STRUCTURAL POLICY CHALLENGES IN SLOVAKIA

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NON-TECHNICAL SUMMARY

The views and results presented in this paper are those of the authors and do not necessarily represent the official opinion of the National Bank of Slovakia.

Structural Policy Challenges in Slovakia

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Abstract

The paper presents possible approaches for measuring the quality of life together with their strengths and weaknesses. We identify 10 outcome indicators, which could help not only to set targets, but also as a quantitative benchmark for structural policy evaluation in Slovakia. In addition to that we present several case studies with best practices mainly from EU countries. Based on these we formulate 33 structural policy recommendations.

One of the main aims of democratically elected governments in the world is to ensure the long-term prosperity of their citizens. In general, economic policies aim to achieve the highest quality of life for the people, or at least they declare so. Quality of life is a multivariable concept which, in addition to material values, also includes health, social cohesion, culture, religion, and subjective perception of welfare. This is the reason why there may be substantial differences between a numerical description of economic growth and the quality of life.

So measuring social welfare and its changes is a demanding task to perform. This study has tried to identify indicators which would, in spite of their low number, sufficiently cover the most important areas of Slovak society. A progress in these indicators should mean not only a growth of market production, but also a notable improvement in the quality of life built on a sustainable basis. **A group of ten outcome indicators (plus public finance sustainability) could serve as a framework for assessing the success of structural policies in Slovakia.**

However, it is necessary to point out three important caveats. Firstly, the group of indicators should not be seen as a fixed list. If higher-quality indicators from a certain area become available, they must definitely be included in the list. Secondly, it is not enough to provide a mechanical assessment of the indicators, we should also monitor the qualitative aspects of changes. The indicators should be used rather indicatively, not as economic policy targets. Thirdly, when trying to improve the indicators, it is necessary to avoid hasty solutions which would decrease welfare. For example, the number of quotations per researcher can be increased very easily when we re-label most researchers as 'associate professionals'. In a similar way, we can increase the proportion of high-tech exports by suppressing other export sectors. The policies should therefore aim at improving the quality of life and not at quantitative indicator improvement.

The study also provides a review of global best practices in the identified areas. Interestingly, **the following two economic models were by far the most frequently included** among the best examples: **the Scandinavian model and the Anglo-Saxon model.** Large countries of continental and southern Europe have appeared only rarely. This was also the case with Central and Eastern Europe, where whilst lower levels are understandable due to history, worse results in dynamics are surprising.

At first sight it seems paradoxical that the two social models which are so different can bring about substantial progress in the quality of life, as reflected also in the 'subjective perception of welfare' indicators. This means that both the limited as well as substation role of a state in an economy can bring success. The key to success lies in factors which these two schools have in common. In our opinion, the common feature of the Scandinavian and Anglo-Saxon model is the emphasis on market-based systems. While in the Anglo-Saxon model these systems work mainly outside public finances, in the Scandinavian systems they serve as the basis for public resource reallocation. So it is not an arbitrary allocation of taxpayers' money (that can be connected to corruption), but rather a healing' of market failures by strict rules, often based on market principles (e.g. auctions, transparent public procurement).

