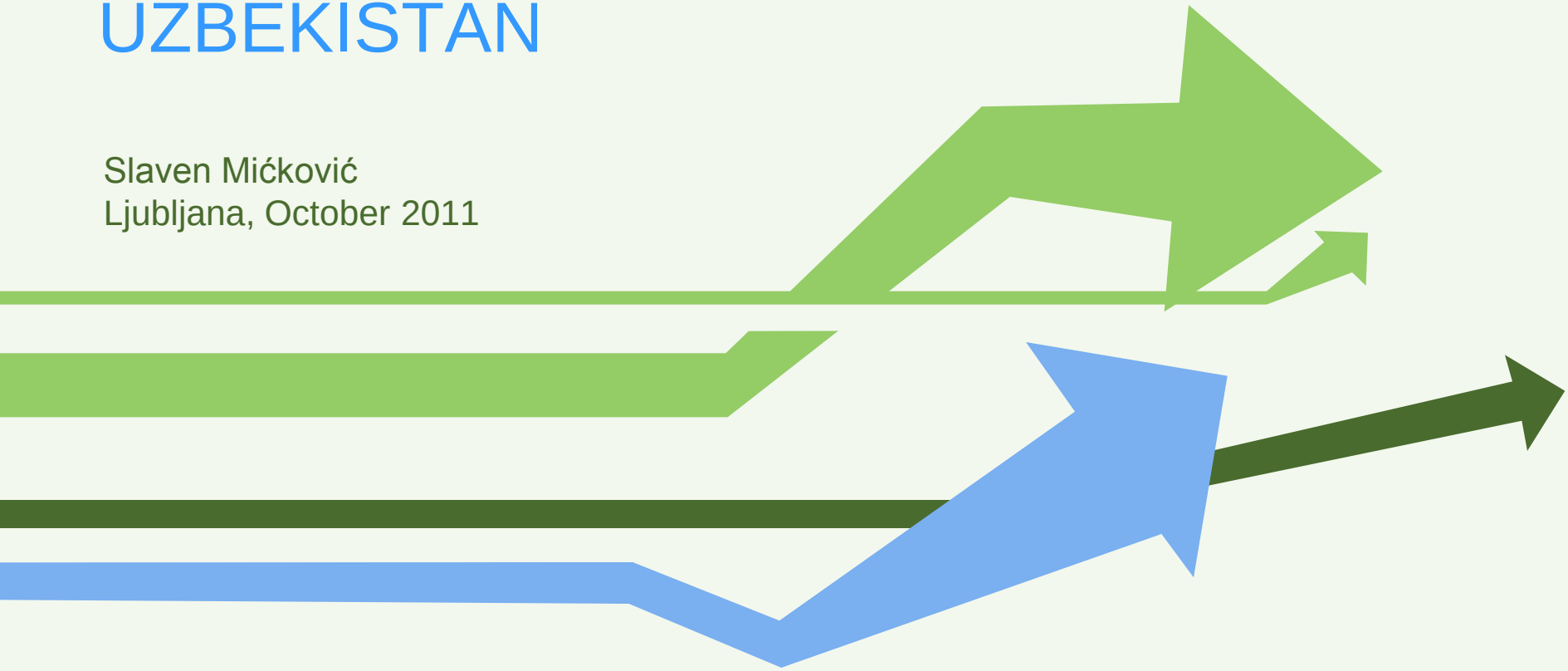
STUDY TOUR TO SLOVENIA FOR OFFICIALS FROM THE MoF OF UZBEKISTAN

Slaven Mićković
Ljubljana, October 2011



1. PART: SETTING FISCAL STRATEGY AND POLICY PRIORITIES

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Fiscal policy

- Fiscal policy is the use of the government budget to affect an economy.
- When the government decides on the taxes that it collects, the transfer payments it gives out, or the goods and services that it purchases, it is engaging in fiscal policy.

The objectives of fiscal policy

- Avoid excessive deficits and debt that could threaten short-term macro stability or longer term government solvency:
  - The legacy of past deficits is higher government debt.
  - To stabilize the debt, the government must eliminate the deficit.
  - To eliminate the deficit, the government must run a primary surples equal to the interest payments on the existing debt.

Why care about fiscal policy?

- Fiscal vulnerability is the potential that a government fails to achieve it's macro-fiscal objectives.
- Failing to meet government goals has sizeable political, economic and social costs.
- Let's start with some accounting identities.

Fiscal policy and the macroeconomy

- Equilibrium condition (supply meets demand):

$$C + S + T = C + I + G + X - M \ (=Y)$$

Consumption +	Consumption +	Exports -
Savings +	Investment +	Imports
Tax	Government exp.	

Fiscal policy and the macroeconomy

Fiscal policy and the current account

(economy's savings-investment balance)

$$X - M = S_P - I_P + T - G$$

Current Account	Private Saving-Investment Balance	Fiscal Balance

Fiscal policy and the current account

- An increase in the fiscal deficit can therefore be reflected in
  - A worsening current account
  - Crowding out of private investment
  - Increase in private savings

Fiscal policy, debt and inflation

Government financial balance

$$G - T = M_T - M_{T-1} + B_T - B_{T-1} + B^*_T - B^*_{T-1}$$

Fiscal Deficit	Money Financing	Domestic Borrowing	Foreign Borrowing

Fiscal policy, debt and inflation

- Assuming no monetary financing, increases in the deficit lead to public debt accumulation.
- However, if debt financing is not an alternative, deficits can cause inflation insofar as the money supply is expanded in excess of changes in money demand.
- Even in the absence of money financing, fiscal policy can be inflationary if it expands aggregate demand faster than aggregate supply can adjust.

Budget deficits, Output and Investment

- Effects of a deficit reduction:
  - Short run: Y ↓ I ↑↓ ?
  - Medium run: Y → I ↑
  - Long run: Y ↑ I ↑

Deficit reduction, Expectations and Output

- The decrease in government spending need not lead to a decrease in output - it all depends on how much people expect future output to rise as a result of deficit reduction.
  - The rational expectations revolution in macroeconomics forced macroeconomists to think about how people's expectations about the future affect economic variables. Because people know that a deficit reduction causes output to rise in the future, this does affect decisions they make today.

Criteria for an optimal budgeting process

1. Transparency
2. Medium-term planning
3. Centralization of the process
4. Top-down approach
5. Prudent budget projections
6. Flexibility
7. Performance budgeting

1. TRANSPARENCY

- Democracy requires transparency
- If the government does not explain what it is doing with tax money , support for elected officials and public sector workers will diminish.
- The people have a right to know how we are spending their money.
- Challange: very detailed budget, thousands of different items, difficult to understand how much is spent for what!

