



Report on the Long-term Sustainability of Public Finances

April 2015

© Secretariat of the Council for Budget Responsibility, 2015

The reproduction of any part of this text should be identified, apart from the name of the institution, by the document title. The text has not been proofread.

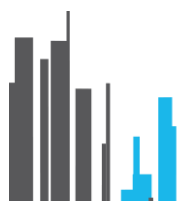
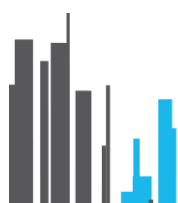


Table of contents

Summary	6
1 Framework for the evaluation of long-term sustainability	8
2 Starting year	10
2.1 Structural primary balance in 2014 _____	10
2.2 General government debt in 2014 _____	12
3 Baseline scenario	13
3.1 Demographic forecasts _____	13
3.2 Macroeconomic forecasts _____	14
3.3 Medium-term no-policy-change scenario _____	15
3.4 Expenditures and revenues sensitive to population ageing _____	17
3.4.1 Pension system projections.....	18
3.4.2 Projections of healthcare expenditures.....	19
3.5 Other implicit and contingent liabilities _____	20
3.6 Baseline scenario of long-term developments in public finances _____	22
4 Long-term sustainability indicator	23
4.1 Development in the indicator in 2013 and 2014 _____	23
4.2 Sensitivity scenarios _____	24
5 Net worth of the Slovak Republic	28
6 Economic growth	32
6.1 Debt and feedback on economic growth _____	32
6.2 Risks in convergence and equilibrium unemployment rate _____	33
7 Generational accounts	35
Annex 1 – Revision of the fiscal performance in 2013	38
Annex 2 – Dividends paid to general government budget	44
Annex 3 – Profit/loss of state corporations	45
Annex 4 – One-off effects in 2014	48
Annex 5 – Methodology and assumptions of the baseline scenario	50
Annex 6 – Net worth	54
Annex 7 – Baseline scenario of 2013 - revision	56



List of boxes, tables and charts

Box 1: Four dimensions of scrutinising the long-term sustainability of public finances	9
Box 2: CBR's revision of one-off effects in 2013	39
Box 3: Correlation of selected lines in the tax return of companies	42
Tab 1: Overview of the first four reports on long-term sustainability	8
Tab 2: Structural primary balance in 2014	11
Tab 3: MFC forecasts and CBR long-term projections	14
Tab 4: Medium-term part of the baseline scenario	16
Tab 5: Expenditures and revenues sensitive to population ageing	17
Tab 6: Public finance baseline scenario	23
Tab 7: Development of long-term sustainability indicator	24
Tab 8: Alternative scenarios	27
Tab 9: Net worth of the public sector in Slovakia in 2012 and 2013	28
Tab 10: Link between the balance and change in net worth of ŽSR and NDS in 2013	30
Tab 11: Generational accounts of current and future generation	37
Tab 12: Structural primary balance in 2013	38
Tab 13: Revision of GG balance in 2013	39
Tab 14: Difference in one-off effects in 2013	40
Tab 15: Public sector structural primary balance between 2011-2013	41
Tab 16: Correlation summary	42
Tab 17: Structural primary balance in 2013	43
Tab 18: GG gross debt revision in 2013	43
Tab 19: Dividends in portfolio of NPF and state	44
Tab 20: Profit/loss of state owned corporations, or NPF respectively	45
Tab 21 : One-off effects in 2014	48
Tab 22: One-offs and other temporary factors	52
Tab 23: Assumptions on EU funds	52
Tab 24: Public sector's balance sheet – net worth	54
Tab 25: Net worth of the public sector in Slovakia in 2012 and 2013	54
Tab 26: Contingent liabilities of the public sector	55
Tab 27: Baseline scenario for public finance development – 2013	56
Figure 1: Structural primary balance between 2011-2014	12
Figure 2: General government gross debt between 2011-2014	12
Figure 3: Aggregate fertility rate	13
Figure 4: Old-age dependency ratio	13
Figure 5: Real GDP growth	15
Figure 6: Employment	15
Figure 7: Decline of employment in EU countries	15
Figure 8: Convergence of Visegrad Four countries in history and in EC projections	15
Figure 9: Balance of the universal pension system	18
Figure 10: Balance of the pension system of the armed forces and police corps	18
Figure 11: Healthcare expenditures in 2013	20
Figure 12: Healthcare expenditures of people who died in a given year	20
Figure 13: Availability payment under the PPP project and costs of maintenance	21
Figure 14: Nuclear facility decommissioning scheme - impact on the balance	21



Figure 15: Debt and primary balance development under baseline scenario	22
Figure 16: Expenditure development under baseline scenario	22
Figure 17: Consolidation at a constant rate	25
Figure 18: Consolidation postponed by 5 years	25
Figure 19: Development of debt in the baseline and alternative scenarios	27
Figure 20: Debt in feedback effects on economic growth	33
Figure 21: Loss of potential in feedback scenarios	33
Figure 22: Debt in feedback effects on economic growth	34
Figure 23: Debt in NAWRU risk scenarios	34
Figure 24: Age profile of revenue and expenditure policies 2013 (individuals)	35
Figure 25: Aggregate age profile 2014 (individuals)	35
Figure 26: Generational accounts of living population according to age and gender	36
Figure 27: Population according to age cohort and gender in 2014	36
Figure 28: Profitability	42
Figure 29: Tax base	42
Figure 30: Tax liability	42



Summary

In contrast to the two preceding years, Slovakia's long-term sustainability of public finances in 2014 deteriorated. The main reason lies in the worse starting position, which was due to the year-on-year increase in general government deficit, even if adjusted for temporary effects. Long-term projections of the revenues and expenditures sensitive to demographic changes have not changed significantly. The fiscal policy easing worsened the long-term sustainability indicator, from 1.9 % of GDP in 2013 to 2.4 % of GDP last year. The change in the indicator already reflects the amendments in the tax legislation effective as of 2015; without them, the deterioration would have been worse.

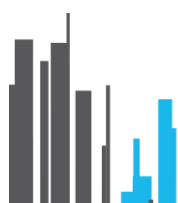
Since the last year's report, the Council for Budget Responsibility evaluates long-term sustainability along all four sustainability dimensions (solvency, stability, growth and fairness). However, analytical approaches continue to be improved. This report, in particular, expands on the sensitivity scenarios, points at the differences between the net worth and balance under ESA2010, and quantifies the impact of the economic environment on the fiscal performance of state corporations.

From the perspective of long-term sustainability, the value of structural primary balance is important. Unlike the balance published by Eurostat, it does not take into account short-term cyclical fluctuations and one-off temporary measures. Moreover, it also disregards debt interest payments; on the other hand, it takes into account the fiscal performance of the NBS and state corporations. The fiscal policy easing and the decline in NBS profits deteriorate the value of the thus defined indicator by 1.3 p.p., from positive 0.6 % of GDP to negative 0.6 % of GDP. The gross debt decreased by 1 % of GDP to 53.6 % of GDP, which slightly improved the starting position.

In 2014, the government did not adopt any measures in respect of the revenues and expenditures sensitive to the demographic change, which would have significant impact in the long run. By 2064, these items will deteriorate the balance by 2.6 % of GDP, with pension schemes contributing less and the healthcare and long-term care expenditures contributing more to the change. The steepest absolute increase, by 1.5 % of GDP, is expected in the healthcare sector, while the long-term care expenditures will rise by 0.4 %, which represents the biggest relative change (133 %). As far as the other measures are concerned, the recent legislative amendments in the area of taxation, effective as of 2015, will improve the balance on a permanent basis by around 0.4 % of GDP.

The 2014 end-year deficit, placed in the context of the legislation applicable at the end of 2014, show how the public deficit and debt would develop in the future (baseline scenario). Under such a scenario, general government debt would surge to 250.5 % of GDP in the next 50 years. The upper debt limit, as defined in the Fiscal Responsibility Act, would be overshoot in 2021. Of course, the projection is hypothetical since financial markets would cease to finance the Slovak debt much earlier.

The need for a permanent improvement in the government balance in 2014 was calculated at 2.4 % of GDP. Given the degree of uncertainty associated with long-term projections, the report contains several sensitivity scenarios which illustrate how sensitive the indicator is to delayed consolidation, its different definitions, or to changes in demographic and macroeconomic



assumptions. Analyses show that the delay in consolidation by five years or the extension of the horizon of projections from 50 to 60 years increase the value of the indicator by 0.3 p.p. From among the macroeconomic assumptions, the most significant impact comes from changes in the productivity growth assumption. A slower convergence to the EU average may increase the indicator by up to 0.6 p.p.¹. The reduction of the indicator by 0.3 p.p. can be achieved, for example, by increasing the birth rate progressively, to 2.1 by 2060. The linking of the statutory retirement age to changes in life expectancy would ensure that the effect of longer life expectancy on the indicator would be negligible.

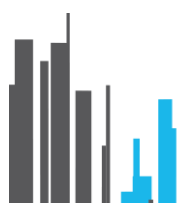
The baseline scenario and sensitivity analyses present long-term projections against a constant macroeconomic scenario. In reality, any debt increase above the critical level inflates the risk of rising premiums on government bonds and, consequently, increases the cost of capital, and may cause the crowding out of private investments. All these channels undercut the economic growth potential which, ultimately, significantly shortens the period of time (compared to the baseline scenario) for which the country is able to finance its debt, with all the negative consequences attached. For example, the debt level of 80 % of GDP² would be achieved six years earlier than under the baseline scenario (2029 vs 2035).

The results of generational accounts indicate that fiscal burden is being shifted onto future generations. While a child born today will receive from public budgets EUR 41,000 more than he/she contributes, future generations will be in a completely different situation for they will have to contribute EUR 61,000 more than what they receive. This is approximately EUR 6,000 more than in 2013, mainly due to the higher general government deficit and net debt increase in 2014. For the same reason and assuming the application of an unchanged fiscal policy, the total volume of government liabilities increased from 248 % to 263 % of GDP in 2014. This justifies the conclusion that, compared to the year before, the intergenerational solidarity in 2014 deteriorated.

The changes in Slovakia's net worth have been minimal. From negative 229.8 % of GDP at the end of 2013, the net worth improved by 1.1 p.p. year-on-year. The Ministry of Finance continues to fine-tune the reporting of individual net-worth components, for example by extending the list of contingent and implicit liabilities and including lawsuits with potential positive impacts on public finances. It is not yet possible to interlink the net worth development with deficit development in order to evaluate the impact of government policies on the net worth. In this report, the CBR focuses on such interlinkage on a sample of state corporations (Slovak Railways, National Motorway Company). Although the aggregate surplus of both corporations reached 0.3 % of GDP, the net-worth improvement was significantly lower, reaching only 0.1 % of GDP. The difference stems mainly from differing treatment of capital expenditures. Even though capital expenditures increase the deficit, they do not reduce net worth in the given year. On the other hand, current expenditures on the company's operations deteriorate both the deficit and net worth.

¹ The baseline scenario envisages Slovakia's convergence to 90 % of the EU-28 average, sensitivity scenario suggests convergence to 80 %. The impact should be symmetrically positive if 100 % of the EU-28 average is reached.

² Based on international experience, the CBR considers the level of 80 % of GDP critical for small and open economies.



1 Framework for the evaluation of long-term sustainability

The drawing up of Report on the Long-term Sustainability of Public Finances is one of the main tasks of the Council for Budget Responsibility laid down in the Fiscal Responsibility Act³. The objective of the report is to evaluate situation in public finances in the long term, taking into account the current setup of policies.

The methodology for the evaluation of the long-term sustainability of public finances was published in November 2012 (*Discussion paper no. 1/2012*). The CBR evaluates long-term sustainability along four main dimensions: solvency, stability, growth and fairness (See Box 1 for description). Given the complexity of evaluation, the CBR was gradually incorporating new analytical approaches into its reports; the one published last year was the first to cover all four dimensions of sustainability.

Despite the fact that the present report covers all dimensions of evaluation, the quality of evaluation can still be improved. This report contains amended sensitivity scenarios and illustrates, for the first time, the impact of the economic environment on the fiscal performance of state corporations; on a sample of two state corporations, it illustrates the methodological and interpretation differences between changes in the net worth and deficit under ESA₂₀₁₀. The impact of public finances on economic growth is illustrated using varying rates of Slovakia's convergence to the EU average and the development of unemployment.

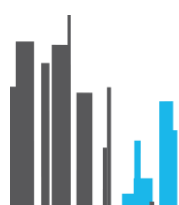
In order to improve the evaluation of long-term sustainability further, it is essential to improve the quality of all input data. This will enable us to improve the evaluation of changes in the net worth and interlink them with the general government deficit. The contingent liabilities and fiscal performance of the National Bank of Slovakia (NBS) and state corporations also warrant a deeper analysis. The compilation of the baseline scenario can be further improved by developing an in-house macroeconomic forecast, which would reflect the adopted measures in a consistent manner. Apart from the current models for the pensions systems (universal and armed forces) and healthcare expenditures, it is necessary to develop a model for expenditures in the sectors of education and long-term care.

Tab 1: Overview of the first four reports on long-term sustainability

Publication date	Type of report	New content	Principle
17 December 2012	extraordinary report (according to the transitional provisions of the Act)	baseline scenario (flow variables) Sustainability indicator	Solvency Solvency
30 April 2013	regular report (Article 4(1) of the Act)	net worth (stock variables) sensitivity analysis cost of delay	Solvency Stability Stability
28 April 2014	regular report (Article 4(1) of the Act)	impact on economic growth generational accounts	Economic growth Fairness
30 April 2015	regular report (Article 4(1) of the Act)	new sensitivity scenarios adjusted profit/loss of state corporation for cycle net worth (link to the deficit – selected corporations) impact on economic growth – convergence scenarios and NAWRU	Stability Solvency Solvency Economic growth

Source: CBR

³ Constitutional Act no. 493/2011 on Fiscal Responsibility (available only in Slovak)



Box 1: Four dimensions of scrutinising the long-term sustainability of public finances ⁴

1. Solvency

Solvency expresses the ability of the state to pay its liabilities, including in the long-term future. The Fiscal Responsibility Act defines solvency as such fiscal performance of the Slovak Republic which, in the next fifty years, does not bring the general government debt above the upper limit of 50 % of GDP⁵. Hence 'public finances sustainable in the long term' mean that the gross debt of Slovakia, despite population ageing which will increase public expenditure and reduce revenue, will not exceed half of the annual economic output.

2. Stability

The stability principle is about making sure that there are no excessive fluctuations in the living standard of the individual throughout his/her life. In other words, it is not desirable for the state to be forced in the future by financial markets and international institutions to consolidate its public finances radically in a short time span. Moreover, long-term forecasts are reliable only to a certain degree and it is thus of key importance to develop analyses of sensitivity to changes in the input parameters, such as the interest rate, birth rate or growth in labour productivity.

3. Growth

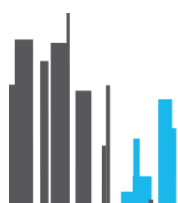
The growth aspect is about the impact of budget variables on economic growth. Various deficit and debt development scenarios must not be isolated from their feedback on the macroeconomic environment. An increase in public debt may, for example, raise the risk premium on debt financing or crowd public investments out of the economy. Long-term models should incorporate all these correlations.

4. Fairness

In the public finance context, fairness refers to intergenerational equity. The fairness aspect attempts to ensure that current generations refrain from passing excessive financial burdens onto future generations. Also the recital in the Fiscal Responsibility Act emphasises the economic and social fairness between generations. The CBR will be quantifying the net contribution to/receipt from public finances of individual age cohorts, however, without making judgements on the fairness itself, which is a matter for politicians to decide on.

⁴ These four dimensions of sustainability were defined by Allen Schick in his study for the OECD entitled *Sustainable Budget Policy: Concepts and Approaches* in 2005.

⁵ According to the Fiscal Responsibility Act, the upper limit for public debt (and also the other debt limits) will be progressively reduced during the transitional period from 2018 to 2027 from the current 60 % of GDP to 50 % of GDP – each year by one percentage point.



2 Starting year

The Fiscal Responsibility Act defines long-term sustainability as a difference between the actual and long-term sustainable value of the structural primary balance. Therefore, the first step in assessing the position of public finances is to evaluate the general government's fiscal performance in the previous period by **quantifying the structural primary balance⁶** and the **actual gross debt of the general government⁷**.

The long-term sustainability report is published regularly, as of 30 April each year, a point in time at which only preliminary data for the past year are available and several relevant pieces of information are still missing. The definitive information on the general government balance and additional information on adjusting items (for example, profit/loss of state corporations) can thus be reflected only in the next year's update of the report.

Compared to the previous report, this report reflects two methodological changes⁸. Starting from its October 2014 notification, Eurostat reports macroeconomic and fiscal data under the ESA2010 methodology. At the same time, in order to develop a uniform national methodology for the assessment of one-off effects comparable with the approach of the Ministry of Finance, the CBR has revised the original list of one-off effects.

2.1 Structural primary balance in 2014

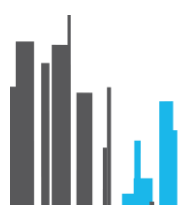
In 2014, the structural primary balance reached -0.6 % of GDP. This balance is worse by 1.3 % of GDP⁹ compared with 2013, which is almost equally attributable to the deficits run by the general government and other components of the public sector.

⁶ The Fiscal Responsibility Act defines the structural primary balance as the value of the general government budget balance adjusted for the impacts of economic cycle, one-off effects, cost of debt servicing and balances of state corporations, municipal corporations and the National Bank of Slovakia.

⁷ The gross general government debt corresponds to the Maastricht definition of debt. It is published by Eurostat as part of the deficit and debt notification.

⁸ The report from April 2014 suggested to design a methodology which would reflect, in a consistent manner, the fiscal performance of state corporations and the NBS in comparison to the general government. Beyond the framework of the definition contained in the Fiscal Responsibility Act, it is necessary to adjust the balances of state corporations and the NBS for economic cycle and one-off effects, which will make the balances of the general government and state corporations more comparable. Since state corporations and the NBS are specific, proper reflection of the above-mentioned factors requires a comprehensive analysis. In Annex 1, the CBR presents an alternative calculation of the 2013 results.

⁹ Since the change in the structural primary balance, adjusted for the balances of state corporations and the NBS, does not contain the long-term effects of measures (costs of the implementation of the fully-funded pillar of the pension system, costs connected with the nuclear decommissioning scheme ...), it is not appropriate to compare and use it in the same way as the structural balance change is used in evaluating the budget. This indicator represents only one input in the calculation of long-term sustainability (GAP) and expresses the present budgetary position without taking long-term impacts into account. They are already a part of the baseline scenario presented in the next part of the document. Only the combination of the structural primary balance quantified in this chapter and the baseline scenario enables us to calculate the long-term sustainability indicator, which reflects all the impacts that are typically included in the calculation of a change in structural balance within budget evaluation.



Tab 2: Structural primary balance in 2014

	2014 % GDP	2014 mil. eur	2013 % GDP	2014-2013 % GDP
A. Net lending /borrowing	-2.9	-2 157	-2.6	-0.3
(-) Cyclical component	0.0	-4	-0.5	0.5
(-) One-off effects	0.1	88	0.0	0.1
(-) Interest payments	-1.9	-1 440	-1.9	0.0
B. General government structural primary balance	-1.1	-800	-0.2	-0.8
(+) Profit/Loss of state owned corporations	0.7	502	0.8	-0.1
(+) Profit/Loss of the NBS	0.1	102	0.7	-0.5
(-) Dividends paid to the GG	0.4	283	0.6	-0.2
C. Public sector structural primary balance (incl. state own. corp. and NBS)	-0.6	-479	0.6	-1.3

Source: CBR, MF SR

According to the preliminary data released by Eurostat, **the 2014 general government deficit under ESA2010 reached EUR 2,156.7 million**, which represents **2.9 % of GDP**. The general government deficit deepened by **0.3 % of GDP** year-on-year, despite the output gap closing in 2014 (the cyclical component of the balance¹⁰ was zero) and a slightly positive impact of the one-off effects¹¹. **The general government's contribution to the year-on-year deterioration in the structural primary balance reached 0.8 % of GDP** on the whole. Adjusted for the decrease in dividends from state corporations¹², the contribution represents **0.6 % of GDP**.

The fiscal performance of general government is also influenced by the balances of state corporations and the National Bank of Slovakia (NBS), which contributed to the year-on-year deterioration in the structural primary balance by 0.6 % of GDP. The NBS profit declined from **0.7 % of GDP** in 2013 to **0.1 % of GDP** in 2014. The aggregate profit of all state corporations¹³ in 2014 is estimated at **0.7 % of GDP**, which is a decline by **0.1 % of GDP**¹⁴.

