

Gone with the wind

Safe debt levels from the
perspective of pension reform



Moderní nástroje pro finanční analýzu a
modelování, Bratislava

Zuzana MÚČKA

May 30, 2019

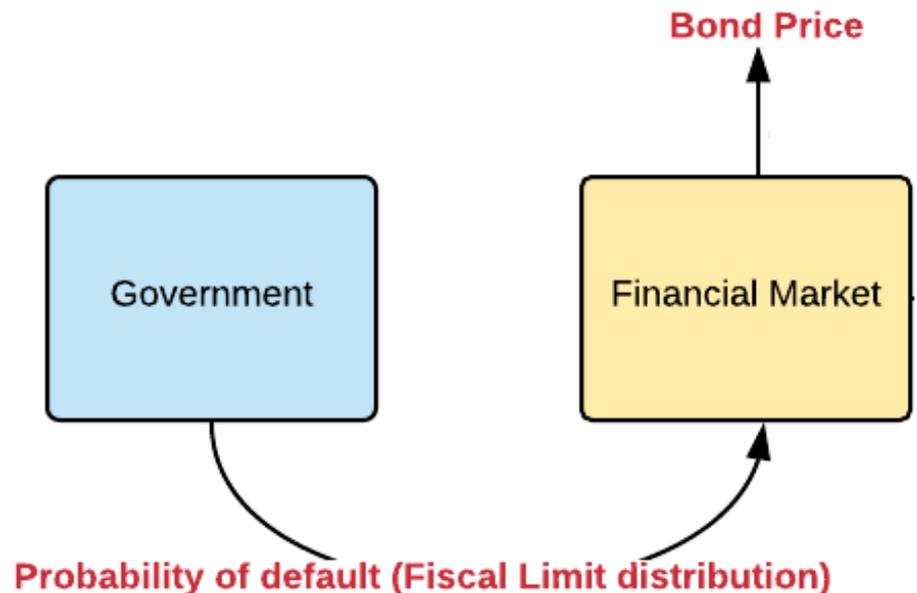
www.rozpocetvarada.sk

- **First attempt: Is the Maastricht debt limit safe enough for Slovakia?** (2015)
 - ⇒ **The mirror does not lie** (2019)
- **Recent pension reform** (March 2019)
 - **Automatic link between retirement age and the increase in life expectancy**

- **First attempt: Is the Maastricht debt limit safe enough for Slovakia?** (2015)
 - ⇒ **The mirror does not lie** (2019)
- **Recent pension reform** (March 2019)
 - ~~Automatic link between retirement age and the increase in life expectancy~~
 - Retirement age **cap at 64 years**
 - Cost evaluations: **Dôchodkový vek: mýty a fakty** (2018), **Bezpečná úroveň dlhu** (2019)

Fiscal Limit Redefinition

- **Fiscal Limit** = Maximal debt level that the government can service
 - = **maximum expected present value of the sum of all future primary surpluses**
 - reflects probability of default on government outstanding debt obligations
- **Factors:**
 - demography (long-term projections on ageing-related expenses & **economy growth = Extension 1**)
 - fiscal policy & its credibility,
 - exogenous shocks and disturbances
- Implications of
 - default probability on **bond pricing (risk premium)**