The paper also suggests **thirty-three possible inspirations for economic policy in Slovakia** which are included at the end.
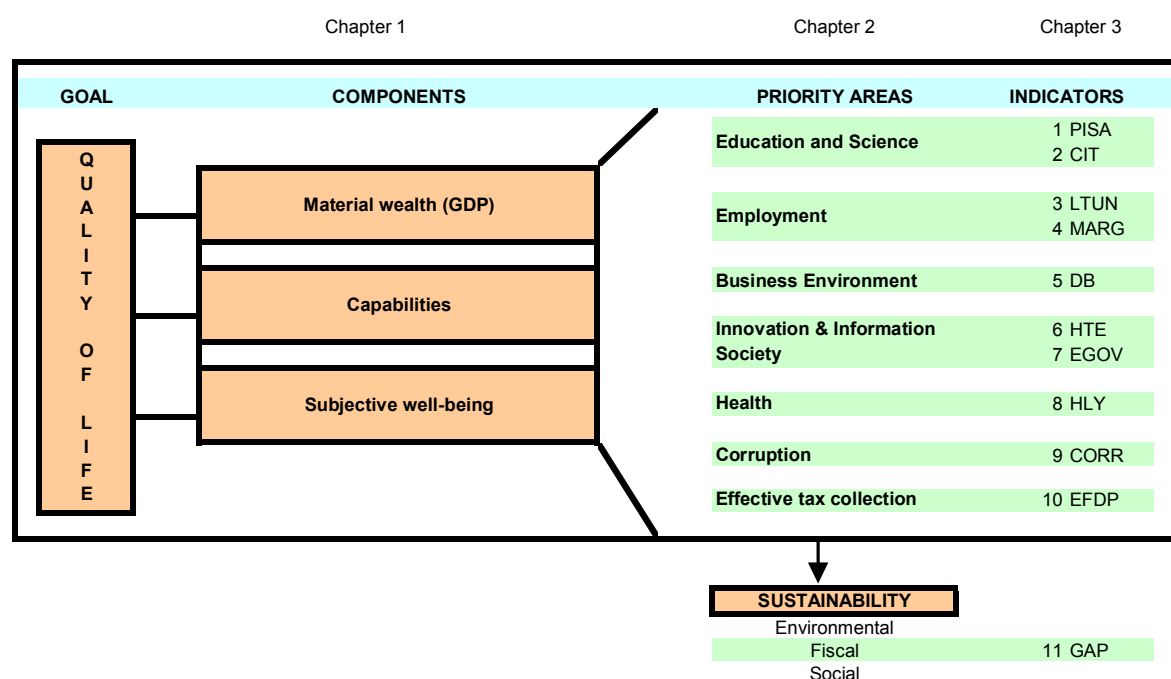
Priority Areas of Structural Policies

When trying to find priorities for structural policies in Slovakia, we combined three approaches: material wealth (mainly GDP), capabilities and subjective perception of welfare.

Material wealth potential is the easiest to identify. It can be seen from the GDP breakdown for Slovakia that there is notable scope for improvement in the total factor productivity, employment of young and elderly people, as well as long-term unemployment. The capabilities-approach has the most practical applications in education and health. So the priority of high-quality education results not only from material indicators, but also from the need for an equality of opportunity. In order to enhance a subjective perception of welfare, it is necessary to improve confidence in the economy and to decrease corruption. It is also related to the efficiency and transparency of public administration. Knowing the Slovak conditions, we wanted to point out efficiency of taxation in particular.

We have identified **seven areas** which we consider important for enhancing welfare in Slovakia, namely: **(1) education, (2) employment, (3) business environment, (4) innovation and information society, (5) health, (6) corruption, and (7) effective tax collection.** We are not saying that only the identified areas are important for Slovakia, we just think that these should play a vital role in the formation of economic policy in the near future.

Scheme : Our approach to measuring the quality of life

Indicators of Assessment of Structural Policies in Slovakia

The seven areas identified above, together with the sustainability requirement, form a basis for the selection of appropriate indicators for assessing and monitoring the progress of structural policies. We are using only indicators, which are internationally comparable.

1. EDUCATION

High-quality human capital not only has a positive impact on economic growth; it also brings individual and social benefits in the form of a higher quality of life, health, children's upbringing, and social and political engagement. Human capital, as we understand it, includes all schooling, training, and experience relevant for the creation of products and services and for acquiring further knowledge. The education of a population influences economic growth by various channels. Individual levels of education have a different impact on economic growth. While primary and secondary education mainly helps to introduce existing technologies into practice, university education also enhances a country's innovation capacity.

PRIMARY EDUCATION (PISA)

We consider the **PISA** indicator to be the best available indicator for measuring knowledge in the first stages of educational process. Since 2000, in three-year-long intervals, PISA tests have been used for measuring the performance of 15-year-old students in three areas – reading, mathematical and scientific literacy. For the purpose of this study, we use a composite PISA index that is an arithmetic average of reading, mathematics, and natural-science literacy.

In an overall assessment, Slovakia ranks below the OECD average with a position even worse than the V3[6] average. Moreover, 2006 saw a slight, statistically insignificant worsening of the overall position compared to 2003. Slovakia lags substantially in reading literacy and natural-science capacities; although in mathematics it is around the OECD and V3 averages.