¹⁰ The budget balance adjusted for the cyclical component assumes that the economy is performing at its potential (long-term) level and the differences in revenues and expenditures occur under the influence of economic and political interventions.

¹¹ One-off effects are measures (under government control) and transactions (outside government control) with temporary budgetary impacts, which do not induce a permanent change in the budgetary position. See Annex 4 for more.

¹² Also the dividends received from state corporations are revenues of the general government budget. Since the balances of state corporations are included in the calculation of the structural primary balance, the mutual relationships between the budget and state corporations need to be excluded (their overall impact is neutral, since the dividends are revenues of the budget and, at the same time, represent expenditures from the budgets of state corporations).

¹³ The calculation of the balances of state corporations in 2014 is based on an annex to the approved General Government Budget for 2015-2017 (state corporations, the companies in the portfolio of the National Property Fund (NPF) are not on the list) in which these corporations indicated their expected financial results for the years to come. These results were then weighted depending on the size of the government's ownership share in the corporation. Annex 3 contains the detailed results of state corporations.

¹⁴ The figures presented by the state owned corporations indicate their lower profits in 2014. However, these worse results compared to 2013 may be partly due to the non-inclusion of companies in the NPF portfolio, those did not report their expected results for the years to come. The lower dividend pay-out in 2014 points at lower profitability of state corporations (revenues from dividends are specified in Annex 2) as well.

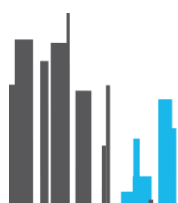
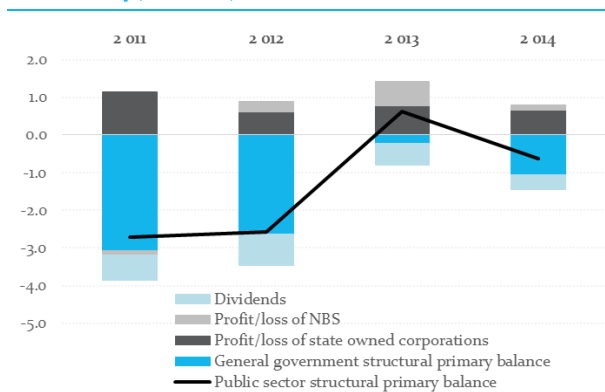


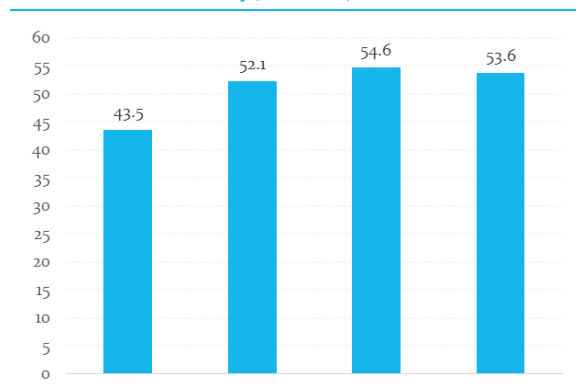
Figure 1 below illustrates the public sector's contributions to the structural primary balance in the years 2011-2014. For the sake of better comparability, the 2011-2013 balances have been adjusted for one-off effects and for the impacts of the newly adopted ESA2010 methodology. The structural primary balance was improving between 2011 and 2013 and then deteriorated in 2014 for the reasons mentioned above.

Figure 1: Structural primary balance between 2011-2014 (% GDP)



Source: CBR

Figure 2: General government gross debt between 2011-2014 (% GDP)



Source: CBR, Eurostat

2.2 General government debt in 2014

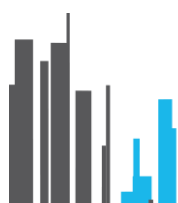
According to the figures published by Eurostat, the gross debt of general government reached 53.6 % of GDP in 2014 and decreased by 1.0 p.p. year-on-year. The main reason for the decrease was the cash reserve reduction in the State Treasury¹⁵.

The 2014 gross general government debt remained within the second limit defined by the Fiscal Responsibility Act¹⁶. The sanctions attaching to this debt limit include the obligation of the government to submit to the parliament a proposal for measures designed to reduce the debt and reduce¹⁷ the salaries of cabinet members to the previous year's level.

¹⁵ At the end of 2014, the cash reserved covered the liabilities of the government for the nearest month and declined by more than 2.5 % of GDP year-on-year. Apart from the early redemption of bonds maturing in early 2015, the reserve was also used to repay the debt of the Emergency Oil Reserves Agency (the agency got a loan from the 'state financial assets').

¹⁶ At the time of publication of the last year's report, the debt published by Eurostat reached 55.4 % of GDP, which was above the third debt ceiling. After the revision in October 2014, the debt fell below the second ceiling.

¹⁷ The 2015 budget does not contemplate increase in salaries, i.e., they remain at the 2014 level.



3 Baseline scenario

The baseline scenario of public finance development¹⁸ illustrates the consequences of current policies on the balance and debt of the general government in the long term, taking into account anticipated changes in the demographic and macroeconomic parameters. Prepared for the next 50 years from the latest available figures, the baseline scenario is essential for the calculation of the long-term sustainability indicator.

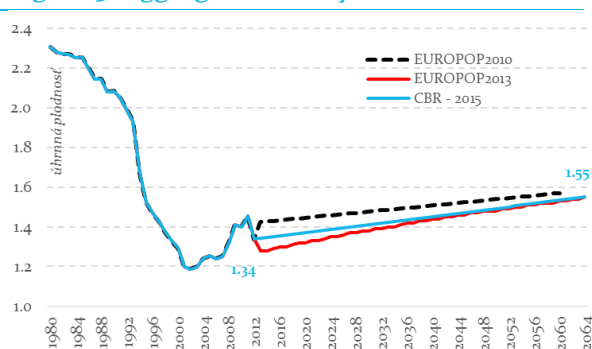
Since long-term projections carry a significant degree of uncertainty, all the information and assumptions that feed into the scenario must be presented in a transparent manner. Quantification of the long-term sustainability indicator requires (i) demographic forecasts, (ii) macroeconomic forecasts, (iii) medium-term scenario of public finances, (iv) projection of revenues and expenditures sensitive to population ageing, and (v) other implicit and contingent liabilities.

3.1 Demographic forecasts

In its demographic forecasts the CBR uses Eurostat assumptions for long-term projections, adjusted in a manner which reflects reality as accurately as possible. The CBR's assumptions are based on EUROPOP2013 projections (published in 2014) with the following adjustments:

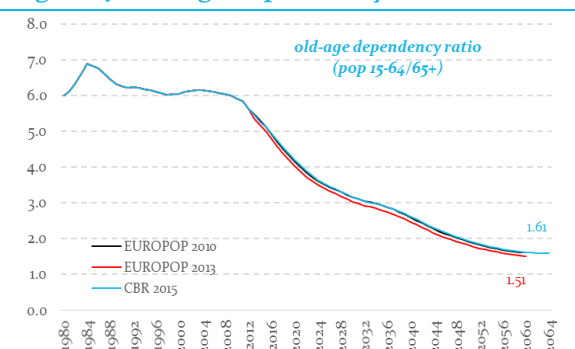
- The present age-structure of the population is based on the latest available data of INFOSTAT¹⁹;
- The current mortality rates and the calculation of life expectancy are based on the latest available data and methodology of INFOSTAT. The future changes in mortality rates (dynamics) are taken over from Eurostat projections;
- The total fertility rate is based on the latest available figures of INFOSTAT and converges linearly to the Eurostat projection until 2064 (Figure 3).

Figure 3: Aggregate fertility rate



Source: CBR, Infostat, Eurostat

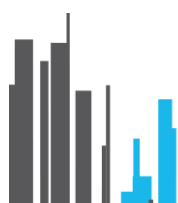
Figure 4: Old-age dependency ratio



Source: CBR, Infostat, Eurostat

¹⁸ The Fiscal Responsibility Act defines the baseline scenario as a long-term forecast of the general government revenues and expenditures, which reflects the future economic and demographic development of the Slovak Republic under the current legislative framework; the general government liabilities also include the implicit and contingent liabilities of the general government sector.

¹⁹ Institute of Informatics and Statistics



In comparison with the previous report that used the demographic projections of EUROPOP 2010, **there are no significant changes in the demographic assumptions**, which is well illustrated by the old-age dependency ratio (Figure 4).

3.2 Macroeconomic forecasts

The medium-term macroeconomic assumptions are based on the latest forecast by the Macroeconomic Forecasting Committee²⁰ for 2015-2018. The long-term horizon uses the latest assumptions of the European Commission²¹, mainly the growth in productivity, capital stock, number of hours worked, and the unemployment rate. In case of the participation rate, the CBR applies its own estimates based on the Commission's methodology, however, using slightly different assumptions on the effects of an increase in the statutory retirement age²².

Tab 3: MFC forecasts and CBR long-term projections

Indicator (%)	Actual	MFC forecasts (February 2015)				CBR projections		
	2014	2015	2016	2017	2018	2025	2035	2060
GDP, real growth	2.4	2.9	3.6	3.6	3.7	3.0	1.5	0.7
Inflation, year average; CPI	-0.1	0.0	1.6	1.8	2.0	2.0	2.0	2.0
Real wage, growth	4.1	2.6	2.3	2.5	2.6	3.2	1.7	1.5
Employment (ESA), growth	1.4	0.6	0.7	0.7	0.8	-0.2	-0.2	-0.9

Source: SO SR, MFSR, CBR

The differences in the latest projection of the CBR and the Commission are relatively small and they are mostly attributable to differences in demographic projection and participation, which consequently influence the total number of people in the labour market²³. In the long term, the number of employed influences economic growth fairly significantly.

²⁰ Forecasts of the Macroeconomic Forecasting Committee (MFC) from February 2015.

²¹ [The 2015 Ageing report: Underlying assumptions and projection methodologies.](#)

²² The main reason of using our own estimates of participation rates (as well as our own demographic projections) is the need to estimate, in a consistent manner, the participation rates for individual age categories also beyond the 2060 horizon for the purposes of generational accounts (Chapter 7). When modelling participation rates, the Commission uses the assumption of a zero participation on reaching the age of 75. However, since the increase in the statutory retirement age is automatically linked to the development of the life expectancy, such an assumption may be limiting behind the 2060 horizon.

²³ Potential output is quantified using the Cobb-Douglas production function, while the number of employed is the only variable which the CBR does not adopt directly.

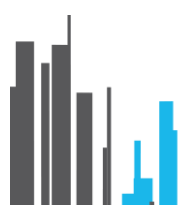
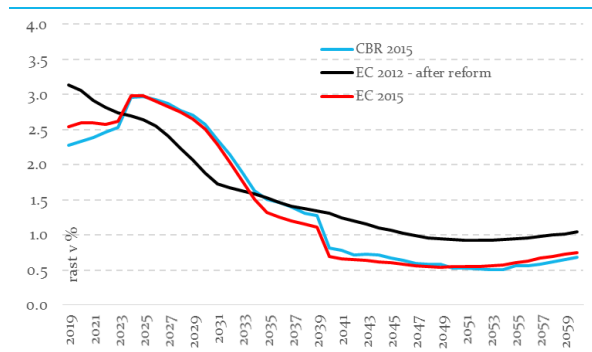
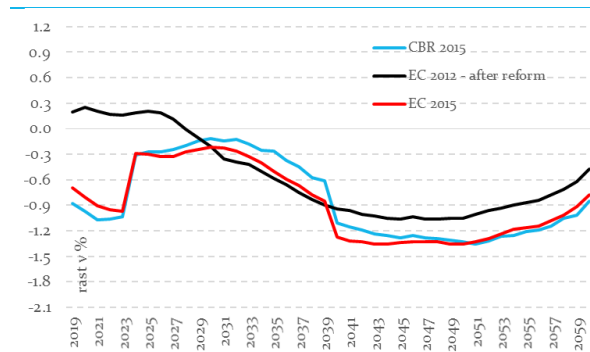


Figure 5: Real GDP growth (%)



Source: CBR, EC

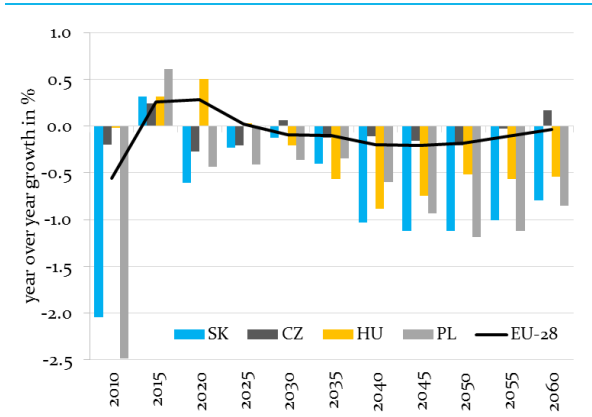
Figure 6: Employment (15-64 y) growth (%)



Source: CBR, EC

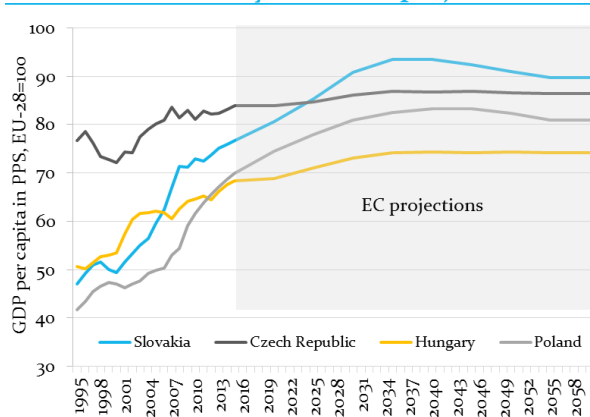
Despite the growth of the total participation rate due to the rising statutory retirement age and the fall of unemployment rate to 7.2 % (NAWRU – non-accelerating wage rate of unemployment), the number of employed is reduced significantly due to declining number of inhabitants (Figure 7). This negative effect is partially offset by productivity growth²⁴. The baseline macroeconomic scenario assumes a faster convergence of the Slovak economy, from the current 75 % of the EU-28 level (70 % of the EU-15) to 90 % of the EU average GDP per capita (or 85 % of the EU-15, Figure 8).

Figure 7: Decline of employment in EU countries



Source: EC, CBR

Figure 8: Convergence of Visegrad Four countries in history and in EC projections



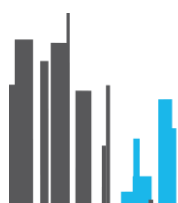
Source: EC – AMECO until 2014, AWG since 2015, CBR

3.3 Medium-term no-policy-change scenario

The medium-term part of the baseline scenario was prepared in line with the process briefly described in the last year's report²⁵. The main change to which the rules for the projection of individual items reacted included the **transition to the new methodology for national**

²⁴ The scenario assumes only convergence in productivity growth rates (occurring mostly in the 2015-2035 period) given the differences in the structure of individual EU economies.

²⁵ A detailed description of the process used to develop the baseline scenario is presented in CBR Discussion Paper No. 2/2015 entitled *Zostavenie základného scenára vývoja verejných financií* (available only in Slovak).



accounts reporting, ESA2010, as a consequence of which the general government sector has been expanded to also include a number of new entities and the approach to recognising certain types of transactions has been changed (for example: capitalisation of R&D expenditures, treatment of transfers to the EU budget from VAT-based source)²⁶.

Tab 4: Medium-term part of the baseline scenario (% of GDP)

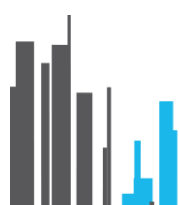
	2014 estimate	2014 adjustments	2014 adjusted	2015 scenario	2016 scenario	2017 scenario	2018 scenario
REVENUES	38.9	-0.2	38.6	39.2	37.4	37.1	37.0
Tax revenues	17.2	0.1	17.3	17.2	16.9	16.6	16.5
Social security contributions	13.7	0.0	13.7	13.6	13.4	13.3	13.3
Non-tax revenues	5.0	-0.2	4.7	4.7	4.5	4.4	4.3
- of which property income	0.9	0.0	0.9	0.8	0.8	0.7	0.7
Grants and transfers	3.1	-0.2	2.9	3.8	2.5	2.8	2.9
- of which EU funds	1.6	0.0	1.6	2.4	1.2	1.6	1.7
EXPENDITURES	41.8	-0.1	41.6	42.2	40.1	40.1	39.9
Compensation of employees	8.7	0.0	8.7	8.8	8.6	8.6	8.6
Goods and services	5.4	0.0	5.4	5.5	5.1	5.0	4.9
Subsidies and transfers	1.0	0.0	1.0	1.0	0.9	0.9	0.9
Social benefits	14.0	-0.1	13.9	13.8	13.5	13.3	13.1
Healthcare expenditures	5.1	0.0	5.1	5.2	5.2	5.2	5.3
Interest payments	1.9	0.0	1.9	1.8	1.6	1.5	1.5
Investments	3.7	0.0	3.7	4.1	3.5	3.7	3.8
Other expenditures (mainly transfers)	1.9	0.0	1.9	2.1	1.6	1.8	1.8
GG BALANCE	-2.9	-0.1	-3.0	-3.0	-2.7	-3.0	-3.0
GROSS DEBT	53.6	0.0	53.6	55.2	55.3	55.4	55.4
<i>p.m. impact of legislative changes in taxes adopted in 2014</i>	-	-	-	0.4	0.4	0.4	0.4
<i>p.m. GG balance excluding the impact of new taxation legislation</i>	-2.9	-	-3.0	-3.4	-3.1	-3.4	-3.4

Source: CBR, SO SR

The 2014 general government deficit reached 2.9 % of GDP; without one-off effects, the deficit would have reached 3.0 % of GDP²⁷. **Assuming unchanged policies, the deficit is expected to remain at around 3 % of GDP in the medium term.** The slight fluctuation in the 2016 deficit is connected with the pace of the drawing of EU funds. The drawing of EU funds is

²⁶ Apart from changes connected with the ESA2010, compared with the last year, this report is based on a more precise process for the indexation of certain items aimed at ensuring consistent approach to the substantively similar items, as well as on a more precise projections in certain parts of the baseline scenario (impact of EFSF, PPP project). However, the impact of these changes on the balance in individual years of the baseline scenario is negligible. The main changes and the main assumptions used for the construction of the baseline scenario are described in Annex 5.

²⁷ The value is not adjusted for cyclical component. The impact of the economic cycle in the medium-term part of the baseline scenario is included through macroeconomic forecasts by the MFC and through tax revenue forecasts by the TRFC.



expected to pick up in 2015 as the programming period nears its end, which will increase co-financing from the state budget. In the following year, when these funds will no longer be available and the new programming period will be phasing in, the co-financing expenditures are expected to decrease. The deficits around 3 % of GDP will cause the **debt to stabilise just above 55 % of GDP²⁸**.

The deficit will also be influenced by **changes in the tax legislation** (for example, maintaining the basic VAT rate at 20 %, changes in corporate taxation), which were adopted in the course of 2014 but whose effect will be felt only from 2015 onwards. **Their cumulative impact is estimated at 0.4 % of GDP. In other words, the absence of these changes would bring the deficit to around 3.4 % of GDP in the medium term.**

3.4 Expenditures and revenues sensitive to population ageing

In the next fifty years, the impact of demographic changes on the sustainable development of public finances will be felt more markedly. Due to the extended life expectancy, the rising number of the retired relative to the working-age population and fewer newborn children, areas such as pensions, healthcare, long-term care and education will be affected significantly. In addition, we should also expect changes in the expenditures on unemployment insurance.