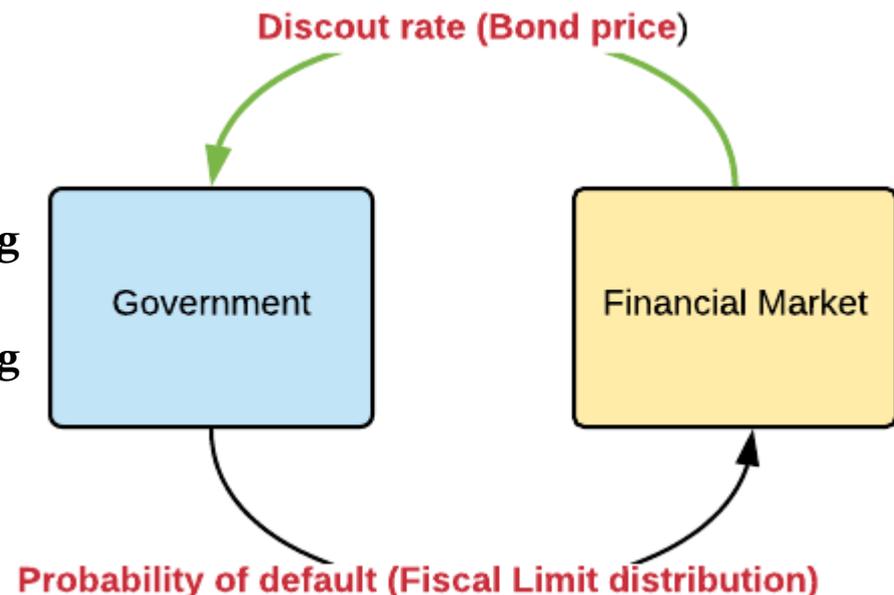
Fiscal Limit Redefinition

- **Fiscal Limit** = Maximal debt level that the government can service
 - = **maximum expected present value of the sum of all future primary surpluses**
 - reflects probability of default on government outstanding debt obligations
- **Factors:**
 - demography (long-term projections on ageing-related expenses & **economy growth = Extension 1**)
 - fiscal policy & its credibility,
 - exogenous shocks and disturbances
- Implications of
 - default probability on **bond pricing (risk premium)**
 - expected bond price on **discounting of future cash flows**

⇒ **Feedback loop**

(Government & Financial Markets)

= **Extension 2**



Fiscal Limit Application

www.rozpoctovarada.sk

- Study the relationship between the **fiscal policy**, **default risk** and **sovereign risk premium** in the context of demography challenges
- Evaluate the country's **safe levels of public debt**:
 - Economy growth projections included/excluded
 - before and after pension reform
 - Evolution: now & 20 years later

Fiscal Limit Application

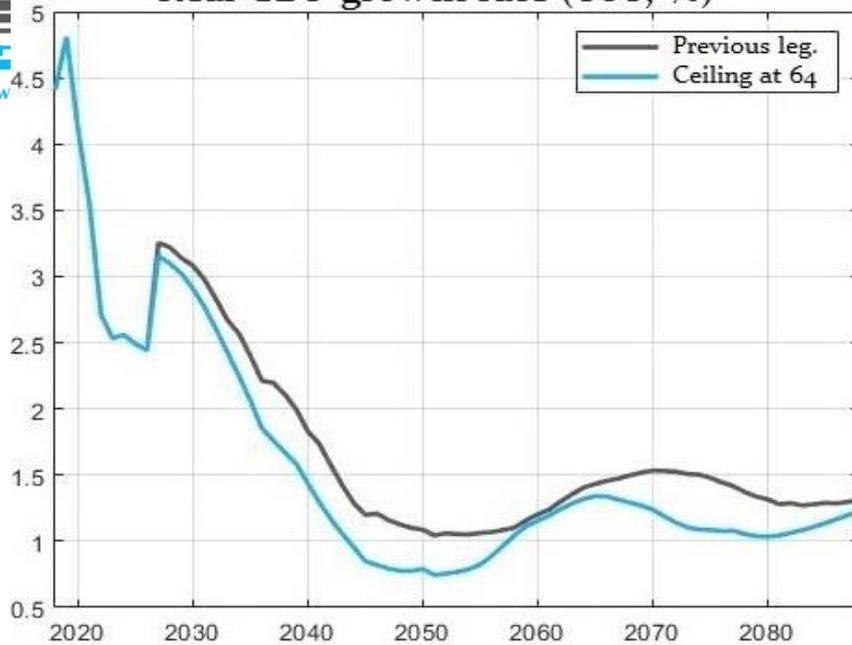
- Study the relationship between the **fiscal policy**, **default risk** and **sovereign risk premium** in the context of demography challenges
- Evaluate the country's **safe levels of public debt**:
 - Economy growth projections included/excluded
 - before and after pension reform
 - Evolution: now & 20 years later

➤ Terminology:

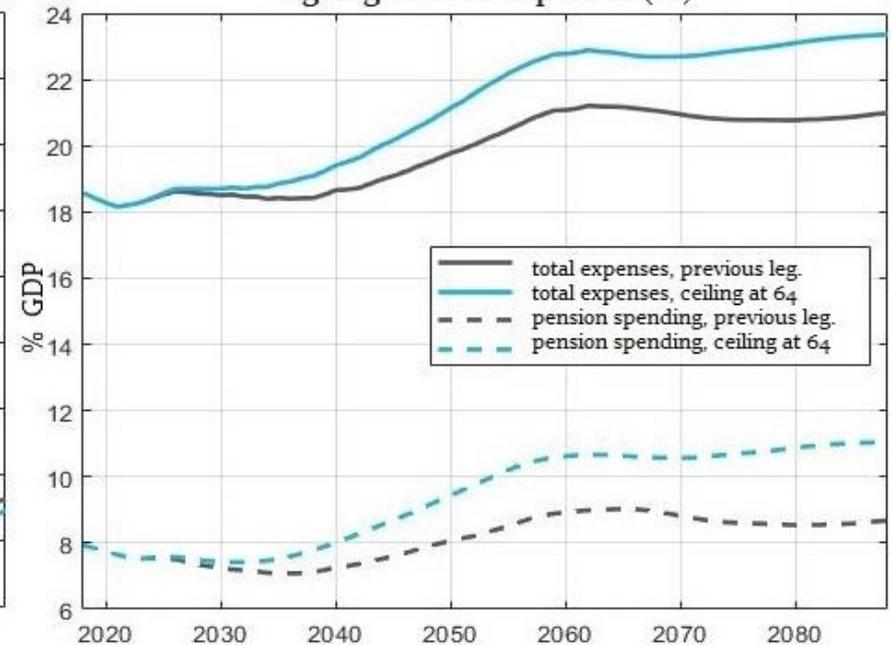
Sovereign Default Probability	Rating (S&P standards)	Terminology (indebtedness/GDP)
< 1%	AA-AAA	Optimal debt level
5%	A	
10%	BBB	Upper limit, Safe debt level

Some Facts

Real GDP growth rate (YoY, %)



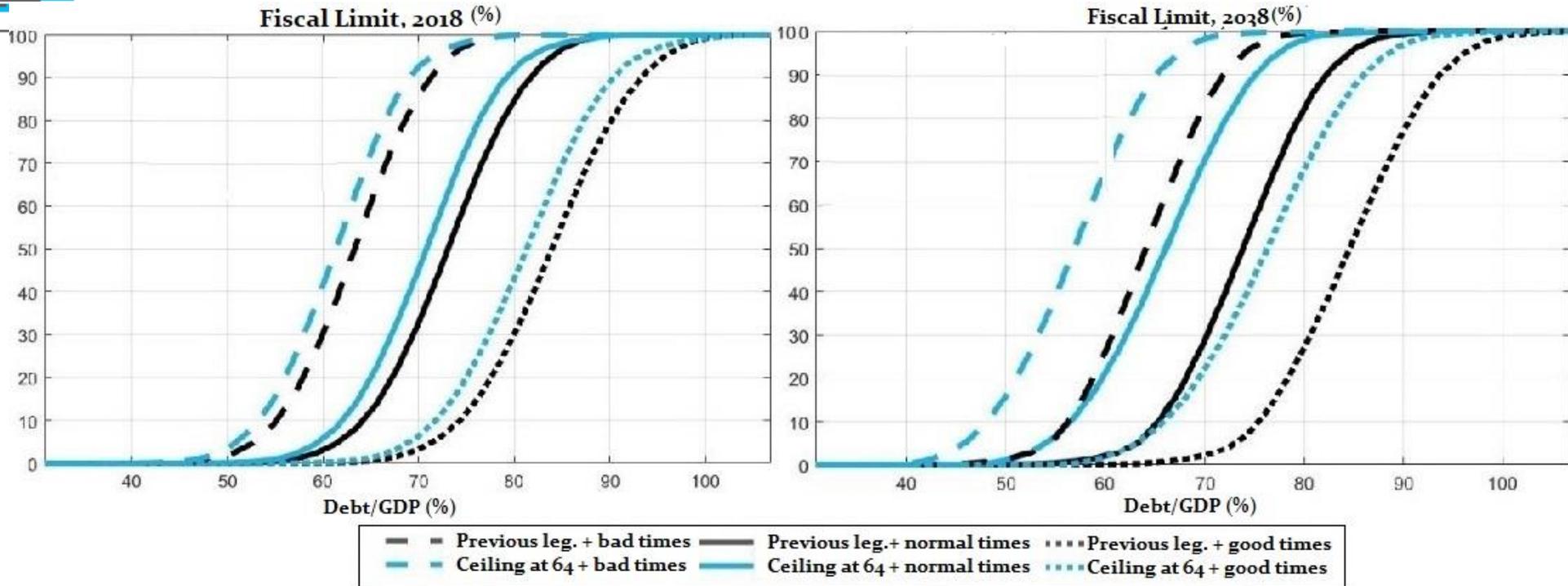
Ageing-related expenses (%)