TERTIARY EDUCATION (CIT)

University education development is essential for innovation-leading countries, while its quality is as important as its quantity. There is no good, internationally comparable performance indicator to measure university education quality; however, we can consider a few second-best – proxy indicators for that purpose. We suggest monitoring the number of quotations per researcher in the country (CIT). There are other alternative, though equally imperfect, indicators, such as the position of universities among top universities in international rankings, internationalization, the number of quotations per publication, income difference between a secondary school and tertiary graduate, interest in the study, etc.

Slovakia is significantly lagging behind in all defined indicators compared to the world's top performers as well as all its neighbouring countries. With its 9.1 quotations per researcher it is one of the worst-positioned countries in the OECD, the average of which is 24.1; while it is also below the V3 average (12.7). To be more precise, we are comparable with the average

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[6] Czech Republic, Poland and Hungary

of advanced countries in engineering science, clinical medicine, physics and mathematics; however, economics is the worst-performing area.

2. EMPLOYMENT

Employment is one of the direct components of a production function. More employed people produce more goods and services, and it has a positive impact on public finances: by paying taxes and contributions on the revenue side and with a lower burden on social expenditures and other transfers on the expenditures side. Surveys have shown that the loss of employment decreases the overall perception of happiness more significantly than just the loss of income; in addition, an unemployment increase in a country also worsens the life satisfaction of those who are still employed.

Slovakia remains among the countries with relatively high unemployment. Upon closer look, we can see that Slovakia has a problem mainly on the margins of the labour market bordering with inactivity, as manifested by a high long-term-unemployment rate and relatively low employment of young and elderly people. Indicators which we suggest monitoring focus on groups on the margins of the labour market as well as the long-term unemployed.

LONG-TERM UNEMPLOYMENT (LTUN)

Even though Slovakia is improving its long-term unemployment figures (LTUN) in recent years, it still holds the worst position within the EU/OECD. While the EU average is around 2.6%, the V3's is slightly lower at 2.4%; in contrast, 6.6% of the Slovak workforce has been unemployed for more than a year in 2009. The high rate of long-term unemployment in Slovakia is also related to the unsatisfactory situation of the Roma minority in Slovakia.

PRODUCTIVE ACTIVITY OF YOUNG AND ELDERLY PEOPLE (MARG)

The second indicator (MARG) measures the productive activity of young and elderly people. It is a sum of the employed people, students, and women on maternity leave, and people caring for ill family members, expressed as a share of the relevant part of the population in productive age (15-64)[7]. We monitor it within the age groups of young (15-24) and elderly (55-64) people; these are the groups where Slovakia traditionally demonstrated a low employment rate compared to the most advanced countries, and we show this as a weighted average depending on the number of people in these groups.

With its almost 70%-share of working people and students, Slovakia is close to the EU average in this indicator; having a similar position as the Czech Republic and slightly better than Poland and Hungary. Nevertheless, the employment rate among young and elderly is relatively low in Slovakia. We are close to the European average thanks to a high enrollment rate, a fact that can be beneficial for the future provided the quality of education is increased.

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[7] We do not think that public policy should try to influence the fact if people study, work, or have children. However, people should not be inactive or unemployed.

3. BUSINESS ENVIRONMENT (DB)

It is not sufficient to have a strong supply of production factors. It is also important to combine them efficiently and to apply the factors in a dynamic, continually changing environment. Therefore, for a country to be successful, it is important to ensure a good environment, without unnecessary barriers or political and administrative burdens for businesses to overcome, in order to pursue their activities. The business environment is determined by a wide range of factors from the institutional and regulatory framework regarding production, labour market and financial markets, through to macroeconomic policy, and up to public administration efficiency.

There are various international indices and surveys for its assessment. We consider the following indicators to be the most relevant indicators of business environment quality:

• Doing Business (World Bank),

• Indicator of Product Market Regulation (OECD),

• Global Competitiveness Index (World Economic Forum, Switzerland),

• World Competitiveness Index (International Institute for Management Development).

We find the 'Doing Business' (DB) survey produced by the World Bank to be the best indicator. DB measures the regulation of local small and medium sized businesses over ten stages of their life cycle: Starting a Business, Dealing with Construction Permits, Employing Workers, Registering Property, Getting Credit, Protecting Investors, Paying Taxes, Trading Across Borders, Enforcing Contracts, and Closing a Business. The data is based on local legislation, other regulations, and administrative requirements. The quality of DB's data is testified by the fact that many of the other mentioned indices include DB data among their sub-indicators.