2. MEDIUM-TERM PLANNING

- Although every budget prepared has long-term implications for the future of the state, it is often developed using short-term fiscal tools: no long or medium-term strategy, essential to the fiscal planning of any private business, is undertaken at the state level!
- Instead, intrinsically volatile revenue forecasts are used to cast short-term budgets often finessed to meet the state's statutory requirement of a balanced budget.

2. MEDIUM-TERM PLANNING

- It can be shown that this reliance on unpredictable revenues has been a one of major causes of budget shortfalls and deficits in the past.
- Where are you in the economic cycle.
- Longer term costs can take time to emerge.
- Takes time to implement change.
- Support expenditure control.

3. CENTRALIZATION

- Establishment of a formal budgeting procedure defining responsible agents/agency.
- Improve the process of setting priorities:
  - We analyze a budget because we want to understand and improve it.
  - We want to allocate money where it will do the most good; where it will get desired results.

3. CENTRALIZATION

- Make better decisions at every level of public administration:
  - Budgets allocate money to prime ministers, parliaments, mayors, police, hospitals, soldiers and schools.
  - Budget Analysis can guide government actions at all levels by understanding the resources available and what they can really do.

4. TOP-DOWN APPROACH

1. Form macroeconomic forecasts.
2. Decide on appropriate fiscal stance (e.g. the deficit).
3. Determine the revenue envelope.
4. This yields an aggregate expenditure ceiling.
5. Develop expenditure envelopes for each line ministry.
6. Line ministries then prioritize spending needs and develop project allocations.

5. PRUDENT BUDGET PROJECTIONS

- The problem with the state budget process is not in the forecasts; it is in the way the forecasts are used!
- There is always pressure on the forecasters to “find” a few million of additional revenue in the forecast so that the pet projects of various groups can be funded.
- Because of the proclivity of the state to spend every dollar in the budget process, even small forecasting errors can have sizeable effects.

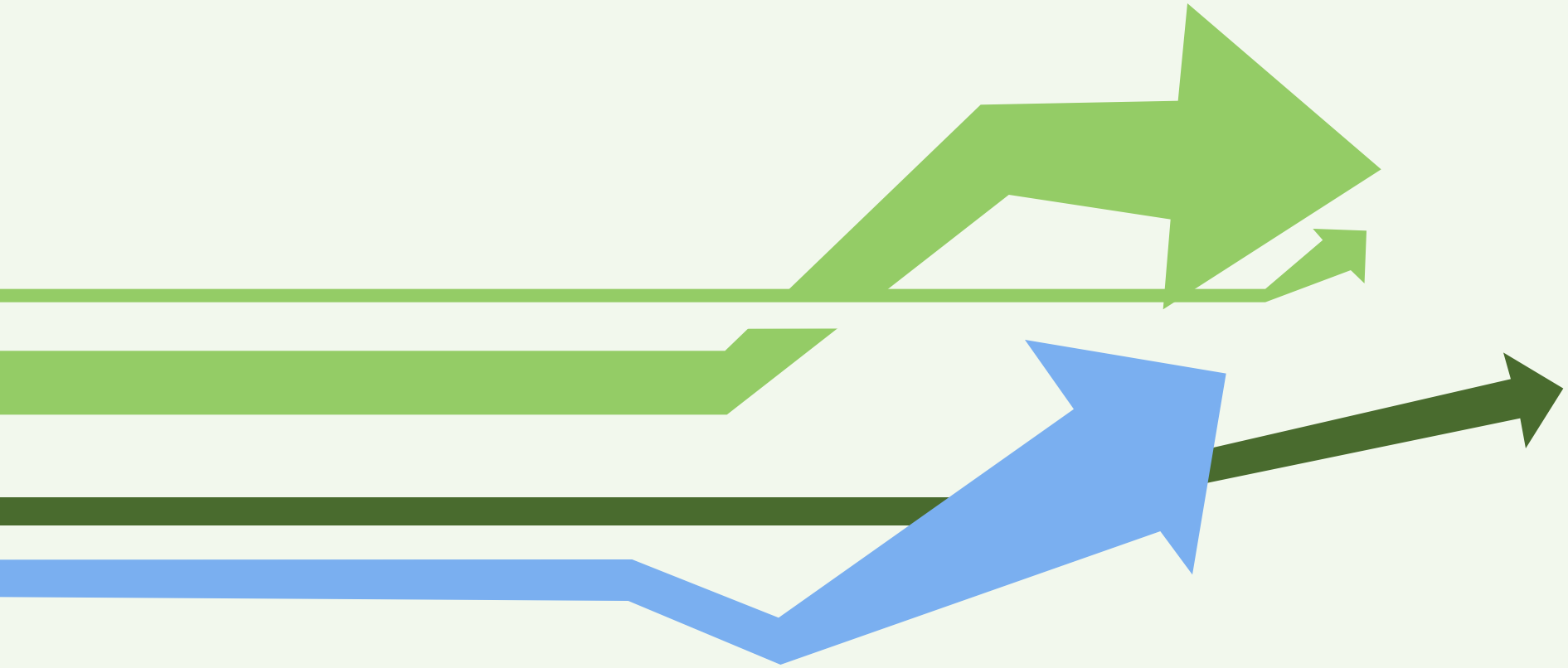
6. FLEXIBILITY

- Challange: Almost impossible to shift financial resources from one item to the other during budget execution.
- Redundancy of ex-ante control.

7. PERFORMANCE BUDGETING

- Challanges:
  - no definition of measurable objectives and indicators;
  - allocation on the basis of historical trends and not on priorities or objectives;
  - few information.
- Performance budgets are constructed by program but focus on program goals and objectives, measured by short-term outputs, projected longer term outcomes, and cost/benefits analysis.

Postcrisis Fiscal Rules



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Fiscal Rules Are Applied In Many Countries

- Fiscal Rules are numerical targets that constrain key budget aggregates
- Approximately 80 countries now have fiscal rules compared to fewer than 10 countries in 1990
- The rules have not been standardized across countries
- Many countries target budget deficit or public debt
- Targets typically are stated as a percentage of GDP

Fiscal Rules Are Applied In Many Countries

- Targets also can be applied to total revenues or expenditures
- Some have been adopted by the country to constrain its budget decisions
- Others have been imposed by supranational authorities such as the EU or the IMF

Why do we need fiscal rules?