Compared to the previous report, **no legislative changes that would considerably influence budget items sensitive to demographic changes have been adopted. By the year 2064, expenditures are expected to increase by 2.8 % of GDP, whereas revenues should increase (due to reduced contributions to the fully-funded pillar²⁹) by 0.2 % of GDP.**

Tab 5: Expenditures and revenues sensitive to population ageing

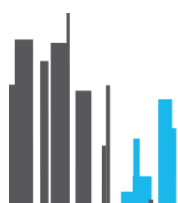
	2014*	Medium-term scenario				Long-term projections					2064-2014
		2015	2016	2017	2018	2020	2030	2040	2050	2064	
Social and health sec. contributions	13,7	13,6	13,4	13,3	13,3	13,2	13,2	13,4	13,6	13,7	0,1
- Fully funded pillar including	14,0	13,9	13,7	13,7	13,6	13,6	13,6	13,6	13,6	13,6	-0,3
- Shortfall of fully funded pillar	-0,5	-0,5	-0,5	-0,6	-0,6	-0,7	-0,8	-0,6	-0,3	-0,2	0,3
- Armed forces	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,1
Expenditures	18,6	18,7	18,4	18,4	18,4	18,4	18,3	18,5	19,3	21,4	2,8
- Universal pension system	8,3	8,3	8,2	8,2	8,2	8,2	7,7	7,6	8,1	9,7	1,3
- Pensions of the armed forces	0,4	0,4	0,4	0,4	0,3	0,3	0,4	0,4	0,4	0,4	0,1
- Health care	5,2	5,3	5,3	5,3	5,4	5,4	5,9	6,2	6,5	6,7	1,5
- Long term care	0,3	0,3	0,3	0,3	0,3	0,3	0,4	0,5	0,6	0,7	0,4
- Education	4,1	4,2	4,0	4,0	4,0	3,9	3,8	3,6	3,7	3,8	-0,4
- Unemployment benefits	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1	0,1	0,1	-0,1

* net of one-offs

Source: RRZ

²⁸ The scenario does not assume the application of sanctions under the Fiscal Responsibility Act.

²⁹ Taking into account the voluntary entry into the fully-funded pillar for those who enter the labour market for the first time, the number of people participating in the fully-funded pillar will be declining over time.

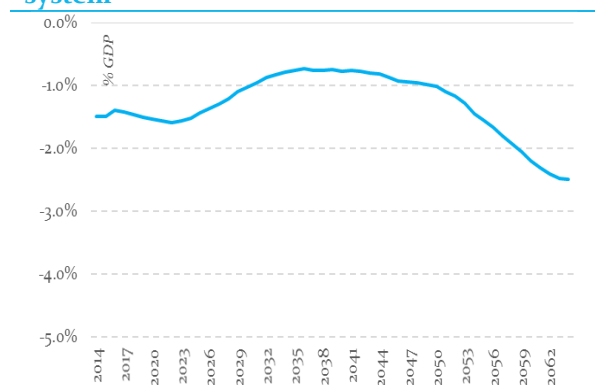


The CBR uses its own models for long-term projections of the pension system expenditures (universal pension system and the pension system of the armed forces and police corps) and healthcare expenditures. For those ageing-sensitive items where the CBR does not have its models, it uses the dynamics of expenditure growth calculated by the Commission. These include, in particular, expenditures on education, long-term care and unemployment insurance³⁰.

3.4.1 Pension system projections

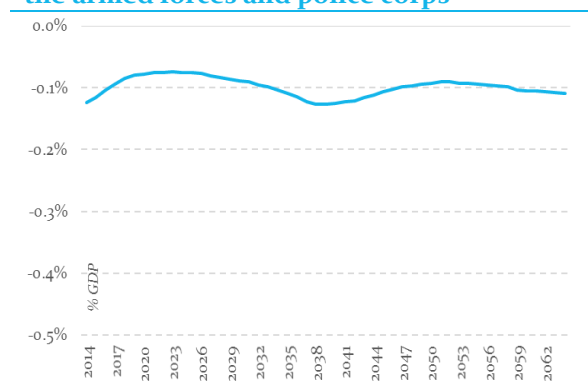
The pension system of the Slovak Republic³¹ consists of the **universal system** administered by the Social Insurance Agency (pay-as-you-go pillar) and **the pension system of the armed forces and police corps**. The latter is an independent and a relatively small³² pension system covering the armed forces, police force and other uniformed corps³³, which, in terms of its rules, differs quite significantly from the universal pension system. Over the next 50 years, the balance of these two pension systems will deteriorate by 1.0 % of GDP.

Figure 9: Balance of the universal pension system



Source: CBR

Figure 10: Balance of the pension system of the armed forces and police corps



Source: CBR

From the perspective of future burdens on public finances, the **universal system** will play a crucial role as it covers most of Slovakia's population. The latest calculations show that the deficit of the universal system will **worsen by 1 % of GDP** in the next fifty years and **thus the fiscal performance of the Social Insurance Agency will represent an additional burden for public finances**. Also, beyond the 50-year horizon the deficit will continue to deteriorate quite considerably, approximately **1.8% of GDP** relative to the present deficit by 2095. . This is due to the continued increase in pension expenditures caused by changes in the population

³⁰ For these items, the dynamics of expenditure development as a % of GDP have been taken from Commission projections (2013). As regards the amount of expenditures, the expenditures on education, long-term care and unemployment benefits are based on the functional (COFOG) and economic (ECBC) classification of the budget.

³¹ Within the general government sector.

³² Expenditures in the amount of 0.4 % of GDP compared to 8.3 % of GDP in the universal system.

³³ The social security system regulated by Act No. 328/2002 on Social Security Scheme for Police Corps and Armed Forces covers professional soldiers, members of the police corps, members of the fire and rescue brigades, members of the mountain rescue service, staff of the Slovak Intelligence Service and National Security Authority, prison and court guards, and customs officers.



structure; without the significant parametric adjustments³⁴ adopted in 2013, the increase would be even steeper. In terms of policy changes, the projections do not contemplate the adoption of new measures³⁵, save for the changes in calculation of the Christmas bonus for pensioners (without its one-off increase), however, its long-term impact is marginal. At the same time, certain aspects of the model have been more accurately specified.

The **pension system of the police corps³⁶ and armed forces** is currently generating deficits as well, however, its impact on the budget is considerably lower³⁷. The present deficit comes from the pension scheme of the armed forces³⁸, whereas the police pension scheme is balanced. Due to the 2013 reform (effective from April 2014), this pension system should not pose an additional burden for public finances in the next 50 years. The deficit of the armed forces is expected to shrink considerably in the long run, as the historical burdens are gradually eliminated in time. The current projections incorporate a more detailed specification of the service period³⁹, which shifts the expected increase in the number of pensioners further in time and thus temporarily improves the deficit.

3.4.2 Projections of healthcare expenditures

In addition to the universal pension scheme and the special pension scheme for the police corps and armed forces, the CBR also prepares its own projections of long-term expenditures in the healthcare sector. Save for the very old age cohorts, it can be observed that with growing age healthcare expenditures increase and with the gradual ageing of the population, ever larger number of people will fall within the higher cost areas of the expenditure profile⁴⁰. The increase in the average life expectancy will, at the same time, affect the development in costs covering the last years of life (so-called death-related costs). Their increase resulting from a higher number of deceased persons will, however, be partially offset by the fact that the death-related costs moderately decrease in case of very old age cohorts⁴¹.

³⁴ Indexation of old-age pensions by pensioner inflation and automatic link between the statutory retirement age and the life expectancy.

³⁵ The introduction of the minimum old-age pension and the opening of the fully-funded pillar in 2015 will have a negative impact on long-term sustainability, but they will be reflected in the baseline scenario only in the 2015 evaluation exercise. The CBR nevertheless illustrates the impact of the opening of the fully-funded pillar assuming that the number of those who opt to exit the scheme is in line with the expectations, see the chapter on sensitivity scenarios.

³⁶ This report includes into the category of police corps all those who receive pensions from the Ministry of the Interior, i.e., police officers, firefighters, railway police and mountain rescue rangers.

³⁷ The size of the deficit is comparable with the universal system if the total size of the scheme is taken into account.

³⁸ Due to the professionalization of the armed forces in the past, the number of soldiers dropped suddenly and so did the revenues of the pension scheme. At the same time, certain types of pensions in the past were indexed way above the usual benchmarks which led to a considerable increase in pension expenditures..

³⁹ The present modelling of contributors is based on both their age and length of service. This approach enables us to better capture the instances when the minimum length of service has been reached and assign the replacement rate accordingly, unlike under the previous approach which was based only on the age of the person.

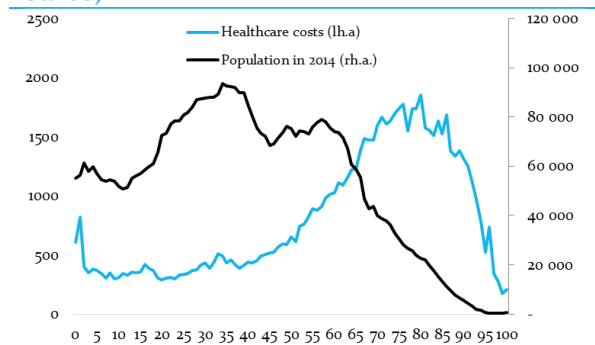
⁴⁰ However, expenditure profiles do not remain constant over time. In keeping with the previous AWG reports and assumptions, the expenditure profiles were adjusted for half of the increase in life expectancy.

⁴¹ [A Joint Report prepared by the European Commission and the Economic Policy Committee \(AWG\)](#) mentions three possible causes of this decrease: devoting limited resources to the treatment of older age cohorts, technical reasons and/or voluntary restraining from receiving health care by older people.



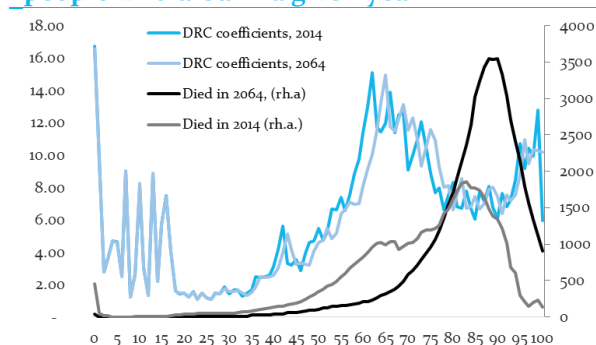
The demographic changes in the population structure are not the only factor influencing the healthcare expenditures. In case of converging countries in particular, a growing demand for a higher quality and greater scope of healthcare services can be expected. On that account, the long-term projections are based on the assumption that unit costs of healthcare services will outpace the growth in GDP⁴². Driven by the aforementioned factors, healthcare expenditures **increase by 1.5% of GDP** over the next 50 years according to projections.

Figure 11: Healthcare expenditures in 2013 (in euros)



Source: CBR

Figure 12: Healthcare expenditures of⁴³ people who died in a given year



Source: CBR

3.5 Other implicit and contingent liabilities

The baseline scenario also takes into account other revenues and expenditures resulting from implicit⁴⁴ and contingent liabilities of the general government. They are liabilities that might not necessary have an impact on the balance under the ESA2010 methodology at present, but they will affect the general government balance and debt when paid in the future. In order to prepare the baseline scenario and calculate the sustainability indicator, it is extremely important to know their impacts on the balance and debt⁴⁵.

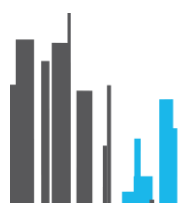
Similarly to the last year's sustainability report, the following items of 'other implicit or contingent liabilities' have been identified in the preparation of the baseline scenario: **instalments paid for a R1 motorway PPP project and a scheme for funding the costs of the decommissioning of nuclear facilities.**

⁴² Elasticity of 1.1 was applied to the growth in unit costs in the first year, after that it gradually linearly converges to 1 over the entire 50-year period.

⁴³ DRC coefficients show how many times the costs of healthcare provided to the dying population exceed those of the healthy population of people who will not die over the next three years.

⁴⁴ Implicit liabilities are defined by the Fiscal Responsibility Act as the „difference between the expected future liabilities of general government entities and the expected future revenues of general government entities resulting from the financial implications caused by the future exercise of rights and obligations established by the law of the Slovak Republic, unless they constitute part of the general government debt”.

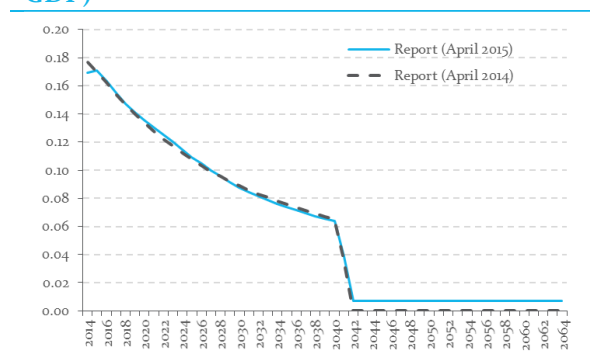
⁴⁵ The total amount of these liabilities is quantified when calculating Slovakia's net worth (Chapter 5). However, it is a different view of the matter because not all identified liabilities have to materialise in the deficit and debt (or they can materialise in part only). For example, contingent liabilities from a legal dispute do not have to affect the balance at all if the state wins that dispute and no additional costs arise. Therefore, the baseline scenario only includes those implicit and contingent liabilities the impact of which on the balance can be estimated.



With respect to the **PPP project**, no changes have occurred in the estimates of availability payments to be paid by the state until 2041. Since the ownership of the motorway will be transferred to the state afterwards, the baseline scenario takes into consideration maintenance costs after 2041⁴⁶.

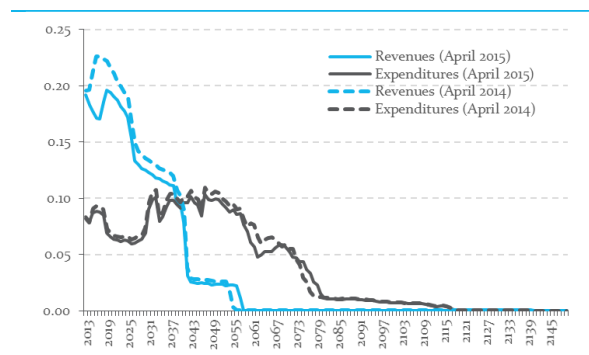
Several changes have occurred in the estimated impacts of the **nuclear facility decommissioning scheme** (Figure 14). The CBR updated the last year's projection to reflect the actual development in revenues and expenditures in 2014, the development in the inflation forecasts and the expected delay in commissioning Units 3 and 4 of the Mochovce nuclear power plant into operation⁴⁷.

Figure 13: Availability payment under the PPP project and costs of maintenance (% of GDP)



Source: MDVRR SR, CBR

Figure 14: Nuclear facility decommissioning scheme - impact on the balance (% of GDP)



Source: CBR, *Strategy of the back end of the nuclear power sector in the Slovak Republic, January 2014*

Contingent liabilities from lawsuits and provided guarantees are not included in the baseline scenario due to the uncertainty concerning the materialisation of these liabilities and the need to define a clear methodology for incorporating their possible risks to the sustainability of public finances. According to the Summary Annual Report of the Slovak Republic for 2013, these contingent liabilities amounted to EUR 12,063 million (16.4% of GDP) as at 31 December 2013. Of the total amount, only a portion attributable to the EFSF in the amount of EUR 2,188 million (3.0% of GDP) is covered by the baseline scenario because these liabilities are included in the gross debt⁴⁸.

⁴⁶ The costs of maintenance are based on an estimate of a portion of the availability payment which serves for the payment of operating costs of a private corporation. For the rest of the period covered by the baseline scenario, they are kept in proportion to GDP. The maintenance costs beyond 2041 were not included in the projection in the last year's report.

⁴⁷ The last year's projection was taken over from the *Strategy of the back end of the nuclear power sector in the Slovak Republic*, approved by Government Resolution No. 26/2014 in January 2014. Given the fact that the strategy is not updated on a yearly basis, the CBR updated the projection to include the impacts of macroeconomic parameters. The projection was updated with a lower actual and forecast inflation development until 2018. In addition, since the project expected that blocks 3 and 4 of the Mochovce nuclear plant would be put into operation in 2014 and 2015, respectively, which was not the case, their assumed launch has been postponed to 2017 and 2018.

⁴⁸ Under the national accounts methodology, a portion of liabilities towards EFSF is recorded in the debt. EFSF's impact on the gross debt amounted to EUR 1,895 million (2.6% of GDP) at the end of 2013.



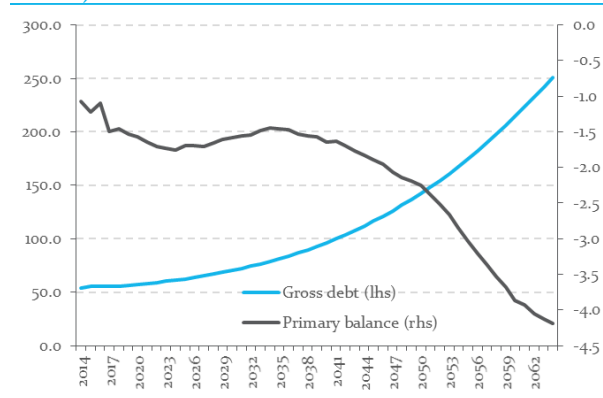
3.6 Baseline scenario of long-term developments in public finances

The baseline scenario of public finances is produced by merging the medium-term scenario with long-term projections of revenues and expenditures sensitive to population ageing and by incorporating the implicit and contingent liabilities.

The figures below illustrate the expected development in the structural primary balance and general government debt until 2064, using 2014 as the base year. Based on this projection, the general government debt would rise from 53.6% of GDP to as much as 250.5% of GDP. This is a hypothetical scenario, because markets would cease to finance Slovakia's needs at much lower debt levels. The effect of the response from financial markets, as well as from households and businesses, is discussed in Chapter 6 which shows that, from the dynamic perspective, the year when Slovakia would theoretically no longer be financed would be getting much closer.

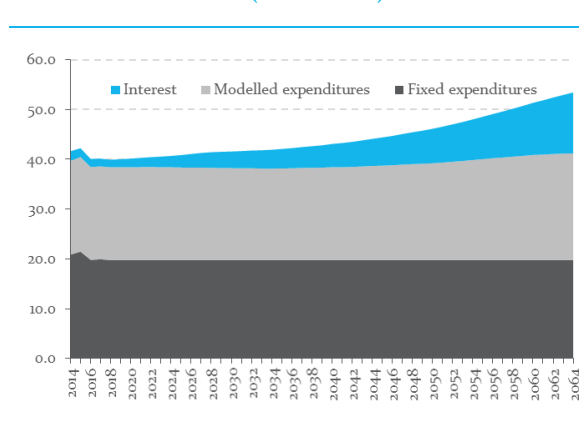
Under the baseline scenario, the debt increase is determined by the general government deficit which is caused, in particular, by an increase in expenditures sensitive to population ageing relative to GDP from 18.6% in 2014 to 21.4 % of GDP in 2064. The high debt in turn results in a steep rise in the amount of interest paid which causes the debt to inflate. The above implies that, in terms of the long-term sustainability, it is crucial to maintain the general government debt at a stable level, because leaving the "safe zone" would automatically result in the deficit spinning out of control and increasing the debt further. **Without adopting additional measures applicable after 2014, the general government debt would exceed the upper limit defined by the Fiscal Responsibility Act in 2021⁴⁹.**

Figure 15: Debt and primary balance development under baseline scenario (% of GDP)



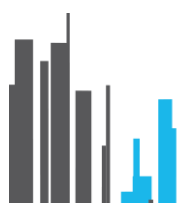
Source: CBR

Figure 16: Expenditure development under baseline scenario (% of GDP)



Source: CBR

⁴⁹ At that time, the upper limit of the debt would be at 56% of GDP.



Tab 6: Public finance baseline scenario (% of GDP)

	2014*	Medium-term part				Long-term projections				
		2015	2016	2017	2018	2020	2030	2040	2050	2064
Total revenues	38.6	39.2	37.4	37.1	37.0	36.9	36.7	36.8	37.0	37.0
Tax revenues	17.3	17.2	16.9	16.6	16.5	16.5	16.5	16.5	16.5	16.5
Social and health security contributions	13.7	13.6	13.4	13.3	13.3	13.2	13.2	13.4	13.6	13.7
Grants and transfers	2.9	3.8	2.5	2.8	2.9	2.9	2.9	2.9	2.9	2.9
Non-tax revenues	4.7	4.7	4.5	4.4	4.3	4.3	4.1	4.1	4.0	3.9
- Contributions to nuclear fund	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0
- Property income	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5
- Other non-tax revenues	3.7	3.7	3.6	3.5	3.4	3.4	3.4	3.4	3.4	3.4
Total expenditures	41.6	42.2	40.1	40.1	39.9	40.1	41.6	43.1	46.1	53.4
Primary expenditures	39.7	40.5	38.5	38.6	38.4	38.4	38.2	38.4	39.2	41.2
Fixed	20.9	21.5	19.8	19.9	19.8	19.8	19.8	19.8	19.8	19.8
Sensitive to population ageing	18.6	18.7	18.4	18.4	18.4	18.4	18.3	18.5	19.3	21.4
Decommissioning of nuclear plants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PPP projects and maintenance	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
Transfers to political parties	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest	1.9	1.8	1.6	1.5	1.5	1.7	3.3	4.7	6.9	12.2
GG balance	-3.0	-3.0	-2.7	-3.0	-3.0	-3.3	-4.9	-6.3	-9.2	-16.4
GG primary balance	-1.1	-1.2	-1.1	-1.5	-1.5	-1.6	-1.6	-1.6	-2.3	-4.2
Debt	53.6	55.2	55.3	55.4	55.4	57.0	70.2	96.3	142.2	250.5

* excluding one-offs

Source: CBR

4 Long-term sustainability indicator

In order to evaluate Slovakia's solvency based on the flow variables described in Chapter 3, the CBR uses the sustainability indicator (the so-called GAP or the sustainability gap). It shows the amount by which government revenues/expenditures should increase/decrease on a permanent basis in order to ensure that the gross general government debt does not to exceed 50 percent of GDP over a fifty-year period, i.e. the upper limit set by the Fiscal Responsibility Act⁵⁰.