In the most recent 2010 Doing Business Ranking, Slovakia scored 42nd of 183 countries, the best position of any V4 country. Slovakia was best ranked in Registering Property (11th) and Getting Credit (15th). On the other hand, Slovakia was off the pace in Protecting Investors (109th), Trading Across Borders (113th) and Paying Taxes (119th), with rankings outside the top 100.

4. INNOVATION AND INFORMATION TECHNOLOGIES

HIGH-TECH PRODUCTION (HTE)

High productivity is the key to welfare as it is the source of long-term economic growth. Apart from material wealth, it also provides higher values of indicators for the subjective perception of welfare by means of higher education, health, and job satisfaction.

Slovakia is a small open country, so the indices of trade in goods and services can express a lot about how quickly we are ascending the added-value ladder. The following indices are among the potential candidates:

- share of high-tech in total exports (HTE),

- share of the SR in total V4 exports,

- volume of exports of services (globalization).

We consider the first of the indicators as the most promising. In order to compensate its disadvantages, we might perhaps define 'high-tech export' in a different way than in the standard database, but as it is data-intensive, we have chosen not to opt for this. The share of high-tech export is a standard component of structural Eurostat indicators, so its current and historical values can be easily obtained .

The proportion of Slovak high-tech exports represents only 5.4% of total exports, i.e. only a third of the EU average. First place is occupied by Ireland where high-tech exports represent almost 30%.

E-GOVERNMENT (EGOV)

E-government enables citizens and businesses to access to information and services of public administration by digital channels including the Internet. It is based on information and communication technologies (ICT), which have a significant impact on economic growth through the channel of total factor productivity and capital creation. ICT usage in the public sector also leads to a reduction in the administrative burden of companies as well as increasing the efficiency and productivity of public administration and businesses.

The indicator which we have created is a combination of Eurostat indicators of E-government on-line availability and the indicators of E-government usage by individuals and businesses. With such complex indicator (EGOV), we can simultaneously measure the availability (supply) of high-tech e-services and their use by individuals and companies (demand).

As for the EGOV index in 2009, Slovakia was ranked 20th of 29 countries (EU + Iceland and Norway), which, despite slight progress, is still below average. SR is mostly lagging behind in the area of e-government availability.

5. HEALTH (HLY)

An important feature of societies with good living conditions is the health of their citizens. Therefore, health status is one of the main indicators of well-being, directly entering the social welfare function. But a certain level of health is also necessary for people to produce goods on the one hand, and to consume them on the other. Health is therefore seen to be one of the factors which enable a meaningful human life.

The question is still how to measure the health of the population on an aggregate level, and in an internationally comparable way. In a group of structural indices you can find, for example, Eurostat's healthy life years (HLY, alternatively also called disability-free life years, DFLY). This index measures how many years of healthy life, i.e. a life without disability or major handicap, can a person expect to live in a certain country.

Of V4 countries, the HLY is the worst in Slovakia with only 54.4. The EU average is 62.1, with the best countries approaching 70. It means that Slovakia, in terms of health condition

but also of satisfaction with the healthcare system in general, is significantly behind the best results of rich countries, but also behind its neighbours. However, we should be cautious when interpreting recommended policies and solutions, as the health condition is to a great extent determined by other factors than the healthcare system itself. Improvements in the area of transport infrastructure, local and regional environment, and education might perhaps improve health more than interventions in the healthcare system.

6. TRANSPARENT AND CORRUPTION-FREE ENVIRONMENT (CORR)

Corruption is understood as any use of social status or political power in order to obtain personal or group advantages at the expense of wider society. Our understanding of the concept is therefore economic and quite broad; above all, we do not limit it to the legal definition of corruption, or to what is perceived by the general public as corrupt behaviour. Although from the static point of view, corruption can be neutral to positive, from the dynamic point of view it almost always forms barriers to economic activity, miss-allocation of resources in the public and private sectors, and represents a hidden and very inefficient form of taxing individuals and businesses.

With the aim of measuring corruption in the Slovak society, we have created a composite indicator that places equal importance on everyday and business corruption. In order to measure common corruption, we used the Eurobarometer survey made every two years, measuring experience with corruption among the general public per individual sectors[8].