- Persistent deficits lead to unsustainable debt.
- Governments spend more than they earn.
- Monetary policy needs sound public finances.
- Fiscal rules are particularly important in the EMU.
- Fiscal rule can improve transparency and ease fiscal planning.
- Make commitment and decrease political manoeuvring.

Many Countries Ignored Their Fiscal Rules During the Crisis!

- Most rules are expressed in nominal terms and do not distinguish between periods of economic growth and decline.
- When output declines and unemployment rises, automatic stabilizers generate budget deficits in excess of the levels allowed by the targets.
- Despite the rules, some governments have taken discretionary action that cut revenues, boosted expenditures and raised the deficit.

Many Countries Ignored Their Fiscal Rules During the Crisis!

- Countries have not repealed pre-crisis rules, but some have adjusted the targets.
- IMF and others have urged countries to continue stimulative policies.
- The after effects of crisis will linger for years, with elevated unemployment, depressed demands and high deficits.

Rules Play an Important Role in Post-Crisis Fiscal Consolidation!

- The risk of sovereign debt default has motivated countries to act before their economies have stabilized.
- Some of the most heavily impacted countries have begun to stabilize public finance by tabling austere budgets.
- Adopting new rules or resetting targets are means of restoring confidence and making credible commitments to correct fiscal imbalances.

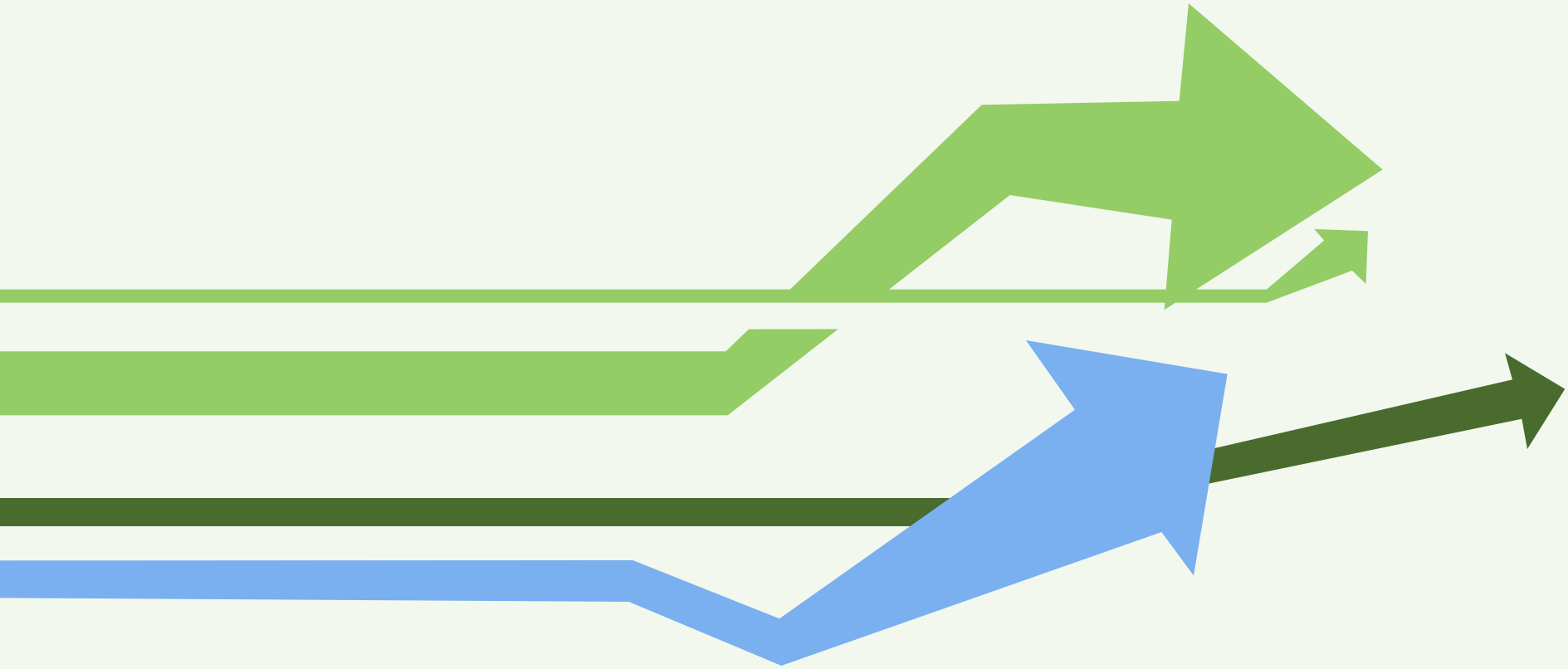
Rules Play an Important Role in Post-Crisis Fiscal Consolidation!

- Timing new rules is a difficult decision: deficit levels signal government to act now; unemployment rates signal delay until economic conditions improve.
- A sensible path may be to announce new targets or rules now but to delay full implementation until recovery is well underway.
- This approach can be effective only if the new targets are realistic and credible.

Next Generation Rules Will Differ from Many of the Earlier Rules

- They will adjust to changes in economic conditions.
- They will be embedded in fiscal frameworks linked to the budget.
- They will have a medium-term or longer time frame
- They will cover all levels of government.
- They will be sensitive to impacts on different types of expenditure.
- They will take account of fiscal risks.
- They will have stronger enforcement mechanisms.

