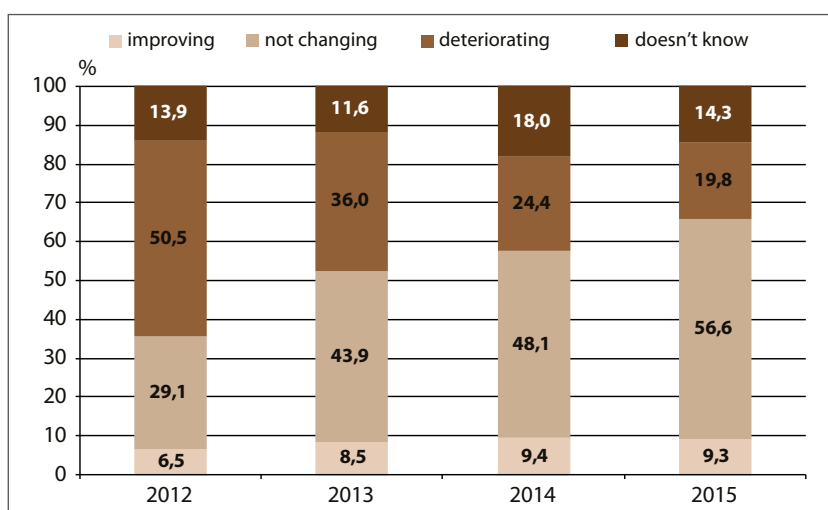
The trend in the reduction of the number of the population per 100 rooms indicates an improvement in fundamental living circumstances.

B.5.3. EXPECTATIONS REGARDING THE POPULATION'S FINANCIAL SITUATION

While the income situation is determined by financial opportunities, expectations associated with a person's financial situation are subjective elements that, growing out of future expectations, determine the feeling of financial security and of the sustainability of the standard of living secured by the income.

According to the surveys conducted by the HCSO since 2012, the population's expectations regarding financial prospects have recently clearly shifted in the positive direction, and the population's expectations appear to have now stabilised as a result on the overall societal level.

While those expecting their financial situation to worsen comprised half the population in 2012, this figure was only two-tenths by 2015. This is a very significant improvement that clearly indicates that the expansion of the Hungarian economy experienced in recent years can also be felt by wide swaths of the population. At the same



Source: HCSO

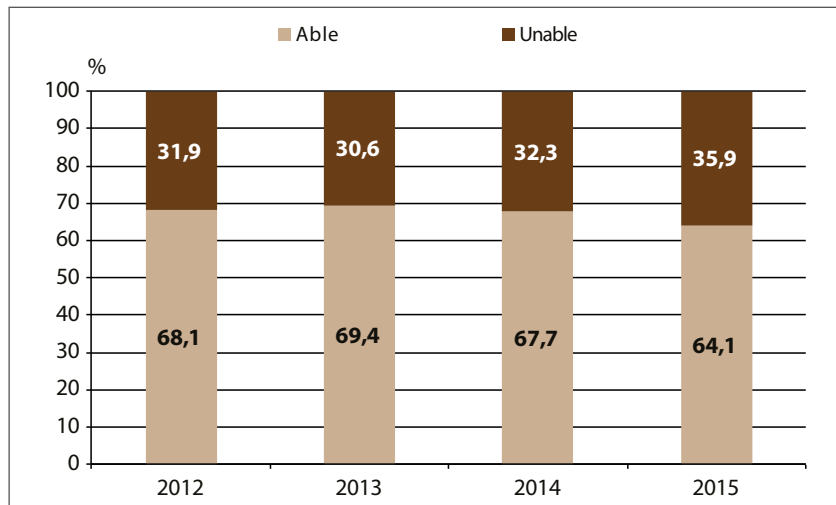
time, the percentage of those expecting their financial situation to improve has significantly grown since 2012. Even so, this group remains less than a tenth of the population as the number of those expecting their financial situation to improve continues to be low.

Optimism regarding the overall financial situation has increased since 2012, stabilising between 2014 and 2015.

B.5.4. THE POPULATION'S SENSE OF FINANCIAL SECURITY

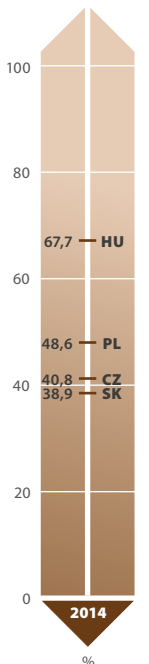
The population's sense of financial security is based upon the ability to cover unexpected and more substantial expenses. The question measures the population's financial saving from the perspective of whether they have sufficient financial means at their disposal to preserve their standard of living.

The population's sense of financial security has also been measured annually by the HCSO since 2012. From this data set, what stands out is that over the course of the previous years, the population's financial situation has stabilised and slightly improved. At the same time, this improvement is much below expectations compared to people's expectations regarding their financial situation. What possibly lies behind this is that following the lasting effects of the financial crisis, the population's delayed purchasing resulted in consumption growing at a higher rate than households' inclination to save. When compared internationally, domestic households that possess the funds for unexpected expenditures are at an exceptionally low percentage. The reason for this is that the



Source: HCSO, EU-SILC

effects of the financial crisis on Hungary were much stronger than for example in Poland, as well as that the global crisis was accompanied by a credit crunch that plunged Hungarian families with foreign currency debts into exceptionally difficult circumstance. Alongside the growing weight of debt, it is little wonder that the sense of financial security among these households, as well as their ability to save, significantly dropped up until 2013.



Source: Eurostat

The population's sense of financial security is improving since 2013.

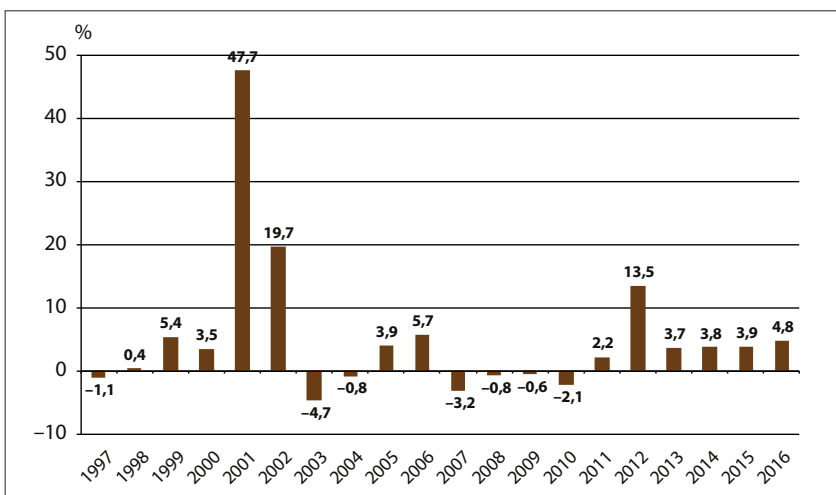
B.5.5. CHANGE IN THE REAL VALUE OF THE MINIMUM WAGE

In public policy measures, maintaining income security constitutes an aspect of security of livelihood. The minimum wage is one of the government's most important tools for guaranteeing a secure livelihood, which legally ensures that those who work but earn little still receive a minimum level of income.

Compared to the previous year, the hectic fluctuations in the minimum wage in real terms clearly show that government capabilities are exceptionally strong in this area. Accordingly, it is possible that drastic deviations may occur between

growth in the minimum wage and capacity for economic performance, which may later be followed by corrections.

The real value indicators of the minimum wage have grown in a relatively predictable manner and at a slightly



Source: HCSO

increasing pace since 2011, following a loss in value for the period between 2007 and 2010. The drastic minimum wage increase witnessed in 2012 occurred as compensation for the withdrawal of tax credits. Taking this into consideration this year also fits with the trend.

The value of the minimum wage is in positive territory since 2011, and is growing at a sustainable rate.

PUBLIC WELL-BEING

SUMMARY¹

The improvement of public well-being as a top social and economic aim is an impact area belonging to the category of target-type impact areas, and is closely linked to the impact areas associated with security and trust, as well as democracy. On the other hand, the asset-type impact areas that are of great significance to it are those of economic competitiveness and financial stability, environmental and social sustainability, as well as effective administration.

Our analysis took the approach of moving away from the economic-type evaluation of public well-being prevalent previously and shifting towards a broader examination of quality of life, as well as a move towards virtue ethics perspectives that provide more complete information on well-being. Rejecting the expediency of using a single indicator, we have selected and employed indicators belonging to the four pillars that make up the 'dashboard' of public well-being: material well-being, quality of life, virtue ethics and sustainability.

It was not through GDP or indicators originating from GDP that we analysed the makeup of material well-being; we instead defined it through indicators relating to the dimensions of disposable household income, poverty, social exclusion, employment and education. A prime aim of analysing this important dimension is to show how the position of the household, or within that, the individual, exerts a many-folded influence on people's well-being, and how they collectively do the same for the state of society and public well-being.

When it came to selecting indicators to measure social exclusion, in addition to objectively capturing the circumstances of those in poverty, and expressing inequality, an important criterion was also to include the indicators used to formulate both domestic and international development goals.

We have described changes in the quality of life with indicators relating to healthcare and the social safety net, as well as to dimensions of the individual in society (mental well-being). In doing so, we have examined the possibility and expediency of both the 'top-down' and the 'bottom-up' structure. Although in the former case quality of life can be approached starting from the available possibilities (income, services, etc.), practical perspectives and international experience led us to prioritise the second approach in defining the indicators, starting from the individual's subjective opinions (preferences). Among others, the opinion polls of the population help to inform us about dissatisfaction with the health care services sector and public education.

With respect to virtue ethics, our starting point is that objective well-being, perceived as happiness, is subject to the 'hap-

piness paradox': happiness (human fulfilment) only grows for some time together with growth of economic means, and after a certain point begins to drop off. The factor that virtue ethics-based well-being grows with in direct proportion to is the intensity of human relationships. 'Social capital' is the other significant function of well-being. Well-being therefore depends on human relationships: in virtue ethics the person is nothing more than an individual who realises themselves and is completed through their relationships. They are capable of surrendering themselves and being selfless. People enter into a relationship in their own interests and not for the value the other person will derive from it.

Well-being can be linked to the idea of self-interest, since this is not only the engine of the economy, but also that of well-being. In the profit-oriented approach, self-interest is the self-interested pursuit of profits understood subjectively (subjective self-interest), the fulfilment of which results in well-being and happiness. In virtue ethics, self-interest can be defined as: my self-interest also includes a desire for the other person's well-being (objective self-interest). Therefore, the person who exists and acts within the virtue ethics system places not only themselves at the centre, but the other person as well. Win-win situations can result from this, and what can be realised is public well-being in its wider meaning and benefit for all: for the common good. An analysis of this, among other things, is aided by indicators such as the following:

- frequency of voluntary social work;
- importance of caring for others;
- trust in other people;
- the importance of moral and ethical values.

By including the sustainability pillar, we show the need for the level of public well-being currently achieved for the short term to also be sustainable for a longer period, or at least in the medium term. The examination of this, however, falls primarily under the scope of studying the impact areas of economic competitiveness and financial stability, as well as sustainability.

While the dimensions selected for the purposes of research and practical application broadly span the areas of public well-being, a few important dimensions have thus far been omitted from the study. These include composition of the family and household, the level and structure of consumption, the situation of youth and the elderly, the quality dimension of work, culture and sport, and use of time (work-life balance). In analysing the indicators describing the dimensions of public well-being, we paid special attention to the change in governmental capabilities in relation to public well-being; meaning, on the one hand, the general direction and character of economic and social policy, and on the other, its role

¹ The authors of this chapter are prof. Gusztáv Báger, Ph.D. (workgroup leader), Sarolta Laura Baritz, Ph.D., Rita Judit Kelemen, Ph.D., Norbert Tamás Kiss, and Ildikó Szabó, Ph.D.

in influencing public policy measures taken during the given time period. The results of this are reflected in the key findings and conclusions shown in presenting the achievements signified by the individual indicators.

The main characteristics of the income situation.

According to the main indicator measuring total corrected disposable income for the household sector, the improving financial situation of households is exerting an increasingly positive influence on the development of objective factors related to quality of life, and, through income earned from work, on improved public well-being on the part of both the individual and society as a whole, as well as – from the demand side – on economic growth. The average net income of employees sub-indicator saw a significant (4.3%) increase in 2015. The growth in the disposable income of households and the improvement in employment made it possible for the savings rate of households to grow further in 2014. Household debt further decreased in 2014. During the period examined, the middle class's income situation, especially in 2014, improved, reaching and then surpassing the national value of the gross average income for the entire population.

The main characteristics of poverty and social exclusion.

The risk of poverty or social exclusion significantly decreased in 2015 nationally, but there were significant deviations by region within this result. This risk, based on the international data available for 2014, surpassed (31.1% [Source: temperature gauge]) the EU value calculated at 24.5%.

The risk of income poverty stagnated between the period of 2013–2015. Its value, in international comparison, placed the country within the middle third. The risk of severe economic deprivation shrank further in 2015. The percentage of the population above the age of 18 exposed to deprivation was reduced on average to below 20%, but there were differences within the demographic groups. The proportion of households with very low work intensity also decreased in 2015; this risk affects 7.1% of the population, compared to 9.7% in 2014. The income poverty rate for children fell from 25% in 2014 to 22.5% in 2015, which is higher than the value for the EU overall.

The main characteristics of the health care and social safety net.

The increase in the number of healthy life years (HLY) means that, in terms of health care, Hungary is close to the average position of EU member countries, only falling behind by 1–2 years. In order to promote this trend, it is appropriate to increase the level of health care spending and to improve the efficiency of its use. Life expectancy at birth improved slightly ahead of the EU average change, but it still significantly falls behind the EU average. Health care expenditure as a percentage of GDP was lower than the EU average in 2014,

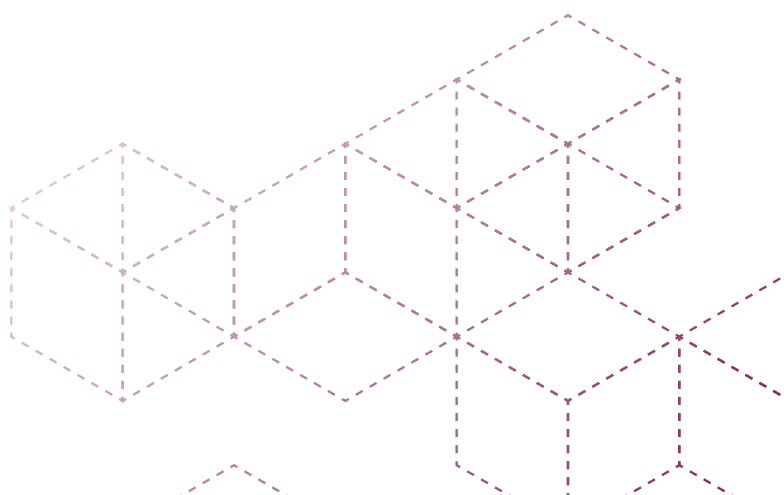
especially in terms of public sources, while the percentage of private expenditure in proportion to total expenditure was significantly higher than the EU average of 27%. The number of spaces in nurseries also increased in 2014. The change in pension replacement rates observed over the long term and the rise in 2014 were in line with the increases in performance and competitiveness in the national economy.

Main characteristics of employment and education.

According to the Active Population Aged 15–64 key indicator, the number of employed and unemployed people on the labour market during the period from 1998–2006 grew, with small variations annually, with the highest figure (4.222 million people) recorded in 2006. In the wake of the financial crisis, the active population fell in 2009 to 4.135 million, and grew to 4.3 million in 2013. In 2014, the number grew to a record level of 4.444 million. The number of people employed in the public work programme significantly increased, reached 172,200 people in 2014. There was a small improvement witnessed in the percentage of early school leavers, although regional differences are significant. The percentage of youth with higher education degree has significantly grown over the last decade, but further increase is necessary to improve competitiveness. Differences in net migration have resulted in excess availability of labour in the Central Hungary region.

Main characteristics of the individual in society.

According to the Satisfaction with Life key indicator, the average values of the answers provided in a survey by the adult population, on a 0–10 scale, were 6.15 in 2013, while this same data point fell slightly to 6.13 in 2015. In 2014, the value of the Meaningfulness of Individual Activity indicator improved for each age group compared to the previous year, but Hungary's average value was behind the Visegrád countries and the EU average. What is typical for the frequency of volunteer social work is that 29.1% of the Hungarian population participated in such work at least once annually in 2015. Satisfaction with the quality of the health care services system is not sufficient. A similar situation exists in public education, where those with higher education degrees are more critical than the average.



K.1. INCOME POSITION DIMENSION

Key indicator: HOUSEHOLD SECTOR TOTAL ADJUSTED DISPOSABLE INCOME

The key indicator shows, in a timeline, the household sector's (private households) total adjusted disposable income based on the national HCSO data. By the balance of private households' primary incomes, which is the income-side operating result, we mean employee incomes and incomes originating from assets minus asset-related payments, as well as revenues received in cash redistributions of incomes. In-kind social benefits are not included. *Source: HCSO*

Sub-indicator 1: AVERAGE MONTHLY NET EARNINGS OF EMPLOYEES

This indicator shows changes over time in the average earnings of employees working in the national economy, in a timeline. *Source: HCSO*

Sub-indicator 2: HOUSEHOLD SAVINGS RATE

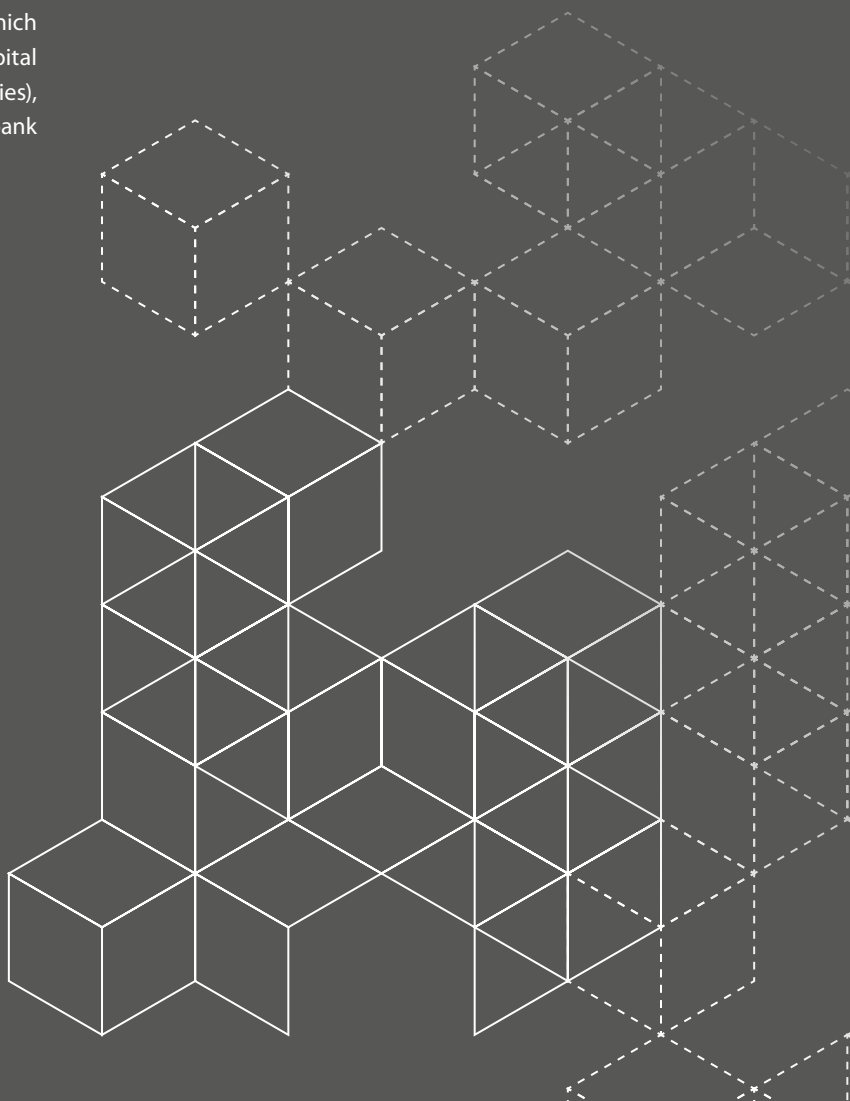
The ratio of annual household savings for a given year as a share of disposable income. The disposable income – supplemented with the correction for net changes in wealth from private pension funds – is the income amount that the households can use for consumption and accumulation. Savings are the amount remaining from disposable income after financing final consumption expenditures and which can be used for accumulation, partly in the form of capital accumulation (fixed assets and accumulated inventories), and partly for acquiring financial assets (e.g. securities, bank deposits and loans). *Source: HCSO*

Sub-indicator 3: HOUSEHOLD DEBT

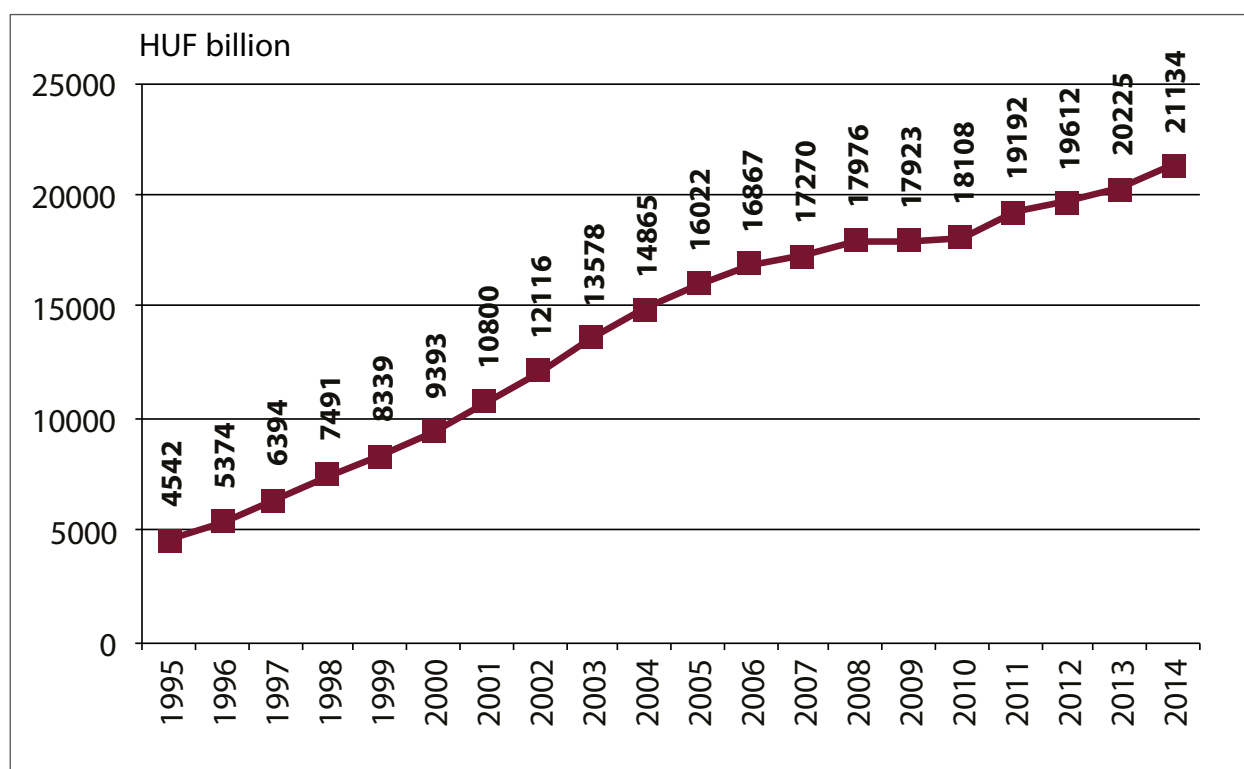
This indicator shows the loan portfolio of the household sector (households, non-profit institutes assisting households and non-financial organisations) as a percentage of GDP. *Source: HCSO*

Sub-indicator 4: ANNUAL GROSS AVERAGE INCOME OF THOSE FALLING INTO THE THIRD AND FOURTH INCOME QUINTILES IN PROPORTION TO THE NATIONAL AVERAGE

This indicator focuses on the middle range of income inequality. It shows the distribution of equivalent income of the top 20% (those with the most income) as a ratio compared to that of the bottom 20% (those with the lowest income). The higher the value of the indicator, the greater the percentage of the middle group. *Source: HCSO*



K.1.1. HOUSEHOLD SECTOR TOTAL ADJUSTED DISPOSABLE INCOME



Source: HCSO

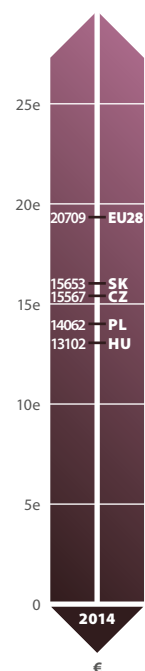
A household's financial situation and income status is one of the most important factors in the complex relationship system between a population's living standards and well-being. The financial status of a household or within it the individual has a significant impact on people's well-being, and in total on the state of society and public well-being.

From the perspective of the practical consequences of financial status, a more valuable approach in place of the individual's income is an examination of the financial situation of households. The household, according to its concept, determines a community "in which, independent of the existence of family relations, the individuals comprise one unit from an income and consumption perspective, and bear their life expenses together in part or in whole."

From the perspective of public well-being, we selected as the key indicator the household sector's total adjusted disposable income to define their income situation. Of the indicators for income, this has the closest relationship to quality of life as it also takes into account everyday necessary expenses and therefore provides a good estimation of the

extent to which material goods, health care expenditures, the amount invested into education or training, or any other form of consumption that improves well-being can add to a household's quality of life. The development of the income available to households depends on the performance capacity of the national economy and on economic and social policy measures. The rapid economic growth (3–5%) of the first half of the past decade resulted in relatively rapid and steady improvement of the income situation. This was followed in 2007–2008 by a slowdown, and then in 2009 – as a result of the crisis – by stagnation, with an improvement noticeable again as growth quickened from 2010 onwards. In 2014, the steady growth of household disposable income continued. While in 2013 this value was HUF 20.255 trillion, by 2014 it had grown to HUF 21.134 trillion.

International comparison of purchasing power parity (measured in PPS) is possible. The value typical for Hungary (13,102 PPS) does not reach the middle value typical for the EU (20,709 PPP), but is above that of Romania, Latvia, Croatia and Estonia.

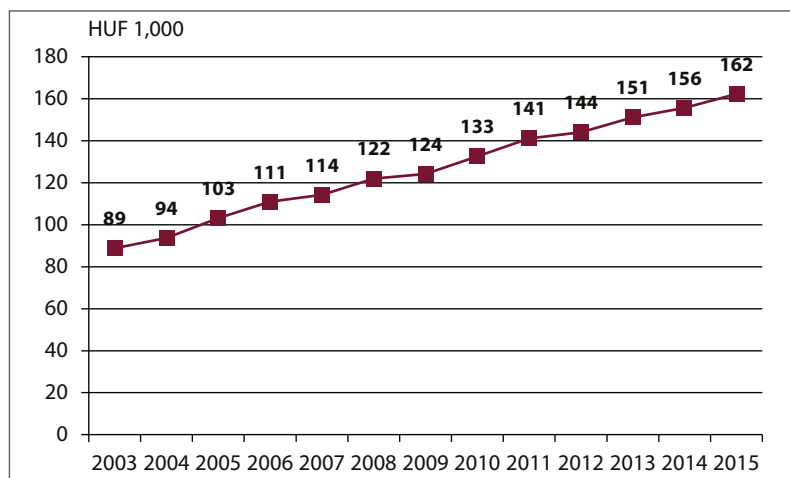


Source: Eurostat

In Hungary, total household disposable income has steadily grown since 2010. In 2014, the household sector's total adjusted available income was HUF 21.134 trillion, or 65.7% of GDP.

K.1.2. AVERAGE MONTHLY NET EARNINGS OF EMPLOYEES

The average monthly net earnings of employees indicator provides information on how the population's economic engine, the actively earning citizenry, are employed and under what earning conditions. Those employed are workers in a legal relationship with their employers to perform work, and are required to work in exchange for a salary on the basis of their work contracts and agreements to work, averaging at least 60 working hours per month. Those who are considered to be employed, among others, includes people contracted to work remotely, students employed during or outside of the school term, foreign citizens who work for a wage at an enterprise registered in Hungary independently of whether the work is performed in the employer's domestic or international office or site, as well as those who are sent abroad to perform their work.



Source: HCSO

The indicator's value has, since 2008, shown steady growth, and the rate of increase has been stable over the previous years. The 3% change from 2014 was outpaced by growth in 2015, since the average monthly net earnings of employees was HUF 162,300, which represents a positive change of 4.3%.

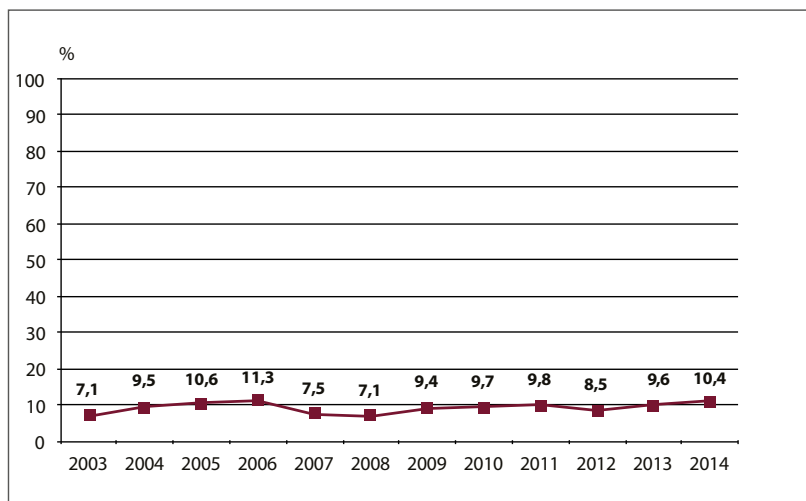
The average monthly net earnings of those in employment was HUF 162,300 in 2015. Consequently, the indicator surpassed the previous year's value by 4.3%.

K.1.3. HOUSEHOLD SAVINGS RATE

Financial situation is a broader concept than income. In addition to regular income, when examining a household's financial situation, one must also consider a household's accumulation of wealth, of which the most revealing index is the cash savings rate, which expresses the value of household realised monetary savings as a percentage of disposable income.

The household savings rate between 2003 and 2012 showed a 4% variation. Following the low point of 2012, the indicator has increased steadily. In 2014, annual household savings as a percentage of disposable income surpassed 10%.

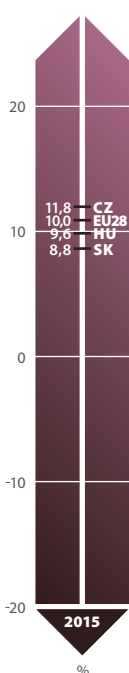
The indicator can be compared internationally in the case of the 23 EU Member States. Of these nations, Hungary is in the upper half for household savings rate. The value of



Source: HCSO

10.4% for Hungary is higher than 13 Member States, while 9 Member States are ahead of us. For the EU, the indicator's value is 10.3%, so Hungary's household savings rate value is nearly equal to the EU value.

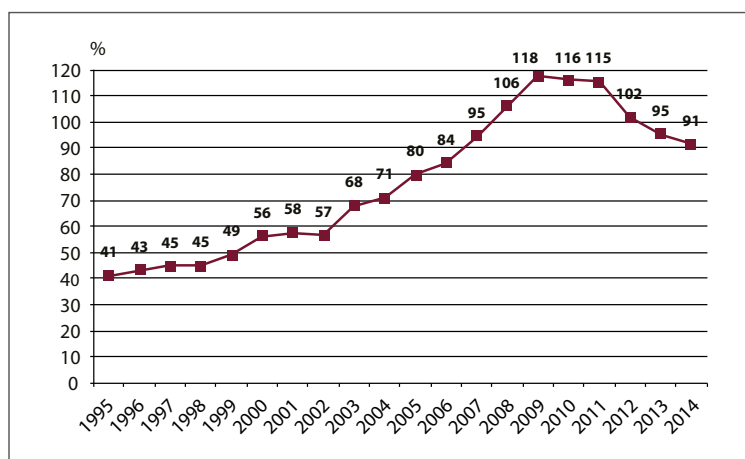
In 2014, the household savings rate in Hungary was 10.4%, which is almost equal to the value typical of the European Union.



Source: Eurostat

K.1.4. HOUSEHOLD DEBT

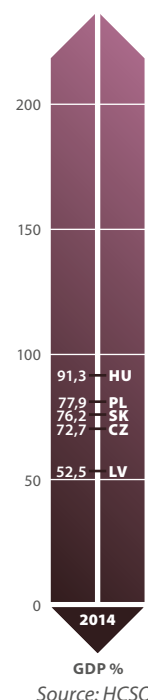
The growth in household debt that started in 1995 continued at a slow, steady pace until 2002, accelerated during the period 2003–2008, and then reached an extremely high level of 117.5% of GDP in 2009. Thanks to economic policy measures on multiple fronts, it started to decline in 2010, with the process accelerating in 2012, as household debt reached a level of 91.3% of GDP by 2014. This favourable change contributed to a decrease in households' propensity to save, and through the rise in household propensity to consume appreciably helped kick-start the transition to consumption and growth. For a significant portion of indebted households, however, the pressing requirement to adapt to new circumstances could be observed in 2014, which strengthened those households' sense of the need for precaution. Compared across the EU, the household debt indicator



Source: HCSO

in Hungary was the sixth lowest. The indebtedness rate expressed as a percentage of GDP was the lowest in Lithuania (52.5%) in 2014, while this value is above 340% in Luxembourg and Cyprus.

Household debt has steadily decreased in Hungary since 2011. In 2014, the value of the indicator as a percentage of GDP was 91.3%.



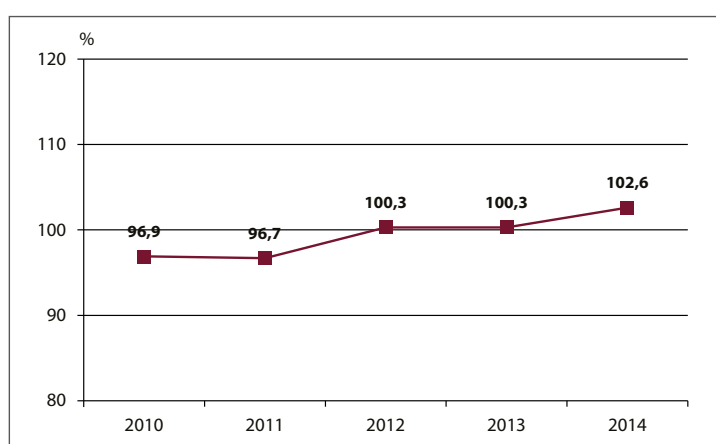
Source: HCSO

K.1.5. THE ANNUAL GROSS AVERAGE INCOME OF THOSE FALLING INTO THE THIRD AND FOURTH INCOME QUINTILES AS PART OF THE NATIONAL AVERAGE INCOME

In order to understand the income inequality present in society, it is useful to examine average income quintiles by income per person and the composition of income.

Widely adopted in international practice, the S80/S20 indicator for income inequality determines the average income of the top quintile based on the average income of the bottom quintile. Taking this idea further, in order to understand the middle class's income situation, the combined average income of the third and fourth quintiles as a percentage of the national average can be calculated. The third and fourth quintiles taken together correspond to the segment of society that is financially better off than the median, but do not belong among the most wealthy 20%.

From the percentage number, we can conclude how the financial situation has changed for those who are better off than the average but who are not wealthy, as compared to the average of the country's entire population.



Source: HCSO

Since 2010, this indicator has grown steadily. With the jump that occurred in 2012, the percentage value passed 100%, which means that the financial improvement of the middle class's income situation reached and then surpassed the national average for the entire population.

The financial situation of the middle class has steadily improved since 2011.

K.2. SOCIAL EXCLUSION DIMENSION

Key indicator: THE RISK OF POVERTY OR SOCIAL EXCLUSION

The key indicator shows the percentage of people in the overall population who are affected by income poverty, severe financial deprivation and/or very low work intensity.

Source: HCSO

Sub-indicator 1: THE RISK OF INCOME POVERTY

This indicator shows the percentage of people living in households with income less than 60% of median equivalent income. *Source: HCSO*

Sub-indicator 2: THE RISK OF SEVERE FINANCIAL DEPRIVATION

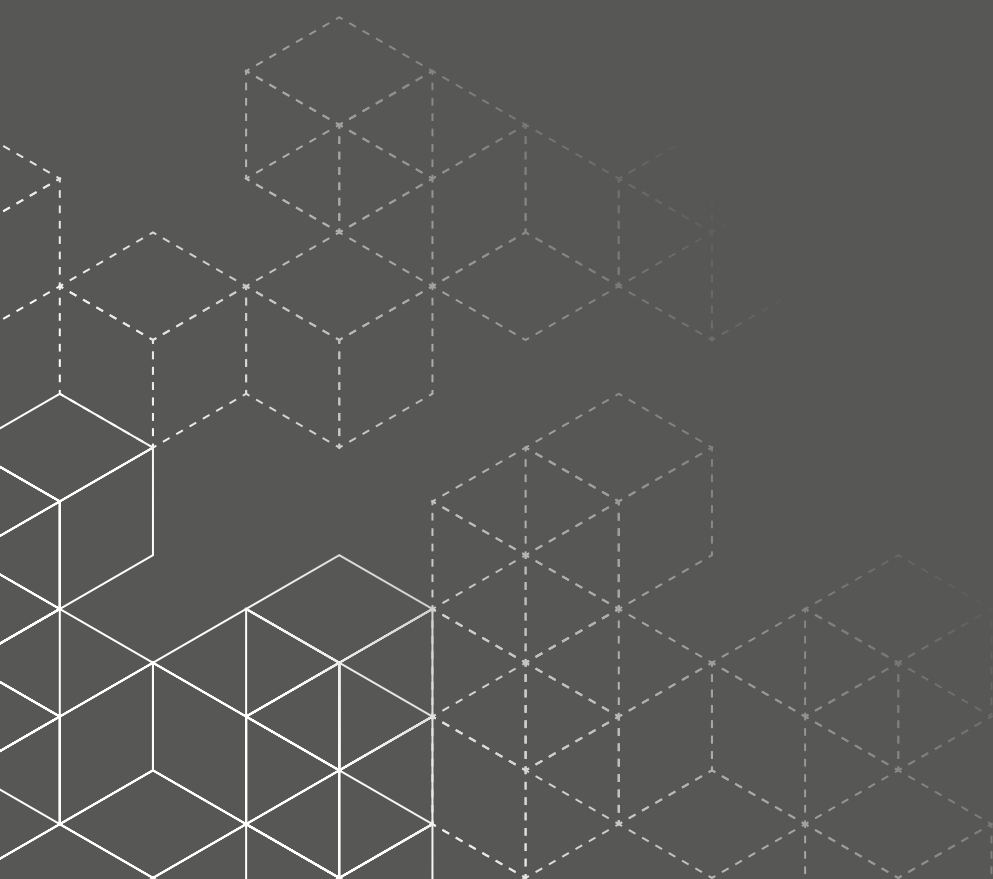
This indicator shows the percentage of people affected by severe financial deprivation. The term “severe financial deprivation” is used when a person is affected by at least four of the following nine financial problems: 1) they are in arrears with mortgage or rental payments; 2) their home lacks adequate heating; 3) they lack the ability to cover unexpected expenses; 4) they lack meat, fish or equivalent foodstuffs for consumption at least every other day; 5) they are unable to take a one-week holiday away from home at least once a year; 6) they do not own a car for financial reasons; 7) they do not own a washing machine for financial reasons; 8) they do not own a colour television for financial reasons; 9) they do not own a telephone for financial reasons. *Source: HCSO*

Sub-indicator 3: THE PERCENTAGE OF PEOPLE LIVING IN HOUSEHOLDS WITH VERY LOW WORK INTENSITY

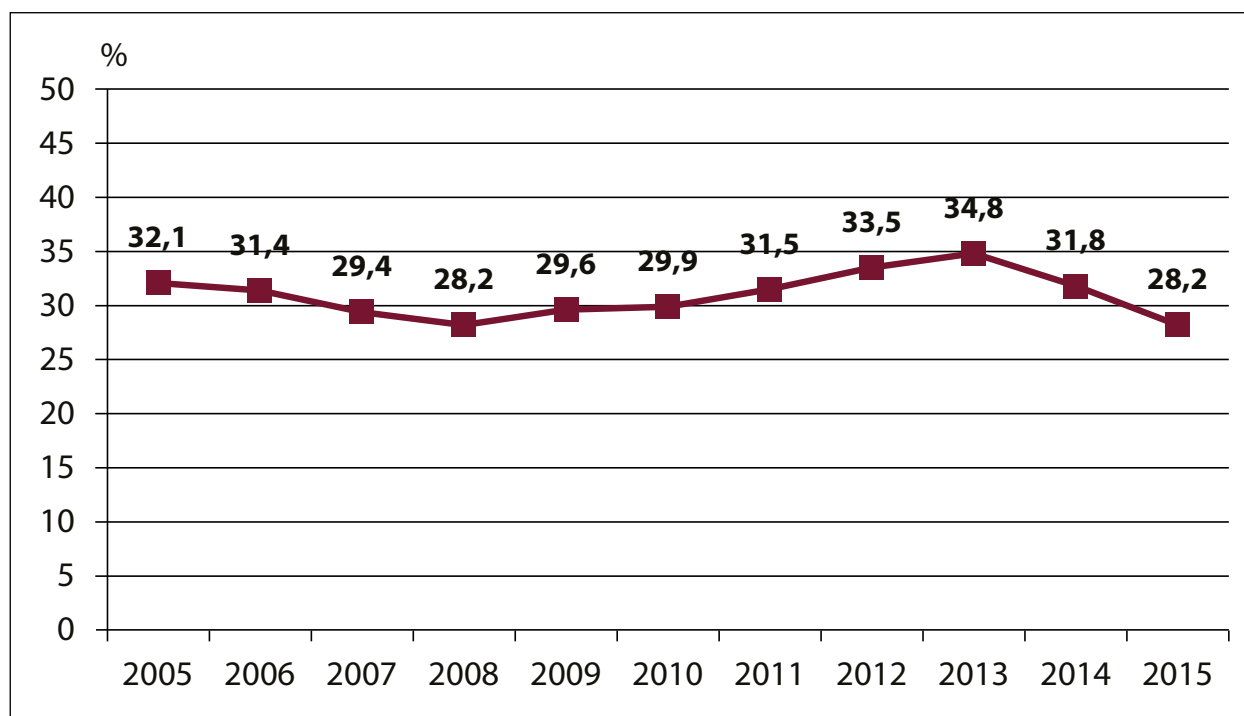
This indicator shows the percentage of persons of working age (persons 16–64 years old who are not students) who live in households with a work intensity lower than 0.2. Work intensity: the ratio of the time spent working during the given year by all persons of working age in the household in relation to how much time they theoretically could have spent working. Its value can fall between 0 and 1 (0 means that no-one works at all, 1 means that everyone works full-time, all year long). *Source: HCSO*

Sub-indicator 4: THE RISK OF INCOME POVERTY AMONG CHILDREN

This indicator is the ratio of persons aged 0–17 years with income less than 60% of the median equivalent income. In light of the fact that persons aged 0–17 do not have income, their income situations are determined essentially by the income situations of their parents. This is why we show the data broken down by the level of educational attainment of the children's parents. *Source: HCSO*



K.2.1. THE RISK OF POVERTY OR SOCIAL EXCLUSION BY AGE



Source: HCSO, EU-SILC

Social exclusion is a complex phenomenon, which in many cases goes hand in hand with powerlessness, a feeling of vulnerability, questions as to the meaning of life, and a general sense of malaise.

Although social exclusion is at the heart of the problem, the quantifying measurement in many cases focus on economic deprivation. The two are tightly bound to each other, and the correlation can be controlled in such a way that economic deprivation in nearly all cases brings with it social exclusion. From the perspective of public well-being, the poverty, deprivation and income situation of this one segment represent an unquestionably significant area.

Calculated on the basis of Eurostat's methodology, the AROPE rate measures the risk of poverty or social exclusion. It is the headline indicator among the EU 2020 target figures and takes poverty into account in the broadest possible terms.

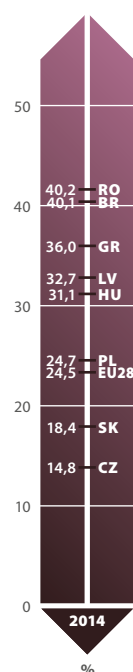
This approach uses the broadest possible set of data, and consequently does not exclusively take into account only those in a given society who are in the worst financial situ-

ation, but for example also those who live from their possessions, and do not work for this reason, and therefore also belong to the group of households with very low work intensity, but who are not deprived.

It does not solely examine relative poverty on the basis of income, instead taking into account a person's labour market situation, as well as also measuring their available assets. The indicator shows the percentage of those who are (1) relatively income poor, (2) live with very low work intensity or (3) are impacted by the risk category of exposure to severe economic deprivation.

Since 2013, there has been a steady decrease in the percentage of the population exposed to the risk of poverty or social exclusion. In 2015, this rate had fallen to 28.2%.

In terms of international comparison, there is data available for the year 2014. At that time, Hungary (31.8%) significantly fell behind the EU average rate of 24.5%. In the ranking of EU Member States, Hungary had a lower risk of exposure to poverty or social exclusion than Latvia, Greece, Bulgaria and Romania.



%

Source: Eurostat

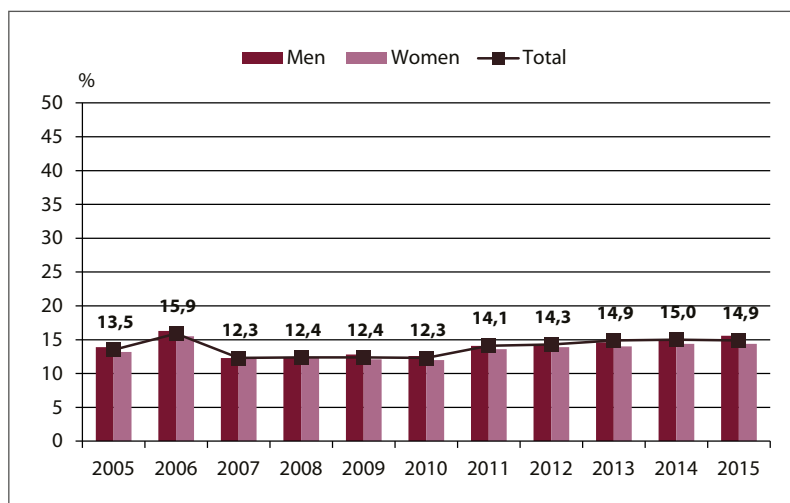
The percentage of those living at risk of poverty or social exclusion in Hungary fell from 2013-2015, although it still remains significantly higher than the EU average.

K.2.2. THE RISK OF INCOME POVERTY

Relative income poverty is the type of indicator that captures poverty in terms of income, and correlates to a value in forints. The poverty level based according to the population's median income reflects those individuals who have access to less than what they need for their monthly livelihood and can therefore be considered from a material perspective to be on the periphery of society: they are the ones we call financially poor. According to the official definition of the rate, the poverty rate is the percentage of people living in households with less than 60% of the median equivalent income as a percentage of the entire population.

The income poverty indicator is therefore a relative indicator that fundamentally depends on the distribution of income in a given country. The indicator's relative characteristic derives from its comparison of the poverty of individual persons to the income situation of other members of society.

Relative income poverty in Hungary has stagnated between 2013–2015. Compared internationally on the basis of this indicator, Hungary falls into the middle third of the ranking.



Source: HCSO, EU-SILC

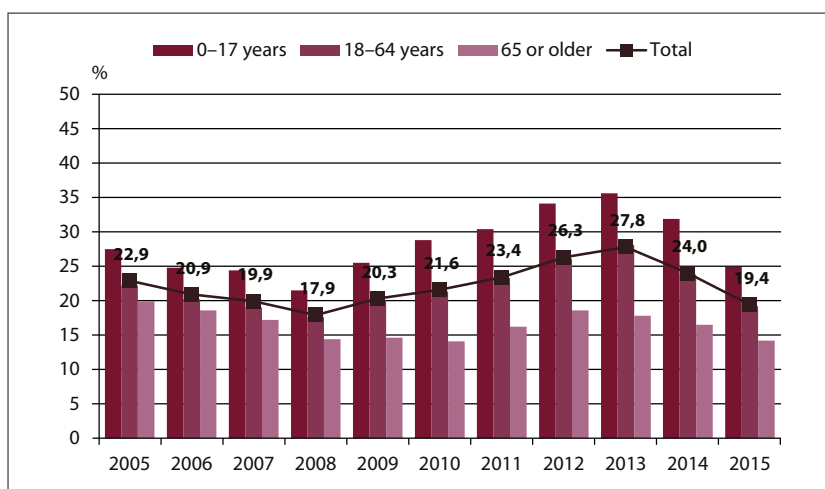
Since 2013, the relative income poverty rate has essentially stagnated, with the 2015 rate compared to the 2013 rate falling minimally to 14.9%. Income poverty affects the unemployed most significantly, of whom 54% are impacted by the risk of poverty.

K.2.3. THE RISK OF SEVERE FINANCIAL DEPRIVATION

The term deprivation, the primary meaning of which is "to be deprived", refers to the absence of such financial conditions that are generally accepted as fundamental goods and services, so their absence results in involuntary hardship. What aids international comparison is that the indicator is not a financial threshold, it does not examine the presence or absence of material goods or services, but lists nine conditions. Severe financial deprivation exists if the individual has to do without four of the listed nine conditions for economic reasons.

In Hungary the indicator's value has consistently fallen since 2013, with 19.4% of the population at risk for poverty in 2015.

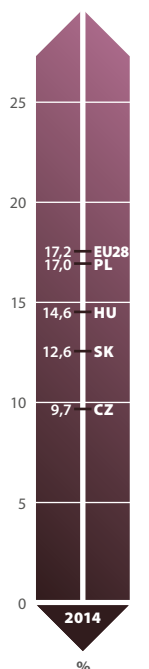
In 2014, from among the nine conditions, the most difficulty was presented by having to cover the costs of a sudden expenditure, with 70.7% unable to spend HUF 70,000 in a sin-



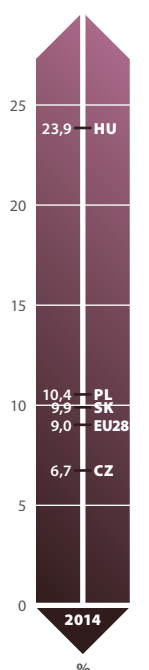
Source: HCSO, EU-SILC

gle payment. A little more than half the households (55.1%) responded that they could not afford to travel away for a week for relaxation. Less than a quarter (23.7%) could not consume meat every other day, and 21.6% possessed some form of outstanding arrears.

One of the most important absolute poverty indicators has over the previous years consistently fallen in Hungary. In 2015 the percentage of the population at risk of severe financial deprivation fell below 20%, reducing by nearly 5% in one year.



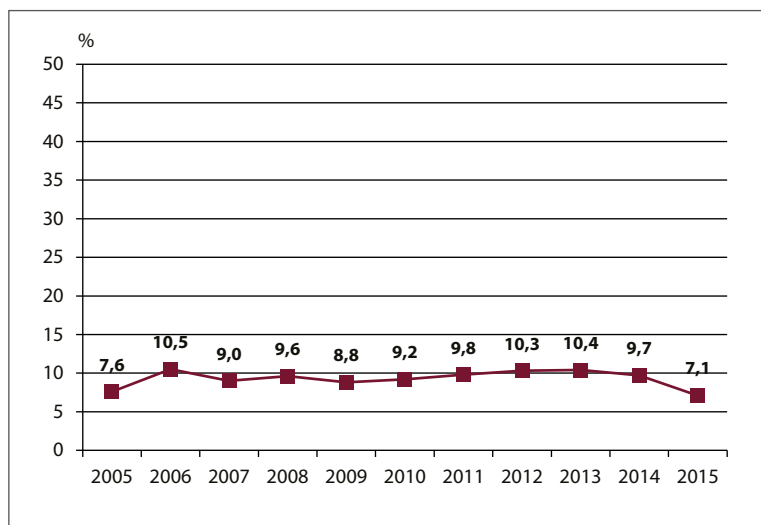
Source: Eurostat



Source: Eurostat

K.2.4. THE PERCENTAGE OF PEOPLE LIVING IN HOUSEHOLDS WITH VERY LOW WORK INTENSITY

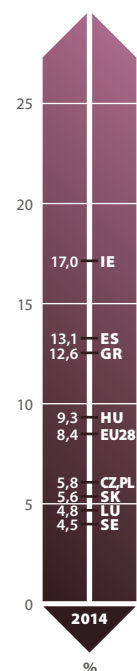
The third dimension of poverty or social exclusion can be defined as the percentage of people living in households with very low work intensity. This indicator shows the characteristics of working poverty and the percentage of exclusion from the labour market. The examined phenomenon is important not only because of current participation in the labour market, but also because household members going without work serves as a negative example for the family's younger members, and this can result in poverty and exclusion being inherited across generations. The indicator's value did not show much change for the period 2007–2014, but it began to show improvement in 2015. For the population of active age, only 7.1% lived in very low work intensity households in 2015, compared to 9.7% in 2014. In international comparison, the indicator's value is close to the EU calculated average. The countries most exposed to



Source: HCSO, EU-SILC

low work intensity are Greece, Spain and Ireland, while the indicator's value is below 5% in Sweden and Luxembourg, according to the data from 2014.

In Hungary, the percentage of people living in households with very low work intensity significantly fell in 2015. This poverty risk factor impacts 7.1% of the population.

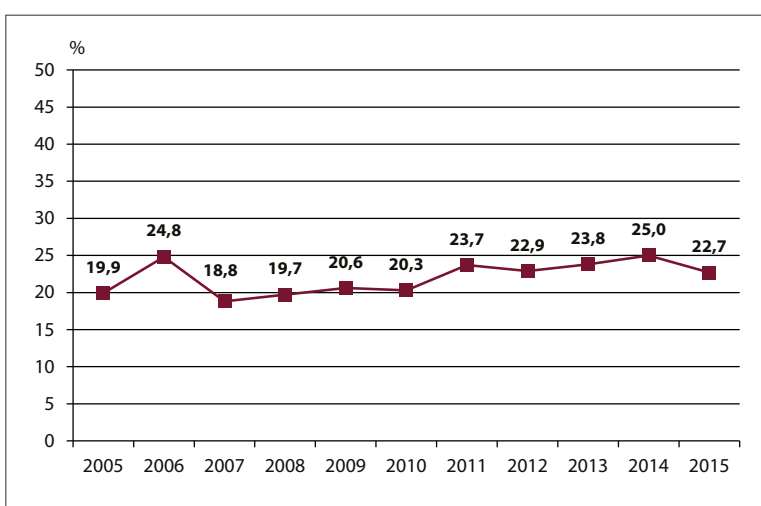


Source: Eurostat

K.2.5. THE RISK OF INCOME POVERTY AMONG CHILDREN

The income of the adult members of a household is the basis for calculating income poverty among children. Considering the calculation method for relative poverty, which is based on income per capita, it is a given that in the cases of households consisting of multiple persons looking after children but without an income, the income per person will be lower, and therefore there is a greater chance of them falling below the poverty threshold determined to be 60% of the median income per capita.

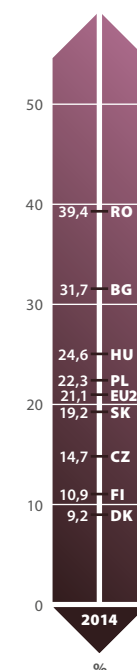
In 2015, 22.7% of children lived in relative income poverty, a percentage that shrank compared to the previous year. In international comparison, the percentage is higher than the EU average. In terms of child poverty, the situation is the worst in Bulgaria and Romania, where more than 30%



Source: HCSO, EU-SILC

of children live in poverty. The indicator's value is the lowest in Denmark (9.2%) and Finland 10.9%.

For Hungarian children, 22.7% live in relative income poverty. As a result of societal and social measures introduced, this percentage has shrunk compared to the previous year.



Source: Eurostat

K.3. HEALTH CARE AND SOCIAL SAFETY NET DIMENSION

Key indicator: NUMBER OF HEALTHY LIFE YEARS

This indicator expresses the number of years that an average new-born born in a given year can expect to live in good health, according to current age-specific mortality rates. It is calculated based on the HCSO's demographic data for the entire population and the results of a sample survey on health status. We show the data in a timeline starting in 2005, broken down by gender. *Source: HCSO*

Sub-indicator 1: LIFE EXPECTANCY AT BIRTH

This indicator expresses the number of years that an average newborn born in a given year can expect to live, according to current age-specific mortality rates. The data is generated based on the HCSO's demographic data covering the entire population, broken down by gender. We show the data as a timeline starting from 2003. *Source: HCSO*

Sub-indicator 2: HEALTH CARE SPENDING AS A PERCENTAGE OF GDP

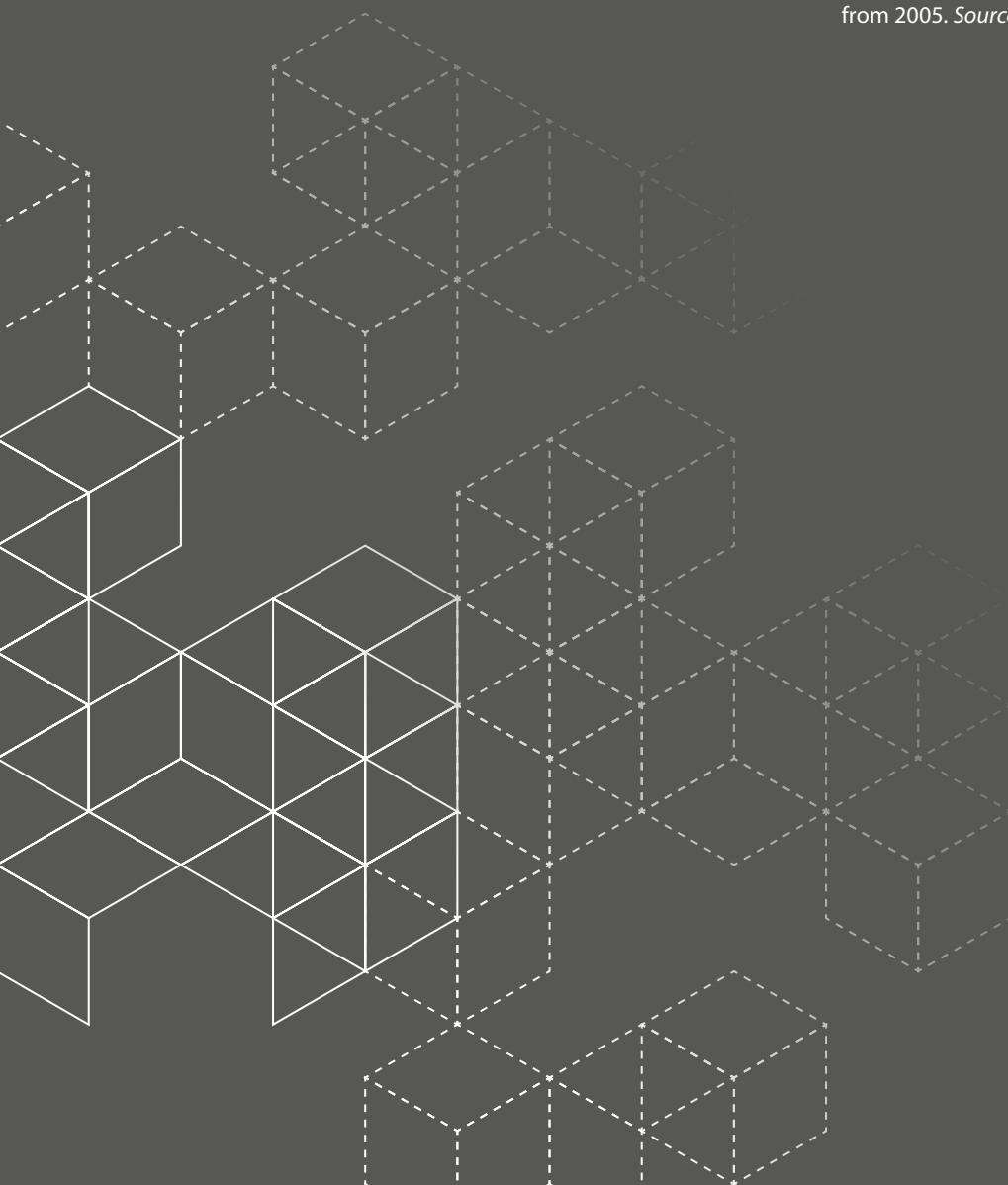
The indicator, according to the international methodology of system of health accounts, measures the final consumption of health care goods and services (excluding investments) as a share of GDP. Public health care expenditure consist of government and local government health care expenses, as well as the Health Insurance Fund. *Source: OECD*

Sub-indicator 3: THE NUMBER OF PLACES AT NURSERIES

This indicator provides information on the number of places at operational nurseries, based on comprehensive data from the HCSO, starting from 2000. *Source: HCSO*

Sub-indicator 4: THE PENSION REPLACEMENT RATE

This indicator shows the average levels of pensions for persons aged 64–74 in relation to the average earned income of persons aged 50–59 based on data originating from the HCSO's survey of a sample population, as a timeline starting from 2005. *Source: HCSO*



K.3.1. HEALTHY LIFE YEARS



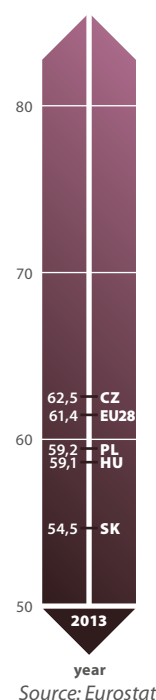
Source: HCSO EU-SILC

The number of healthy life years takes into account quality of life in addition to life expectancy and is therefore one of the fundamental measures of well-being. Its value is determined by complex socio-economic processes: beyond the functioning of the health care system (the total resources designated for it and the efficient use of said resources), income situation and education, the social services system, the quality of environment, as well as individual lifestyle factors (e.g. nutrition, physical activity, smoking) all have a significant impact on the indicator's value.

Since 2005 in Hungary, there has been a significant increase in the number of healthy life years for both women and men: for women the indicator increased from 54.3 years to 60.9 years, while for men it increased from 52.2 years to 59.2 years. Since 2012 this growth has slowed for women and stopped for men. In the period between 2005–2013, the EU average for both genders was between 61–62 years; in 2013 (the last year with Eurostat data) the value was 61.5 for women and 61.4 for men. It can thus be seen that over the previous decade, in terms of healthy life years, the

Hungarian population has made significant strides in closing the gap with the EU average to within only 1–2 years. Although its impact on influencing health is limited, the government's role nonetheless primarily extends to health care spending (spending as a percentage of GDP is shown by a separate indicator). Between 2005–2013, the nominal value of domestic health care spending per person grew from HUF 178,900 to HUF 222,300 per annum. The cumulative value of the health care price index showed 42.8% inflation during this same time, that is, the real value of health care spending fell during this period, which also includes the global financial crisis. The value of health care spending per person calculated at PPP, according to the OECD's studies, correlates with both life expectancy and the number of healthy life years: higher levels of spending result in increased life expectancy and the ability to live more healthy years. In terms of both indicators, Hungary lies below the regression curve, indicating that it is not only the amount spent on health care that can be improved, but also the efficient use of these resources.

During the previous decade the number of healthy life years in Hungary has been closing the gap and moved closer to the EU average, being only 1-2 years below it.

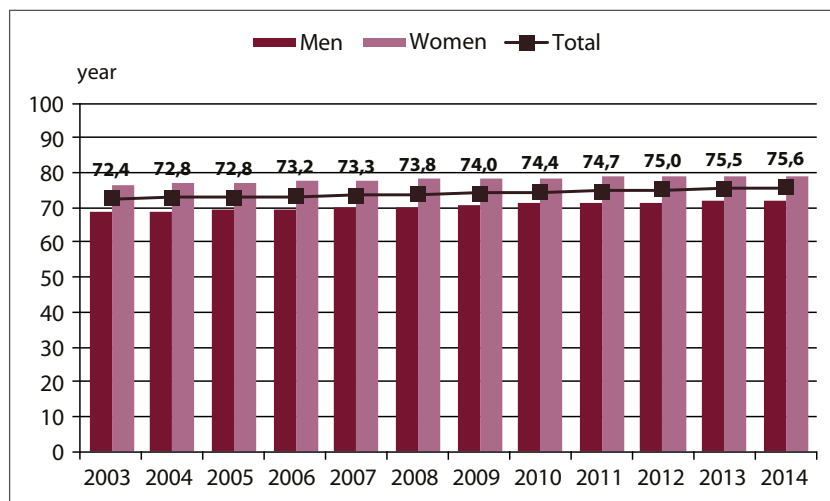


Source: Eurostat

K.3.2. LIFE EXPECTANCY AT BIRTH

Life expectancy at birth is the oldest and most commonly used indicator in relation to health, which at the same time does not take into account quality of life or the limits on everyday life that exist for some reason (this is the reason why we use the number of healthy life years as the key indicator, which is also preferred by the EU).

The entire population's life expectancy, with the exception of 2014, has uniformly grown over the past decade, with a positive change of 2.8 years between 2005–2014. During this same period, the EU average life expectancy grew from 78.5 to 80.9 years, that is the domestic increase surpassed the change in the EU average by 0.4 years (the data for 2014 is preliminary Eurostat data, and owing to the calculation methodology there may be a difference of several tenths between the two data sets). The gap, however, is still significant: the life expectancy



Source: HCSO

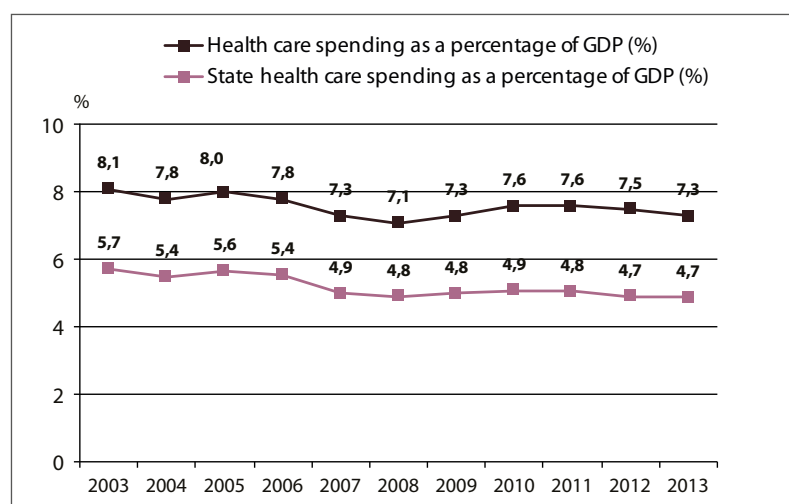
of Hungary's population is on average 5.3 years shorter than the EU average. The difference is greater for men: the Hungarian male population's average life expectancy is 6 years below the EU average, while for women the difference is 4.7 years.