In trying to measure business corruption, we could not find a survey which would measure the experience of business people with corruption. So as the second best option, we used the Corruption Perception Index (CPI) of Transparency International, a major part of which (one half in the case of Slovakia) is composed of surveys about corruption perception by businessmen, while the rest is based on various expert opinion surveys. The resulting corruption index (CORR) is a simple average of the two mentioned indices. The same again applies for Slovakia, which with its 61% is far behind not only the EU average (77%) but also the V3 average (67%).

7. EFFICIENT TAX COLLECTION (EFDP)

Efficient public finance represents an essential precondition for productive utilisation of resources. At the same time, it strengthens mutual trust in the economy, and so increases the subjective perception of welfare in general. Other parts of this paper deal with recommendations on the expenditure side, so this indicator places an emphasis mainly on tax system efficiency. We propose to construct the following index:

EFDP = [(personal income tax collection + social security contributions)/(compensations + mixed income)]/(effective tax wedge)

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[8] The following categories are surveyed: police, customs administration, courts, national politicians, regional politicians, local politicians, tenders, building permits, business permits, healthcare system, school system, inspection and "others".

The index which we have created compares the actual tax collection with the rate stipulated by the legislation. In 2007, its value in Slovakia was 41.2%, while the OECD average amounted to 54.2%. Similar indicators on a macroeconomic level might be considered too: 1) tax quota II in comparison with effective rates, and 2) comparison of tax collection with tax wedges in personal income taxes and social security contributions.

SUSTAINABLE DEVELOPMENT

Structural changes represent a great challenge for the European Union, but so does their sustainability. We have identified three areas which have to be borne in mind in an effort to improve structural indicators: fiscal policy, environment, and social coherence. We can easily imagine a substantial increase of resources in high-priority areas which, however, would notably worsen the public finance deficit. It is also possible to increase production at the expense of environmental quality (or exhaustion of natural resources), or increasing income inequality.

Of the three mentioned areas, we have quantitatively focused on public finance. The following can be included among possible candidates for measuring public finance sustainability: 1) S1 and S2 indicators[9], which are used for EU countries' assessment (in view of stability and convergence programs); 2) Country Ratings; 3) Risk margins of Eurobonds or the price of government bonds insurance against default (CDS, Credit Default Swaps).

We suggest monitoring the GAP indicator, which is an improvement of the standard Eurostat S2 indicator. GAP measures the difference between current and desired structural deficit level. When determining a current value, it is necessary to correct for the business cycle, one-off effects, property sales, as well as the balance of state-owned enterprises. The estimate of GAP for Slovakia stands at approximately 5% of GDP. Although GAP calculations are not available for other countries, in this case a natural benchmark is zero.

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[9] S1 indicator expresses the need for consolidation in order not to exceed the public debt level of 60% of GDP in a particular time in the future (e.g. 2050), while the S2 indicates how much a government should decrease deficit to avoid an "explosive" deficit in an infinite time span.

MATRIX FOR STRUCTURAL POLICY ASSESSMENT

Apart from identifying indices for measuring the quality of life in Slovakia, we tried to set ambitious but achievable target levels for the near future. In our case we considered the period of two electoral terms. Specific target figures (benchmarks) were created by the authors' consensus. The valuation is mainly based on V3 status and on the size of the best improvement achieved for the previous 8 years.

	Question	Indi-cator	Current SR	Current TOP5	Bench-mark
1.	Is the quality of primary schooling increasing?	PISA	482	538	505
2.	Do Slovak universities have good results?	CIT	9	55	16
3.	Are prospects for the long-term unemployed improving?	LTUN	6.6%	0.54%	3%
4.	Is the unemployment of marginalized groups dealt with?	MARG	69.6%	77.7%	74%
5.	Do we have an excellent business environment?	DB	42	TOP5	TOP 15
6.	Is Slovakia successful in exporting with higher added value?	HTE	5.4%	22.4%	14%
7.	What is the progress in public services' informatization?	EGOV	0.45	0.81	0.8
8.	Is our general health condition improving?	HLY	54.4	67.6	60
9.	How are we fighting corruption?	CORR	61%	95%	80%
10.	How efficient is our tax system?	EFDP	41.2%	69.0%	54%
	Is the development sustainable in the long term?	GAP	5%	1%	0

To conclude, we present **possible inspiration for structural policies in Slovakia** based on the analysis of experience with enhancing quality of life globally as well as our familiarity with Slovak conditions.