Expenditure Fiscal Rule in Slovenia



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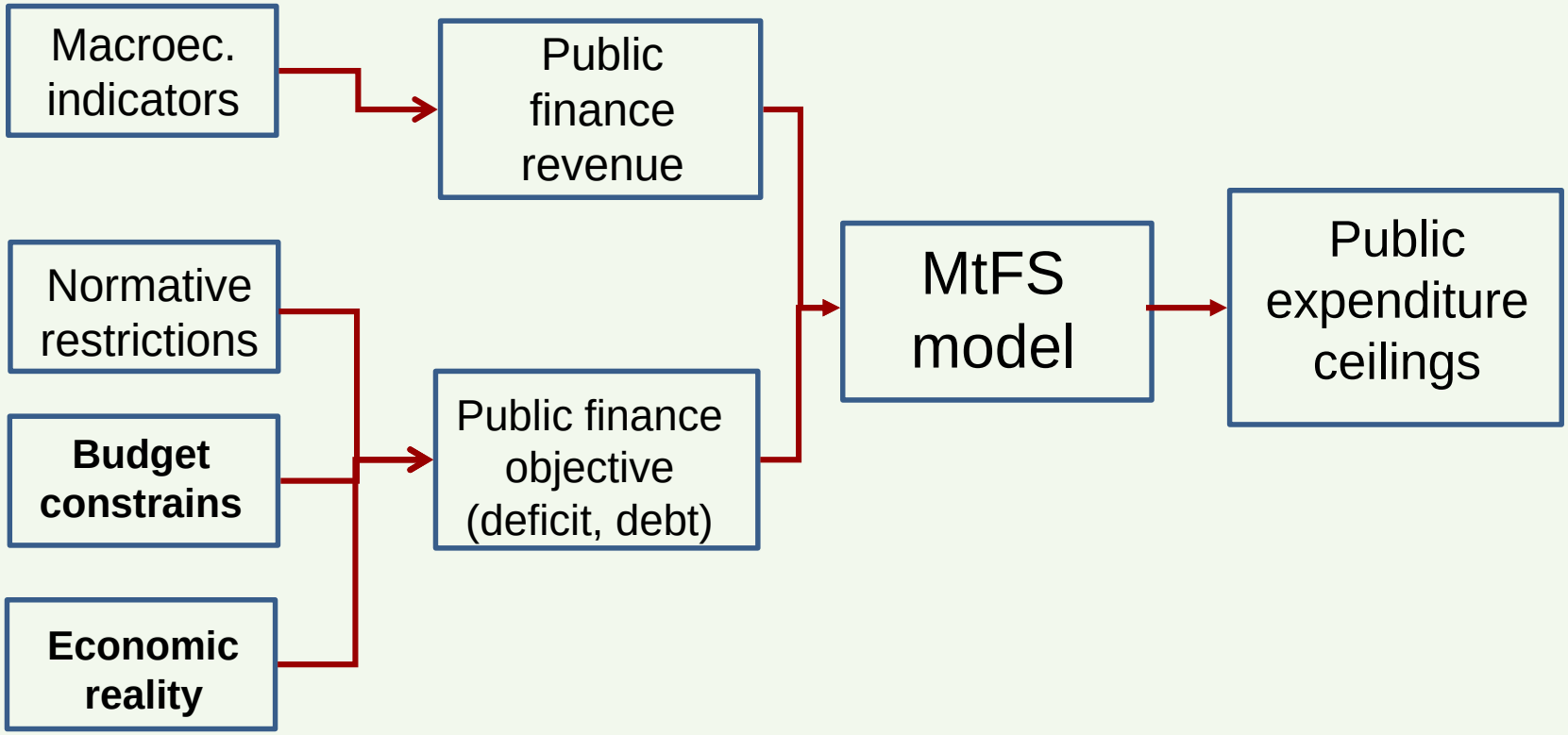
DEFINITION OF PUBLIC FINANCE EXPENDITURE CEILING



- Normative restrictions - The Stability and Growth Pact (SGP) framework:
  - Existence of an excessive deficit in Slovenia
  - Introduction of implicit liabilities into the medium-term budgetary objectives (MTOs)

MTO values for Slovenia - EU Commission methodology

	Level of public finance balance that stabilizes debt level at 60% GDP	Long-term aging costs (% GDP)	MTO (3) = (1)+alpha*(2) % GDP			
			% of total aging costs (α)			
			25%	33%	50%	66%
	1	2				
MF calculation of Jan 2011 (accepted pension reform law taken into consideration)	-2.0	6.9	**-0.3**	**0.3**	**1.4**	**2.6**
MF calculation of Sept 2010 (pension reform bill taken into consideration)	-2.0	5.8	**-0.6**	**-0.1**	**0.9**	**1.8**
MF calculation of Sept 2010 (w/o pension reform bill)	-2.0	8.8	**0.2**	**0.9**	**2.4**	**3.8**
EU Commission calculation, updated version 2009	-2.1	7.8	**-0.1**	**0.5**	**1.9**	**3.1**
EU Commission calculation, original suggestion	-2.1	8.3	**0.0**	**0.7**	**2.1**	**3.4**

- Budget constrains: timing / time horizon is crucial at public finance MTO setting – a newly appointed medium term objective will have to be put in an appropriate /realistic time frame!

- Economic reality:
  - 3% deficit ceiling and the recommended safety margins (m) help identify a natural and non-trivial limit of convergence for debt and primary surplus ratios within the Stability and Growth Pact,
  - targeting deficit & debt at the same time allows for the reconciliation of multiple policy targets, such as safety, speed and quality of convergence, whereas deficit benchmark identifies a convergence path only by focusing on one of the above criteria, namely safety!

- Economic reality: country-specific benchmarks which can guarantee both stability and safety conditions
- Steady state target debt and primary surples:

$$b^* = \left(\frac{1+g}{g}\right)(0{,}03 - m) \qquad s^* = \left(\frac{r-g}{g}\right)(0{,}03 - m)$$

Maximum general government debt that enables “close to balanced or in surplus” budget position