Life expectancy in Hungary during the examined period improved to be closer to the EU average, but it is still significantly lower.

K.3.3. HEALTH CARE SPENDING AS A PERCENTAGE OF GDP

This indicator measures the final consumption of health care goods and services (excluding investments) as a share of GDP. Between 2005–2013 (the last available year), health care spending fell from 8% of GDP in Hungary to 7.3%. This is roughly one percentage point lower than the EU average, but cannot be considered low compared to other Central and Eastern European countries.

Within health care spending, the percentage of public spending dramatically fell: the value of 4.7% of GDP also means that 35.4% of total health care spending was financed by the private sector in 2013. To a great extent, this refers to the deductibles paid by the population and private services. The percentage of private spending against total spending significantly surpassed the EU average of approximately 27%, indicating



Source: OECD

that the financial protections offered by the state and social security are insufficient. When compared internationally, an increase in public spending is necessary.

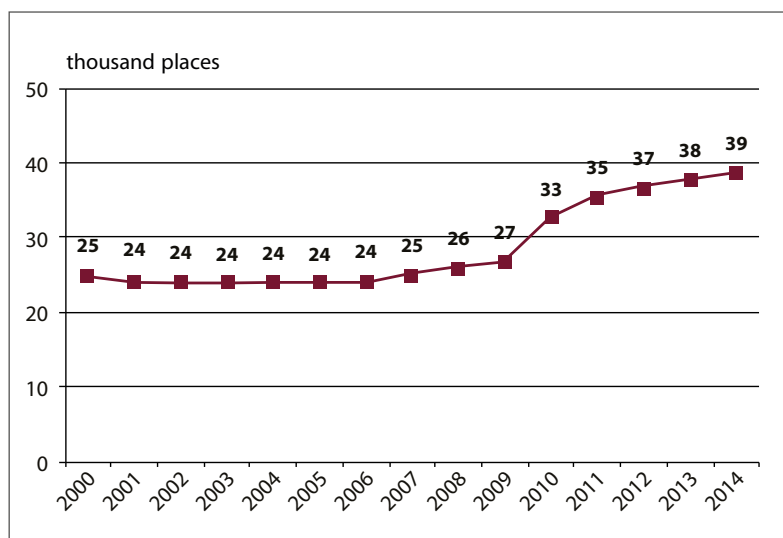
While Hungary spent less on health care as a percentage of GDP than the EU average, this level is consistent with its economic development. The percentage of public expenditure is, however, low.

K.3.4. THE NUMBER OF PLACES AT NURSERIES

Securing a place in a nursery is an important consideration for those raising small children in terms of social services. Expanding the number of places at nurseries makes it possible for parents with small children to re-enter the labour market: in accordance with national childcare practices, this primarily affects mothers with small children positively. The increase in the number of freely available places observed from 2010 may also reduce the financial burden on families, although places in family daycare centres that exist as an alternative also expanded (from 4,861 to 8,209) in the period from 2010 to 2014.

The expansion in the number of places also resulted in a reduction in overcrowding.

While the number of children enrolled in nurseries was around 30,000 between 2000 and 2005, and therefore significantly exceeded the number of available places, after 2011 the number of registered places and enrolment numbers balanced



Source: HCSO

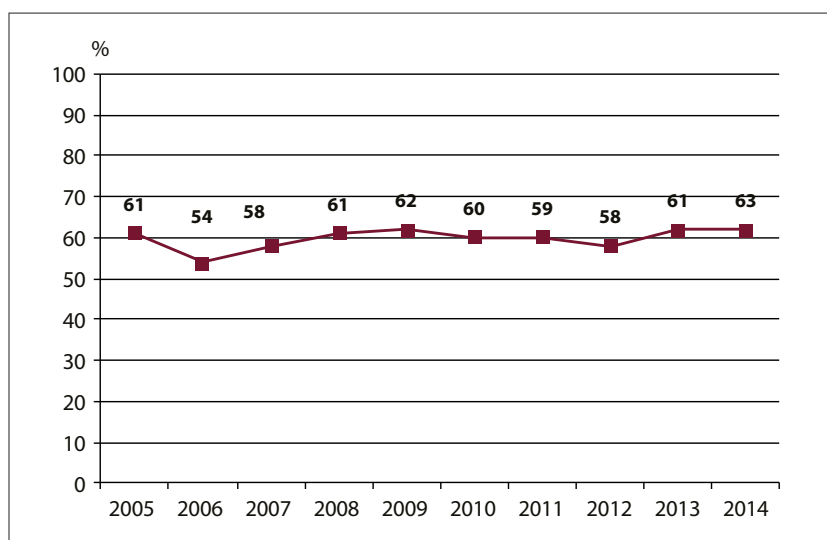
out. Taking into consideration the fact that 90,000 children are born annually, and that enrolment in nurseries affects several age groups (depending on intentions of returning to work), it may be justified to further expand the number of places.

The number of places in nurseries has significantly grown in recent years.

K.3.5. THE PENSION REPLACEMENT RATE

The values of this indicator show that, on average, entering into retirement between 2005 and 2013 did not affect an individual's income situation. Average pensions – with the exception of the outlier year of 2006 – came to 58–62% of the average income of wage-earners aged 50–59 and nearing retirement age. In 2013, following the recession year of 2012, the pension replacement rate was under 61%: in other words, this was the extent to which the state could assist the population of pension age to retain the standard of living it had achieved previously. The value of 63% for 2014 is outstanding to such an extent that it exceeds all of the values examined since 2005.

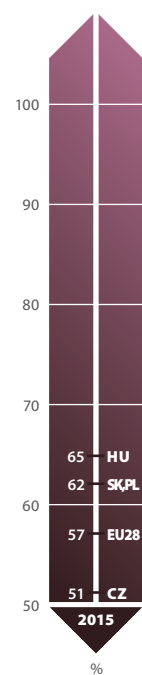
It is important to note, however, that this indicator does not account comprehensively for the total amount of benefits spent on the pension-age population, in view of the fact that – in addition to the state's contribution – the demographic



Source: HCSO EU-SILC

factors pertaining to this age group also have a major effect on trends in its standard of living. Compared internationally, the Hungarian pension replacement rate shows a more favourable percentage than the EU average, is the same as the Polish and Slovak data, and greatly exceeds the Czech value.

The trends observed over the long term in the pension replacement rate and its increase in 2014 are in line with trends in the performance and competitiveness of the national economy.



Source: Eurostat

K.4. EMPLOYMENT AND EDUCATION DIMENSION

Key indicator: THE ACTIVE POPULATION AGED 15–64

This indicator shows the number of people aged 15–64 in the active population, calculated annually starting from 1998. *Source: HCSO*

Sub-indicator 1: THE NUMBER OF PEOPLE EMPLOYED IN THE PUBLIC WORK PROGRAMME

This indicator shows changes in the number of public workers (participants in the public work programme), starting from 2010. While public work already existed in the Hungarian economy prior to that year, it was from 2010 that this form of employment was expanded to include new types of work and became widespread. Public work employment offers a temporary work opportunity to those whose efforts to find work independently have been unsuccessful for an extended period of time. *Source: HCSO*

Sub-indicator 2: THE RATIO OF EARLY SCHOOL LEAVERS

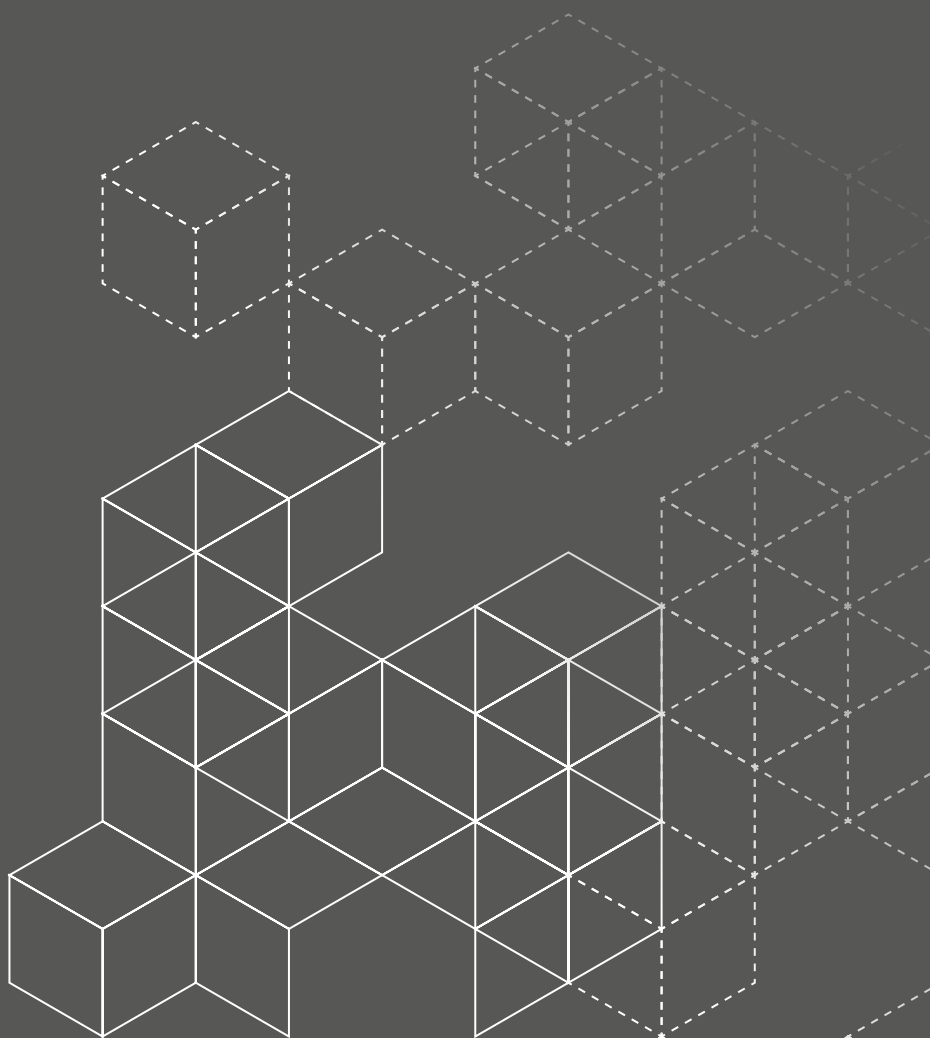
This indicator shows the percentage of young adults aged 18–24 who have not completed more than primary education and are not participating in any further education or training. This data originates from HCSO data covering the entire population, starting from 1997. *Source: HCSO*

Sub-indicator 3: THE PERCENTAGE OF YOUNG ADULTS WITH TERTIARY EDUCATIONAL ATTAINMENT

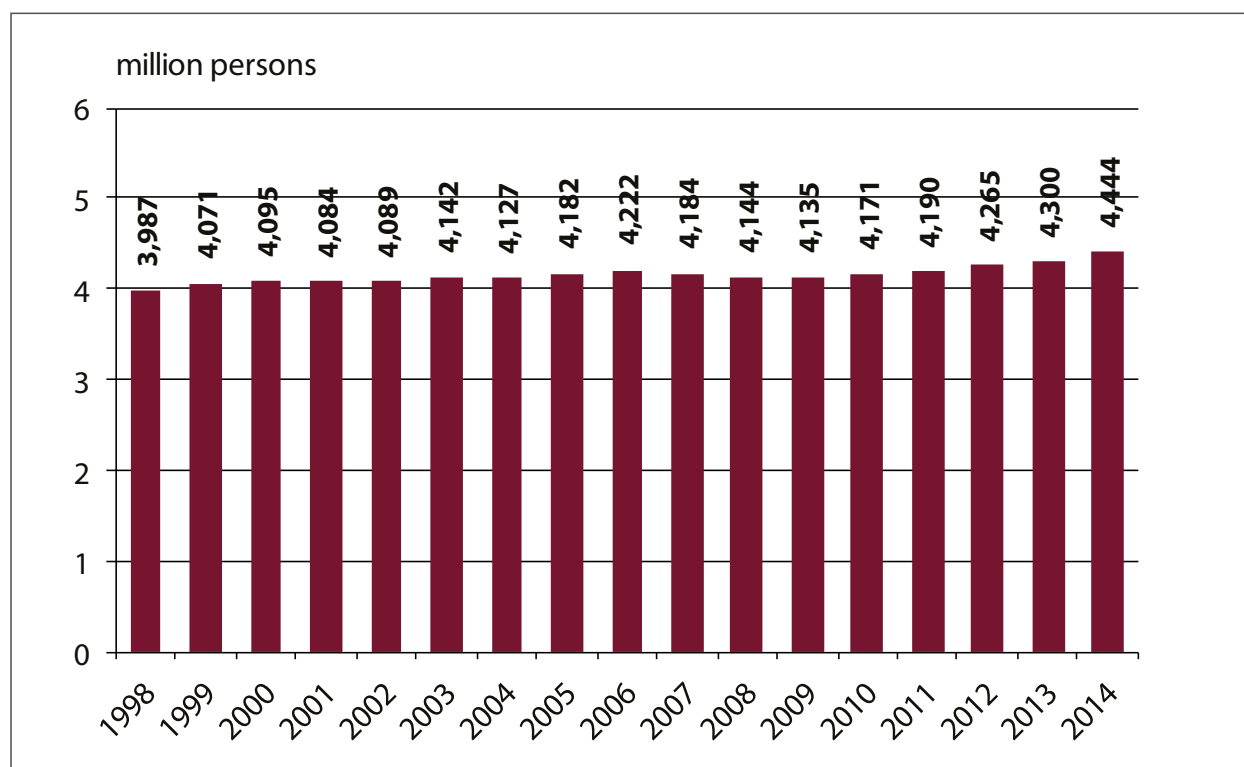
This indicator shows the percentage of young adults in the 30–34 age group who have completed higher education based on data from HCSO covering the entire population since 1997. *Source: HCSO*

Sub-indicator 4: NET MIGRATION

The indicator is the difference between immigration and emigration for the regions within Hungary rounded to the nearest 1,000 of the population, and also includes permanent and temporary migration. On this basis, according to the relationship between net migration and natural reproduction, a distinction can be made between recipient regions (where the migration difference is positive) and regions experiencing population (where net migration is negative). *Source: HCSO*



K.4.1. THE ACTIVE POPULATION AGED 15–64



Source: HCSO

The key indicator shows that the number of employed and unemployed persons present in the labour market grew – with some minor fluctuation from year to year – in the time period between 1998 and 2006, reaching its highest value (4,222,000 people) in 2006. As a result of the financial crisis, the size of the active population shrank to 4,135,000 in 2009, but then started to increase, growing to 4,300,000 by 2013. In 2014, this value grew to a record level of 4,444,000.

As a result of the resumption of economic growth and the public work programme, the labour market indicators grew more positive, vis-a-vis the previous year, in regard to the increase of employment and the decrease in unemployment. The number of employed between the ages of 15–64 was on average 4,101,000 persons, which surpassed the data from 2013 by 208,000. Among them, 4,070,000 belonged to the 15–64 age group, which surpassed the previous year's figure by 210,000 (5.4%), and as such their employment rate in 2014 climbed by 3.7 percentage points to 61.8%. This growth was somewhat greater among men than among women: the men's employment rate grew to 67.8%, while for women it

grew to 55.9%. The labour market saw growth in the number and rate of employment for youths aged 15–24 (23.5%), the best working age of 25–54 (79.2%), as well as in the 55–64 age group (41.7%).

In 2014, the number of unemployed among those aged 15–64 was 343,000 persons, which is 98,000 (22%) less than in 2013. Accordingly, the unemployment rate is 7.8%, or 2.4 percentage points lower than in the previous year. Unemployment figures for men and women fell to a greater degree for men. In their case, the unemployment rate fell to 7.6%, and for women it fell to 8%. In annual comparison, the unemployment rates for youths aged 15–24 (20.4%), those aged 25–54 (6.8%), and the 55–64 age group (6.4%) all fell. In 2014, the employment rate in Hungary of the population aged 20–64 was 66.7%, 2.5 percentage points lower than the EU-wide rate (69.2%). Of the Visegrád countries, the Hungarian employment rate was close to the Polish figure (66.5%), while the Slovak rate was 65.9% and the Czech rate 73.5%. In addition to the V4 Group, the employment rate in Romania was 65.7% and 65.1% in Bulgaria.

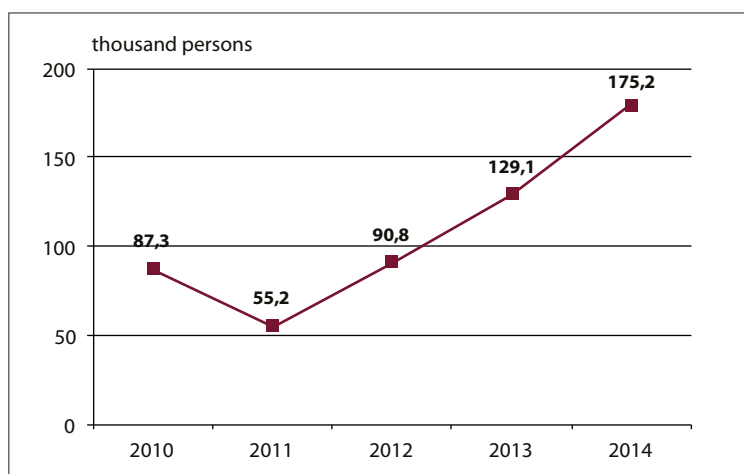
Following the decline that lasted until 2000 and the stagnation of 2011, the number of employed people grew, and by the end of 2014 stood at close to 4.5 million, which was the highest employment rate of the previous two decades. Despite this growth, the employment rate was 2.5 percentage points below the EU average.

K.4.2. THE NUMBER OF PEOPLE EMPLOYED IN THE PUBLIC WORK PROGRAMME

The number of people employed in the public work programme, which has been fully implemented since 2010 with a broader range of jobs, grew from 87,300 in 2010 to 175,200 in 2014.

Of all those in the ranks of the employed, those who considered themselves to be in public work employment in 2010 numbered 87,300, a number which grew to 129,100 in 2013 and 175,200 in 2014. It is a tendency worth evaluating that the people employed in the public work programme are also capable of finding employment in the private sector, and, following special retraining by employers, people employed in the public work programme are sought after in growing numbers.

The number of jobs newly registered at the National Employment Service in 2013 was 718,700, of which 498,400 related to public work, representing an increase of 50% relative



Source: HCSO

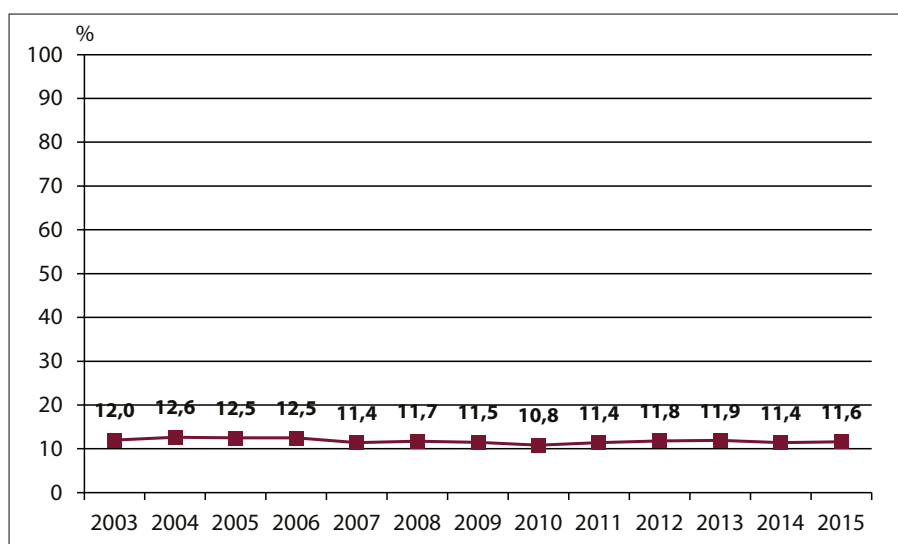
to the level for 2012. The number of new jobs coming from the primary labour market was 158,700, which entailed growth of 14.3% relative to 2012.

From 2011, the number of people employed in the public work programme significantly grew. The 55,200 people in 2011 grew to 175,200 persons by 2014.

K.4.3. THE RATIO OF EARLY SCHOOL LEAVERS

Reducing the ratio of early school leavers to below 10% by 2020 is one of the key objectives of the Europe 2020 Strategy. The development of this indicator is important as it shows the percentage of youths entering the labour market who only have a basic education. Low educational achievement is a significant individual limiting factor for labour market activity, while at the societal level it negatively affects the country's competitiveness.

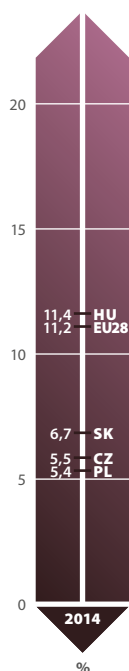
There was significant improvement in the percentage of early school leavers in the late 1990s and early 2000s (from 1997–2003, their percentage fell from 17.8% to 12%), but, with smaller fluctuations, there has been no significant improvement since (especially after 2007). (In 2014, the HCSO refined the calculation method, and on this basis made minor corrections to the data in the years following 2006.) Among women,



Source: HCSO

early school leaving is somewhat lower (11.2%) than for men (12%). Regional differences are significant: while in 2013 in Central Hungary the rate was 7.7%, in Northern Hungary the indicator's value was 18.8%. In Hungary, the rate of early school leavers is noticeably high among the V4 countries, and the same as the EU average, which certainly indicates that intervention is necessary in this area.

There was no improvement in the ratio of early school leavers, and regional differences are significant.



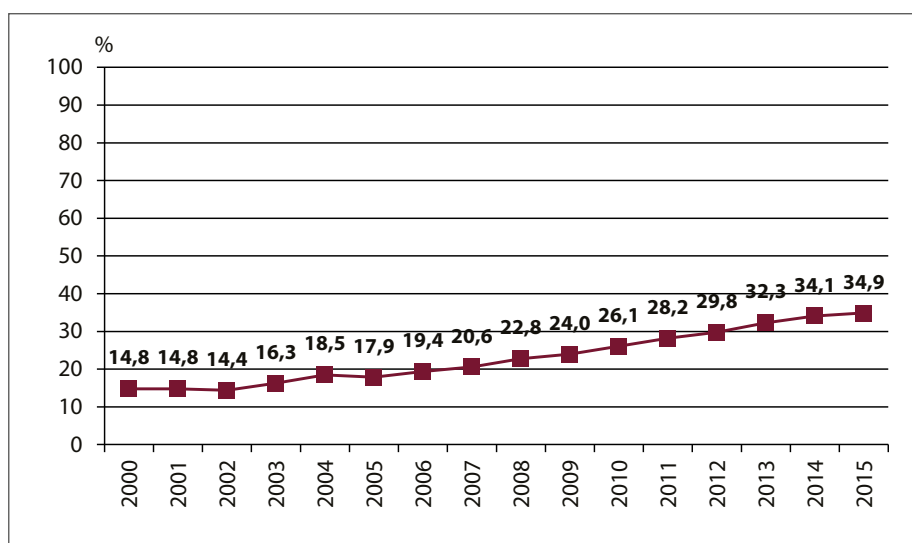
Source: Eurostat

K.4.4. THE PERCENTAGE OF YOUNG ADULTS WITH TERTIARY EDUCATIONAL ATTAINMENT

The higher education objective of the Europe 2020 Strategy is for the percentage of people in the 30–34 age group with a higher education qualification to reach 40% by 2020 (at the EU level). To achieve this, the Member States have committed to various targets, with Hungary committing to 30.3%. As a result of the large-scale expansion of education places in the 1990s and early 2000s, this percentage consistently improved over the last decade.

The indicator's value in Hungary in 2015, based on preliminary Eurostat data, was 34.9%, so the country has achieved its commitment. This commitment is lower than the EU average, so, in order to improve competitiveness, the need remains to grow the number of those with higher

education qualifications. Thanks to the higher percentage of young adults with higher education qualifications, the percentage of those with higher education qualifications also improved for those in the active age group between 25–64 to 24.2% in 2015.



Source: HCSO



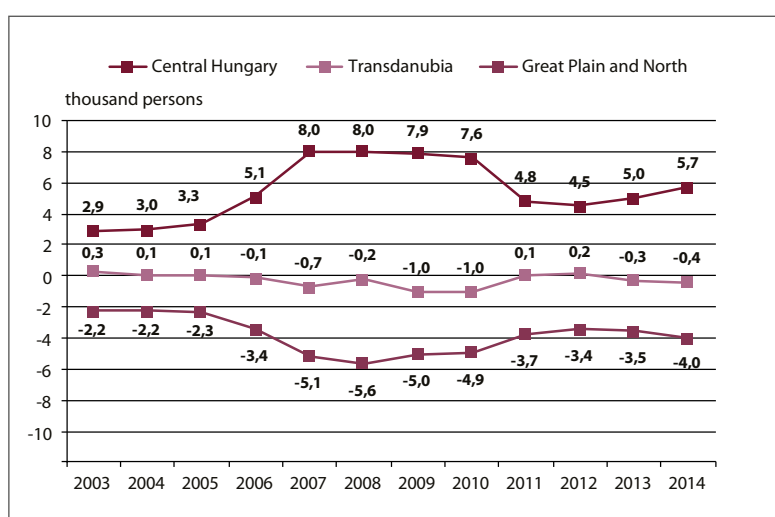
Source: HCSO

The percentage of young adults with tertiary educational attainment has improved significantly over the last decade, but further developments are necessary in future if competitiveness is to be improved.

K.4.5. NET MIGRATION

An important indicator of the individual's societal well-being is net migration. According to the indicator, in terms of internal migration within the country, Central Hungary is the primary receiving region. This is supported by steady and significant population growth between 2003–2014, especially in the period from 2007–2010. This region's receptive nature is primarily related to its more favourable employment opportunities. As a mirror image of this process, internal migration from the Great Plains and Northern Hungary regions resulted in a significant drop in the population. In these regions, the emigration of the population, following a slow-down in 2012–2013, resumed its growth in 2014 to 4%. In contrast to this, Transdanubia, which consists of three

regions west of the Danube, had a balanced change rate of no greater or no less than 1% during the period examined.



Source: HCSO

In Hungary, internal migration provides the Central Hungary region with an employment reserve.

K.5. THE INDIVIDUAL IN SOCIETY DIMENSION

Key indicator: SATISFACTION WITH LIFE

Satisfaction with life is a key variable of subjective well-being derived from a sample survey of households using European Union methodology. The HCSO first included this question in 2013, and it became a regular addition starting from the following year, although those results were not available at the time this publication was completed. Broken down by age groups of respondents 16 years old and older, the indicator reflects the answers to the question: "On a scale of 0–10, how satisfied are you with your life?" (with 0 meaning that the respondent is not at all satisfied, and 10 meaning that the respondent is completely satisfied). *Source: HCSO*

Sub-indicator 1: MEANINGFULNESS OF INDIVIDUAL ACTIVITY

This indicator, which originates from a sample survey of households using European Union methodology, reveals information on the place of individuals in society and the roles they fill through the meaningfulness of their individual activity. On a scale of 0–10, the HCSO measured answers to the question "Overall, how meaningful do you feel that the things you do are?" with 0 meaning not meaningful at all, and 10 meaning extremely meaningful. The HCSO first included this question in 2013, and it was repeated in 2015. *Source: HCSO*

Sub-indicator 2: FREQUENCY OF VOLUNTEER SOCIAL WORK

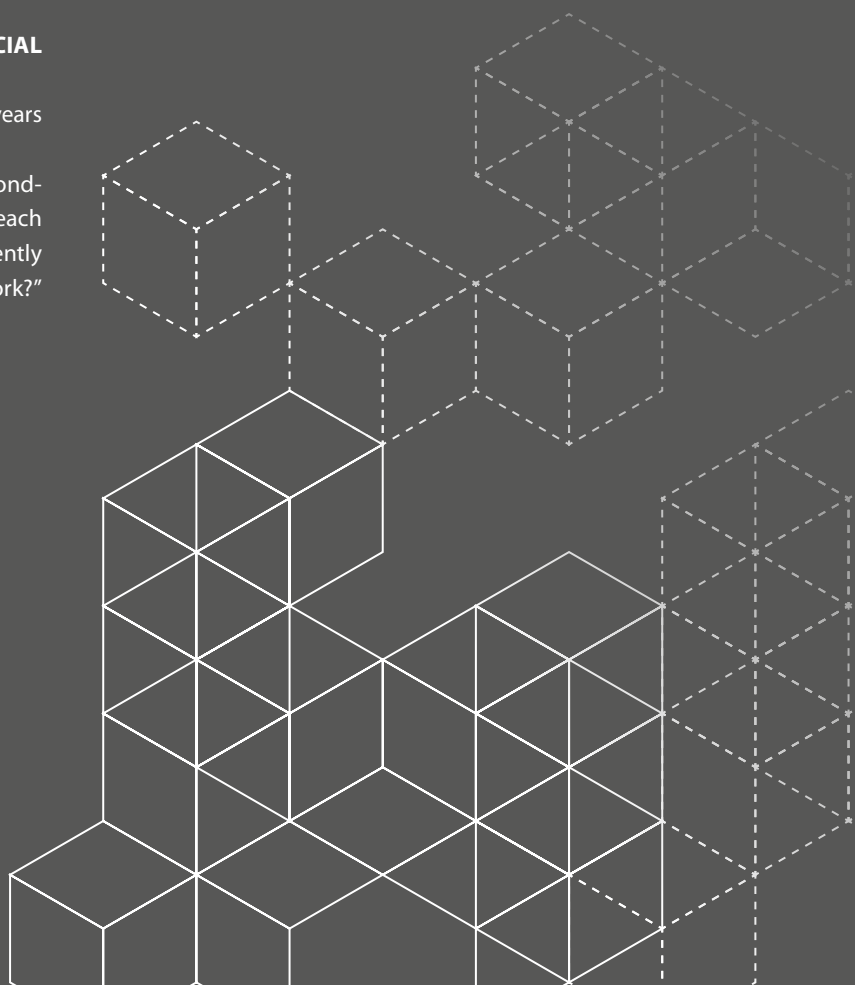
The indicator represents the country's population of 18 years of age or older. The first data were collected in 2015. The indicator number shows the percentage of respondents who selected the answer option of "at least once each year" to the question "In the previous year how frequently did you perform volunteer activities and/or social work?" *Source: HCSO*

Sub-indicator 3: SATISFACTION WITH THE QUALITY OF THE HEALTH CARE SERVICES SYSTEM

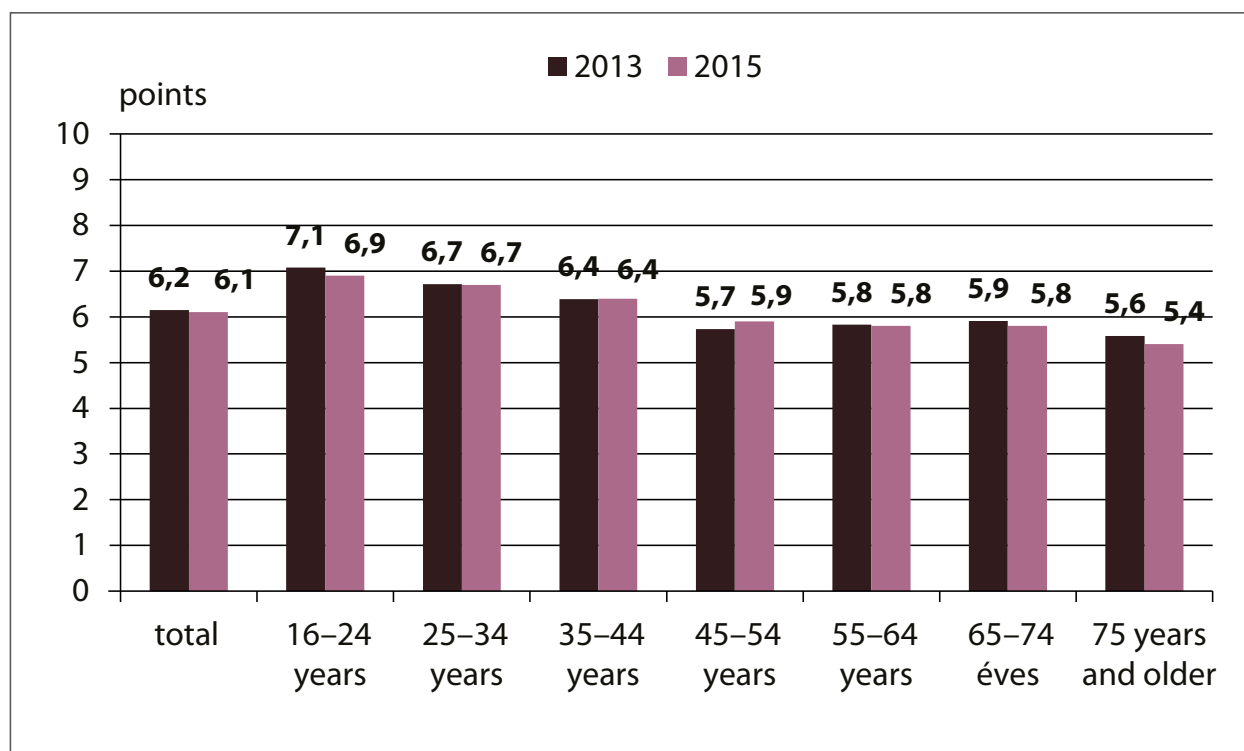
The indicator shows the average value of the answers to the question "Taken as a whole, how satisfied are you with the quality of the health care services system?" The smoothness and effectiveness of its operation were rated on a scale of 0–10 by respondents, on which 0 was "absolutely not satisfied" and 10 was "completely satisfied". The source of the data was the HCSO, and the GOS which surveyed a representative sample of the national population of 18 years of age and older. The first data were collected in 2015. *Source: HCSO, GOS*

Sub-indicator 4: SATISFACTION WITH PUBLIC EDUCATION

The indicator shows the average value of the answers to the question "Taken as a whole, how satisfied are you with the quality of the public education system (elementary and secondary education)?" The smoothness and effectiveness of its operation were rated on a scale of 0–10 by respondents, on which 0 was "absolutely not satisfied" and 10 was "completely satisfied". The source of the data was the HCSO and the GOS, which surveyed a representative sample of the national population 18 years of age and older. The first data were collected in 2015. *Source: HCSO, GOS*



K.5.1. SATISFACTION WITH LIFE



Source: HCSO

According to the OECD definition, subjective well-being is a concept encompassing various evaluations people make in relation to events that happen to them, their bodies, their thoughts, their living conditions and their lives as a whole. The key variable of subjective well-being is satisfaction with life, as well as those other mental and emotional states that can be used to obtain information about the individual's mental disposition.

The 2009 Stiglitz-Sen-Fitoussi Report formulated recommendations for statistical offices on how to measure well-being, and subjective well-being in particular. In addition, the European Union's communication "GDP and Beyond" also puts the examination of indicators pertaining to the society's "hidden sentiment". Meeting the new challenge, Eurostat included in its 2013 EU-SILC data survey, which is mandatory for all Member States, a 23-question module pertaining to individual subjective well-being. The questionnaire was given to residents of 16 years old and older. In Hungary, the number of respondents, that is, the actual sample size, was 17,412 persons. No survey of a sample comparable size had ever been used on the topic before in Hungary.

Data on satisfaction with life are available in Hungary for the years 2013, 2014 and 2015, which shows that the population is slightly more satisfied with life than average. The mean

value of the survey responses by the adult population over the age of 16 was 6.15 in 2013 on a 0–10 scale, and this value barely changed in 2015, dropping very slightly to 6.13.

In 2014, there was a minor improvement in terms of satisfaction with life across all age groups, and for the 25–34, the 45–54 and the 74+ age groups there was a 0.4 point improvement, while the 2015 data show stagnation or a slight fall in several age groups compared to 2013. Those aged 16–24 are 0.2 points less satisfied with their lives than they were in 2013, while the 65–74 group's satisfaction also fell slightly (by 0.1 points). A slight improvement was only observed among those in the 45–54 age group. In total, therefore, the Hungarian population's satisfaction with life has not changed considerably over the last three years, but the slight drop in 2015 serves as a warning.

The primary factors to impact the indicator are financial situation and level of education. These are almost directly proportional to satisfaction with life. In 2013, the population with higher education qualifications was 1.5 points more satisfied with their lives (7.0) than the population with just a primary education (5.5 points). In 2014, the difference in terms of satisfaction grew further between the two groups slightly to 1.7 points. In 2015 there was a noticeable change as this difference shrank to 1.2 points.



On average, the adult population of Hungary is somewhat more satisfied with their life in 2015 (6.13 on a 0–10 scale) than the middle value, and this reveals stagnation as well as a slight decline (0.02 points) compared to 2013.

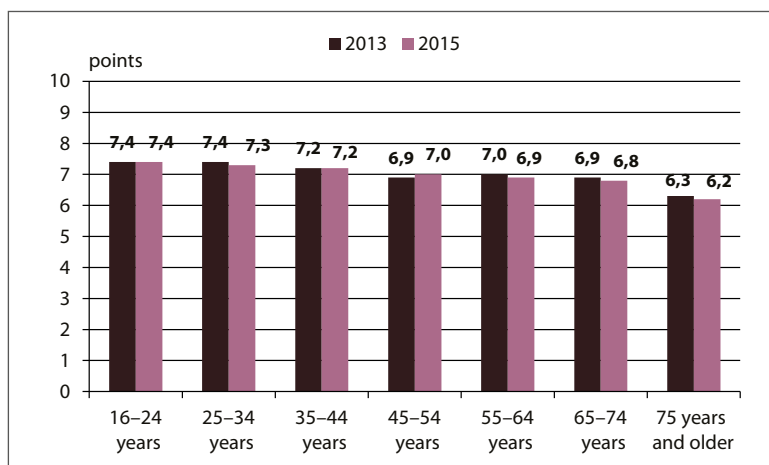
Source: Eurostat

K.5.2. MEANINGFULNESS OF INDIVIDUAL ACTIVITY

This indicator serves to express the feeling of success and usefulness that respondents get from their work, their private lives, or even from participating in sports.

Examining the meaningfulness of activity according to age group, in 2013 and 2015 the average value was highest (7.4 points) for young adults aged 25–34, but was close to the average (7.0 points) among those aged 45–54, while the average value of meaningfulness of activities was the lowest in the eldest age group. In 2015, the indicator was only slightly higher in the 45–54 age group than it had been in 2013, compared to the same or slightly lower value in the other age groups.

The indicator's Hungarian value for 2013 (7 points) falls behind the value for the Visegrád countries, since the Slovak value is 7.5 points, and the Polish and Czech values were 7.6 points. It is worth noting that the Romanian value was 7.3 points, and in



Source: HCSO

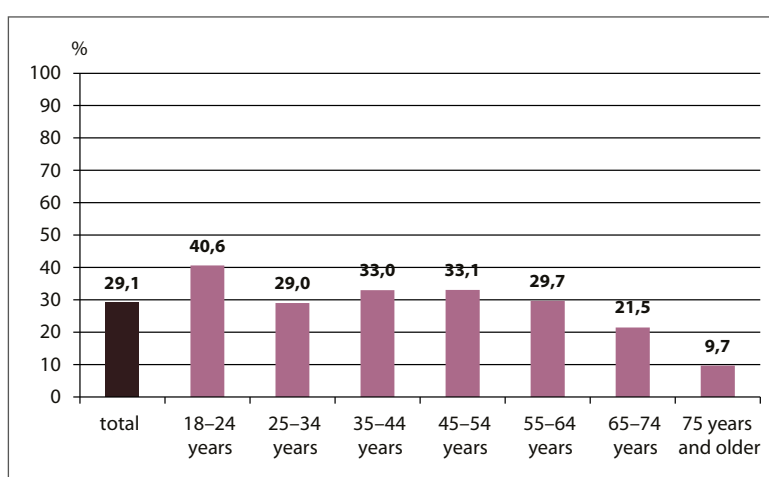
this group of countries only the Bulgarian value (6.1 points) was below the Hungarian. At the same time, the EU average value was 7.4 points, and this largely corresponds to the average of the examined countries.

In 2015, the meaningfulness of individual activity, to a small extent (with one exception) fell below the average values from 2013 for every age group. The average value for the answers provided by the entire population was below the Visegrád countries and the EU average.

K.5.3. FREQUENCY OF VOLUNTEER SOCIAL WORK

This indicator is new among the Good State and Governance Report's the Individual in Society Dimension indicators, with the first data collected in 2015. The source of the data is the HCSO and the GOS's statistical data collected from an opinion poll of a national representative sample of the population aged 18 or over. The indicator number shows the percentage of respondents who selected the answer option of "at least once each year" to the question "In the previous year how frequently did you perform volunteer activities and/or social work?"

The results of the survey reveal that in 2015 nearly a third of the Hungarian population (29.1%) performed volunteer work at least once during the year, with the highest percentage (40.6%) being the youngest age group (18–24 years). After them, volunteer work performed by adults was considerable (for the age group between 35–54 years, 33% of the population participated in volunteer social work in 2015), after which this



Source: HCSO, GOS

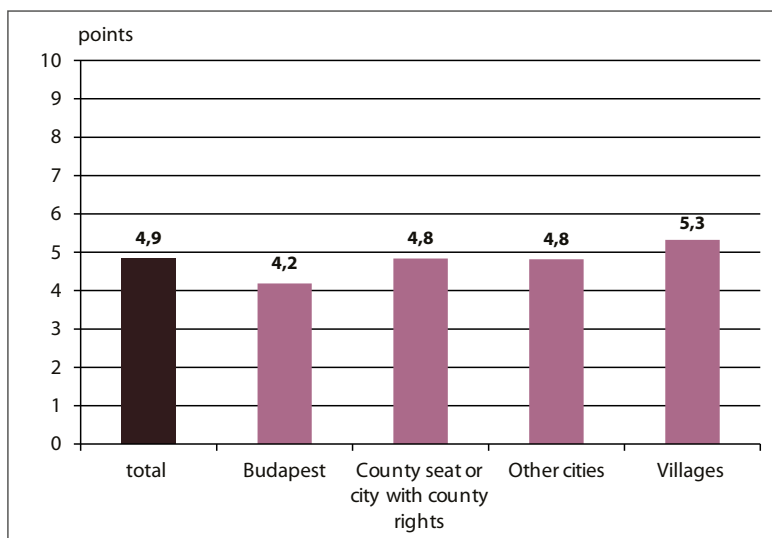
rate dropped with advancing age, although a tenth of those above 74 years of age still perform volunteer work. These results can be said to be good when compared internationally: according to a public opinion poll conducted by the European Parliament in 2011, 22–25% of Europeans participate in volunteer work.

On average, 29.1% of the Hungarian population participated in volunteer social work at least once in 2015.

K.5.4. SATISFACTION WITH THE QUALITY OF THE HEALTH CARE SERVICES SYSTEM

Although the lead time for reforms in regards to the development of the health care system is measured in years, it is still one of the determinants of health status, being the factor where government intervention can have the most direct impact on health status. Due to the asymmetry of information, patients frequently cannot correctly assess the quality of clinical treatment, however, health care is one of the largest service industries, where for numerous operating parameters (waiting times, attention, information, infrastructural conditions) the assessment of users is a relevant perspective.

Due to the absence of previous data, a time series analysis of satisfaction with the service system is not possible. With satisfaction measured on a scale of ten, having an average value of 4.9 is considered to be low (in comparison to the maximum level or the 5.87 result for public education or 6.38 for public administration). Despite access to the system being better



Source: HCSO, GOS

in cities, this does not have an impact on the perception of quality among the population: in Budapest, satisfaction is extremely poor, while in the countryside the result was better than average.

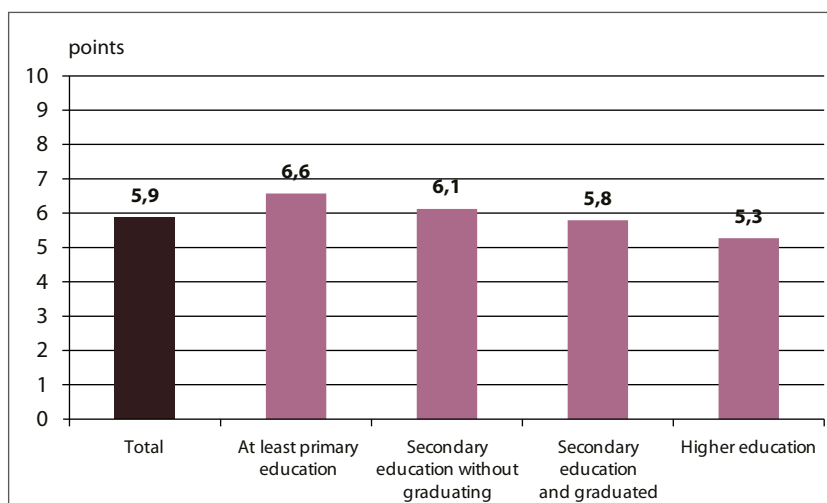
The population's satisfaction with the quality of the health care services system is relatively poor.

K.5.5. SATISFACTION WITH PUBLIC EDUCATION

The PISA survey evaluates education systems worldwide and is performed triennially, therefore we decided to abstain from including the previous indicator once again in this year's publication. The PISA survey's earlier results primarily drew attention to closing the gap in the disparities in the Hungarian public education system. For the 2015 survey, the population's satisfaction with the quality of the public education system was included, with satisfaction measured on a scale from 0 to 10.

With the absence of previous data, the change in satisfaction over time cannot be analysed.

The national average result of 5.87 certainly indicates that the population would like to see an improvement in quality. Public education's relative position is at the same time better than health care's (4.9), but worse than public administra-



Source: HCSO, GOS

tion's (6.38). The higher someone's level of education is, the more critical they were of public education, probably because their status in society leads them to have higher expectations.

A magyar lakosság nem elégedett a közoktatás minőségével, a felsőfokú végzettségűek az átlagnál is kritikusabbak.

FINANCIAL STABILITY AND ECONOMIC COMPETITIVENESS

SUMMARY¹

The quality of governmental capabilities can be accurately measured through observable results in the area of financial stability and economic competitiveness. It is precisely for this reason that financial stability and economic competitiveness are important areas for study in international research aimed at measuring the quality and effectiveness of governance. What can be considered a weak point in international analyses, on the other hand, is that comparisons are made according to the same criteria for each of the examined countries. It is precisely for this reason that the research team primarily analysed indicators that measure the level of competitiveness based on conditions in Hungary. Therefore, this was taken into account when selecting the five dimensions to be examined and the single key indicator and four sub-indicators linked to each of these.

With respect to analysing financial stability, we primarily emphasised the debt situation and, in relation to this, the extent to which the economy can be financed. This corresponds to the national debt that is constantly falling but still high when compared regionally, the burden of which prevents us from closing the technology gap, and as a consequence limits greater and more sustainable economic development. The level of economic diversity is also an important competitiveness issue. All international analysis draws attention to the economy's low level of diversification, which harms export opportunities and limits the rate of growth. One of the methods for increasing diversification is strengthening and giving a foothold to domestic small enterprises. At the same time, targeted government actions to support innovation are also important, on the one hand by reinforcing innovative industries, and on the other by encouraging the emergence of innovative companies. This is why we have analysed the level of diversification from several approaches. An especially important issue for competitiveness, as part of economic diversity, is the presence of modern industries in the economy and the proportion of technology and knowledge-intensive industries that create value and employment. We also discussed this area in the analysis.

Investments are notable among the additional conditions for improving competitiveness in the future. These must be interpreted broadly, for it is not only investment in fixed assets and technology that have an effect on competitive-

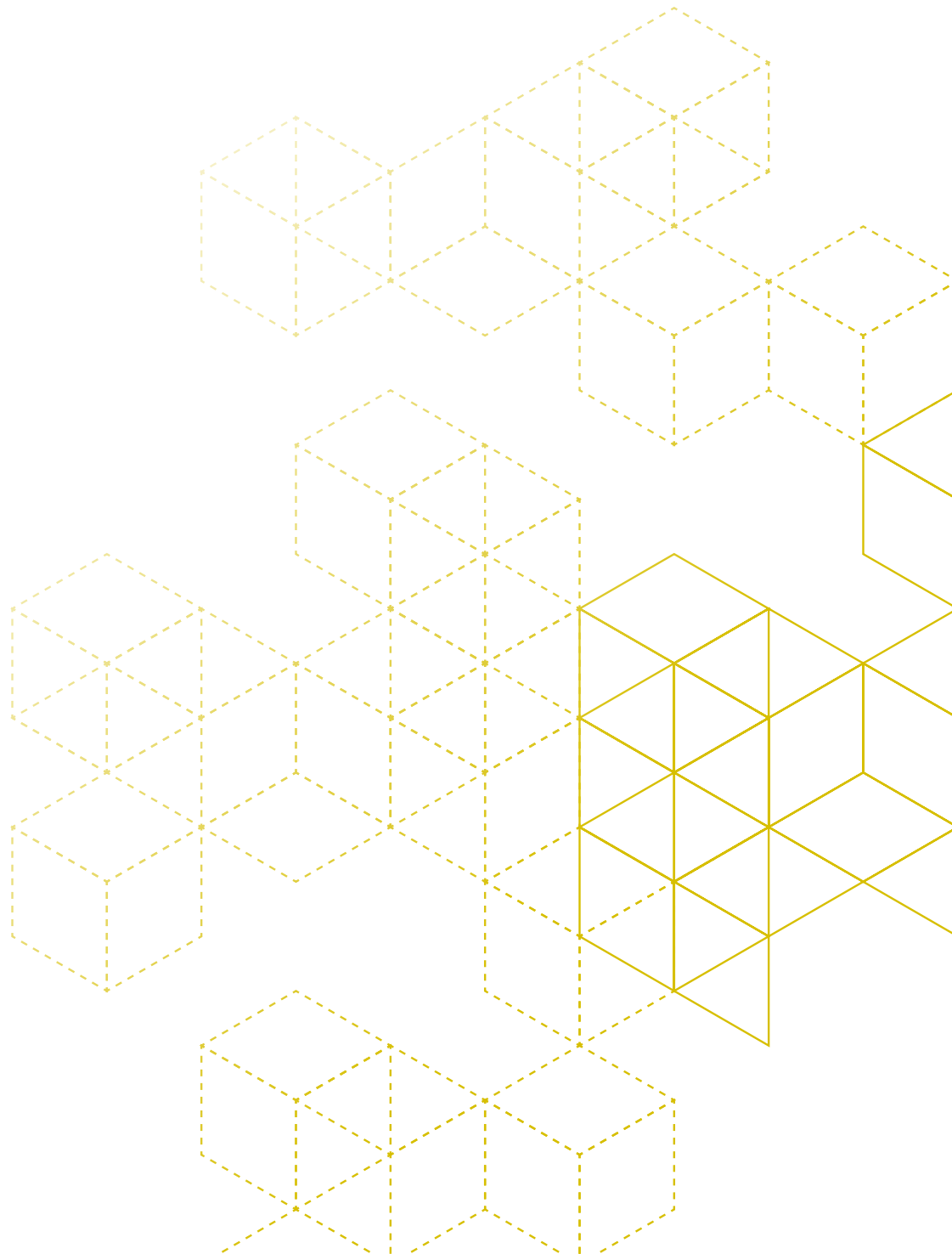
ness, but increasingly investments in human capital and innovation as well. These are at once also the conditions for sustainability. These deficits are evident in comparisons across the EU, and even in the region: under-investment in human capital and innovation. This makes it very important to have an extremely thorough and detailed analysis of this area and to show that today's favourable economic growth data will only remain sustainable in the long term if we devote much more of current national income into investments, be they investments in technology and machinery or in human capital and innovation. We can thereby improve the ratio between the GDP and GNI indicators, or in other words, succeed in ensuring that the gross national income generated by players in Hungary, which is the basis for domestic economic and social development, grows faster than GDP, which includes elements – such as repatriated foreign profit – that are not utilised in Hungary. Ultimately, the conditions that are especially important for economic growth and competitiveness, the evolution of general and multifactor productivity and changes in terms of trade and the export-import ratio must, in the case of Hungary, be subjected to very close scrutiny. Analysing the multifactor productivity indicator is important, because it is proven that this indicator increases faster in the more competitive economies than the traditional productivity factor. This is because the multifactor productivity indicator examines not only how GDP produced by employees measures up, but also analyses how up to date the technology that employees use is, what level of knowledge is required for the available jobs and how up-to-date corporate management, organisation and governance is. In other words, looking at this indicator shows how it might be possible to raise traditional productivity. It is therefore also linked to other indicators related to the levels of innovation and education, including, most importantly, the lifelong-learning indicator. One good method for increasing the multifactor productivity indicator, though, is continuous training of employees. Multifactor productivity, innovation and economic diversity together positively impact the export-import ratio and the terms of trade.

For a more detailed analysis of the quality of governance, we will need to examine government spending and the resulting economic and social benefit relationship, that is, the effectiveness of the use of resources. What is needed is the construction of a comprehensive composite indicator calculated from the sub-indicators, taking into account the weight of their importance. This would make it possible to determine the competitiveness of the Hungarian economy, allowing us to perform a regional comparison.

¹ The authors of this chapter are prof. Magdolna Csath, Ph.D. (workgroup leader), Tünde Ludmányiné Gyórpál, Balázs Nagy, Balázs Taksás, Ph.D. and Szergej Vinogradov, Ph.D.

The level of financial stability and economic competitiveness also measures a country's economic stability and its level of security. Improving financial stability and economic competitiveness is a high priority when it comes to formulating national security strategies. The principal way to reduce economic dependency, that is to say, to reduce economic vulnerability, is to improve competitiveness. On the other hand, increased financial stability and economic competitiveness result in improved living standards, quality of life and public well-being. Macroeconomic results, which generally reflect the impact in the present of past decisions, also create a basis for macro indicators to continue to move in a positive direction in the future through present-day investment in social development. The structure of the economy, its need for energy and resources

and its operating efficiency, are all also closely interrelated with environmental sustainability. The important issue for sustainable development is how to efficiently use the resources currently available, including human capital, so as to ensure that a sufficient quantity remains available for the coming generation. The efficiency and transparency of public administration and the degree of bureaucracy establish an environment and the conditions for business activity. Research has confirmed that a state that operates flexibly and quickly based on a performance and enterprise-oriented approach itself has a positive impact on competitiveness. Finally, democracy is also an important economic factor as it also guarantees opportunities for decision-making in business, thereby supporting innovation and constant development.



G.1. FINANCIAL STABILITY DIMENSION

The financial stability dimension assesses the security level of the financial (financing) subsystem, that is, it evaluates whether or not there are stable foundations for developing a competitive economic and social environment, or, in other words, whether or not the individual sectors of the national economy possess the financing resources essential for their operation and development, and how much risk there is in obtaining these resources. If, however, financial security flags (financing resources become difficult to obtain, unavailable or expensive), then the risk level of the other economic security risks also grows significantly. In severe cases, the entire functioning of the economy can collapse. This is why it is the task of the “Good State” to help reduce risks to financial security, and thereby to create a solid foundation for long-term growth in competitiveness, and through this, in prosperity. To measure the G.1. Financial Stability Dimension, we have designated a total of five indicators (one key indicator and four sub-indicators). Within the dimension, we paid special attention to examining the issue of financing the state sector, since if financing the state sector becomes problematic, then the tools of economic policy and its room for manoeuvre both become drastically restricted, and not only is the state left without the tools or power to improve competitiveness, but its everyday operation and its ability to perform functions and tasks for creating well-being can also be placed in jeopardy. This is why it is important for the “Good State” to ensure the sustainability of its own financing. We used two of the four sub-indicators to assess this.

Key Indicator: NET LENDING/BORROWING POSITION IN PROPORTION OF GDP

In terms of a national economy, this is the prevailing core indicator of financial stability, showing the balance of payments, as well as whether the national economy possesses sufficient resources (savings) for its own operation, i.e. for investments in the corporate sector, and – if there is a deficit – for the financing of both the budget deficit and existing public debt, as well as for the development of competitiveness factors or is in need of external financing, which is generated from the savings of other national economies. In the latter case it is obvious that the risks of financing security are higher, as these external sources can dry up or become overnight significantly costlier in our globalised world. *Source: Eurostat*

Sub-indicator 1: THE GROSS EXTERNAL DEBT IN PROPORTION OF GDP

The ratio of the debt of domestic economic actors outstanding to foreigners as a proportion of gross domestic product. Growing debt can harm the external risk rating of domestic economic actors, which, on the one hand, can make new financing sources more costly and, on the other, increase the need and expense of renewing maturing financing sources. The growing costs are highly detrimental to competitiveness and prosperity. *Source: HCSO*

Sub-indicator 2: VALUE OF FOREIGN CURRENCY RESERVES COMPARED TO FOREIGN DEBT MATURING WITHIN ONE YEAR

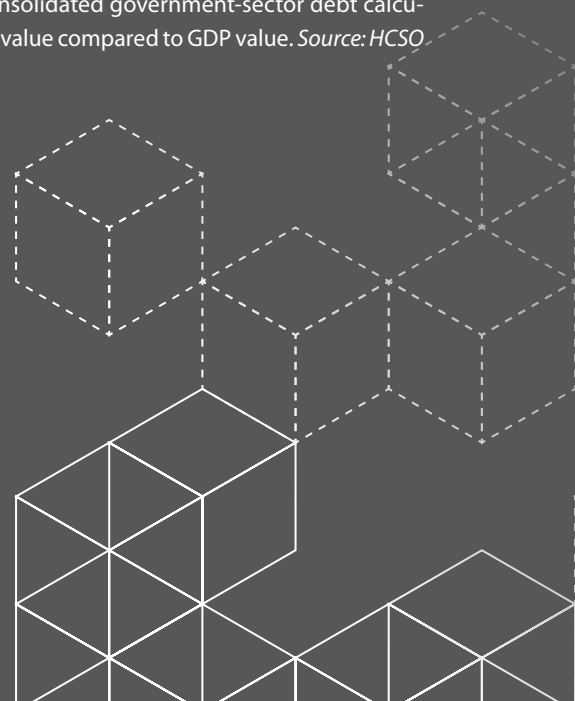
The ratio of the value of international reserves to the amount of foreign debt maturing within one year. In the event that financing sources dry up, the national economy is able to use foreign currency reserves to finance its maturing obligations and pay for its imports to compensate for the deficit in its current account balance. The foreign currency reserve is also needed for interventions in the foreign exchange market by the central bank and to protect its own currency. If the market sees that the amount of foreign reserves is sufficiently high, there will also be higher market confidence in the national economy and much greater willingness to finance it. *Source: HNB*

Sub-indicator 3: GOVERNMENT SECTOR'S FINANCING (NET LENDING/BORROWING) POSITION IN PROPORTION OF GDP

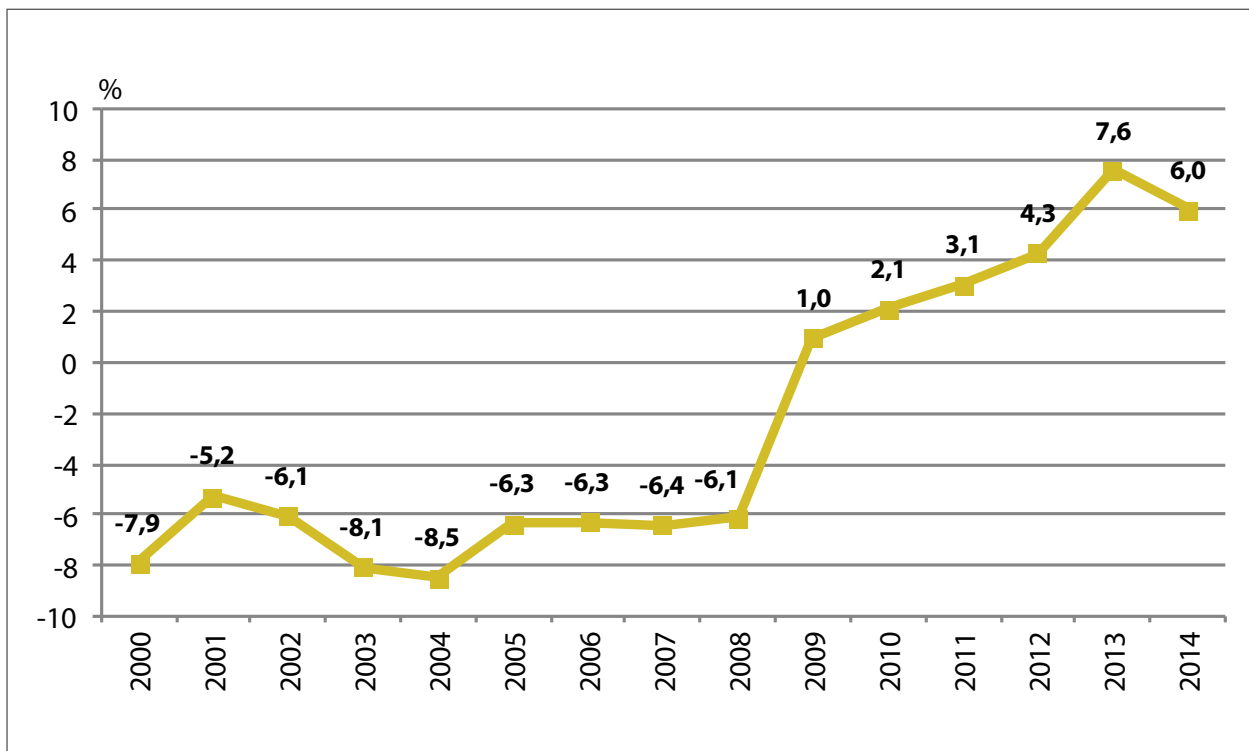
This shows the consolidated balance of government-sector revenues and expenditures. *Source: HCSO*

Sub-indicator 4: GROSS STATE DEBT IN PROPORTION OF GDP

Shows gross, consolidated government-sector debt calculated at nominal value compared to GDP value. *Source: HCSO*



G.1.1. NET LENDING/BORROWING POSITION IN PROPORTION OF GDP



Source: Eurostat

Following the regime change, the Hungarian national economy was for a long time forced to continuously seek external financing. This necessity increased further as economic performance and the standard of living rose. The chart shows that up to the start of the financial-economic crisis, a consistent and very significant 6–9% savings deficit existed, that is, the country was dependent on the savings of other national economies and financing to this extent. This was the greatest risk factor for our economic security, and the foreign currency lending boom was one consequence of several.

After 2008, with the sources of financing not existing any more, the negative balance of payments became unsustainable, and it was only through forced adaptation measures (accompanied by falls in the domestic standard of living, consumption and imports) that it returned to positivity and we could start repaying the debt that had accumulated earlier. The financing position of the Hungarian economy has improved substantially, but this is not a great achievement, but rather the effect of forced adaptation, the lack of opportunities for external financing and growing repayment obligations. The conclusion that can be drawn from the main indicator is that a similar situation must not

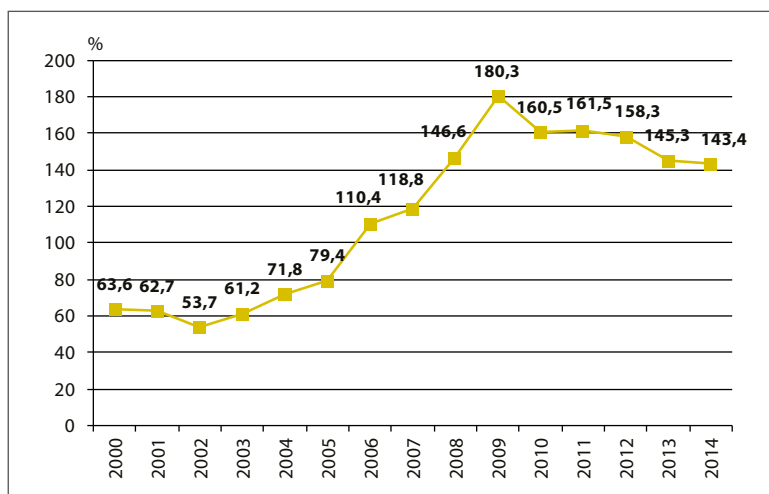
be allowed to develop in the future, the “Good State” must in any case increase the society’s overall level of economic awareness and education, as well as its motivation to save. In this respect, it must set a good example itself by striving towards efficient management. For example, before the crisis the competing countries of Central and Eastern Europe had significantly lower dependence on external financing, and this is the reason partly that Hungary’s growth potential was lower than that of nearby countries during the evaluated time period.

In 2014, after the crisis, the tendency that developed during the adaptation process continued further, and the Hungarian economy ran a significant 6% balance of payments surplus. What this means is that in addition to being able to meet its own financing needs, it can continue to repay its earlier debts at a relatively fast pace, thereby improving our financial security. (The small reduction compared to the previous year was due to the combined effects of growing domestic consumer consumption and import-generating investments, withdrawal of foreign direct investment capital, as well as the consequence of high repatriation of profits by foreign-owned companies compared to previous years.)

Following the regime change, Hungary’s national economy was forced to seek significant external financing. After the global financial-economic crisis the process of reducing the external debt accumulated previously began as a result of forced adaptation.

G.1.2. THE GROSS EXTERNAL DEBT IN PROPORTION OF GDP

The external debt that developed as a result of the need for significant external financing began to fall due to the balance of payments becoming positive. This reduction was seemingly much slower, however, and the main reason for this was that, unlike the private sector, the public sector is not capable of reducing its external debt. Therefore, by the end of 2014, external debt could only be reduced to the level that existed at the beginning of the escalation of the crisis, which can still be considered to be a risky level as it can be seen from the European data that risks grow significantly when the levels of indebtedness, competitiveness and domestic savings fall out of balance, and the given national economy falls more into debt than its world market competitiveness and the value of its domestic savings would allow. Therefore, if we look at external debt as a percentage of GDP of Central and Eastern European countries that have similar competitiveness and also joined after 2000,



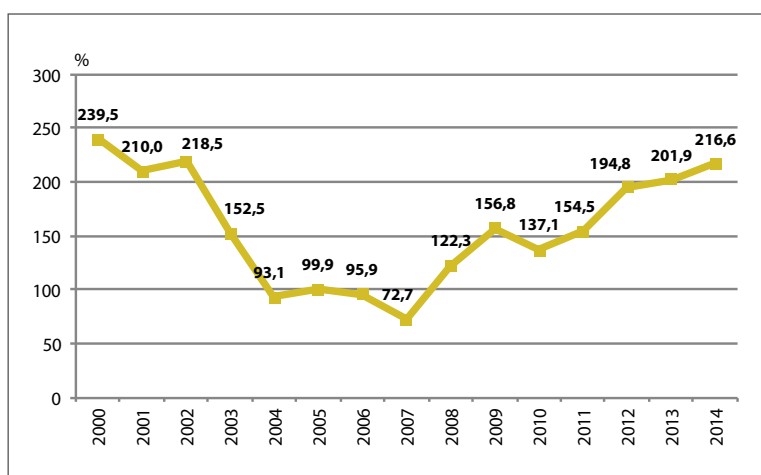
Source: Eurostat

then we will find all the values falling between 60–100%, with the data only from Latvia (142%), Slovenia (124.2%), Croatia (104.4%) and Hungary (143.4) exceeding this threshold. Source: Eurostat

External debt grew quickly during the middle of the period analysed, then after adaptation it began to fall, but it is still much higher than other similarly developed EU Member States.