General – Better Information about Quality of Life

1. Construct and use indicators which would monitor the consumption, income and wealth of households including their distribution, instead of production. In Slovakia there is a lack of high-quality information about the total assets and liabilities of households.

2. We recommend to monitor added value in the public sector on the basis of results instead of input costs.

3. It would be good to cover non-material areas of life with surveys about subjective welfare, happiness and capabilities (family, free time, criminality, environment, etc).

4. Economic policy and government documents should place greater emphasis on social relations, health, employment issues, mutual trust and corruption.

Education and Science

5. Create an advisory system including individual education of weaker students.

6. Increase the remuneration of teachers with focus on the performance component.

7. Decrease selection based on abilities of elementary students.

8. Increase the role of English language in teaching at all educational levels.

9. Put greater emphasis on internationally acknowledged results in education and science, project funding, and international cooperation in the university funding system. To join PIAAC and AHELO assessment.

10. Make the accreditation process more professional and decrease its high administrative burden. Appoint foreign experts in the accreditation committees.

11. Introduce tuition fees at universities while maintaining access to education, together with introducing income-contingent loan scheme.

Employment

12. Enable greater flexibility in relations between employees and employers.

13. At the same time increase the social protection of disadvantaged groups on the basis of activity including education (community services, requalification courses, etc).

14. Limit opportunities for early retirement.

15. Increase the retirement age in line with life expectancy.

Business Environment

16. Strengthen the law enforcement and make public procurement and subsidies provision more transparent. Introduce obligatory e-auctions and the disclosure of full contracts in the

public sector.

17. Decrease the bureaucratic and administrative burden of companies, mainly in paying taxes and social security contributions.

18. Create a support system of starting innovative companies (infrastructure and financial tools) on the basis of private initiatives support.

19. Apply transparent criteria for license allocation and simplify market entry in highly-regulated sectors.

20. Create conditions for a systematic business education of youth, mainly at vocational schools.

Innovation and Information Society

21. Support cooperation of technical universities with business sector, mainly adopting the up-to-date knowledge on the level of West-European schools, as well as giving preference to supporting projects with involvement of private sector.

22. Re-direct state aid towards private initiatives in research and development.

23. Increase the supply and quality of e-government services, improve their internal compatibility, and simplify the e-signature process.

Health

24. Make medical workers, health services providers, insurance companies, and patients better informed, and make their relations more transparent. Better monitor and disclose the quality of providers, including the disclosure of insurance contracts.

25. Decide which segments of health services providers will be open for market competition and which segments are basic infrastructure. Adjust regulation regimes and institutions consistently with this differentiation.

26. Provide equal definition and access to health care services for all socio-economic groups and regions.

27. Widen the competencies of health regulation agencies (ÚDZS and ŠÚKL) to an assessment of medical interventions and technologies on the basis of their costs and benefits (following the British NICE, the German IQWiG, and similar patterns). For example, they would assess the entry of pharmaceuticals onto the market and their payment from public resources, investment into financially-intensive technologies, or inclusion of medical services into the type of health care paid for with public insurance.

Corruption

28. Strengthen the position of autonomous anti-corruption (ÚVO, NKÚ) and regulatory (PMÚ, sector regulators) agencies. Select the management through an international tender.

29. Introduce an obligation to disclose key data generated by the public sector in user-friendly form as well as "rough data", most importantly, in our opinion, in public finance and highly-regulated areas (inspirations No. 19 and 33).

Efficient Tax Collection

30. Unify tax and social security contributions bases as well as their collection.

31. Transform health insurance contributions into the tax system and abolish various exceptions (deductible item for a husband/wife, social security and pension contributions exemptions, 2% for community purposes, etc.)

32. Fight tax evasion more efficiently. Increase the professional level and improve information systems of the Tax Directorate. Create specialized teams (on the basis of international experience) to solve evasions in the most critical areas (VAT, excise taxes).

Sustainability

33. Improve the institutional framework of public finance: introduce expenditure ceilings and an independent Council for Fiscal Responsibility. Introduce transparency rules and a concept of net worth.