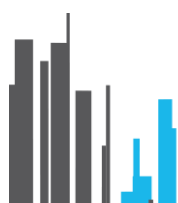
4.1 Development in the indicator in 2013 and 2014

The long-term sustainability indicator published in the report from April last year was based on the 2013 figures. **Due to the revision of the base year and the baseline scenario, its value at 3.0% of GDP was adjusted to the current figure of 1.9% of GDP.** The underlying reason for this improvement was the reduction in the general government deficit for the base year, adjusted for one-off effects from 3.5% of GDP to 2.6% of GDP, which is reflected in the baseline scenario to the full extent⁵¹. The change results from:

- the update to tax revenues with an impact of 0.35% of GDP;

⁵⁰ Under the Fiscal Responsibility Act, the ceiling for the government debt (along with other debt thresholds) will gradually decline during the transitional period starting in 2018 from the current value of 60% of GDP to 50% of GDP in 2027, i.e., by one percentage point every year.

⁵¹ The baseline scenario of 2013 is included in Annex 7.



- the revision of one-off effects in the total amount of 0.4% of GDP; and
- the changeover to the ESA2010 methodology that has improved the deficit by 0.1% of GDP and increased the level of gross domestic product with a positive impact of 0.05% of GDP (the denominator effect).

The sustainability indicator for 2014 was quantified by the CBR at 2.4% of GDP. It means that in order to prevent Slovakia's public debt from exceeding the upper limit stipulated by the Act under the expected macroeconomic and demographical trends by 2064, government revenues/expenditures would additionally have to be permanently increased/reduced by this particular value.

In a year-on-year comparison, the sustainability indicator increased by 0.5 percentage points. The deterioration primarily relates to the **easing of the fiscal policy in 2014** when the general government structural balance worsened by 0.9% of GDP year-on-year. On the other hand, it was **partially offset by the legislative changes in taxation, effective from 2015**, which should improve the balance by 0.4% of GDP annually.

Tab 7: Development of long-term sustainability indicator (% of GDP)

	2011	2012	2013	2014	most important factors
Extraordinary report - December 2012	6.8	-	-	-	-
Regular report - April 2013	7.0	4.3	-	-	2012: pension system reform, consolidation measures for 2013
Regular report - April 2014	-	4.0	3.0	-	2013: GG balance improvement, armed forces pension system reform
Regular report - April 2015	-	-	1.9	2.4	2014: worsening of the GG balance in 2014, partially compensated with tax legislation changes effective from 2015

Source: CBR

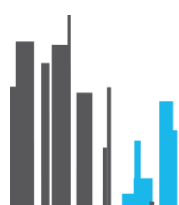
4.2 Sensitivity scenarios

Long-term projections are characterised by a higher degree of uncertainty. For this reason, it is advisable to consider not only the baseline “no-policy-change” scenario and the most likely demographic, macroeconomic and budgetary projections, but also other possible scenarios for development in assumptions, or other possible definitions of the long-term sustainability indicator.

The alternative scenarios are based on the assumptions of delayed consolidation and on the change in individual parameters which affect, in the long term, the macroeconomic developments, as well as outputs from long-term projection models.

As is the case with private finances where putting off the payment of liabilities might not be worth it at the end of the day, the same is true for public finances where delayed implementation of important reforms might induce additional costs. In general, the longer the delay in the long-term stabilisation of public finances, the more urgent it will be to consolidate them in the future. These **costs of delay**⁵² can be quantified using the specified assumptions, thus providing

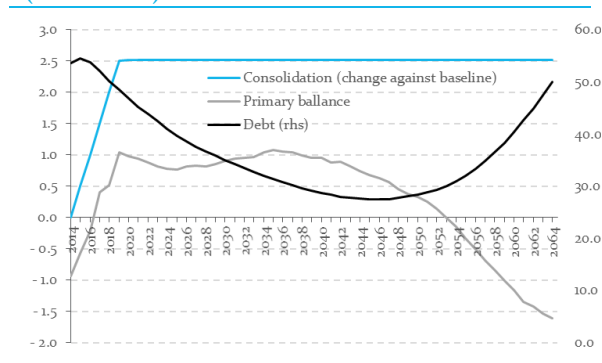
⁵² In quantifying the costs of delay, the baseline scenario is compared against alternative scenarios which are characterised by different timing or pace of consolidation. By quantifying the values of the long-term sustainability



information on additional measures necessary for keeping the debt below 50% of GDP by the end of the reporting period:

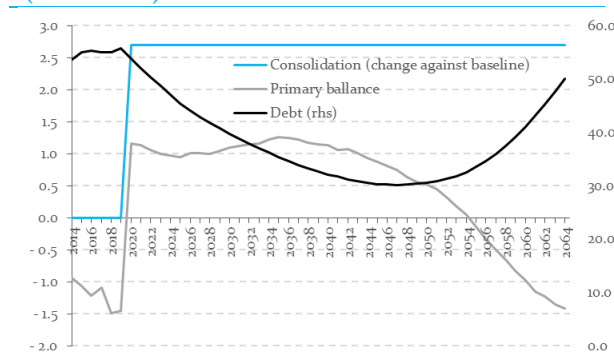
- The first scenario assumes a **gradual convergence towards the sustainable level at a rate of 0.5 %⁵³ of GDP a year⁵⁴**. In the period following the consolidation, the government does not implement any additional measures that would either improve or worsen the situation in public finances. Compared to the baseline scenario, this scenario assumes austerity measures spanning over a period of several years thus costs of delay occur. **The long-term sustainability indicator is approximately 0.10 percentage points higher** than that included in the baseline scenario.
- The second scenario does not **envisage any austerity measures in the first five years; however, an immediate one-off consolidation takes place after the end of this period**, similarly as is the case with the baseline scenario. In the next period, the government is not implementing any other measures and, equally to the previous scenario, the debt increase at the end of the period is caused by population ageing. In this case, the **long-term sustainability indicator (the need for additional austerity measure five years later) grows 0.29 percentage points**.

Figure 17: Consolidation at a constant rate (% of GDP)



Source: CBR

Figure 18: Consolidation postponed by 5 years (% of GDP)



Source: CBR

Different definitions of the long-term sustainability indicator allow us to illustrate its sensitivity to a given time horizon, the target level and definition of debt:

- The sustainability indicator's sensitivity to a given time horizon is described in a scenario under which the fifty-year horizon is extended by additional 10 years. It means by how much public finances would have to be permanently consolidated in order to keep Slovakia's debt below the 50% of GDP level throughout the 2064-2073 period as well. **Extending the sustainability period by ten years increases the sustainability gap by nearly a quarter of a percentage point to 2.7% of GDP.**

indicators of alternative scenarios and by comparing them with the baseline scenario, it is possible to assess the additional improvement of the structural primary balance which would be necessary for stabilising public finances in the long run.

⁵³ During all years, consolidation maintains a pace of 0.5% of GDP, save for the last year when the consolidation pace can be lower than 0.5% (0.01% GDP in the present case), unless the debt exceeds 50% of GDP in 2064.

⁵⁴ The long-term sustainability indicator will reach zero value in 2020 under this scenario.



- As an alternative, let's assume that, until 2064, the debt should not even be reaching the brackets that are subject to sanctions, starting at debt levels as low as 40% of GDP. **If the debt is to remain below this threshold over the period of 50 years, the general government expenditures/revenues would have to be permanently reduced/increased by 2.5% of GDP.** The long-term sustainability indicator will therefore increase against the baseline scenario by more than 0.1 percentage point.
- When changing over to the ESA2010 methodology, the idea had been to **include trade credits** under the definition of gross debt which, however, was dropped eventually. In case such credits were included in the debt, the debt would be 1.5 % of GDP⁵⁵ higher at the end of the year. The long-term sustainability indicator would only see a marginal increase (by **0.03 percentage points**).

Another group of sensitivity scenarios can serve to illustrate the **impact of alternative macroeconomic and demographic projections** on the long-term sustainability indicator:

- In determining the stability of government debt, interest expenditures associated with its refinancing represent one of the key parameters. Since the baseline scenario envisages an implicit interest rate applied to Slovakia's debt in line with the Commission's assumptions, the rates lower by 50 basis points are considered under this scenario. Cutting down the interest rate⁵⁶ by a half of a percentage point would lower the sustainability indicator by 0.14 percentage points of GDP to the final level of **2.3% of GDP**.
- The growth in labour productivity has a relatively strong impact on long-term sustainability. If the **growth in labour productivity in the long term was 0.3 p.p. lower than that included in the baseline scenario**, the sustainability indicator would **worsen by 0.6 percentage points to 3.02% of GDP**. This scenario anticipates Slovakia's convergence only towards the level of 80% of GDP per capita in the EU (against the 90% convergence anticipated under the baseline scenario, Figure 7). Symmetrically, **the attainment of the 100% of the EU average would, on the other hand, reduce the indicator by 0.6 p.p.**
- A gradual linear increase in **total fertility rate** to 2.1 in 2060 would have a positive impact on narrowing the fiscal gap. This assumption would contribute to **improving the indicator by 0.3 percentage points to the final value of 2.15% of GDP**, with its positive impact amplifying after 2064. The underlying reason lies in GDP growth driven by higher employment.
- A very moderate improvement in sustainability would occur if we lived longer, which may seem counter-intuitive at first sight. Under the scenario assuming that probability of death is reduced in a way that **life expectancy at birth would gain two years in 2064** against the baseline scenario, the sustainability indicator **would slightly improve, by 0.1 p.p. and reach 2.32% of GDP**. This is due to the fact that the retirement age is automatically linked to life expectancy, which prevents the extension of the period during which pensioners will receive pensions. More years spent on the labour market translate into a higher old-age pension as the time of paying social contributions gets

⁵⁵ Trade credits totalled EUR 1,140,538 million (1.5% of GDP) at the end of 2014.

⁵⁶ The impact of interest rates on the long-term sustainability is also illustrated in Chapter 6, where the rates respond to the debt amount gradually, while also taking into account the feedback effects on economic growth.



longer, but, at the same time, GDP will grow, too. It is the effect of a higher GDP in the ratio indicator that will moderately reduce the costs of GDP despite their slight growth in nominal terms.

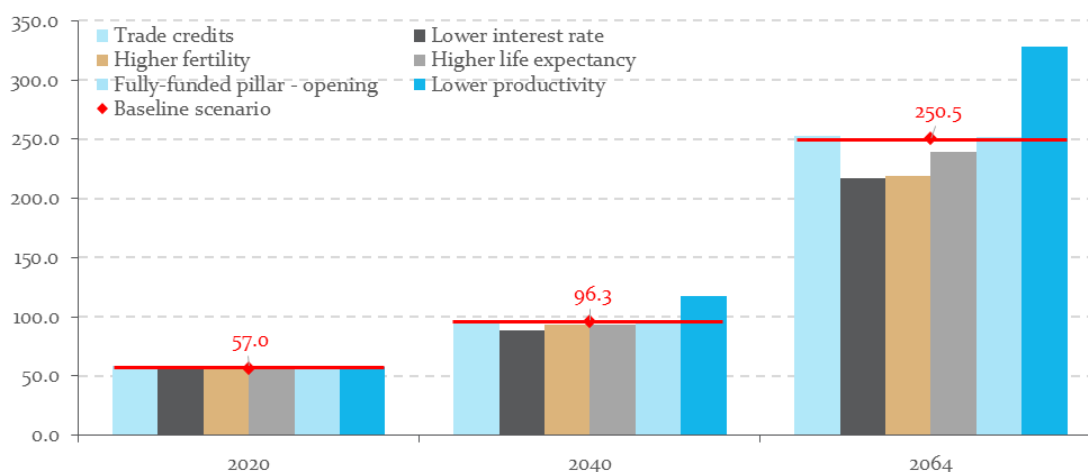
- The possibility to opt out from the fully-funded pillar in 2015 should **only have a marginal impact** on the long-term sustainability over the period until 2064, since the future higher expenditures on pension payments to those persons who opt out⁵⁷ from the fully-funded pillar are offset by an immediate increase in revenues of the Social Insurance Agency. However, this is true only on the assumption that the government uses these additional revenues to immediately reduce the deficit. Otherwise (if the additional revenues are spent on expenditures that do not reduce the deficit), this measure will have a negative impact on long-term sustainability.

Tab 8: Alternative scenarios (% of GDP)

Scenario	GAP	Difference to baseline
Baseline scenario 2014	2.42	-
Gradual consolidation by 0,5 % of GDP annually	2.51	0.10
Delay in consolidation by 5 years	2.70	0.29
Extended period by 10 years	2.69	0.28
Scenario with 10% of GDP reserve	2.54	0.12
Inclusion of trade credits	2.44	0.03
Interest rate -50 b.p.	2.27	-0.14
Lower labour productivity (-0.3 p.p. in 2060)	3.02	0.60
Increase in total fertility (2.1 in 2060)	2.15	-0.27
Increase in life expectancy (+ 2 years in 2060)	2.32	-0.10
Opening of the fully-funded pillar of pension scheme in	2.43	0.01

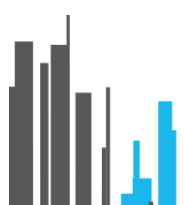
Source: CBR

Figure 19: Development of debt in the baseline and alternative scenarios (% of GDP)



Source: CBR

⁵⁷ CBR assumes, in line with the Ministry of Finance expectations, that around 85 thousand pension-savers opt out, with their age structure as estimated by the Ministry of Finance.



5 Net worth of the Slovak Republic

The net worth of the Slovak Republic⁵⁸ had a negative value of EUR 169.1 billion at the end of 2013, representing 229.8% of GDP. For the time being, it is difficult to interpret this value due to valuation problems related to some of the assets and liabilities calculated in the net worth⁵⁹. In this respect, it is more advisable to individually assess its separate components which can already now be correctly evaluated, and concentrate on analysing their year-on-year changes (Table 9).

Tab 9: Net worth of the public sector in Slovakia in 2012 and 2013 (% of GDP)

	2012	2013	y-o-y change	of which:		
				methodol ogical changes	change in level	impact of GDP
1. Equity of the public sector entities (excluding NBS and NPF corporations)	3.1	0.9	-2.2	-	-2.1	-0.1
- equity of general government entities	-7.2	-9.3	-2.1	-	-2.2	0.1
- equity of central government corporations	10.2	10.1	-0.1	-	0.1	-0.2
- equity of local government corporations	0.1	0.1	0.0	-	0.0	0.0
2. Equity of NPF corporations	7.3	7.1	-0.2	-	-0.1	-0.1
3. Equity of the National Bank of Slovakia	-5.0	-5.0	0.0	-	-0.1	0.1
4. Other assets (lawsuits)	0.0	0.9	0.9	0.9	0.0	0.0
5. Other liabilities (contingent liabilities)	-11.2	-16.4	-5.2	-5.1	-0.2	0.2
6. Implicit liabilities	-225.1	-217.3	7.7	3.7	-0.2	4.3
Net worth (1+2+3+4+5+6)*	-230.9	-229.8	1.1	-0.5	-2.8	4.4
<i>p.m. net worth (in EUR mill.)</i>	<i>-166 648</i>	<i>-169 111</i>	<i>-2 463</i>	<i>-386</i>	<i>-2 077</i>	<i>-</i>

Source: MF SR, CBR

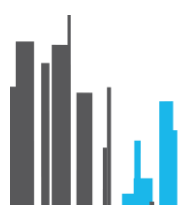
* In the Report on long-term sustainability of public finances from April 2014 the 2012 year-end net worth reached a negative 234.3 % of GDP. Its improvement to -230.9 % GDP was caused solely by the change in denominator (revision of GDP level due to the implementation of the ESA2010 methodology).

The net worth worsened almost by EUR 2.5 billion in 2013, although this change is rather marginal relative to its total value. Expressed as a ratio to GDP, however, the net worth improved by 1.1 percentage points year-on-year. The reason is that the year-on-year growth in nominal GDP outmatched the impact of the decline in the level of net worth. There were three main factors that contributed to this development: **changes in methodology, updates to implicit liabilities, and a change in the equity of general government entities.**

The **changes in methodology**, associated with the ongoing improvements in the quality of the data base and methodology for calculation, **decreased the net worth by EUR 386 million**

⁵⁸ The Fiscal Responsibility Act (constitutional Act No. 493/2011 Coll.) defines net worth of the Slovak Republic “as the sum of the net worth of general government entities, National Bank of Slovakia, state corporations and corporations owned by municipalities and self-governing regions, adjusted for implicit liabilities and contingent liabilities, as well as other assets and liabilities. The concept is described in more details in Annex 6.

⁵⁹ This involves, for example, the valuation of natural resources (waters, forests, mineral resources) and recording buildings at their book rather than market value. On the other hand, the liabilities do not include, for instance, liabilities related to the implementation of EU standards (for example, those concerning sewerage systems, energy efficiency of buildings) and environmental debt (for example, costs for removing toxic waste landfills).



(0.5% of GDP). They namely involved expanding the list of contingent liabilities (a detailed list is included in Annex 6) and including those lawsuits where the public sector may, if successful, be awarded sums of money. In addition, the projection concerning the nuclear facility decommissioning scheme, in which funds are currently accumulating to finance the costs of decommissioning in the future, was included in the calculation of implicit liabilities.

The **effect of a year-on-year increase in GDP** was most prominently felt on **implicit liabilities**, since it is the largest item in terms of volume. For this reason alone, **the net worth improved as much as 4.3 percentage points**. The actual **implicit liabilities** (adjusted for the change in methodology involving the inclusion of the nuclear facility decommissioning scheme) **rose EUR 178 million (0.2% of GDP)**. This rise in liabilities resulted from the updates to the medium-term forecast of revenues and macroeconomic indicators. The forecast for expenditures related to population ageing remained unchanged. **The reform of the social security scheme for the armed forces, approved at the end of 2013, has not yet been included.**

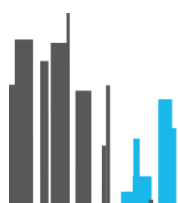
Another factor affecting the change in net worth was **the reduction in the equity of the general government sector's entities by EUR 1.6 billion (2.2% of GDP)**. It would be advisable to also analyse this change in the context of developments in the government's fiscal performance in 2013⁶⁰ in order to assess the impact of government policies on the net worth. However, the current setting of data collection that serve to quantify the net worth does not allow us to establish such a link at the moment. On that account, the CBR has prepared an illustrative link for selected entities, namely state-run railway infrastructure operator Železnice Slovenskej republiky (ŽSR) and National Motorway Company (NDS).

Both companies had a surplus in 2013, exceeding EUR 200 million in total (0.3% of GDP). Their contribution to the improvement in net worth was, however, considerably lower, amounting to some EUR 80 million (0.1% of GDP).

Given that they are companies through which the government makes investments in the road and railway transport, they serve as an example illustrating one of the major differences between the general government balance and the change in net worth - that is, **a different approach to non-financial investments**⁶¹. Expenditures spent on motorway construction have a negative impact on the balance under the ESA2010 methodology at the time when the investment is effected. Revenues from the investment (for example, in the form of toll payments) flow in at the time when the investment (motorway) is in use. The impact of the investment at the time of construction on the net worth is zero, since an increase in assets in the form of a new motorway section is offset by a decrease in financial assets or by a new debt. The investment becomes reflected in the net worth only after it has been put into use - on the one hand, it generates revenues in the form of toll payments, on the other, the motorway is subject to wear and tear, resulting in costs (depreciation). **It means that the net worth concept is better positioned to capture investments in terms of their economic substance.**

⁶⁰ General government deficit amounted to EUR 1.9 billion (2.6% of GDP) in 2013 under the ESA2010 methodology.

⁶¹ The balance of revenues and expenditures under the ESA2010 methodology records non-financial investments only (for example, investments in plants, machinery, equipment and software). Purchasing ownership interests in corporations, investing in securities (financial investment) have no impact on the balance. In this regard, the term 'investments' used in the text below only covers non-financial investments.