G.1.3. VALUE OF FOREIGN CURRENCY RESERVES COMPARED TO FOREIGN DEBT MATURING WITHIN ONE YEAR

Prior to 2008, the foreign currency reserves of the Hungarian economy were on a downward path in relation to the negative balance of payments, and by 2007 these stood at 72.7% of foreign debt maturing within one year. According to one method for determining the optimal level of foreign reserves, the Guidotti-Greenspan rule, which states that foreign currency reserves must be sufficient to cover the foreign debt of a country that will be maturing within the next year, this is a dangerously low amount. A consequence of this was that when external sources were closed off, the monetary policy essentially became unable to react independently without external aid, neither through finding domestic financing sources nor by stopping the plunge in the exchange rate. At the end of 2008, the loans received from international institutions increased foreign currency reserves, which increased further due to the positive balance of payments. By 2014, the national bank possessed twice the reserves to cover obligations due within a year, which provides Hungary with a considerable amount of security in



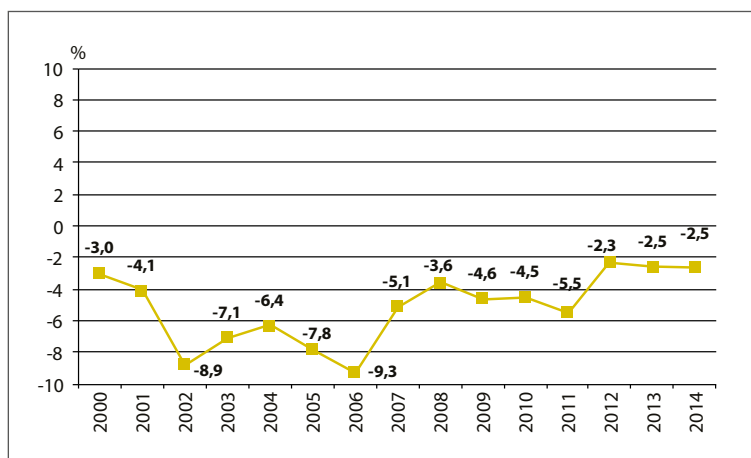
Source: HNB

the event of the international capital markets locking up once again. Since maintaining foreign currency reserves also has cost implications, the Hungarian National Bank has already considered the artificial and cautious reduction of foreign currency reserves beyond the foreign currency exchanges offered previously to the banking sector.

The value of foreign currency reserves fell to a risky level in the period before the crisis, but later grew thanks to the positive balance of payments. It is now at twice the level that is considered the secure minimum.

G.1.4. GOVERNMENT SECTOR'S FINANCING (NET LENDING/BORROWING) POSITION IN PROPORTION OF GDP

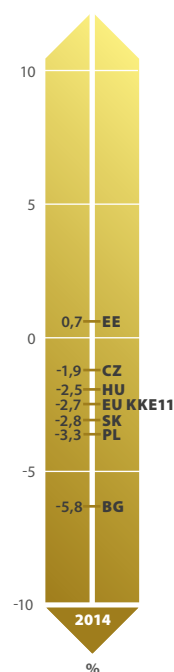
It can be seen that the Hungarian public sector was continuously in a net-financed position during the examined time interval. The situation deteriorated drastically in the mid-2000s, which brought about negative effects. Firstly, it increased public debt at a growing pace. Secondly, it drew financing sources away from other sectors. Thirdly, it increased the national economy's dependence on external sources and its external indebtedness. These factors together significantly increased economic risks. After the global economic crisis broke out, the shrinking of the external sources that were available and their increasing costliness necessitated more disciplined management of public finances, but financing needs only fell to a truly low level from 2012 onwards. This has remained stable since, and in 2014 was roughly the same as the measurable -2.71 average of the similarly competitive EU Member States that acceded from 2004–2007. (The reason for the high, 2.75%



Source: HCSO

deviation is the financing needs of more than 5% of Bulgaria and Croatia, as well as the low value of the Baltic states, with Estonia and its surplus at the fore.) It is a serious risk, however, that the government's gross financing needs are still outstandingly high when compared to the region.

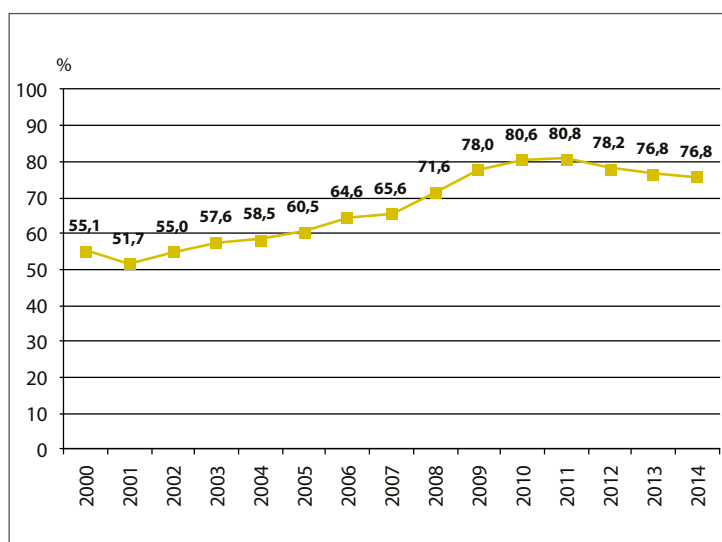
After 2001, the government sector's net financing needs grew to a dangerous extent, and only since 2011 have they returned to a low level. This is in accordance with the regional average.



Source: Eurostat

G.1.5. GROSS PUBLIC DEBT IN PROPORTION OF GDP

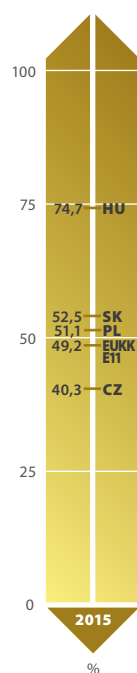
When examining the data, we must also consider the balance of national debt, competitiveness and domestic savings. If a state falls more into debt than the competitiveness of its economy and domestic savings allow, that carries serious risks to financing security, as well to the economic policy tools system and the secure room for manoeuvre. Additionally, it also means significant costs, since a country with higher risks can only renew debts at higher cost (which appears in the interest rates of government bonds). Therefore, the pressure to meet interest payments associated with public debt creates a significant disadvantage in terms of competitiveness. When compared to competing and similarly developed countries, the Hungarian state needs to collect more taxes to pay back the higher interest burden, but this also means higher costs and a competitive disadvantage for companies. Alternatively, if the government collects the same amount of tax, it can spend less in given areas, and this also leads to a loss of



Source: HCSO

competitiveness or the disruption of society. For the 11 Central and Eastern European Member States, the average national debt is 49.7%. In comparison, Hungary's value at 76%, being the third highest in the region is outstandingly large.

National debt, which earlier grew at a fast pace, began to slowly fall from 2012, but its more significant interest burden compared to competing countries, despite its falling value, is damaging the country's competitiveness.



Source: Eurostat

G.2. ECONOMIC DIVERSITY DIMENSION

Economic diversity measures variety within the economic structure and the balance of industries and sectors. It also measures the length of the value chain located in a given country. The level of economic diversity is important because it is interdependent with the level of economic development. Also it has been proved that economies with more variety and diversity can better withstand economic crises, which have less impact on them. Such economies can recover more easily from the negative effects of crises. Another reason for developing greater diversity is that a diversified economy contributes to generating more new knowledge and innovation, and creating a wide variety of highly skilled jobs. All things considered, a high level of diversity facilitates sustainable competitiveness and economic growth. Competitiveness studies analyse the level of economic diversity. They place special emphasis on the share of the technology- and knowledge-intensive industries combined within the gross added value and also on the ratio which exists between these industries. Improvement in competitiveness and economic growth are both accelerated when the proportion of high tech industries requiring high level of knowledge is growing, and the companies locate not only the manufacturing phase of the value chain into the given country, but also those phases which create higher added value, like research and development, sales, marketing, and service activities.

From the above, it follows that it is also important what percentage of all employees work in the technology- and knowledge-intensive industry. These industries generally offer higher wages, which provides for a higher standard of living and quality of life. This, in turn, produces greater government revenue, which also ensures more funding for investments that are important from the point of view of the future. Furthermore, greater diversity improves the average level of productivity, which is also a source of competitiveness. Greater diversity reduces the country's economic vulnerability, increases economic independence, and improves indicators of well-being.

From the point of view of diversification, the SME (Small and Medium-sized Enterprise) sector plays an especially important role in the economy of Hungary. SMEs employ approximately 2 million people – more than 70% of the workforce – and generate approximately 56% of GDP. Their share of export comes to around 28%, which is why they have a major role to play in the continuing diversifi-

cation of the economy. It is therefore important to measure their share within the gross added value and export. Another important indicator of economic diversity is how GDP – gross domestic product – and GNI – gross national income – relate to each other. The GNI indicator – according to certain professional opinions – measures the performance of the national economy more objectively, since it does not include the income generated in Hungary by foreign companies or earned by foreign persons, which then flows out of the country. To reflect the above, we have described economic diversity with the following five indicators.

Key indicator: THE SHARE OF GROSS VALUE ADDED CREATED BY TECHNOLOGY- AND KNOWLEDGE-INTENSIVE INDUSTRIES

The indicator expresses the extent to which technology- and knowledge-intensive industries contribute to the gross value added of the national economy. *Source: HCSO*

Sub-indicator 1: SHARE OF EMPLOYMENT CREATED BY TECHNOLOGY- AND KNOWLEDGE-INTENSIVE INDUSTRIES

The indicator expresses the proportion of employees working in the technology- and knowledge-intensive industries to all employed. *Source: HCSO*

Sub-indicator 2: THE SME SECTOR'S SHARE OF GROSS VALUE ADDED

This indicator assesses the extent to which micro-, small- and medium-sized enterprises contribute to the gross value added of the national economy. *Source: HCSO*

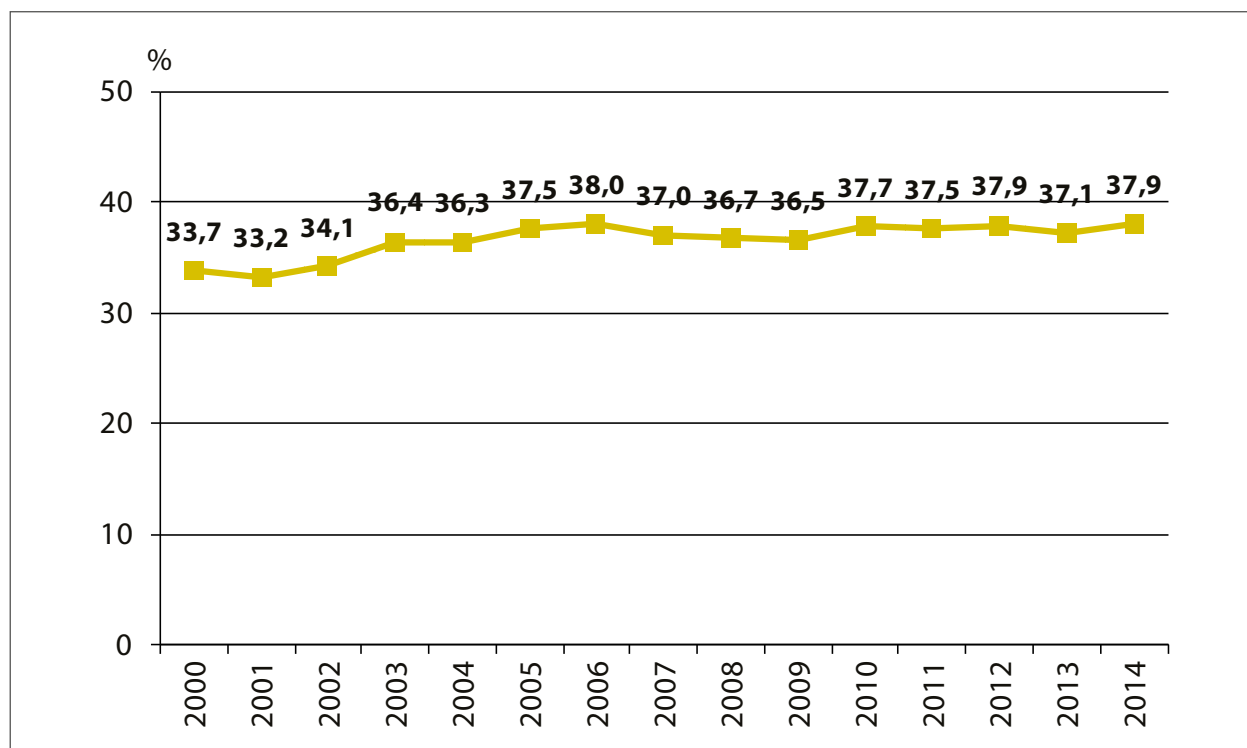
Sub-indicator 3: THE SME SECTOR'S SHARE OF EXPORTS

This indicator shows the percentage of export produced by the SME sector from the total export of the national economy. *Source: HCSO*

Sub-indicator 4: VALUE OF GNI AS A PERCENTAGE OF GDP

This indicator presents the gross national income as a share of gross national product. *Source: HCSO*

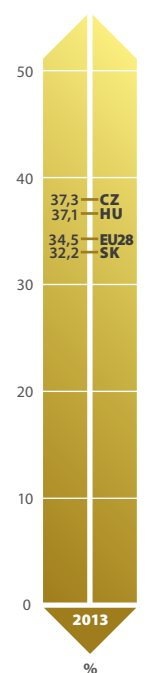
G.2.1. THE PERCENTAGE OF GROSS VALUE ADDED CREATED BY TECHNOLOGY- AND KNOWLEDGE-INTENSIVE INDUSTRIES



Source: HCSO

This indicator shows the performance between 2000 and 2014 of the state of the art 28 technology- and knowledge-intensive industries (as defined by NACE 08) capable of generating modern, high added value. The value fluctuates between 33.2% and 38%. The average value is 36.5%. What must be noted is that Eurostat does not list the same activities among the technology- and knowledge-intensive industries that we took into consideration. Eurostat makes distinctions with respect to high and medium technology-intensive industries, and technology- and knowledge-intensive services, and their shares are measured against gross added value. It is an important distinction that, according to Eurostat's understanding, the automotive manufacturing that represents a significant percentage of added value for Hungary does not count as a technology-intensive (high-tech) industry.

Therefore, if we use Eurostat's data, we have different rates, although those are not unfavourable in international comparison either. For example, taking into consideration the development of the share of the gross added value of technology- and knowledge-intensive services, our 10.9% rate of growth from 2008 to 2013 (the most recent available data) puts us at the forefront of the V4 countries. Our position is not as good, however, in the area of manufacturing production. Here, the growth in the percentage of high and medium technology-intensive industries between 2008–2013 was only 14%, while in the Czech Republic it was 20.5% and 35% in Slovakia. What this shows is that the percentage of low added-value assembly activities is too high in Hungarian industry.



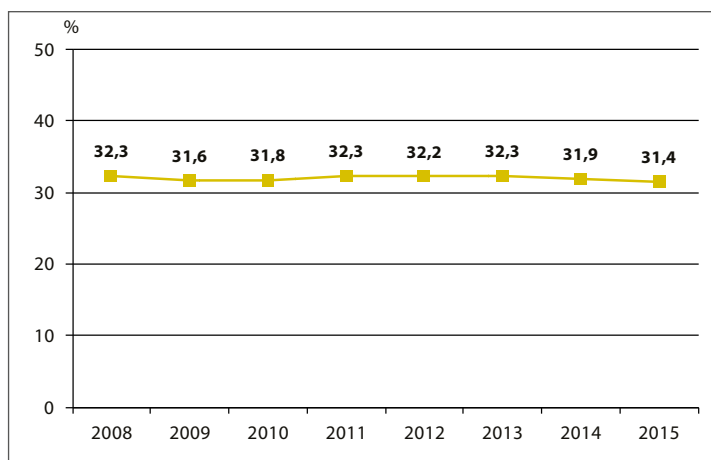
Source: Eurostat

On the basis of the indicator and international data, what can also be seen is that the share of technology- and knowledge-intensive industries as a part of gross added value is growing slowly and to a small degree. For this reason, the percentage of knowledge-intensive activities and other sectors of the economy must be increased.

G.2.2. THE SHARE OF EMPLOYMENT CREATED BY TECHNOLOGY- AND KNOWLEDGE-INTENSIVE INDUSTRIES

The 28 analysed technology- and knowledge-intensive industries (as defined by NACE 08) accounted for an average of 31.98% of total employment during the evaluated time period from 2008 to 2015. During the same period, the performance of these industries accounted for an average of 36.5% of gross added value. The probable reason for the divergence is that in Hungary higher productivity and labour efficiency are typical in the automotive industry, which falls into the technology- and knowledge-intensive category with a better organized work, so less labour is used. In these companies, the majority of the employed labour are those physical assemblers who do not perform technology- and knowledge-intensive work. The indicator includes all of the employees working in the priority industries, independent of what type of work they perform.

This is precisely why it is worth examining the percentage of those working in the technology- and knowledge-intensive industries as a proportion of total employment. In Hungary in 2008, this was 5.04%, while in 2014 it was 4.71%, which represents a percentage decrease of



Source: HCSO

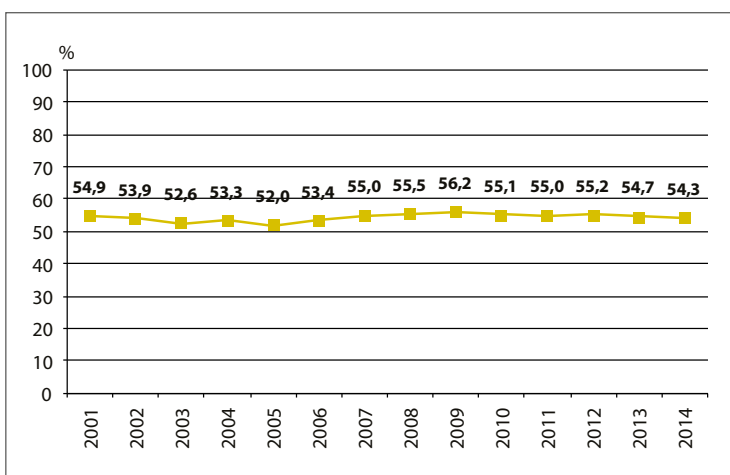
6.5%. However, this value is still better than the Polish or Slovak, and is only slightly lower than the Czech value (4.78%). In the V4 countries, employment in the technology- and knowledge-intensive industries grew everywhere from 2008–2014, except in Hungary, where it fell.

In order to improve competitiveness, it would be important to see that the proportion of knowledge-intensive jobs increases in the technology and knowledge-intensive industries, similarly to other sectors of the economy.

Source: Eurostat

G.2.3. THE SME SECTOR'S SHARE OF GROSS VALUE ADDED

Between 2001–2014, technology- and knowledge-intensive industries' share of the gross added value varied between 52% and 56.2%, and has been steadily dropping since 2009. In the EU, the SMEs' contribution to gross added value is on average 57.9%, which is higher than the Hungarian value. In terms of employment, the EU average (66.9%) is lower than the Hungarian value of 69.8%. Of the total SME industries in the EU 28 economy, 2.4% are Hungarian, 4.7% are Czech, 6.8% are Polish and 10.2% are German. The majority of these companies are micro companies in every country. The rate the contribution to total gross added value is made up of 1.2% Czech, 0.7% Hungarian, 2.6% Polish and 21.6% German SMEs. Within this, medium-sized companies produce the greatest gross added value. This shows that there are low levels of innovative activity and production of gross added value in the Hungarian SME industries. In terms of jobs created by SMEs, the rate in Hungary is 1.9%, 2.7% in the Czech Republic, 6.4% in Poland, and 18.8% in Germany. Although within the EU Hungarian SMEs do not play an outstanding role, in Hungary they are nonetheless important. The technology- and knowl-



Source: HCSO

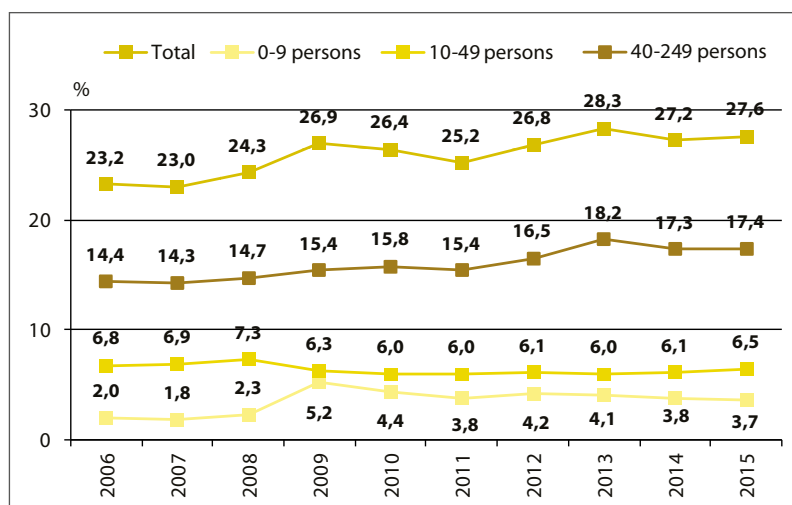
edge-intensive industries are flexible enterprises, and can play an especially important role in job creation in those regions that are less likely to attract large companies. What should be encouraged in the SME sector is innovation and a shift to products and services that produce high gross added value. Micro companies are in the lead in terms of job creation, but their numbers have fallen since 2010.

The job creation and economy-growing potential of the SME sector should be better utilised through more encouraging economic policy and environmental conditions that support innovation and generation of high gross added value.

G.2.4. THE SME SECTOR'S SHARE OF EXPORTS

In the EU, 13% of SMEs have exporting activities. Within the sector, however, it is primarily middle-sized companies that lead the way. According to the available data, 6% of Hungarian SMEs regularly conduct exporting activities. The available data shows SMEs' share of the total exports fluctuating between 23% and 28.3% between 2006 and 2014.

The average value for the period was 25.95%. By international standards, this is a low value. It can also be seen that the vast majority of the share of exports is accounted for by mid-sized enterprises, whose exports are growing slightly, whereas the export for micro- and small-sized companies has stagnated. To improve export ability, within the technology- and knowledge-intensive industries' product and services offerings, the percentage of larger new products and added value products and service should be increased, so that better prices and larger market share can be achieved.



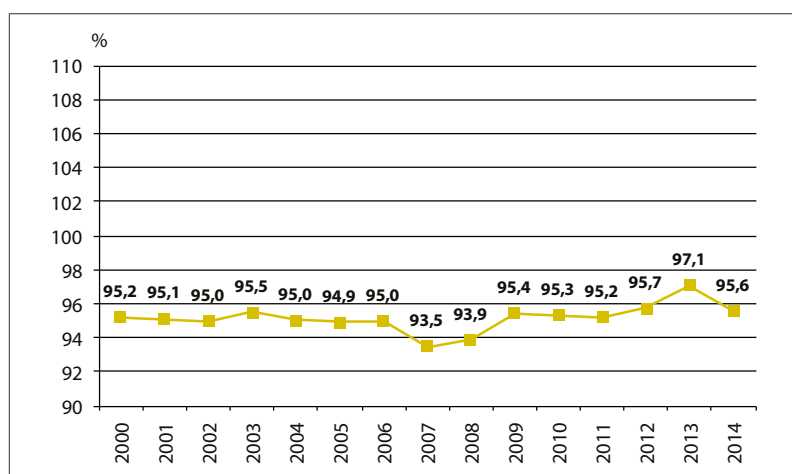
Source: HCSO

It should be noted, however, that there are many SMEs that are suppliers for export companies, so they export indirectly, which is why their exports do not appear in the statistics as the company's own exports.

Promoting innovation in the SME sector is critical as well-priced products and services that produce high added value and offer new solutions are a prerequisite to successful exports.

G.2.5. GNI AS A PERCENTAGE OF GDP

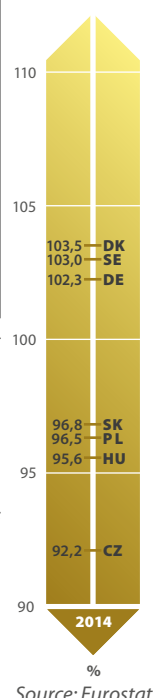
It is advantageous for a country if the GNI indicator is greater than GDP. With respect to the value of the indicator, that would mean that the ratio is greater than 100%. In figure G.2.5. it can be seen that there was not a single year when GNI in Hungary was greater than GDP between 2000 and 2014. The greatest difference between the two indicators could be seen between 2007 and 2008. This was the start of the economic crisis. What is also striking, however, is that as the indicator developed we saw another low point in 2014. This allows us to conclude that the revenues of foreign-owned players in the economy grew higher than that of Hungarian-owned enterprises. International statistics show that GNI is generally higher than GDP in the case of developed and competitive countries. International data prove this as well: in the six EU countries with a strong economy, GNI was greater than GDP in 2014. Standout results were produced by Germany (102.3%), Denmark (103.5%) and Sweden (103%). It is



Source: Eurostat

exactly for this reason why it would be important for Hungary that increasing numbers of Hungarian-owned enterprises perform activities generating high added value, and increase the value of productive capital investments abroad. This could be aided by the financial and competitive strengthening of the SME sector, including mid-sized companies in particular.

In order to increase GNI as a percentage of GDP, Hungary needs to improve its competitiveness, bolster Hungarian enterprises, and increase the knowledge and innovation content of the products and services that these companies are able to offer.



Source: Eurostat

G.3. INVESTMENT AND HUMAN CAPITAL DIMENSION

Economic competitiveness is the aim of every country, and for this it is essential that the available resources (capital, labour, knowledge, technology, etc.) are all utilised as efficiently as possible. It is a matter of importance that what is required for all this is an economic and social environment in which the actors are capable of creating the greatest possible added value. How the state functions has a major impact on this economic environment and competitiveness. The directions and aims defined by the state with regard to the future trends of the country influence its effectiveness in international competition to a great extent.

The definition of competitiveness is a more multi-layered and complex than that of economic growth or development. A truly competitive country, in the course of its operation, does not only scrutinise economic considerations, but social and environmental factors as well. Taking into account the analytical areas of other working groups in the course of the research, we designated one key indicator and four sub-indicators for the assessment of the competitiveness dimension. The state should pay special attention to these in the interests of promoting growth in competitiveness. The selected indicators also show that in the 21st century, a country can only be competitive with a knowledge-based (innovative) economy. To this end, the Good State must pay increased attention to knowledge and human capital. Efficient, knowledge-based investment, the quantity and quality of human capital and the utilisation of knowledge at the highest level are all of key importance.

Key Indicator: GROSS FIXED CAPITAL FORMATION AS A PERCENTAGE OF GDP

This indicator shows the value of gross fixed capital formation (that is, the value of the goods comprising produced tangible assets and intellectual property that is either purchased or produced internally, the growth in value of use and non-produced non-financial goods and the value of non-financial assets obtained in financial leasing arrangements) compared to gross national product. The indicator expresses the ratio of investments as a percentage of GDP. *Source: HCSO*

Sub-indicator 1: PROPORTION OF EMPLOYEES CLASSIFIED IN NACE'S EMPLOYEE CATEGORIES 1, 2 AND 3 AS A RATIO OF TOTAL LABOUR FORCE

The proportion of economic, administrative, advocacy, management and legislative employees, as well as employees in occupations requiring the independent application of high level qualifications or other high level or secondary education compared to the total number of employees. The indicator expresses the ratio of people employed in these areas to the total as percentage. *Source: HCSO*

Sub-indicator 2: ANNUAL GOVERNMENT EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GDP

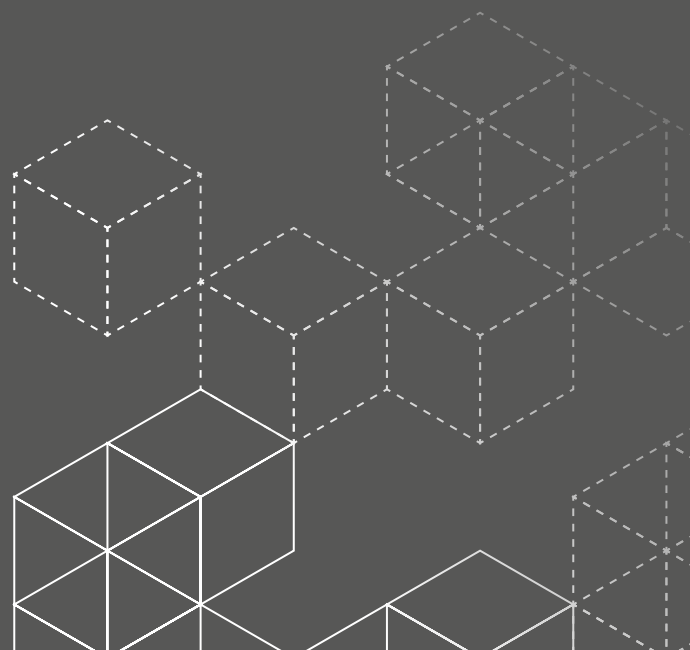
This indicator is the ratio of government-sector expenditures on education as a ratio of gross domestic product. The indicator gives the expenditures spent on education as a percentage of GDP. *Source: HCSO*

Sub-indicator 3: THE NATURAL DECREASE IN POPULATION

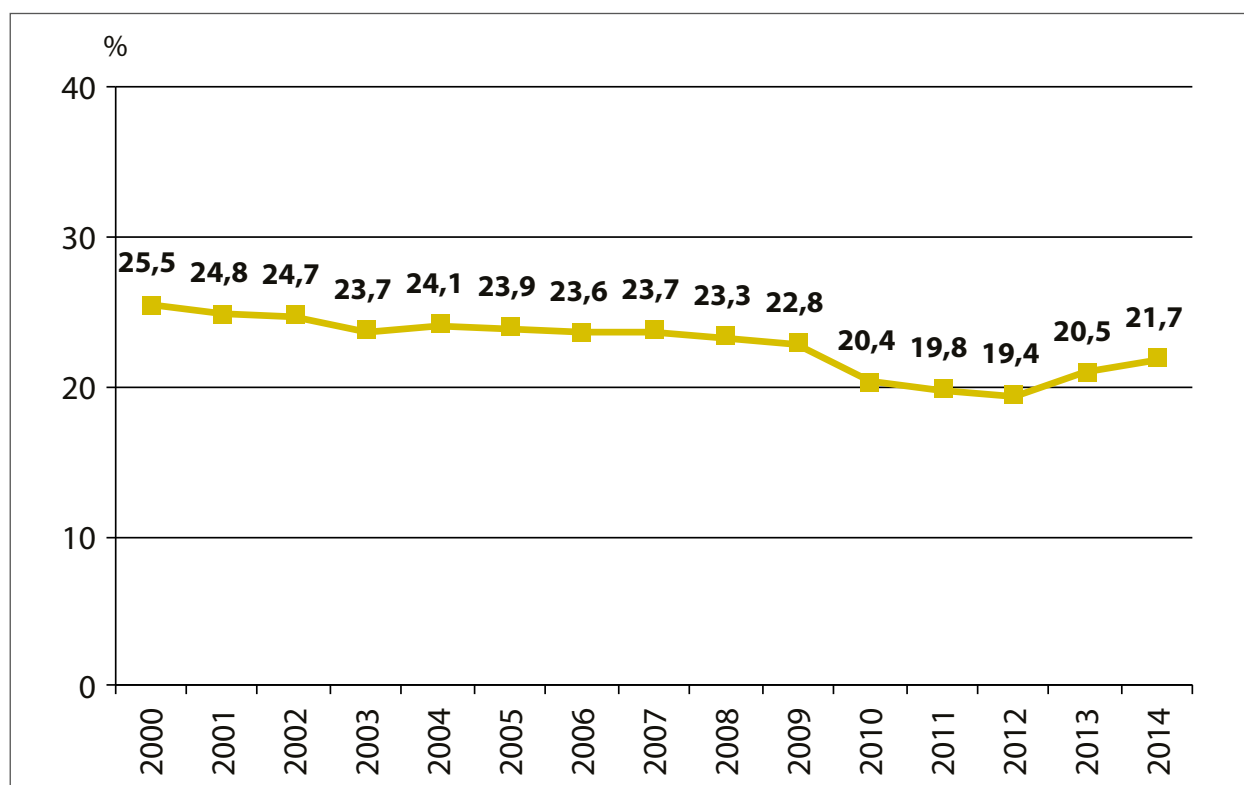
The natural decrease includes the difference between live births and deaths calculated per 1000 inhabitants. The data is given as a number of people. *Source: HCSO*

Sub-indicator 4: THE NUMBER OF PATENT APPLICATIONS MADE AT THE NATIONAL LEVEL

This indicator shows the number of patent applications made on national level. The data is expressed in a number of units. *Source: HCSO, HPO*



G.3.1. THE GROSS FIXED CAPITAL FORMATION AS A PERCENTAGE OF GDP

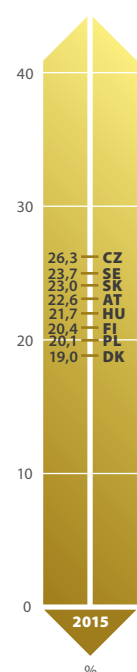


Source: HCSO

During the assessment of competitiveness, the quantity and quality of investments is a key area of analysis. If investment is not sufficient, this slows economic growth and recovery. In general, 21–22% of GDP is considered to be a “sustainable” level of gross fixed capital formation. The figure above shows the data for Hungary with respect to the period 2000–2014. Based on the data for the assessed time period, Hungary had not shown positive figures in the area of investments up to 2012. Compared to 25.5% in 2000, gross fixed capital formation data in 2012 was only 19.4% of GDP. Although from 2000 until 2009, the decline took place at a slower pace, from 2009 to 2010, the recession was much bigger than before. This is in all likelihood due to one of the negative effects of the financial and economic crisis that also engulfed Hungary. The nadir of the assessed period was in 2012, when investments came to 19.4% of GDP. After this, growth could be detected in 2013, as a result of which the investment ratio of 20.5% was reached, which grew further

in 2014 and reached 21.7%. However, if we investigate the structure of the investments, we find that growth occurs mostly due to larger state investments, and not investments by the commercial sector.

In comparison to the V4 countries on the basis of the 2014 data, we found that Hungary placed second behind the Czech Republic (25%) but ahead of Poland (19.6%) and Slovakia (20.9%). During the period from 2010–2014, with the exception of Hungary, total investments fell in each V4 country. It is worth observing the data from those countries that are more competitive than we are. In 2014, investments in Denmark and Finland lagged behind that in Hungary. It is important, however, to note which sectors the investments are made in, and also whether they are replacements or expansions. As one can read it in the 2015 Good State and Governance Report, the state also has a prime responsibility in using resources efficiently and for the right purposes.



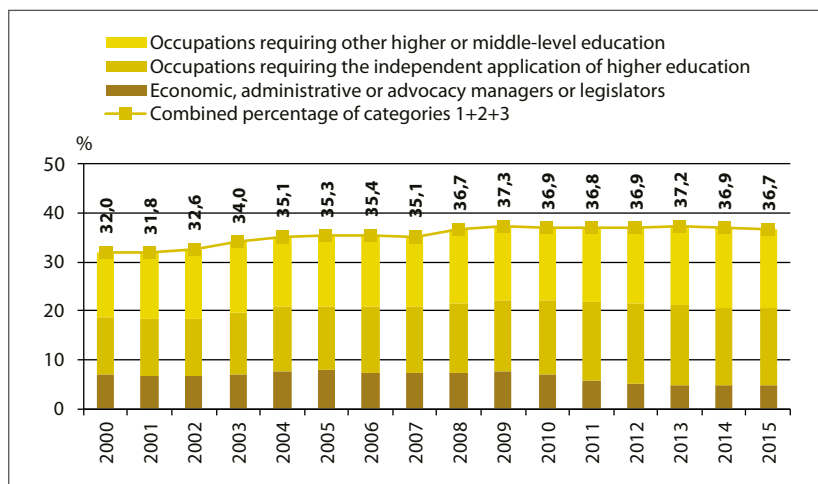
Source: Eurostat

The role of investments is exceptionally important from the perspective of improving competitiveness, so special attention must be paid to investments in modern technology and innovation.

G.3.2. PROPORTION OF EMPLOYEES CLASSIFIED IN NACE'S EMPLOYEE CATEGORIES 1, 2 AND 3 AS A RATIO OF TOTAL LABOUR FORCE

The proportion of employees classified into NACE's categories 1, 2 and 3 increased by 5.2% from 2000 to 2013, and following this it shrank by 0.5% by 2015, so that in total it was 36.7%. This shrinkage is not necessary due to the reduction in the number of employees in these three sectors, since it could also mean an increase in the number of people in other categories.

The proportion of employees in category 1 – those employed as economic, administrative or advocacy managers or legislators – reached its apex in 2009 with a figure of 7.6%. After this year, the ratio of people employed in this area decreased, falling nearly 2.9% by 2015. The percentage of people employed in Category 2 – those in jobs requiring the independent application of higher qualifications – showed a continuous growth trend starting in the 2000s up to 2013, when a slight decrease was detected for two years so that by 2015 the per-



Source: HCSO

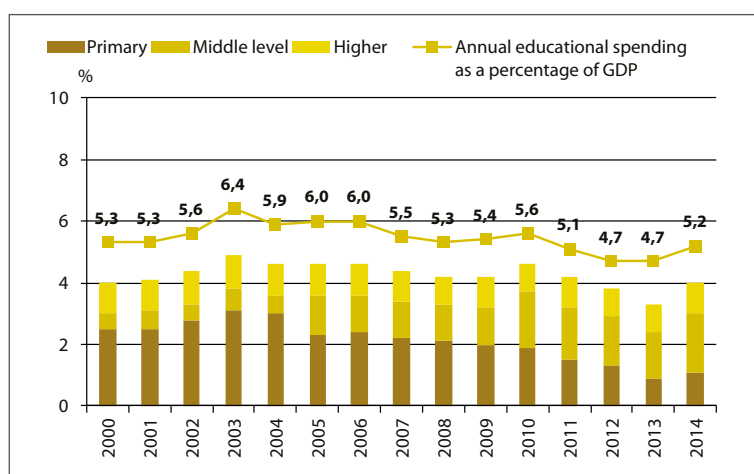
centage of people employed in this sector fell to 15.9%. The ratio of workers in the third category – occupations requiring other higher or medium-level education – also showed a growth trend from 2000–2013, after which a decrease could also be detected. In 2015, the ratio of people employed in this area was 16% of all those employed.

A competitive economy can only be created with highly trained professionals, which is why in the future, too, efforts will have to be made to raise the level of knowledge and to ensure that professionals are able to find suitable jobs.

G.3.3. ANNUAL GOVERNMENT-SECTOR EXPENDITURE ON EDUCATION AS A PERCENTAGE OF GNP

The indicator shows the investment in developing human capital. Between 2000–2003, expenditure on education grew, then, with the exception of 2005 (6.0%) a constant reduction can be seen till 2008. From 2010–2013, there was a significant drop, which was followed by a 0.6% increase in 2014. With this, the amount spent on education in 2014 surpassed the value of that in the year of 2011, but it did not reach the earlier highest level of 6.4%. The growth in 2014 may have been impacted by wage increases, and the data may be distorted by structural reforms.

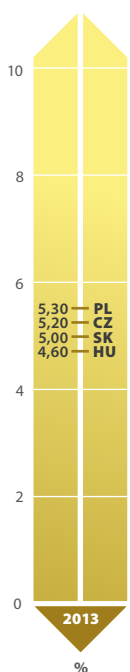
Looking at the international data from 2013 we can see that our position has weakened in general terms. Compared to the EU 28 value of 5%, Hungary (with 4.6%) is located below the average. Among V4 countries, Hungary is in the last place. Compared to countries



Source: HCSO

that are more competitive, our data are conspicuously poor. (For example Denmark with 7%, Finland with 6.5%, and Sweden with 6.6%).

Based on the state expenditure on education there seems to be no long-term commitment to improvement. This may be an obstacle to permanent economic growth and to the improvement of competitiveness.



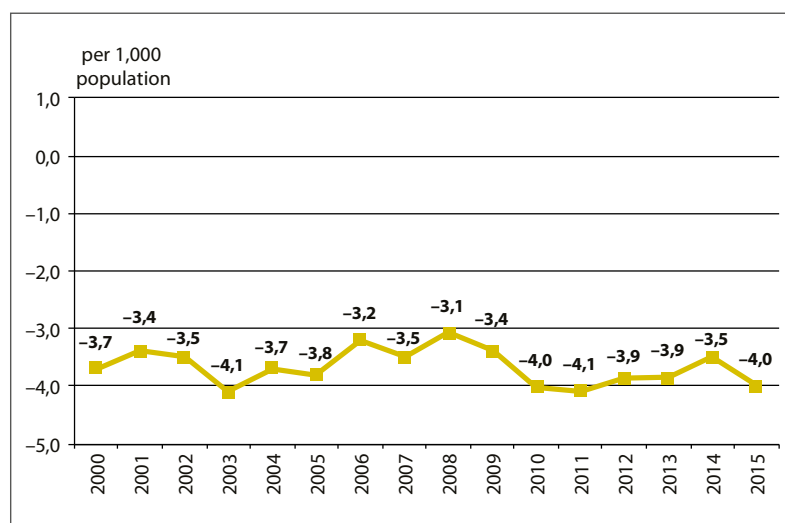
Source: Eurostat

G.3.4. NATURAL DECREASE IN POPULATION

The level of natural decrease is an important assessment factor taking into consideration that long-term development and future competitiveness are to a great extent determined by the size of available human resources. The indicator consists of the most important characteristics of the demographic situation.

There were two serious low points during the assessed period: in 2003 (-4.1) and in 2011 (-4.1). An upward trend was evident since 2011 up to 2014, when in addition to an increase in the number of births, the number of deaths also decreased, and thus the rate of natural positive decline moved in a favourable direction by reaching -3.5. Unfortunately, the data from 2015 show a deterioration, and Hungary has fallen back to its 2010 level with its -4 value.

It is an important task for the Good State to preserve its human capital. In addition to the natural decrease of population, the actual rate of decrease also represents an important and substantive problem,



Source: HCSO

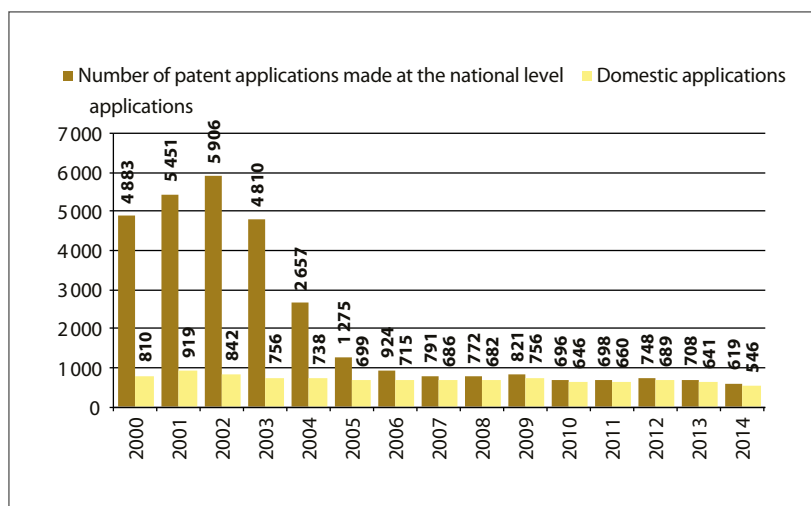
which the number of emigrants leaving Hungary exacerbates greatly. Although it is difficult to precisely determine the number of people emigrating, the number of those who emigrated in 2014 is probably 31,500 based on administrative records.

The loss of human capital available to a nation harms the prospects of improving competitiveness even in the short term. In the long term, this correlates with a fall in the country's international position.

G.3.5. NUMBER OF PATENT APPLICATIONS MADE ON NATIONAL LEVEL

With respect to this indicator, during the first three years of the assessed time period, a growth trend can be seen, reaching its peak in 2002 with 5916 patent applications. A dynamic downturn was witnessed until 2006, which resulted in 4,982 fewer patent applications being filed. Continuing decline can be observed in the period between 2006 and 2014, but it is not nearly as drastic as in the preceding years.

Looking at the number of domestic applications, a more balanced trend can be seen, but in this case as well, an ongoing drop is the prevailing feature. While in 2000, at the beginning of the assessed time period, 4883 patent applications were made at the national level, of which 810 were domestic applications, in 2014 this figure fell to as low as 619, of which 546 were domestic. It is worth observing that, up until 2000, 83%



Source: HCSO, HIPO

of patent applications were filed from abroad, but this number had fallen to 11.8% by 2014. Naturally, the number of domestically filed patents swung in the opposite direction, so that by 2014 they made up 88.2% of the total applications filed nationally.

The number of patent applications made on national level improves opportunities for innovation. This is why it is necessary to make patent procedures easier, faster, and less expensive.

G.4. INNOVATION DIMENSION

Research and development and innovation have become one of the 21st century's most important factors with respect to society, economy and competitiveness. The Good State must encourage research and development and its successful emergence on the market in the form of a product or service, and as innovation. Support for innovation is clearly evident in the growth of the number of research and development expenditures and research sites and the share of employees in the area of research and development. Investing in R&D activity, especially in the case of basic research, means investing in an activity the results of which are uncertain. At the same time, if the research or experimental research brings results, then the newly obtained knowledge reaches consumers in the form of innovation, and Hungary's store of knowledge thereby generates significant added value. This is precisely the reason why, as it was shown in the G.3. indicators, Hungary's store of knowledge and the quantity and quality of its human capital are also of key significance from an RDI perspective. In order to increase knowledge-based competitiveness, knowledge-based work and employment in the innovation sector must be encouraged.

In order to increase the proportion of people employed in the research and development area, it is not sufficient to train professionals with a high level of knowledge and methodological skills, but attention must also be paid to retaining the researchers and reducing "brain drain" and emigration. According to academic literature from both Hungary and abroad, the ultimate aim of competitiveness is to boost societal progress and prosperity. This is why it is important to take into account that innovation can create the basis for increasing competitiveness and improving productivity, which will lead to a reduction of knowledge-dependence, to social development and to improvements in the standard of living and the quality of life.

In order to measure innovation, we have selected a total of five indicators (one key indicator and four sub-indicators), as follows:

Key Indicator: TOTAL R&D EXPENDITURE AS A PERCENTAGE OF GDP

This indicator shows the aggregate amount (excluding VAT) of R&D expenditures and R&D investment incurred in the course of research and development activity carried out in the national economy relative to GDP. The framework of the data collection includes, in addition to all institutions of higher education and research institutions, those economic

entities that have reported conducting R&D activities over the course of the last five years as well as those that have received support for R&D from budgetary funds during the given time period. *Source: HCSO*

Sub-indicator 1: R&D EXPENDITURE OF ENTERPRISES AS A PERCENTAGE OF GDP

This indicator shows the aggregate amount of R&D expenditures and R&D investment incurred in the course of research and development activity carried out in the corporate sector relative to GDP. *Source: HCSO*

Sub-indicator 2: TOTAL R&D STAFF AS A PERCENTAGE OF TOTAL LABOUR FORCE

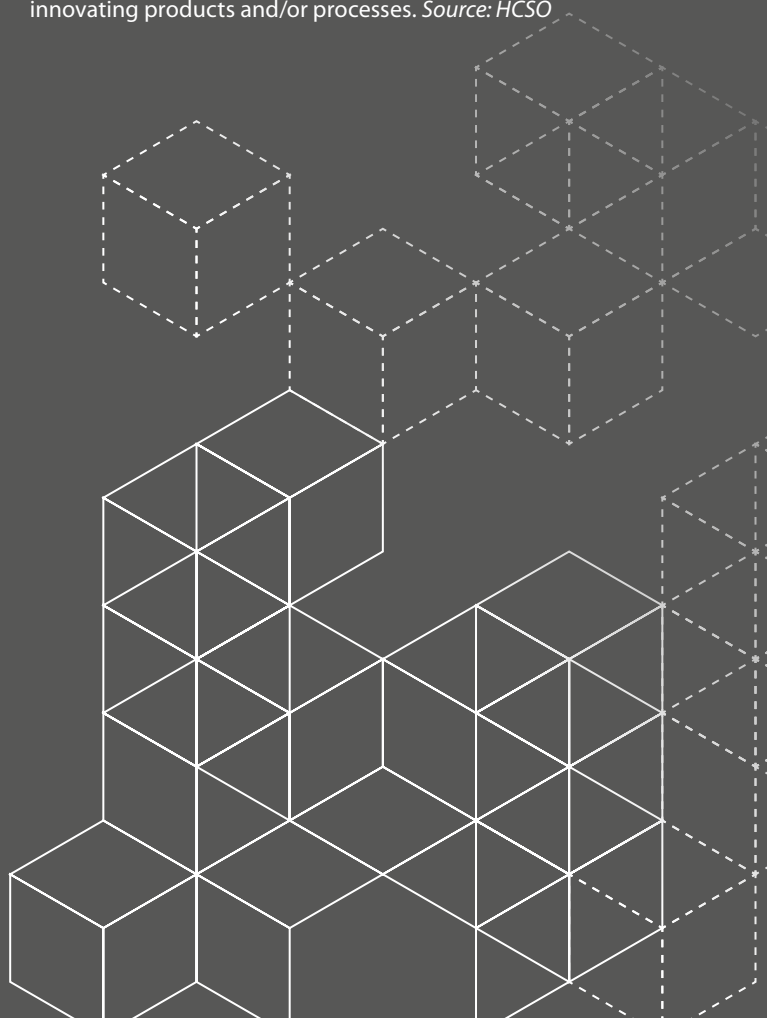
The indicator shows the proportion of persons employed in R&D activities relative to the number of employees in the national economy. *Source: HCSO*

Sub-indicator 3: STUDENTS GRADUATED IN TECHNICAL FIELDS AND THE NATURAL SCIENCES

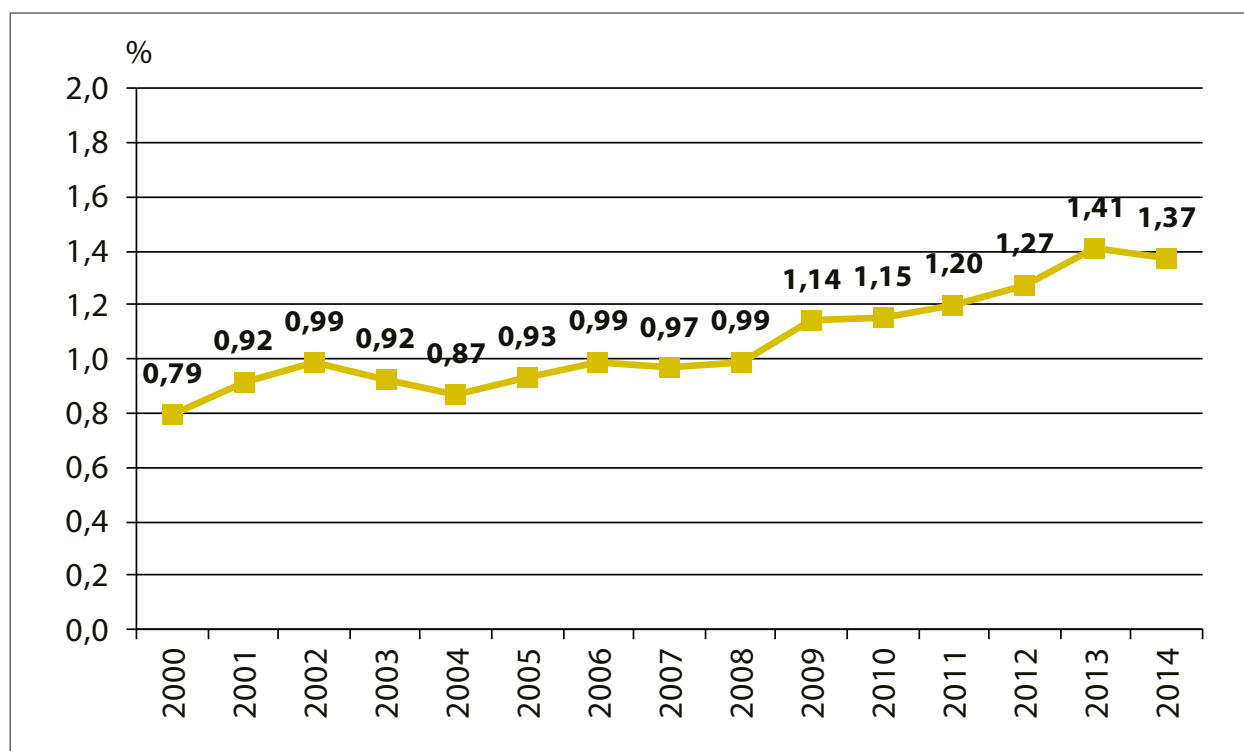
This indicator shows the number of degrees and academic degrees obtained in technical fields and in the natural sciences. *Source: MHC*

Sub-indicator 4: SHARE OF INNOVATIVE ENTERPRISES

This indicator shows the number of companies engaged in innovating products and/or processes. *Source: HCSO*



G.4.1. TOTAL R&D EXPENDITURE AS A PERCENTAGE OF GDP



Source: HCSO

It is also important from the points of view of both the national economy and society that by developing education, respecting knowledge and raising the standard and the GDP-proportionate value of R&D, it becomes possible to build a knowledge- and innovation-based economy that contributes on the medium- and long-term to increasing the given country's competitiveness, reducing its dependence on foreign capital, and also improving society's position in terms of income and well-being.

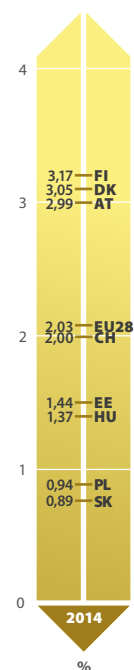
Government and corporate expenditures on research and development came to 1.37% of GDP in 2014, which shows a significant increase compared to the value (0.79%) for 2000. Between 2002 and 2007, the value of expenditures relative to GDP dropped slightly, and later stagnated, although a growth trend was observed from 2008 (despite the economic crisis) that lasted until 2014.

In the 2015 Good State and Governance Report, we showed the increase in state and corporate R&D activities, because since 2007 the percentage of GDP spent on R&D steadily increased. With the data added to the timeline from 2014, we can see that the indicator fell compared to the previ-

ous years. By examining the state and corporate sector's combined R&D activities by regional distribution, it can be established that the superiority of Budapest that existed in the previous year's report grew even further as the 57.36% that was the capital's share of all R&D spending in 2013 grew to 59.19%. This research activity draws attention to the increasing inequality within the country. In comparison to last year's report, the counties and regions falling behind could not significantly improve their positions.

Upon examination of the international data, there are significant variances among the V4 countries in terms of R&D. The Czech Republic is unequivocally in the lead (2%) compared to the other countries. The Slovak and Polish data are nearly identical (0.89% and 0.94%), and equally show weak R&D activities compared to the EU average.

Austria, which was taken as a reference country, reached its EU 2020 target (3%) already in 2014, but by 2020 Austria wishes to raise its percentage of GDP spent on R&D to 3.76%. Of the Scandinavian countries, Denmark achieved 3.08% and Finland 3.17% in 2014. Estonian R&D spending is more favourable than Hungary's, and has reached a level of 1.46%.



Source: Eurostat

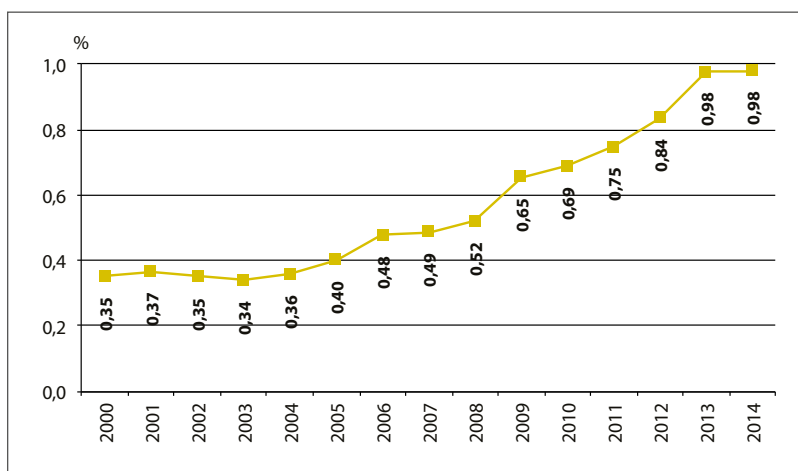
Although R&D spending had increased in the past couple of years, a drop was seen in 2014. Since this indicator significantly influences competitiveness, it is imperative that this activity should be enhanced.

G.4.2. R&D EXPENDITURE OF ENTERPRISES AS A PERCENTAGE OF GDP

Companies play key roles in research and development activity, since it is not sufficient for the state to conduct R&D activities it has financed itself. Instead, other actors in the economy must be encouraged to engage in such activity. Corporate R&D expenditures relative to GDP have been rising dramatically: whereas in 2000 corporate R&D spending came to 0.35% of GDP, in 2013 and 2014 the figure was 0.98%. Looking at the various industries in the economy, it becomes apparent that it is the manufacturing industry that spent the great amount on R&D, realising 51.5% of all expenditures in the entire corporate sector.

Of the V4 countries (similarly to the G.4.1 indicator), the Czech Republic is in the best position (1.12%) while in Slovakia (0.33%) and Poland (0.44%) corporate expenditure on R&D as a proportion of GDP was lower than the Hungarian figure.

The Austrian and Finnish figures (2.11% and 2.15% respectively) are somewhat above the Danish figure (1.98%),



Source: HCSO

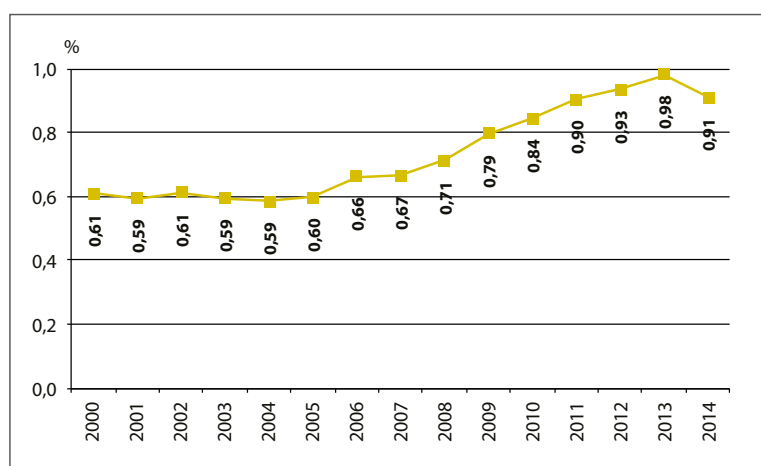
while Estonian corporate R&D activities (unlike the public sector's spending) is far below the value of Hungarian spending, since as a percentage of GDP it is only 0.64%. In the case of Estonia, R&D expenditure by state and higher education institutions exceeds that of the corporate sector.

The stagnation of corporate R&D expenditures in 2014 paints a negative picture, so domestic companies should be encouraged (especially SMEs) to perform R&D&I activities, and, with regard to FDI investment, efforts should be made to attract R&D activities to Hungary.

G.4.3. TOTAL R&D STAFF AS A PERCENTAGE OF TOTAL LABOUR FORCE

Research and development activity requires human resources with proper quality and quantity levels. Therefore, along with increasing expenditures, the number of researchers and developers also has to grow. While in itself it is not sufficient, their numbers as a percentage of all those employed should increase, too. This percentage, however, fell from 2013 to 2014 from 0.98% to 0.91%. The change was not only in relative value, but the absolute number of persons employed in R&D jobs also fell, from 38,163 employees to 37,329. What makes the situation worse is that, despite growth in employment, the absolute number of researchers and developers declined. As we already suggested, an indicator of increasing inequality in R&D activities is that, despite a national decline, the number of researchers and developers increased by 694 individuals in Budapest and Pest County.

This indicator's value was 1.3% in the Czech Republic, 0.74% in Slovakia and 0.66% in Poland, which is com-



Source: HCSO

mensurate with the given country's R&D expenditures. For the additional countries provided as reference, the values are 1.63% for Austria, 2.16% for Denmark, 2.13% for Finland and 0.93% for Estonia, all of which were ahead of Hungary with respect to this indicator in 2014.

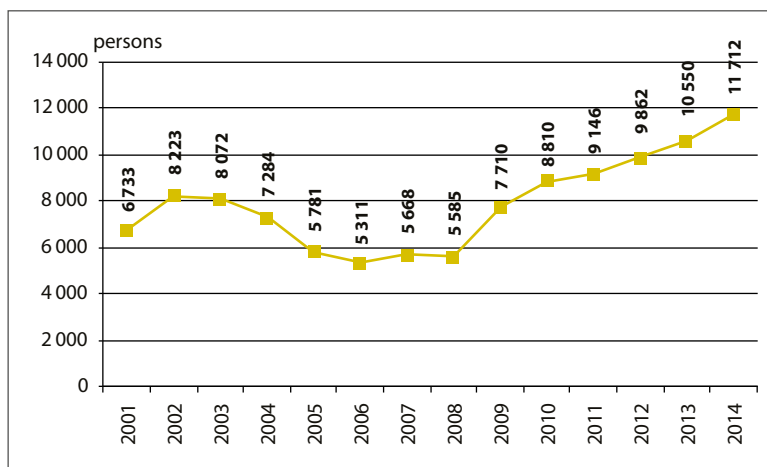
R&D expenditures in themselves are insufficient to develop the knowledge base, as an innovative economy with a modern structure cannot be developed if the percentage of knowledge-based jobs does not increase.

Source: Eurostat

Source: Eurostat

G.4.4. NUMBER OF QUALIFICATIONS OBTAINED IN TECHNICAL FIELDS AND THE NATURAL SCIENCES

The number of people with technical and natural science qualifications is an important indicator regarding the knowledge base suitable for shifting the centre of gravity in the direction of a more highly trained, knowledge-intensive high-tech sector. The number of higher-level qualifications obtained in these fields started to decline starting in 2002, reaching a nadir of 5,311 in 2006. After two years of stagnation, the number of new degrees and science degrees gradually began to rise. This is presumably partly an effect of the Bologna system introduced in 2005. The first group of students to receive a basic qualification (BSc) in the new higher education system now divided into three levels graduated in 2008, although they generally appear in the 2009 data due to an education lasting at least six or seven semesters. By 2014 the number of diplomas and scientific degrees awarded in these fields had grown 73.9% compared to 2001, the basis year. In 2014, 11,712



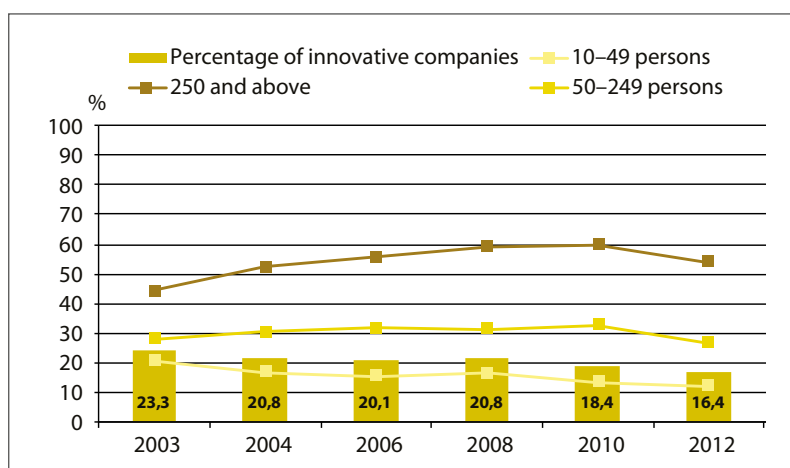
Source: MHC

individuals earned qualifications in the examined scientific fields. The number of graduates in the technical and natural sciences doubled when compared to 2005, and this is favourable since experts can be one of the sources for acceleration in innovation.

It is insufficient to educate experts with technical and natural science qualifications, since they must also be retained. With this in mind (according to international competitiveness analyses), Hungary's situation has deteriorated in recent years.

G.4.5. SHARE OF INNOVATIVE ENTERPRISES

Despite the growth in expenditure on research and development and the proportion of people employed in the area of R&D, the ratio of companies involved in innovation has been falling since 2003 for all company types. The reason for this is clearly the drop in innovation performance on the part of small enterprises. Whereas in 2003, 20.9% of the enterprises in this sector were involved in innovation, by 2012, this figure was only 12.2%. With respect to mid-sized and large enterprises, we can establish that compared to the basis year of 2003, the ratio of companies engaged in product and/or process innovation increased up until 2010, but then by 2012 the innovation performance of both sectors was already deteriorating significantly. Projected across the entire corporate sector, the ratio of innovative companies dropped 6.9% between 2003 and 2012: from 23.3% to 16.4%. Up until now, we have analysed the percentage of enterprises conducting product or procedure innovations. At the same time, 16.5% of domestic companies performed structural, while 19.7%



Source: HCSO

conducted marketing innovation activities. The most (product or procedure) innovative industry in the national economy is the information communications sector, in which 32.2% of enterprises were innovative. The least innovative sector of the national economy was transportation and warehousing, where only 5.9% of enterprises were innovative.

Since the activities of innovative companies assist in producing high added value and successful exports, special attention should be dedicated to increasing existing companies' innovative capability and encouraging the establishment of new and innovative companies.