g (trend GDP) / m (safety margin)	2.80%	2.90%	3.00%	3.10%	3.20%	3.30%	3.40%	3.50%	3.60%	3.70%	3.80%	3.90%	4.00%
1.00%	73.43%	70.97%	68.67%	66.52%	64.50%	62.61%	60.82%	59.14%	57.56%	56.05%	54.63%	53.28%	52.00%
1.10%	69.76%	67.42%	65.23%	63.19%	61.28%	59.48%	57.78%	56.19%	54.68%	53.25%	51.90%	50.62%	49.40%
1.20%	66.09%	63.87%	61.80%	59.86%	58.05%	56.35%	54.74%	53.23%	51.80%	50.45%	49.17%	47.95%	46.80%
1.30%	62.41%	60.32%	58.37%	56.54%	54.83%	53.22%	51.70%	50.27%	48.92%	47.65%	46.44%	45.29%	44.20%
1.40%	58.74%	56.77%	54.93%	53.21%	51.60%	50.08%	48.66%	47.31%	46.04%	44.84%	43.71%	42.63%	41.60%
1.50%	55.07%	53.22%	51.50%	49.89%	48.38%	46.95%	45.62%	44.36%	43.17%	42.04%	40.97%	39.96%	39.00%
1.60%	51.40%	49.68%	48.07%	46.56%	**45.15%**	**43.82%**	**42.58%**	**41.40%**	**40.29%**	39.24%	38.24%	37.30%	36.40%
1.70%	47.73%	46.13%	44.63%	43.24%	**41.93%**	**40.69%**	**39.54%**	**38.44%**	**37.41%**	36.44%	35.51%	34.63%	33.80%
1.80%	44.06%	42.58%	41.20%	39.91%	**38.70%**	**37.56%**	**36.49%**	**35.49%**	**34.53%**	33.63%	32.78%	31.97%	31.20%
1.90%	40.39%	39.03%	37.77%	36.58%	**35.48%**	**34.43%**	**33.45%**	**32.53%**	**31.66%**	30.83%	30.05%	29.31%	28.60%
2.00%	36.71%	35.48%	34.33%	33.26%	**32.25%**	**31.30%**	**30.41%**	**29.57%**	**28.78%**	28.03%	27.32%	26.64%	26.00%
2.10%	33.04%	31.93%	30.90%	29.93%	29.03%	28.17%	27.37%	26.61%	25.90%	25.22%	24.58%	23.98%	23.40%
2.20%	29.37%	28.39%	27.47%	26.61%	25.80%	25.04%	24.33%	23.66%	23.02%	22.42%	21.85%	21.31%	20.80%
2.30%	25.70%	24.84%	24.03%	23.28%	22.58%	21.91%	21.29%	20.70%	20.14%	19.62%	19.12%	18.65%	18.20%
2.40%	22.03%	21.29%	20.60%	19.95%	19.35%	18.78%	18.25%	17.74%	17.27%	16.82%	16.39%	15.98%	15.60%
2.50%	18.36%	17.74%	17.17%	16.63%	16.13%	15.65%	15.21%	14.79%	14.39%	14.01%	13.66%	13.32%	13.00%

- Slovenian MTO basic principles :
  - The MTOs must be country-specific and should ensure credibility and ownership!
  - Fiscal policy cannot be expected to cope with the full structural effects of demographic aging.
  - Fiscal policy surveillance in the context of SGP should aim at fostering that countries respect the safety margin of not breaching the 3% deficit threshold (i.e. lowering debt): this concern should be the driving contribution of fiscal policy to sustainability of public finances.
  - The MTOs need a proper balance between explicit and implicit liabilities.
  - The MTO algorithms have to take into account adequacy of pensions.

- Similarly to credit ratings, the approach to fiscal sustainability should be gradual:
  - the contingent liabilities and the period over which they are measured when included in the MTOs should be shorter, for example next 10 years and not next 45 years,
  - the resulting MTOs should be updated every 4 years for the next 10 years on a rolling basis,
  - the MTOs should ensure that the safety margin of not overcoming the 3% deficit as percentage of GDP should not be breached.

- Gradual approach of including contingent liabilities provides more weight to the current fiscal stance within a period where there is more certainty as to the likelihood that contingent liabilities will turn into explicit liabilities.
- The resulting MTOs will be consistent with the following objectives:
  - providing sufficient margin for not breaching the 3% deficit-to-GDP ratio;
  - keeping the debt below 60% of GDP;
  - ensuring long-term fiscal sustainability;
  - avoiding a distortive allocation of funds in the medium-term based on high degree of uncertain liabilities.

- Slovenian public finance MTO:
  - Real budget deficit below 3% of GDP by the end of 2013;
  - Cyclically-adjusted budget deficit below 1% of GDP by the end of 2015;
  - balanced cyclically-adjusted budget position reached by the end of 2016.
- Additional restriction: public debt during the consolidation phase must not exceed 45% of GDP, target value of public debt is 40% of GDP!

- Medium-term fiscal sustainability model:
  - MtFS model is designed on the idea of Hiebert and Rostagno[1] but restructured in such a way that primary influence of cyclical economic activity is transferred on revenue side, while fiscal consolidation and restructuring is reflected on the expenditure side.
  - MtFS model is a powerful tool for fiscal policy decisions which stimulate convergence and determine a reasonable time horizon to achieve fiscal goals.

[1] Hiebert, P. and Rostagno, M. (2000), »Close to Balance or in Surplus: A Methodology to Calculate Fiscal Benchmarks«, Fiscal Sustainability

- The number of expenditure equations in MtFS model corresponds to the number of government policies: control parameters [u, v] are introduced for each policy of expenditures for which measures of fiscal adjustment are carried out
- Results of the MtFS model are:
  - scenarios of different combinations and intensity of expenditure cuts and reallocations,
  - a time path for fiscal consolidation defining the velocity of consolidation measures.

Expenditure Fiscal Rule:

- Because revenues are, in the short term, largely outside the control of the government, a number of governments have therefore turned their attention to spending, and have introduced maximum limits on expenditure.
- The idea is here to establish a binding ceiling on government expenditure, based on a projection of available resources, before the process of negotiating the various expenditure proposals is initiated.

Expenditure Fiscal Rule:

- Besides the debate whether or not an expenditure ceiling is a fiscal rule in the pure sense, it has proven to be an effective instrument in promoting fiscal discipline in a number of countries.
- In order to generate the desired development of government finances, the expenditure ceilings requires the expected revenue projections. For this reason, expenditure ceilings are sometimes referred to as an operational instrument to implement a deficit or surplus rule.

Basic principals beyond fiscal rule construction:

- to decrease expenditure is more important than to decrease deficit,
- spending fiscal rule acts counter-cyclically,
- expenditure targeting improves financial planning of budget users,
- targeting fiscal balance (deficit) includes risk of too optimistic revenue forecast,

Basic principals beyond fiscal rule construction:

- consolidated general government budgetary balance depends on cyclical swings of economy,
- potential GDP growth is less volatile than actual GDP growth and in that way better base for expenditure growth,
- structural deficit is a unobservable quantity and less useful as a target.

Expenditure reaction rule

$$G_{t+1} = G_t \times (1 + g^*)$$

where g* is nominal growth of expenditures:

$$g^* = \underbrace{g^{trend}}_{\text{“preventive” part}} - \underbrace{u \times (b_t - b^*) - v \times (f_t - f^*)}_{\text{“corrective” part}}$$

Expenditure reaction rule

- g^{trend} average of last three, current and three forecasted potential GDP growths (%),
- b^* targeted/benchmark debt ratio,
- f^* targeted/benchmark primary balance ratio,
- **u** the velocity of adjustment to the discrepancy between the current and the target levels of the debt ratio,
- **v** the velocity of adjustment to the discrepancy between its current value and the target

Expenditure reaction rule

- Expenditures were supposed:
  - to track the trend growth of the economy and
  - to be adjusted by a given percentage of the difference between the current debt ratio and the steady state debt target (u), and a given percentage of the difference between the current primary surplus ratio and its target ratio in the long run (v).
- Parameters u and v depend on the interest rate-growth rate differential!