Tab 10: Link between the balance and change in net worth of ŽSR and NDS in 2013 (€ ths)

	ŽSR	NDS
1. Balance (ESA2010, October 2014 notification)	58 251	147 160
2. Factors affecting the balance with no impact on the change in net worth:	-93 455	79 667
- cash investment expenditures	-311 393	-301 035
- subsidies on acquisition of long-term assets	175 818	386 703
- change in claims on state investment subsidy	41 023	0
- income tax (paid)	0	-7
- net interest payments	1 097	-4 830
- change in inventories	0	-1 164
3. Factors affecting the change in net worth with no impact on the balance:	-109 528	-32 258
- amortisation	-158 102	-89 582
- amortisation of subsidies	72 248	67 866
- income tax (paid and deferred)	-20 788	-5 620
- net interest payments	-4 326	-4 657
- change in reserves	-2 596	-265
- inclusion of land into equity	4 036	0
4. Discrepancy	5 573	0
5. Change in net worth (1-2+3+4)	47 751	35 235
Equity as of 31 December 2012	1 571 247	3 406 448
Equity as of 31 December 2013	1 618 998	3 441 683

Note: (+) positive impact, (-) negative impact on balance and net worth

Source: SO SR, Financial statements of ŽSR and NDS in 2013

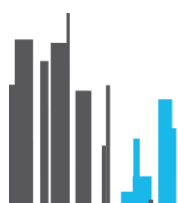
A similar difference as the one with respect to investment expenditures/costs also occurs in the case of investment subsidies. The ŽSR and NDS both receive subsidies from the state budget⁶² and/or from the EU budget (in the case of investments co-financed from EU funds) to fund their capital expenditures. Under the ESA2010, the balance is positively influenced at the time of receiving a subsidy/becoming entitled to receive a subsidy; a positive impact on the net worth is felt during the use of a particular investment when the subsidy translates into revenues.

The two aforementioned factors account for approximately 80% of differences between the impact on the balance and the change in the net worth of ŽSR and NDS in 2013 and indicate that the current amount of capital expenditures does not decrease the net worth in a given year. On the other hand, the current expenditures spent on the operation of the two companies worsen both the balance and net worth.

The remaining differences can be attributed to the following items:

- **Income tax** - while the balance captures the income tax actually paid, the net worth reflects, in addition to the tax payable, the so-called deferred tax, too. The deferred tax

⁶² When looking at the general government sector as a whole, mutual transfers between individual entities have a zero impact on the balance, as well as on the net worth. However, when analysing individual entities (ŽSR, NDS), it is necessary to take into account transfers from the state budget, too, when explaining the differences.

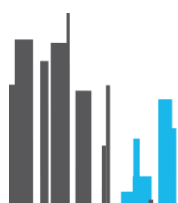


(it can be a receivable or a liability) can result, for example, from the difference between the method of asset depreciation applied in accounting books and the method of asset depreciation used for tax purposes. Depreciation classes for tax purposes are simplified and do not have to fully capture the life-cycle of particular assets⁶³.

- **Recording provisions to finance future expenditures**, for example, financial liabilities arising from legal disputes, from guarantees and costs of the elimination of environmental burdens. While the balance is usually⁶⁴ affected by the expenditures actually incurred, the net worth is affected by the creation of provisions at the time when the future realisation of the particular expenditure is highly probable. The provisions are subject to regular revaluation.
- **Change in inventories** affects the balance. From the net worth perspective, a decrease/increase in inventories has a neutral impact as it is linked to an increase/decrease in other assets (financial resources) or a decrease/increase in liabilities (debt).
- **Interest revenues and costs** - the difference is in that the paid/received interests are taken into consideration in the case of the balance. As far as the net worth is concerned, those interests are felt that are factually related to a given period.
- **Including land into equity** - this is a one-off, ŽSR-specific item. These are plots of land owned by the Slovak Republic that were managed by the ŽSR in the past but have not been recorded in its financial accounts.

⁶³ For example, in the case of NDS, the estimated life span of bridges and load-bearing structures of tunnels is 100 years (the value of a particular asset is depreciated at a rate of 1% a year). The longest depreciation period for tax purposes is 40 years (the value of a particular asset is depreciated at a rate of 2.5% a year).

⁶⁴ Under the ESA2010 rules, the balance can be affected even before the expenditure is made. For example, where the provision of state guarantees is concerned, their negative impacts on the balance are recorded as soon as the realisation of the state guarantee becomes highly probable.



6 Economic growth

The baseline scenario is based on macroeconomic assumptions that do not consider change in the level of the general government debt. In reality, however, an increasing debt results in higher government bond yields (risk premium) with a subsequent rise in interest rates across the economy. Ultimately, it may lead to restriction of private investments as a result of depletion of freely available funds due to purchase of government debt⁶⁵. The economic growth, negatively influenced by demographic changes alone, will thus be slower due to feedbacks between the debt and the economic growth mainly through the loss of productive investments (Figure 21). Taking into account the dynamic effects of debt on the economic growth, the **period over which the government would be able to refinance the debt under unchanged policies shortens considerably** when compared to the baseline scenario. For example, a debt equal to 100% of GDP will be attained about ten years earlier as anticipated under the baseline scenario (2031 against 2041).

Potential growth is sensitive to assumptions about the number of employed and labour productivity. This chapter lays out the aforementioned effects if these assumptions change. It turns out **the productivity assumptions have considerable impact on the sustainability**, while the impact of the change in employment (through NAWRU) is negligible.

6.1 Debt and feedback on economic growth

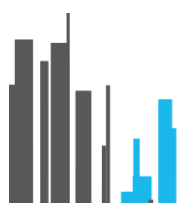
The first scenario allows for the spontaneous **reaction of investors buying government bonds** to rising debt in the form of higher yields requirements. With growing risk of insolvency, the investors are willing to include such an investment into their portfolio only with higher interests, which in turn increases the debt further through higher refinancing costs⁶⁶. This initial effect carries the highest impact on the budget among all the scenarios.

Under the second scenario, the growth of government bond interest rates is followed by the movements in interest rates in the private sector in the same direction. The reason is the government bonds are still considered to bear the lowest investment risk in the economy. Their growth leads to higher costs of short- and long-term financing of investments, translating thus into higher **costs of capital**.

The third scenario assumes that investors have only **limited savings**. If the domestic debt rises, it is very likely the funds used to purchase domestic government bonds will not be available for more productive investments, such as investments in new technologies and/or buildings. A deceleration in GDP growth will follow, representing another undesirable impulse to the debt-to-GDP ratio. Under this scenario, however, a positive counter-reaction is also expected in the

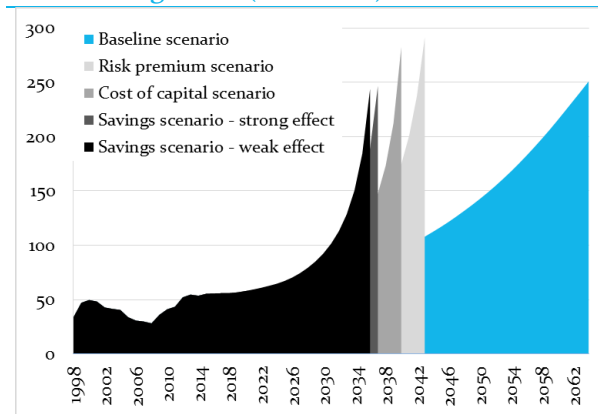
⁶⁵ The methodology used for the analysis of feedback effects of debt on economic growth is outlined in detail in Box 11 (page 55) of the last [Report on the Long-term Sustainability of Public Finances \(April 2014\)](#).

⁶⁶ The effects of debt on risk premium are estimated using actual data for Visegrad Group countries, the methodology is described in detail in Annex 8 of [the Report on the Long-term Sustainability of Public Finances \(April 2014\)](#).



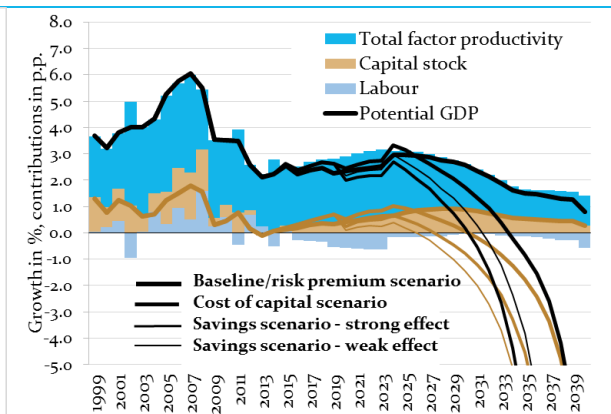
form of replacing a portion of domestic investments by foreign investors⁶⁷; this is especially relevant for small and open economies.

Figure 20: Debt in feedback effects on economic growth (% of GDP)



Source: CBR

Figure 21: Loss of potential in feedback scenarios



Source: CBR

6.2 Risks in convergence and equilibrium unemployment rate

Given the differences in the structure of the EU economies, the underlying assumption of long-term projections is a consensus about convergence towards an equilibrium growth rate of **total productivity (technological progress)** and a specific level of **structural unemployment rate (NAWRU)**.

Previously discussed sensitivity scenarios with the exclusion of feedback effects on macroeconomic variables (Chapter 4.2) indicate that a **change in productivity has a considerable impact on the long-term sustainability of public finances**. The recent economic crisis has increased the uncertainty in preparation of long-term scenarios. With the structural problems of countries unresolved, the question is whether the crisis has caused a permanent or only temporary loss of output. Uncertainties also surround the definition of an equilibrium level over the long term. Since the 1990s, the EU economy has been unable to converge towards a growth in total productivity of the US (Timmer et al., 2013, Dew-Becker, Gordon, 2008). Nevertheless, the European Commission anticipates an equilibrium growth rates across the EU at 1%, which is currently above the level of growth of technological progress of the US. The growth in productivity mostly depends on structural parameters such as market regulations with an impact on competitiveness, protective patent systems, levels of private and public investments, quality of education, level of employees' protection, sector and regional mobility and others (e.g., EIB, 2011, Bouis et al., 2011).

Another key indicator of a potential economic growth is the so-called non-accelerating wage rate of unemployment, the **NAWRU** (eventually, the non-accelerating inflation rate of unemployment, the **NAIRU**), i.e. the rate of unemployment that does not induce additional price

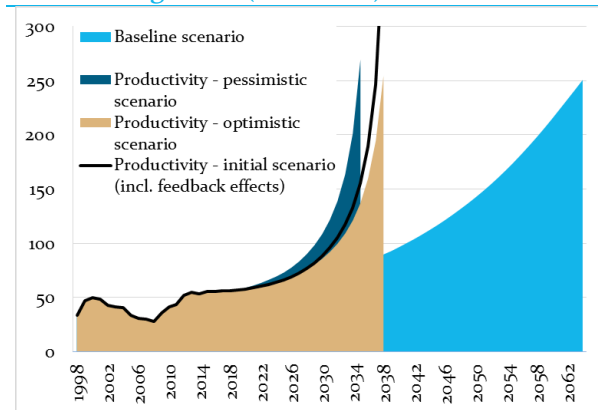
⁶⁷ 1 euro of domestic investments is replaced by approximately 25 eurocents of foreign investments which subsequently worsens the current account balance. If the effect of savings is strong, each euro in deficit decreases investments by 10 cents, in an alternative of weak effect of savings, the investments will decrease 30 cents per euro of deficit.



pressures on the labour market (a growth in wages driven by over-employment) or on the goods and services market (inflation growth). Historically, the Commission estimates of the NAWRU for Slovakia ranges between 12.7% and 15.1%. For the sake of comparison, the National Bank of Slovakia estimates the NAIRU in the range of 11.3% to 13.4%. Under the baseline scenario the unemployment rate gradually falls for each country to its specific target value; according to the median value of national estimates the Slovakia's unemployment rate will decline towards 7.2% by 2060. Similarly to the assumptions about total factor productivity, the NAWRU depends on structural policies, such as active labour market policies, strength (or density) of trade unions, replacement rate of unemployment benefits, tax wedge, changes in the demand for jobs, while it may also depend on such macroeconomic variables as real interest rates or productivity growth rate (Orlandi, 2012).

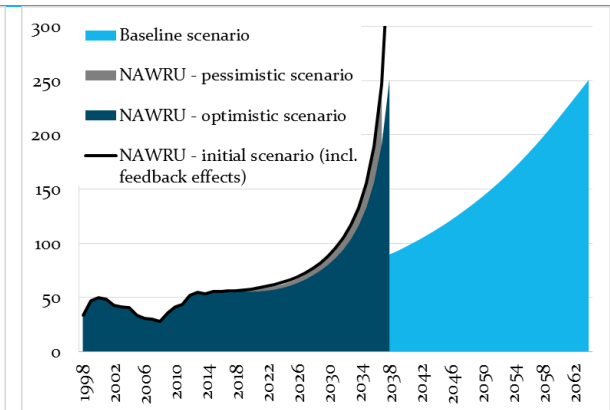
Under the scenarios of the Commission, Slovakia shows on average the highest growth in **total factor productivity** among all EU Member States; moreover, the **target NAWRU value** is considerably below its historical average. It means that the Commission's scenarios inevitably assume a positive change in structural parameters which, however, may not occur in reality. Therefore, alternative **NAWRU scenarios** are presented - under the optimistic one, the NAWRU falls towards 5%, under the pessimistic scenario it declines towards 10%. Under the pessimistic alternative, the **total productivity growth scenario** assumes the convergence towards the level of 80% of the average EU's GDP per capita (acquiring the assumptions of the sensitivity scenario), while the optimistic alternative assumes convergence towards 100% level of the EU (against 90% under the baseline scenario).

Figure 22: Debt in feedback effects on economic growth (% of GDP)



Source: CBR

Figure 23: Debt in NAWRU risk scenarios



Source: CBR

Even the attainment of the average EU's GDP per capita does not suffice to keep the debt below 100% of GDP after 2030 when feedback effects are taken into consideration (Figure 22). The dynamic feedback effects due to government deficit financing have thus a **considerably stronger impact on the macroeconomic development than the productivity growth assumptions**. Unlike the total productivity alternative projections, the scenarios considering different target equilibrium unemployment rate of NAWRU do not show major differences. The only consequence is the shift in the level of potential growth, while the actual contributions to potential growth do not change considerably.

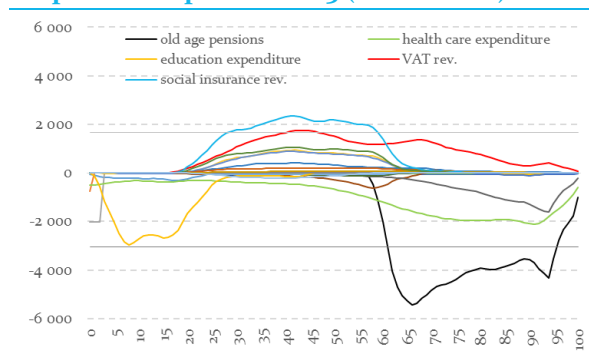


7 Generational accounts

One of the aspects assessed by the CBR in connection with the long-term sustainability of public finances is **intergenerational fairness**. Since fairness is a problematic concept from the economic point of view, this chapter is designed to illustrate it quantitatively, without providing recommendations. For this purpose, the so-called **generational accounts** are used, allowing to estimate the **magnitude of fiscal expenditure or revenues for individual age cohorts during their lifetime**⁶⁸. In the event of a more extensive reform undertaken in some of the government policies, generational accounts also lend themselves to an analysis of both fiscal and redistributive impacts on the individual cohorts. More technical details on generational accounts were provided in the last year's report on the long-term sustainability (April 2014).

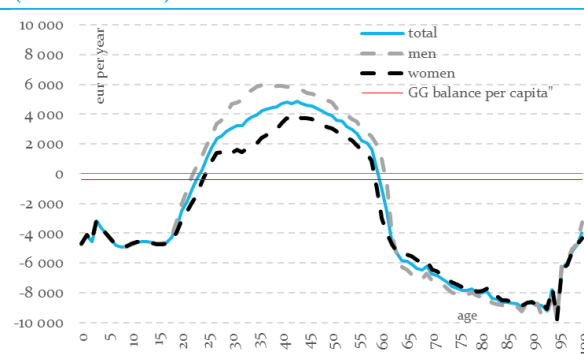
In addition to long-term demographic forecasts, the basis for constructing generational accounts includes the age profile of individual government policies for an average individual (Figure 24), for instance in terms of pension expenditure, education expenditure or revenues from taxes and contributions. These profiles can be combined into a **summary profile**⁶⁹ expressing the **net financial position of an individual vis-à-vis public finances in the individual phases of his/her life** (Figure 25).

Figure 24: Age profile of revenue and expenditure policies 2013 (individuals)



Source: CBR

Figure 25: Aggregate age profile 2014 (individuals)

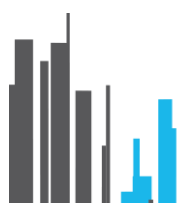


Source: CBR

Based on this profile, an average Slovak is a net recipient in terms of public finances until the age of 25, mainly due to the costs of education, the costs of healthcare and family benefits. Over the productive life, one gradually becomes a net contributor due to the economic activity, with

⁶⁸ Simply put, a comparison of how much one pays in the form of taxes and contributions during one's own life and of how much one receives in the form of benefits, healthcare, education, etc.

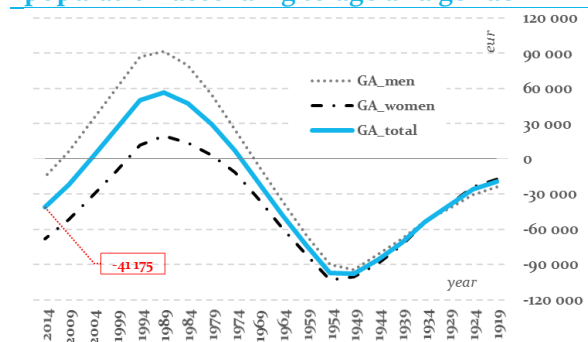
⁶⁹ Assuming that the policies do not change, indexing by future productivity growth is usually used in academic literature. The CBR also took into account other adjustments in the policies modelled by the CBR. Since the retirement age is linked to the life expectancy, the profiles related to retirement age (pension benefits, contributions, income taxes) were adjusted so as to reflect the developments in the labour force participation, as well as the parameters of the relevant policy (such as pension indexation method, the setting of the fully-funded pillar, etc.). In addition, the expenditures on healthcare reflect an increase in life expectancy (in accordance with the Commission's assumptions, 50% of the increase in life expectancy is spent in good health) and are growing faster than GDP (an elasticity of 1.1 converging to 1). On the other hand, expenditures on family allowances reflect the developments in the number of children.



the largest burden being that of social contributions and VAT. In terms of gender, it is these age categories where the most prominent differences between men and women arise, resulting from a higher employment rate of men in combination with their higher wages. In the post-productive age, both men and women again become net recipients, especially due to the pension system and the costs of healthcare⁷⁰.

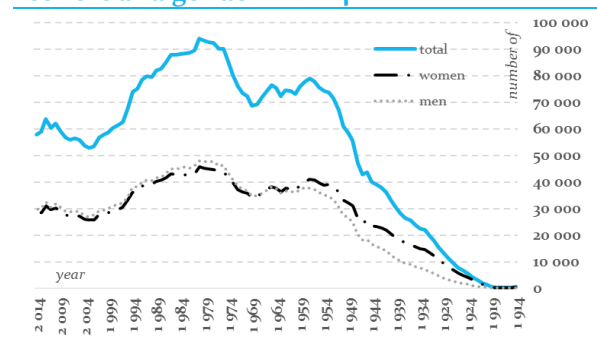
By taking into account the probability of death⁷¹, it is then possible to quantify the generational account of an average individual for every age cohort, as well as the overall fiscal expenditure/revenue of the given cohort.

Figure 26: Generational accounts of living population according to age and gender



Source: CBR

Figure 27: Population according to age cohort and gender in 2014



Source: CBR

As shown by generational accounts for living population cohorts (Figure 26), every **child born in 2014 would receive EUR 41,000 more from the general government budget than it would contribute to it during his/her life**⁷², whereas in 2014 there are some 60,000 of such children (Figure 27). This fact alone indicates that public finances would not be sustainable in the long-term. From all living population cohorts, this is the only cohort covered by generational accounts over the entire life and, therefore, it can be seen as the **benchmark cohort representing the current generation (the 2014 cohort = current generation)**.