	Real GDP growth rate (%,YoY,avg)		Ageing-related expenses/GDP (%)		
	2018-2068	2038-2088	2038	2068	2088
Previous legislation	1,78	1,33	18.42	21.05	20.99
Ceiling at 64 years	1,53	1,07	19.09	22.69	23.36

Results:

Safe debt level with constant growth

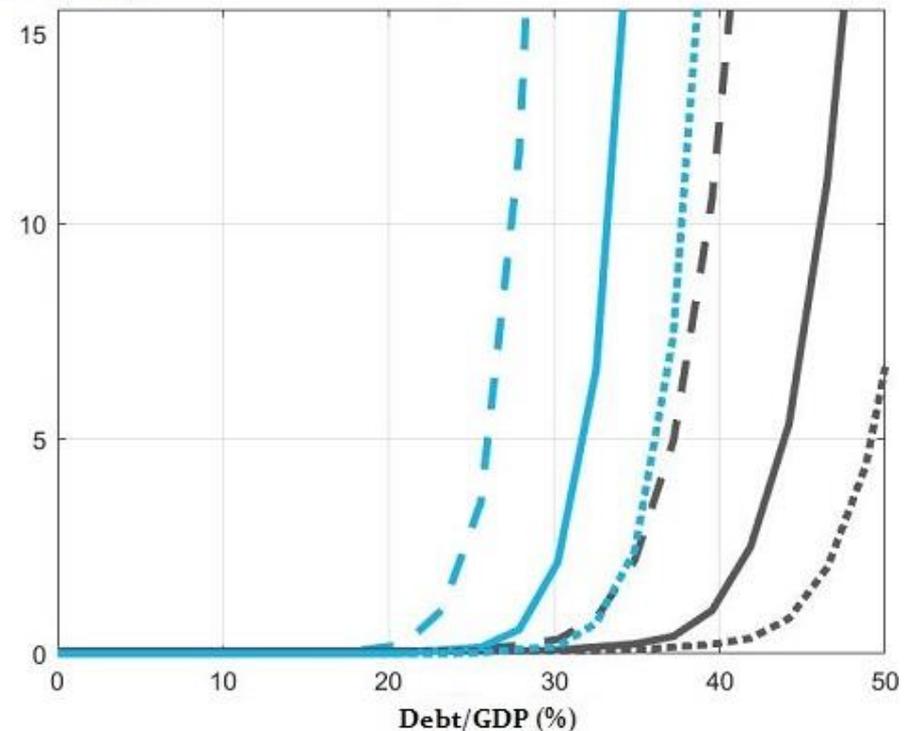
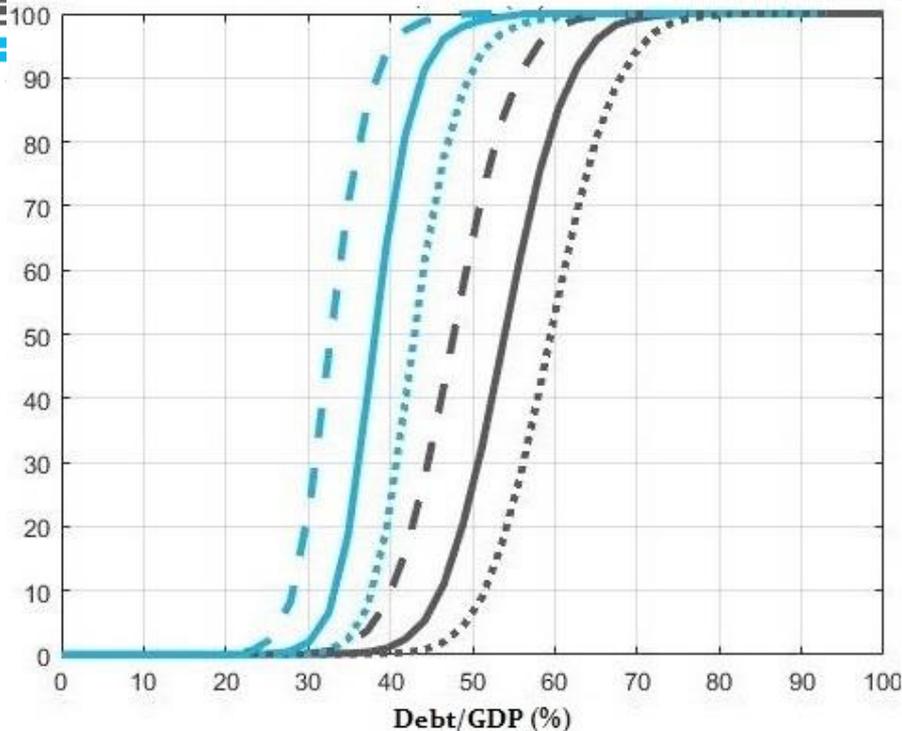