Expenditure reaction rule

- Fiscal rule is **flexible**: it allows the reconciliation of multiple policy targets, such as **safety**, **speed** and **quality** of convergence.
- Fiscal rule draws a clear distinction between the **targeted state** of the fiscal position and **the transition** to this target and tailors a reaction formula that is most suitable for each phase of policy-making.

Expenditure reaction rule

- The Fiscal Rule provides tools to exploit the basic trade-off of fiscal policy between the ambitiousness of the deficit (and debt) target and the amplitude of the deficit cycle under a constitutional constraint such as the Stability and Growth Pact:
  - closer the average deficit to the lower constitutional bound of –3 percent of GDP the narrower its permitted automatic swings in face of macroeconomic fluctuations.

Expenditure reaction rule

- Enforceability: Policy reaction formula unambiguously prescribes for how much government should adjust their expenditures.
- No reference in “corrective” part is made to unobservable quantities.

Expenditure reaction rule

- The above-defined expenditure reaction rule itself is part of a broader fiscal procedural framework to derive general government revenues and expenditures in mid-term.
- This framework is designed on the idea of Hiebert and Rostagno model but restructured so that primary influence of cyclical economic activity is transferred on revenue side, while fiscal consolidation and restructuring is reflected on the expenditure side.

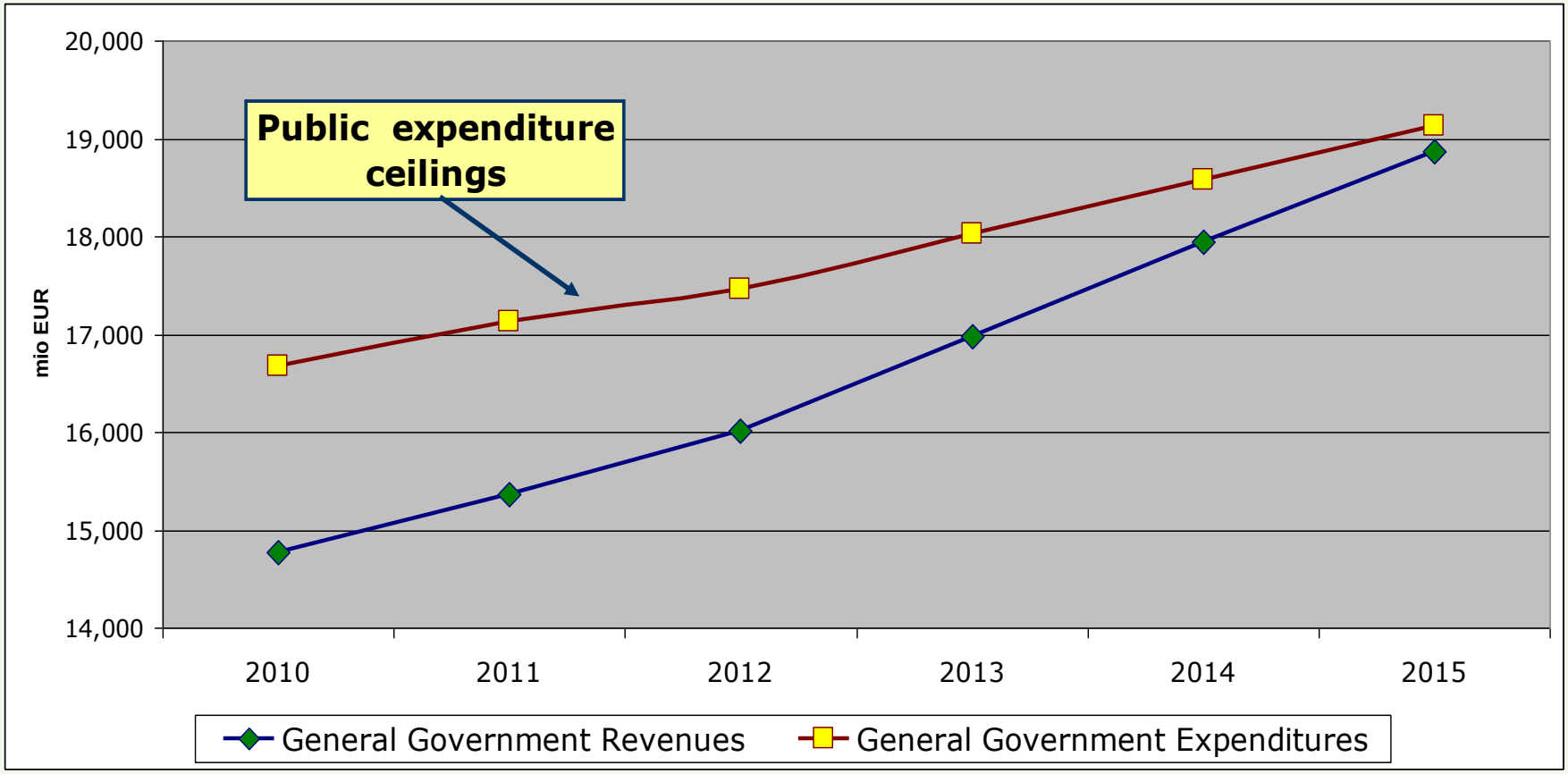
Expenditure reaction rule

- This modelling strategy is justified by the fact that countercyclical fiscal policy would lead to a budget that is balanced on average.
- The expenditure reaction formula is explicitly devised to guarantee stability but also is enough manageable to strike a balanced compromise between the safety requirement and the authorities' need to retain as much control as possible over fiscal policy throughout the transition and beyond.