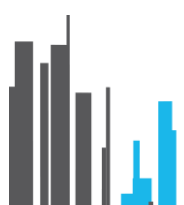
For the remaining living population cohorts (aged more than 1 year), the generational accounts are quantified until death without quantifying how much they received from, or contributed to the state in the past. In terms of identifying the future fiscal burden of the living population cohorts, monitoring of past periods is not only unnecessary, but also extremely demanding on data. Moreover, the past has already been captured in the government debt.

By merging the generational accounts of the living population cohorts (Chart 26) with the size of the given cohort (Chart 27) it is possible to identify the total fiscal expenditure of the living population cohorts. According to the most recent estimates, **the living population will**

⁷⁰ Age profile is given per capita (share in the total population of the given age cohort), therefore, it does not describe an average amount of a recipient's/payer's benefit/tax because the relevant policy does not usually cover the entire population (e.g., sickness benefits). The reason is that the profile is to be applied on demographic projections of the whole population.

⁷¹ Not every newborn will live to a high age. In addition to mortality, the impact of migration is also taken into account by assigning weight to the number of years during which an individual participated in the tax-benefit system.

⁷² Assuming no change in policies (tax and contribution system and the 2014 balance), the current life-expectancy forecasts and the current general government deficit adjusted for one-off effects.



generate an additional fiscal burden amounting to 108 % of GDP. Assuming the long-term budget constraint associated with the payment of these liabilities by future generations including the existing liabilities in the form of a net debt (50.3 % of GDP), **all of the yet-to-be-born children of the future generations (GA^{fut}) will have to contribute EUR 61,000 more to the budget than they would receive from it.** At this point please note that the current generation of children (GA^{cur}) **will receive EUR 41,000 more from the general government budget during their lifetime than they will pay to it.**

Under a hypothetical scenario where intertemporal budget constraint is not taken into account, government policies remain unchanged (a reduction in entitlements or an increase in taxes), and the future governments continue to generate the same general government deficits as in 2014, the fiscal burden of the general government would increase by a volume of 263 % of the 2014 GDP by the year 2150.

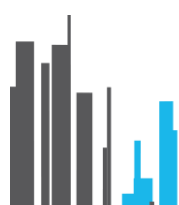
Tab 11: Generational accounts of current and future generation incl. the sustainability indicator

For year	2013	2014	2014	2014
Anticipated real discount rate	4%	4%	3%	5%
Scenario – actual balance*				
GA^{act} – average individual of present generation (eur)	-37 056	-41 175	-45 460	-41 970
1) Fiscal burden from living generation – future (% GDP)	100.60%	107.50%	190.40%	62.60%
2) Fiscal burden in the form of net debt - existing (% GDP)	48.20%	50.30%	50.30%	50.30%
1+2) Total fiscal burden for future generations (% GDP)	148.80%	157.80%	240.60%	112.90%
GA^{fut} – average individual of future generation (eur)	55 234	61 368	73 884	55 997
Sustainability indicator (% GDP)	248%	263%	389%	196%

* balance without one-off and temporary measures

Source: CBR

Despite the generational accounts being sensitive to the discount rate, **the results under all scenarios indicate the inevitability of passing the fiscal burden onto the future generations.** While a child born today would receive more from public budgets than he/she actually would pay over his/her life (-EUR41,000), the future generations will be facing the very opposite situation (+EUR 61,000) in the event that they would have to pay all the liabilities of the current age cohorts (including the existing debt). In comparison with 2013, this figure is up by roughly EUR 6,000, **in particular due to a worsening general government balance and an increase in net debt in 2014.** For the same reason, **the total volume of government liabilities** – assuming that the current fiscal policy continues to be pursued – **also increased year-on-year** from 248 % of GDP to 263 % of GDP for the year 2014. It can therefore be concluded that **intergenerational solidarity has worsened in 2014.**



Annex 1 – Revision of the fiscal performance in 2013

Structural primary balance

At the end of April 2014 the CBR published its Report on the Long-term Sustainability of Public Finances which contained a preliminary calculation of the structural primary balance for 2013. Because the majority of fiscal data was not available at the time of publication of the report, or some data was available only in the form of estimates, this section of the document adds more detail on the fiscal performance of the general government for 2013.

Following the revision of data in 2013⁷³, the structural primary balance has improved by 0.9 % of GDP to 0.6 % of GDP in particular due to the following factors:

- Eurostat's detailed data on the fiscal performance of the general government improved the results by 0.2 % of GDP.
- Reassessing one-off effects for the purposes of aligning the methodology of their reporting with the Ministry of Finance of the Slovak Republic brought an improvement amounting to 0.7 % of GDP.
- An update to the estimate of the cyclical component and the amount of debt interest payments have worsened the balance by a total of 0.2 % of GDP.
- The positive impact of better economic performance of corporations with government's equity participation (or equity participation of the National Property Fund) accounted for 0.1 % of GDP.

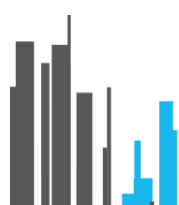
Tab 12: Structural primary balance in 2013

	Revision		change to report 2014	
	% GDP	mil. eur	% GDP	mil. eur
A. Net lending /borrowing	-2.6	-1 902	0.2	93
(-) Cyclical component	-0.5	-349	0.1	48
(-) One-off effects	0.0	-1	-0.7	-524
(-) Interest payments	-1.9	-1 393	0.1	21
B. General government structural primary balance	-0.2	-160.5	0.8	547
(+) Profit/Loss of state owned corporations	0.8	563	0.1	100
(+) Profit/Loss of the NBS	0.7	490	0.0	0
(-) Dividends paid to the GG	0.6	436	0.0	0
C. Public sector structural primary balance (incl. state own. corp. and NBS)	0.6	456	0.9	647

Source: CBR, MF SR

Based on Eurostat's report of 21 April 2015, the general government's fiscal performance showed a deficit of EUR 1,902.4 million in 2013. Against the first estimates in April 2014, this figure has improved by EUR 92.5 million (0.2 % of GDP).

⁷³ The Council announced that, in order to achieve better comparability in terms of fiscal performance of the general government and public sector companies, it would attempt to adjust the economic performance of state corporations and the National Bank of Slovakia for one-off effects and the economic cycle in a consistent manner. This adjustment was applicable to 2013 and its calculation is shown in the next subsection of this chapter.



The resulting balance represents a combination of changes arising from the changeover to the new ESA2010 methodology (a negative impact quantified at 0.2 % of GDP) and changes not affected by the ESA2010 methodology (a positive impact quantified at 0.3 % of GDP). The inclusion of new entities into the general government sector has improved the fiscal performance of the general government by 0.1 % of GDP in 2013, whereas the costs associated with the opening of the fully-funded pillar of the pension system had, according to the ESA2010 methodology, a negative impact⁷⁴ on the general government balance in the amount of 0.3 % of GDP. Updated figures for tax collection (EUR 261.0 million) contributed to the improvement of the general government deficit by 0.4 % of GDP.

Tab 13: Revision of GG balance in 2013

	mil. eur	% GDP
Net lending/borrowing - notification April 2014	-1 995	-2.77
revisions related to introduction of ESA2010 methodology	-146	-0.20
- sector reclassification:	91	0.12
of which: NDS (National Highway Company)	147	0.20
EOSA	-41	-0.06
others (hospitals, Eximbanka)	-15	-0.02
- interest on swaps and FRAs	2	0.00
- lump sum payments for pension scheme	-240	-0.33
revisions not related to introduction of ESA2010 methodology	239	0.32
- taxes	261	0.35
- others	-22	-0.03
revision of nominal GDP	-	0.05
Net lending/borrowing - notification April 2015	-1 902	-2.59

Source: SO SR

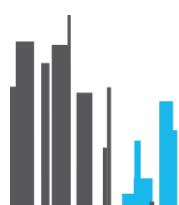
Updated one-off effects had a positive impact of 0.7 % of GDP on the estimated structural primary balance in 2013 compared to the CBR's report published in 2014. In addition excluding the measures necessitated by the new ESA2010 methodology (such as revenues of the fully-funded pillar, recording of the healthcare facilities' liabilities), the updated list reflects the discussion with the Ministry of Finance which should lay the groundwork for joint national methodology aimed at identifying one-off effects.

Box 2: CBR's revision of one-off effects in 2013

The table shows the items that were struck out from, or included in, the CBR's original list of one-off effects. The reasons for the revision can be broken down into three categories:

- **Changes in methodology (ESA2010):** temporary 'opening' of the fully-funded pillar of the pension scheme, debt of hospitals and healthcare facilities.

⁷⁴ Based on the ESA2010 methodology, the revenues from the transfer of pension savings to the general government (the possibility to opt out from the fully-funded pillar upon its opening) will not have an impact on the ESA balance because the future claims on pensions will increase simultaneously. This transaction is considered as a financial operation.



- **Effects not complying with the specified minimum amount of 0.05% of GDP:** these include voluntary grant from Javys company, taxation of retained profits
- **Other (such as duration, prolonged effect of legislation, additional information):** a levy on business operations in regulated sectors and extended bank levy.
- **Newly identified effects:** accrualisation of VAT receipts, retroactive top-up of pensions in the armed forces (including the police corps) by the Social Insurance Agency.

Tab 14: Difference in one-off effects in 2013

	Report 2014		Report 2015		difference	
	mil. eur	% GDP	mil. eur	% GDP	mil. eur	% GDP
possibility to exit from the fully-funded pillar *	239.7	0.33	-	-	-239.7	-0.3
temporary levy in regulated sectors **	75.0	0.10	-	-	-75.0	-0.1
taxation of retained profits from before 2004 **	8.0	0.01	-	-	-8.0	0.0
extended bank levy **	157.1	0.22	-	-	-157.1	-0.2
retroactive top-up of pensions in the armed forces	-	-	-8.1	0.0	-8.1	0.0
VAT revenue/payment from a PPP project (Granvia)	-5.8	-0.01	-5.8	0.0	0.0	0.0
accrualisation of VAT receipts ***	-	-	88.0	0.1	88.0	0.1
JAVYS (voluntary grant)**	30.0	0.04	-	-	-30.0	0.0
repayment of a loan provided by Cargo a.s.	19.5	0.03	19.5	0.0	0.0	0.0
repayment of a loan provided by Vodohosp. výst., š.p.	30.3	0.04	30.3	0.0	0.0	0.0
financial correction to EU funds	-124.5	-0.17	-124.5	-0.2	0.0	0.0
takeover of debt of healthcare facilities*	93.8	0.13	-	-	-93.8	-0.1
Total	523.1	0.7	-0.5	0.0	-523.6	-0.7

* change related to ESA2010 methodology

** re-assessment one-off effects

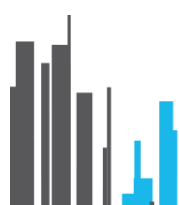
*** newly-identified one-offs

Source: CBR, MFSR

At the time of preparing the last year's report the CBR had at its disposal only the anticipated results of economic performance in 2013 only for state corporations, because the corporations falling under the National Property Fund failed to provide in the supporting documents their expected figures of economic performance for 2013. Based on the published annual reports for 2013, the profit of corporations with equity participation of the National Property Fund and the profit of state corporations totalled EUR 563 million. The corporations thus improved their economic performance by EUR 100 million against the CBR's technical assumptions. The amount of dividends paid to the general government budget remained unchanged, and their impact on the structural primary balance amounted to EUR 436 million⁷⁵. According to information available, no other changes have occurred in other components necessary for the calculation of the structural primary balance.

The table below shows the developments in the public sector structural primary balance between 2011 and 2013, as previously published in CBR's reports.

⁷⁵ A more detailed overview can be found in Annex 2



Tab 15: Public sector structural primary balance between 2011-2013(% GDP)

	2 011	2 012	2 013	2 014	most important factors
Extraordinary report - December 2012	-2.8	-	-	-	-
Regular report - April 2013	-2.7	-2.3	-	-	GG balance revision 2011 (-0.2), one-off effects (-0.1), profit/loss of state owned corp. (0.4)
Regular report - April 2014	-	-2.6	-0.3	-	GG balance revision 2012 (-0.1), one-off effects (-0.1), profit/loss of state owned corp. (-0.2)
Regular report - April 2015	-2.7	-2.6	0.6	-0.6	GG balance revision 2012 (0.2), one-off effects (-0.7), profit/loss of state owned corp. (0.1)
(+) impact of GG balance revision (ESA2010)	0.9	0.3	0.0		
(-) impact of one-offs revision	1.0	0.1	-0.7		
(-) impact of state owned corporations (ESA2010)	0.0	0.1	0.0		

Source: CBR

Structural primary balance – alternative approach

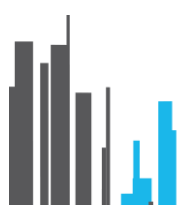
In order to make a comparable evaluation of fiscal performance for the general government, state corporations and the NBS, the CBR has announced its intention to adjust for one-off effects, in a consistent manner, the fiscal performance of corporations with government's equity participation (and equity participation of the National Property Fund) and, assuming that the fiscal performance of state corporations would be correlated with the rest of companies in the economy, to adjust the same figures for the impact of the economic cycle. Due to existing data limitations and open methodological issues, the results for 2013 are presented at this stage only as an alternative approach.

The **one-off effects** in the performance of corporations, as identified by the CBR in the past, included in particular the revenues from the revaluation of assets or the deferred tax. In the case of the National Bank of Slovakia, this applied to financial operations which represent a major and the most volatile part of its performance (unrealised gains and losses), in which case the developments are determined by the actual situation on the market. In 2013 the one-off effects in the performance of state corporations and NBS were identified in the amount of EUR 722.9 million.

An analysis⁷⁶ of the impact of the **economic cycle** on the performance of state corporations and NBS investigated the trends in selected indicators of state corporations' performance (profitability, tax base and tax liability) and compared them against the rest of the companies in the Slovak economy. Sectoral specialisation (such as monopolies in the energy and transport sectors) is a specific feature of the public sector companies and NBS. In many cases, the developments in these corporations may also be affected by non-economic factors. Where such a correlation is confirmed, the economic cycle can be expected to affect the state corporations in the same way as it affects the economic performance of companies in the economy. The CBR's analysis has confirmed the correlation in the developments at the level of corporations' profitability (0.83). For simplicity, the calculation of the cyclical component uses an identical macroeconomic base used for the rest of the corporations, and assumes unit elasticity⁷⁷ of the macroeconomic base and the profitability of corporations.

⁷⁶ More details on the CBR's analysis are provided in Box 3.

⁷⁷ The CBR takes the same parameter when calculating the cyclical component of corporate income tax.

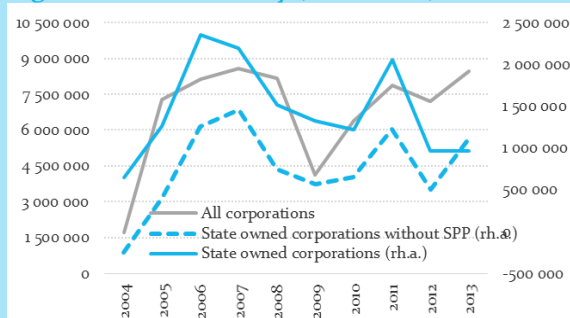


Box 3: Correlation of selected lines in the tax return of companies in the national economy and of state corporations

The purpose of the analysis was to identify a correlation between the performance of companies in the economy and corporations with government's or NPF's equity participation. Should this correlation be confirmed, the state corporations will be, just like other companies in the economy, adjusted for the impact of the economic cycle which causes temporary fluctuations in their economic activity and affects their profitability.

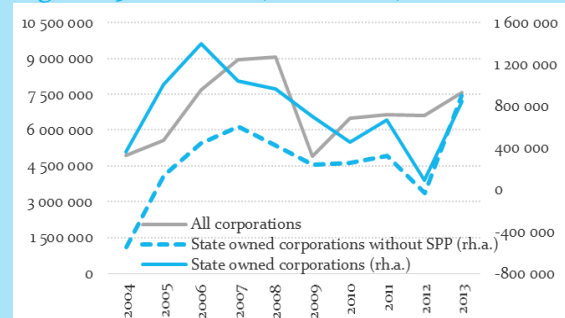
The following figures show the trends in the selected lines of corporation income tax returns, i.e., profitability, tax base and tax liability, between 2004 and 2013. From among state corporations, or corporations with government's equity participation, the national gas company Slovenská plynárenská spoločnosť (SPP), a.s., was excluded from the analysis, because of its significant impact on the overall results of the state corporations⁷⁸ that are subject to assessment. The table below summarizes the results of CBR's analysis. The correlation in terms of reported profit has been quantified at 0.83; as regards the tax paid, a lower correlation value has been confirmed (0.72).

Figure 28: Profitability (in th. EUR)



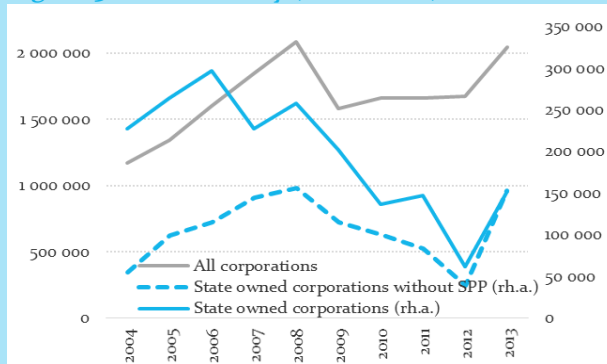
Source: CBR, FA SR

Figure 29: Tax base (in th. EUR)



Source: CBR, FA SR

Figure 30: Tax liability (in th. EUR)



Source: CBR, FA SR

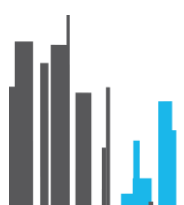
Tab 16: Correlation summary

(2004-2013)	state owned corporations excl. SPP	state owned corporations incl. SPP
Profitability	0.8263	0.5820
Tax base	0.6793	0.4838
Tax	0.7175	-0.1628

Source: CBR

The calculation of the **public sector structural primary balance for 2013** is presented in the table below where corporations with equity participation of the government or the National Property Fund, as well as the NBS, are also adjusted for one-off effects and the impact of the economic cycle. Compared to the calculations presented at the beginning of this section, the

⁷⁸ The correlation between SPP, a.s. and the rest of the companies in the national economy represents -0.06 in terms of reported profit.



2013 structural primary balance **dropped by 0.8% of GDP to -0.2% of GDP**. This decline can be fully attributed to the exclusion of NBS' financial operations (beyond its control, with developments relying on financial markets) and the revaluation of the state corporations' assets (Slovenský plynárenský priemysel, a.s., Slovenské elektrárne, a.s. and Slovenská elektrizačná prenosová sústava, a.s.). The inclusion of the cyclical component into the economic performance of the state corporations and the NBS has not affected the overall results for 2013.

Tab 17: Structural primary balance in 2013

	2013 %	2013 mil. eur	2013 without add. adjustment	difference
A. Net lending /borrowing	-2.6	-1 902	-2.6	0.0
(-) Cyclical component	-0.5	-349	-0.5	0.0
(-) One-off effects	0.0	-1	0.0	0.0
(-) Interest payments	-1.9	-1 393	-1.9	0.0
B. General government structural primary balance	-0.2	-160	-0.2	0.0
(+) Profit/loss of state owned corporations (a-b-c)	0.7	524	0.8	-0.1
(a) Profit/loss	0.8	563	0.8	0.0
(b) cyclical component	0.0	-9	-	0.0
(c) one-off measures	0.1	48	-	0.1
(+) Profit/loss of NBS (operating results) (a-b-c)	-0.1	-55	0.7	-0.7
(a) Profit/loss	0.7	490	0.7	0.0
(b) cyclical component	0.0	1	-	0.0
(c) one-off measures (from financial results)	0.7	544	-	0.7
(-) Dividends paid to the GG	0.6	436	0.6	0.0
C. Public sector structural primary balance (incl. state own. corp. and NBS)	-0.2	-127	0.7	-0.8

Source: CBR, MF SR

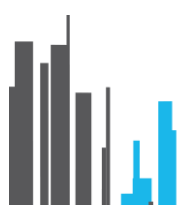
General government debt

Based on the notification in April 2014, the general government debt for 2013 amounted to 55.4 % of GDP (EUR 39,975.0 million). The debt notification in October 2014 reduced the debt to 54.6 % of GDP (EUR 40,174.3 million). The main reason for this revision was the change in the methodology of recording macroeconomic and fiscal data, the so-called ESA2010, which, on the one hand, increased the nominal debt (in particular due to re-classification of certain entities to the general government sector), but, on the other hand, resulted in significant increase in nominal GDP. The impact associated with the inclusion of new entities to the general government sector is 0.3 % of GDP. The revision of the nominal GDP reduced the debt by 1.1 % of GDP.