G.5. PRODUCTIVITY AND EFFICIENCY DIMENSION

The level of productivity and efficiency significantly influences the competitiveness of a country. Productivity shows how much new value an employee generates. But it can also be measured as how much new value is created per unit of employee's work during the time spent. Nevertheless, this relatively simple indicator is today supplemented by another more system-oriented indicator. This is called total factor productivity. The complexity of the work performed by the employee, however, is also relevant, as are the technological level of equipment the employee uses and the extent to which his or her work is well-organised and managed. More complex, well-managed and organized work carried out using modern equipment creates greater value, and improves productivity. An important factor for improving total factor productivity is continuous training of employees, that is, life-long learning. System-oriented total factor productivity is shown to have improved when a country is capable of exporting more than it imports, since it is easier to find market for higher value added products. This also contributes to improving the terms of trade. Efficiency measures the level of utilisation of available resources, such as money, materials and energy for relevant purposes. It can be measured with various indicators, with energy efficiency being one of the most important among them. We have measured the level of productivity and efficiency with the following indicators:

Key Indicator: GDP PER PERSONS EMPLOYED

This indicator is the gross domestic product (GDP) based on 2005 prices divided by the number of persons employed in the given year. *Source: HCSO*

Sub-indicator 1: THE RATIO OF VALUE OF EXPORTS TO VALUE OF IMPORTS

This indicator is a numerical relationship that compares the national economy's exports to imports. A value over 100% shows that the value of exports is greater than that of imports. *Source: HCSO*

Sub-indicator 2: CHANGES OF TERMS OF TRADE

The change in the terms of trade is a very important indicator, since it sheds light on whether or not the country has a comparative advantage, and if it does, whether or not it can exploit it. If the value of the indicator is greater than 1, then more imports can be obtained with each unit of export products, or, fewer exports are needed to obtain each unit of imports. *Source: HCSO*

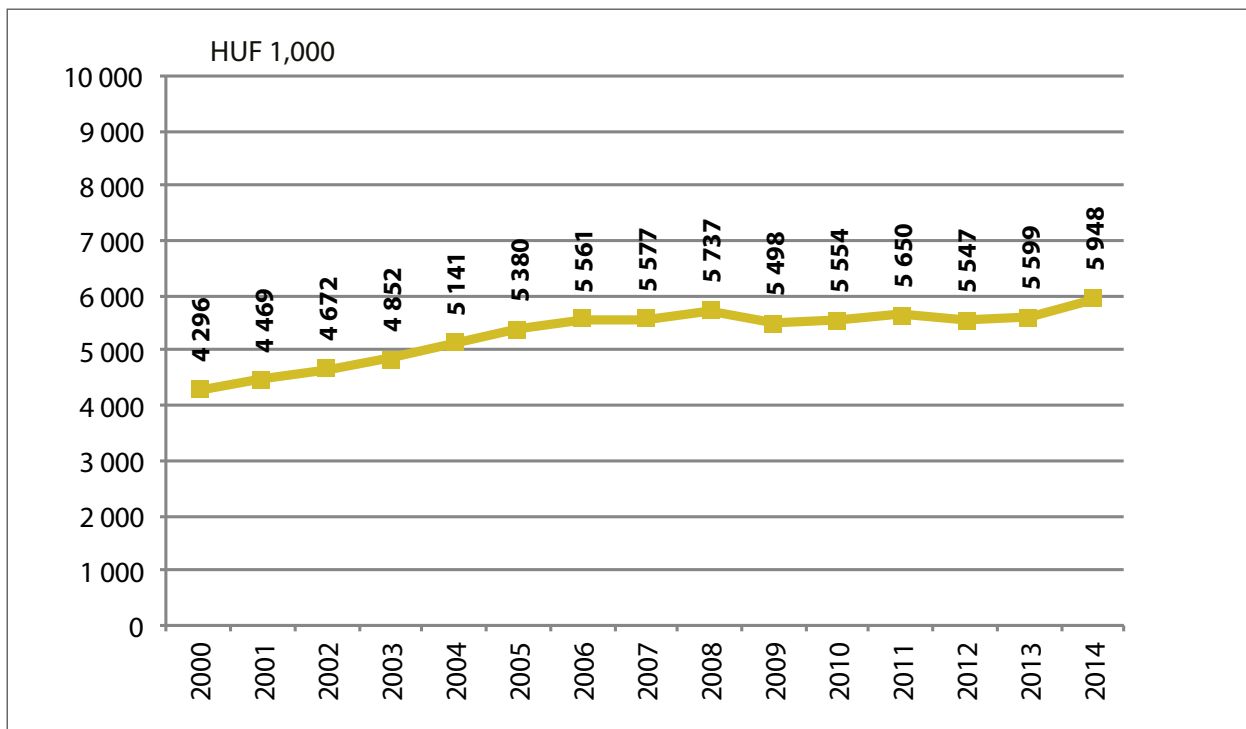
Sub-indicator 3: THE ENERGY INTENSITY OF THE ECONOMY

Energy intensity is the gross domestic energy used in a given year divided by GDP, where energy use is represented in kilograms of oil equivalent. The gross added value shown in the denominator is specified in constant 2005 prices. The indicator measures the amount of energy required to generate 1000 EUR of GDP. *Source: Eurostat*

Sub-indicator 4: LIFE-LONG LEARNING IN THE 25–64 AGE GROUP

This indicator measures the proportion of the population aged 25–64 that participated in formal education or adult training in the four weeks prior to the survey. *Source: Eurostat*

G.5.1. GDP PER EMPLOYEE

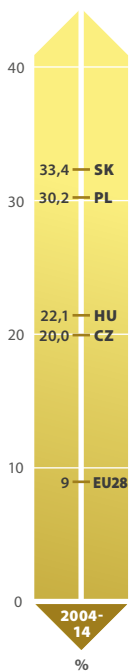


Source: HCSO

The figure measures changes in the amount of GDP per employee over the period 2000–2014, calculated in 2005 prices. In the figure, we can see that improvement in productivity remained uninterrupted until 2006. Between 2007–2013 this value fluctuated, while in 2009 and 2012 we witnessed a decline. The reason for this is that starting in 2006 the pace of economic growth slowed, and by 2008 it stopped altogether. Compared to 2000, the improvement in 2014 was 38.5%, and as a yearly average this meant a growth of 2.75%. On the basis of this indicator, we cannot receive a complete picture about the level of Hungarian productivity, since we do not know how many hours the employed actually worked. For this reason, it is worth examining the development of GDP per hours

worked. According to the international data, between 2004–2014 GDP per actual hours worked grew 9.0% in the EU 28 countries. The Hungarian value was 22.1%, the Czech 20.0%, the Polish 30.2%, and the Slovak 33.4%. The Hungarian value therefore comes in third among the V4 countries. Since economic growth is one of the important sources of growth in productivity, we need to improve the level of Hungarian productivity. Possibilities for improving total factor productivity should be examined in the future. Additional training would contribute to improvement, as would modernising technology as well as increasing the amount of money invested in innovation in general. Furthermore, the percentage of those participating in adult education could be increased further.

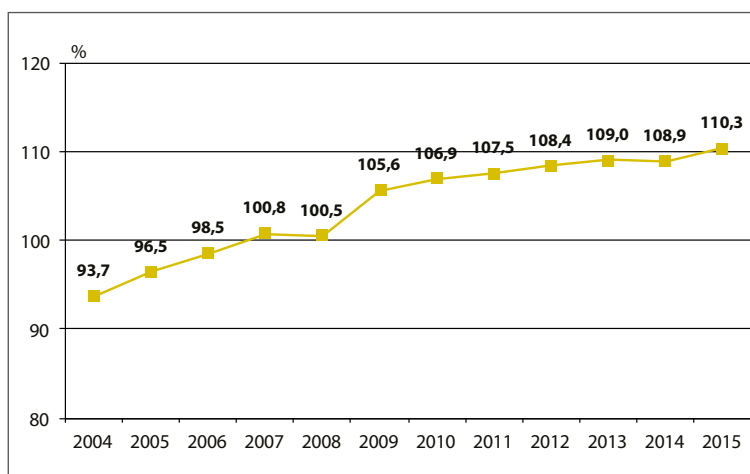
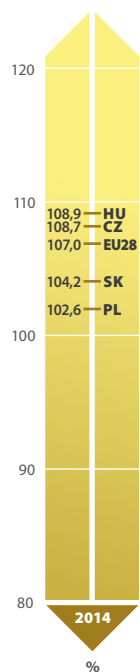
Growth in productivity is the main source of competitiveness and economic growth, which is why creating conditions for growth, primarily by raising the level of knowledge and technology must be encouraged.



Source: Eurostat

G.5.2. THE RATIO OF VALUE OF EXPORTS TO VALUE OF IMPORTS

The figure assembled from Eurostat data shows the ratio of the value of exports to the value of imports between 2004 and 2015. The value for a given year is calculated at the medium rate and in nominal terms for the given currency. The data shows that exports began to overtake imports in value starting in 2009. The chief reason for this was the launch of investments in the automotive industry and growing exports from it. A slight deterioration was seen from 2013 to 2014 due to the rise in imports. In 2014, exports grew 3% while imports grew 4.8% compared to the previous year. It is worth keeping in mind that in comparison to 2011, the percentage of knowledge-intensive (high-tech) products declined by 6.5% in 2014 as a proportion of our exports according to Eurostat data. But the Hungarian data for 2014 (108.9%) is still better than the EU average (107%). According to international data from 2014, we lead the V4 countries for this indicator. On the basis of analysis and inter-



Source: HCSO

national data, it is still important to reduce our economic vulnerability and dependence on exports derived from a small number of sectors. In expanding our exports, it is recommended to encourage the export of products and services of high added value.

The expansion of exports can be secured by diversifying our economy, increasing the quality and differentiation of our export products, as well as by increasing the proportion of high added value activities.

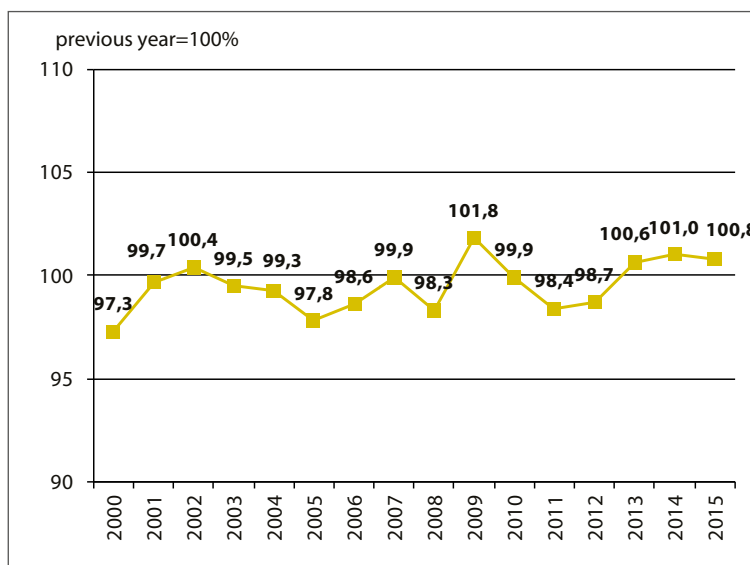
G.5.3. THE CHANGES IN THE TERMS OF TRADE

Changes in the terms of trade show whether or not a country has a comparative advantage, and if it does, whether or not it is capable of exploiting it properly.

If the value of the indicator is greater than one, then the terms of trade are positive for the country.

In figure G.5.3., we can see that that during the time period of 16 years, the terms of trade deteriorated more often than they improved. We must draw attention to the fact that after the improvement of 2013–2014 there was once again a worsening in our terms of trade. One of the possible reasons for this is that within exports, more and more products are exported, that for the market count as of average or less than average quality, which in some cases forces us to dramatically reduce prices. It is only possible to achieve high

prices with products and services that contain a high level of added value and innovation and with outstanding marketing.



Source: HCSO

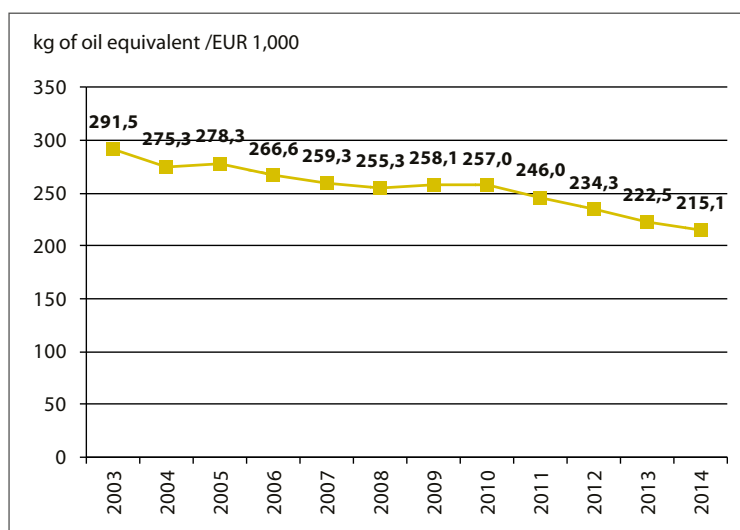
This is why innovation, knowledge and the creation of high-value products and services that underpin these are a key issue.

The road to improving the terms of trade is to increase the economy's innovative performance, exports of high-quality, innovative and further-processed products, and outstanding work in market.

G.5.4. THE ENERGY INTENSITY OF THE ECONOMY

Knowing the level of an economy's energy intensity allows one to draw conclusions about the economy's structure, the ratio of energy and knowledge-based activities, and the efficiency with which resources are used. The high energy intensity of the economy raises competitiveness problems.

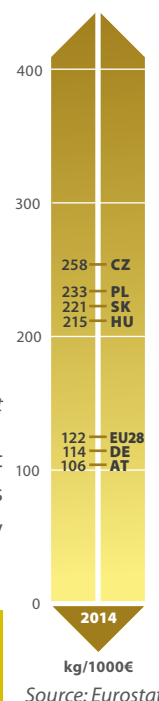
The figure assembled on the basis of Eurostat data, as well as international comparison, shows that the Hungarian economy's energy intensity, although steadily declining, is still very high. In the EU in 2014, only six countries had higher energy intensity than Hungary. Our energy intensity in 2014 exceeded the EU average by 76.3%, although it declined by 26.2% between 2003 and 2014. The performance of the V4 countries is even better: these countries saw declines in energy intensity by 27.9% for the Czech Republic, 32.5% for Poland and 43.8% for Slovakia. The EU average is 20.8%. Since Hungary imports energy, its high energy intensity means continued significant dependence. In the interests of improving



Source: Eurostat

competitiveness, on the one hand it would be expedient to reduce the percentage of high energy intensity activities within the economy, while the growth of energy efficiency and alternative energy uses also needs to be encouraged.

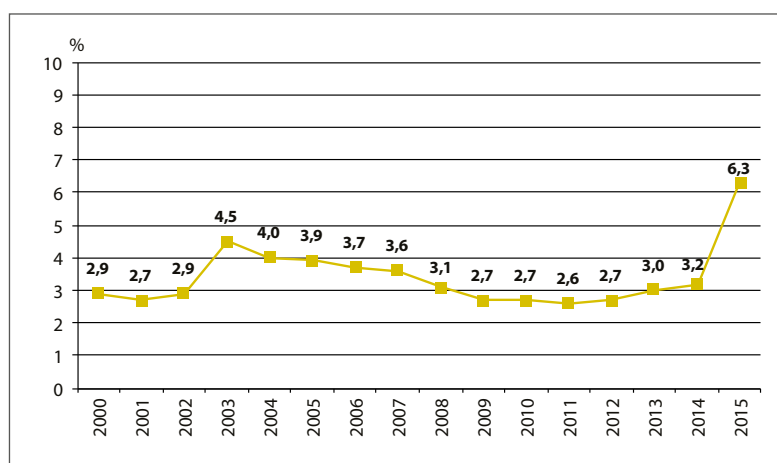
Energy dependency means economic dependency and is a competitive disadvantage, so reducing energy intensity in the economy and increasing energy efficiency are important tasks.



Source: Eurostat

G.5.5. LIFE-LONG LEARNING AMONG THOSE AGED 25–64

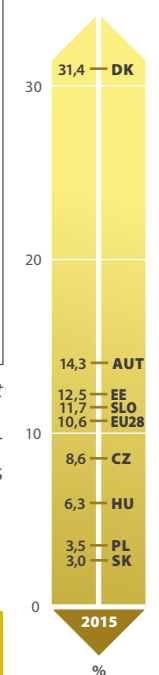
The rate of participation in adult education generally has a significant effect on the possibility to increase productivity, especially the possibility to raise total factor productivity, since it makes it possible to acquire new knowledge and skills, thereby growing the size of the available workforce with higher qualifications. In terms of this indicator, we were not in a good position until 2014, but 2015 brought a significant change. The percentage jumped from 3.2% to 6.3%. This improving result is probably the result of new qualifications being obtainable free of charge, as well as continued further training for those employed in the public work programme. In order to grow our competitiveness, this value is still nonetheless low. In 2015, this percentage was 8.6% in the Czech Republic, 12.5% in Estonia, 14.3% in Austria and 11.7% in Slovenia. The EU 28 average was 10.6%.



Source: Eurostat

The lack of up-to-date knowledge hinders economic development, prevents increased exports and competitiveness and ultimately diminishes GDP growth prospects.

The essential tool for increasing productivity is constantly raising the employees' level of knowledge, which is why it is necessary to further and significantly increase the participation rate in adult education.



Source: Eurostat

SUSTAINABILITY

SUMMARY¹

Sustainable development is the only peaceful option for human civilization if it wants to live well on Earth in the long run. Cooperation of knowledgeable and open individuals and the co-existence of communities capable of harmoniously living alongside each other could mean a world where, thanks to the fair distribution of produced goods, everyone can live well without exploiting nature. Does this sound utopian? This societal model is just as achievable as that based on oppression, wasteful production or competition. The foundational pillars for the survival of the human race are knowledge and the ability to cooperate. It was not man's physical attributes that made it possible for him to take possession of the entire planet, but his above mentioned abilities that are now relegated to the background in the interest of real or perceived values.

By sustainable development, we mean the complex approach to well-being (and not just living comfortably) that can be achieved through harmony with nature. Sustainability is therefore not an obstacle, nor another dimension, but a conscious choice between different pathways that take into account values (frequently unquantifiable) beyond economic values.

What are the values that serve living well? How can these be kept in mind? How can we keep track of what is frequently difficult or impossible to quantify or measure? What are those measurable factors that indicate an important, but not measurable quality?

Sustainability is a system and outlook that pervades all aspects of life. The secret to the long-term successful survival of every country, region or community comes down to whether it is able to find a method to create a harmonious existence in a given time and place. There is no single 'right' path. In each era and each region or social system, sustainability can be achieved differently. The goal is shared, and the foundational pillars (nature, the individuals, community, economy) are the same, but the method for finding balance varies.

As Lajos Kassai observed in the documentary *A lovasijász* (The Mounted Archer) from 2015: "It's not our ancestors we need to follow but that which our ancestors followed." Wisdom's timelessness in the given eras needs to be broken down into smaller units, and this responsibility always brings new challenges that we cannot avoid by simply copying existing clichés.

The indicators that we have selected aim to support sustainability in the decision-making process. The indicators shine light onto those areas that from the perspective of our country's sustainability are currently the most important.

The information we have assembled together helps show current tendencies, and we make suggestions on desirable developments, or we simply draw attention to something if it is heading in the right direction, or if it would be good to ensure that the government keeps to this course. Sustainability is living well while respecting our planet's ecological limits.

From the point of view of sustainability (environmental, individual and social), economic considerations present one of the greatest challenges. The economy is the sum total of systems based on flows of materials and energy. Hungary belongs to those developed minorities in the world where the environmental problems caused by an economy built on fossil resources is the first thing to face. The country's economic situation is shaped by those markets in which we are present, and the transactions completed in them. Economic processes have environmental and social impacts, some of which can be termed visible, predictable and intentional, while others cannot be predicted or have no direct effects. When conducting policy analysis in advance of a decision being made, the analysts generally attempt to uncover and consider every circumstance that might influence the decision or its consequences.

The governing of a country is a series of long-term strategic decisions which, if made within a shifting or poorly structured system, invariably come with great risks. An additional challenge is that the spatial and temporal validity and success of these decisions are rather limited. Responses must constantly be formulated to the challenges arising at a given moment, while the results frequently appear only much later. This is especially true for processes related to sustainability. It is the task of the state to promote the preservation and growth of environmental and social values. As Hungary's Fundamental Law states: "The protection and maintenance of natural resources [...] and their preservation for future generations is the responsibility of the state and of everyone."² In the interest of this, and support sustainability efforts, the National Assembly approved the document entitled "The National Concept for the Transition to Sustainability – The National Sustainability Developmental Framework Strategy 2012–2024". At the global level, the UN's Sustainable Development Goals (SDG), adopted unanimously on 25 September 2015 by 193 Member States, provide a direction that sets the elimination of poverty and the creation of a sustainable future as targets to be achieved by 2030.

The indexes we have selected are in line with the contents of the SDG Framework Strategy, according to which "producing the assets required to promote the material, intellectual and spiritual well-being of every generation – whether these are

¹ The authors of this chapter are Mónika Besenyi (workgroup leader), László Földi, Ph.D., Zsolt Hetesi, and Ágnes Zsóka, Ph.D.

² The Fundamental Law of Hungary (25 April 2011), Article P

products and services generated through the coordination of the market or public assets provided by the state or other institutions – is not possible in the absence of four fundamental resources, these being human, social, natural and economic resources.”³

This research undertaking, and the sustainability dimension in particular, can also be considered a response to the appeal of the Hungarian National Sustainable Development Council, according to which “we currently do not have at our disposal indicators measuring the four national resources which can be used without causing concerns with respect to their methodology and content. For this reason, the Framework Strategy, by starting to develop this set of indicators, addresses the government, the Hungarian Central Statistical Office, and the various academic working groups.”⁴

In reviewing and selecting the indicators, we bore in mind the fact that each of the dimensions (environmental, social and economic) should carry equal weight in the final set of indicators. In addition to this we paid attention (since system outlook is one of their foundational pillars, not only at the level of sustainability indicators, but with respect to the entire indicator system), to how our work would fit into the entirety of the report. Keeping all of this in mind, we divided the sustainability indicators into the following groups:

- climate change,
- natural resources management,
- energy and water management,
- environmental stresses,
- social sustainability.

One of the explanations for the significant weight given to the environmental indicators (climate change, natural resources, water, energy, environmental stresses) is that they do not appear in other sections of the Good State and Governance Report. Furthermore, society is a sub-system of nature while the economy is a sub-system of society. Accordingly, economic considerations are placed within the individual dimensions, thereby showing the given dimension's financial aspects.

The current economy's greatest challenge is switching to low-carbon operations. The climate change indicators seek to establish where the country currently stands in this process. This goal is served by activities, actions and investments that target reduced or more efficient energy consumption, as well as those that support increased use of energy produced from renewable and/or low-carbon sources.

The indicators having to do with the management of natural resources reflect the results of measures taken in the interest of careful handling of the nation's natural resources

and assets. They show the extent and health of the natural capital that the country possesses.

In the updated report, the area of water and energy management received a separate dimension. We selected two critical factors from among the many, which in the current economic situation have a significant influence on the ability to achieve natural and social sustainability. Responsible management of energy and water and planning with a long-term outlook can also impact our country's and our region's future.

The environmental stress indicators trace the unnecessary and leftover materials that are produced as a result of economic and social processes. The state's efforts can take the form, in part, of measures taken to appropriately handle pollution and all activities that support the reduced generation of pollutants, so the implementation of cleaner technologies has a positive effect on the indicators. The goal is a 'circular economy', which is modelled on nature and does not recognize or redefines waste as a potential resource.

The aim would be to integrate subjective criteria in such a way that the subjective impact of the “quality” of the governance can also be made measurable (livelihood, positive outlook for the future, feasibility of life goals) on the basis of a reliable survey conducted regularly on a representative sample.

This report places Hungary's situation and challenges at its focal point. At the same time, we also show (where relevant) where we stand in international comparison. In the globalised world, it is important that we do not try to interpret phenomena or establish goals thinking of our country as a separate island. Global or regional processes, regulations, collaborations and competitions are frequently strengthened or limited by processes. Today, sustainability is not merely a desirable utopia, but in many places it is a productive “industry”. There are increasing numbers of successful companies where the desire generated by a sustainable outlook and technologies responsive to new expectations has resulted in great triumphs. In most cases, these success stories are also the result of significant state subsidies. When a given country, recognising its long term interests, creates a competitive advantage for the clean economy, it brings into position those innovations that support the realisation of a low-carbon economy.

The threat of climate change is known to nearly everyone in Hungary. The majority of society is aware of the potential consequences (or has already experienced them for themselves). Appropriate rhetoric is no longer engendering fear or raising awareness. In the interests of setting into motion climate action, it is necessary to coherently communicate the appropriate goals supported by effective, predictable and significant participation by the state.

³ Ibid., 7.

⁴ Ibid., 45–46.

F.1. CLIMATE CHANGE DIMENSION

Many researchers have named climate change as the most threatening challenge for humanity in the 21st century. The process of climate change cannot be considered to be in its initial phase with events only beginning to unfold, since its effects and consequences are certainly already present in everyday life. Based on what has been written in the reports by the UN Intergovernmental Panel on Climate Change (IPCC), countermeasures must be organised around two groups: mitigation and adaptation.

Most analysts agree that it would be difficult to reverse climate change, so the most important goals appear to be in the area of adaptation. Naturally, Hungary must also do everything in its power to slow (or even reverse) the process, but it is obvious today that this can only be achieved through global and international cooperation. Therefore, in addition to international-level mitigation efforts, adaptation opportunities on the local level must be the focus.

Key indicator: GREENHOUSE GAS (GHG) EMISSIONS

Emissions of six greenhouse gases (CO₂ – carbon dioxide, CH₄ – methane, N₂O – nitrous oxide, HFC – hydrofluorocarbon, PFC – perfluorocarbon and SF₆ – Sulfur hexafluoride), converted into carbon dioxide equivalency (CO₂e). The CO₂ equivalency is a tonne of CO₂ or the quantity of another greenhouse that has the equivalent potential to alter the global climate to an equivalent extent. *Source: HCSO, HMS*

Sub-indicator 1: EXTREME WEATHER

The number of frosty days: we consider frosty days those when the daily minimum temperature is below 0°C. Hot days are those when the daily maximum temperature reaches 30 °C.

A heatwave exists when there are at least three consecutive hot days. *Source: HMS*

Sub-indicator 2: THE GREENHOUSE GAS INTENSITY OF ENERGY CONSUMPTION

The ratio of greenhouse gas emissions related to energy use to gross domestic energy use. *Source: HCSO, HMS, HEPR*

Sub-indicator 3: THE FOREST CO₂ ABSORPTION RATE

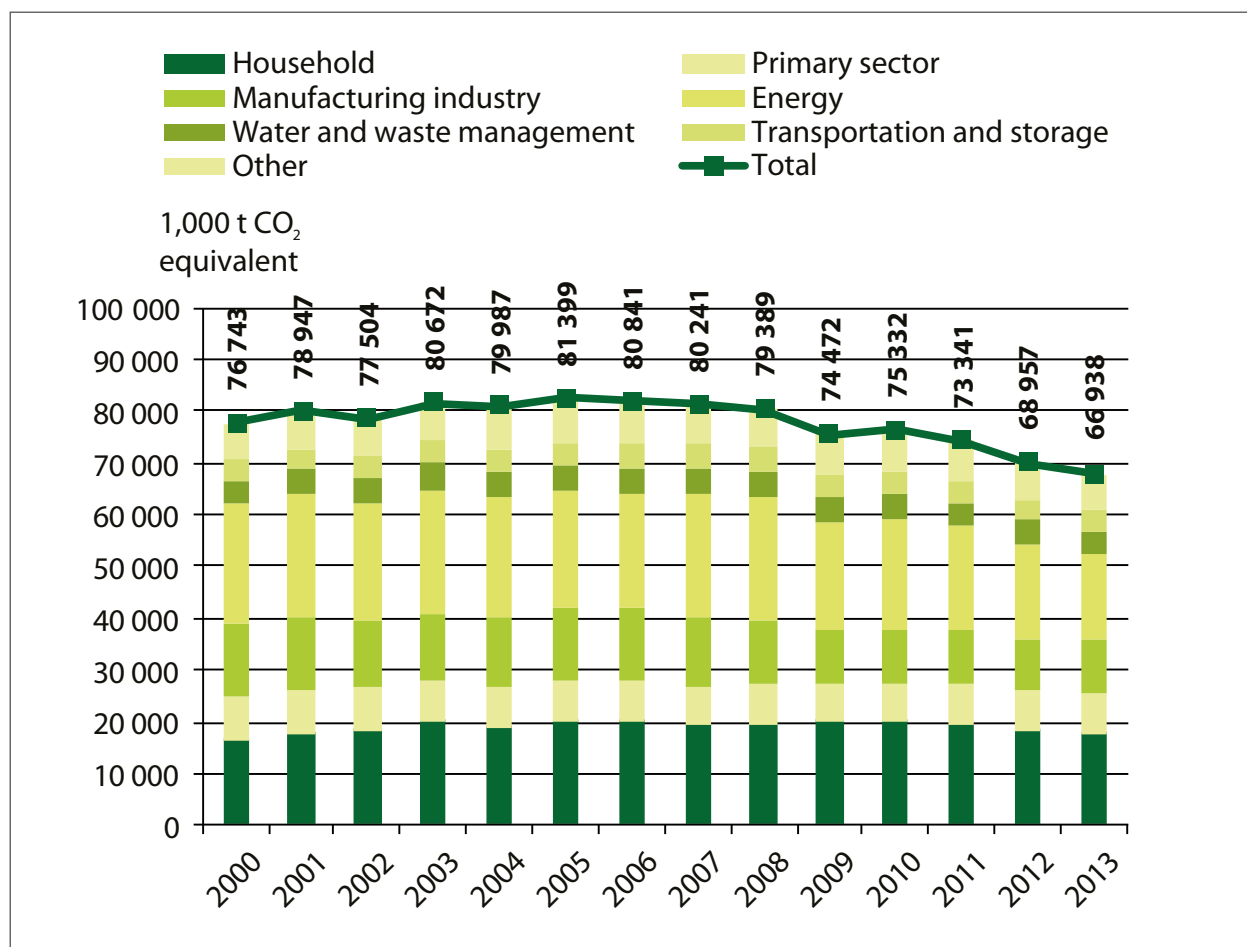
Land use, the change in land use and the forestry sector's net GHG emissions. The sector works as a net absorber, which absorbs greenhouse gases from the atmosphere. Through the more sustainable use of products originating from logging, the emission of greenhouse gases into the atmosphere can be significantly limited, and their absorption from the atmosphere can be increased. *Source: HMS*

Sub-indicator 4: GHG INTENSITY

The amount of greenhouse gases (expressed in CO₂ equivalents) and the percentage of GDP. This indicator helps to determine what level of GHG emissions corresponds to the production of a unit of added value. *Source: HCSO, HMS*



F.1.1. GREENHOUSE GAS (GHG) EMISSIONS



Source: HCSO, HMS

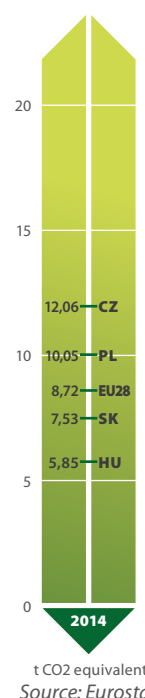
It would have been difficult to select a different key indicator for climate change than the total value of greenhouse gas emissions. The factors causing climate change are also often measured in GHG emissions per capita, a figure which has decreased in Hungary as well in recent years, despite the dwindling population. We instead chose total emissions, because from the point of view of the harmful effects, it is incidental what population is causing it.

For international comparison it is worth analysing Eurostat data that track GHG emissions for individual countries. If we compare total, per capital and GDP-proportionate emissions, then Hungary ranks 12th place out of 34 countries (with Iceland, Luxembourg and Slovenia in the top places), while in the area of per capita emissions, it is in third place, after Turkey and Sweden. In the case of GDP-proportionate emissions, a different picture is shown, with Hungary placing 18th, and Switzerland, Sweden and Norway in the lead.

Based on the commitments it has made, the EU must reduce its GHG emissions to 20% below its 1990 level by 2020. This is one of the main objectives for the Europe 2020 growth strategy program, which is the EU's climate and energy package.

Hungary's performance exceeds its commitments (in 2012, emissions were at 70% of the 1990 level) and thus in the European Union, based on Government Decree 323/2007 (XII.11) on the use of revenues originating from CO₂ trading in effect since 1 January 2005, and on the quota systems, on which the Green Investment Scheme (GIS) was based. The aim of this is to generate revenues for use for climate protection.

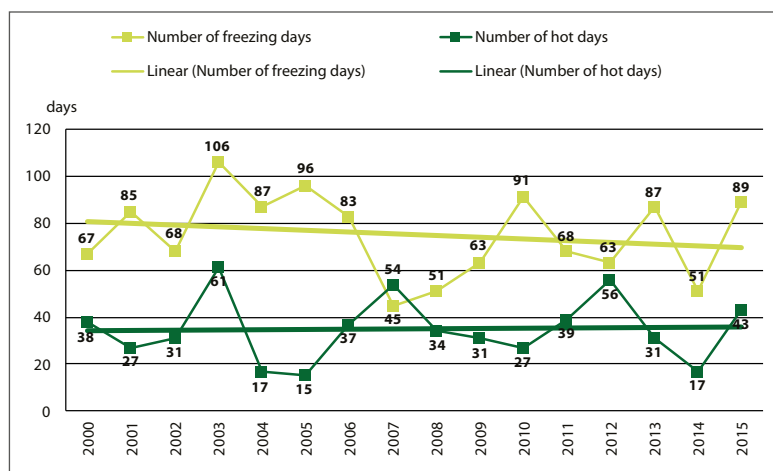
From all of this it is clear that the government is able to play a major role not only in promoting and supporting the reduction, but also putting the revenue from the quota system to appropriate use. In order to achieve the objectives, it is also important to be aware of what sectors are the biggest GHG emitters, and where government intervention can be most effective. As can also be seen from the EU statistics, transportation is responsible for 24.3% of GHG emissions (of which road transportation makes up 71.9%). What is even more important than this, however, is that while in the case of the other sectors, emissions have decreased, in the transportation sector they have grown by 36% at the EU level.



While the continuous reduction of CO₂ emissions is a positive trend, increasing the extent of these reductions is still important even if Hungary is to exceed the commitments it has made.

F.1.2. EXTREME WEATHER

The number of hot and frosty days now fall under a new indicator compared to the previous year's report. Its use serves primarily to raise awareness, and its timely formation gives a clear picture of the growing impact of the consequences of climate change. Since extreme weather phenomena result in significant physiological strain for humans, the increase in the phenomena poses an immediate threat to the lives and health of the population. Statistics underscore, for example, that on hot days the number of cases requiring medical attention significantly grows, and there is in fact a higher mortality rate during these periods. Children, the elderly, and those with heart, circulatory and nervous system illnesses are in increased danger. To reduce these consequences, a complex approach is required, starting with a survey of the population's climate sensitivity to educating



Source: HMS

and observing the affected all the way to developing preventative programmes with the aim of improving resilience capability. It is also worth examining adaptation expenditures and their impact, which are part of the state-level response.

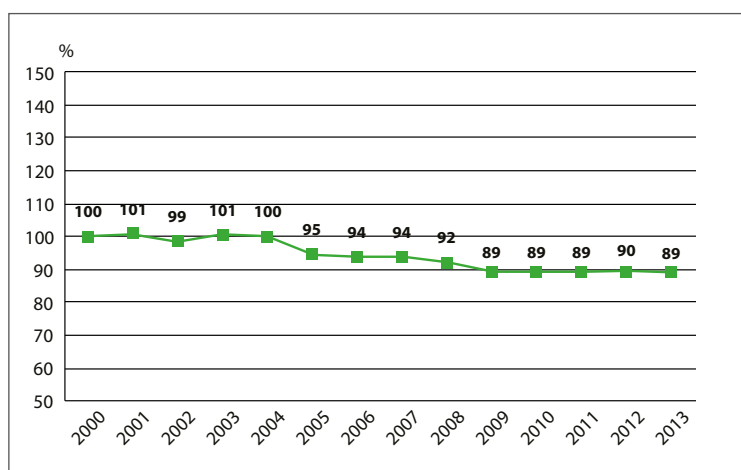
With regard to extreme weather events, the trend is for an increasing number of hot days, for which we must prepare for from a health protection perspective.

F.1.3. THE GHG INTENSITY OF ENERGY CONSUMPTION

A methodology frequently applied in measuring environmental factors of energy consumption is the Life Cycle Analysis (LCA). Based on this, we establish the degree to which a product is environmentally friendly.

One of the most important factors in this is the GHG emissions of the given product over the course of its life cycle.

Using fossil-based energy sources can cause the most significant burden. Thus, if we wish to succeed in reducing humanity's environmental impact, then we must reduce the ratio of fossil fuels in favour of renewable sources, which simultaneously means that the GHG emissions for a given unit of energy use will also decrease. As the diagram above illustrates, there has been a 11% reduction compared to 2000. Taking into consideration that consumption also increased by 16% since the reference year, it is clear that the environmental burden is reduced. At the same time, we must also note that replacing fossil fuels with renewable sources can only be a solution for the problem if we also target reducing overall energy consumption in parallel with this. A good



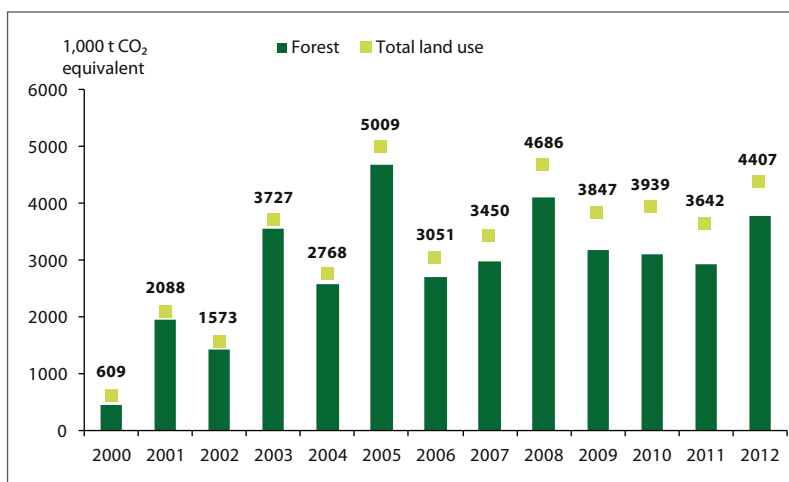
Source: HCSO, HMS, HEPR

example of this is provided by residential programmes that target improved household energy efficiency. Continuing these programmes along with developing supporting programmes that are targeted at improving conscious consumption (e.g. employing smart meters) can contribute a great deal to energy consumption that relies upon reduced energy consumption and increased renewable sources of energy.

The GHG intensity of energy consumption, following an initial decline, has stagnated, which is an unfavourable development. In the future, it is also necessary to reduce GHG intensity through the use of energy-efficient and clean energy sources.

F.1.4. THE FOREST CO₂ ABSORPTION RATE

Although we emphasised in the introduction that national-level pursuits should primarily be concentrated around solving adaptation problems, national-level mitigation tasks also need to be presented with appropriate emphasis. Since it is unequivocal that the main reason for climate change is human-produced CO₂ emissions, it is therefore also obvious that there are only two things we can do, and these are of equal importance. On the one hand, we examine the possibility of reducing CO₂ emissions in every area and develop suitable programmes to realise this; on the other we do our best to capture the CO₂ in the atmosphere, so that it can be 'removed'. The method that has been proven to be the most effective and natural is performed by plant life, since photosynthesis transforms the CO₂ found in the air into plant tissue, or valuable biomass. Since the intensity of CO₂ absorption by plants depends on vegetation coverage, it is no wonder that forests are the most effective solution. In terms of Hungary it is



Source: HMS

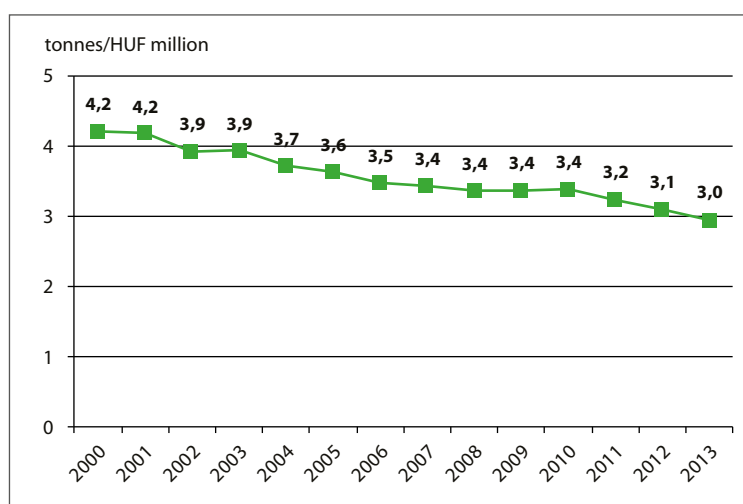
therefore worth examining the percentage of forested area, as well as the rate of afforestation, but in the case of every type of similar data the aim is to determine the CO₂ absorption potential of our country's forested areas. As can be determined together with the F.1.1 indicator, the value was 6.39% in 2012, with the ten-year average fluctuating around 5%.

The CO₂ absorption of our forests is slowly growing along with their size, with greater growth being favourable.

F.1.5. GHG INTENSITY

GHG intensity (or the GDP's carbon intensity) shows what level of GHG emissions correlates to the production of a unit of added value. The indicator's value declined from 4.2 tonnes/HUF million in 2000 to 3 tonnes/HUF million in 2013, and this can be considered a significant improvement. Several changes could be behind this reduction in carbon intensity. Carbon intensity declines if the use of resources in the economy becomes more efficient (independent of the economic structure), as well as if lower energy-intensive economic processes and sectors (such as the services sector) come to the fore. Both of these effects are happening in Hungary, and this is mirrored by the favourable improvement in the carbon intensity indicator.

The possibility of a rebound effect cannot be ignored, however, when analysing this indicator. The decline in carbon intensity is definitely a move in the direction of sustainable value creation, but at the same time total carbon emissions



Source: HCSO, HMS

must also decline so that the country can favourably contribute to slowing climate change. In Hungary's case, the latter indicator also shows a declining tendency, which is a welcome development and something to be continued further.

The economy's GHG intensity is falling, and this is a favourable process. In order to uphold this rate, the goal is for the economy to become increasingly carbon-neutral.

F.2. NATURAL RESOURCES DIMENSION

The role of the state is to safeguard valuable natural and social assets and to promote economic development. As the Fundamental Law states in Article P: "it shall be the obligation of the State and everyone to protect and maintain them, and to preserve [natural resources] for future generations". Furthermore, in Article Q, it also undertakes the obligation to work with other nations for the sake of sustainable development: "In order to create and maintain peace and security, and to achieve the sustainable development of humanity, Hungary shall strive for cooperation with all the peoples and countries of the world."

Resources provide the basis for economic production, which in a given location with given technology can be obtained and processed. Natural capital can be exhausted but can in some instances also be grown. The goal is to operate systems that contribute to growth. The chief function of natural capital is to provide resources, to accommodate and neutralise waste, along with its functions of sustaining life and promoting well-being.

Key indicator: BIOCAPACITY

Biocapacity (biological capacity) is the ecosystem's ability to regenerate. It shows the capacity of ecosystems to regenerate what people demand from those surfaces. It is the ecosystem's capacity (from a human consumption perspective) to produce useful materials and absorb waste. *Source: GFN**

Sub-indicator 1: THE CHANGE IN POPULATIONS OF BIRD SPECIES ASSOCIATED WITH AGRICULTURAL HABITATS

This is an aggregated index resulting from the programme to monitor the common bird types feeding and breeding in agricultural habitats. Its value reflects the changes in bird numbers associated with agricultural habitats. The Hungarian index is based on 16 species of birds that represented common bird types in domestic agricultural habitats in the period 1999–2012 (on the basis of habitat use and preference). *Source: BLH*

Sub-indicator 2: THE PERCENTAGE OF AGRICULTURAL LAND USED FOR ORGANIC FARMING

Areas certified for farming according to European Commission Regulation 889/2008 as a proportion of total agricultural area. *Source: HCSO*

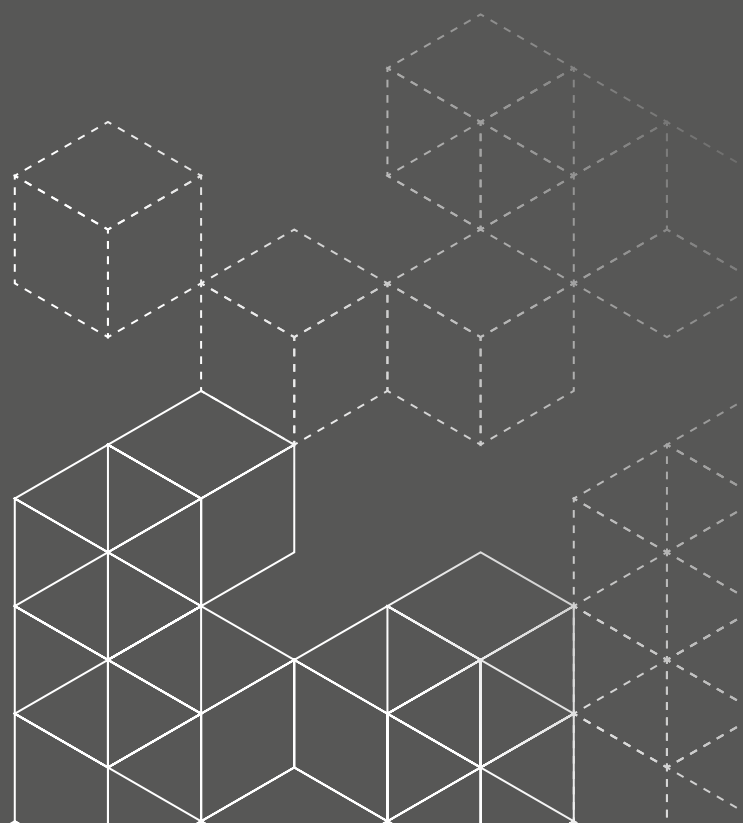
Sub-indicator 3: THE SIZE OF AREAS OF NATIONAL IMPORTANCE PROTECTED BY THEIR OWN LOCAL LAWS

Areas of national importance protected by their own bylaws include national parks, conservation areas and nature reserves. A national park is a larger area that is home to the country's characteristic natural endowments and has not been significantly changed, and where the presence of animal and plant life, topographical features and their combination is of particular significance in the contexts of science, public education and recreation. A conservation area is a larger area or region protected in order to preserve and maintain natural assets and favourable natural characteristics. A nature reserve is an area set aside to preserve and maintain particular natural assets, including caves and associated land area. *Source: MA*

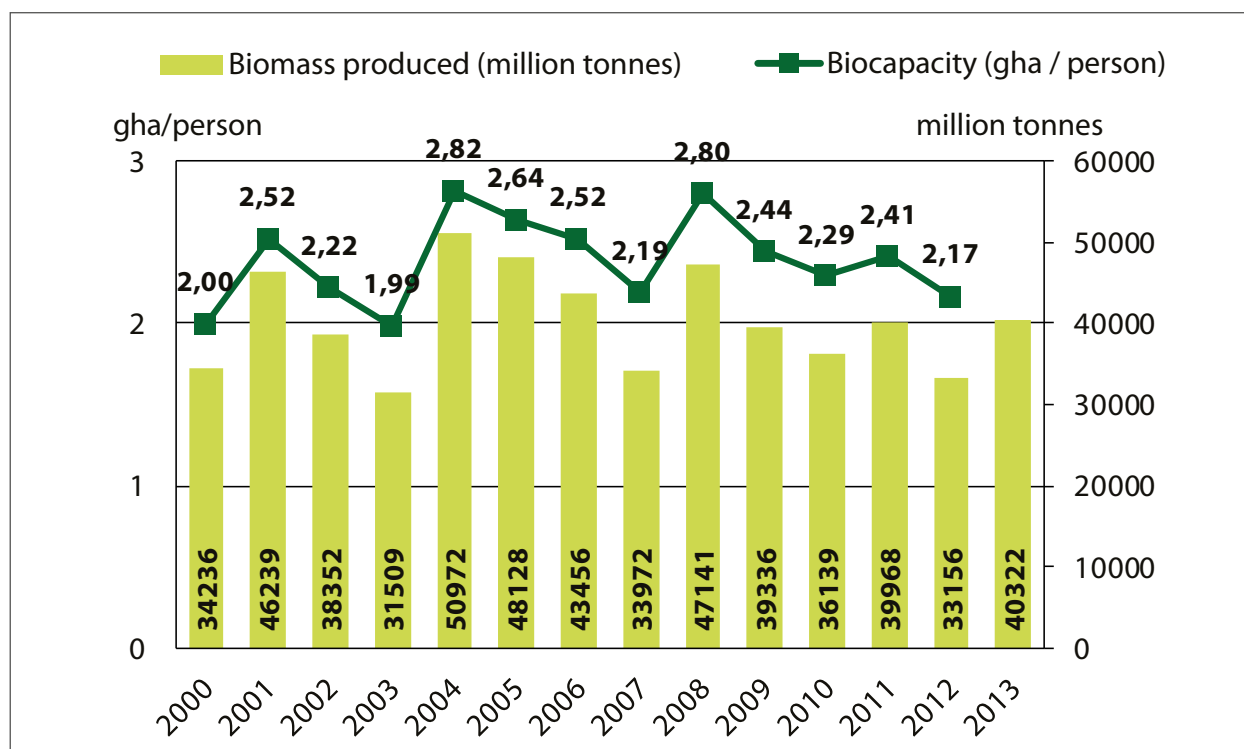
Sub-indicator 4: THE PERCENTAGE OF WASTE THAT IS RECYCLED

Reprocessed waste as a proportion of total treated waste. Reprocessing is a process that makes use of waste to produce a product or material, either for its original use or for another purpose. This includes processing of organic waste but does not include use for energy production and processing into materials used for landscaping. *Source: MA*

* This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.



F.2.1. BIOCAPACITY



Source: GFN

One of the fundamental conditions for sustainable development is that all human activities must be performed within the limits of the ecosystem's biological capacity. The economy is based on those natural resources that can be found on Earth. Specific cultures according to specific demands in a specific era, alongside available technology, are able to work by consuming these resources.

As can be clearly seen from this definition, resources and the determination of their amount cannot be absolute, only relative. Even what we consider to be 'available' depends on the era and needs. In the case of natural resources, in addition to technology, the weather is also a deciding factor. Biological capacity is the ecosystem's regenerative ability.

In addition to raw material, human civilization has created a new concept that nature did not know before us: the concept of waste (or in a broader sense emissions). We consider as waste those materials that are unnecessary or useless to the economy (or perhaps we should say unusable in their current state). Some of this waste nature (as an ecosystem service) can process and therefore render harmless.

The other already mentioned ecosystem-service is that nature supplies us with all of the raw materials necessary for our economy. Taken together, we call these two services biological capacity. Biocapacity varies according to time and place. It depends on a given area's natural attributes, the weather as well as technology.

According to the internationally most widely adopted methodology developed by the Global Footprint Network (with Dr Mathis Wackernagel), biocapacity is measured by the area of land weighted by biomass yields compared to world-average fertile lands. The biocapacity of an area is calculated by multiplying the actual physical area by the yield factor and the appropriate equivalence factor, which is usually expressed in global hectares. There were approximately 12 billion hectares of biologically productive land and water on Earth.

Hungary's biocapacity is 21.6 million global hectares, and this (taking into consideration the country's area of 9.3 million hectares) and that nearly 80% of this is agricultural land shows that even if we are not in as good a position as the Scandinavian countries, we nonetheless possess favourable natural attributes.

On this basis, the variations in the data are understandable, since in addition to the weather, economic changes (such as the regime change and with it the collapse of large-scale agriculture) have also significantly impacted the country's biocapacity.

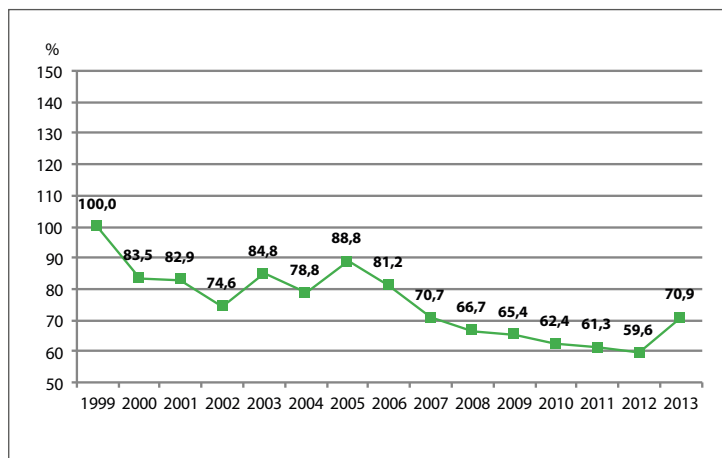
It is important to note that what could be considered to be an ideal and sustainable condition is if the ecological footprint (see the environmental stresses dimension) were consistently lower than the biological capacity, making the ecosystem able to continuously thrive and grow its reserves.

The declining biocapacity value shows an unfavourable tendency. Agriculture's adaptation to climate change could be the suitable solution for Hungary.



F.2.2. THE CHANGE IN POPULATION OF BIRD SPECIES ASSOCIATED WITH AGRICULTURAL HABITATS

"Birds are suitable performance indicators of environmental changes, and the decrease in their populations across Europe is clear proof of perceptible environmental degradation (destruction)." (Birds as a 'Quality of Life' indicator in the United Kingdom, 2004). European organisations for the protection of birds demand that reforms be made to the Common Agricultural Policy (CAP), as the European Union's policy of providing subsidies for agriculture has led to agriculture becoming more intensive. In Europe, the population of birds present in agricultural habitats has shrunk by nearly 50% over the past 25 years, which was caused by changes in the agricultural sector. In Hungary, according to data provided by the Common Bird Monitoring programme run by the Hungarian Ornithological and Nature Conservation Society, in the past four or five years, the populations of bird species that are linked to agricultural habitats in Hungary have dropped. In Western Europe the biological diversity in agricultural habitats fell by nearly 40



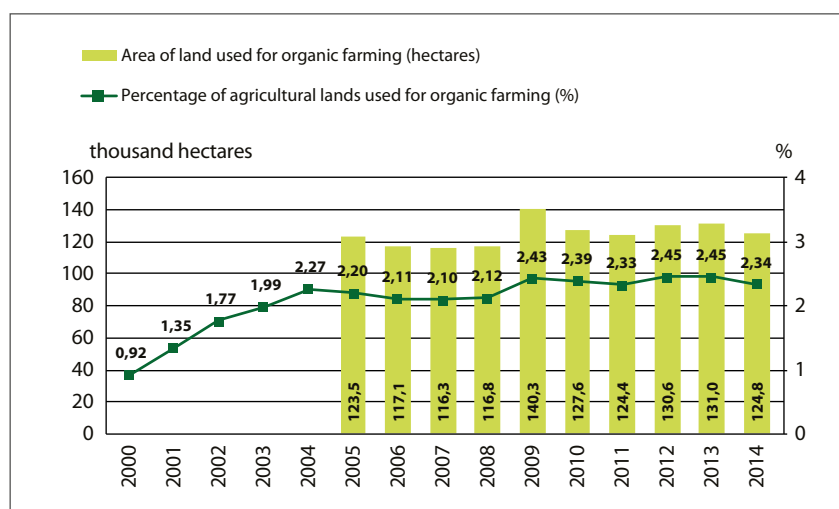
Source: MME

per cent in the case of birds. On the basis of the European Bird Census Council's international database, the period from 1980–2000 saw a rapid decline in farmland habitat bird species, with a slower decline observed up until 2012, similarly to domestic data.

The decline in numbers of farmland habitat bird species appears to be coming to a halt over previous years. It would be useful if this process was strengthened and the reasons behind it discovered.

F.2.3. THE PERCENTAGE OF AGRICULTURAL LAND USED FOR ORGANIC AGRICULTURE

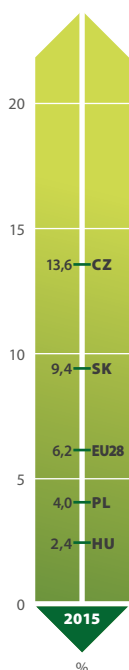
According to the International Foundation for Organic Agriculture (IFOAM), which has brought together the world's various grassroots ecological trends, organic agriculture includes all agricultural systems that promote the environmentally, socially and economically sound production of food and fibres. According to a decision by the National Food Chain Safety Office, organic farming in Hungary refers to a farming and food production system that forbids or limits the use of certain pesticides, artificial fertilisers and soil conditioners, as well as artificial veterinary medicine products and yield enhancers. Following a period of expansion between 2000 and 2004 the figure shows the number stagnating. Regulatory conditions favouring organic production and increased support would be stimulative. The National Rural Development Strategy adopted in the spring of 2012 calls for the development of an organic agriculture action plan for



Source: HCSO

Hungary that is aligned with the EU action plan for organic foods and organic agriculture. Pursuant to this, the amount of land used for organic agriculture will at least double, to over 300,000 hectares by 2020. In the EU, the percentage of land dedicated to organic farming has steadily grown at 4–5%, and this exceeds the Hungarian trend.

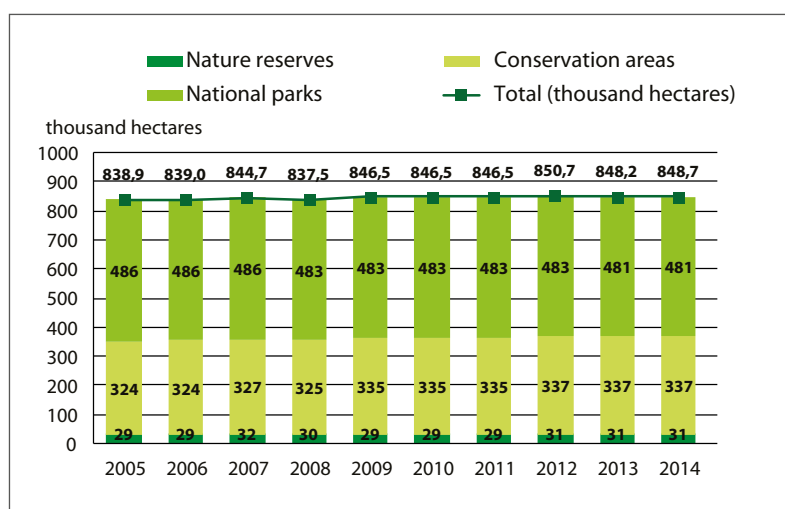
The percentage of land dedicated to organic farming has stagnated. Growth needs to be set as a target, so that Hungary no longer lags behind neighbouring countries.



Source: Eurostat

F.2.4. THE SIZE OF AREAS OF NATIONAL IMPORTANCE PROTECTED BY THEIR OWN LOCAL LAWS

According to articles 4 b), c) and d) of Act LIII of 1996 on the Protection of Nature, all areas shall be considered natural areas that are characterised by being in or close to a natural state. Special protection for natural areas is established by way of the force of law (ex lege) or through declarations of protection in individual statutes. The name natural areas of national importance protected by individual legislation is the term used to refer to natural areas declared by the Minister for Natural Protection to be protected by decree. The first declaration of protection in Hungary was made in 1939. A category of international (European) importance is constituted by the Natura 2000 areas established by the European Union. Included as areas of international classification are wetland habitats of international importance (Ramsar sites), the European Diploma sites, the biosphere reservations, the geoparks, the World Heritage sites and the dark sky parks. Approximately 10% of Hungary's territory is protected natural



Source: MA

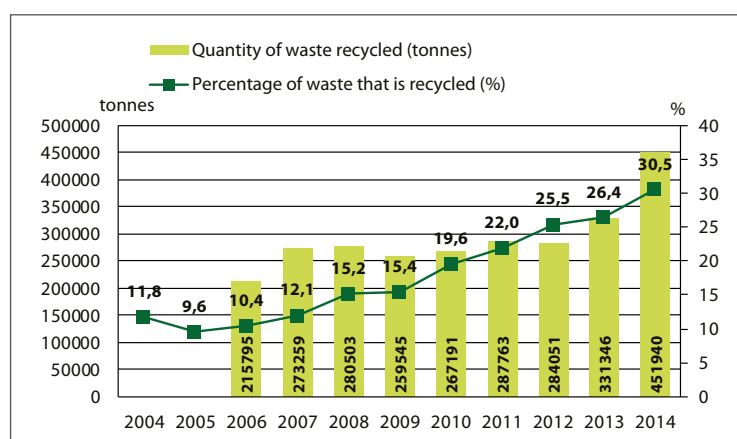
area, and 21% is Natura 2000 area, which – as a result of overlap – means that a total of 22% of its territory is under natural protection. Through the comparison with the EU, it can be seen that over the previous years the EU has also experienced similar stagnation to Hungary (based on Eurostat data).

The number of protected natural areas is slowly increasing. Measures are necessary to accelerate this growth.

F.2.5. THE PERCENTAGE OF WASTE THAT IS RECYCLED

The life-cycle approach is the basis for the evaluation of environmental impacts, as well as for environmental management systems. This approach yields greater divergences from the usual approach when production and discarding phases are also added into the life of the product.

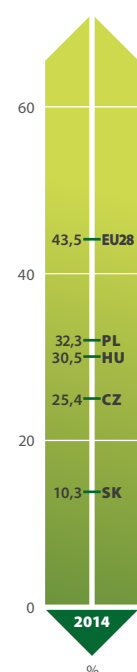
The widespread view today, which the legal statutes require, is that manufacturers should also attend to handling wastes. Thus, either they themselves have to ensure that it is collected, or else they have to contribute to the cost of collecting the waste in proportion to the quantity of the emitted goods in the form of either a tax or an alternative charge. As a consequence of all of these changes, since 2005 the share of waste that is recycled has increased dramatically in Hungary, as it has in other countries. The use of the waste or some component of it in industry or in a service qualifies as utili-



Source: MA

sation. The three most widespread methods for handling waste are recycling (used in some production process in its current state), recovery (separated and converted into a base material), and utilisation for energy (the utilisation of its energy content).

The percentage of waste recovered as a result of recycling increases each year. Promoting further increases is an important goal.



Source: Eurostat

F.3. ENERGY AND WATER MANAGEMENT

During the functioning of society the management of two resources, water and energy, are of exceptional significance. Our society's metabolism is currently built on non-renewable sources of energy, with the world's energy consumption consisting of approximately 80% fossil fuels and nuclear energy, with the remainder provided by renewable energy sources. 9% is derived from biomass, the use of which carries a significant environmental burden and reduces natural resources. In Hungary's case, with respect to energy consumption, sustainability is not the only key factor, since the percentage of fossil fuels is high, but so is security of supply, as well as import exposure. The goal is to develop an energy system that, in addition to ensuring supply security and competitiveness, also encompasses sustainability. Energy resiliency should be increased with the expansion of decentralized systems, as well as the increase of the percentage share of renewable energy sources.

Water consumption is an especially important issue, since access to water is changing globally due to climate change and increased demand. Additionally, based on the data, humanity is already consuming more than half of the fresh-water available annually. Due to climate change, the amount of precipitation in Hungary has shown a declining tendency, and evaporation has also increased together with the number of hot days, so sustainable water management is in our fundamental interest.