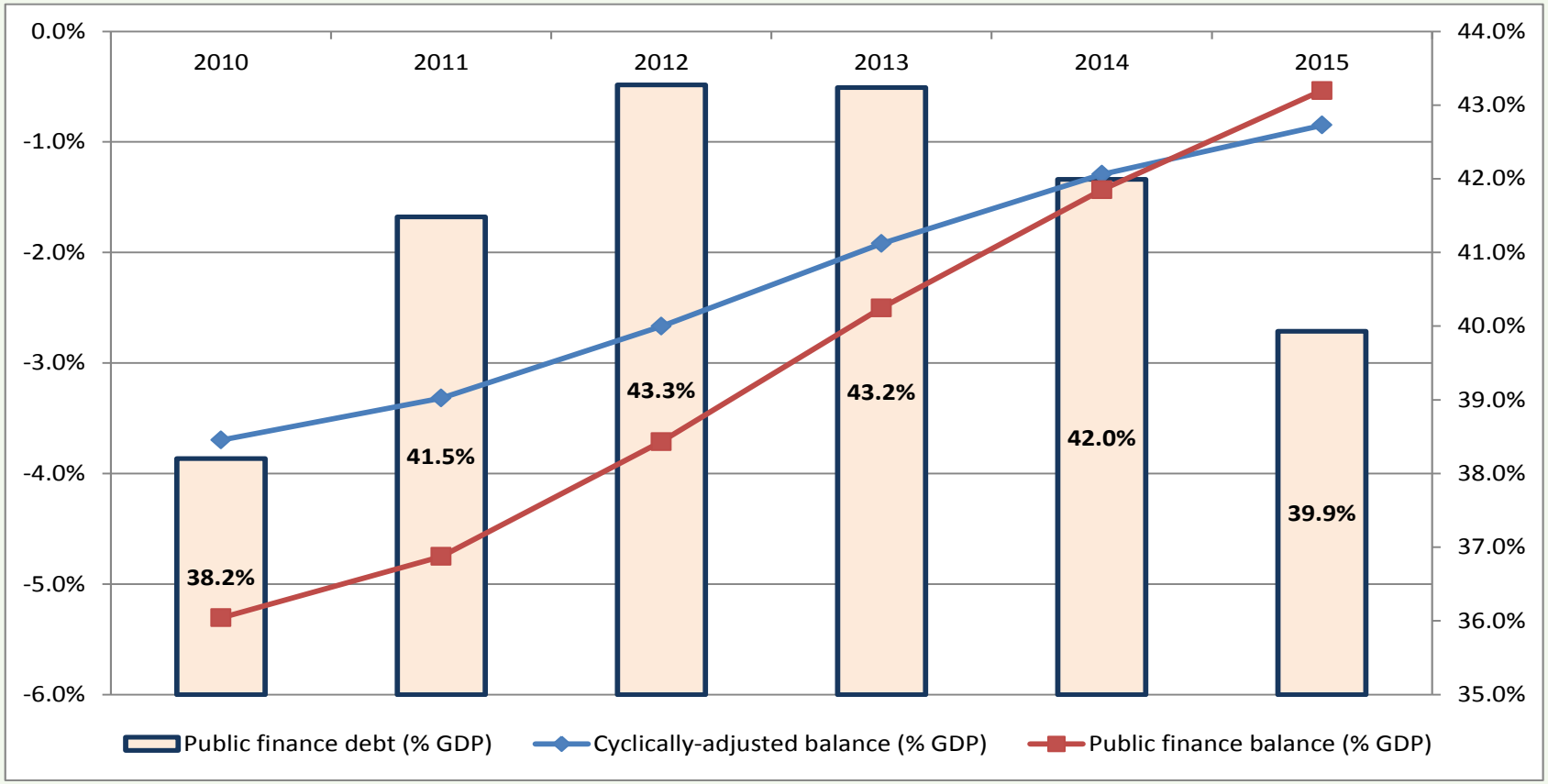
Expenditure growth in consolidation period

	Preventive growth (g^{TREND})	Growth Correction	Primary Expenditure Growth
2011	4.6%	-2.4%	2.2%
2012	4.4%	-3.1%	1.2%
2013	4.3%	-1.6%	2.7%
2014	4.7%	-1.8%	2.9%
2015	4.9%	-2.0%	2.9%

General government revenues and expenditures in 2010-2015



General government deficit and debt in 2010-2015



Aging - Definition of the problem

- Background:
  - The usefulness of headline annual budgetary balances and the official public debt figures for assessing the medium-term and long-term soundness of public finances has gradually decreased.
  - On the one hand, governments that have to comply with simple numerical budgetary rules such as those that apply in the EU have been implementing all kinds of temporary and self-reversing measures on a large scale.
  - On the other hand, it is clear that the sweeping demographic changes in many industrialised countries will imply an increasing burden on government budgets in the not so distant future!

Aging - Definition of the problem

- Against this background, the sustainability of public finances has become one of the key issues in the analysis and assessment of budgetary positions:
  - In the context of EU fiscal surveillance, EU Member States are required to outline the strategies to ensure the sustainability of public finances in their stability or convergence programmes
  - Ageing Working Group (AWG), attached to the Economic Policy Committee, is responsible for producing common projections of the budgetary impact of population ageing.
  - Based upon these projections, the European Commission routinely calculates quantitative sustainability indicators.

Aging - Definition of the problem

- WHAT IS FISCAL SUSTAINABILITY?
  - The general intuition of fiscal sustainability is self-evident: sustainable policies are those that can be continued indefinitely while unsustainable policies will ultimately have to be modified.
  - However, the interpretation is usually narrowed down to specific limits on the government deficit or debt accumulation.

Aging - Definition of the problem

- Operational definitions:
  - Backward-looking approaches:The backward-looking approaches have in common that they try to test econometrically whether the development of fiscal variables in a given period in the past suggests that policies have been affected by the government budget constraint.
  - All backward-looking studies provide valuable insights concerning the way fiscal policy was designed in the past, but there is obviously no guarantee that the same policy regime will apply in the future and, hence, they can in principle not provide robust conclusions regarding the current sustainability of public finances.

Aging - Definition of the problem

- Operational definitions:
  - Forward-looking approaches: The forward-looking approaches have in common that they try to assess fiscal sustainability by analysing the future development of public finances based upon the currently available information and a number of macroeconomic and demographic assumptions.
  - They differ, however, in the way in which the results are presented:
    - Long-term projections;
    - Synthetic indicators;
    - Generational accounting.

Aging - Definition of the problem

- Long-term projections: The most basic approach consists in simply projecting government deficit and debt dynamics over a long time period - the development of these projections has been fuelled by growing concerns over the long-run budgetary impact of population ageing.
- They typically define a limited number of budgetary items which are sensitive to ageing (such as pensions, health care, education expenditure, etc.) and project their evolution taking into account the expected changes in the size and the composition of the population.
- In addition, the impact of ageing on economic activity growth is usually assessed taking into account the projected evolution of the working-age population and assumptions concerning the participation and structural employment rates - the change in the ratio of these ageing-related budgetary items to GDP over the period under review is then considered as the 'total cost of ageing'.
- Typical examples of such studies are the work by AWG.