Tab 18: GG gross debt revision in 2013

	mil. eur	% GDP
GG gross debt - Notification April 2014	39 975	55.4
sector reclassification	199	0.3
of which: NDS (National Highway Company)	335	0.5
EOSA	55	0.1
others (hospitals, Eximbanka)	-190	-0.3
nom. GDP revision	-	-1.1
GG gross debt - Notification April 2015	40 174	54.6

Source: SO SR

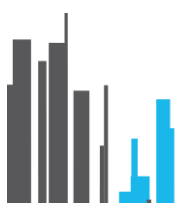


Annex 2 - Dividends paid to general government budget

Tab 19: Dividends in portfolio of NPF and state (in th. €)

	2013	2014	
National Property Fund	Slovenský plynárenský priemysel, a.s.	0	186 316
	Slovak Telecom, a.s.	10 585	2 460
	Západoslovenská energetika, a.s.	355 629	26 629
	Stredoslovenská energetika, a.s.	51 503	26 520
	Východoslovenská energetika, a.s.	33 944	23 742
	Trnavská teplárenská, a.s. Trnava	98	45
	Ostatné	437	242
	"Bezcenné" CP	72	78
Total NPF	452 267	266 032	
State budget	Správa služieb diplomatickému zboru, a.s.	178	194
	Slovenská záručná a rozvojová banka, a.s.	0	500
	Tipos, a.s.	3 000	3 000
	Slovenská elektrizačná prenosová sústava, a.s.	0	146 090
	Slovenská konsolidačná, a.s.	1 175	1 477
	EXIMBANKA - odvod zo zisku	100	200
	Slovak Telecom, a.s.	23 993	5 576
	Transpetrol, a.s.	7 861	7 000
	Jadrová a vyradovacia spoločnosť, a.s.	-	1 624
	Lesy SR, š.p.	5 000	5 000
	Slovenský plynárenský priemysel, a.s.		446 594
	Ostatné	685	1 070
	Total state budget	41 992	618 325
Dividends (cash basis)	494 259	884 356	
(-) superdividends	312 272	336 844	
(+) shift of dividends	254 208	-264 492	
DIVIDENDS (ESA2010)	436 195	283 020	

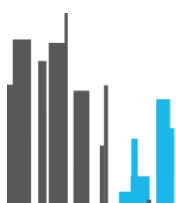
Source: MF SR



Annex 3 – Profit/loss of state corporations

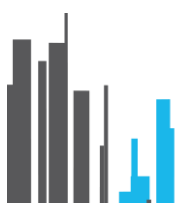
Tab 20: Profit/loss of state owned corporations, or NPF respectively (in th. €)

corporation	share	from 2014	2013 P/L	2014 1 P/L	2013 P/L x share	2014 1 P/L x share
Burza cenných papierov v Bratislave, a.s.	75.94%	NPF	822.3	na	624.5	na
KÚPELE SLIAČ a.s.	67.00%	NPF	-1 036.4	na	-694.4	na
Dlhopis, o.c.p., a.s.	100.00%	NPF	109.4	na	109.4	na
Slovak Lines, a.s.	44.01%	NPF	691.7	na	304.4	na
Bratislavská teplárenská, a.s.	100.00%	NPF	-23 560.0	na	-23 560.0	na
Poliklinika Tehelná, a.s.	100.00%	NPF	25.7	na	25.7	na
SAD Banská Bystrica, a.s.	37.96%	NPF	-559.9	na	-212.5	na
Zvolenská teplárenská, a.s.	100.00%	NPF	306.6	na	306.6	na
SAD Lučenec, a.s.	39.66%	NPF	46.6	na	18.5	na
SAD Zvolen, a.s.	37.84%	NPF	-137.4	na	-52.0	na
BARDEJOVSKÉ KÚPELE a. s.	0.08%	NPF	1 027.0	na	0.8	na
eurobus, a.s.	39.50%	NPF	618.4	na	244.3	na
Tepláreň Košice, a.s.	100.00%	NPF	-6.8	na	-6.8	na
ARRIVA Michalovce, a.s.	39.86%	NPF	230.5	na	91.9	na
SAD Dunajská Streda, a.s.	39.68%	NPF	95.3	na	37.8	na
Trnavská teplárenská, a.s.	100.00%	NPF	69.9	na	69.9	na
SAD Trnava, a.s.	39.50%	NPF	145.5	na	57.5	na
DMD GROUP, a.s.	100.00%	NPF	-628.3	na	-628.3	na
SAD Trenčín, a.s.	41.54%	NPF	797.0	na	331.1	na
SAD Prievidza, a.s.	39.66%	NPF	357.1	na	141.6	na
Martinská teplárenská, a.s.	100.00%	NPF	79.6	na	79.6	na
Žilinská teplárenská, a.s.	100.00%	NPF	1 671.4	na	1 671.4	na
SAD LIORBUS, a. s.	39.58%	NPF	626.4	na	247.9	na
SAD Žilina, a.s.	40.64%	NPF	567.5	na	230.6	na
SAD Prešov, a.s.	39.53%	NPF	237.3	na	93.8	na
SAD Humenné, a.s.	39.58%	NPF	0.0	na	0.0	na
SAD Poprad, a.s.	39.68%	NPF	149.1	na	59.2	na
Podtatranská vodárenská spoločnosť, a.s.	0.10%	NPF	644.6	na	0.6	na
ARRIVA NITRA a.s.	39.52%	NPF	410.7	na	162.3	na
ARRIVA Nové Zámky, a.s.	39.64%	NPF	359.0	na	142.3	na
Východoslovenská vodárenská spoločnosť, a.s.	0.02%	NPF	1 878.0	na	0.4	na
Stredoslov.vodárenská spoločnosť, a.s.	0.01%	NPF	63.7	na	0.0	na
Západoslovenská vodárenská spoločnosť, a.s.	0.01%	NPF	785.9	na	0.1	na
Slovak Telekom, a.s.	15.00%	NPF	47 686.0	78 678.0	7 152.9	11 801.7
Slovenský plynárenský priemysel, a.s.*	100.00%	NPF	267 585.0	311 000.0	267 585.0	311 000.0
Západoslovenská energetika, a.s.	51.00%	NPF	98 340.0	60 900.0	50 153.4	31 059.0



Tab 20: Profit/loss of state owned corporations, or NPF respectively (in th. €)

corporation	share	from 2014	2013 P/L	2014 1 P/L	2013 P/L x share	2014 1 P/L x share
Slovenské elektrárne, a.s.*	34.00%	NPF	354 737.0	126 650.0	120 610.6	43 061.0
Východoslovenská energetika a.s.	51.00%	NPF	28 226.0	69 100.0	14 395.3	35 241.0
Stredoslovenská energetika, a.s.	51.00%	NPF	23 254.0	48 960.0	11 859.5	24 969.6
METRO Bratislava a.s.	34.00%	MTCRD SR	-272.0	10.0	-92.5	3.4
Letové prevádzkové služby SR, š.p.	100.00%	MTCRD SR	2 351.0	729.0	2 351.0	729.0
Letisko M.R.Štefánika Bratislava, a.s. (BTS)	100.00%	MTCRD SR	-7 206.3	-8 230.7	-7 206.3	-8 230.7
Letisko Poprad - Tatry, a.s.	97.61%	MTCRD SR	203.8	116.5	198.9	113.7
Železničná spoločnosť Cargo Slovakia, a.s.	100.00%	MTCRD SR	262.0	-9 397.0	262.0	-9 397.0
Železničná spoločnosť Slovensko, a.s.	100.00%	MTCRD SR	-7 104.7	-9 490.0	-7 104.7	-9 490.0
Národná diaľničná spoločnosť, a.s.	100.00%	sektor VS MTCRD	35 235.0	22 642.0	35 235.0	22 642.0
Letisko Piešťany, a.s.	22.14%	SR	-508.0	-809.0	-112.5	-179.1
Letisková spoločnosť Žilina, a.s.	99.53%	MTCRD SR	244.0	830.0	242.9	826.1
Letisko Košice - Airport Košice, a.s.	34.00%	MTCRD SR	780.0	820.0	265.2	278.8
Slovenská pošta, a.s.	100.00%	MTCRD SR	2 106.0	68.0	2 106.0	68.0
Poštová banka, a.s.	0.04%	MTCRD SR	68 172.0	na	27.3	na
Letisko Sliač, a.s.	100.00%	MTCRD SR	127.0	181.0	127.0	181.0
Verejné prístavy, a. s.	100.00%	MTCRD SR	671.0	538.0	671.0	538.0
Technická obnova a ochrana železníc, a. s. (TOOŽ)	100.00%	MTCRD SR	-201.0	10.0	-201.0	10.0
Mincovňa Kremnica, štátny podnik	100.00%	MF SR	-946.0	31.0	-946.0	31.0
Slovenská záručná a rozvojová banka, a.s.	100.00%	MF SR	762.0	1 042.0	762.0	1 042.0
TIPOS, národná lotériová spoločnosť, a.s.	100.00%	MF SR	7 866.0	3 967.0	7 866.0	3 967.0
Exportno-importná banka SR	100.00%	GG sector	316.0	1 309.0	316.0	1 309.0
Slovenská konsolidačná, a.s.	100.00%	MEc SR	1 671.0	2 845.0	1 671.0	2 845.0
Slovenská elektrizačná prenosová sústava, a.s.*	100.00%	MEc SR	69 226.0	32 216.0	69 226.0	32 216.0
Rudné bane, š.p.	100.00%	MEc SR	42.0	45.0	42.0	45.0
TRANSPETROL, a.s.	100.00%	MEc SR	9 029.0	7 222.0	9 029.0	7 222.0
Slovak Telekom, a.s.	34.00%	MEc SR	47 686.0	78 678.0	16 213.2	26 750.5
Jadrová a vyrábajúca spoločnosť, a.s.	100.00%	MEc SR	11 738.0	2 535.0	11 738.0	2 535.0
MH Development s.r.o.	100.00%	MEc SR	-1 611.0	-1 294.0	-1 611.0	-1 294.0
MH Invest, s.r.o.	100.00%	MEc SR	-3 147.0	-513.0	-3 147.0	-513.0
Jadrová energetická spoločnosť Slovenska, a.s.	51.00%	MEc SR	-4 881.0	-5 554.0	-2 489.3	-2 832.5
Vojenské lesy a majetky SR, š.p.	100.00%	MD SR	131.0	122.0	131.0	122.0
HOREZZA, a.s.	100.00%	MD SR	-442.0	0.0	-442.0	0.0
Letecké opravovne Trenčín, a.s.	100.00%	MD SR	-4 170.0	-744.0	-4 170.0	-744.0
Vojenský opravárenský podnik Nováky, a.s.	100.00%	MD SR	-579.0	190.0	-579.0	190.0

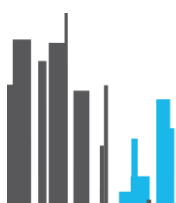


Tab 20: Profit/loss of state owned corporations, or NPF respectively (in th. €)

corporation	share	from 2014	2013 P/L	2014 1 P/L	2013 P/L x share	2014 1 P/L x share
Vojenský opravárenský podnik Trenčín, a. s.	100.00%	MD SR	-5 453.0	-1 097.0	-5 453.0	-1 097.0
Nemocnica svätého Michala, a. s.	100.00%	GG sector	-2 637.0	-4 041.0	-2 637.0	-4 041.0
Lesopoľnohospodársky majetok Ulič, š.p.	100.00%	MARD SR	51.0	51.0	51.0	51.0
Závodisko, š.p.	100.00%	MARD SR	-124.0	1.0	-124.0	1.0
Národný žrebčín "Topolčianky" š.p.	100.00%	MARD SR	1.0	2.0	1.0	2.0
Hydromeliorácie, štátny podnik	100.00%	MARD SR	-7 026.0	-7 126.0	-7 026.0	-7 126.0
LESY Slovenskej republiky, štátny podnik	100.00%	MARD SR	8 392.0	3 100.0	8 392.0	3 100.0
Agrokomplex - Výstavníctvo Nitra, š.p.	100.00%	MARD SR	52.0	100.0	52.0	100.0
Plemenárske služby SR, š.p.	100.00%	MARD SR	39.0	20.0	39.0	20.0
Agroinštitút Nitra, š.p.	100.00%	MARD SR	-185.0	10.0	-185.0	10.0
Technická inšpekcia, a.s.	100.00%	MLSAF SR	79.0	80.0	79.0	80.0
BIONT, a.s.	100.00%	MESRS SR	-294.0	0.0	-294.0	0.0
Automobilové opravovne MV SR, a. s.	100.00%	MI SR	51.0	50.0	51.0	50.0
Špecializovaný liečebný ústav Marína, š.p.	100.00%	GG sector	221.0	35.0	221.0	35.0
Všeobecná zdravotná poisťovňa, a.s.	100.00%	MH SR	15 586.0	5 000.0	15 586.0	5 000.0
SLOVOTHERMAE, Kúpele Diamant Dudince, š.p.	100.00%	GG sector	90.0	37.0	90.0	37.0
Národný ústav srdcovo-cievnych chorôb, a.s.	100.00%	GG sector	15.0	44.0	15.0	44.0
Nemocnica Poprad, a. s.	100.00%	GG sector	346.0	346.0	346.0	346.0
Východoslovenský ústav srdcovo-cievnych chorôb, a.s.	100.00%	GG sector	1 197.0	620.0	1 197.0	620.0
Letecká vojenská nemocnica, a.s.	100.00%	GG sector	-153.0	0.0	-153.0	0.0
Východoslovenský onkologický ústav, a.s.	100.00%	GG sector	586.0	484.0	586.0	484.0
Stredoslovenský ústav srdcovo-cievnych chorôb a.s.	100.00%	GG sector	1 262.0	1 310.0	1 262.0	1 310.0
Spoloč. pre zavedenie unitár. systému VZP a. s.	100.00%	MH SR	0.0	-3.0	0.0	-3.0
Správa služieb diplomatickému zboru, a.s.	100.00%	MFEF SR	359.0	230.0	359.0	230.0
VODOHOSPODÁRSKA VÝSTAVBA, š.p.	100.00%	MEEn SR	2 815.0	704.0	2 815.0	704.0
SLOVENSKÝ VODOHOSPODÁRSKY PODNIK, š.p.	100.00%	MEEn SR	2 157.0	-5 185.0	2 157.0	-5 185.0
Poľnonákup TATRY, a.s.	100.00%	ASMR	-195.0	1 700.0	-195.0	1 700.0
Spoločnosť pre skladovanie, a.s.	13.45%	ASMR	-1 009.0	na	-135.7	na
Technický skúšobný ústav Piešťany, š.p.	100.00%	ÚpNMS	87.0	3.0	87.0	3.0
Total			1 014 098.0	789 091.8	562 739.2	501 805.5
assets revaluation*			178 839.00		48 067.9	

* anticipated P/L

Source: NPF, MF SR



Annex 4 – One-off effects in 2014

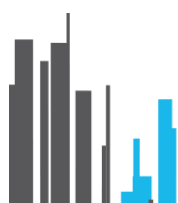
This part describes one-off effects that were taken into account in the calculation of the general government structural balance in 2014.

Tab 21 : One-off effects in 2014

	mil. eur	% GDP
VAT revenue/payment from a PPP project (Granvia)	-5.8	-0.01
digital dividend	163.9	0.22
retroactive top-up of pensions in the armed forces	-58.5	-0.08
financial correction to EU funds	-111.0	-0.15
adjusted amount of transfer to the EU budget	87.4	0.12
penalty of the Antimonopoly Office of the SR	44.8	0.06
accrualisation of VAT receipts ***	-100.7	-0.13
repayment of a loan provided by Cargo a.s. (cap. transfer v 2009)	19.5	0.03
repayment of a loan provided by Vodohospodárska výstavba, š.p.	48.1	0.06
Total	87.7	0.1

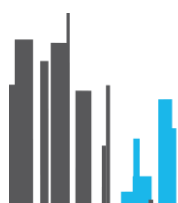
Source: CBR, MF SR

- VAT receipt from a PPP project** - in 2011, the imputation of a claim towards the Granvia company as a consequence of VAT payment in connection with a PPP project for the R1 motorway in the amount of EUR 174 million had a one-off positive effect on the deficit. For the next 30 years, the amount of the advance payment will be reduced every year by an aliquot portion amounting to EUR 5.79 million. This amount will have a negative effect on the general government budget during the 30-year period.
- Digital dividend** – In 2014, the sale of frequency bands through auction executed by the Telecommunications Regulatory Authority, the so-called digital dividend, had a one-off positive effect on the non-tax revenues. The positive impact of the sale on the 2014 balance reached EUR 163.9 million.
- Retroactive top-up of pensions in the armed forces** – in 2014, based on a Court decision, the Social Insurance Agency retroactively granted pension entitlements for certain categories of employees in armed forces. The one-off retroactive top-up of pensions had a negative impact on the general government balance in the amount of EUR 58.5 million.
- Financial corrections to EU funds** - Due to infringements of EU funding rules, several projects are not refunded from the EU even though Slovakia has already received the payment from the EU or the projects were already pre-financed from the state budget. Once the correction is imposed and accepted, it has a negative impact on the balance. In 2014 alone, financial corrections to EU funds reached EUR 111 million.
- Adjusted amount of transfer to the EU budget** – the amount of transfer payable to the EU budget from sources based on VAT and GNP is estimated annually by the Commission. Based on the Commission's calculations, the original amount has been significantly revised and the deadline for payment by Member States has been set to 1 December 2014, or 1 September 2015 respectively. The revision should be recorded on an accrual basis into the year 2014. The calculations done so far show that the revision had a positive impact on the 2014 budget in the amount of EUR 87.4 million



6. **Penalty imposed by the Antimonopoly Office** - In October 2006, the Antimonopoly Office ruled that the companies of Strabag a.s., Doprastav, a.s., BETAMONT s.r.o., Inžinierske stavby, a.s., Skanska DS a.s., and Mota – Engil, Engenharia e Construcao, S.A. concluded a cartel agreement in conflict with the provisions of the Antimonopoly Act and the Treaty on the Functioning of the European Union. The cartel agreement concerned a public tender for the construction of the first section of the D1 motorway (Mengusovce – Jánovce). The Supreme Court of the Slovak Republic confirmed the legality of the fine in the amount of EUR 44.8 million on 30 December 2013, and its decision became final in 2014. The receipt from the fine therefore increased non-tax revenues in 2014.
7. **Accrualisation of VAT receipts** - ESA2010 uses the method of accrued cash receipts based on which cash receipts are attributed to individual periods with a fixed time lag. This approach, however, does not fully reflect reality, particularly when it comes to excess tax refunds. Tax audits and the related suspensions of the excess tax refunds may significantly influence VAT accrual receipts under ESA2010. Due to this, the negative effect on VAT revenues in 2014 reached EUR 100.7 million
8. **Repayment of loans provided to Cargo, a.s.**⁷⁹ – On 4 March 2009, the Government approved the use of state financial assets for the provision of a loan to Cargo Slovakia a.s. in the amount of EUR 166 million; this had a negative impact on the general government balance in 2009. Under a contract with the Ministry of Finance and the Ministry of Transport, Post and Telecommunications, Cargo used the assistance to finance its payroll and personnel expenditures, charges for the use of the railway infrastructure, and its own financial expenses. The payment of interest was set to begin in 2009, the payment of principal in 2011, and the entire loan matures in 2016. In 2014, the instalment paid by Cargo had a positive impact on the general government balance in the amount of EUR 20 million.
9. **Repayment of loans provided to Vodohospodárska výstavba, š.p.** – in 2014, the balance of the last two instalments of the repayable financial assistance provided to Vodohospodárska výstavba (state corporation) before 2002 was paid, which increased revenues by EUR 48 million. Because, in the past, the loan was treated as a capital transfer with negative effect on the deficit under the ESA95 methodology, the transaction had a positive impact on the general government balance in 2014.

⁷⁹ Even through individual instalments do not reach 0.05 % of GDP in each year, the CBR believes that the booking of these transactions should be consistent. The instalments are thus spread over the entire loan term and have a positive impact on the balance.



Annex 5 – Methodology and assumptions of the baseline scenario

The baseline scenario prepared by the CBR is based on the last known data made available by the Statistical Office of the Slovak Republic and the State Treasury in its reporting system. The data for the base year is available in a detailed revenue/expenditure structure under several classifications: economic (ECBC), ESA2010, functional (COFOG) and source-based (national sources, EU funds, co-financing).