Key indicator: TOTAL PRIMARY ENERGY CONSUMPTION

Primary energy consumption, broken down by sources of energy, comprises the total volume of electrical energy, heat energy and the other smaller sources of energy available. It shows the rate of environmental burden related to the available sources of energy. *Source: HEPPA*

Sub-indicator 1: PUBLIC WATER CONSUMPTION PER CAPITA

The volume of water per capita transported through drinking water pipelines by the public water works for the population, agricultural, industrial and other (e.g. institutional) consumers. The indicator does not include the volume of water consumed from privately owned wells. *Source: HCSO*

Sub-indicator 2: RENEWABLE SURFACE WATER SUPPLY

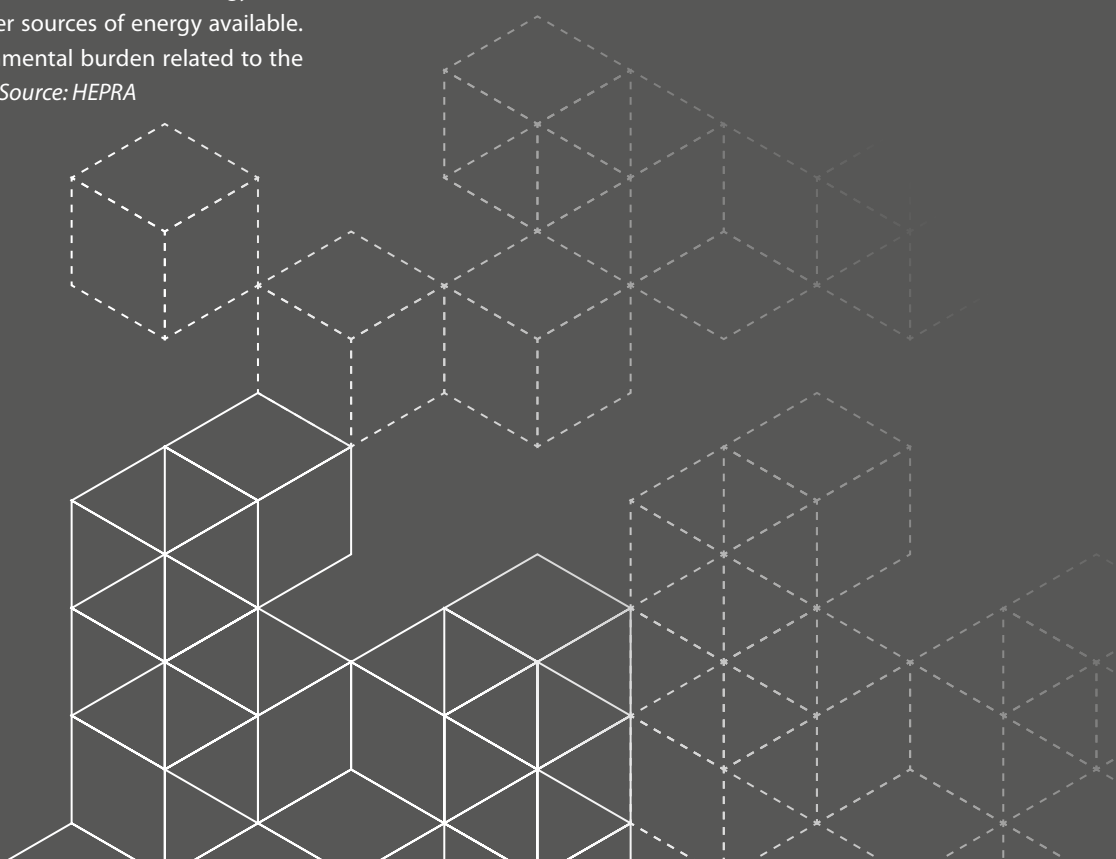
The balance of precipitation and evaporation, as well as the volume of water flowing into the country. *Source: HMS, GDWM, HCSO*

Sub-indicator 3: HOUSEHOLD FINAL ENERGY CONSUMPTION

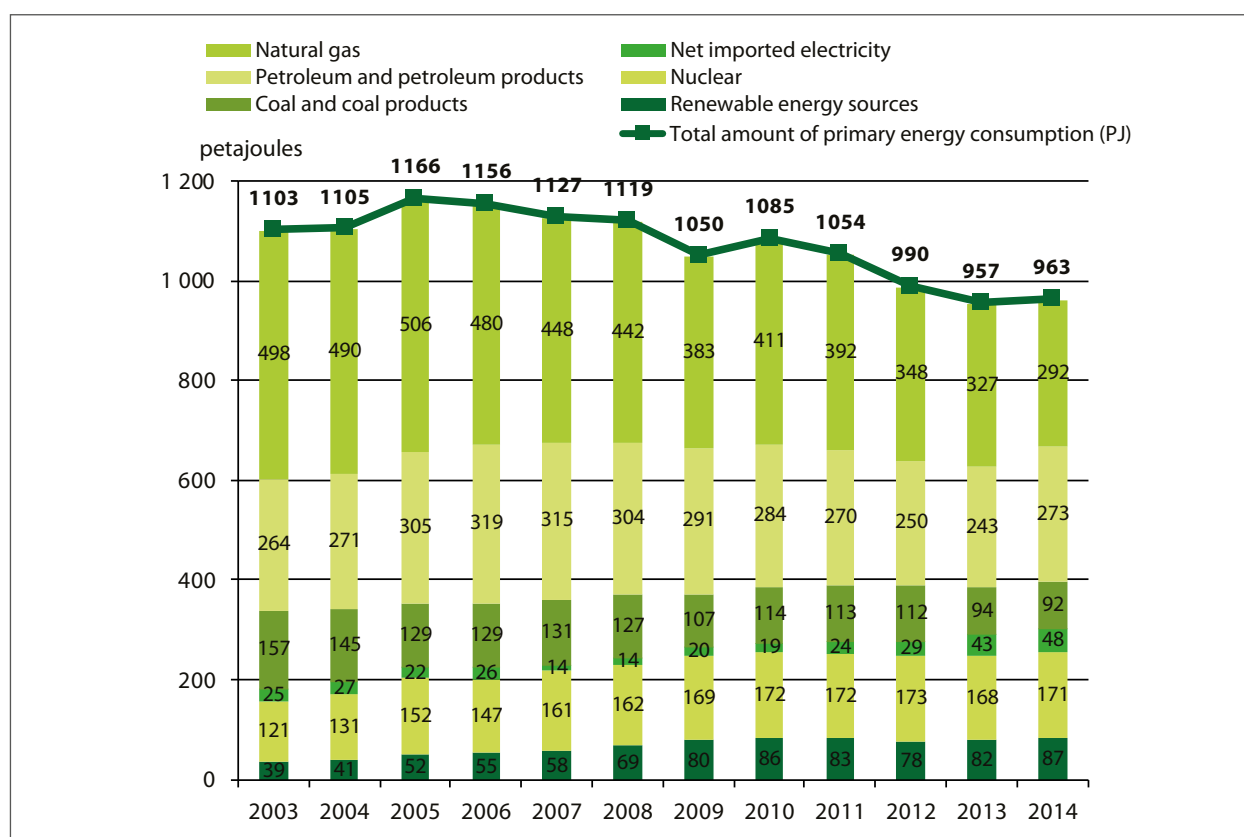
This indicator shows the volume of energy delivered to households for the purposes of energy consumption. *Source: HEPPA*

Sub-indicator 4: RESOURCE PRODUCTIVITY

Resource productivity is the quotient of GDP and domestic material consumption. The indicator is used to determine what the rate of natural resource consumption in relation to economic growth. An increase in the indicator shows an expansion in the productivity of the available resources, and this makes economic growth possible with less environmental damage. *Source: HCSO*



F.3.1. THE TOTAL VOLUME OF PRIMARY ENERGY CONSUMPTION



Source: HEPPA

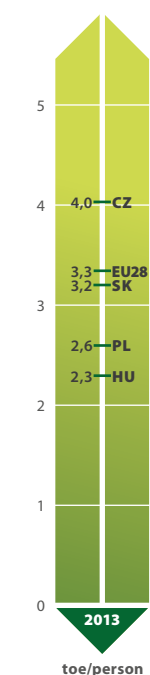
One of the fundamental conditions for the operation of the social system is for energy to be supplied in an efficient, secure and sustainable manner. In modern history security of supply was achieved through the development of primarily centralized distribution systems and the consumption of fossil fuel resources. Humanity's energy consumption has shown exponential growth, and significant energy consumption lies behind civilisation's achievements.

The most important indicators for energy consumption sustainability are the proportion of fossil fuels and the absolute level of consumption. In Hungary's case, the reduction in the proportion of fossil fuels, as well as the reduction in absolute consumption have been achieved in recent years. The consumption of fossil fuels because of their role in altering the natural greenhouse effect goes against sustainability goals, and – because most originate from abroad – there is a risk from a supply security perspective. Reducing the use of coal and carbon products is important and desirable, since the amount of CO₂ emissions from coal is the greatest. An increase in the proportion of imported electricity is explained by the reduction in the consumption of natural gas (since production by domestic natural gas power plants has declined), as well as that winters are milder (the increase since 2009 also shows this, since 2009's winter was colder). The growth in

renewable sources of energy is slow, and a state where the country produces and consumes more renewable energy would be desirable. A decline in the consumption of petroleum after 2008 was caused by high petrol and diesel prices. Owing to the currently low price of oil, this form of consumption has increased. From the perspective of sustainability, it would be important for transportation to move away from the use of fossil fuels through support for electric vehicles, their widespread adoption and an increase in electrified railway lines. Development of public transportation would lead to a further drop in petroleum consumption, since the consumption of fuel per kilometre per passenger would decline and energy efficiency would increase. Savings and energy-efficient investments and measures can further reduce energy consumption. In addition to improving efficiency, the National Energy Strategy published in 2012 mapped out the country's future energy path in nuclear energy and the combined use of coal and renewable resources.

Compared to the EU, similar trends can be observed: total energy consumption is declining, and within this primarily the use of petroleum and coal has fallen, but in Europe the use of nuclear energy has also declined, while clean renewable energy has increased, such as wind and solar energy (based on Eurostat data).

The reduction of primary energy consumption is a favourable process, but sustainability is only one of the reasons for it. Bringing it to the fore is desirable.



Source: Eurostat

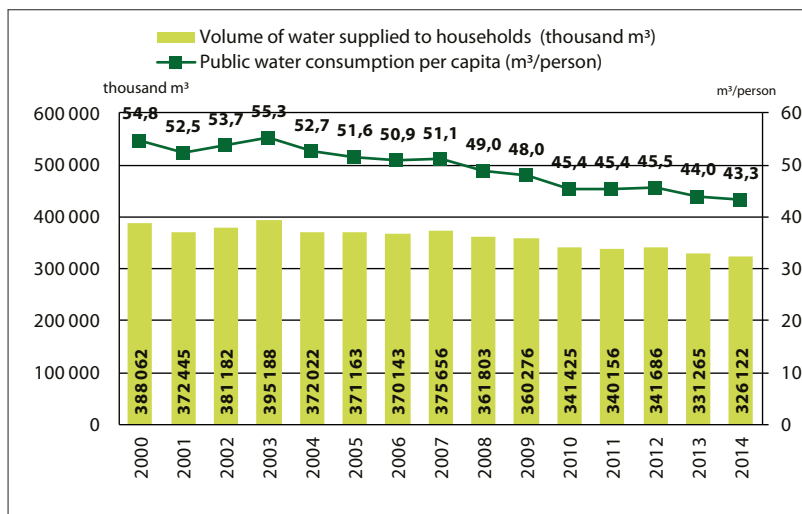
F.3.2. PUBLIC WATER CONSUMPTION PER CAPITA

Domestic public water consumption has steadily declined. This is a favourable trend, to which the decline of industrial production contributes just as much as the significant increase in the price of supplying water, as well as the slow decline in average consumption.

The greatest percentage of domestic water consumption is by households. In 2014, of the approximately 430 million m³ of water supplied, 260 million m³ were consumed directly by the population, while another approximately 140 million m³ was indirectly used within the framework of industrial use. This means 90–100 litres consumed directly daily and a further 30–40 litres of water consumed indirectly.

An important supplementary indicator for public water consumption is the water footprint, which represents the volume of consumed water directly and indirectly consumed (during the production of products and the creation of services), of which water consumption on the part of the population is a smaller

proportion. In Hungary, the water footprint per person in 2011 was 6,500 litres daily. Of this, only 110–160 litres were direct consumption (cleaning, bathing, cooking, drinking water, etc.). The rest is built into our objects, our food, the clothes we purchase and into services.



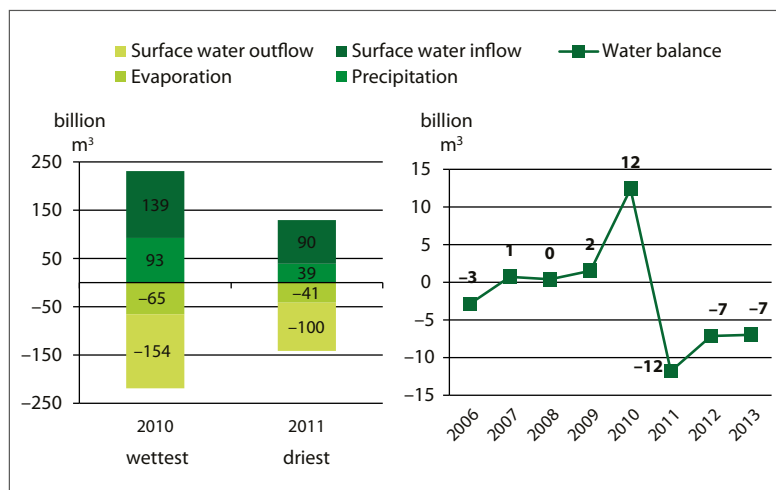
Source: HCSO

The decline in public water consumption per capita shows positive consumer behaviour. Promoting conservation is an important government responsibility.

F.3.3. RENEWABLE SURFACE WATER SUPPLY

The water balance shows how we manage the water (in the form of precipitation and rivers) arriving into our country. If this balance is consistently negative, then more water is leaving the country (via outflow and evaporation) than entering it. By examining the balance data, what is observable is that the balance was negative a majority of the time in recent years: frequently, approximately 7–12 km³ more water left the country than arrived (figure on the left). The reason for the significant outflow can be found in extreme weather; that is years with a lot of precipitation result in a significant surplus, while dry summers result in significant losses due to evaporation.

Our water management since the time river water began to be controlled has been based on allowing flood-water to flow out of the country as quickly as possible, as well as to drain inland water from agricultural fields. Up to the present there have been few attempts to capture arriving water, since it is difficult to hold water in reservoirs and artificial systems, and evaporation from large water surfaces further increases losses.



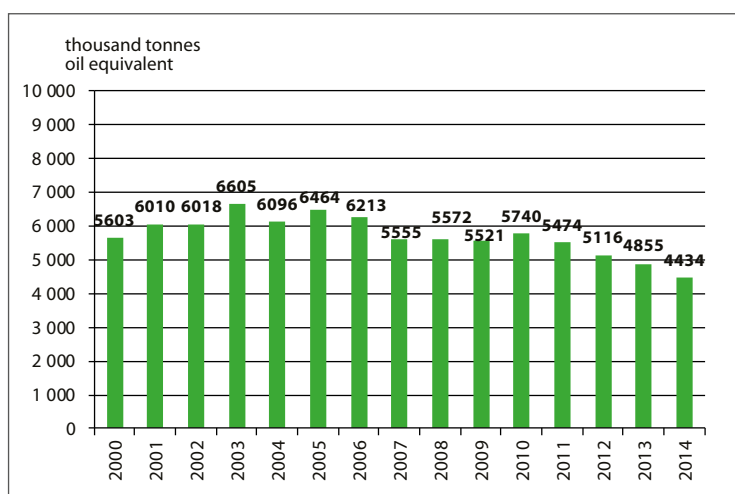
Source: HMS, GDWM, HCSO

A solution to the problem would mean the development of wetlands that structurally are able to hold on to significant amounts of water, and this surplus of water could then (without intervention and the via the help of natural processes such as evaporation and the development of a small water cycle) be returned to our environment.

The negative water balance observed in many years is a reminder that we must reconsider our management of water.

F.3.4. HOUSEHOLD FINAL ENERGY CONSUMPTION

The population is the greatest energy consumer with regard to the country's energy consumption. The decline in the use of energy for household purposes is a favourable process and appears to be mostly steady. In developed countries, it is usually the case, especially since the 2008 financial crisis, that energy consumption has dropped. The long-term timeline at the same time shows that this trend for developed economies also applies to Hungary: consumption in crisis-free years does not grow significantly. The reason for this is in part that GDP growth does not correlate with a significant increase in energy consumption, and new demands by residential consumers do not appear, as was the case with the proliferation of automobiles. In order to continue this declining tendency, there is a need for targeted intervention in areas that contribute the most to residential consumption, such as for example heating and transportation. Insulation of family homes, the spread of more modern heating systems, and announcing residential energy tenders can all make significant impacts in this area.



Source: HEPR

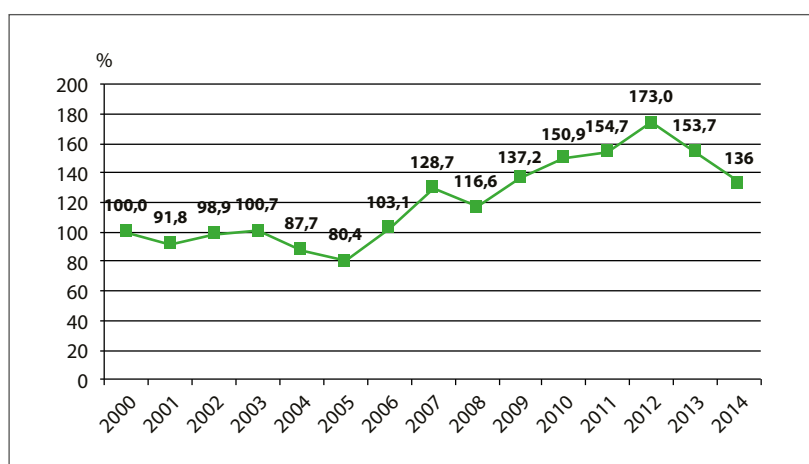
In international and EU comparison, it is also the case that the population's energy consumption in developed countries is declining, while in developing countries such as China or India it is quickly increasing. What can be seen is that the developing countries are following the same path as the developed countries did decades previously.

The decline in residential energy consumption is a favourable process, and assisting this is one of the most important government responsibilities.

F.3.5. RESOURCE PRODUCTIVITY

The OECD's 2011 book *Towards Green Growth* mentions resource-efficiency first as one of the important directions for green growth. Greater efficiency is promoted by the following incentives: an increase in productivity, a reduction in waste and energy consumption, and securing resources for the applications of greatest value.

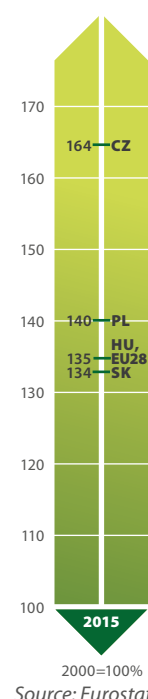
The diagram shows an interesting picture of the changes that have occurred over the previous decade and a half. Following the deteriorating tendency at the beginning, from 2005–2012 and with the exception of the minor relapse in 2008 due to the international crisis, consistent growth has been observed. The reason for improvement is primarily technological development (the dematerialisation trend) and the coming to the fore of less material-intensive sectors (e.g. services). Following this, we witnessed a decline back to the 2009 level in 2014.



Source: HCSO

Finding the optimum is the most important task, and is at once our most important challenge. Approaching the optimum rate of improvement will slow until it arrives at the best achievable level. The statistics from the following years are expected to show where this level is.

The deteriorating tendency of recent years is an unfavourable process. An increase in the indicator would show that economy is at once experiencing recovery and modernisation.



2000=100%
Source: Eurostat

F.4. ENVIRONMENTAL BURDENS (EMISSIONS) DIMENSION

Tracking waste outputs stemming from social activities serves to directly measure the size of the burden being caused by making use of the service to neutralise pollutants into the environment. State efforts in part took the form of measures taken to appropriately manage pollutants, and any activity that supported reducing the generation of pollutants, that is, the application of cleaner technologies, positively influences the indicator.

Reducing waste emissions, therefore, can be achieved partly through technologies and careful treatment, and partly through managing waste as a secondary raw material. One of the things that life cycle analyses search for is the answer to how to increase the useful lifespan of a given product, thereby reducing the waste that it generates. Initially, the essence of the “cradle to the grave theory” was to track the life of the product from production to the point when it becomes waste. Nowadays, the more modern techno-cycle, that is, the “cradle to cradle model” prevails. With this approach, by mimicking nature, the concept of the existence of waste is not accepted, but what is generated is instead simply a secondary raw material (therefore a phase of the process), after which it becomes the useful base material for another process. As a final resort, (just as in nature) all waste can be handled as a raw material in a different subsystem.

Key indicator: WASTE INTENSITY

This is the ratio of waste produced to gross added value. The indicator helps establish the volume of waste produced in relation to economic growth. A fall in the index indicates a reduction in waste intensity, which signifies economic growth with less burden on the environment. *Source: MA, HCSO*

Sub-indicator 1: MUNICIPAL WASTEWATER TREATMENT INDEX

The municipal wastewater treatment index shows the level of development of municipal wastewater treatment, taking into account the effectiveness of purification processes. Analysis of the effectiveness of municipal wastewater treatment levels is categorised based on the following weighted factors: unpurified wastewater: 1.00; first-stage (mechanically) treated wastewater: 0.86; second-stage (biologically) treated wastewater: 0.49; third-stage treated wastewater: 0.00. The municipal wastewater treatment index is 100% if the wastewater is not treated, and 0% if all municipal wastewater is purified using stage III water treatment. It represents the level of development of the municipal wastewater system, taking into account the effectiveness of purification processes. *Source: HCSO*

* This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.

Sub-indicator 2: THE LEVEL OF AIR POLLUTION

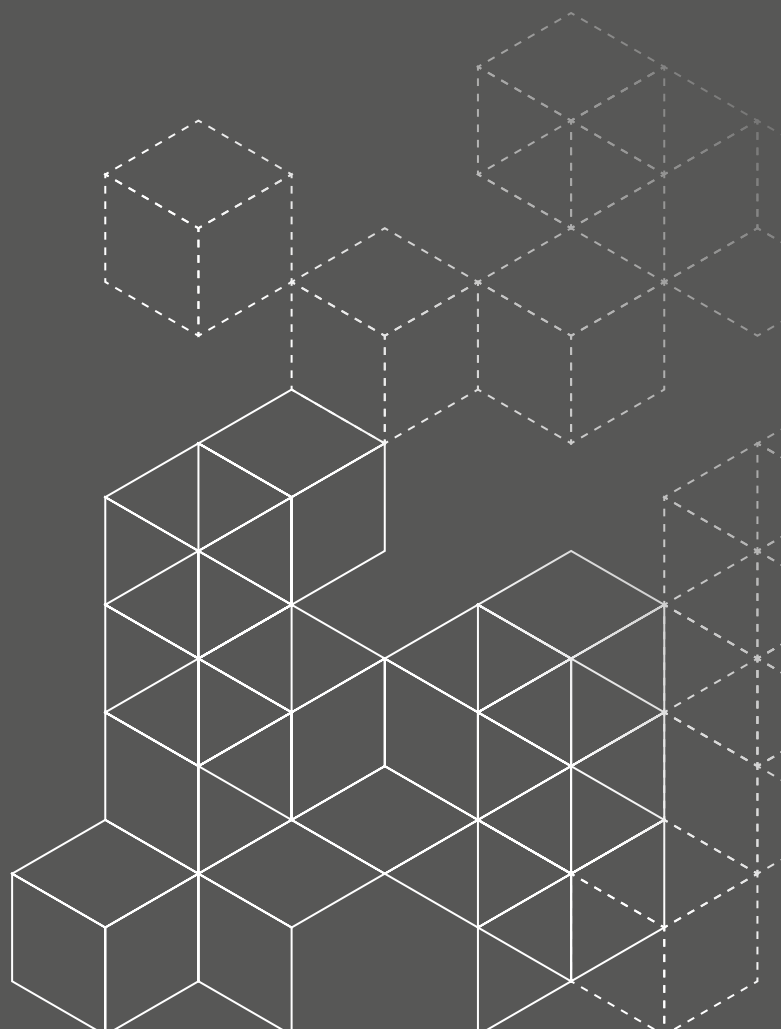
The annual average concentration of particles as well as of ozone pollution measured at the measuring sites weighted by the number of local residents. *Source: EEA**

Sub-indicator 3: NITROGEN BALANCE

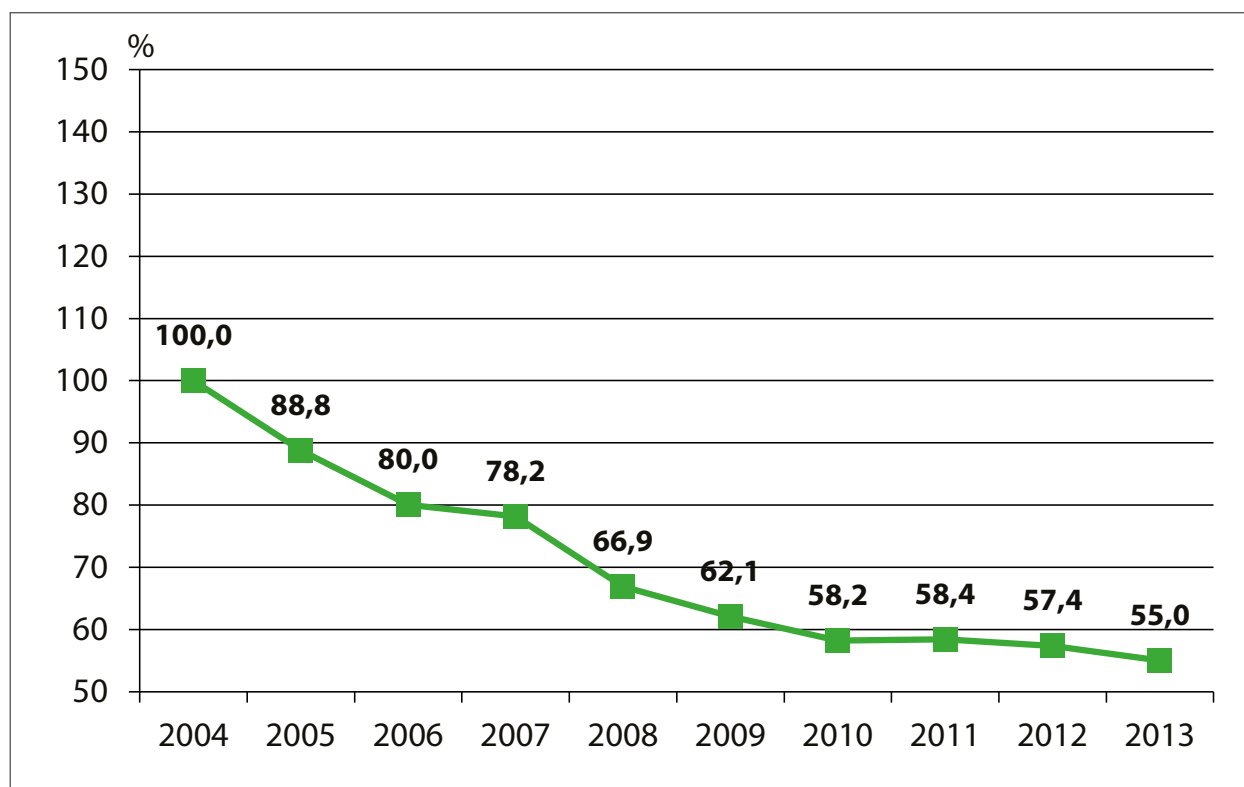
This indicator tracks the condition of agricultural land. It is the difference between the nutrients introduced through fertilizers and other means and the nutrients removed in the form of produce. The defining component on the input side are the nutrients introduced in the form of chemical fertilizers. The output side is determined by the volume of production, which depends significantly on weather conditions in the given year. *Source: HCSO*

Sub-indicator 4: ECOLOGICAL FOOTPRINT

This indicator shows how much biologically productive land area and water is necessary for the production of goods consumed by a given individual or group of people (such as a country) and the disposal of the resulting waste with the available technology and resource management. *Source: GFN*



F.4.1. WASTE INTENSITY



Source: HCSO, MA

Waste consists of any material or group of materials whose owner wishes to be free of in some way. If he or she does so in accordance with the environmental protection regulations, then it causes no further damage, although this is not necessarily in the spirit of sustainability. Waste can be categorised in many different ways, as determined by the source of the waste (issuer "source"), condition (material characteristics) or environmental impact (handling). Although it is important to promote environmentally conscious waste-handling and support (either through taxes or rewards) a less wasteful lifestyle, the global problem of emissions cannot be remedied solely with increased thriftiness.

Waste, as an undesirable 'by-product' appears in the activities of nearly every producer or service-provider, and arranging for appropriate handling of it is the task of the given organisation. In Hungary, strict legal regulations apply to both the registration of waste and the means of its handling. In spite of this fact, 2,780,000 tonnes of municipal waste were generated in 2013.

In 2010, the Europe 2020 programme launched by the European Parliament set as its objective economic development for the EU that is intelligent, sustainable and inclusive. A key area designated by this is resource efficiency, in recognition of the need to decouple economic growth from use of resources.

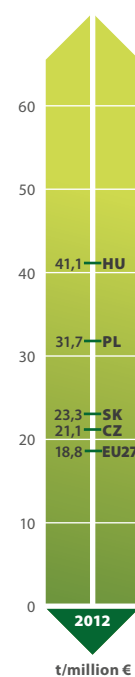
It is important for the emphasis to be on effectiveness rather than efficiency; a process is effective if it supports or positively influences the natural flow of materials, or in other words, it adapts

to the existing situation rather than opposing it (e.g. in the case of low CO₂ technologies, one does not get rid of the GHGs, but rather makes use of them).

Generating the greatest possible amount of product using the least possible amount of raw, recycled or secondary raw materials in the course of the processes seems to be the ideal solution. But it is important not ignore the fact that a number of other factors other than the raw materials also have to be taken into consideration during production. This is why it is more precise to calculate the added value, which is the difference between the output (base price) and the intermediate producer or end use (market acquisition price). In other words, it calculates with every resource (other than raw materials) used during production in order to generate the given value.

In finding a solution to the problem of waste, researchers side with the potential solution of increasing the ratio of services at the expense of purchased goods. But to do this requires grappling with numerous obstacles that arise in part from our culture and in part from human nature. We are participants in a large-scale social and technological transition evolving toward a more sustainable economy.

Based on international data (Eurostat), the situation in the developed EU countries, and in Hungary as well, shows an improving trend: waste intensity is declining relative to GDP.

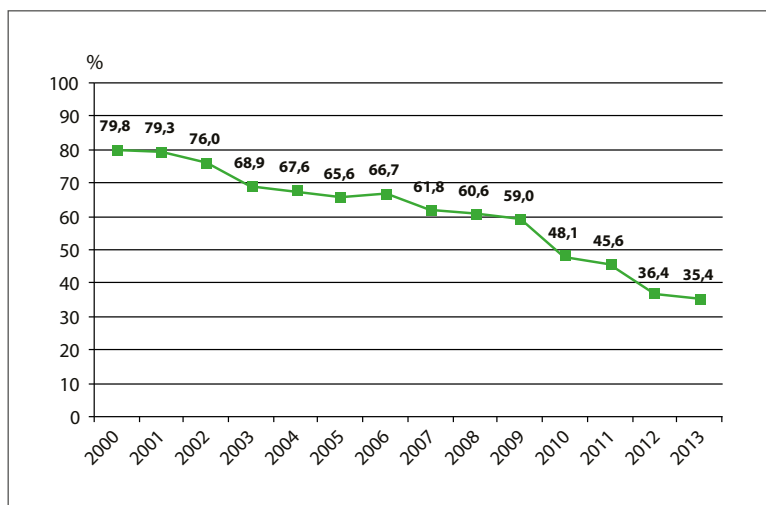


Source: Eurostat

Over the previous nearly ten years the intensity of waste has declined to nearly half. Continued reduction is important and a high priority responsibility from the perspectives of economic efficiency and sustainability.

F.4.2. MUNICIPAL WASTEWATER TREATMENT INDEX

The aim of wastewater management is to remove contaminating substances to the greatest extent possible. After appropriate wastewater management, the pollutants remaining in the water are broken down by the self-purification capacity of the natural water that accepts it, and thus the water becomes available for further use, and the condition of the original, natural water is not harmed significantly. The municipal wastewater index stands at 100% when there is no wastewater management, and at 0% if all municipal wastewater is purified with third-stage wastewater treatment. In Hungary, the value of the index fell by more than 44% between 2000 and 2013, which is the result of the commissioning of more effective (at least biological-stage) wastewater purification plants. The total quantity of wastewater processed through the public utility wastewater collection network has fallen continuously since the regime change, and currently stands at no more than a half of its previous level (436 million m³). Of the total quantity, 430 million m³ is purified wastewater and 317 million m³ is



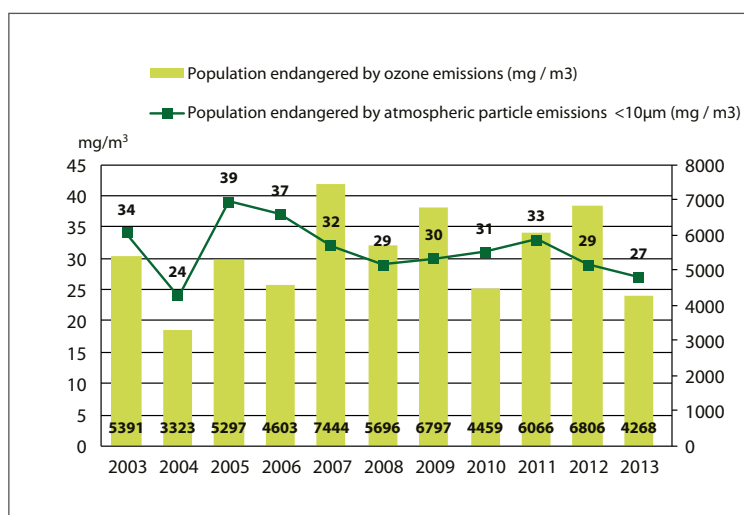
Source: HCSO

also treated using mechanical and third-stage purification (in which the inorganic substances arising as an end-product of the biological stage, for example, nitrates and phosphates are removed.) At the international level, this indicator shows that our country belongs among the developed world, with Austria and the Czech Republic ranked higher from our region.

The municipal wastewater treatment index significantly declined over the previous period, with an increasing number of settlements possessing wastewater management facilities. With recent investments, total sustainability, an index of 0%, is more achievable.

F.4.3. THE LEVEL OF AIR POLLUTION

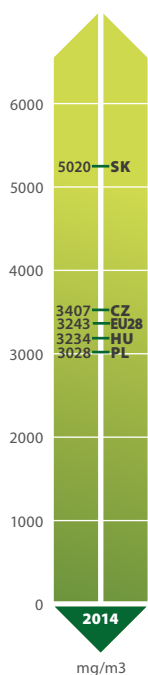
Air pollution is an environmental-health factor that in numerous countries is a serious danger to the population. Smog alerts are not unknown in Hungary, which may occur due to unfavourable meteorological conditions in large cities that already have higher amounts of pollution. There may be differences nationwide or even within a city. This trend is not showing improvement, so a comprehensive strategy is necessary to handle the situation in especially at-risk areas. A significant portion of the tiny, harmful particles come directly from diesel engines. Diesel vehicle particle emissions, of which the greatest part is soot, is one order of magnitude (at least ten times) greater than gasoline engines. From surveys conducted by the National Korányi TB and Pulmonological Institute it is evident that asthma and lung cancer rates are quickly increasing in the capital, largely due to air pollution. According to the WHO there is no minimum amount of dust that has been proven to be harmless to health. A



Source: Eurostat

small improvement in air quality would favourably impact a given population's health. The greatest advance would be observable in mortality rates for cardiovascular and respiratory illnesses.

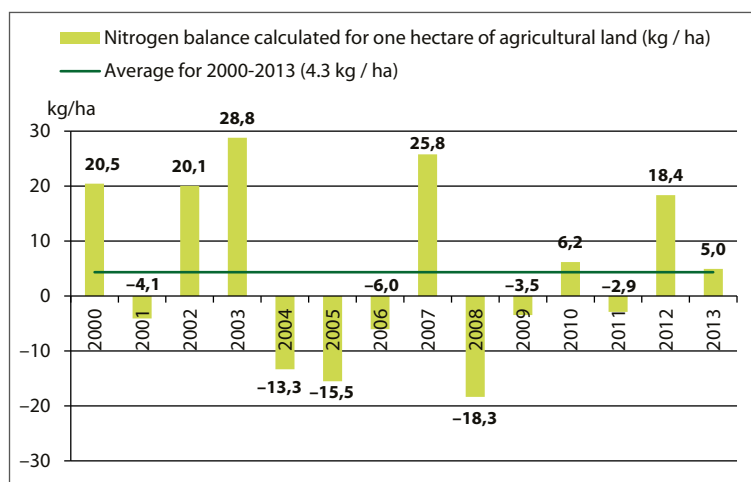
The population's endangerment due to air pollution is stagnant. The value could be improved through discovering the reasons for this and applying appropriate measures.



Source: Eurostat

F.4.4. NITROGEN BALANCE

The nitrogen content of the soil depends on its organic matter content, and so the higher the humus content, the higher the nitrogen level will be. If the quantity of nitrogen that can be used in the soil is low, then plant growth is impeded. The lack of nitrogen can cause serious problems for agriculture: the growth of the plant slows down, it does not fully develop, yields are drastically reduced or there is no yield at all. But having too much nitrogen is not positive either: an overdose of nitrogen reduces a plant's resistance to frost. An excessive nitrogen supply in the soil can lead to an undesirable accumulation of nitrates, which in turn can cause "blue baby syndrome" in infants. In Hungary, the quantity of nitrogen input was balanced between 2000 and 2013. The level of the nitrogen balance fluctuated chiefly as a function of the yield taken from the land. In an ideal case the balance will fluctuate around the median value (0) as it adjusts to weather conditions. The average for Hungary for the past 15 years has shifted in the direction of excessive input (4.36 kg/ha, dark green horizontal line). Nitrogen replenishment suited to the features of the soil is also especially important because it is



Source: HCSO

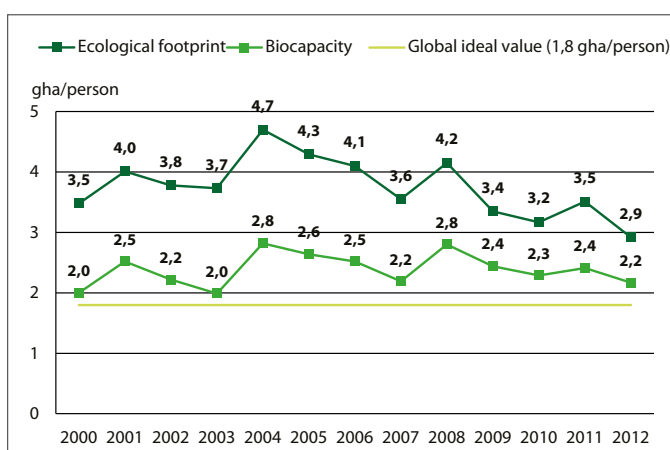
harmful to have excessive quantities of nitrogen in standing water, and the use of fertilisers also pollutes the air with nitrogen dioxide and ammonia.

It is worth noting that the soil's humus content declines as a result of crop rotation, so the nitrogen balance inevitably turns positive in time (Source: Ministry of Rural Development). This imbalance can be countered by the spread of farming techniques that increase the soil's humus content.

A nitrogen scale hovering around zero suggests a balanced situation, but the small surplus now observed indicates that responsible nutrient-farming in agriculture can be improved.

F.4.5. ECOLOGICAL FOOTPRINT

The ecological footprint, together with the concepts of overshoot and biocapacity, is one of the most widespread indicators for expressing to what extent human civilisation overuses finite natural resources today. The annual yield of our natural capital would mean the limit that we should respect during the process of consumption so that the ecosystem's ability to regenerate is not harmed. The depletion of natural capital and resulting overshoot (meaning that our ecological footprint is greater than biocapacity) are processes that began in the early 1970s, which with smaller reversals (owing to crises) has shown a continuously growing tendency. Globally, we would currently need a planet 150% the size of our own to achieve sustainable resource consumption, and in this regard Hungary is nearly equal to the world average. If we look at average consumption habits in the EU, then we would need three planets. Overconsumption is a hazardous game, since the ecosystem is interconnected and complex, and one where the rule of 2-1=1 is not always applicable. On this basis, driving to extinction a natural value that appears



Source: GFN

insignificant can launch an avalanche that could lead to the collapse of all of the subsystems.

The basic idea behind the "happy planet" index is to take pragmatic approaches towards achieving social goals: living a long and happy life through the minimum possible use of natural resources.

The declining ecological footprint is a promising phenomenon, at the same time from the perspective of it becoming permanent, it is important that it should be the result not only of crises-related effects but also a conscious strategy.

F.5. SOCIAL SUSTAINABILITY DIMENSION

The final goal of sustainability is to create well-being at the societal level. Due to the diversity of the individuals who comprise society and their frequently diverging desires and interests, social sustainability is a difficult-to-measure concept. Although there are certain indicators that are believed to show close correlation with social satisfaction, and there are processes that are believed to increase the level of satisfaction, the surveys frequently belie expectations. Differences are most commonly found in the area of important subjective indicators.

Making the quality, effectiveness and efficiency of government measurable in the social sustainability dimension would be desirable (security of livelihood, positive outlook, ability to realise life goals). Overall, therefore, it is the extent to which government tools and involvement support the individual and the welfare of given groups. The individual and social phenomena and indicators do not always move together. There are numerous social interests that do not necessarily serve the interests of individuals, or only in a significantly indirect manner.

The revised impact chapter in this dimension, beyond mental and physical health, which is just as an individual value as much as it is a social one, contains indicators that, from the perspective of economic inequality in a society, as a potential source of stress or long-term stability, shows the especially important dependency ratio in a society. Assuming a peaceful transition process, during which we strive to build a more sustainable society, these are the indicators we consider to be deserving of special attention.

Key indicator: DEPENDENCY RATE

The total dependency rate reflects the responsibility falling on one member of the active population, which is determined as the ratio of the population of inactive age (0–19 years and 60 or older) compared to the population of active age (20–59 years old). In the case of the indicator and on the basis of demographic data, a forecast for the future is also being prepared. *Source: HCSO, NIPA*

Sub-indicator 1: STUDENTS STUDYING IN ECO-SCHOOLS

The ratio of students and teachers as a percentage of total student numbers studying at institutions that have received the official eco-school title in a given year. *Source: HCSO, HIERD, ISHE*

Sub-indicator 2: THE PERCENTAGE OF THE POPULATION THAT IS OVERWEIGHT OR OBESE

The percentage of the adult population (18 years of age or older) whose body mass index is greater than 25. *Source: WHO**

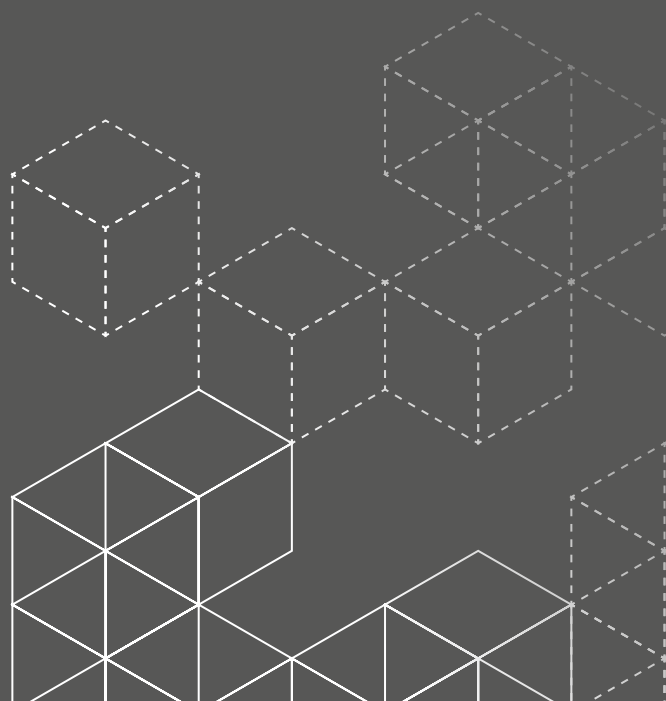
Sub-indicator 3: MUNICIPAL WASTE PER CAPITA

This indicator shows the per capita quantity of household and similar waste per capita. Household waste includes mixed, separated and junk waste derived from homes, residential properties, leisure and holiday buildings, as well as communal rooms and areas in apartment buildings. Waste similar to household waste is mixed or separated waste that is generated outside the home but is equivalent in its make-up and composition. *Source: MA, HCSO*

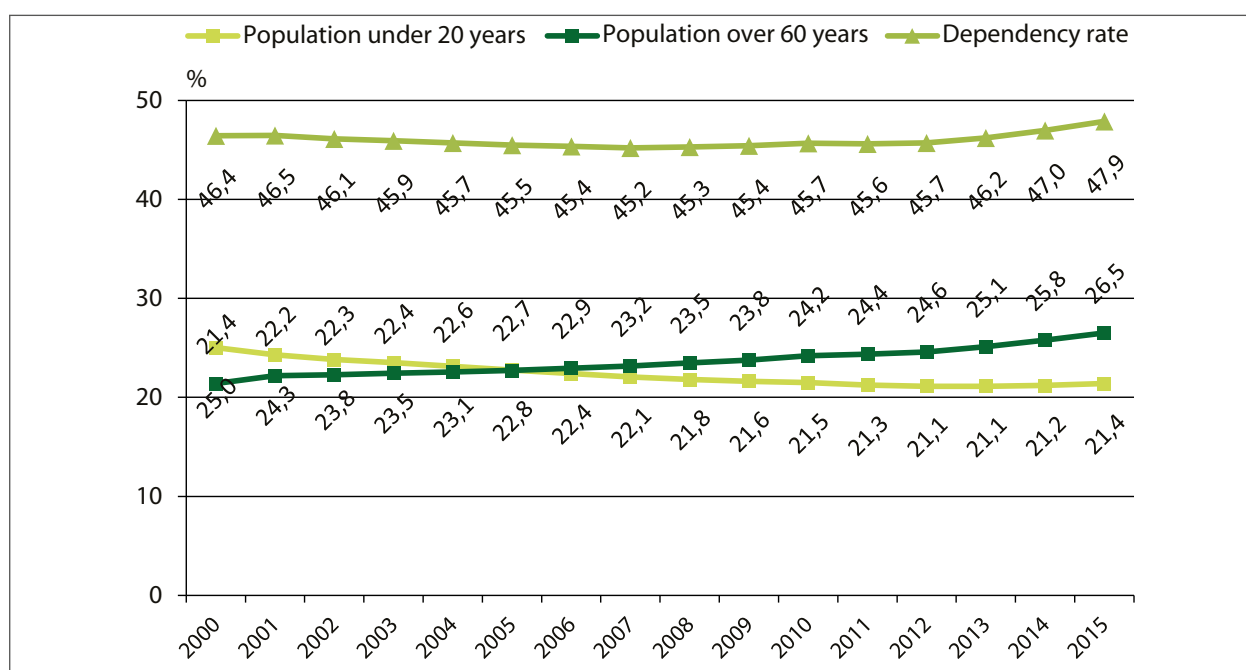
Sub-indicator 4: INCOME DISTRIBUTION

The Gini index is an economic measurement of the inequality of statistical distributions. It is used primarily to measure income and wealth distribution, and examines the distribution between income levels with a simple ratio. The Gini index can be calculated as the quotient of the area between the ideal distribution and the actual distribution (A) and the total area (A + B), that is $G_i = A / (A + B) \times 100$, but because $A + B = 0.5$, therefore $G_i = 2A \times 100$. The value of the Gini index falls between 0 and 100, where the value 0 is perfect distribution, and 100 means total inequality. *Source: HCSO*

* This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.



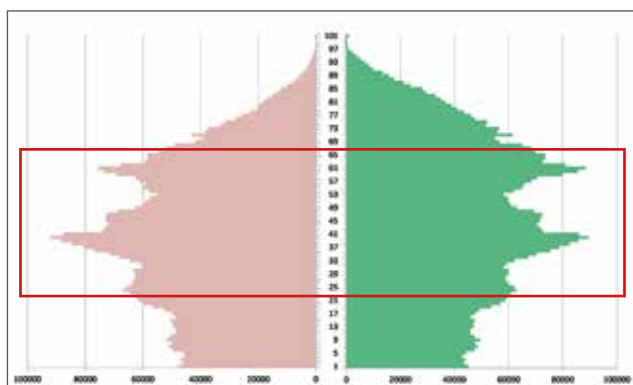
F.5.1. DEPENDENCY RATE



Source: HCSO

The population of Hungary is decreasing continuously. In 2003, the number still stood at 10,142,362, whereas by 2015 it had shrunk to only 9,855,571, which equals a drop of close to 287,000 people (3%), a number greater than the population of a city the size of Debrecen. In addition to the number by which the population has shrunk, the dependency rate also serves to provide other important information.

The dependency rate indicates the extent of the obligation to support others that falls on people of working age. The lower the proportion of people of working age as part of the overall population, the greater the burden they incur, and this also means that the taxes and charges are borne by them. This is something that must be taken into account when making governmental decisions in order to prevent these extra burdens from making the situation even worse. But ultimately, state revenues are produced by those who carry out activities that add value, and so every measure may only be limited to the extent that these removed resources are utilised in the best possible manner.

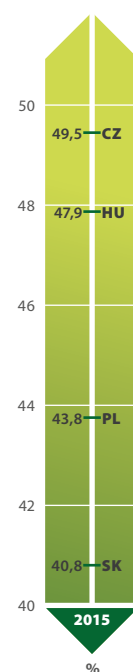


Source: HCSO

The population pyramid is the most widespread indicator to track demographic trends. As shown in the diagram, it displays the dependency rate graphically. The area in the red box shows the number of working-age inhabitants, while those outside of it are inactive workers. Unfortunately, the number of children is quite low, which does not foreshadow positive changes for the future. The shape of the population pyramid also shows the age-structure of a given population:

- a pyramid or cone: a growing population composed of young people,
- an onion or urn shape: a dwindling population composed of older people,
- a bell shape: a stable population with few changes in the number of people of each age.

The success of any state intervention can only bring results in the long term, and increasing the desire to bear children is only one side of the coin. If it is not accompanied by, among other things, educational development, then newly born generations will not necessarily become earning citizens when they reach adult age. Overpopulation has often been mentioned as one of the problems for sustainability, and therefore, in the eyes of sceptics, a dwindling population does not seem to be a problem. But the truth is that the population problem cannot be remedied by a decrease in the number of inhabitants of developed (well-off) societies while overpopulation continues to threaten developing countries. On the one hand, some social aspects of sustainability cannot be interpreted globally, only locally, and on the other, the already high level of economic inequality thereby grows even worse.



Source: CIA

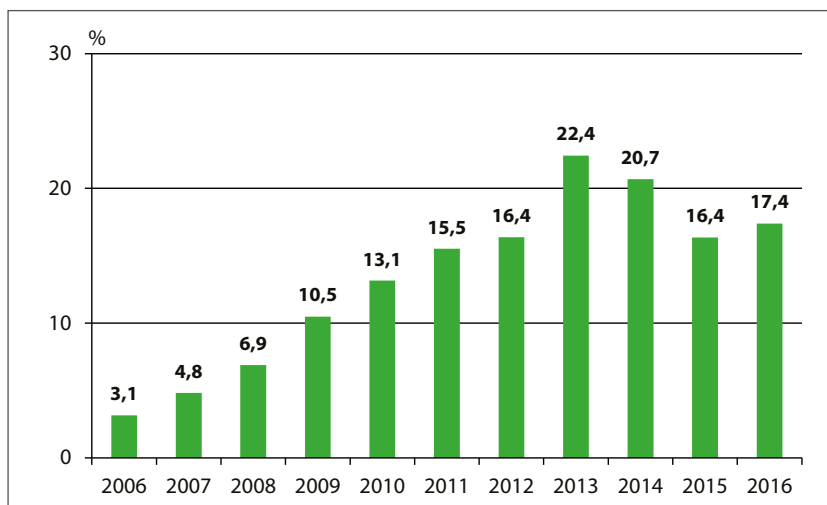
The dependency rate's constant growth is the result of aging, and not an increase in the number of children. The declining population only adds to this negative trend.

F.5.2. STUDENTS STUDYING IN ECO-SCHOOLS

Education is the type of long-term investment that cannot be managed exclusively on a market basis. On the basis of Eurostat data, only Latvia and Slovakia of the EU countries spend less on education than Hungary, but this trend is showing an increase in the case of Slovakia.

From the perspective of sustainability, in addition to the usual indicators for education, it is worth measuring what the situation is in terms of environmental education. While it is a welcome development that pre-school and elementary education places an increasingly greater emphasis on forming environmental consciousness, secondary education does not possess such favourable data.

The ministries responsible for education and environmental protection jointly created the "eco-school" title in 2004, which education institutions can win since 2005 through an application process each year. A criterion for earning the title is that the institutions should intelligently, system-



Source: HIERD, HCSO, ISHE

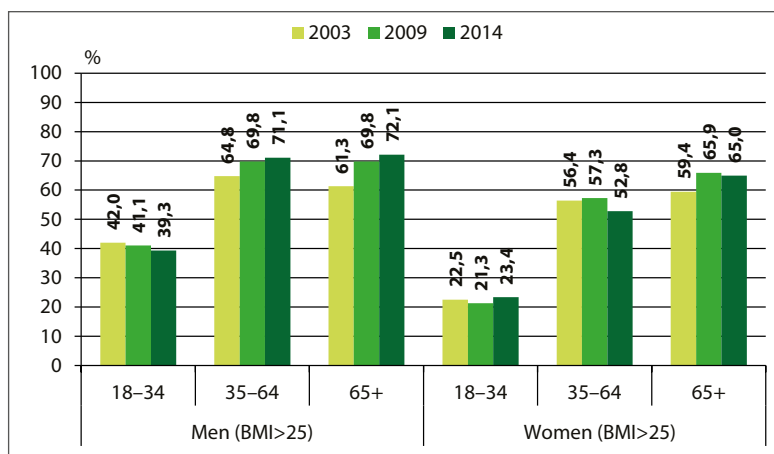
atically and in everyday practice address environmental issues, educate about sustainability as well as about the environment and health.

Owing to their volunteer activities, eco-schools are also an ideal example of how students and teachers within an institution can develop and execute sustainable programmes.

Following the upward phase at the start, a slightly declining trend can be observed in this promising initiative. With adequate support, this trend could easily be reversed.

F.5.3. THE PERCENTAGE OF THE POPULATION THAT IS OVERWEIGHT OR OBESE

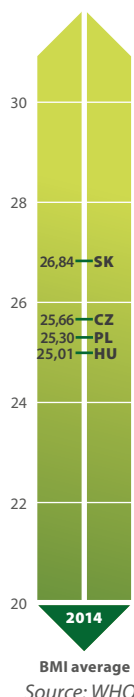
The main responsibility of health care is not treating diseases that have already developed but prevention. It is in the nation's economic interest that the working population should not increase health care expenditures. Obesity is one of the most common undesirable side effects of a modern (affluent) society. In developed societies, excessive calorie consumption is typically high, as is a sedentary lifestyle. On top of all of this is the high rate of psychological eating disorders in these same countries. Obesity is the number one preventable cause of death worldwide. Obesity is a risk factor, as a result of which there is a greater chance of developing numerous diseases (cardiovascular diseases, type 2 diabetes, certain cancers and asthma). Prevention is easier and less expensive than treatment. Hungary compares favourably to the



Source: WHO

surrounding countries, but compared to the EU we are near last place, not to mention globally. It is important to note that obesity is simply a single indicator of many that are closely related to the lifestyles and consumption habits of modern society.

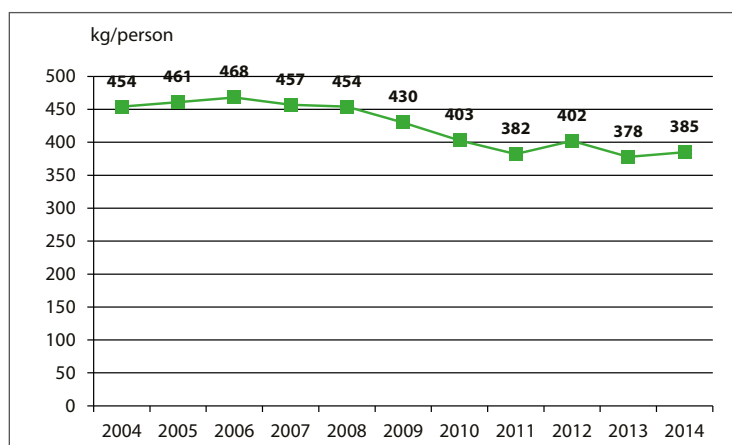
The high obesity rate, which is slightly growing, is a negative trend. There are numerous possible areas of intervention in the interests of reversing this trend.



BMI average
Source: WHO

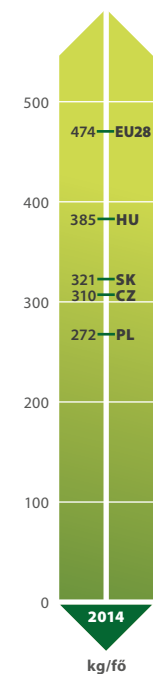
F.5.4. MUNICIPAL WASTE PER CAPITA

Although neither recycling nor re-utilisation in and of themselves solve the problem of the environmental burden caused by consumer society, environmental awareness still needs to be stressed at every level. Waste is created and everyone must attend to ensuring that it all reaches the appropriate collection container. This is the point where, day after day, we are confronted with the negative results of our consumption as well as the size of the burden that it entails for the environment. The downward trend in the quantity of waste is also highly positive for the reason that not only would waste removal fees have increased otherwise, but that they even declined in 2013 as part of the utility cost reductions of that year. The quantity of waste is interrelated with the quantity of purchased products, thus the decline that has been evident since 2008 is more of a consequence of the economic crisis than it is a sign of increased awareness on the part of society. At the same time, the development of the sorted waste collection system, which



Source: MA, HCSO

got underway two years ago in Budapest as the result of an Environment and Energy Operational Programme (KEOP) project, cannot be ignored. Although the amount of waste per capita in Hungary (385 kg) was below the EU average (474 kg), compared to the surrounding countries we are still unfortunately in the lead.



Source: Eurostat

This slightly declining trend is positive and can be intensified. In addition to the availability of infrastructure, the amount of municipal waste per capita can be improved through raising awareness.

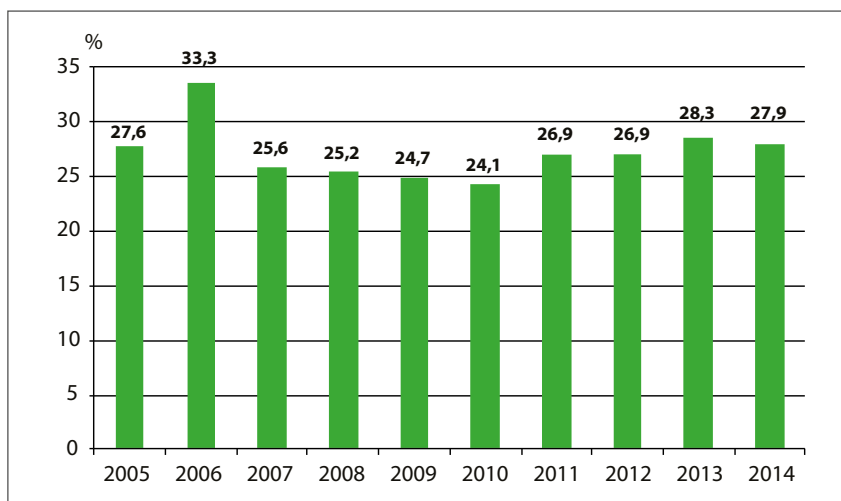
F.5.5. INCOME DISTRIBUTION

A condition for social sustainability is social justice. This means that everyone should be given the opportunity to earn an income according to their performance. It is not equitable, therefore, that total income or the majority of it should be concentrated in a few hands.

The Gini index provides a picture of the proportional distribution of income, which shows the distribution of income through a ratio. The index's value can be between 1 and 100. The lower the index, the more equally income is distributed across the various social groups. If we look

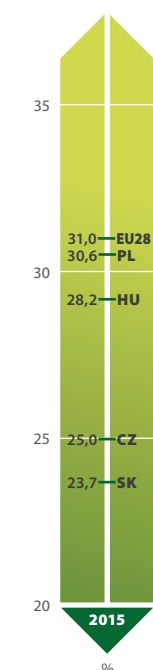
at the formation of Hungary's Gini index, then we can see that the decline in the number leading up to 2010 reversed with a slight increase becoming detectable, meaning that the distribution of income is increasingly unequal.

The magnitude of the Gini index does not state anything about a country's general financial situation or welfare.



Source: HCSO

What it shows is how income is distributed within a country. Additionally, according to the Gini index's rate before and after tax, it can be determined to what extent a country's tax system supports those with smaller incomes at the expense of those with larger incomes, or if it burdens its citizens at an equal rate.



Source: Eurostat

Income inequality has increased in recent years. From society's perspective, this is a negative development.

DEMOCRACY

SUMMARY¹

An indispensable condition for the realisation of the democratic rule of law is the enforcement and fulfilment of basic human rights, therefore research on statecraft receiving prominence can be said to be timely. Developments in the past few years unequivocally show that “in the interest of the fulfilment of the public good abstract system of norms, the state must play a value-creating and value-defending role in the political, economic and social spheres.”² A serious demand exists for an interdisciplinary foundation to be established for the state structure that meets the needs of the 21st century and is in line with the academic. “Examined from the state’s perspective, law, political science, sociology, economics, police science and military science are branches of the sciences, and their relationship and mutual impact can be considered either research of the state, and also as an independent discipline of government science.”³ Democracy and the democratic operations resulting from it are the theoretical framework that as a basic principle binds together the disciplines just mentioned. The principle of democracy and its realisation in practice fundamentally affects the competitiveness and efficiency of the market and the public sector. The primary component of democracy is the realisation of political pluralism. The will of the people is made directly evident through elections, and through elected representatives; it affects the entire state apparatus. In addition to ensuring political competition, what is necessary for the people’s will to form is the promotion of political participation, thereby creating a quasi “supply and demand” situation. Another essential condition for democracy is to ensure the possibility for democratic dialogue for both political actors and representatives of civil society. In this circle, it is especially important to refer to the importance of institutions handling freedom of information requests, since an overall social position can only be formed on the basis of objective information. Naturally, this also fulfils a type of control function in opposition to the executive authority, or it may prove its effectiveness. In the formation of the people’s will, an unavoidably important role is played by the press and the demands for freedom of the press in a democracy. On one side, this can be achieved through the realisation of press pluralism, or rather through access to press materials of various political ideologies, on the other through the requirement for balanced, objective information. In the interests of defending these democratic freedoms, it is necessary

to rule democratically, for democratic freedoms cannot be defended with anti-democratic tools, since that would raise self-identity issues with regards to the entire political system. A condition for the creation of the democratic exercise of authority is the development of the checks and balances system that maintains the equilibrium. One of the possible tools for this is the Constitutional Court and by increasing the power, scope and authority of external parliamentary oversight bodies. Through these bodies, a certain type of citizen’s rights awareness can be measured, since a knowledge of the law can be inferred from the number of submitted complaints and citizen initiatives. In addition to knowledge of the law, political awareness is also an essential component of a democratic constitutional state, which can be seen from a willingness to organise political events, or the capability to exercise the right of assembly and the number of protests announced in advance, independently of whether these protests are in favour of or in opposition to the government. This study makes suggestions for measuring the traits and expectations listed above through an indicator system, which covers democracy and certain areas related to the democratic rule of law. The starting point for examining the area of impact was that the researchers primarily examined political competition and political participation from among the various conceptual dimensions. We would like to emphasise that the concept of democracy in every case carries with itself the requirement of effective rule of law, for which an essential factor is effective institutional functioning, as well as respect and accountability for individual and community rights. The rule of law and democracy are inseparable concepts, since the democratic exercise of authority limits itself to the law, or rather, to uphold the rule of law, as can be read in Article B of the Fundamental Law. Only an independent, democratic state can meet the constitutional requirements that have been elaborated by international law. In the case of liberal democracy, respect for and accountability to individual and community rights and the requirement for the actual institutional functions is completed with the components of social dialogue, democratic exercise of law, as well as freedom of the press and speech. At the same time the examination of the impact area does not examine social equality, economic development, good quality of life and the “good governance” that results in widespread satisfaction. The “level” of the approach to the research, with respect to the number and proportion of subject areas, also remains somewhat below that of Freedom House’s (FH) democracy numerical rating, which, by concentrating on the constituent elements of so-called liberal democracy, places particularly strong emphasis on basic democratic rights and individual freedoms, as well as the extent of checks and balances on political power. By way of an analogy that is approximate in

1 The authors of this chapter are Csaba Cservák, Ph.D. (workgroup leader), György Tamás Farkas, Dr. jur. and János Rimaszécsi, Dr. jur.

2 Tamás Kaiser. “Az államkutatások helye a társadalomtudományok rendszerében.” Államtudományi Műhelytanulmányok, Issue 2016/1, 1.

3 Ibid.

nature, it can be concluded that the set of indicators show kinship to a limited extent to the measurement of the Polity IV Project.

When examining the impact area, we identified the government's capabilities. According to our interpretation, under government capability we mean the total of those tools through which the government can ensure political pluralism and basic human rights through legislation and the process of law.

The identified government capabilities, adjusted to the impact area dimension, are the following:

1. Assuring political competition

As the maximum that can be achieved for this government capability, the impact area assessment inquired if the government, in the interest of the democratic functioning of public life, ensures (in fact guarantees) one of its fundamental conditions: ensuring political competition between political alternatives, organisations and programmes.

2. Promoting political participation

The government capability relating to this sector can be defined as the government's assuring or promoting, in the interest of the democratic functioning of public life, one of the fundamental conditions for such: the realisation of participation in managing and influencing public matters and in political decision-making.

3. Promoting social dialogue

The government capability relating to this sector shows the extent to which, during the course of political decision-making, the opinions and series of technical proposals by the affected social sub-systems and organised groups, as well as non-governmental organisations (NGOs) can be articulated and presented to the public, and become part of public-policy and political decisions during the course of the decision-making process at different levels of the political system.

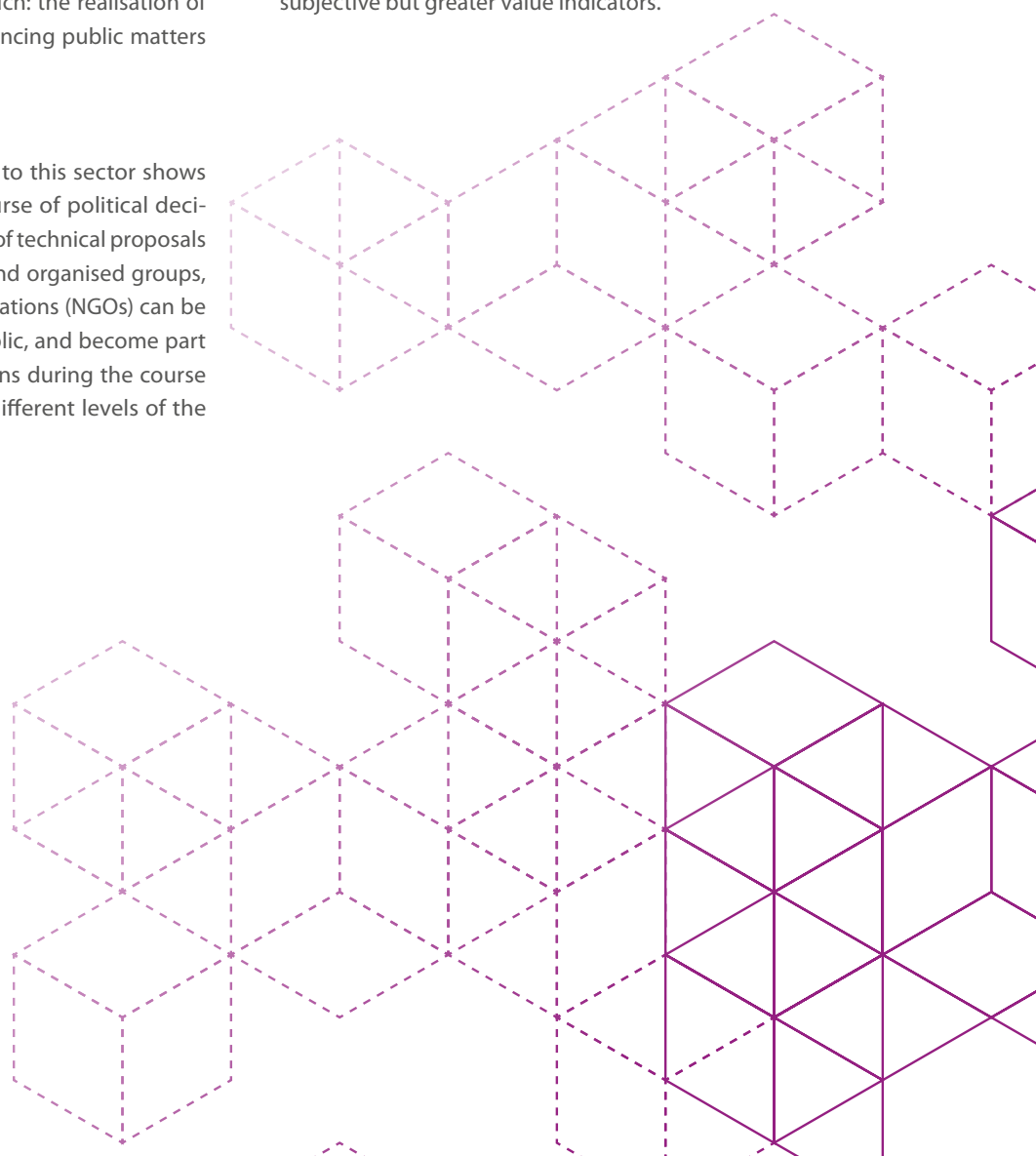
4. Assuring the exercise of democratic rights

The government capability characterising this sector manifests itself as one of the elements of the rule of law, in the assurance of the exercise of democratic rights and the defence of democratic freedoms, which can be ensured by the functioning of the system of institutions and instruments in Hungary that guarantee the requirement for equal treatment.

5. Assuring the freedom of the press and free speech

The government capability belonging to this sector is the assurance of the most effective and most useful means for dialogue between government and governed, as well as freedom of the media, which also performs the function of social control.