Aging - Definition of the problem

- Synthetic indicators: On the basis of the long-term projections of deficit-debt dynamics different synthetic indicators are proposed in the literature that try to measure which adjustment effort is required to reach a certain sustainable debt ratio at a given point in the (distant) future.
- In the European context the most well-known indicators are undoubtedly the sustainability gaps S1 and S2 that are now routinely calculated by the European Commission for all Member States.

Aging - Definition of the problem

- Synthetic indicators:
  - both the S1 and S2 indicators can only be considered as rough approximations of the sustainability gap.
  - As noted by the European Commission (2005), the sign and the order of magnitude of the indicators are more important than the exact value.
  - These indicators would only signal whether a fiscal adjustment is required (the sign of the indicator) and feasible without large structural reforms (the order of magnitude).
  - The European Commission is typically very cautious in interpreting the results of these indicators and tends to refrain from giving specific quantitative recommendations to individual Member States concerning the appropriate adjustment efforts.

Aging - Definition of the problem

- Generational accounting exercises such as those contained in Auerbach, Kotlikoff and Gokhale (1991) also calculate the required fiscal adjustment in order to comply with the government's intertemporal budget constraint but add an intergenerational perspective.
- The key principle of those studies is that they focus on the intertemporal fiscal burden for different generations: for each presently-living generation and taking into account current policies the present value of total remaining net payments to the government (taxes minus transfers) is calculated.

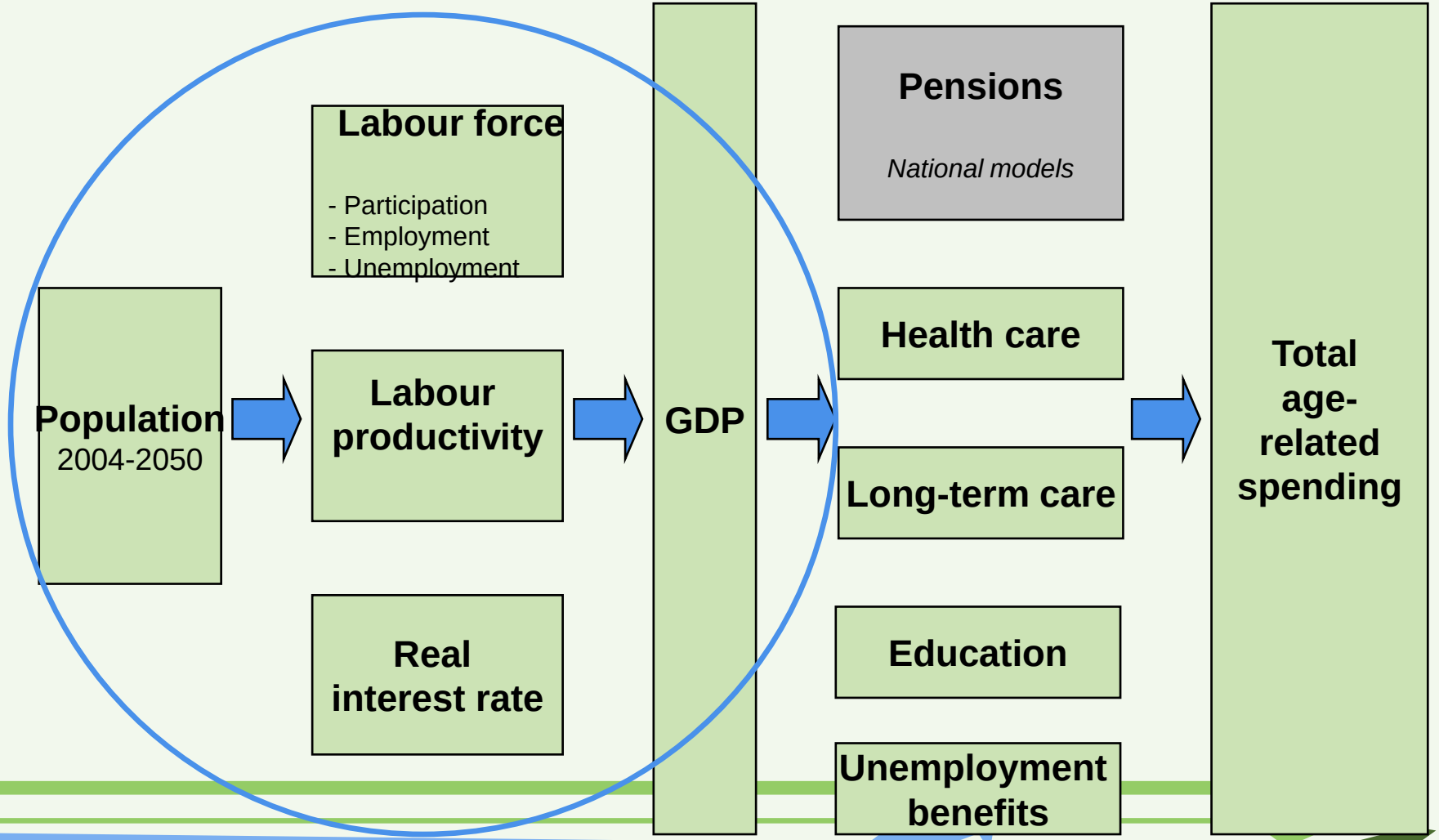
Aging - Definition of the problem

- Given the government's intertemporal budget constraint, the average fiscal burden for unborn generations can be derived by subtracting the sum of all these generational burdens of present generations from the government's net debt and the present value of the flow of planned government consumption and investment (all expenditure items which have not been allocated to different generations).
- Fiscal sustainability or the generational balance is assessed on the basis of the difference between the generational burden of the unborn generation and that of the youngest presently-living generation.

Aging - Definition of the problem

- If this difference is positive, then the policy is considered to be unsustainable and a fiscal adjustment is required!
- The main value added of generational accounting studies compared to the long-term projections and the synthetic indicators discussed above is that they do not only signal sustainability problems but also clearly show their potential implications in terms of intergenerational fairness.
- They can be used to assess the impact of alternative policy responses on the welfare of different generations.

Overview of projection exercise (European Commission)



Source: Presentation by Bogaert and Costello; European Commission and AWG, 2006.

THANK YOU!