In the first step, the base year data are adjusted for one-off effects and impacts that are non-recurring but fall short of meeting the definition of a one-off effect (e.g., due to their size). This balance is then adjusted for specified rules. Given the detailed data, the indexation rules are defined in the first four years of the baseline scenario (the medium-term part) at the level of sub-items of the economic classification of the budgetary classification (ECBC) by using the current macro-economic and tax revenue forecasts prepared by the committees⁸⁰. In the event that certain items are not directly related to economic developments, the actual figures for the last year are used. The medium-term scenario is linked with the long-term projections of expenditures sensitive to population ageing. The projections of the pension and healthcare systems are based on CBR's models, other expenditures sensitive to population ageing are taken from the Commission's projections. Implicit and contingent liabilities are taken into account across the entire horizon of the baseline scenario projections.

The baseline scenario presented in this report was compiled on the basis of the 2014 base year for the first time; by the same token, the 2013-based scenario has been updated as well. Compared to the methodology used for its compilation as outlined in the last year's report (of April 2014), it underwent only minimal changes.

The main changes against the approach applied in the previous year:

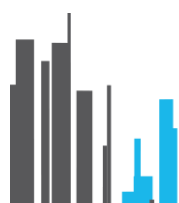
- As a result of changes in the ESA2010 national accounts methodology, **new entities are classified under the general government sector and several transactions are recorded in a different manner**. The new entities – with the exception of healthcare facilities – were subject to the same indexation rules as those applied to the existing entities, depending on the factual nature of revenues and expenditures⁸¹. The economic performance of healthcare facilities (the balance of their revenues and expenditures) was part of the projection of expenditures on healthcare⁸².

The different recording of several transactions has necessitated the definition of rules for their indexation in the medium-term part of the baseline scenario. These include, in

⁸⁰ The Macroeconomic Forecasting Committee and the Tax Revenue Forecasting Committee

⁸¹ In the case of new general government entities (an impact of the ESA2010 methodology), the structure of data was less detailed for 2013; therefore, indexation reflected the structure of their expenditures in 2014. This has to do with the fact that these entities were not required, at that time, to submit the defined reports for 2013 and, for the purposes of determining the general government balance under the ESA2010 methodology, the figures from their financial statements have been used.

⁸² This adds more detail in comparison with the last year's report because, in the past, the expenditures on healthcare included only those liabilities of the healthcare facilities which were included in the deficit (i.e., only a portion of their economic performance).



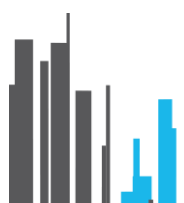
particular, the capitalisation of research and development expenditure and the expenditure on defence which, under ESA95, were recorded under intermediate consumption. Research and development expenditure primarily consist of expenditure on salaries, goods and services, and for this reason, indexation based on the inflation rate and the wage growth rate in the private sector was chosen, with each given equal weight. Defence spending is indexed on the basis of GDP growth rate.

- **An amendment to the Statutes of the Tax Revenue Forecasting Committee extended the range of taxes subject to discussion.** In this context, the rules for the projection of these taxes were aligned with the committee's forecast (such as the special levy payable by financial institutions, real estate tax).
- **The projection of EFSF's impact** on gross debt and interest revenue and costs takes into account the **information⁸³ on the maturity of the individual loans**. This change affected only the long-term part of the baseline scenario (for the years 2023-2054). The information on maturity dates was not included in the last year's report.
- Also included is the **projection of maintenance costs following the completion of a PPP project** (R1 motorway). Because the motorway will become the property of the state after 2041, it will be necessary to take into account the associated costs after this period (the maintenance costs are to be borne by the private partner until 2041; its costs are currently included in the availability payment which it receives from the state).
- In order to adopt **a consistent approach with respect to factually similar items, the indexation of several types of expenditures has been changed**. In the case of current transfers to non-financial corporations (such as state corporations), the indexation of expenditures, which was originally based only on the inflation rate, now also takes into account the wage growth rate in the private sector, which better reflects the developments in the operating costs of these corporations. In addition, expenditures on several services (workshops, training courses) were indexed by means of the inflation rate (which also reflects the price developments in services) instead of the wage growth rate in the private sector.
- A **projection rule using the three-year average** has been set for those items, whose development is irregular and cannot be linked to any particular macroeconomic indicator. As with the last year's report, this rule has been adjusted – due to missing detailed data (caused by the changeover to the ESA2010 methodology) – in a way that **takes into account only the actual last year's data**.

Main assumptions for compiling the baseline scenario:

- As was the case with the last year's report, the **forecast by the Macroeconomic Forecasting Committee** has again been used for the medium-part. So far, the macroeconomic forecasts used have not excluded the impacts of new measures incorporated in the general government budget (a macroeconomic forecast assuming unchanged policies).
- The baseline scenario takes into account the legislation applicable at the end of the relevant period. **For the 2014 base year, this means the state of play as at 31 December 2014, i.e., including also those measures adopted in 2014 which are to become effective in 2015**. In the case of taxes the most recent tax revenue forecasts of the Tax Revenue Forecasting Committee prepared in February 2015 were used, which

⁸³ Information on the maturity of the individual loans is published by the [EFSE](http://www.efsf.europa.eu).



were adjusted for changes adopted after the end of the relevant period (the impact of the 'opened' fully-funded pillar of the pension system).

- In addition to one-off effects presented in Annex 4, the **base year also reflected other items** which, albeit not meeting the definition of one-off effects (due to their size), **have a temporary impact on the balance**. In particular, this involves a transfer from nuclear decommissioning company JAVYS, a. s., to the National Nuclear Fund in the amount of EUR 10 million in 2014 and the one-off part of the Christmas bonus to pension benefits totalling almost EUR 10 million in 2014.

Tab 22: One-offs and other temporary factors (€ thousands)

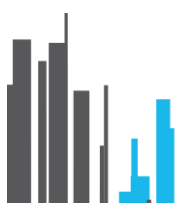
	2013	2014	2015	2016	2017	2018
Tax revenues	87 995	-100 738	0	0	0	0
- accrualisation of VAT receipts	87 995	-100 738	-	-	-	-
Non-tax revenues	0	163 900	0	0	0	0
- digital dividend	-	163 900	-	-	-	-
Grants and transfers	79 840	122 388	97 720	19 500	0	0
- penalty imposed by the Antimonopoly Office of the SR	-	44 800	-	-	-	-
- grant received from nuclear decomm. company (JAVYS)	30 000	10 000	-	-	-	-
- repayment of loans by Cargo	19 500	19 500	97 720	19 500	-	-
- repayment of loans by Water-management devel. (VHV)	30 340	48 088	-	-	-	-
Social transfers	-8 080	-67 928	0	0	0	0
- retroactive disbursement of pensions in the armed forces	-8 080	-58 452	-	-	-	-
- one-off increase in Christmas bonus to pensions	-	-9 476	-	-	-	-
Other expenditures (mainly transfers)	-124	-23 566	0	0	0	0
- adjusted amount of transfer to the EU budget	514	-	-	-	-	-
- financial corrections to the EU funds	-124	87 444	-	-	-	-
	514	-111 010	-	-	-	-
Total (impact on GG balance)	35 241	94 056	97 720	19 500	0	0

Source: CBR, SO SR

- Considering the existing situation in the **drawing of EU funds** and the as-yet-undrawn amount from the 2nd programming period, the CBR expects 90% absorption of the allocation from the Structural Funds and the Cohesion Fund in its baseline scenario. In the case of funds for the agriculture sector (with the exception of direct payments), the allocated amount is expected to be drawn to 95%. As regards the funds available within the 3rd programming period, the same drawing pattern over time is envisaged as that seen in the 2nd programming period – marked by a slow start attributable to the need to complete the drawing of the funds from the preceding period. The expenditures on co-financing were estimated on the basis of the rate of co-financing from the individual funds and on the co-financing expenditures that have been spent to date.

Tab 23: Assumptions on EU funds (€ thousands)

	2013	2014	2015	2016	2017	2018
Struct. funds and Cohesion fund - 2 nd PP	1 525 465	1 507 738	2 415 864	127 151	0	0
Struct. funds and Cohesion fund - 3 rd PP	0	0	59 045	825 456	1 572 266	1 960 708
Agriculture - 2 nd PP	510 311	127 536	130 530	0	0	0
- Rural development programme	174 564	91 673	130 530	0	0	0
- other (mainly direct payments)	335 747	35 863	0	0	0	0



Agriculture - 3 rd PP	0	378 240	503 451	671 647	727 185	707 223
- Rural development programme	0	52 094	120 391	266 880	299 474	255 261
- other (mainly direct payments)	0	326 146	383 061	404 767	427 711	451 963
Total expenditures financed from EU funds	2 035 776	2 013 514	3 108 889	1 624 254	2 299 450	2 667 931
Expenditures on co-financing*	379 429	383 934	475 280	276 111	387 014	433 950
<i>p.m. EU funds in the GG sector</i>	<i>1 047 769</i>	<i>1 194 671</i>	<i>1 844 586</i>	<i>963 713</i>	<i>1 364 324</i>	<i>1 582 954</i>

* including co-financing of EU grants and other foreign grants

Source: CBR, MF SR, SO SR

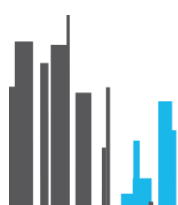
- In order to project **revenues and expenditures in the pension and healthcare systems**, the outputs from CBR's models have been used. Due to missing data⁸⁴ for **long-term care** the data from the Commission's forecasts⁸⁵ were used and the structure of expenditure was estimated based on ECBC. In the years to come, the trends in expenditures are in line with the Commission's assumptions (taking into account the dynamics in expenditures in % of GDP). The **expenditures on education and unemployment** were identified through the classification of functions⁸⁶ (COFOG). The input data, in particular as regards the education sector, differ from those used by the Commission which relies on other statistics by Eurostat and the OECD. Even though they, too, indicate the general government expenditures, their use makes it impossible to exclude them, in a consistent manner, from the overall balance of the general government and to apply the correct indexation rules⁸⁷. On the other hand, the classification of functions is reported in parallel with other national classifications and ESA2010, thus allowing consistent combinations. These expenditures (education and unemployment) have been indexed in the medium-term part on the basis of the defined rules and, therefore, reflect the current macroeconomic developments and the existing legislation. The long-term part takes into account the dynamics in expenditures expressed in proportion to GDP as presented in the Commission's forecast.
- **The projection of revenues and expenditures related to the nuclear decommissioning scheme** has been updated in connection with different actual developments and the forecast of macroeconomic indicators (inflation), as well as information concerning the postponed launch of the 3rd and 4th unit of the Mochovce nuclear power plant.

⁸⁴ In the absence of statistics on long-term care expenditures, also the Commission uses simplified assumptions for Slovakia (for example, averages from other countries). Expenditures can be estimated based on the COFOG classification; the estimate would partly include healthcare expenditures and partly social-security expenditures. However, this is a breakdown at the fourth level of classification, but the Statistical Office publishes – due to insufficient quality of data – only the second level at the maximum.

⁸⁵ [European Commission: The 2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States \(2010-2060\)](#), [European Economy 2/2012](#).

⁸⁶ For the 2014 baseline scenario, the expenditures under the functional classification were compiled by the CBR with the use of supporting documents from the State Treasury and the Statistical Office of the Slovak Republic. Because the Statistical Office publishes such data only at the end of 2015, these unofficial figures may be slightly revised following the publication of the official data.

⁸⁷ Expenditures on education include payroll costs, operating costs, as well as investments. By using the data based on the Commission's methodology, the information concerning the structure of expenditure on education is lost; for this reason, it is not possible to exclude the expenditure on education from the structure of general government expenditures under the relevant ECBC sub-item.



Annex 6 – Net worth

A complex understanding of the situation in public finances requires a perspective on flow values (balance, revenues and expenditures) as well as stock values, typically presented in the form of a balance sheet. The government's balance sheet can be very helpful in increasing the transparency of public finances, as well as in setting the right incentives for economic policy makers. Achieving the long-term sustainability of the general government (deficit and debt) by shifting the burden onto state corporations (putting off the problems until later) is not the same as doing so by reducing the level of provided services (e.g., low quality of infrastructure). The result of the public sector's balance is the so-called net worth.

Net worth is defined by the Fiscal Responsibility Act as the sum of equity of general government entities, equity of the National Bank of Slovakia, equity of central government corporations and local government corporations, adjusted for implicit liabilities and contingent liabilities, other assets and other liabilities. The scheme of public sector's net worth is shown in Table 24.

Tab 24: Public sector's balance sheet – net worth

ASSETS	LIABILITIES
A1 – buildings, land, etc.	P1 – explicit debt
A2 – infrastructure	P2 – implicit liabilities
A3 – net capital stock	P3 – contingent liabilities
A4 – financial assets	P4 – other liabilities
A5 – net worth of the central bank	
A6 – net worth of state-owned enterprises	
A7 – natural resources*	
A8 – ecological wealth*	
A9 – other assets	
	Net worth

* Due to complexity of estimate, these items are not currently calculated.

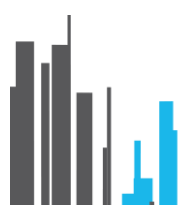
Source: CBR

Based on the currently available data it is not possible to compile such balance for the entire public sector⁸⁸. A consolidated balance is available only for the public sector entities with the exception of the National Property Fund's corporations and the balance of the National Bank of Slovakia. For this reason, net worth is shown as a summary of its individual parts (Table 25), with more detailed data presented for every part in the Summary Annual Report of the Slovak Republic for 2013 published by the Ministry of Finance.

Tab 25: Net worth of the public sector in Slovakia in 2012 and 2013 (€ million)

	2012	2013	of which:		
			y-o-y change	methodol. changes	change in level
1. Equity of the public sector entities (excluding NBS and NPF corporations)	2 234	672	-1 562	-	-1 562
- equity of general government entities	-5 202	-6 835	-1 633	-	-1 633
- equity of central government corporations	7 345	7 412	67	-	67
- equity of local government corporations	91	95	4	-	4

⁸⁸ The consolidation of transactions between the NPF's corporations, the NBS and other public sector entities remains a problem.



2. Equity of NPF corporations	5 265	5 195	-71	-	-71
3. Equity of the National Bank of Slovakia	-3 588	-3 671	-83	-	-83
4. Other assets (lawsuits)	1	689	688	688	0
5. Other liabilities (contingent liabilities)	-8 096	-12 063	-3 968	-3 784	-184
6. Implicit liabilities	-162 464	-159 932	2 532	2 709	-178
Net worth (1+2+3+4+5+6)*	-166 648	-169 111	-2 463	-386	-2 077

In the case of contingent liabilities, the CBR has identified further liabilities beyond those presented by the Ministry of Finance. These involve the protected deposits in the Deposit Protection Fund. An exhaustive list of contingent liabilities is presented in Table 26, indicating those items that were identified by the Ministry of Finance on the basis of a wider data base (marked as methodological change).

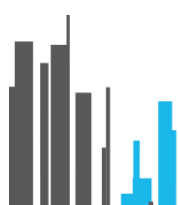
Tab 26: Contingent liabilities of the public sector

Entities (according to the Summary annual report)	Liability	2012		2013	
		(€ mill.)	(% GDP)	(€ mill.)	(% GDP)
MF SR	European Stability Mechanism	5 109	7.1	5 109	6.9
	European Financial Stability Facility*	-	-	2 188	3.0
	EIB membership	574	0.8	574	0.8
	IBRD membership	351	0.5	340	0.5
	EBRD membership	101	0.1	101	0.1
	CoE DB membership	17	0.0	17	0.0
	IBEC membership	15	0.0	12	0.0
	MIGA membership	3	0.0	2	0.0
	IIB membership*	-	-	48	0.1
	arbitration with shareholders of ZP Union, a.s.	25	0.0	26	0.0
	arbitration with shareholders of former ZP Apollo, a.s.	131	0.2	131	0.2
	arbitration with U.S. Steel Košice shareholders	257	0.4	257	0.3
	other legal disputes*	-	-	823	1.1
NC SR	legal disputes*	-	-	725	1.0
SLF	unsettled restitution claims	0	0.0	0	0.0
NPF	legal disputes	112	0.2	116	0.2
	guarantees according to para. 15 of act no. 92/1991	855	1.2	1 114	1.5
	legal disputes	506	0.7	209	0.3
	European Stability Mechanism	5 109	7.1	5 109	6.9
State budget entities (excluding MF SR)		28	0.0	-	-
Other central government entities		-	-	242	0.3
Municipalities		9	0.0	21	0.0
Self-governing regions		2	0.0	8	0.0
State budget entities (excluding MF SR)		28	0.0	-	-
Other entities	Liability	2012		2013	
		(€ mill.)	(% GDP)	(€ mill.)	(% GDP)
DPF	insured deposits	26 889	37.3	26 856	36.5
NC SR	legal disputes	603	0.8	-**	-**
Total		35 588	49.3	38 920	52.9

* Impact of methodological changes

Source: MF SR, DPF, CBR

** Contingent liabilities of the NC SR as of 31 December 2013 have been included in the 2013 Summary Annual report.



Annex 7 – Baseline scenario of 2013 - revision

Based on the revision of the 2013 baseline scenario, the long-term sustainability indicator improved from 3.0% of GDP to 1.9% of GDP.

The underlying reasons for this improvement was the reduction of the general government deficit adjusted for one-off effects in the base year from 3.5% of GDP to 2.6% of GDP which is reflected in the baseline scenario in the full extent. The change results from:

- the update to tax revenues with an impact of 0.35% of GDP;
- the revision of one-off effects in the total amount of 0.4% of GDP; and
- the changeover to the ESA2010 methodology that has improved the deficit by 0.1% of GDP and increased the level of gross domestic product with a positive impact of 0.05% of GDP (the denominator effect).

Tab 27: Baseline scenario for public finance development – 2013 (% of GDP)

	2013*	Medium-term part				Long-term projections				
		2014	2015	2016	2017	2020	2030	2040	2050	2063
Total revenues	38.2	38.6	38.7	37.1	36.8	36.7	36.5	36.7	36.8	36.9
Tax revenues	16.6	16.9	16.5	16.3	16.0	16.0	16.0	16.0	16.0	16.0
Social and health security contributions	13.5	13.5	13.5	13.5	13.4	13.3	13.3	13.5	13.7	13.8
- Total contributions (PAYG+ fully-funded pillar)	13.8	13.8	13.8	13.8	13.7	13.7	13.7	13.7	13.7	13.7
- Shortfall of fully funded pillar	-0.5	-0.5	-0.5	-0.5	-0.6	-0.7	-0.7	-0.5	-0.3	-0.2
forces	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Grants and transfers	3.1	3.2	3.8	2.5	2.8	2.8	2.8	2.8	2.8	2.8
Non-tax revenues	5.0	5.0	4.9	4.7	4.6	4.6	4.5	4.4	4.3	4.3
- Contributions to nuclear fund (NJF)	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0
- Property income	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.6	0.6	0.6
- Other non-tax revenues	3.9	3.9	3.8	3.8	3.7	3.7	3.7	3.7	3.7	3.7
Total expenditures	40.8	41.1	41.3	39.4	39.3	39.5	40.7	41.7	44.3	50.6
Primary expenditures	39.0	39.2	39.5	37.8	37.8	37.8	37.6	37.6	38.5	40.6
Fixed	20.6	20.6	20.8	19.3	19.4	19.4	19.4	19.4	19.4	19.4
Sensitive to population ageing	18.1	18.4	18.5	18.2	18.1	18.2	18.0	18.0	19.0	21.2
- Pensions (PAYG pillar)	8.1	8.3	8.3	8.2	8.2	8.2	7.6	7.4	8.0	9.8
- Armed forces	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5
- Healthcare	5.0	5.2	5.2	5.2	5.2	5.3	5.8	6.1	6.4	6.5
- Long-term care	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.7
- Education	4.0	4.0	4.1	3.9	3.9	3.8	3.7	3.5	3.6	3.7
- Unemployment benefits	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Decommissioning of nuclear plants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
PPP projects and maintenance	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
Transfers to political parties	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest	1.9	1.9	1.8	1.7	1.5	1.8	3.1	4.1	5.8	9.9
GG balance	-2.6	-2.5	-2.6	-2.4	-2.5	-2.9	-4.2	-5.0	-7.5	-13.7
Primary GG balance	-0.7	-0.6	-0.8	-0.7	-1.0	-1.1	-1.1	-1.0	-1.7	-3.8
Debt	54.6	56.4	57.7	57.2	56.8	56.8	64.8	83.5	118.9	203.5

* excluding one-offs

Source: CBR