The study makes suggestions for measuring the characteristics and requirements formulated above through an indicator system that covers democracy and certain areas related to the democratic rule of law. Due to its nature, the impact area assessment (in accordance with preliminary expectations) is based on the 2015 Good State and Governance Report, since it attempts to formulate with a sense of continuity the issues that have arisen after its publication. The impact area assessment used both objective but lower value and subjective but greater value indicators.



D.1. POLITICAL COMPETITION DIMENSION

Modern exercise of authority based on democratic foundations is one of the fundamental conditions for political competition between political alternatives, organisations and programmes. As the maximum that can be achieved for this government capability, the impact area assessment inquired if the government is able to ensure this fundamental condition in the interests of the democratic functioning of public life

Key indicator: THE NUMBER OF POLITICAL PARTIES EARNING AT LEAST 1% IN ELECTIONS

The number of political parties in Hungary that for their party list received more than 1% of the votes cast during the general parliamentary elections. *Source: NEC, Budget Act*

Sub-indicator 1: STATE SUPPORT FOR PARTIES AND PARTY FOUNDATIONS AS A PERCENTAGE OF THE BUDGET IN A GIVEN YEAR

Regular state support for parties and party foundations, nominally and as a percentage of the given year's total budget expenditures. *Source: HCSO, Budget Law of the given year*

Sub-indicator 2: DISTRIBUTION OF PARLIAMENTARY QUESTION BETWEEN THE OPPOSITION AND GOVERNING PARTIES

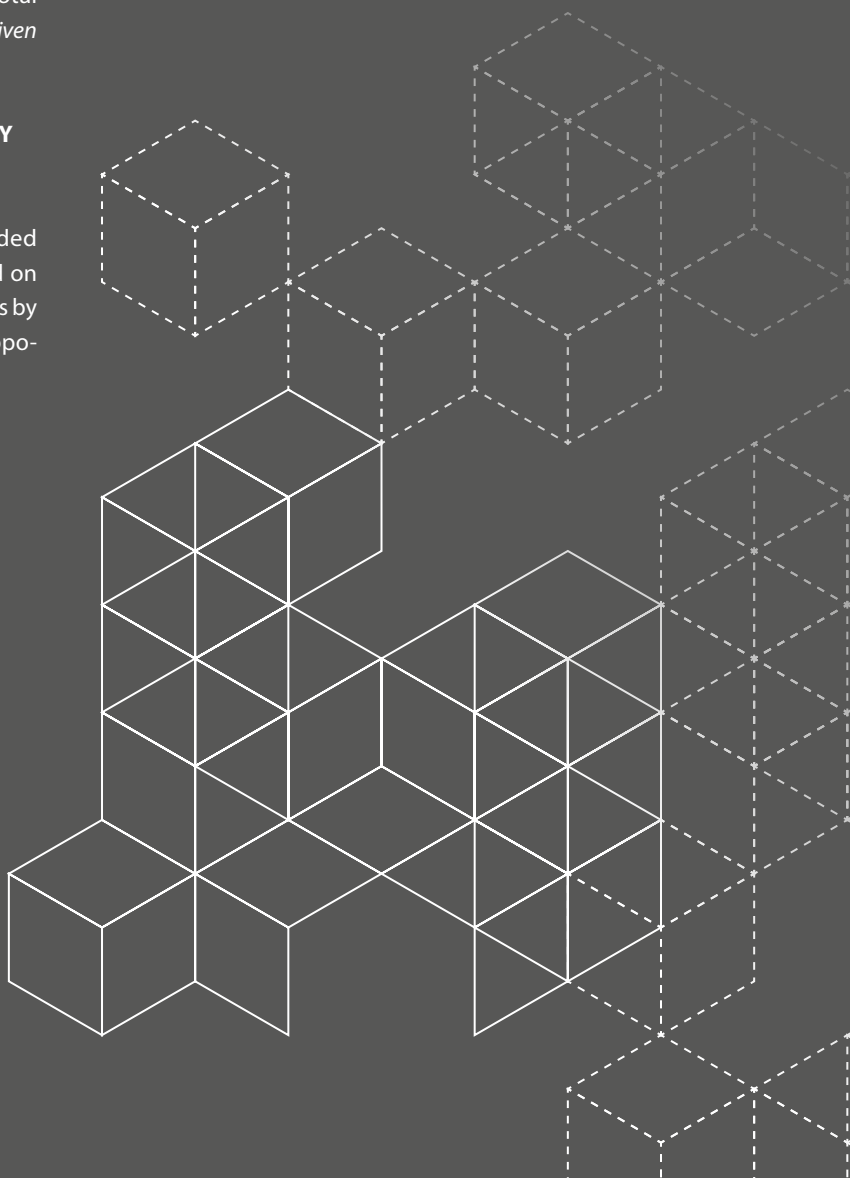
The number of parliamentary interpellations, divided between the opposition and governing parties. Based on the assessment of the National Assembly, interpellations by independent MPs are considered to come from the opposition. *Source: NAH*

Sub-indicator 3: TRUST IN POLITICAL PARTIES

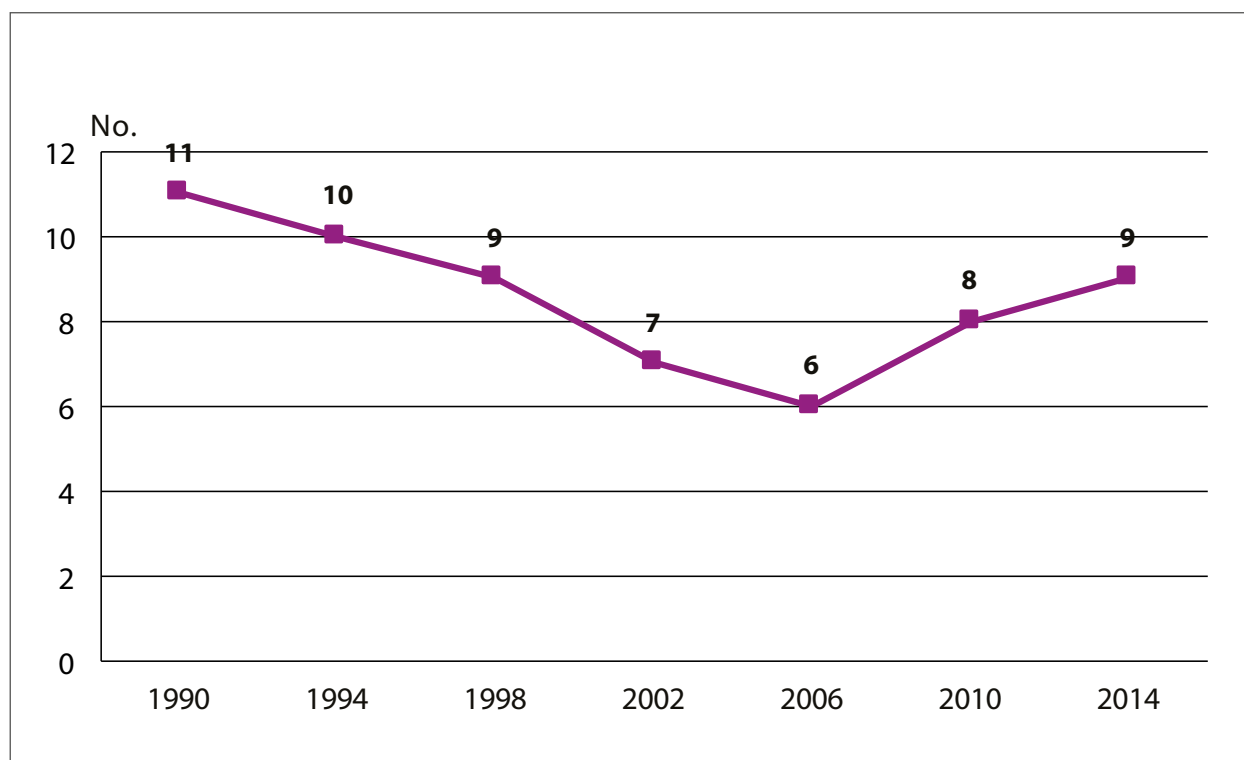
Eurobarometer's 'trust in political parties' indicator. The question posed in the survey was "I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it." *Source: Eurobarometer*

Sub-indicator 4: POLITICAL COMPETITION OUTCOME INDICATORS

We call those who are certain to vote if the election were held this Sunday and know which party they would vote for as committed voters. The parties' popularity concentration is expressed through the Herfindahl–Hirschman index. The most popular party's 'advantage' is expressed as the inverse proportion of the difference between the proportion of votes it received and the total number of votes. *Source: kozvelemenykutatok.hu*



D.1.1. THE NUMBER OF POLITICAL PARTIES EARNING AT LEAST 1% IN ELECTIONS



Source: NEO

Political parties are actors of key importance in modern democratic states. The parties play intermediary roles between society and the state; they present citizens' interests and desires, provide opportunities and motivation for participation in public life, and additionally they are the most important channel for selecting and appointing political office holders. The reason receiving 1% of the vote during parliamentary elections is also in a legal sense a 'psychological barrier' because lawmakers tie the amount of support from the state budget afforded to political parties based on this percentage of support.

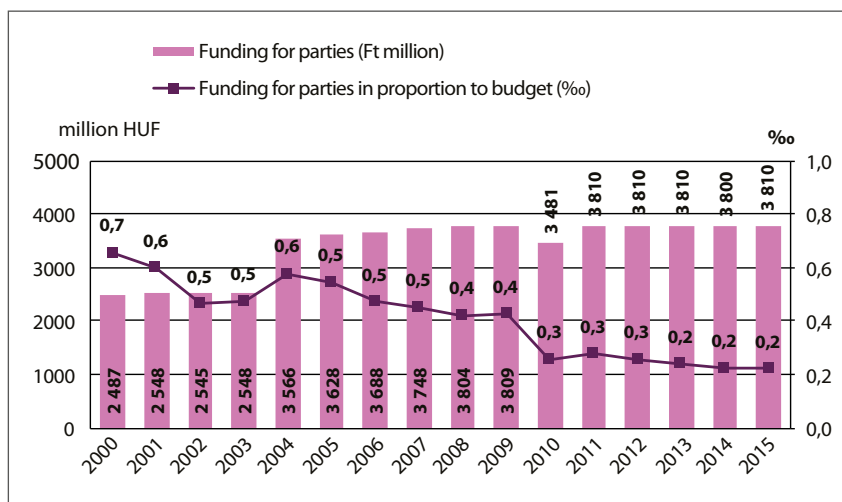
Taking into consideration political parties with more than 1% support, it can be determined that this number was the greatest at the time of the system change during the 1990 elections with 11 parties. The reason for this could have been

the novelty of a multi-party system, since at the time there were no crystallised or entrenched voting blocs, and this could have resulted in the greater number of parties surpassing 1%. Following this, a declining trend was observable until 2006. The reason for this was that the defining domestic political camps had developed, and political life was increasingly bipolar. What this resulted in was that basically two parties were in competition with each other, as the Socialists and Fidesz ruled the political landscape. Hungary's political map following the 2006 elections fundamentally changed. The number of parties with more than 1% support (following the lowest number of 6 in 2006) had grown by the 2010 and 2014 elections, so that at the most recent elections there were 9 parties with more than 1% support, which were thus entitled to state funds from the central budget.

Following the nadir in 2006, the number of political parties with at least 1% support has grown, but it is yet to reach the level of the early 1990s.

D.1.2. STATE SUPPORT FOR PARTIES AND PARTY FOUNDATIONS AS A PERCENTAGE OF THE BUDGET IN A GIVEN YEAR

State support for political parties is a solution for the financing requirements of political organisations in modern democracies that attempts to limit the advantage that parties with a dominant position (e.g. a large membership and membership dues, wealthy donor circles, etc.) enjoy in the political contest. For this reason, it is absolutely worth mentioning when discussing the measurement of political competition as a factor that exerts an equalising force that aids in the preservation of political competition. The total of state support following 2003 jumped significantly, from the earlier HUF 2.5 billion to HUF 3.5 billion. Looking at the trend from 2004–2011 a careful increase was observable, through which the HUF 3.5 billion support grew to HUF 3.8 billion. Following this, since 2011 the total amount



Source: HCSO

of support has remained constant. In contrast to this, the percentage of total budget expenditures turned towards support for parties and party foundations has generally declined since the turn of the millennium.

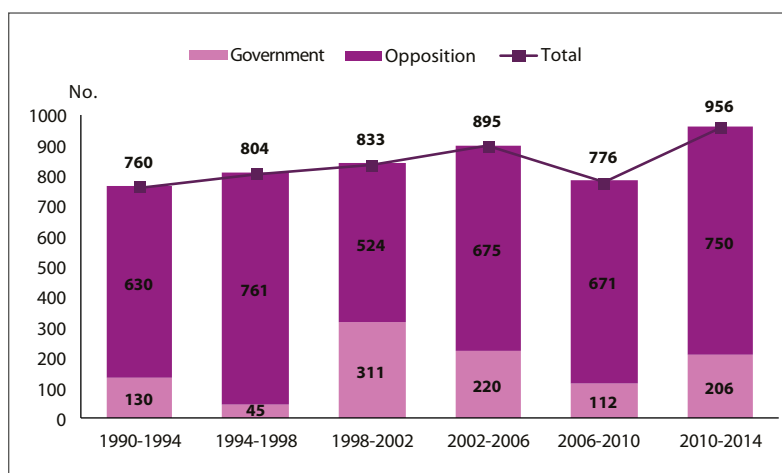
The total of the regular state support provided to parties and party foundations has essentially been stagnant, at the same time the level of state support afforded to parties as a percentage of the budget has declined.

D.1.3. DISTRIBUTION OF PARLIAMENTARY INTERPELLATIONS BETWEEN THE OPPOSITION AND GOVERNING PARTIES

This indicator wishes to measure the expression of political competition in parliament through interpellations.

Interpellations are typically a tool of the opposition, at the same time governing parties also use them. Interpellations are one of the methods of oversight by a representative legislative authority in opposition to the executive authority, therefore its measurement is absolutely justified, on the one hand by the total number of interpellations, and on the other by considering the ratio of governing party and opposition interpellations.

Looking at the total number of interpellations, following the regime change a fundamentally increasing trend can be observed. Considering the interpellations by the government in power, it can be seen that during the second cycle from 1994–1998 interpellations by the govern-



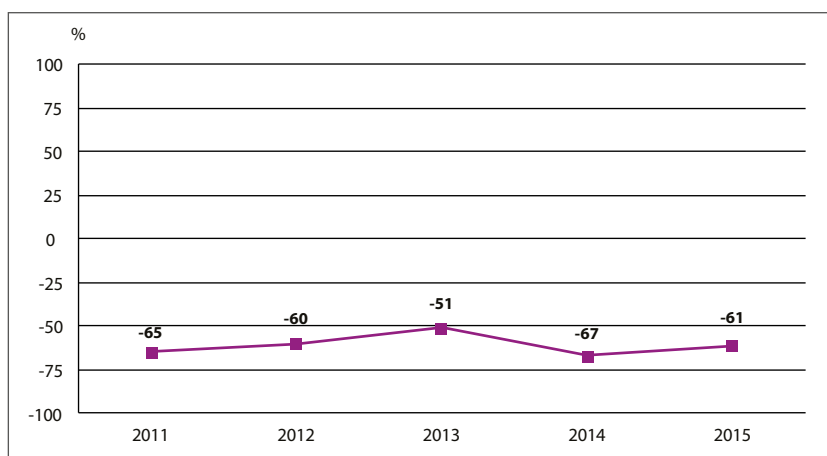
Source: NAH

ing parties significantly declined, while the 1998–2002 cycle saw the greatest number of interpellations by the governing parties. Following this the number continuously declined until 2010, after which it once again began to increase.

On the basis of the total number of interpellations, the legislative authority actively practices its oversight function in opposition to the government in power, and this can be considered positive in every respect.

D.1.4. TRUST IN POLITICAL PARTIES

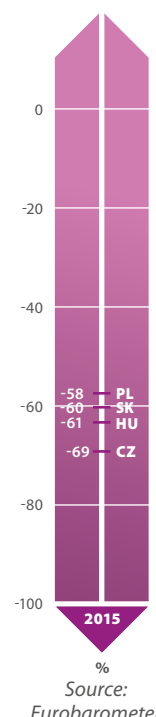
Trust in parties, as an indicator, is an important aspect of the political contest dimension, since this is one type of quality scale towards the main actors of the political content, the parties. During Eurobarometer's representative survey the question posed in relation to this is the following: please, tell me if you tend to trust in or tend not to trust in the political parties. The answers are presented on a time series in the form of a balance indicator, and this expresses the difference between positive and negative answers. Negative values therefore mean that the majority hold negative attitudes, that is, they do not trust the political parties. On this basis, the overwhelming majority of people in Hungary do not



Source: Eurobarometer

trust the political parties. The same can be said for the other Visegrád countries. (See the graphic on the side of the page.)

Over the previous years, those who do not trust political parties constitute a significant majority of the population in Hungary and in the Visegrád countries.



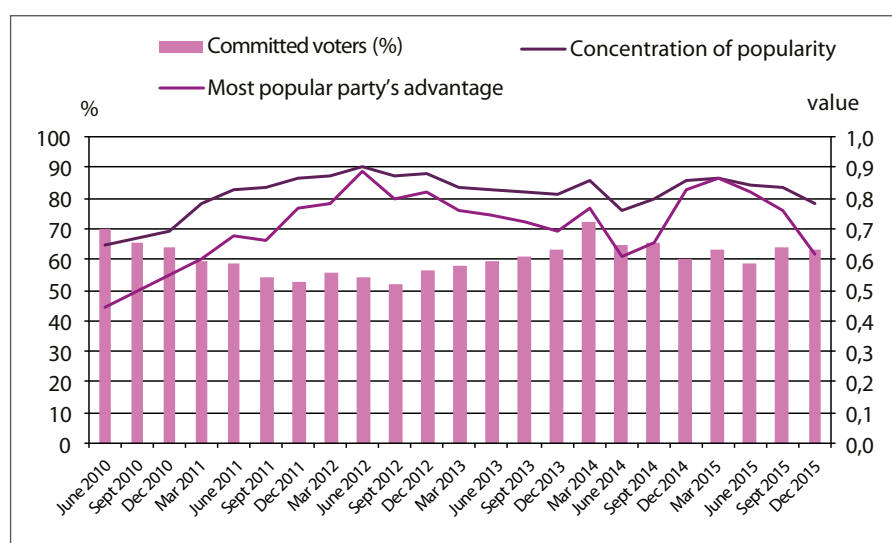
Source: Eurobarometer

D.1.5. THE OUTPUT INDICATORS OF POLITICAL COMPETITION

We use three indicators to characterise political competition on the basis of the averaged data of four public opinion research institutes (Nézőpont, Medián, Ipsos and Tárki) and those who are committed voters. The percentage of committed voters expresses to what extent the parties (taken all together) are successful in their struggle for voter favour.

The concentration of parties' popularity expresses how unequally party popularity is divided, with the most popular party's advantage being the difference between the two most popular parties. The

latter two indicators can have values between 0 and 1, and the higher the index's value the greater the political competition. The percentage of committed voters declined after the 2010 election, then once again increased as the 2014 elections approached. Following these elections, the decrease observed after the 2010 elections did not occur, and at the end of 2015 the percentage of committed voters had stabilised at a higher level than at the same time in the previous



Source: kozvelemenykutatok.hu

cycle. An opposite trend was observed in popularity concentration for the percentage of committed voters, which peaked in the middle of the 2010–2014 cycle, then slowly declined. It grew once again during the 2014 election, but did not reach the level of the previous election, and has since gradually and slowly decreased. The most popular party's advantage behaved similarly to the previous indicator, with the difference that the decline after 2014 was greater

By the end of 2015, the political contest between the parties had weakened, because although the percentage of committed voters had stabilised at a higher level compared to the same period from the previous cycle, the parties' popularity concentration and the most popular party's advantage had both decreased.

D.2. THE PROMOTION OF POLITICAL PARTICIPATION DIMENSION

The government capability relating to this sector can be defined as the government's assuring or promoting, in the interest of the democratic functioning of public life, one of the fundamental conditions for such: the realisation of participation in managing and influencing public matters and in political decision-making.

Key indicator: BY-ELECTION INDICATOR

The difference between the participation rate for general and midterm parliamentary elections, as well as municipal elections (in settlements with a population greater than 10,000). *Source: NEO*

Sub-indicator 1: OPINIONS OF THE WAY DEMOCRACY WORKS

Eurobarometer on 'opinions of the way democracy works'. The question in the survey was "On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the way democracy works in your country?" *Source: Eurobarometer*

Sub-indicator 2: THE PERCENTAGE OF THE POPULATION PARTICIPATING IN DEMONSTRATIONS

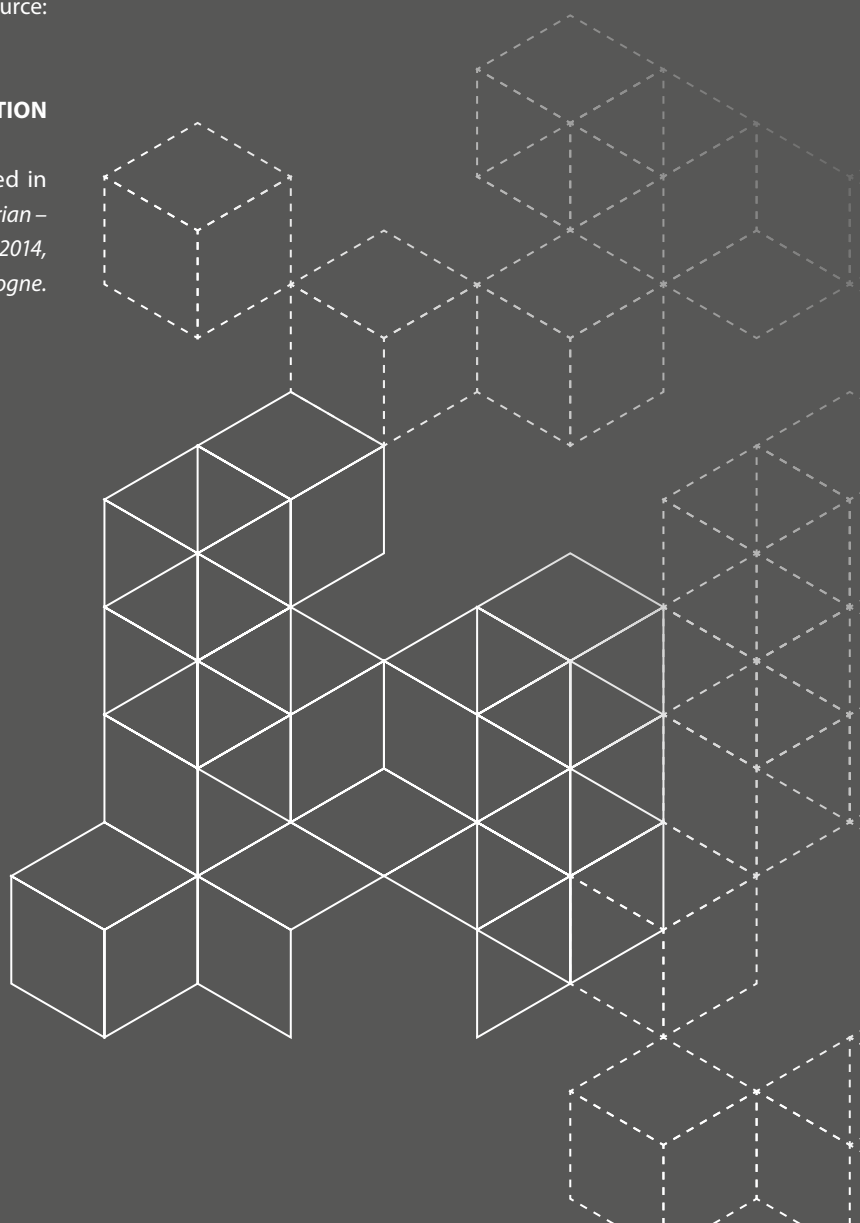
The number of peaceful demonstrations announced in advance. *Source: Schmitt, Hermann – Popa, Sebastian Adrian – Devinger, Felix [2015]: European Parliament Election Study 2014, Voter Study, Supplementary Study. GESIS Data Archive, Cologne. ZA5161 Data file version 1.0.0, doi:10.4232/1.5161*

Sub-indicator 3: LOCAL REFERENDUM INITIATIVES

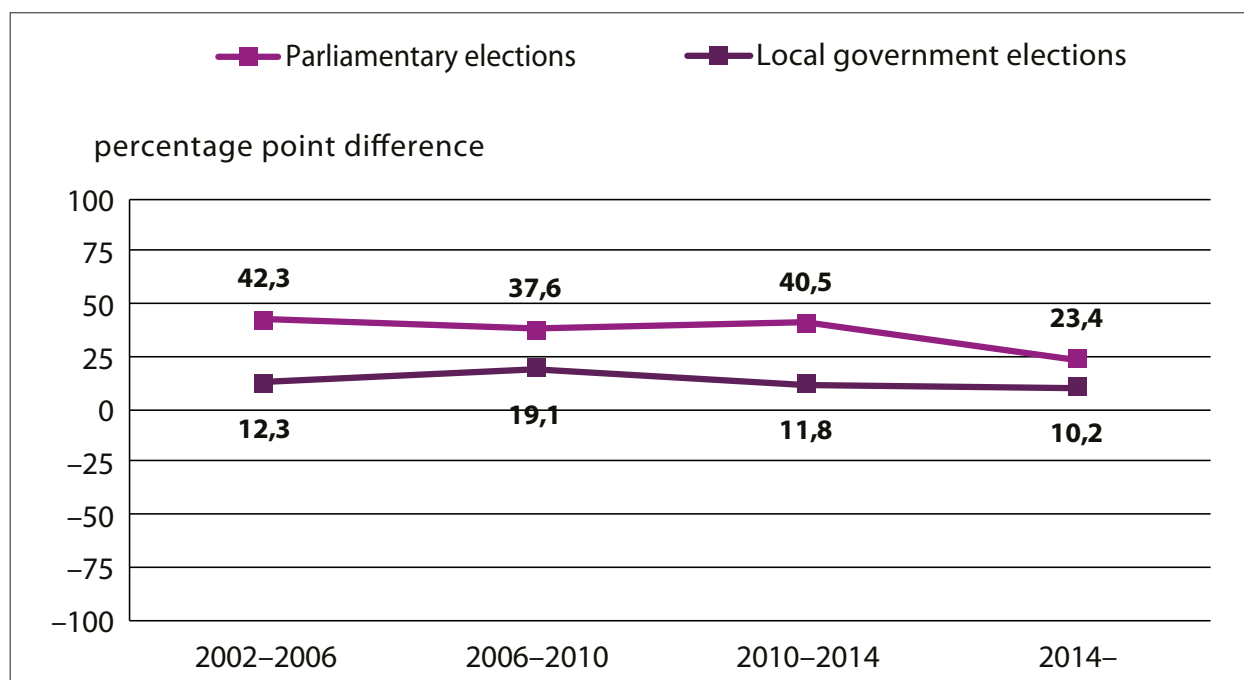
The number of valid and effective, as well as invalid local referenda among the certified local referendum initiatives. *Source: NEO*

Sub-indicator 4: NATIONAL REFERENDUM INITIATIVES

The number of certified national referendum initiatives according to the submitters. *Source: NEO*



D.2.1. BY-ELECTION ELECTION INDICATOR



Source: NEO

The indicator shows the difference in average voter participation between general and midterm elections in settlements with populations greater than 10,000 in parliamentary and municipal elections. According to this, as long as the indicator's value is positive, participation was greater at the general elections. Therefore, on the basis of the indicator, we can infer the level of active political participation between general elections. What can be said is that general elections draw greater numbers than midterm elections for both parliamentary and municipal elections. According to this, voters' political participation

intensity and interest towards the election is cyclical, reaching its maximum every four years during the general elections, and is then lower until the next elections. It can also be said that for the municipal elections the difference is smaller in terms of participation than for parliamentary elections. Thirdly, as the graphic shows, for the parliamentary elections the difference in participation for the general and midterm elections decreased in this cycle, meaning that the parties mobilised more voters than before, and the political contest from this perspective has intensified.

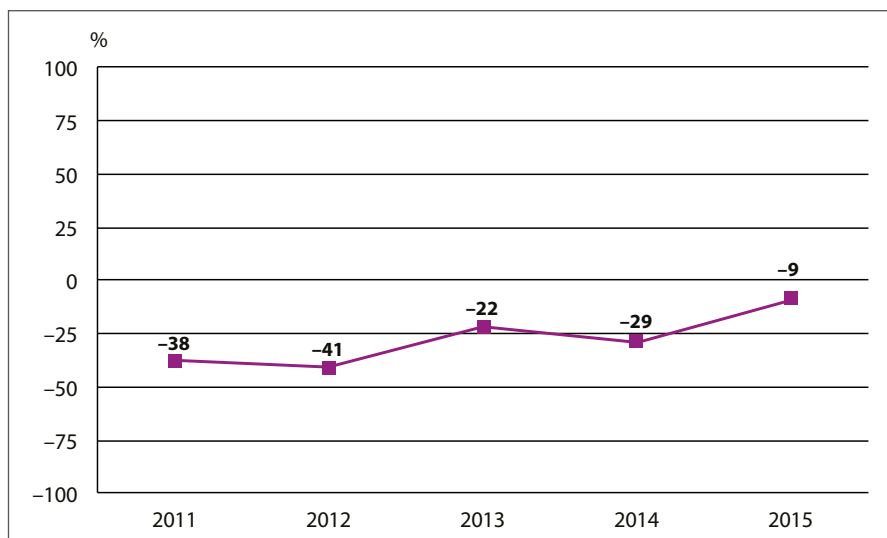
General elections mobilise voters to a great extent, but in the current cycle the midterm parliamentary elections have drawn more voters than before, thereby meaning that the mid-cycle political contest is fiercer.

D.2.2. OPINIONS OF THE WAY DEMOCRACY WORKS

One of the important criteria of political participation is to what extent voters are satisfied with how democracy works.

During one of their representative surveys, Eurobarometer asked the adult population that is eligible to vote: "On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the way democracy works in your country?" The answers are presented in the form of a balance indicator on a time series, which expresses the difference between positive and negative responses. The negative values therefore mean that those are in the majority, who are not very or not at all satisfied with how democracy works in Hungary.

What can be said is that although the unsatisfied are in the majority, their percentage is nonetheless showing a decreasing trend compared to the satisfied. Among



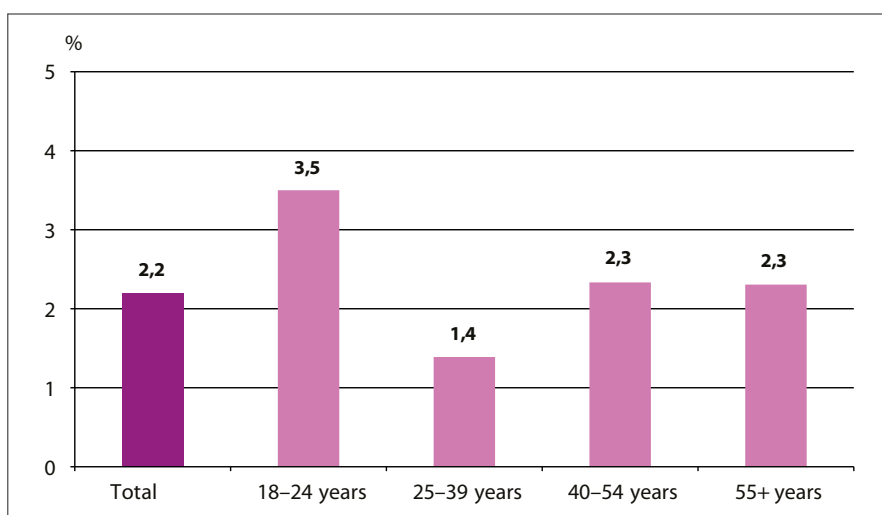
Source: Eurobarometer

the Visegrád countries the indicator's value was lower in Slovakia and higher in the Czech Republic and Poland in 2015, that is, voters were less satisfied in Slovakia and more satisfied in the Czech Republic and Poland with how democracy worked. (See the graphic on the side of the page.)

It can be said that although in Hungary those unsatisfied with how democracy works are in the majority, their percentage is decreasing compared to those who are satisfied.

D.2.3. THE PERCENTAGE OF THE POPULATION PARTICIPATING IN DEMONSTRATIONS

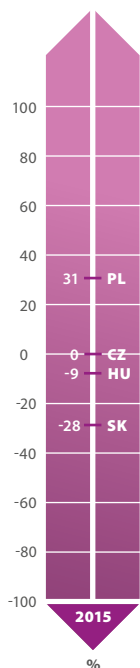
One of the important forms of political participation outside of elections is participating in demonstrations. A representative survey (Voter Study) conducted by European Election Studies in 2014 makes citizen participation in demonstrations internationally comparable. Of those polled in Hungary in 2014, 2% responded that they had participated in a demonstration in the previous 12 months. Unsurprisingly, the youngest age group between 18–24 were the most active, with 3.5% having participated. Slovakia and the Czech Republic had similar rates, but the societies of Germany and Poland



Source: EES

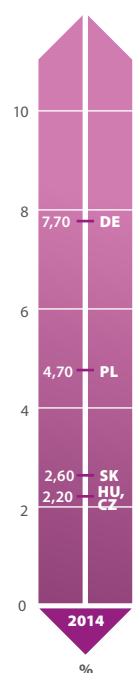
were more active in this respect. (See the graphic on the side of the page.)

Compared internationally, the percentage of those who have participated in political demonstrations in Hungary can be said to be low.



Source:

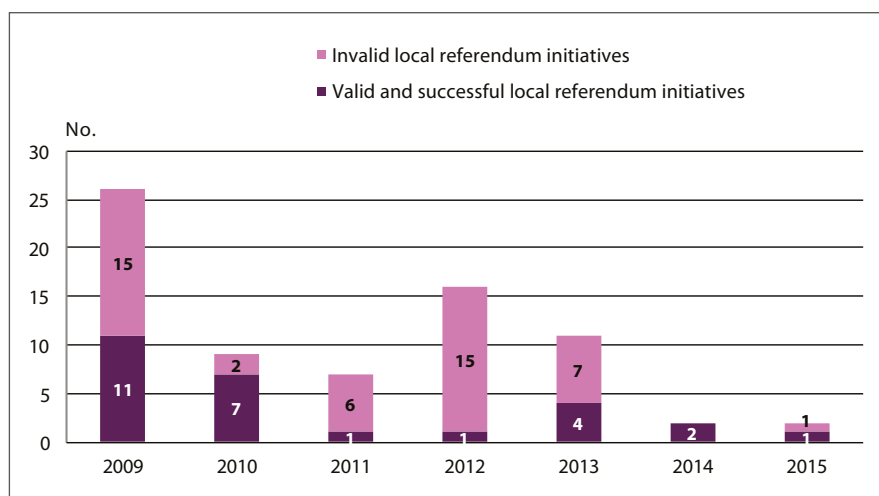
Eurobarometer



Source: EES

D.2.4. LOCAL REFERENDUM INITIATIVES

Local referenda are one form whereby the people directly practice their sovereignty, and in a democracy this has a complementary function to representation. The figure shows the number of certified local referendum initiatives, and within this the valid and effective, as well as the number of invalid referenda. During the period examined the fundamental trend was a decline. Following the first year of 2009 that saw 26 referenda, a decline followed, which in 2012 saw a significant increase (16), but by 2015 the number of local referenda was once again quite low (2).



Source: NEO

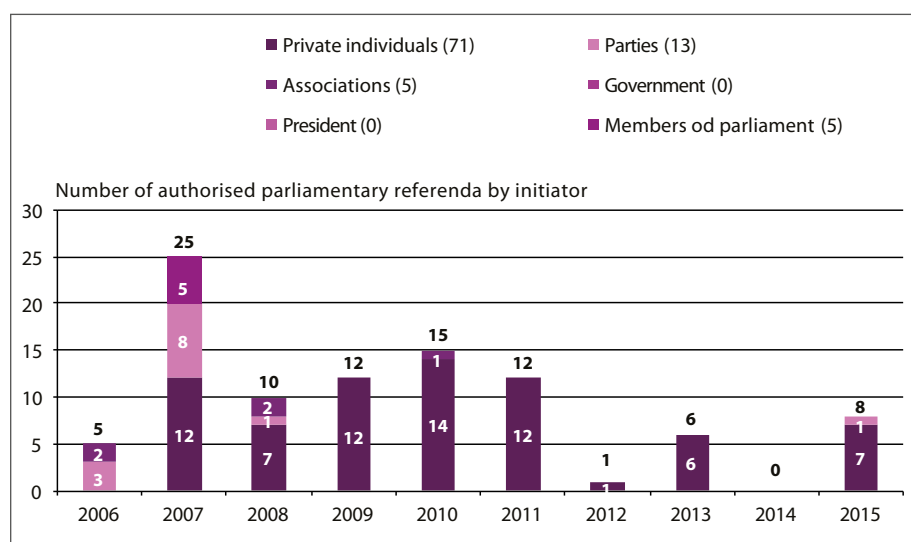
While in 2009, the division between the number of valid and effective or invalid referenda

was evenly split, as the number of referenda decreased the majority of them were invalid.

The number of local referenda keeps declining, and among them an increasing amount are invalid.

D.2.5. NATIONAL REFERENDUM INITIATIVES

National referenda do not function as an autonomous initiative of the voters to determine the direction that representative governments take, as it is used as a tool of the political elite to mobilise voters. Of the five referenda held since 1990 (1990, 1997, 2003, 2004, 2008), the initiator was the government, political parties and a civic association (the World Alliance of Hungarians). The number of certified referendum initiatives saw a jump in the early part of the examined period between 2007–2011, while in the 2010s the number of referendum initiatives saw a drastic decline. Of the period's 94 certified referendum initiatives, with one exception (2008), no referenda took place. The overwhelming majority of



Source: HCSO

initiators are private individuals (71–75%), who are followed far behind by political parties (13–14%). MPs initiate just as many referenda as the NGOs for whom the system was theoretically designed (5–5%).

The number of certified referendum initiatives has drastically fallen, initiatives by the non-government organisations that are most active in this issue (private individuals, organisations) are generally unsuccessful.

D.3. THE PROMOTION OF SOCIAL DIALOGUE DIMENSION

Within this context, the government's capability shows the extent to which the opinions and professional recommendations of affected social subsystems and organised interest groups as well as NGOs can be articulated and presented in the public sphere during the political decision-making process, as well as whether they can engage in the various public policy and political decisions during the decision-making process at certain levels of the political system. This indicator reveals the degree to which we can talk about a living, organic and reflexive connection between political institutions participating in passing legislations (the parliament, the government) municipalities and organised interest groups and social organisations (NGOs). The institution of social dialogue is one of the tools of parliamentary democracy that – when it exists – assures an increase in the efficiency of political decision-making.

Key Indicator: THE NUMBER OF NON-PROFIT ORGANISATIONS ENGAGED IN POLITICAL, SPECIALIST AND ECONOMIC ACTIVITY OR ADVOCACY

The number of non-profit organisations functioning in the given year whose activity falls under the scope of political, professional or economic advocacy based on the classification system for non-profit organisations. *Source: HCSO*

Sub-Indicator 1: THE NUMBER OF PEOPLE PERFORMING VOLUNTEER WORK AT NON-PROFIT ORGANISATIONS ENGAGED IN POLITICAL, PROFESSIONAL OR ECONOMIC ACTIVITY OR ADVOCACY

The number of people performing, in the given year, volunteer work at non-profit organisations that are functioning in the given year and whose activity falls under the scope of political, professional or economic advocacy based on the classification system for non-profit organisations. *Source: HCSO*

Sub-Indicator 2: STATE SUPPORT FOR NON-PROFIT ORGANISATIONS ENGAGED IN POLITICAL, PROFESSIONAL OR ECONOMIC ACTIVITY OR ADVOCACY

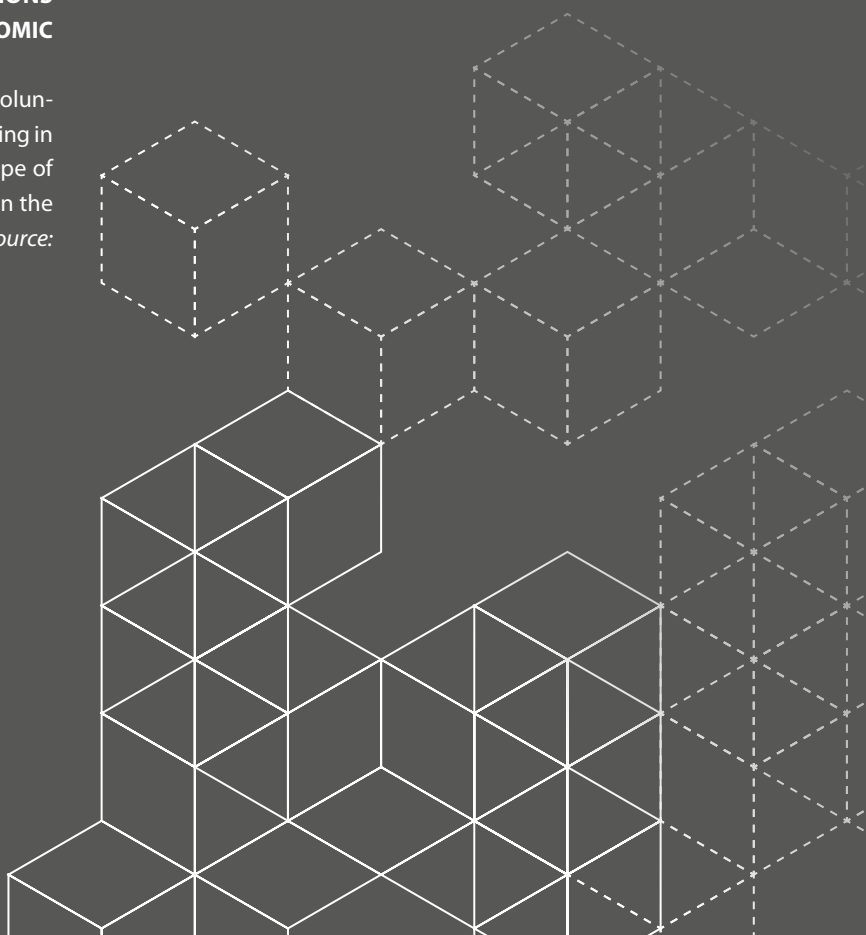
The total amount of state support in the given year for non-profit organisations functioning in the given year whose activity falls under the scope of political, professional or economic advocacy based on the classification system for non-profit organisations. *Source: HCSO*

Sub-Indicator 3: THE NUMBER OF NON-PROFIT ORGANISATIONS ACTIVELY PARTICIPATING IN THE POLICY ANALYSIS WORK OF LOCAL (COUNTY OR METROPOLITAN) MUNICIPALITIES

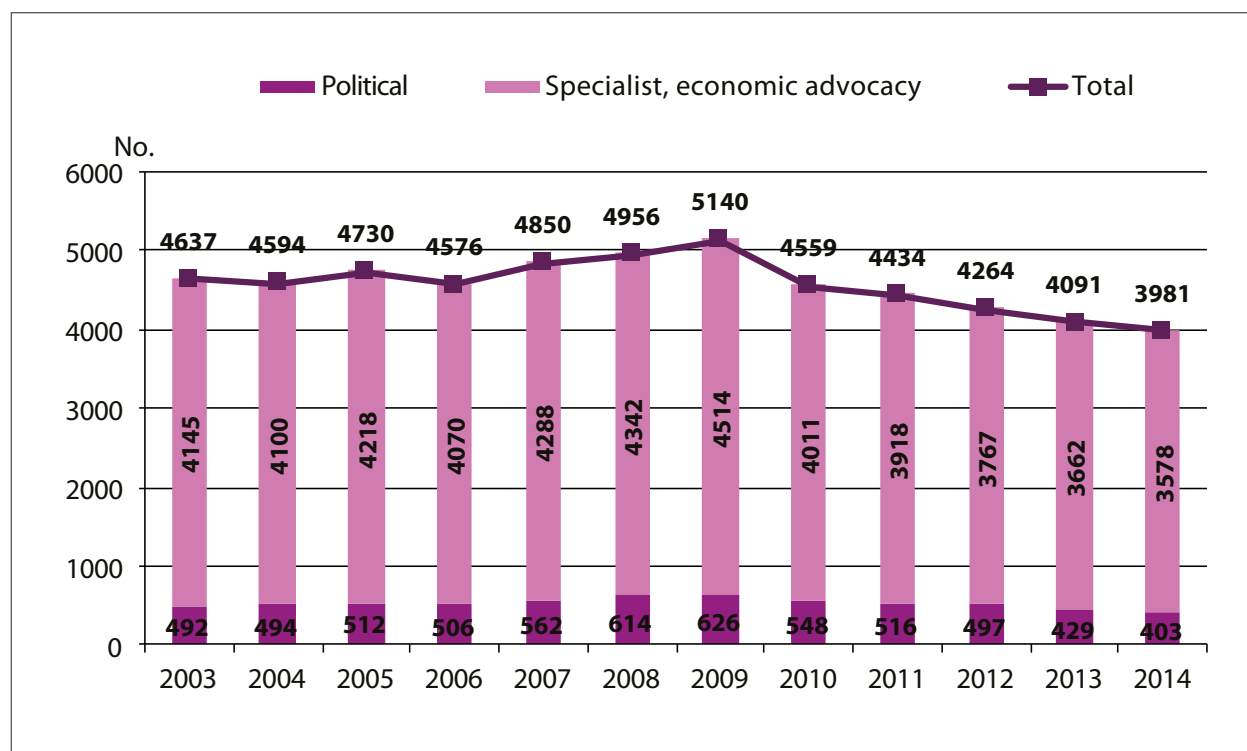
The number of non-profit organisations participating (based on self-reporting) occasionally or regularly in the policy analysis work of local (county or metropolitan) municipalities. *Source: HCSO*

Sub-indicator 4: FAITH IN REPRESENTATIVE DEMOCRACY

The Standard Eurobarometer survey reveals the extent to which a country's citizens' feel that their opinions matter in national politics. The question in the survey was "Do you tend to agree or tend to disagree with the following statements? 'My voice counts in Hungary.'" *Source: Eurobarometer.*



D.3.1. THE NUMBER OF NON-PROFIT ORGANISATIONS ENGAGED IN POLITICAL, SPECIALIST OR ECONOMIC ACTIVITY OR ADVOCACY



Source: HCSO

So that the opinion stated in the introduction can be expressed and can be passed from the representatives of society to political decision-makers, organisations that undertake the task of articulating and advocating interests are needed. Naturally, it is important to note that the number of these non-profit organisations does not itself sufficiently guarantee the implementation of effective advocacy, but in conjunction with the other indicators it presents a solid starting point. The number of non-profit organisations engaged in political, economic and professional advocacy in Hungary grew continuously from 2003 until 2009 (with the exception of 2006). In 2009 and 2010 there was a significant decrease, with the number of organisations falling from 5,141 to 4,559 a year later, and with this number diminishing even further every year after 2010. Between 2009 and

2013, the number of non-profit organisations engaged in political, economic and professional advocacy dropped by more than a thousand.

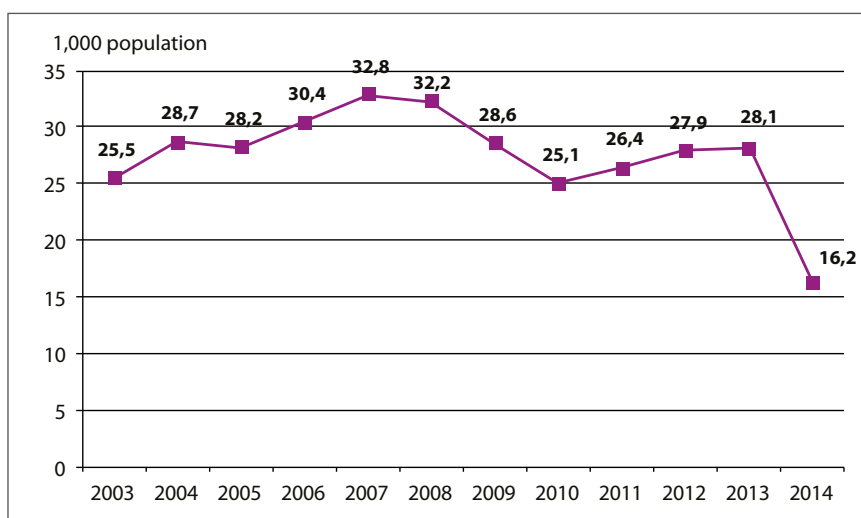
The majority (85–90%) of the examined organisations engage in professional or economic advocacy, and only a small portion of them conduct political advocacy. At the same time, it is important to emphasise that the indicator does not differentiate based on the size of the non-profit organisations, and thus no clear conclusion regarding trends in social dialogue can be drawn from this indicator. In order to make a precise assessment about this, we would need to know how significant and how active those organisations that shut down during the aforementioned time period were. The number of political advocacy organisations declined by 2.7% from 2013 to 2014.

The number of political, professional and economic advocacy non-profit organisations grew from 2003–2009 (with the exception of 2006) but has since declined.

D.3.2. THE NUMBER OF PEOPLE PERFORMING VOLUNTEER WORK AT NON-PROFIT ORGANISATIONS ENGAGED IN POLITICAL, PROFESSIONAL OR ECONOMIC ACTIVITY OR ADVOCACY

The amount of volunteer work performed for non-profit organisations engaged in political, professional and economic advocacy is important data that shows the citizenry's willingness to participate in the social dialogue and its level of activism. In the years following 2003, the number of volunteers significantly grew by 30% compared to the base year, from 25,000 to 32,000, but by 2010 it had returned to its original starting point. After 2010 it once again began to grow, although to a smaller extent. This trend did not continue, however, for in 2014 the number of

volunteers drastically fell, so that from one year to another it declined to 16,000 persons. The number of volunteers fell to



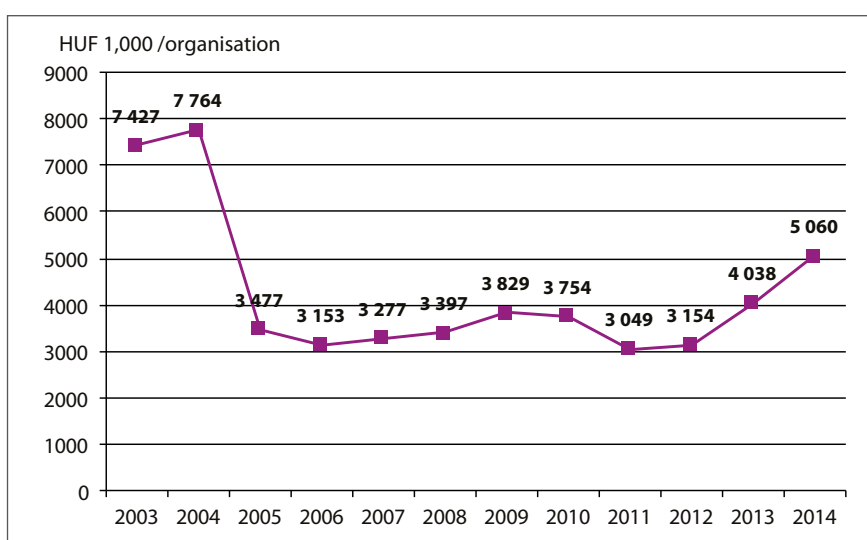
Source: HCSO

two-thirds that of the weakest years (2003 and 2010) and half of the strongest year (2007).

After a significant increase in the number of volunteers in the period between 2003 and 2013, a drop in the number of volunteers was observed. Following a subsequent slight increase, there was a drastic decline after 2014. Citizens are increasingly unwilling to spend part of their leisure time actively participating in social dialogue.

D.3.3. STATE SUPPORT FOR NON-PROFIT ORGANISATIONS ENGAGED IN POLITICAL, PROFESSIONAL OR ECONOMIC ACTIVITY OR ADVOCACY

State support for non-profit organisations engaged in political, professional and economic advocacy directly contributes to the functioning of the organisations, and thereby (in the majority of cases) indirectly facilitates social dialogue, which is one of the basic elements of democratic political systems. To understand the indicator, it is important to know that the distribution of support is not equal among the political and advocacy non-profit organisations; the indicator shows the average. State support for such organisations fell dramatically, by more than half, between 2004 and 2005, then, starting from 2006, slight but continuous growth could be observed until 2009. In the 2010 and 2011, state support for these organisations fell again, albeit moderately, and then from 2012 began to grow once again. Support for non-



Source: HCSO

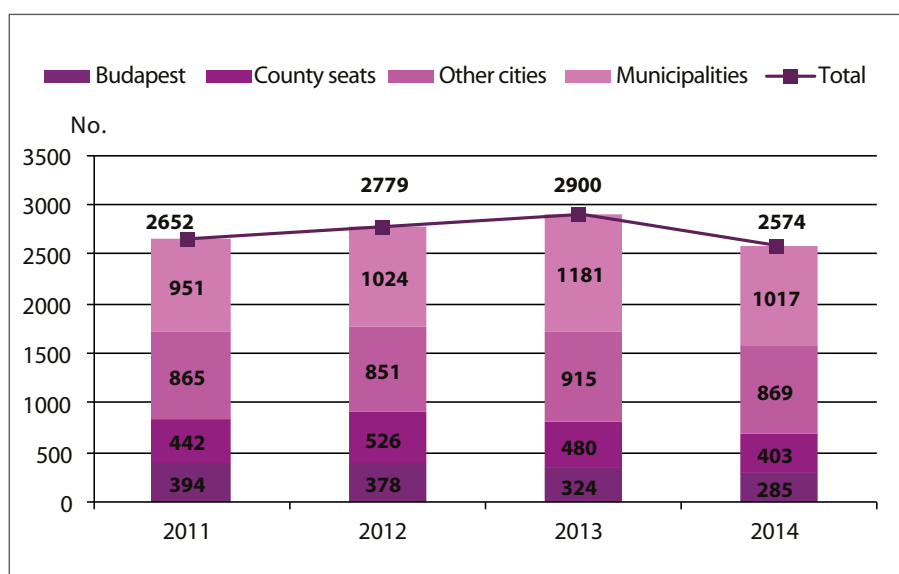
profit organisations as a percentage of a given year's budget significantly increased after 2012. adott évi költségvetéshez viszonyított támogatása 2012 után jelentősen megnőtt.

State support for political, specialist and economic advocacy non-profit organisations declined in the early 2010s before returning to their 2009 level in 2013. In 2015, the figure increased a further 25%.

D.3.4. THE NUMBER OF NON-PROFIT ORGANISATIONS ACTIVELY PARTICIPATING IN THE POLICY ANALYSIS WORK OF LOCAL (COUNTY OR METROPOLITAN) MUNICIPALITIES

Non-profit organisations actively participating in the policy analysis work of local (county or metropolitan) governments are a cornerstone of the development of social dialogue at the local level. Generally speaking, citizens and NGOs tend to be more easily mobilised, and in larger proportions, in local affairs than in national matters. This indicator clearly shows that the number of active local non-profit organisations grew continuously between 2011 and 2013, before drastically falling. Most such active

organisations can be found in rural areas, with the second greatest number in the towns. In Budapest and in the



Source: HCSO

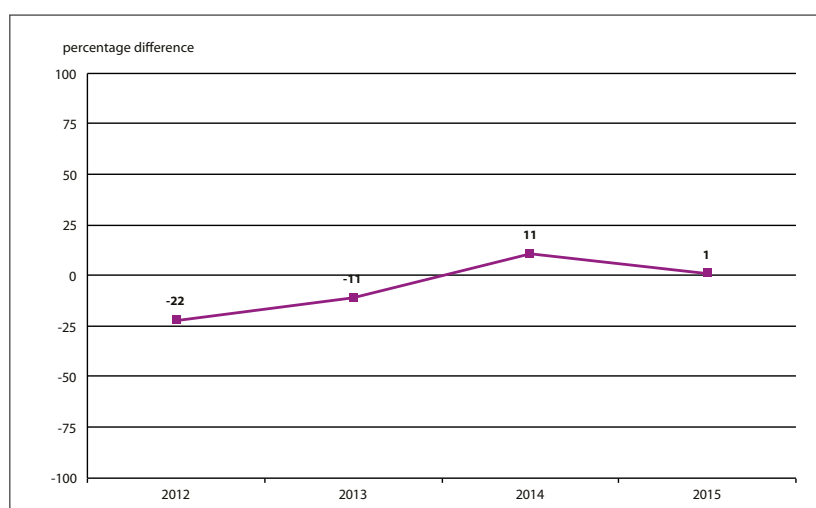
county seats, there were fewer organisations participating in the policy analysis work of municipal government.

The number of organisations participating in the policy analysis work of municipal governments, and thereby constituting a foundation for local social dialogue, has fallen.

D.3.5. FAITH IN REPRESENTATIVE DEMOCRACY

The Eurobarometer survey regularly assesses to what extent the citizens of certain Member States feel that they are heard. The measurement is based on a subjective citizens' rating, and it measures if citizens consider that their voices matter or not. The illustrated balance indicator shows the difference between positive and negative answers. Negative values therefore mean that negative responses are in the majority, or those who feel that their voice does not count. It can be seen that in 2012 there was a 22 percentage point majority of those who expressed their disappointment with respect to this aspect of representative democracy, although in 2013 this percentage declined.

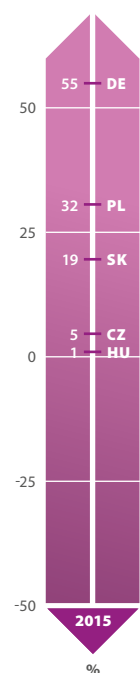
In 2014, the year of the parliamentary elections, this trend reversed, and those who held optimistic attitudes towards representative democracy were now in the majority. In 2015 the two camps were practically in balance, although with these fig-



Source: Eurobarometer

ures Hungary was in last place when compared to the Visegrád countries and Germany (see the graphic on the side of the page). In the years the survey was conducted, only 1–3% responded that they could not determine to what extent their voice mattered.

Although in 2014 and 2015, the percentage of those in Hungary who felt that citizens' voices mattered was higher, Hungary remains in last place in terms of faith in representative democracy when compared to the Visegrád countries.



Source: Eurobarometer

D.4. THE DEMOCRATIC EXERCISE OF LAW DIMENSION

The government capability characteristic of this appears in defence of democratic rights, in securing the democratic exercise of rights that appear as an element of the rule of law, which is ensured through the operations of domestic institutions and tools that guarantee the requirement for equal treatment. Within the concept of democratic exercise of law, it is worth differentiating between democratic legislation and the democratic rule of law. Mindful that democratic fundamentals are realised through the exercise of the law towards citizens, we must examine the democratic exercise of the law, or rather the prohibition of judicial tyranny, as the actualisation of principles.

Key-indicator: THE NUMBER OF CONSTITUTIONAL COMPLAINTS SUBMITTED AGAINST JUDICIAL DECISIONS

The number of complaints against judicial decisions submitted to the Constitutional Court in a given year. *Source: CCH*

Sub-indicator 1: THE UPHOLDING OF ECONOMIC FREEDOM

By combining multiple components, the indicator expresses the upholding of economic freedom. *Source: HF Economic Freedom Index*

Sub-indicator 2: OPEN GOVERNMENT

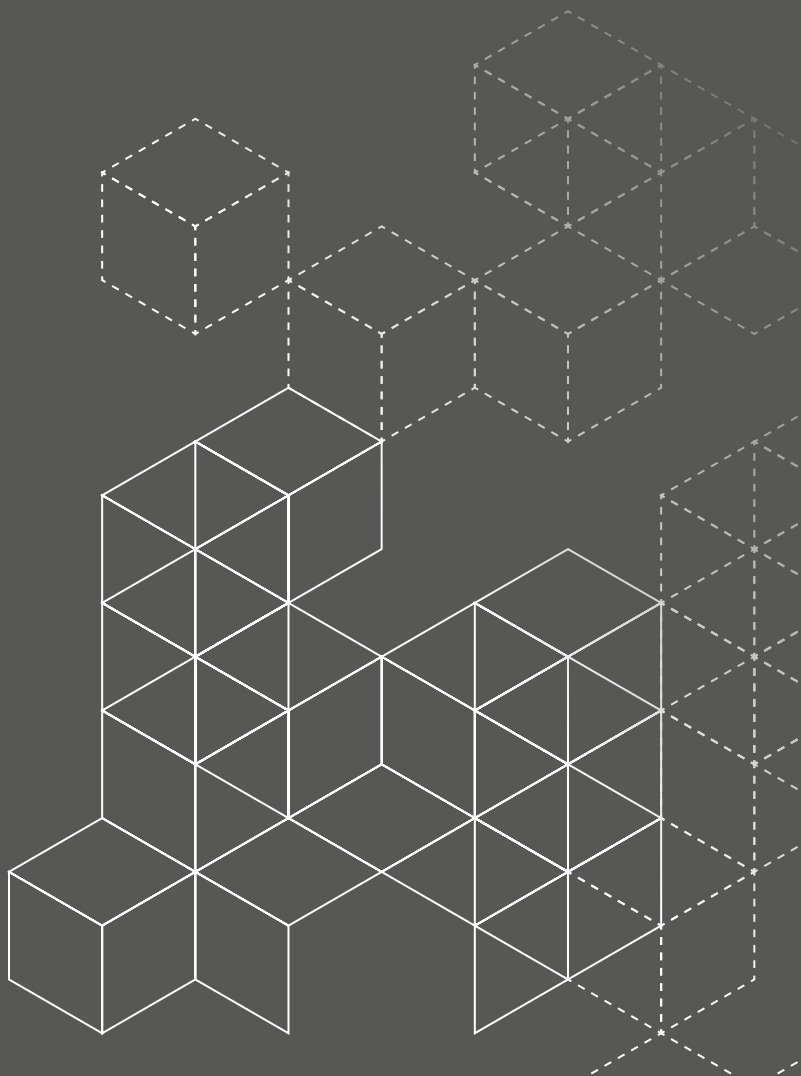
The indicator expresses the transparency of government measures through the ability to familiarise oneself with laws and government data, through the effectiveness of the right to information, as well as through citizen participation in public affairs and the examination of complaint procedures. *Source: WJP 2015. For the purposes of international comparison, the reference year for the data from Germany and Poland is 2013, and for Hungary and the Czech Republic it is 2014*

Sub-indicator 3: THE UPHOLDING OF FUNDAMENTAL RIGHTS

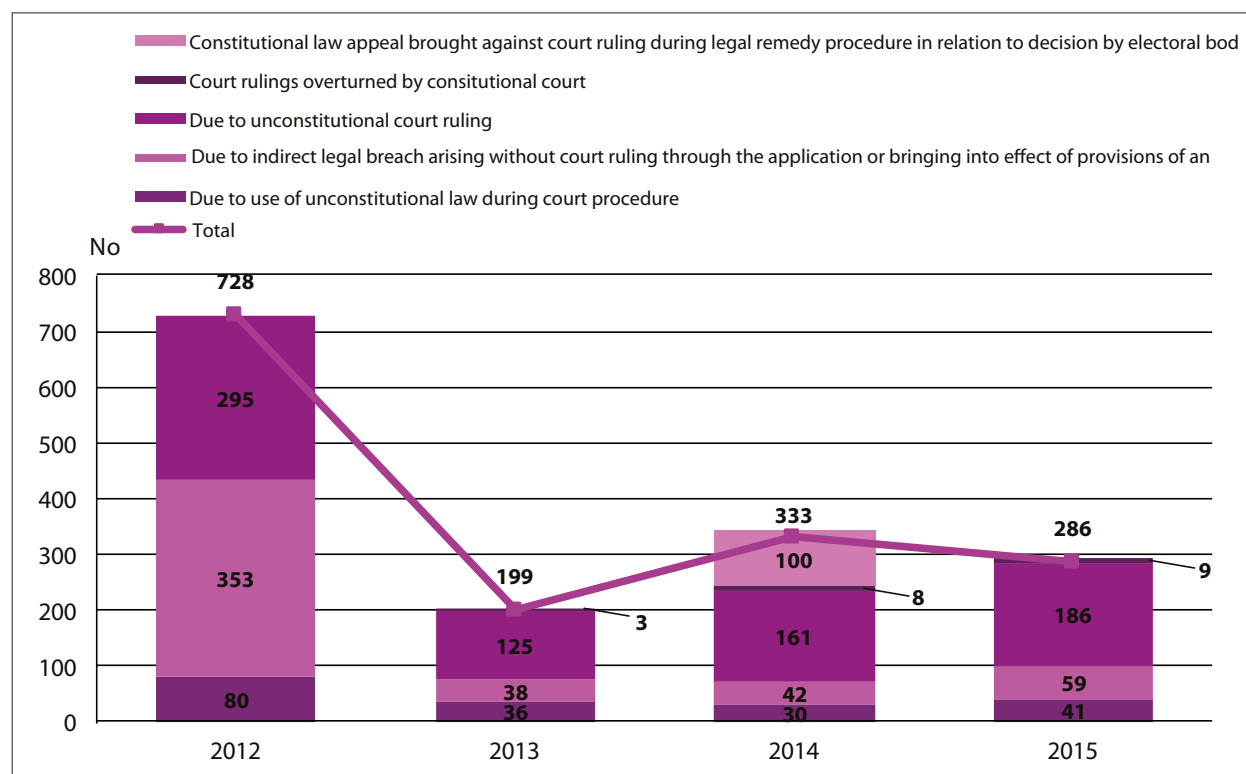
The indicator expresses the situation with regard to fundamental human rights. *Source: WJP 2015. For the purposes of international comparison, the reference year for the data from Germany and Poland is 2013, and for Hungary and the Czech Republic it is 2014.*

Sub-Indicator 4: EXERCISING THE RIGHT OF ASSEMBLY IN HUNGARY – THE NUMBER OF REGISTERED PEACEFUL GATHERINGS, MARCHES AND DEMONSTRATIONS

The number of peaceful gatherings, marches and demonstrations (hereinafter together: events) registered in the given year as part of the exercise of free assembly (pursuant to the act on the right of assembly) in which the participants may freely air their opinions. This does not extend to: meetings related to the election of members of parliament and council members, or to reporting meetings of members of parliament and council members; religious ceremonies, events and processions organised in the area of legally recognised churches and religious denominations; cultural and sporting events; events related to family events. *Source: NPH*



D.4.1. THE NUMBER OF CONSTITUTIONAL COMPLAINTS SUBMITTED AGAINST JUDICIAL DECISIONS



Source: CCH

With the entry into effect of the Fundamental Law and the law on the Constitutional Court adopted in relation to it, the opportunity arose to submit so-called 'genuine constitutional complaints'. Through the institution of the constitutional complaint, the Constitutional Court can oversee the activities of the judiciary from the perspective of their constitutionality.

The Constitutional Court, as a result of the "genuine constitutional complaint" institution, can examine the constitutionality of individual judicial decisions, and in cases where they are in violation of the Fundamental Law they can overrule them as invalid. This indicator is especially important, because the justice system has a great role to play in a democracy, and the Constitutional Court's changed

role fundamentally affects democracy. The indicator can show the justice system's constitutionality, which logically shows a relationship to the democratic exercise of the law, or rather the prevention of possible judicial tyranny. The anomalous data from 2012 is most likely the result of there not being a sufficiently established procedure for the use of this new legal institution. In that year, the greatest number of complaints arrived in relation to the application of the provisions of the law on unconstitutionality or during the period that law was entering into effect. In 2013, the number of constitutional complaints dropped to less than 30% of the total from the previous year, and then following this it significantly grew over the following two years, but it is still well below the numbers from 2012 in terms of magnitude.

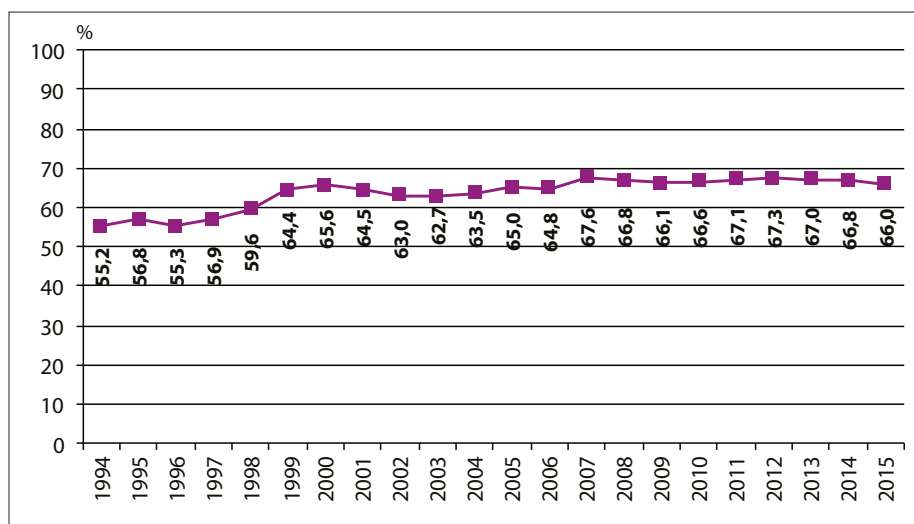
The initially high number of constitutional complaints against judicial decisions was the result of the launch of this new legal institution. The number of complaints in the following years significantly declined, but the institution's effect on the democratic exercise of the law can only be judged after a longer period.

D.4.2. THE UPHOLDING OF ECONOMIC FREEDOM

In economically free societies, the individual has a right to work, to consume, to produce or even to invest; labour, capital and goods flow freely without limits. The Heritage Foundation's (HF) Economic Freedom Index is an experiment to measure to what extent a country's legal system ensures freedom of the economy. Of others, the indicator takes into account regulations for the expropriation of private property and the upholding of contracts

agreed to between private individuals and companies. It is important to emphasise that the economy's freedom is by itself not an expression of how democratic a country is (in the case of the Arab dictatorships the right to property is secured, but we cannot talk of democracy), whereas in Europe the securing of this right is a fundamental right, for the existence of private property – considered together

with the other indicators – is the basis for a civil state. Through a percentage score the indicator shows to what extent a country's economy is free, with a high value being a positive evaluation. In Hungary, similarly to the Visegrád countries, the assessment of the economy's freedom has not changed in recent years. (See the graphic on the side of the page.)



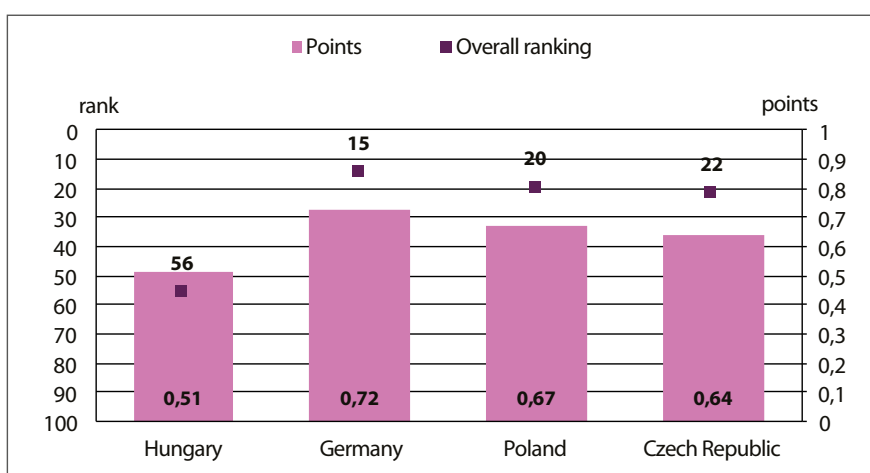
Source: HF

In Hungary, similarly to the Visegrád countries, the assessment of the economy's freedom has not changed over the previous years.

D.4.3. OPEN GOVERNMENT

The World Justice Project's Rule of Law index's 'Open Government' component is an attempt to measure government transparency. The measurement is based on subjective citizen and expert impressions, and measures to what extent citizens and experts judge the government to be transparent. The index has values between 0 and 1, with high values indicating positive attitudes. During the process of measuring government transparency, publicised laws, government data, the right to information, civil participation and complaint mechanisms are taken into consideration. Of the 102 countries assessed, Hungary falls into the middle range, but among

the V4 countries both Poland and the Czech Republic are ranked significantly higher. (There is no data for Slovakia.)

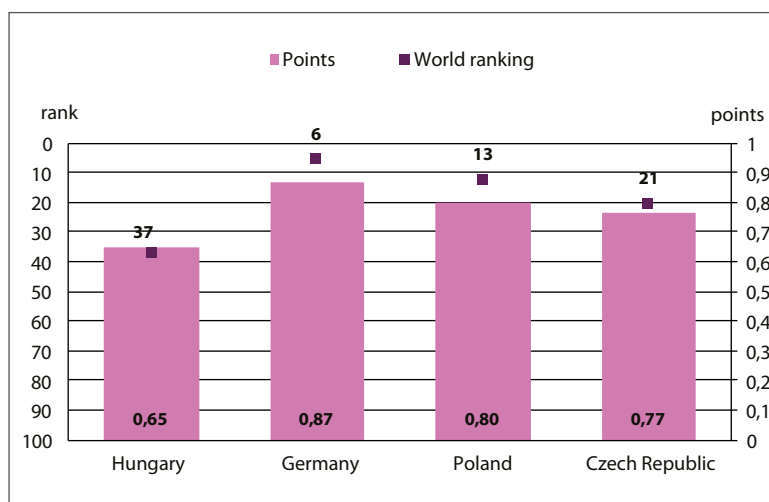


Source: WJP

Hungary, in the government transparency-rating Open Government indicator lags far behind when compared to the Visegrád countries and Germany, and is in the middle range of the 102 countries assessed.

D.4.4. THE UPHOLDING OF FUNDAMENTAL RIGHTS

The World Justice Project's Rule of Law index's 'Fundamental Rights' component is an attempt to measure the protection of fundamental human rights. The measurement is based on subjective citizen and expert attitudes, and measures how citizens and experts see the upholding of fundamental human rights. The index has values between 0 and 1, with high values indicating positive attitudes. The indicator is highly relevant, but at the same time can be characterised as unreliably subjective. The index consists of the following components: 1. the effective execution of laws to ensure equal legal protection; 2. the right to life and personal safety; 3. the right to a fair trial and the upholding of the rights of the accused; 4. freedom of opinion and speech; 5. freedom of conscience and religion; 6. the right to privacy; 7. the right of assembly



Source: WJP

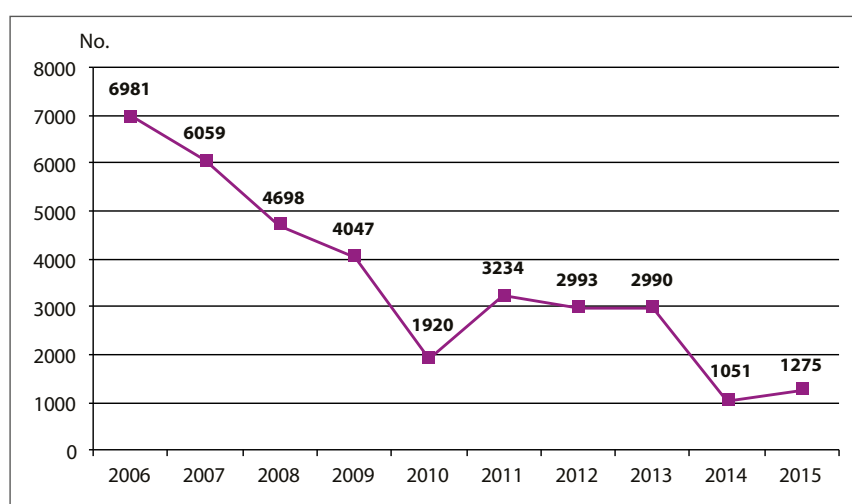
and association; 9. fundamental labour rights, including the right to collective bargaining, the prohibition of forced and child labour, as well as the elimination of discrimination.

Hungary belongs to the middle range in terms of the upholding of fundamental rights, but it is behind the Visegrád countries and Germany.

D.4.5. EXERCISING THE RIGHT OF ASSEMBLY IN HUNGARY – THE NUMBER OF REGISTERED PEACEFUL GATHERINGS, MARCHES AND DEMONSTRATIONS

One of the most important elements in the democratic exercise of the law is the right to assembly, through which citizens actively participate in public issues and express their opinions. This crystallises the most in the periods between elections, since the exercise of the right to assembly in this situation is one of the most important tools for expressing opinions. The indicator does not contain information on political demonstrations, which is why a decline can be seen in election years: the number of events in 2010 and 2014 significantly dropped. An exception to this

trend was the year 2006, which from the examined period saw the most demonstrations. The reason for this was the leaking of a speech by then Prime Minister Gyurcsány and the politically charged events associated with it. It is impor-



Source: NPH

tant to emphasise that the indicator counts pro-government demonstrations as well, nor does it account for differences in the sizes of the events. For the first time since 2011, 2015 saw an increase in the indicator's value.

The number of announced peaceful demonstrations held by exercising the right to assembly has declined since 2006.

D.5. THE FREEDOM OF THE PRESS AND FREEDOM OF SPEECH DIMENSION

The government capability belonging to this sector, ensuring the freedom of the media, is the most effective and useful tool for supporting dialogue between those governing and the governed, which at once also fulfils the responsibility of social control. A free media is the most effective tool for dialogue between the holder and practitioner of power – the decision-making executive authority – and the people, which also has a social control function. Democratic measurement of the government's capability can exclusively be performed within the framework of a free press. The measurement is generally, however, based on subjective factors, since freedom of the press indexes vary by country, and are subject to their own specific characteristics.

Key Indicator: PROPORTION OF PROGRAMMES FOCUSING ON NEWS, CURRENT EVENTS, POLITICS AND ECONOMICS

The breakdown of radio and television programming time by the content as indicated in the title, expressed as a proportion of total annual broadcasting time. *Source: HCSO*

Sub-Indicator 1: PROPORTION OF MEDIA TIME ALLOTTED TO OPPOSITION POLITICIANS AS A PERCENTAGE OF TOTAL SPEAKING TIME ALLOTTED TO ALL PARLIAMENTARY PARTIES ON THE PRINCIPAL NEWS PROGRAMMES

The proportion of media time allotted to opposition politicians as a percentage of total speaking time allotted to all political parties on the principal news programmes. Based on speaking time, the ratio of the presence of opposition politicians on the principal news programs relative to all parliamentary politicians features. *Source: NMIA**

Sub-indicator 2: ENVIRONMENTAL DEMOCRACY INDEX

Through four sub-dimensions (transparency, access to environmental information, participation and justice) the indicator expresses a given country's performance in the right to information in the area of environmental protection. *Source: Environmental Democracy Index, WRI*

Sub-indicator 3: CONSOLIDATED PRESS FREEDOM INDICATOR

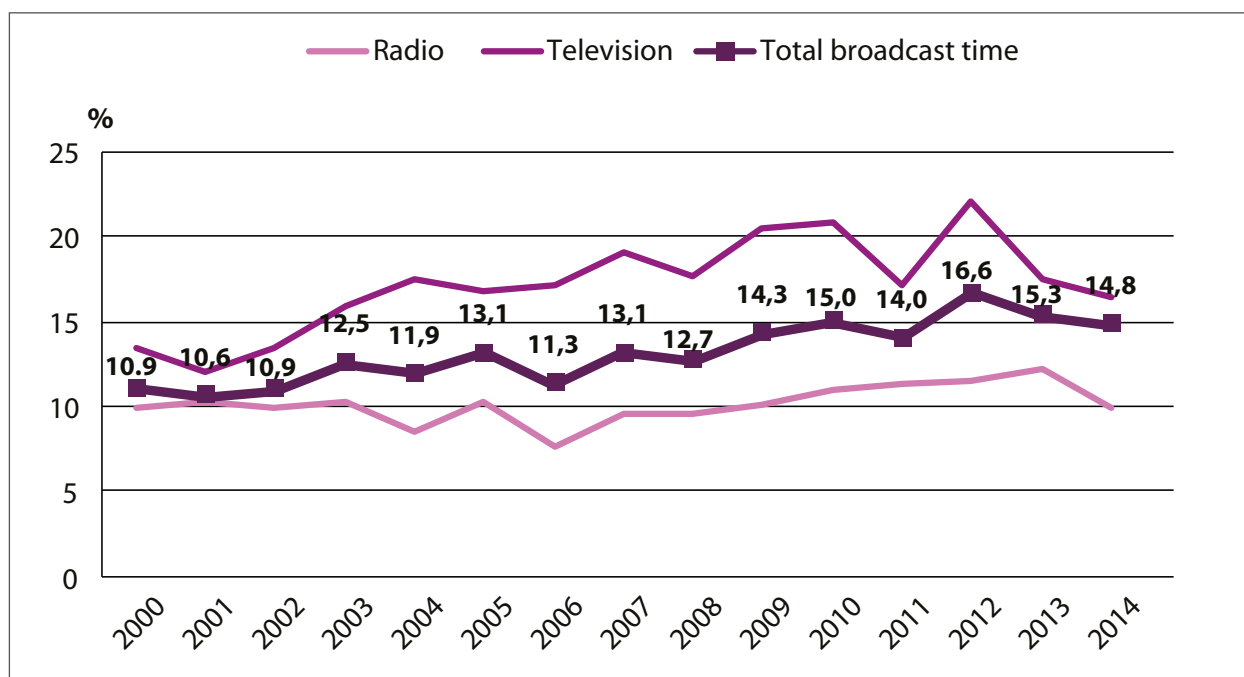
The consolidated press freedom indicator, using a scale of 100 points, presents Freedom House's Freedom of the Press report, Reporters Without Borders' World Press Freedom index, as well as the Civil Liberties sub-index from the Economist Intelligence Unit's (EIU) Democracy Index in a manner where higher values mean more press freedom. *Source: FH, RWB, EIU*

Sub-Indicator 4: THE NUMBER OF ENTERPRISES ENGAGED IN PERIODICAL PUBLISHING, PROGRAMME PRODUCTION AND BROADCASTING

Based on statistical core activity, the number of functioning enterprises in the given year engaged in publishing newspapers, magazines or other periodicals or radio or television programming and/or broadcasting. The comprehensive data set was created from the HCSO's database containing structural information on businesses operating in the given year, whose source is annual data collections and tax information on business statistics. *Source: HCSO*

* This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.

D.5.1. PROPORTION OF PROGRAMMES FOCUSING ON NEWS, CURRENT EVENTS, POLITICS AND ECONOMICS



Source: HCSO

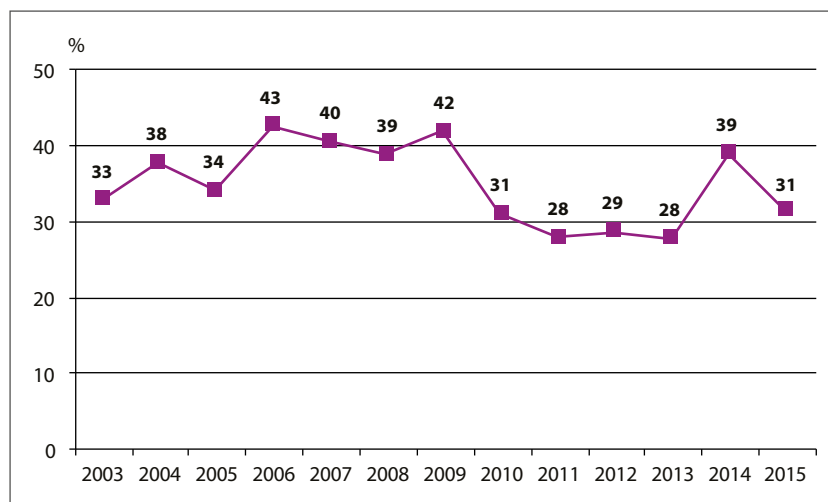
In terms of our democracy study's press freedom-related indicator, our basis should primarily be the political and economic-themed press. One of the fundamental measures of this can be the percentage of the total media that is related to politics and the economy. The data considers programme length, not the size of audience, so the more popular channels are presented with equal weight to those with a smaller audience. It is important

that the data presented here contains both commercial and public channels. The percentage of television and radio programmes dealing with public affairs grew from 11% in 2000 to 17% in 2012, after which a decline was observed. Television has a higher percentage of programmes dedicated to news, current events, politics and economics than radio: based on the 15-year average, the rate is 10% for radio and 17% for television.

Since 2012, the percentage of news, current events, politics and economic programmes has slightly decreased.

D.5.2. PROPORTION OF MEDIA TIME ALLOTTED TO OPPOSITION POLITICIANS AS A PERCENTAGE OF TOTAL SPEAKING TIME ALLOTTED TO ALL PARLIAMENTARY PARTIES ON THE PRINCIPAL NEWS PROGRAMMES

Appearances by opposition politicians in the media is essential in a democratic state, in part because it serves as oversight over the government in power, and in addition an opposition party can offer a political alternative to the governing party's position. Accordingly, the indicator desires to measure the rate by which the opposition uses the press, although understanding the data is made somewhat more difficult by the fact that the palette of opposition parties may change in an election year. According to the National Media and Infocommunications Authority's sample monitoring of the media, examined on the basis of speaking time on the main news programmes, the proportion taken up by opposition politicians – relative to that of all parliamentary politicians – is consistently high, fluctuating in the range of 28–43%. At the same time, over the last ten



Source: NMIA

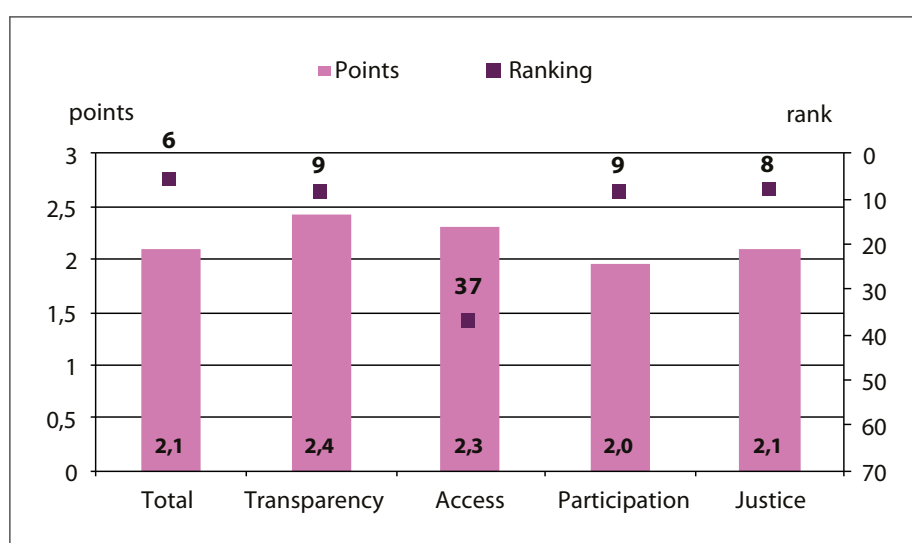
years the media dominance of governing politicians has not been successfully broken even once. In election years (2006 and 2014) the presence of opposition politicians is typically quite high, but the year 2010 was an exception as opposition politicians accounted for only 31% of the total.

From 2014 to 2015, the proportion of time devoted to opposition politicians fell from 39% to 31%, at the same time it can be determined that opposition use of the media is proportional to their power in parliament.

D.5.3. ENVIRONMENTAL DEMOCRACY INDEX

The indicator (Environmental Democracy Index, World Resources Institute) measures the effectiveness of the right to information with regard to environmental protection. This index, in an area that is increasingly important internationally, measures the ability to access information via transparency, access, participation and justice, and is therefore currently one of the most important topics of the future. In 2014, Hungary performed exceptionally well in this area: ranking 6th

of 70 countries with 2.1 points. This prominent position is somewhat diminished, however, by the fact that Western



Source: WRI

European and Scandinavian countries are rarely included in the study.

In Hungary access to environmental information can be considered to be developed.

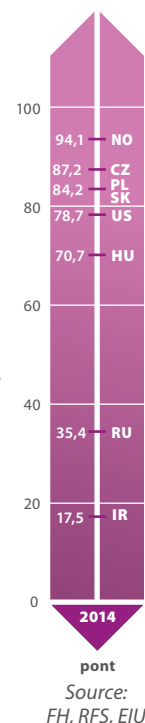
D.5.4. CONSOLIDATED PRESS FREEDOM INDICATOR

The consolidated press freedom indicator, by using a 100-point scale, presents Freedom House's Freedom of the Press report, Reporters Without Borders' World Press Freedom index, as well as the Civil Liberties sub-index from the Economist Intelligence Unit's Democracy Index such that higher values mean more press freedom. An undeniable advantage of these indexes is that they are long-established and use a standardised methodology to evaluate the practices of the various countries. An additional advantage is their widespread familiarity, prestige and simple interpretation. Methodologically, the indicators are characteristically of low reliability. Results can change owing to subjective elements. The summation of the three indexes results produces a degree of robustness. Although minor changes in the indicator cannot be interpreted, the validity of the major differences is beyond doubt. To understand the 71–74 point Hungarian data, Norway, which received



Source: FH, RFS, EIU

94 points can serve as a benchmark which can be considered a liberal democracy both in terms of legal regulations and exercise of the law. The opposite pole would be theocratic Iran, which received 18 points from the consolidated press freedom indicator. (See the graphic on the side of the page.)

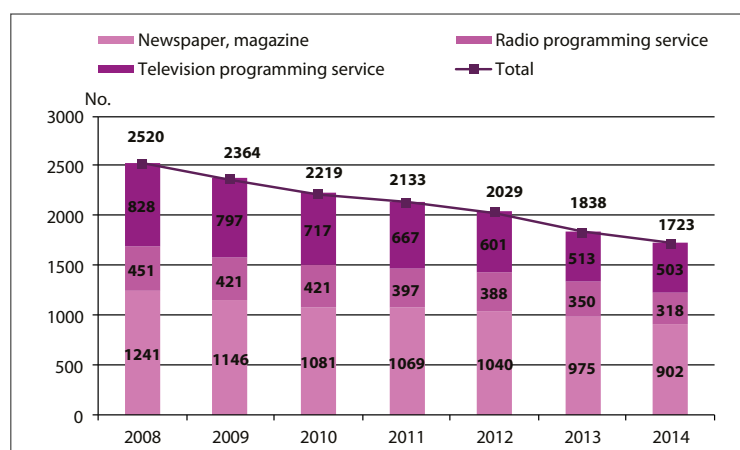


In the three years assessed, the freedom of the press did not change significantly, but every V4 country performed better in this area.

D.5.5. THE NUMBER OF ENTERPRISES ENGAGED IN PERIODICAL PUBLISHING, PROGRAMME PRODUCTION AND BROADCASTING

The indicator, which has a quantitative characteristic, is loosely connected to measuring press freedom, and shows the number of enterprises concerned with printed publications, programme creation and broadcasting. On this basis, there has been a slow decline in the number of professional media providers since 2008.

Over the last seven years, the number of enterprises has declined by nearly 31%. The drop, although it applies to every sector – television, radio and print media – is not uniform in extent across them. While the number of enterprises engaged in publishing printed publications dropped from 1,241 to 902 by 2014, that is, it shows a decline of 27%, the number of television programming providers fell from 828 to 503 in that period, which entails a decrease of 39%. The number of radio programming providers decreased from 451 in 2008 to 318, or in other words, it shows a drop of 29.5%. In 2014, the number of enterprises fell from



Source: HCSO

1,838 to 1,723, and this was a decline of 6% compared to the previous year. At the same time, it can be stated that there is still a significant number of Hungarian and multinational companies active in this sector and providing sufficiently diverse and colourful television and radio programming and print media products

The shrinkage observable in this area continued in 2014, as the number of enterprises significantly declined by 6% in a single year.

EFFECTIVE PUBLIC ADMINISTRATION

SUMMARY¹

The aim of this impact area and points of connection.

The effective public administration impact area was defined in the Good State conceptual system to be of a horizontal and supplementary character in comparison with the other impact areas. In our interpretation, administration here refers to the narrower role that describes the steering mechanism serving as the infrastructure for the state's operation. Public administration enables other actors to more effectively perform their functions of directing society and providing public services. At the same time, this "behind the scenes" position is not an exclusive one, since public administration also comes into direct contact with the citizenry, who manage affairs and acquire rights and obligations through it; that is, they too utilise the public administration infrastructure. It is important, however, to point out that this "use" is also a tool for further enforcing citizens' claims and respecting rights, which can already be construed and investigated within the spheres of the other impact areas.

Criteria for determining the dimensions.

The individual dimensions portray the effective public administration capabilities that are perhaps akin to the concept known from the public policy literature as administrative capacity. The building and expansion of the latter also as a requirement for the public administration of EU Member States, is from time to time formulated along the following principles: raising the standard of administrative services, reducing the burdens on clients and assuring respectful treatment of them, and efficient use of assets and resources. It is as an analogy for this and in line with the objectives that we have specified the 4+1 dimensions of the impact area, that is, the most important capabilities of public administration:

(1) *Accessibility.* With this dimension, we examine how the state strives to dismantle obstacles to access to public administration services arising from individual life-situations, and how it exploits advantages arising from them. With the unprecedented pace of development and dissemination of information and communications technology, the digitalisation of public administrative processes has today become the norm, rather than the exception to the rule or a movement toward modernisation. We measure the features of this normalisation, both from the supply and demand sides of public administration, what channels for administration are available that differ from the traditional, and at what level of development they are, and to what extent these services are utilised by customers.

(2) *Customer burden.* This dimension measures the same relationship as the previous dimension: examining the system of relationships between public administration and the population with the aim of identifying and measuring stresses arising when customers conduct their administrative affairs, as well as considering services that reduce the load on public administration. These so called 'e-services' in support of the forward progression of administrative affairs no longer simply widen the traditional administrative channels for core services, but are now expressly aimed at reducing customer loads with a pro-active approach.

(3) *Resource management.* The principles of utilising public funds, budget constraints, and the demands of society all necessitate the prudent and cost-effective husbandry of personnel and financial resources. It is apparent that the aims of this dimension compete with the previous two dimensions, with their largely resource-intensive development. The main driver of administrative reorganisation is the faith placed in increased efficiency, and for this reason, here it is not merely from the point of view of economic consideration that we examine the related capabilities, but from criteria of effectiveness in light of the other dimensions as well.

(4) *Preparedness.* In addition to the processes and organisation, the third great subsystem of the framework of the comprehensive examination of public administration is human resources. The preparedness of personnel making up the public administrative staff determine the quality of public administration and the performance-capability of the organisations in a fundamental way. Only a staff of prepared, suitably skilled and adequately motivated professionals is capable of smoothing out fluctuations in performance, in addition to providing flexibility even among conditions of diminishing resources and worsening environmental conditions.

(5) *Satisfaction.* Evaluating the public's perception of the four dimensions listed above is the function of this dimension, which measures and accounts for the capability of public administration to manage its services, organisations and personnel at an adequate level of social acceptance. We seek the answer to whether the public knows, understands and uses public administration, as well as to whether their expectations are being met, whether their expectations match their requirements, and finally, whether they are satisfied with the public administration. For the first time since the launch of the Good State and Governance research programme, a representative survey was conducted of the population's experiences with and opinions on public administration as customers. The survey's limits have not made possible an analysis of the deeper correlations in regards to customer preferences and service-use habits.

¹ The authors of this chapter are Krisztián Kádár Dr. jur. (workgroup leader), Sándor Csuha, Leticia Fekete, Anita Fibinger and Zoltán Tamás Tarpai.

Criteria for selecting key and sub-indicators.

Similarly to the other impact areas and owing to the complexity of the subject under assessment, we have attempted to strike a compromise between the precision of measurement and the intelligibility of the narrative. It is important, however, to point out that the selected indicators only provide characterisations of the given administrative capabilities, and do not provide a seamless and comprehensive analysis of them. Accordingly, what we agreed to undertake was to shine a light on many of the aspects of the performance concept of public administration explained above. The focus of the assessment also offers diverse solutions. While we have attempted to present a direct or representative picture of the entire population, certain curtailments had to be decided on in the interests of measurability. Hence, in order to characterise the administrative procedures, we took as a basis a “basket” of services most frequently used by residential customers (the citizens), with the presumption that this narrower set is able to provide data valid for the predominant majority of use.

International outlook

From our theses above it follows that a narrower understanding of public administration provides an opportunity to take a better account of Hungarian public administration traditions, administrative culture and certain contextual characteristics, as opposed to international measurements that necessarily neglect specifics and contain abstract criteria. From a different perspective, because of their character, the indicators tailored to Hungarian public administration (due to the absence of measurements made on the same basis and methodology) are not useful for international comparison. There are one or two exceptions per dimension for indicators based on international measurements, which we have included in part from Eurostat, the World Economic Forum and the OECD.

Beyond these random examples, it is worth mentioning what is in our opinion the most complex international comparison that aspires to be relatively objective: the OECD's Government at a Glance (GaaG) survey conducted since 2009 regarding Member States' governmental structure, functioning, results and good practices. The averages of the measurements provide an overall picture of what the strengths and weaknesses of the government's functioning at the European level are. They also include numerous indicators, which the Member States themselves can develop further to better understand specific working areas. In the following section we have taken one or two comprehensive outlooks as dimensions.

(1) *Accessibility.* The 2013 GaaG examined the accessibility and quality of public administration services also according to the services' affordability in addition to the above. An interesting aspect of the accessibility dimension is the civilian population's degree of involvement in the provision of public services through community or volunteer groups, which can

be correlated with the satisfaction dimension. According to assessments, the closer the provision of a service is to citizens, the more satisfied they are with it.

(2) *Customer burden.* With regard to the load placed on citizens, the timeliness of services, i.e. whether services were provided in a timely manner can also be evaluated. The timeliness of services is assessed by the 2013 GaaG in the area of income tax filings (processing of online v. paper submissions). Indicators regarding the quality of public administration services also make reference to the level of client load, for example client charters that provide customers information on their rights and responsibilities, which can reduce customer orientation times.

(3) *Resource management.* Resource management is a fundamental indicator of the governmental structure's employee numbers as a percentage of total workers. Within this, it examines the percentage of employees in central and local public administration.

Measuring the percentage of women in the labour market and within that the government received special emphasis. An important indicator of HR management is the compensation (salaries and benefits) of those working in public administration, which has been measured since 2008. There is a different indicator for the compensation of upper and middle management, for experts, those with higher education qualifications, as well those performing secretarial work.

(4) *Preparedness.* The survey conducted in 2010 that examined the preparedness of governmental advisers and their ability to assist in strategic decision-making can be connected to the preparedness dimension. Two questionnaires from two perspectives (those from ministerial heads, as well as advisers) examined the role of governmental advisers, i.e. what activities they perform (strategic advising, coordination, policy implementation, media activities, directing public employees, etc.).

(5) *Satisfaction.* A close relationship has been established between confidence in the government and citizen satisfaction. Measuring confidence was one of the central questions of the 2013 GaaG. This questionnaire asks about the level of confidence in general terms, and does not conduct a deeper exploration of the influencing factors. Separate measurements are conducted to discover satisfaction with public services in the areas of education, health care and justice.



H.1. ACCESSIBILITY DIMENSION

Key indicator: THE USERS OF DEVELOPED E-GOVERNMENT SERVICES AS A PROPORTION OF INTERNET USERS

The indicator shows the percentage of internet users (i.e., those who have used the Internet within the past 12 months) aged 16–74 who have on at least one occasion in the past 12 months filled out and uploaded an electronic form in the course of communicating or managing affairs with any authority. The indicator is part of the EUROSTAT data provision service measuring the use of information and communications technology among individuals and households, which takes as its basis the Hungarian Central Statistical Office's questionnaire survey of a representative population. *Source: Eurostat*

Sub-indicator 1: THE NUMBER OF TYPES OF AFFAIRS THAT CAN BE ARRANGED AT GOVERNMENT WINDOWS

The cumulative number of types of affairs (coherent or related groups of individual affairs as defined by the competence and jurisdiction of the administrative body) that can be – as provided for by the legislature – arranged by customers at government windows operating as one-stop shop customer service organisation units at county government offices. *Source: Government Decree 515/2013. [XII. 30.] on government windows*

Sub-indicator 2: THE AVERAGE DISTANCE MEASURED BY ROAD TO THE NEAREST GOVERNMENT WINDOW OUTSIDE THE CAPITAL

For settlements located outside the Hungarian capital, this is the average distance measured on public roads between the settlement's centre and the nearest government window in the county. It is recalculated annually, by running thousands of algorithms, in the case of each settlement, to determine which government window is the closest within a county, and what the distance is. These (smallest) distances are then averaged out. *Source: COAEPS, HCSO, Google Maps, NUPS**

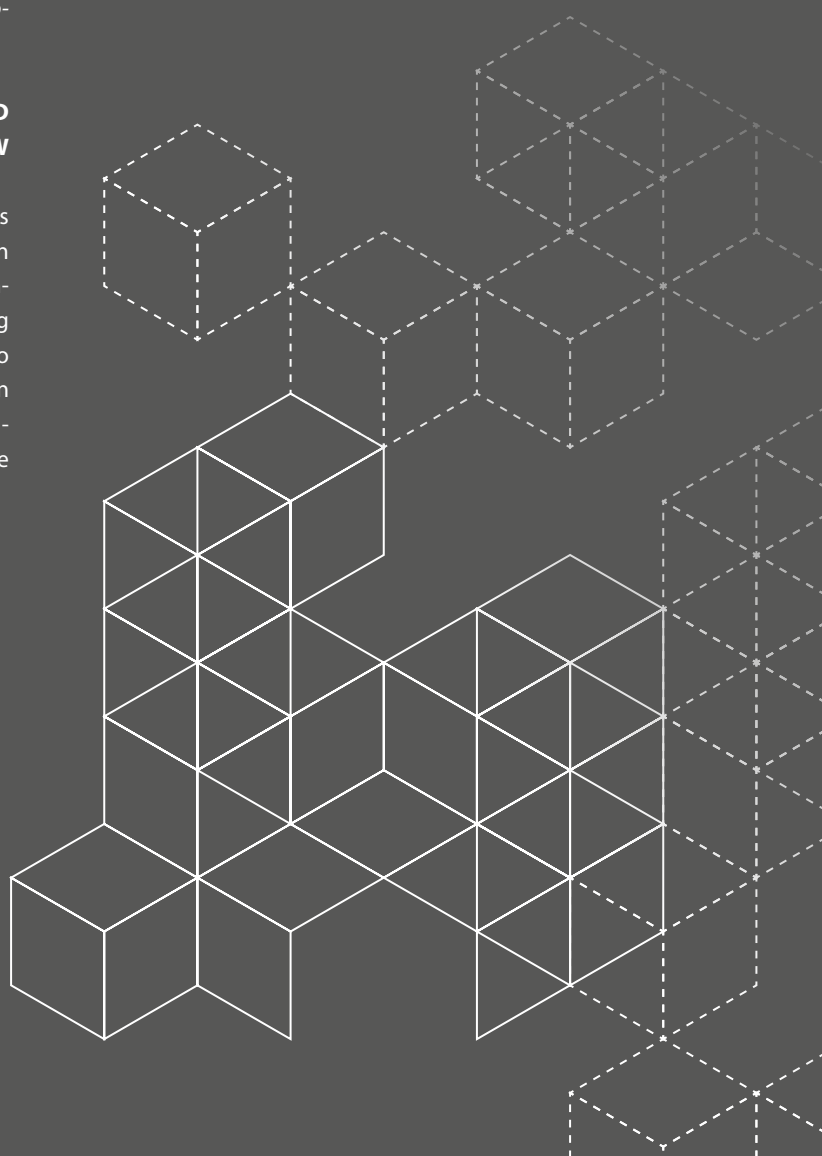
Sub-indicator 3: THE NUMBER OF REGISTRATIONS AND ELECTRONIC DOCUMENTS UPLOADED AT CUSTOMER PORTAL

The indicator shows the number of users registered for the Customer Portal (Ügyfélkapu) service available on the Magyarország.hu government portal, as well as the volume of documents sent by them to institutions via the Customer Portal. *Source: NISZ*

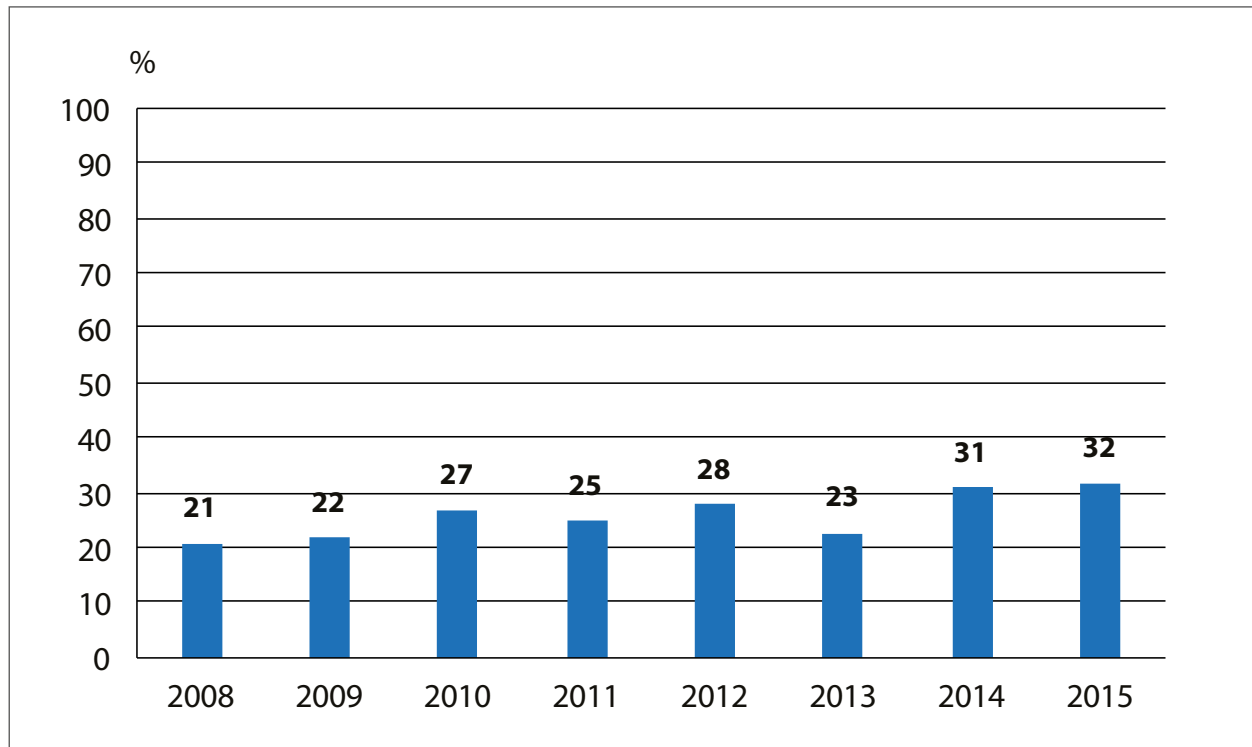
Sub-indicator 4: THE NUMBER OF CALLS TO THE NTCA CUSTOMER INFORMATION AND ADMINISTRATION SYSTEM THAT END WITH AN ADMINISTRATIVE MATTER BEING SUCCESSFULLY COMPLETED

The annual number of customer calls received by the Customer Information and Administration System (ÜCC) operated by the Hungarian National Tax and Customs Administration (NTCA) that after successful telephone identification are concluded with the definitive completion of a customer service. *Source: NTCA yearbooks 2010–2014 and NTCA data*

*This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.



H.1.1. THE USERS OF DEVELOPED E-GOVERNMENT SERVICES AS A PRO-PORTION OF INTERNET USERS



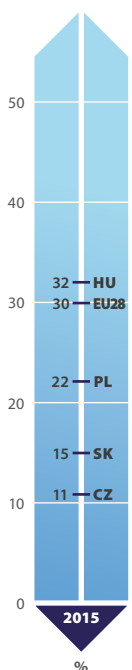
Source: Eurostat

The development of digital administration (e-government) has been a strategic direction on the agenda of both the EU and the Hungarian government for the past decade and a half. The continuous technological development since the beginning has made the exact definition of e-administration, and thus its measurement is problematic. There is agreement, however, that although, broadly interpreted, all customer-side or government-side activities conducted in the course of arranging administrative affairs that take place with the use of information and communications technology can be considered to be e-administered affairs, significant differences can be discerned in the level of development of the individual methods used. Based on the methodology developed by CapGemini in the 2000s, it is possible to differentiate, at the time of using the administrative services (in the course of communicating with the government authority or arranging affairs), among four so-called maturity levels: (1) obtaining information via the internet; (2) downloading forms; (3) electronically submitting forms downloaded electronically; (4) the possibility of comprehensively transacting the entire service on-line without making a personal appearance. The indicator selected to be the Key indicator of the Accessibility dimension is the use of e-government services

by the public (specifically the submission via internet of electronically filled-out forms), and therefore primarily measures the demand, at the same time giving us an indirect picture of the supply side as well, since in the absence of an available service, there will obviously be no use. We employed a similar approach in narrowing the focus to a higher level of development, since the use of a more mature level of service is presupposed, without room for doubt, on the use (or the capability to so) of levels of lower complexity.

Another criterion playing a role in the selection of the key indicator was that the reasons for non-usage should be focused on the public administration's sphere of interest. The examined age group was in part limited to the population between 16–74 who independently take care of administrative tasks, and in part because the examined population consists of internet using citizens (thereby limiting digital illiteracy and other minor reasons relating to passivity as the reasons for lower use).

The graph shows how the Hungarian population self-reports its use of CapGemini third level services. According to it, as a result of a growing trend, in 2015 almost every third internet user submitted a form online in the previous 12 months (in 2008 this was true only for every fifth internet user).



Source: Eurostat

The use of electronic management services shows a positive trend due in part to the expansion of the use of information and communications technologies and in part to the expansion of electronic public administration systems. This value is slightly above the EU average.

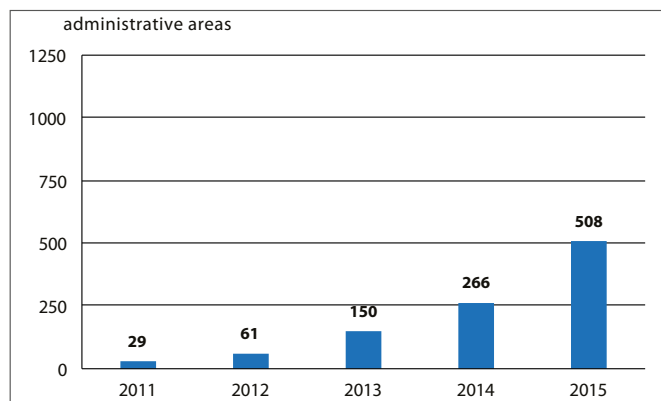
H.1.2. THE NUMBER OF TYPES OF AFFAIRS THAT CAN BE ARRANGED AT GOVERNMENT WINDOWS

From the point of view of customers' access to services, the simplification of administrative processes is of high importance, and in this, among the currently known models, the so-called single window system of arranging affairs at government windows (hence, the possibility of taking all actions relating to the procedures and concerning the greatest possible number of types of administration) is the most suitable. Since the introduction of the government windows in 2011, the number of administrative areas that can be arranged has grown steadily, with the government setting them forth in a comprehensively listed decree.

When interpreting the indicator, it is important to note that with respect to the covered administrative areas, services of varying complexity and type are available as per the following:

- (1) submitting petitions and receiving and sending notifications;
- (2) providing information regarding the progress of the procedure;
- (3) administering affairs immediately or within one's own competence;
- (4) supplementary services to administering individual affairs.

The changing classification of legal statutes does not allow for the indicator to be further broken for chronological comparison, but



Source: Government Decree No. 515/2013. (XII.30.)

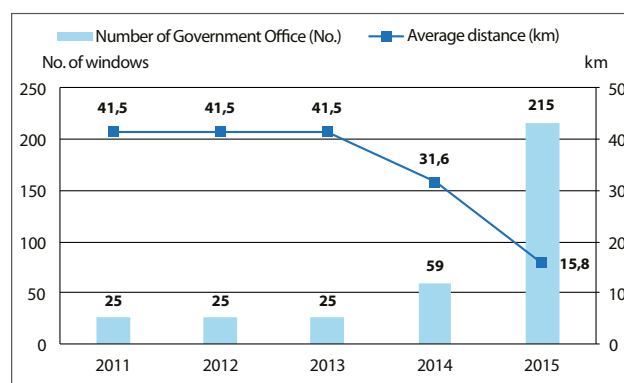
based on the 2015 service portfolio more than half of the types of administration involve sending material, while more than 20–25% are composed of definitively concluded administration and exclusively for information provision.

The easily observable expansion in the number of tasks that can be managed at government windows is a development not only in terms of quantity, but also quality in the scope of government customer service, thanks to the integration of the more developed government-issued document office services.

H.1.3. THE AVERAGE DISTANCE MEASURED BY ROAD TO THE NEAREST GOVERNMENT WINDOW OUTSIDE THE CAPITAL

Fundamentally determining accessibility, alongside the expansion of the number of types of administrative affairs that can be arranged at government windows, is the geographic distance from the physical customer service points. At the time when these were physically situated, one of the criteria was that they be installed in locations that are easily accessible for the customers (e.g. railroad stations, near busy public spaces).

The gradual expansion of the number of integrated customer service windows has made access to administrative services easier for the rural population. Serving as an index for this is the technologically advanced Google Maps road distance measurement application, which by using an algorithm consisting of thousands of calculations aided us in determining the distance between the centre of all of the communities in a given county and the closest government window belonging to that county, and then the national average of all such county information (not including data from Budapest).



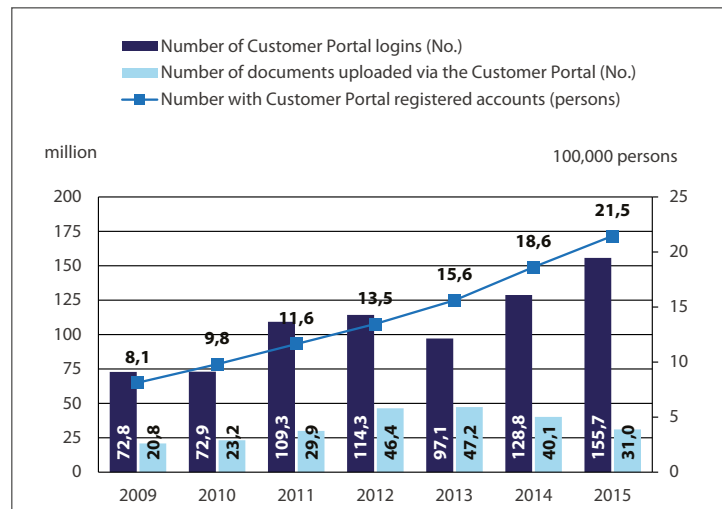
Source: NUPS

In this way, the Sub-indicator is able to give a more rounded look at geographic access, and although it is easy to see that the growth of the number of government windows if dispersed by region reduces the value of the Sub-indicator, it can also be applied as a useful outcome indicator of the uniformity of network development.

By the end of 2015, the network of second generation government windows continuously being constructed on the basis of government offices is a good reflection of integrated management of administrative affairs that is becoming closer to the public.

H.1.4. THE NUMBER OF REGISTRATIONS AND ELECTRONIC DOCUMENTS UPLOADED AT CUSTOMER PORTAL

The Customer Portal (CP) is the public administration's electronic customer log-in and identification system. It allows users, after verifying their personal identity for a single session, to securely communicate with government offices. Similarly to the dimension's Key indicator, the Sub-indicator measures usage of e-government services, with two important differences. While the Key indicator is based on a subjective survey taken from a sample, the portal statistic is taken from mo.hu's operating log database. The other difference can be found in the range of users: companies also appear among the CP users. With the growth in the supply of e-government services, the number of CP registrations and traffic data have also grown steadily, with more than 2.1 million users making use of 132 different services requiring CP registration. The decline in the number of uploaded documents over the previous years is the result of an increase in the use of alternative solutions (e.g. the



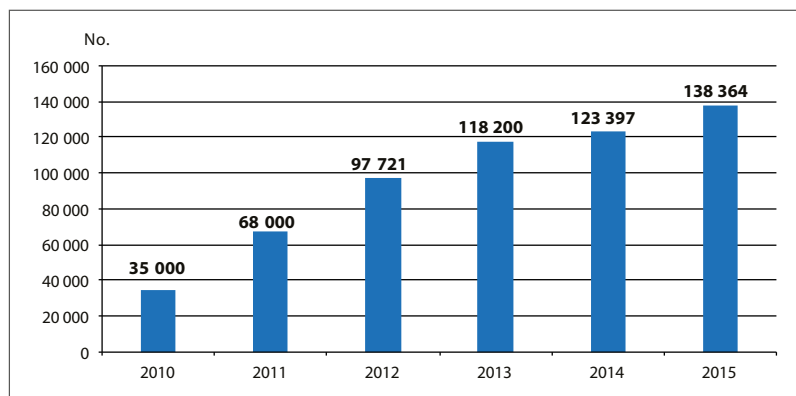
Source: NISZ

submission of online forms), at the same time the number of Customer Portal logins has consistently grown, so that in 2015 more than 150 million Customer Portal logins were recorded.

The increase in the number of Customer Portal registrations and accessible services unequivocally shows an increase in the demand for electronic public administration services and portfolio of offerings.

H.1.5. THE NUMBER OF CALLS TO THE NTCSA CUSTOMER INFORMATION AND ADMINISTRATION SYSTEM THAT END WITH AN ADMINISTRATIVE AFFAIR BEING SUCCESSFULLY COMPLETED

With the online and personal administrative channels already analysed and assessed previously, this sub-indicator shows the telephone administration service used by the NTCSA. In order to meet increasing requirements from taxpayers, the tax authority introduced the Administration Contact Centre (ACC) from the second half of 2009 as a new service. Taxpayers and taxpayers' representatives, after identifying themselves with a private PIN code, can administer individual affairs and request that information classified as confidential tax information be provided to them. Among the affairs attended to with the assistance of telephone customer service, 60–70% of taxpayer calls were in relation to the administration of filing taxes, taxpayer register inquiries made up 15–20%, and administration and information related to payment status made up 10–15%. Out of the total incoming telephone calls, the data in the graphic only includes those that resulted in definitive customer service



Source: NUPS

being offered upon successful identification via telephone. The data series therefore does not merely show an increase in the popularity of this form of contact, but it also refers to an increase in effective administration. Use of the telephone administration channel has shown consistent growth since its launch. The increase in access opportunities simultaneously lowers the administrative burden of in-person customer service.

Successful use of the telephone administration channel operated by the tax authority has shown continuous growth since its introduction. The expanded available access or taxpayers also reduces the administrative burden on the administrative side with respect to personal customer service.

H.2. CUSTOMER BURDEN DIMENSION

Key Indicator: THE NUMBER OF SERVICES SUPPORTING THE ADMINISTRATIVE PROCESS

The ten case types for which administration is most frequently sought were specified based on a special system of statistical data – which contains the data of all customer service centres conducting Office of Government Issued Documents administration – related to the administration of these national document offices. The key indicator shows the availability (and annual traffic data of their utilisation of “load-reduction” services supporting the administrative process of these cases. *Source: COAEPS**

Sub-indicator 1: THE OPINION OF DOMESTIC ENTERPRISES ON THE BURDEN OF GOVERNMENT REGULATION

The index appears as part of the Global Competitiveness Index, presents the burdens that arise from public administration regulations, and is based on the opinions of enterprises. *Source: WEF Annual Reports*

Sub-Indicator 2: THE AMOUNT OF ADMINISTRATIVE SERVICE FEES AND STAMP DUTY MOST FREQUENTLY PAID BY CUSTOMERS

This indicator shows the amount of procedural stamp duty stipulated by legal statute of the ten case types – not free of stamp duty or fees – for which administration is most frequently sought. *Source: Act XCIII of 1990*

Sub-Indicator 3: AMOUNT OF TIME SPENT BY CITIZENS ON ADMINISTERING AFFAIRS

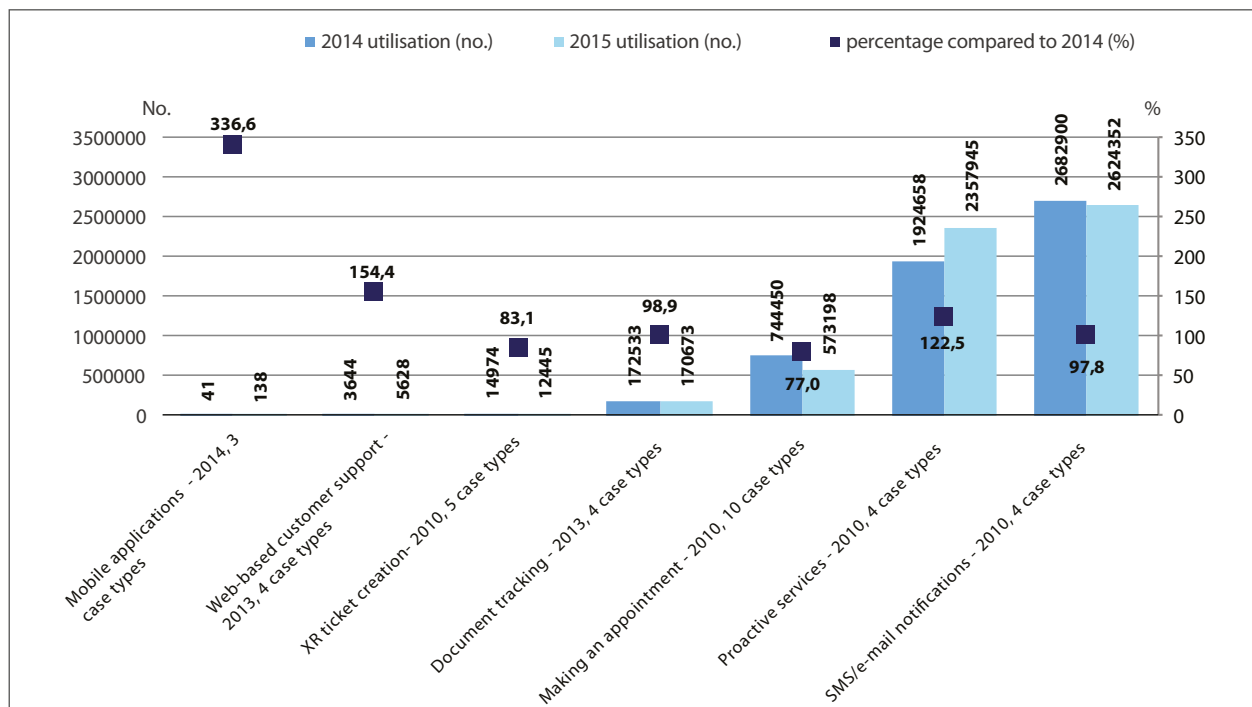
This indicator indicates the average time expenditures of those actually conducting the given activity, calculated in minutes. *Source: Times measured at the customer service windows of the COAEPS*

Sub-Indicator 4: PERCENTAGE OF SIMPLIFIED PERSONAL INCOME TAX RETURNS

The proportion of “E”-type (prepared by the tax authority) of simplified tax returns submitted to the state tax authority as a percentage of all person income tax returns submitted in the given year. *Source: NTSCA Yearbook*

*This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.

H.2.1. THE NUMBER OF SERVICES SUPPORTING THE ADMINISTRATIVE PROCESS



Source: COAEPS

The key indicator examines a new dimension of administration, that of “customer service”, and continues the evaluation of the level of public administration service at the point where the access dimension left off. While the H.1.1. indicator measured level 3 of developed government services, with this we attempt to assess the two other levels: comprehensive online administration and so-called proactive/targeted, or personalised, services. Services provided by public administration are able to substantially improve citizens’ sense of comfort if they keep pace in their level of development and efficiency with the simple, transparent and efficient devices to which users are already accustomed to in the course of everyday life. This is why it is essential to keep up with constantly changing customer needs, which can be achieved by developing and simplifying existing services, introducing new services, and with added convenience provided in the course of customer service and allowing procedures to be performed electronically.

As the basis for the assessment, we took the ten case types for which administration is most frequently sought from the document office administration’s statistical system. These procedures, as a kind of “statistical customer basket”, cover more than 80% of the volume of cases.

We are therefore examining the proportion to which the available convenience services are present when projected on these ten procedures. Convenience services are those that offer the user some kind of extra service that goes beyond the basic service, thereby reducing administrative burdens. The expansion of convenience services to support the process of administration continued in 2015. An increase only occurred in the web-based case-assistance system (which makes comprehensive case administration possible from managing a case to paying the service fee via bank card), while the OkmányApp (Document App) mobile application introduced in 2014 was not further expanded.

As shown in the figure, the statistical data from the special system also confirms the increasing utilisation from year to year of services, with decline only detectable where the given convenience function – e.g. in relation to personal administration – is reduced as an effect of the online administration developed in the meantime. The use of convenience services will soon reach the maximum level possible, therefore through developments that use increasingly efficient technology we can achieve spectacular results.

For the 10 most common document office cases the expansion of convenience services slowed in the previous year. The availability of convenience services has increased through the expansion of SMS and email notifications and web-based customer support for additional case types, as well as through the introduction of the OkmányApp.

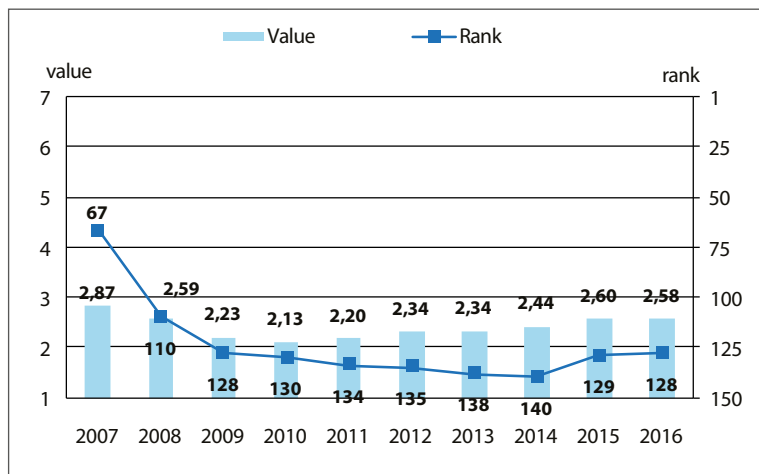
H.2.2. THE OPINION OF DOMESTIC ENTERPRISES ON THE BURDEN OF GOVERNMENT REGULATION

Each year the World Economic Forum publishes their competitiveness index, which includes the burden of government regulation based on a survey of enterprises, as well as an international ranking consisting of 150 countries. The indicator measures the administrative burdens felt by enterprises on a 7-point scale with 7 being the best value.

The indicator has been measured since 2006, and showed a worsening trend up until 2014 when it reversed, so that by 2016 Hungary had climbed to 128th from 140th.

Assessing the absolute values, the decline is less significant, or rather it shows a different pattern. The best value for the indicator was the initial value from 2007–2008 that was 2.87, which showed a declining trend and reached its lowest value (2.13) in 2009–2010. From this point forward there has been a consistent increase, reaching a value of 2.58 in 2016.

Based on the opinions of enterprises, the administrative burdens resulting from legal regulations have steadily decreased



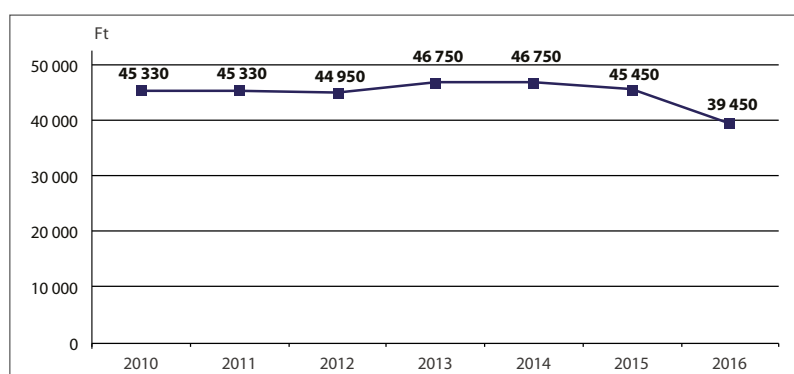
Source: WEF

since 2010. At the same time, the development was not sufficient for the country's position to remain stable in the international contest, and following an additional decline a slight improvement in the international rankings was only observed from 2014.

On the basis of the opinions of enterprises, the administrative burdens resulting from legal regulations have steadily decreased since 2010, but the country has remained in the bottom third of the international rankings.

H.2.3. THE AMOUNT OF ADMINISTRATIVE SERVICE FEES AND STAMP DUTY MOST FREQUENTLY PAID BY CUSTOMERS

The 10 most frequently used administrative service fees were the basis for calculating the indicator, taking 2010 as the base year. The contents of this 'basket of cases' are therefore not homogeneous with the services included in the key indicator. The sample contains other (non-document office) cases, as well as administrative and service fee-free procedures that were free by 2010. Among the customer burdens, the indicator considers direct costs that arise due to payment obligations (e.g. it does not include post office administrative expenses) in the cases of the following procedures: extending a driver's licence (HUF 4,000), vehicle registration transfer (HUF 12,000) personal ID card replacement (HUF 0), property registration (HUF 6,600), temporarily withdrawal of a vehicle from service (HUF 2,300), meat inspection (HUF 800), educational ID card (HUF 0), passport (HUF 7,500), copy of the title deed (HUF



Source: ACT XCIII of 1990

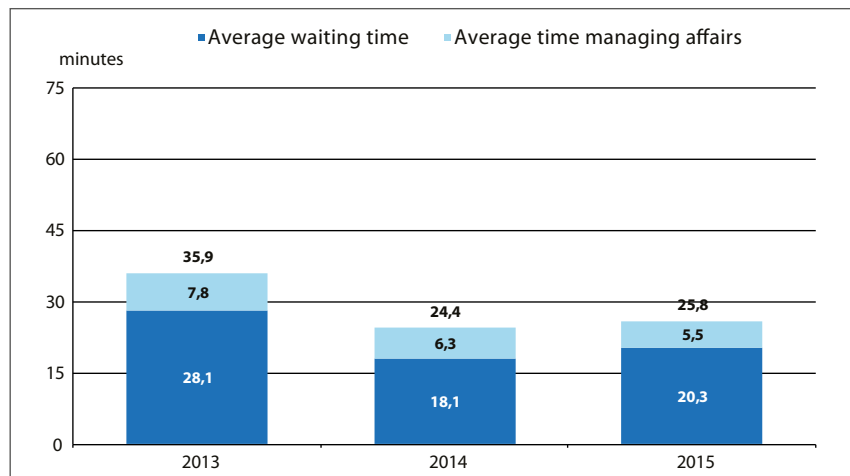
6,250), criminal background check (HUF 0). (These costs were for 2016).

It can be seen that between 2010–2015 there was a marginal increase in the fees to be paid, while in 2016 there was a significant decrease: the combined cost of the fees listed above dropped from HUF 45,450 to HUF 39,450 since the fees for some of the procedures were annulled.

The change in the total cost of administrative and service fees was below the inflation rate between 2010 and 2015, and it saw a significant drop in 2016.

H.2.4. THE AMOUNT OF TIME SPENT BY CITIZENS ON MANAGING AFFAIRS

The customer burden dimension fundamentally determines the amount of time spent managing affairs. The two main elements in the case of personal administration of affairs are waiting (queuing) time and the time spent managing the affair. For an overview of the actual time required to manage an affair (in the absence of reliable national measurements) we used the Central Office for Administrative and Electronic Public Services' (COAEPS) customer service data as a basis. According to the data, despite the higher rates of appointments, 80% of the total amount of time devoted to administration is spent on waiting, while actual administration is only 5% of the total time on average. From the customer service statistics details, it can be seen that although in 2015 the number of customers declined (272,538 customers visited an administrator in 2014 compared to 232,198 customers in 2015), at the same time they typically managed more affairs per person.



Source: COAEPS, GOS

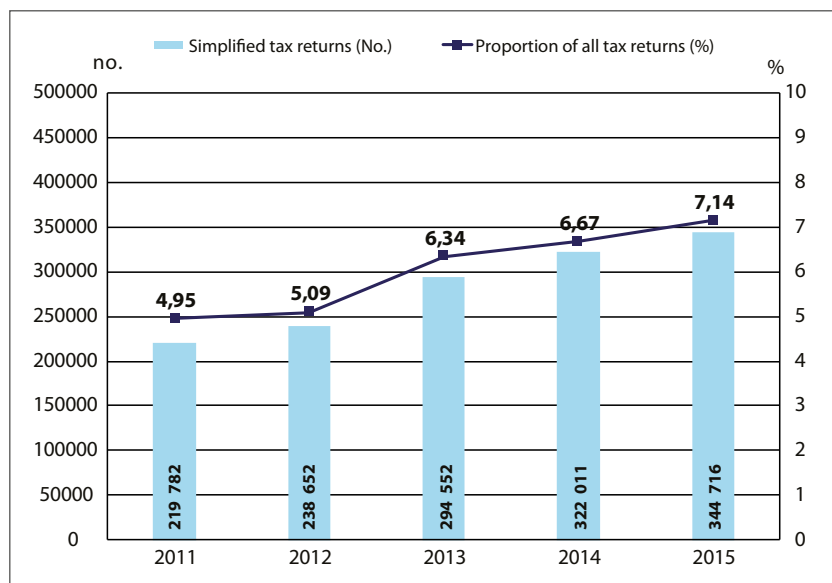
What contributed to the increase in average wait times was that twice as many people made use of the appointment service (25% compared to the previous year's 12% of customers), therefore customers without appointments had to wait longer. This indicator value is worth comparing to the representative survey on acceptable managing and wait times found in the 5th dimension.

The COAEPS's personal customer service data reveal that the average time spent on actual administration decreased further (by 13%), while the waiting (queuing) time grew by 12% from 2014 to 2015.

H.2.5. THE PERCENTAGE OF SIMPLIFIED PERSONAL INCOME TAX RETURNS

The procedural burden arising from the annual tax return preparation obligation of four-five million private individuals is without a doubt one of the most significant points of contact between public administration and its customers. This is why there is an important role to play for any measure that reduces the administrative burdens on taxpayers. The simplified tax return is a form of self-tax assessment which offers the opportunity to file an individual income tax return prepared and individualised by the state tax authority based on a preliminary declaration on the part of the private individual.

The institution's continued popularity is shown by the data, and the growth trend persisted both in terms of returns and in terms of percentage. The growth rate was 7% compared to the previous year. In 2015, of the 4,829,326 personal income tax filings, 7% were simplified tax returns and 1% were even more straight-



Source: NTCA

forward tax declarations submitted by taxpayers. The significance of this result is that a solution was introduced that managed to reduce customer administrative burdens without increasing public administration burdens.

The growth in the result indicator meaning an actual reduction in the administrative burdens of customers continued in 2015. The number and rate of simplified tax returns both increased.

H.3. RESOURCE EFFICIENCY DIMENSION

Key indicator: THE GROSS AVERAGE WAGES OF KNOWLEDGE WORKERS EMPLOYED IN PUBLIC ADMINISTRATION COMPARED TO THE AVERAGE FOR THE NATIONAL ECONOMY

This indicator shows the gross monthly average wages of knowledge workers employed in the activity classification of general administration (TEÁOR: 8411) as a percentage of the average for the national economy. The data was issued by the Hungarian State Treasury and originates from a comprehensive institutional report provided by the public administration bodies. *Source: HCSO, NSDCP 2238*

Sub-indicator 1: THE NUMBER OF MUNICIPAL GOVERNMENTS USING SERVICES BY MUNICIPAL GOVERNMENT APPLICATION SERVICE PROVIDERS

The indicator shows the number of municipal governments who are connected to the application service provider centre. *Source: NISZ**

Sub-indicator 2: COST OF COLLECTION RATIO FOR THE TAX ADMINISTRATION

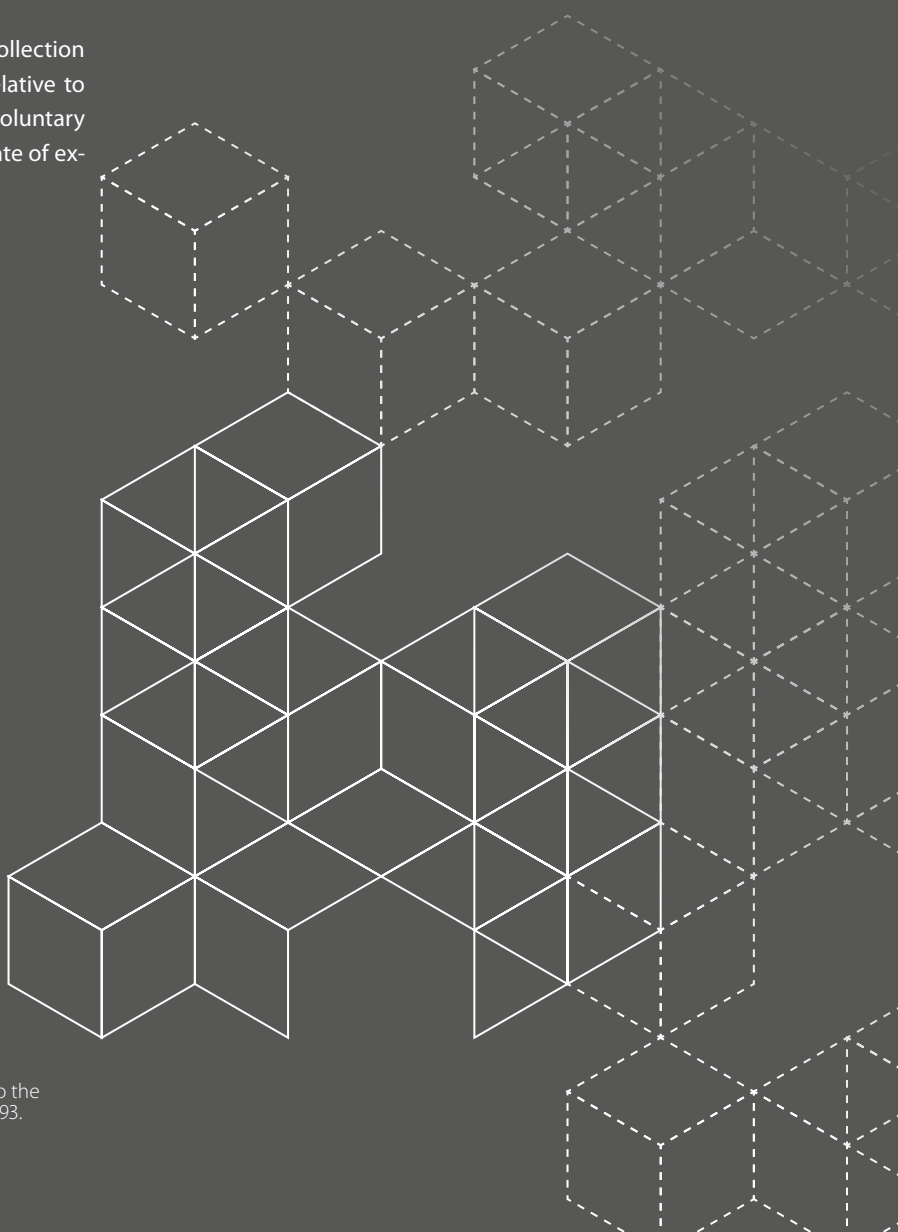
Proportion of administrative costs related to the collection of tax by the tax administration organisations relative to the total tax collected. The indicator shows involuntary tax income requiring collection activity and the rate of expenditures dedicated to this. *Source: OECD**

SUB-INDICATOR 3: EVENNESS OF THE DISTRIBUTION OF THE NUMBER OF ACTIVITIES PER DOCUMENT OFFICE WORKSTATION AT THE COUNTY LEVEL

The relative deviation of aggregate quotients at the county level (the deviation value's ratio of the national average) of total administrative units (activities) of document office customer service activities recorded in the computer system during the course of the given year to the number of hardware infrastructure units (work stations) installed for conducting customer service activities. *Source: COAEPS, GOS**

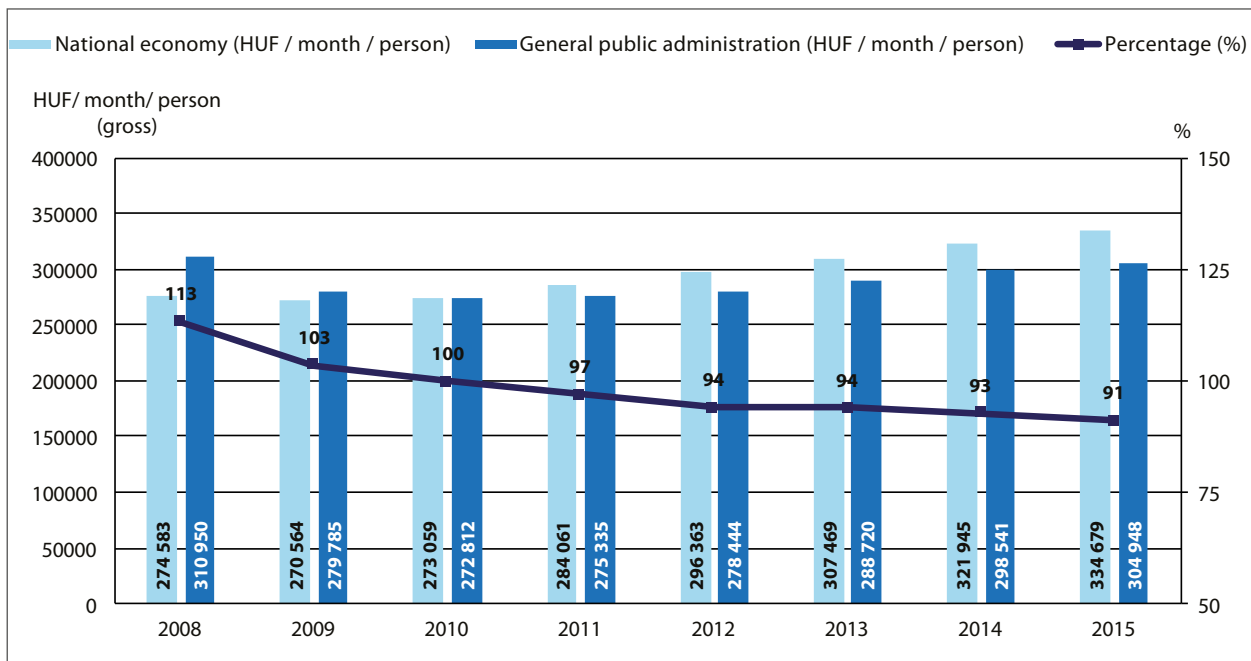
Sub-indicator 4: THE NUMBER OF PRIMARY DOCUMENTS PER GOVERNMENT OFFICE OFFICIAL

The number of primary documents for each county (or metropolitan) government office official. *Source: HCSO, official NSDCP statistics*



*This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.

H.3.1. THE GROSS AVERAGE WAGES OF KNOWLEDGE WORKERS EMPLOYED IN PUBLIC ADMINISTRATION COMPARED TO THE AVERAGE FOR THE NATIONAL ECONOMY



Source: HCSO NSDCP

The key indicator measures the efficiency of human resource management and projects average monthly salary onto the indicators for the average income for all employees. We investigated only the earnings data for knowledge workers broken down by the type of work they do in light of the fact that in public administration, they make up more than 90% of the workers.

The income data for the public sphere typically remains lower than the values for the private-sector (and thus of all employees) sphere. On the one hand, this shows the direction of thrifty and efficient use of public funds, and on the other hands, draws ever greater attention to the effects of negative

demographic processes of European public service, including the favourable image of public service as an employer. Accordingly, the key indicator affects two diverging interests, whose optimum value is aligned to the average level of the national economy. If the two values are identical, however, this allows for both competitiveness in the public administration labour market and appropriate labour costs in relation to the labour market to exist at the same time.

The ratio has been dropping steadily since 2008, which despite showing more efficient use of public funds, has a negative effect on the labour-market competitiveness of a career in public administration.

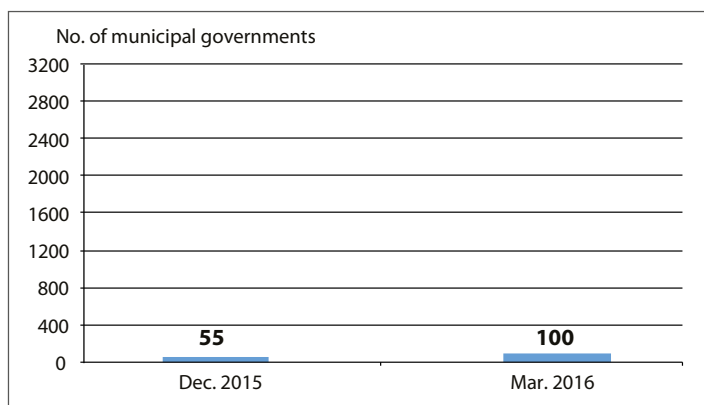
Despite the rising wage level, the income of knowledge workers is still lower in public administration than it is in the entirety of the national economy.

H.3.2. THE NUMBER OF MUNICIPAL GOVERNMENTS USING SERVICES BY MUNICIPAL GOVERNMENT APPLICATION SERVICE PROVIDERS

An application service provider (ASP) provides various electronic affair management and related services for municipal governments, as a result of which they can use specialised services systems to support ongoing business operations without significant investments on their behalf.

What this all means is that the upkeep of the used services (infrastructure and expertise) are ensured centrally, therefore significant cost-savings can be achieved, since a municipal government does not need to maintain and develop their own professional systems. An ASP allows for IT to follow legislative changes without additional expenses.

In addition to all this, it facilitates the monitoring of municipal governments' management through contemporary tools and methods, thereby an opportunity is created to observe the financing mechanisms of a municipal government's subsystem.



Source: NISZ

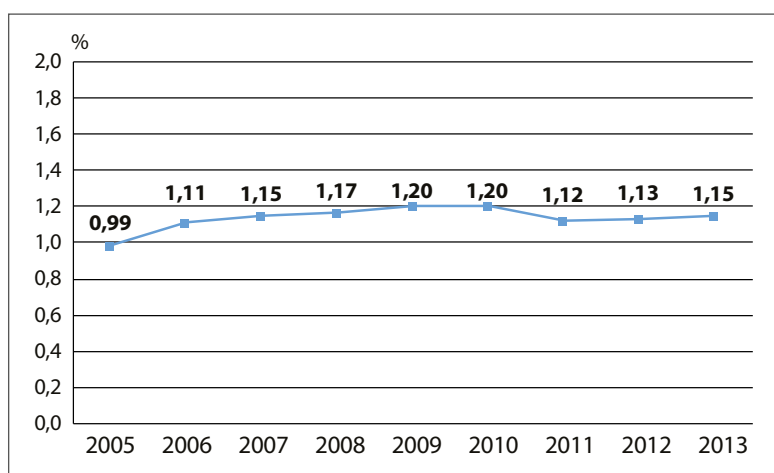
The introduction of ASP services at the national economy level results in lower municipal government IT operational costs. The pace of connection over the previous period has shown an intensive increase, and additional connections by 1 January 2018 forecast a further increase in the indicator's value.

The initial – pilot – phase of the municipal ASP project is being followed by the connection of municipal governments, with 100 local municipal governments currently benefitting from this shared service.

H.3.3. COST OF COLLECTION RATIO FOR THE TAX ADMINISTRATION

In its work comparing tax administration systems, the OECD employs this cost-efficiency indicator. The indicator examines the relative administrative costs in the case of public administration organisations that acquire – in the form of tax collections – revenue. Although the cost structure of these organisations can change dynamically depending on the revenue generated, an efficiency indicator can thereby be determined that projects the administrative costs of collection per unit of net collected (and tax refund-reduced) revenue. It is important to emphasise that the administrative costs do not include the organisation's human resources costs (the tax office worker's wages) or the operations infrastructure (such as IT).

Since 2005, the OECD has collected this information annually from the tax authorities of Member States. In OECD countries, following a negative developmental arc, the same revenue has been achieved with reduced expenditures since 2011.

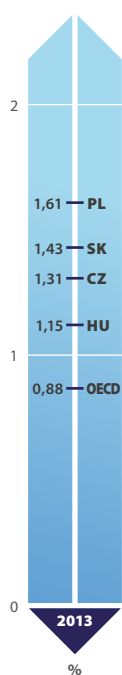


Source: OECD

What reveals the limits to the indicator's role in efficiency measurement is the fact that the indicator does not address the difference between potential (that is maximum possible) tax revenue and actual tax revenue.

The significant differences between the tax systems further complicate comparisons.

Since 2011 the cost of collection ratios (administrative costs/net revenue) has declined in OECD countries, while in Hungary the value has remained above the international average over the previous decade.

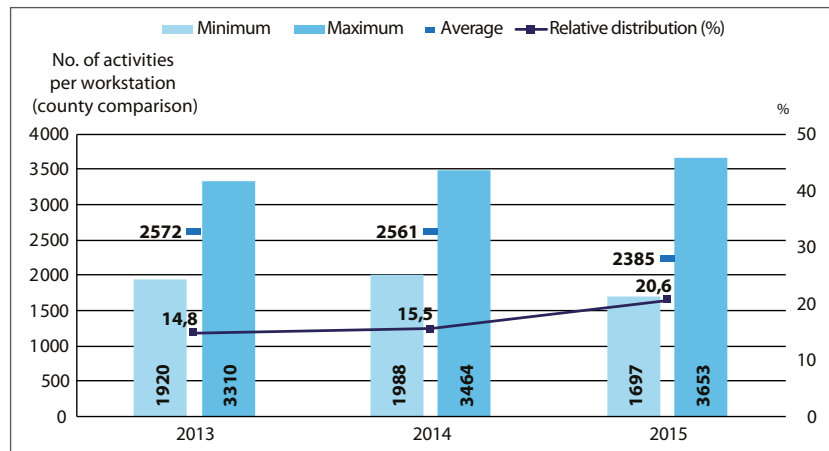


Source: OECD

H.3.4. EVENNESS OF THE DISTRIBUTION OF THE NUMBER OF ACTIVITIES PER DOCUMENT OFFICE WORKSTATION AT THE COUNTY LEVEL

This specific performance indicator based on the statistical data of the national network of document offices shows the average annual distribution of 8,800,000 activities (that is, every affair that is managed and recorded in the computer system) being performed at more than 3,500 workstations (in 2015).

It must be taken into account from several points of view in order to determine the optimal number of customer service administrators and work stations. In essence, the number of workstations that is needed is the number that is required for customer-friendly and efficient operation, taking into account opening hours, the physical layout and customer needs. There is no method to exactly determine these factors. The number of activities per workstation shows the workload of individual workstations and the differences that result between the various customer service stations (such as the use of IT resources).



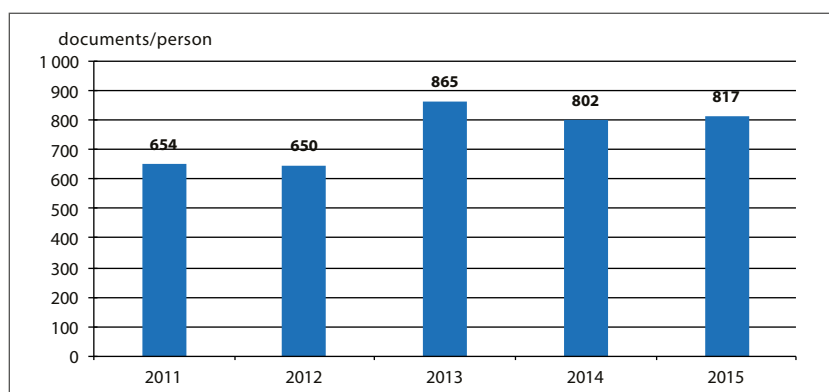
Source: COAEPS, GOS

The graphic shows the average of 20 county (and capital city) government window document office workstations. Additionally, it shows that use was the smallest in Nógrád and greatest in Pest, as well as the average of the total and the percentage ratio of the average deviation. What can be read from this is the extent to which efficient resource allocation by customer traffic is successful at the national level.

The increase in relative deviation shows that differences grew following the opening of newer government windows, therefore customer traffic data needs to be examined to optimize work stations at the national level.

H.3.5. AVERAGE NUMBER OF PRIMARY DOCUMENTS PER COUNTY GOVERNMENT OFFICE ADMINISTRATOR

The establishment of metropolitan and county government windows on 1 January 2011 brought to a close a decentralisation project lasting for nearly two decades and involved 253 organisations at 14 bodies, as well as 23,000 government officers (a total of 36,000 employees). The horizontal and, at the same time, operational integration implemented at the county level ensures efficient utilisation of a uniform organisation – in a single budgetary organ – in each county and in the capital, while also reducing duplication and redundancy. As with the number of work stations, we can project the number of case numbers gained from the authority's statistics on to the number of government office administrators. The number of so-called primary documents



Source: HCSO NSDCP

in the special administrative areas managed by government office fluctuated between 16–22 million over the five years. The staffing numbers, however, relate to the number of government officers within the staff at the government offices.

The specific indicators of the administrative activities of government officers reveal a positive efficiency yield from the integration of professional management bodies.

H.4. PREPAREDNESS DIMENSION

Key indicator: THE NUMBER OF COMPLETED TEACHING HOURS IN THE PUBLIC SERVICE ONGOING TRAINING SYSTEM

The cumulative number of teaching hours from teachers (and within that successfully completed training programmes) provided by the National University of Public Service in the ongoing training system mandatory for public service officers. *Source: NUPS**

Sub-indicator 1: THE RATIO OF PUBLIC SERVICE OFFICERS WHO HOLD A HIGHER EDUCATION DEGREE

This indicator expresses the percentage of government and public officers employed either full-time or part-time by public administration bodies who fall under the Category I classification, meaning that they possess a professional higher education degree prescribed for their job description. *Source: MNE, NES*

Sub-indicator 2: THE NUMBER OF MINISTERIAL OFFICERS WITH ACADEMIC DEGREES

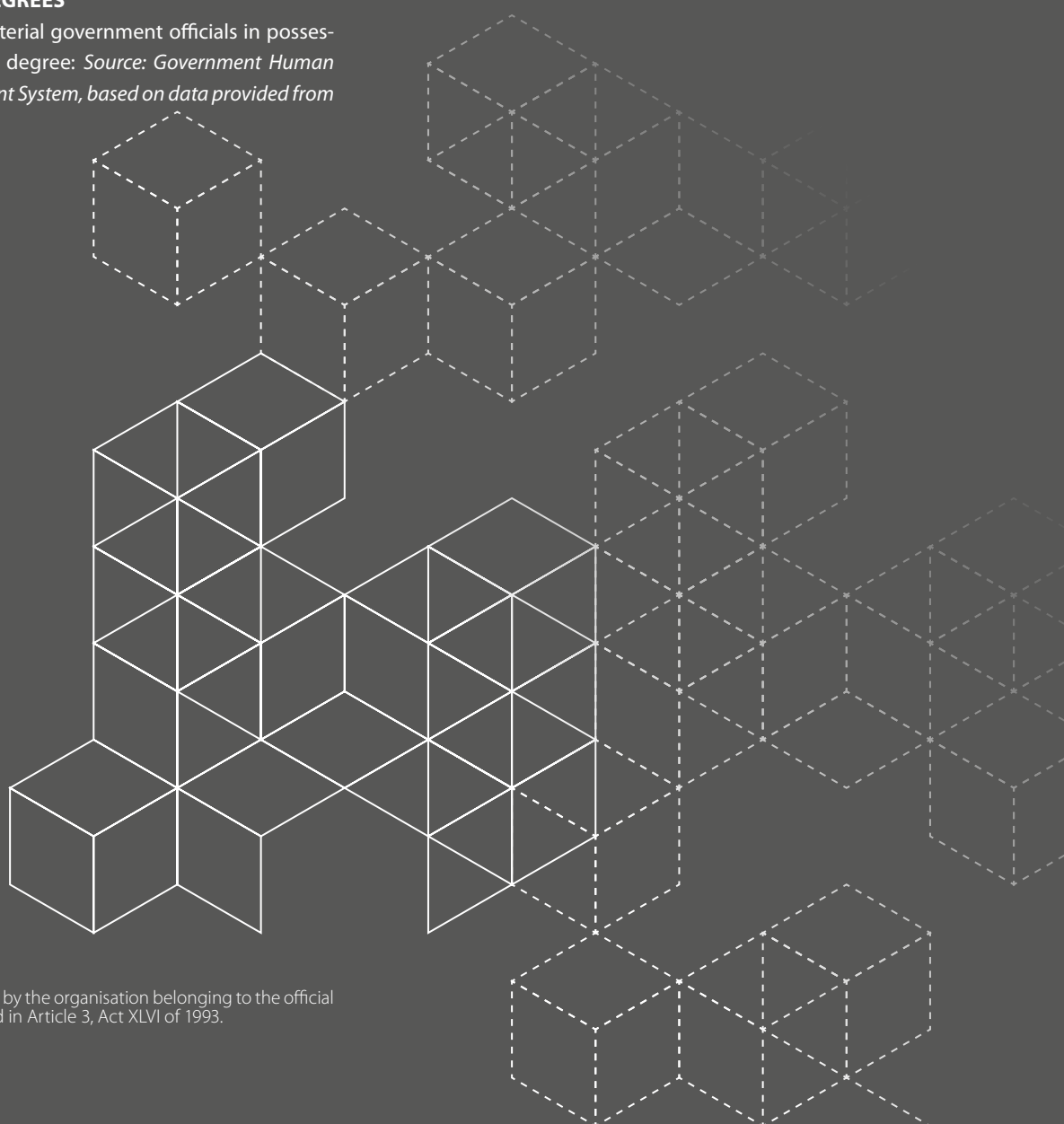
The number of ministerial government officials in possession of an academic degree: *Source: Government Human Resources Management System, based on data provided from the ministries.*

Sub-indicator 3: THE MIDDLE GENERATION'S PERCENTAGE OF THE PUBLIC SERVICE AGE PYRAMID

The percentage that public service officials belonging to the 36–55 age group account for from the total number of public service officials. *Source: MI, Public Service Career Development Department*

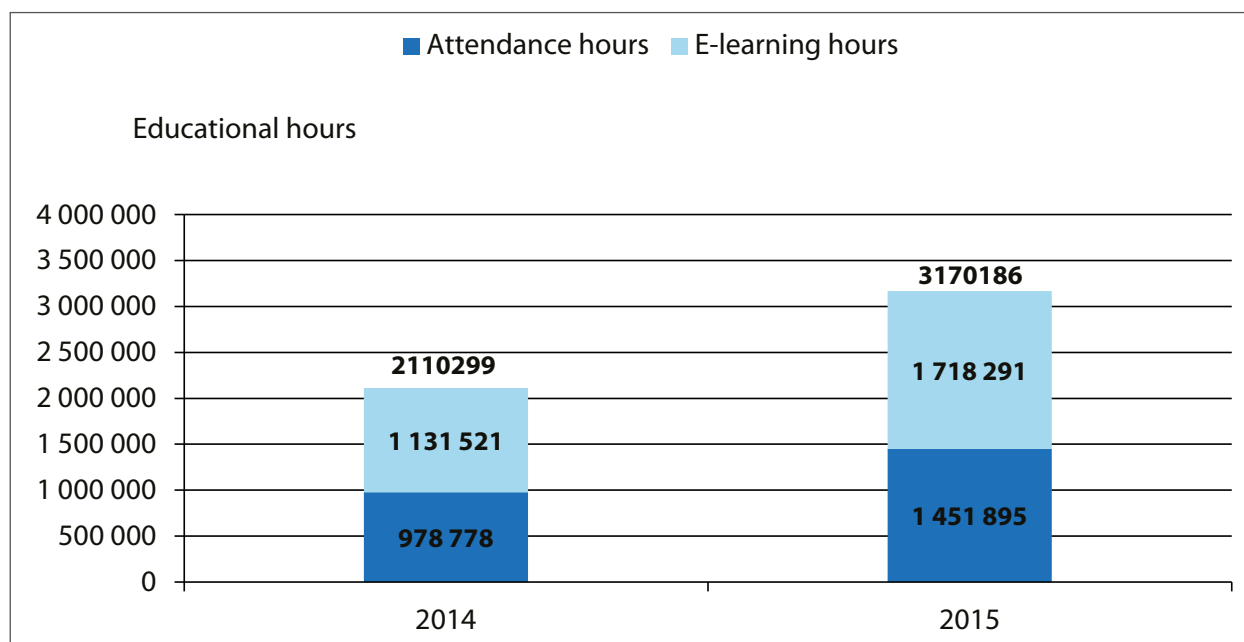
Sub-indicator 4: THE PERCENTAGE OF DECISIONS ALTERED BY JUDICIAL OR SUPERVISORY BODIES

Share of petitions for legal remedy against decisions passed by government offices as the result of a second-instance procedure that are altered, overruled, corrected, replaced or supplemented by the judicial or supervisory body or amended or revoked by the authority. *Source: NSDCP official statistics*



*This data is not provided by the organisation belonging to the official statistical service named in Article 3, Act XLVI of 1993.

H.4.1. THE NUMBER OF COMPLETED TEACHING HOURS IN THE PUBLIC SERVICE ONGOING TRAINING SYSTEM



Source: NUPS

In 2013, the public service training system was placed on a new legal and methodological footing. The previous two-stage examination requirement was supplemented with a further education programme based on an academic point system to be completed in an individualised four-year cycle. The level of preparedness of public administration staff is therefore, fundamentally, determined by the training programmes developed and provided by the National University of Public Service, which entails two or four training programmes annually for each of the 75,000 attending officers. In relation to public service further education in 2015, we can state the following findings based on the system-wide statistical data below:

- in 2015 individual training plans were prepared for 76,730 officials from 1,427 public service organisations,
- in 2015, compared to 2014, the number of training programmes in the individual annual plans doubled: on average it increased from 2 programmes to 4,
- as a result of the university partnership agreements signed in 2013 the number of participating officials in the training programmes organised by partner institutions is dynamically expanding (5,340 officials in 2014, and 7,752 in 2015).

In 2015, the NUPS placed greater emphasis on developing the training programmes on offer: this meant putting into

effect the existing curricula (this occurred in the cases of 133 curricula) as well as the development of 18 new curricula. At the end of 2015 2,335 programmes were listed in the training register, of this 15% where public service training programmes offered by the NUPS, while 85% were internal training programmes. Compared to the previous year, the number of programmes listed in the programme register expanded by 16%, which was due to the high level of internal training programmes being registered.

The indicator, within the total number of public service training teaching hours provided, shows the number that the officials successfully completed (more than 60% was achieved in the examination).

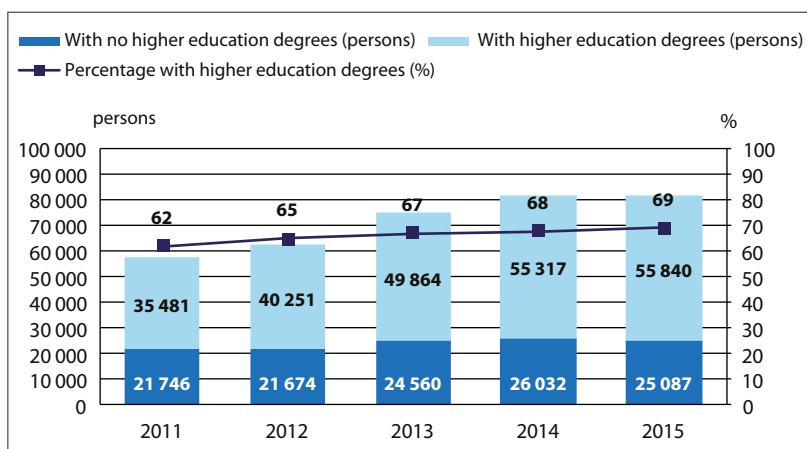
The number of teaching hours provided in the training system grew 50% in 2015. Nearly half of these were training programmes to provide general public service knowledge, and the overwhelming majority were e-learning courses. There can be several reasons for this growth: (1) the officials completed the mandatory courses ahead of time, and then completed more than the prescribed annual number of hours, (2) the list of training programmes expanded, that is more courses became available for the officials, (3) the officials interest grew towards e-learning courses, and within this flexible training format they were more inclined to learn for longer periods.

The number of those who participated in the training programmes provided by the NUPS continued to grow in 2015. During the course of the successful completion of training programmes by 77,000 officials, on average more than 41 hours were spent attending courses or using e-learning services.

H.4.2. THE RATIO OF CIVIL SERVANTS WHO HOLD A HIGHER EDUCATION DEGREE

For many decades, the level of educational attainment of officials, and the proportion of those with primary, secondary and specifically higher levels of education have been considered, by the professional literature, to be a key indicator with respect to the level of their skill and aptitude. From the very beginnings of their history, careers in public administration have been among those fields of employment that require knowledge-intensive and advanced skills of the type that continental Europe's closed public service systems have elevated to "model values". At the same time, effective human resources management also integrates the criterion into the system of requirements to which its personnel are held that officials should be in possession of an appropriate (and not necessarily the very highest level) of training for their jobs. When calculating the partial indicator, the following groups were taken into account: (1) government and public officials in leadership positions (since leadership positions require

higher education degrees), as well as (2) those with higher education degrees who possess qualifications required by their jobs. This group, for all practical purposes, consists of officials classified in category I, and excludes those who, while they may have higher education degrees, are performing work in category II that requires only a secondary qualification.



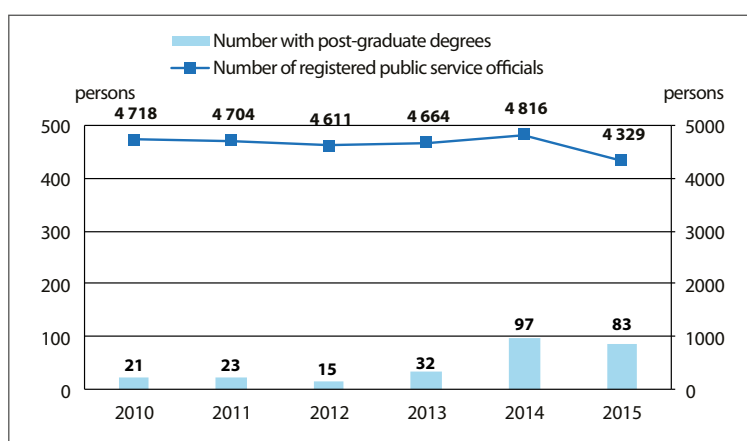
Source: MNE, NES

The number of officers carrying out the core activities of public administration bodies who possess higher educational qualifications is showing a continuous increase both in number and as a proportion of the entire contingent.

H.4.3. THE NUMBER OF MINISTERIAL OFFICERS WITH ACADEMIC DEGREES

The channelling of the academic sphere and scholarly counsel into public policy processes is not a phenomenon of recent origin. This can occur both through formal and informal consultative mechanisms, collaborative programmes and research projects. Perhaps the most intensive method is the application of academic research, which is also an approach that exists through the research institutes operating in the form of non-ministerial agencies.

This sub-indicator examines how many ministerial government officials possess a doctoral qualification. This is a new approach to the extent that, although in their positions, they are not primarily engaged in conducting research, they presumably (although not demonstrably so) employ their specialized academic and methodological knowledge, whereby – even if not inside of an organised framework – academic scholarship can be directly implemented and the level of technical knowledge raised.



Source: OPJ

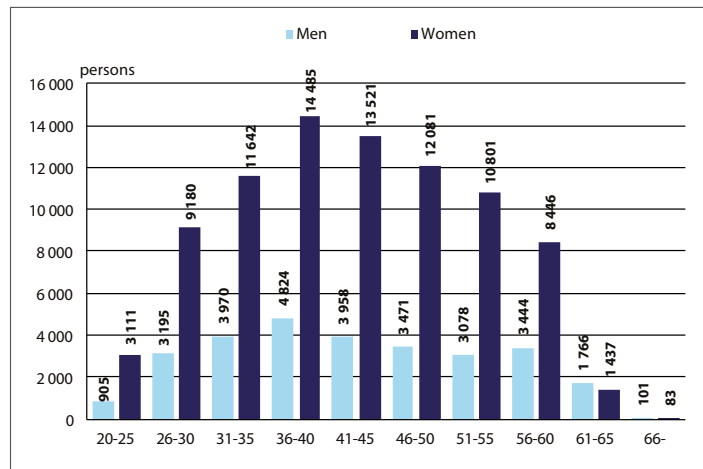
Starting in 2010, the number of staff at the ministries with these kinds of advanced degrees fluctuated between 20 and 30, a figure which tripled in 2014, and in 2015 the magnitude of those with academic degrees remained the same despite the reduction of the number of government officials. Of the officials who possessed academic degrees, the majority had PhDs or equivalents, along with six doctors of the Academy.

The number of ministerial officials with academic degrees changes annually owing to frequent reorganisation. Following significant growth, the percentage of those with academic degrees has stagnated over the previous years.

H.4.4. THE MIDDLE GENERATION'S PERCENTAGE OF THE PUBLIC SERVICE AGE PYRAMID

The preparedness of the public administration human resources stock is characterised well by the age distribution of public service officials. In healthy and balanced organisational systems the age pyramid is an inverted U, in which between the younger generation's growing and older generation's declining trends there is a middle age group (36–55 years of age) which represents a balanced and stable percentage. The youth at the beginning of their career represent the dynamism and refreshing momentum in the organisation, while the older representation are the keepers of organisational knowledge and experience. The effective amalgam of expertise, load-bearing and activity, however, are primarily the middle generation, and without this age group the organisation's work based on effective and strong performance is questionable.

In the previous decade in Hungarian public administration, high levels of migration are characteristic of the middle generation. The reason for this is perhaps the uncertainty caused by changes in government, higher demands for



Source: MI, status of 1 January 2016

labour in the market sphere, as well as income difference between the public and private sphere.

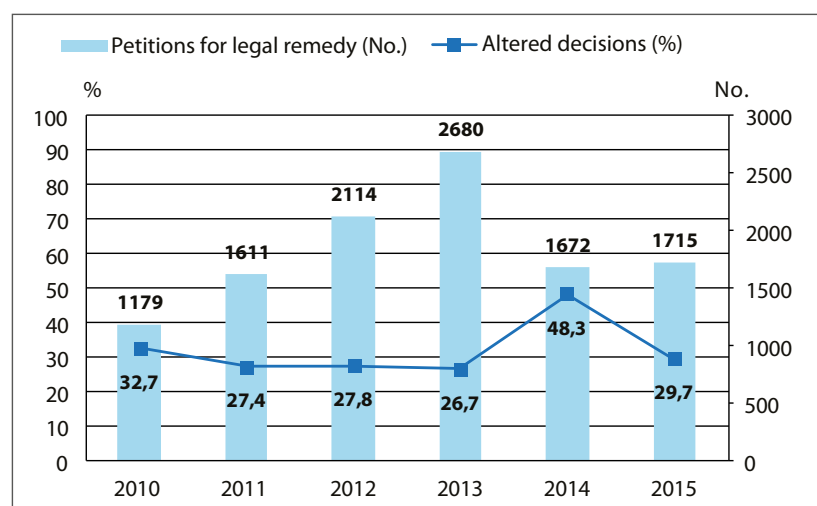
A stabilising trend can be observed over the previous years. Retention levels for the middle generation in public administration have grown, or rather the age pyramid has become balanced.

The most effective group of officials, which consists of those between the ages of 36–55, is 58% of the total. A stabilising trend can be observed over the previous years, as the retention ability for public administration's middle generation has increased.

H.4.5. THE PERCENTAGE OF DECISIONS ALTERED BY JUDICIAL OR SUPERVISORY BODIES

An important measurement of staff preparedness is the proportion of petitions for legal remedy against administrative decisions that are overruled by the body (court or supervisory body) overseeing the system that originally made them. Official statistics by the government office provide detailed data on every level of review of the decisions made by municipal governments and state administrative bodies.

This sub-indicator examines those petitions for legal remedy against second-instance decisions passed by general-purpose government agencies or specialised administrative bodies which have been required to undergo a review. The figure depicts the ratio of contested second-instance decisions that are altered, over-



Source: HCSO NSDCP

ruled, corrected, replaced or supplemented by the judicial or supervisory body or amended or revoked by the authority.

Despite the growth in the number alongside the development of the government office system, a decrease can be seen from 2010–2014 with regard to the ratio of altered decisions. At the same time, in 2014 the figure grew from 30% to nearly 50%, before returning to its earlier level in 2015

H.5. SATISFACTION DIMENSION

Key indicator: CITIZEN SATISFACTION WITH MANAGING SPECIFIC PUBLIC ADMINISTRATION AFFAIRS

In the autumn of 2015 a comprehensive opinion poll was prepared for the Good State and Governance Study, within the survey framework of the NUPS's Institute for Research and Development on State and Governance.

Preparation for and collection of the data was performed by the Central Statistical Office. In the questionnaire survey using a representative sample, 2,160 persons 18 years of age or older responded to the questions posed by the pollsters. One of the dimensions of the survey was dedicated assessing satisfaction on the part of the population who have to manage affairs at government offices, which were uniformly measured on a scale of 1–10. Answers could be provided for six specific types of affairs (in addition to "other"), to indicate how satisfied they were with managing affairs in government offices. *Source: NUPS, GOS 2016*

Sub-indicator 1: PERCEPTION OF PUBLIC ADMINISTRATION AS A WHOLE AND ITS EASE OF USE

The general perception of public administration as a whole and the ease of managing public administration affairs rated on a 1–10 scale according to an opinion survey conducted by interviewers of a representative sample (N = 2,160). *Source: GOS 2016*

Sub-indicator 2: THE DISTRIBUTION OF MANAGEMENT CHANNELS OF PUBLIC ADMINISTRATION BY USE ACCORDING TO AFFAIR TYPE

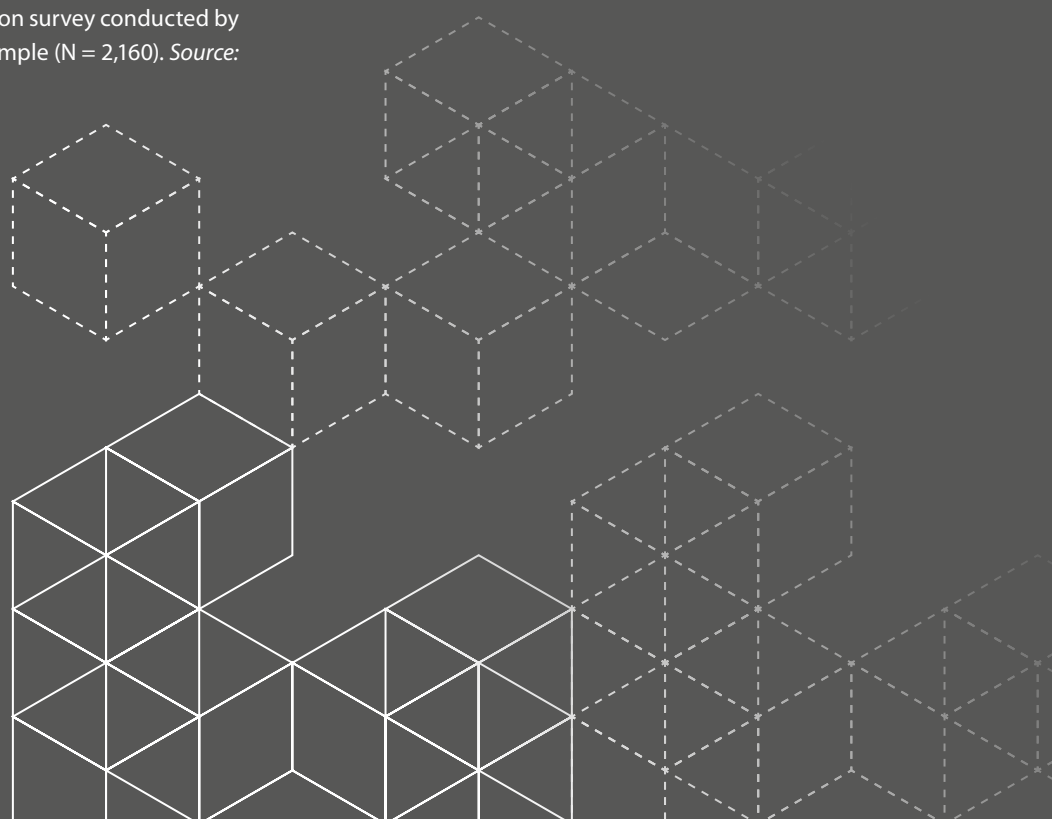
The channels used to manage affairs distributed according to affair type according to an opinion survey conducted by interviewers of a representative sample (N = 2,160). *Source: NUPS, GOS 2016*

Sub-indicator 3: THE ACCEPTABLE LEVEL OF TIME SPENT ON MANAGING PUBLIC ADMINISTRATION AFFAIRS ACCORDING TO EDUCATION LEVEL

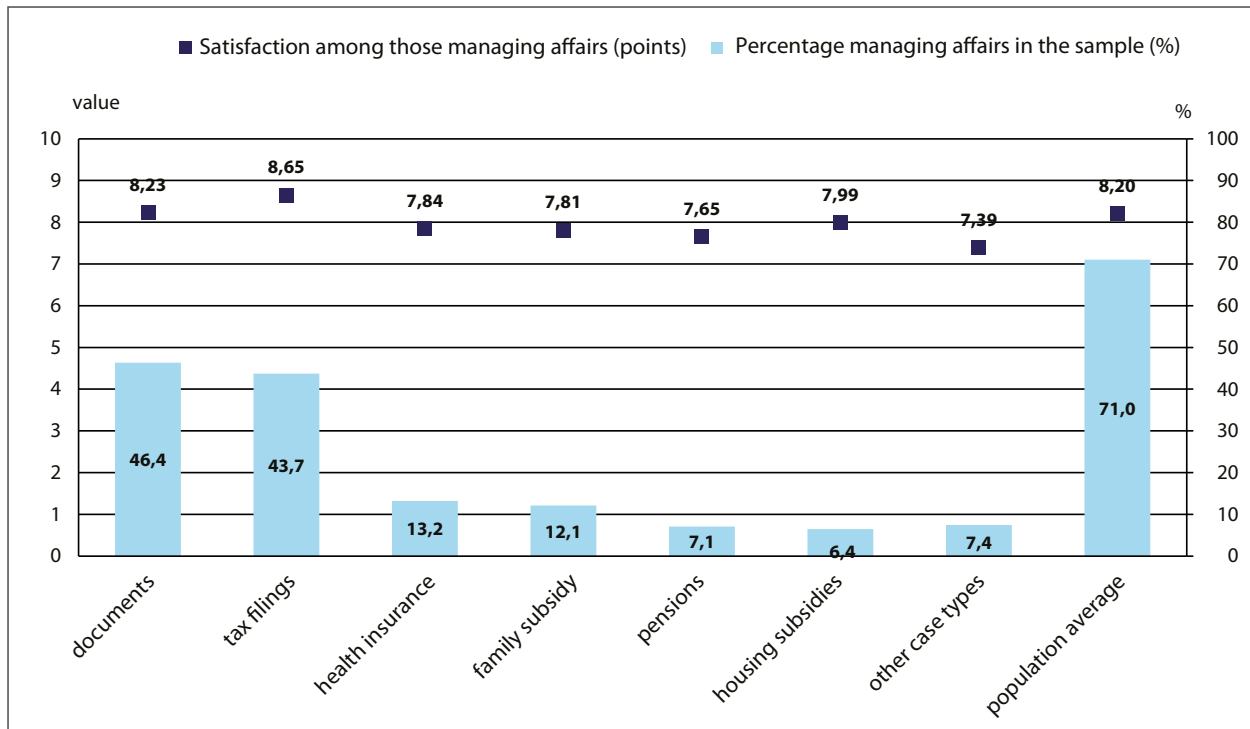
The average answer in regards to the maximum acceptable time spent on travel, waiting and managing affairs according to an opinion survey conducted by interviewers of a representative sample (N = 2,160). *Source: NUPS, GOS 2016*

Sub-indicator 4: CITIZEN PERCEPTION OF POTENTIAL TO MAKE MANAGING AFFAIRS MORE CONVENIENT

Participants' preferences of the developmental areas that make managing affairs more convenient, according to an opinion survey conducted by interviewers of a representative sample (N = 2,160). Respondents could choose only three from the available answers. *Source: NUPS, GOS 2016*



H.5.1. CITIZEN SATISFACTION WITH MANAGING SPECIFIC PUBLIC ADMINISTRATION AFFAIRS



Source: GOS

The significance of opinion polls is especially important in public administration. The population and public administration's proper fit is revealed through opinions and satisfaction indicators. Satisfaction in this topic is none other than (as it is for businesses) being suitable for partners, which is the foundation for every type of cooperation. The key indicator examines the segment of customer perception that is drawn from specific experiences: it provides information on the respondent's opinion on and satisfaction with their experience after using a given public administration service. On the basis of this representative survey, 71% of Hungary's adult population had contact with the public administration system within the previous year of being asked. On the basis of the data, 31.5% of the population only managed a single type of affair, 23.3% managed two types, while 16.2% managed at least three types of affairs in 2015. An especially large amount recounted managing documents

(46.4%), and managing their tax filings (43.7%), while roughly every eighth respondent managed family subsidy or health insurance affairs.

Those managing housing subsidy and pension affairs were 6–7% of the total. Those managing "other" affairs were 7.4% on the basis of the answers.

In the cases of questions relating to specific public administration affairs, a general sense of satisfaction was observable: the sample's average was a value of 8.2 which can be considered high. It is important to emphasise that the types of affairs that can be characterized as having higher satisfaction value are those that are used by more people. What this also suggests is that the type of affairs that are better organised are the ones more widely used by citizens. This is in agreement with the result that those affair types falling under the "other" category received the lowest average scores.

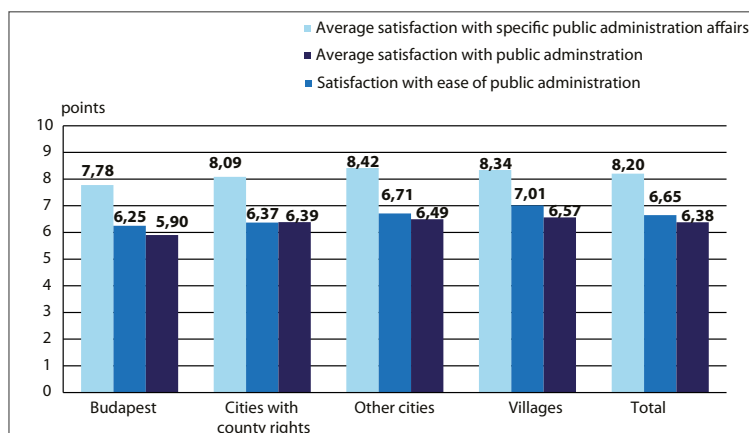
Customers are satisfied with managing specific public administration affairs: the sample's average is 8.2, which can be considered high. The types of affairs that typically show high satisfaction score are those that are more widely used.

H.5.2. PERCEPTION OF PUBLIC ADMINISTRATION AS A WHOLE AND ITS EASE OF USE

While for the key indicator a high satisfaction rate was measured in the case of specific types of affairs, overall satisfaction was significantly lower, although even then the perception of public administration can be considered unequivocally good, as can perceptions regarding the ease of managing public administration affairs, since perceptions about public administration are significantly better than those regarding health care (4.85) or public education (5.87). Assessing ease of use, public administration was behind postal affairs (7.13), banking (6.87) and public utility services (6.48), although well ahead of outpatient clinics (5.31).

The lesson learned from this representative survey of the adult population is that satisfaction with public administration is uniform along social and demographic lines. The only exception was the size of the settlement: those living in large cities were far more dissatisfied with public admin-

istration at any specific level. This relative dissatisfaction was especially typical of those in Budapest, even if individual affair types or public administration as a whole were rated, or if characteristics of public administration had to be rated, such as ease of use.



Source: GOS

Compared to other public services, the general perception of public administration is more favourable and typically shows high satisfaction rights, although when compared to specific types of affairs the satisfaction rate is lower.

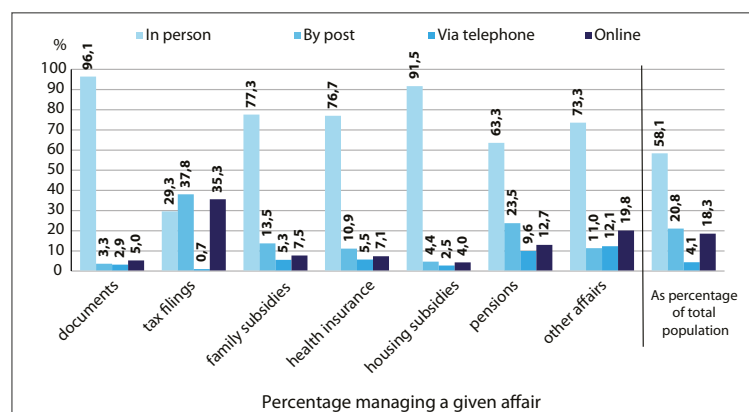
H.5.3. THE DISTRIBUTION OF MANAGEMENT CHANNELS OF PUBLIC ADMINISTRATION BY USE ACCORDING TO AFFAIR TYPE

Although in the case of every type of affair the opportunity exists to use every method (channel) for managing affairs, there is nonetheless great variety in the distribution of channels by affair type from the perspective of actual use. The reason for this is that in many cases it is not possible while managing affairs to complete the whole process with a single channel, only certain steps.

The hegemony of managing affairs in person (with the exception of filing taxes) is unquestionable, and in the cases of managing documents and living subsidies is almost exclusive.

In the case of other types of affairs, the role of additional channels changes, but use of the online management channel is more significant than the postal channel. On this basis it can be stated that the electronic channels' actual use is isolated or complementary.

In accordance with the above, in terms of the entire population, personal management of affairs is the most common,



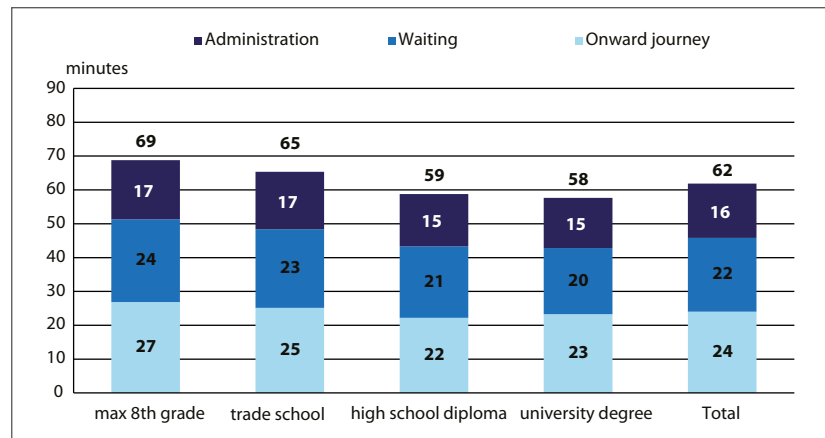
Source: GOS

which 58.1% used in the previous year, and this group in terms of its affair types managed was satisfied to a rating of 8.04 points. In comparison, those managing their affairs over the telephone only showed a 7.19 satisfaction rating, while those managing their affairs via the post or online rated their satisfaction as 8.34 and 8.62 respectively, higher than those managing their affairs in person.

What becomes clear from the data on perceptions by those actually using individual administrative channels is that in-person managing of affairs dominates, which is surpassed by the electronic channel only in the case of filing taxes.

H.5.4. THE ACCEPTABLE LEVEL OF TIME SPENT ON MANAGING PUBLIC ADMINISTRATION AFFAIRS ACCORDING TO EDUCATION LEVEL

While conducting the survey, we also asked about the maximum amount of time that is acceptable to spend on managing each individual public administration affair. In relation to this, we also asked about the amount of time needed for travel, waiting times and time spent managing the affair. On this basis there is a population-wide expectation that a single public administration affair should be manageable in under an hour, and this was the answer even accounting for variables where in certain cases differences become quite apparent between population groups. Accordingly, the institutional system necessary for managing public administration affairs should be developed so that the majority of the population should have a location in the network within half an hour of travel time from their home or place of employment. What is considered acceptable for waiting and managing times is roughly similar, although on the basis of mathematical averages,



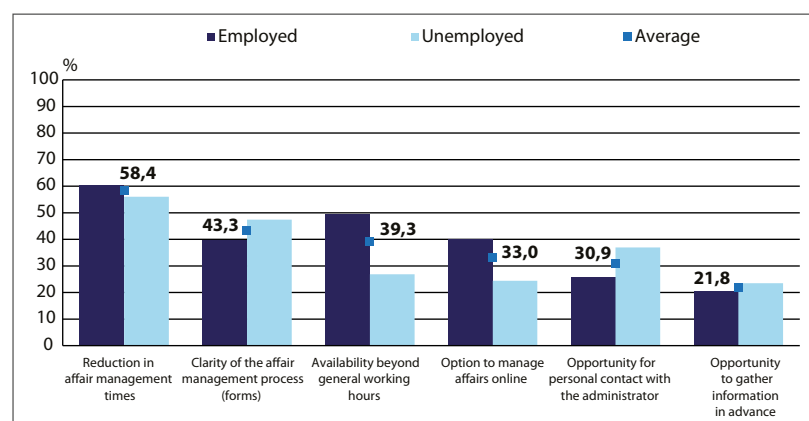
Source: GOS

in the case of waiting times a slightly greater amount of time was acceptable for respondents. What this means is that respondents do not like to wait more than what it takes for managing one or two affairs, that is, customers cannot pileup, and this requires the organisation of scheduled customer management, as well as the scheduling of appointments becoming general practice.

General expectations are present in each group that the managing of each affair, combined with the amount of time necessary for travel, should be able to be completed in under an hour.

H.5.5. CITIZEN PERCEPTION OF POTENTIAL TO MAKE MANAGING AFFAIRS MORE CONVENIENT

Of the respondents to the opinion survey, three affair management aids could be selected from among all of those presented. On average, 2.3 were selected. Taking this into account, all of the affair management aids received widespread support, with the exception being the opportunity to receive preliminary information. At the same time, due to the interview technique used, it cannot be determined if the reason for few selections was that this was considered less important based on needs, or if respondents found that they were already provided in practice, or considered other opportunities more important. In the case of attitudes towards opportunities for making the management of affairs more convenient, there was a deviation in the sample between the employed and unemployed. While a higher rate of the jobless would like services that provide assistance (the opportunity to meet in person; an increase in access to procedures and forms), those with jobs advocated



Source: GOS

for more flexibility in terms of time (availability outside working hours, development of online affair management opportunities). Among the desired directions for development the greatest is for shorter affair management times and increased access to forms. The ability to manage affairs online was only in 4th place, which we can consider a special sub-case of general management of affairs time.

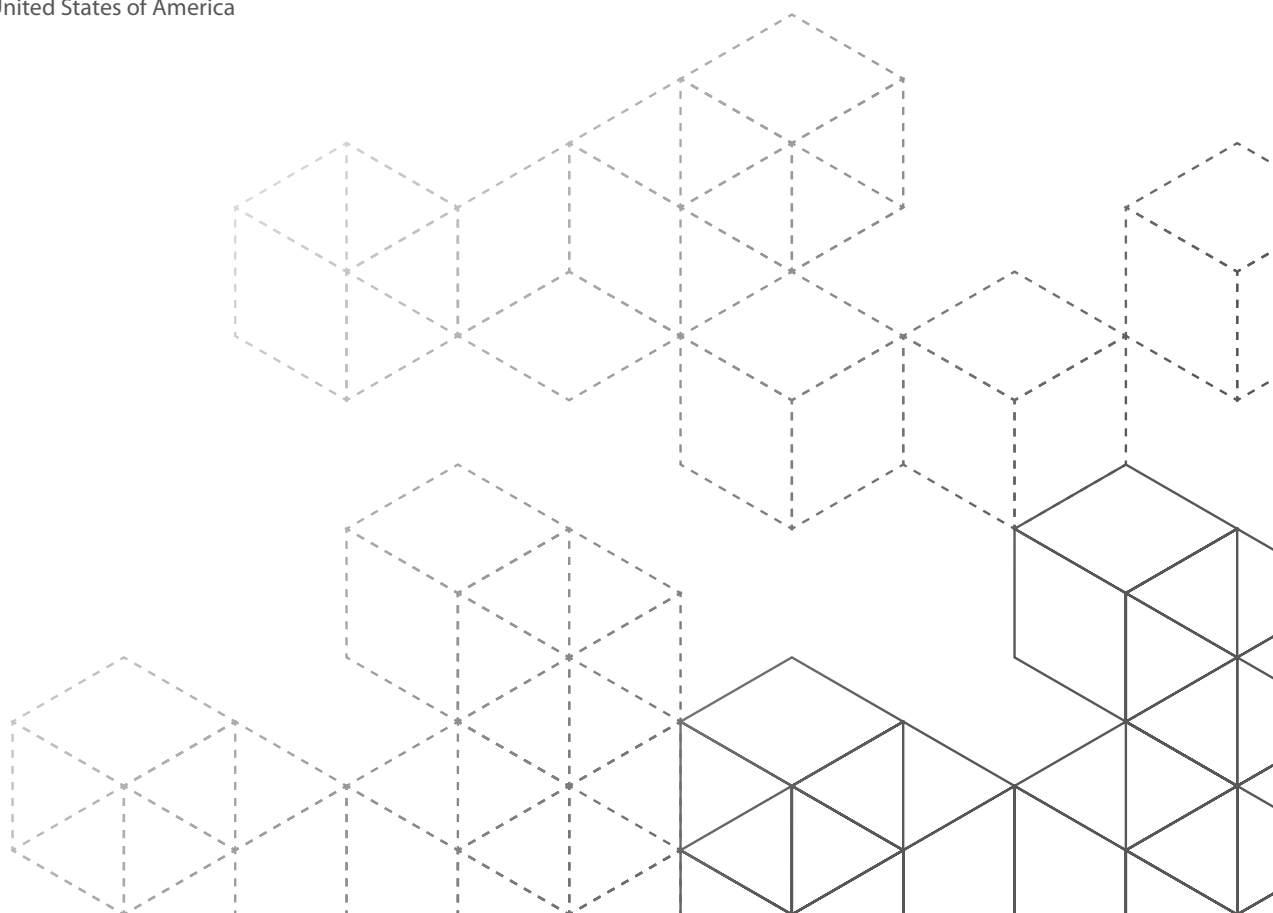
Essentially all opportunities to aid the management of affairs received widespread support, especially those that reduced the amount of time needed to manage an affair.

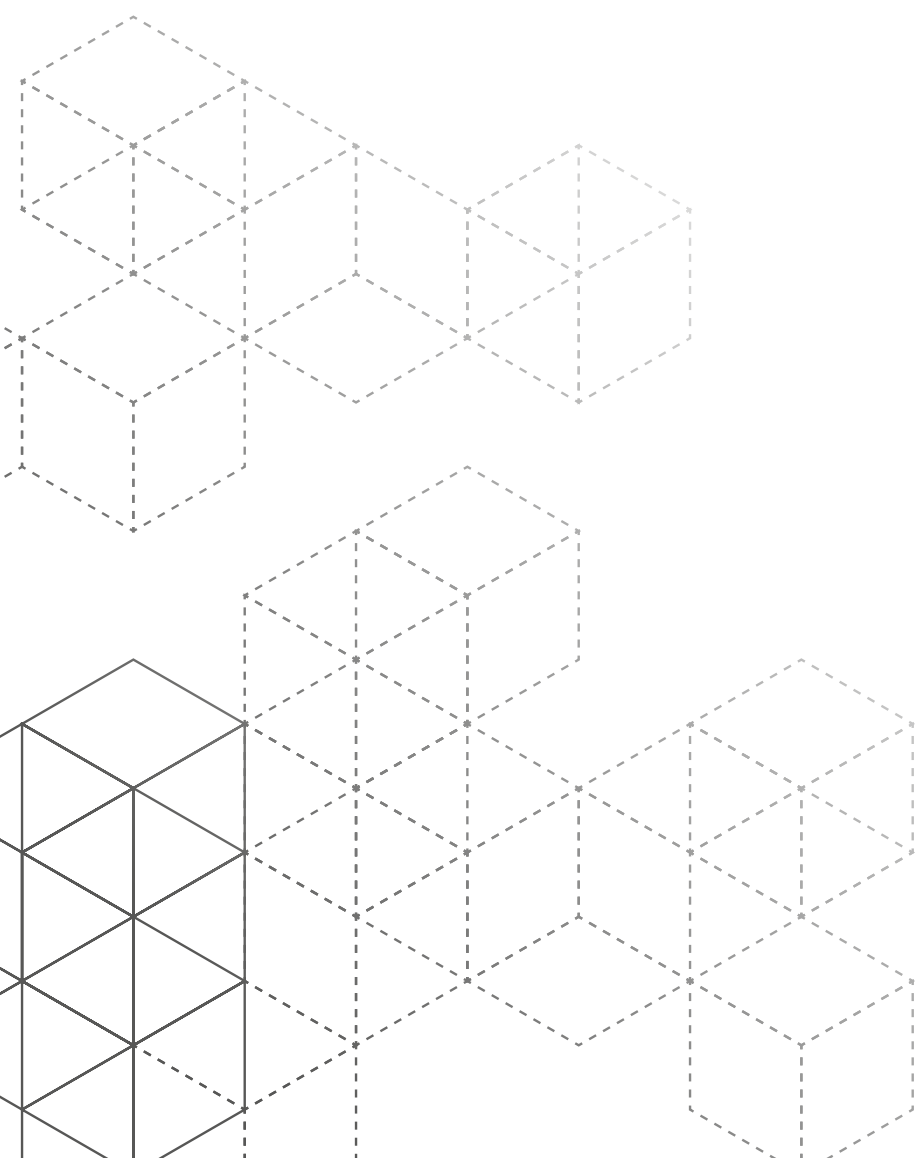
ABBREVIATIONS

BLH	BirdLife Hungary
CCH	The Constitutional Court of Hungary
CEPEJ	The European Commission for the Efficiency of Justice
CIA	Central Intelligence Agency
COAEPS	Central Office for Administrative and Electronic Public Services
COFOG	Classification of the Functions of Government
HCSO	Hungarian Central Statistical Office
ECFR	European Council on Foreign Relations
EEA	European Environment Agency
EES	European Parliament Election Study
EIU	The Economist Intelligence Unit
FH	Freedom House
GDWM	General Directorate of Water Management
GFN	Global Footprint Network
GFP	Global Firepower Index
GOS	Good State and Governance Opinion Survey 2016
HDRI	Hungarian Demographic Research Institute
HEPRA	Hungarian Energy and Public Utility Regulatory Authority
HF	The Heritage Foundation
HIERD	Hungarian Institute for Educational Research and Development
HIPO	Hungarian Intellectual Property Office
HMS	Hungarian Meteorological Service
HNB	Hungarian National Bank
HNDF	Hungarian National Authority for Data Protection and Freedom of Information
HPO	Hungarian Patent Office
IFOAM	International Foundation for Organic Agriculture
ISHE	Information System of Higher Education
MA	Ministry of Agriculture
MHC	Ministry of Human Capacities
MI	Ministry of the Interior
MNE	Ministry for National Economy
NAH	National Assembly of Hungary
NEO	National Election Office
NES	National Employment Service
NIPA	National Institute of Public Administration
NISZ	NISZ National Infocommunications Services Company Limited by Shares
NMIA	National Media and Infocommunications Authority
NOJ	National Office for the Judiciary
NPH	National Police Headquarters
NSDCP	National Statistical Data Collection Programme
NTCA	National Tax and Customs Administration
NUPS	National University of Public Service
OECD	Organisation for Economic Co-operation and Development
OPJ	Office of Public Administration and Justice
RWB	Reporters without Borders
SAO	State Audit Office of Hungary
SILC	Statistics on Income and Living Conditions
SIPACS	Single Investigation and Prosecution Authority Crime Statistics
SIPRI	Stockholm International Peace Research Institute
SWB	Subjective well-being
WEF	World Economic Forum
WHO	World Health Organization
WJP	World Justice Project
WRI	World Resources Institute

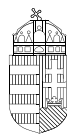
ABBREVIATIONS FOR THE COUNTRIES THAT APPEAR IN THE REPORT

AT	Austria
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
EU CEE 11	The 11 Central and East European states that joined the European Union after 2004
EU28	The 28 European Union Member States
FI	Finland
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
LU	Luxembourg
LV	Latvia
NO	Norway
PL	Poland
RO	Romania
RS	Serbia
RU	Russia
SE	Sweden
SK	Slovakia
SI	Slovenia
UK	United Kingdom
US	United States of America





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