Safe debt level (default probability <10%) Previous legislation Ceiling at 64 years	2018	2038
		55%
	51%	46%

Results:

Safe debt level with growth projections, 2018

Fiscal Limits in 2018 (%)

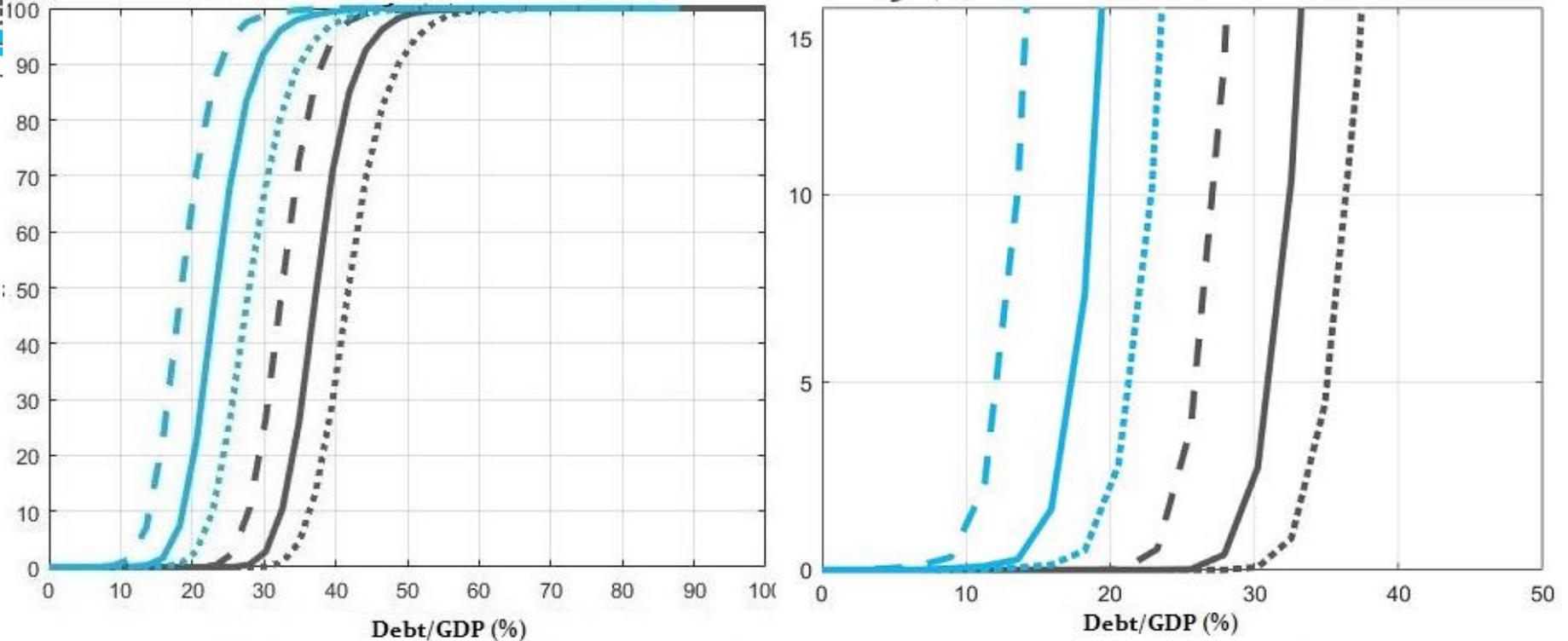


probability of default in 2018		Previous legislation	Ceiling at 64 years
<1%	AA-AAA	32	23
5%	A	37	26
10%	BBB	39	27

Results:

Safe debt level with growth projections, 2038

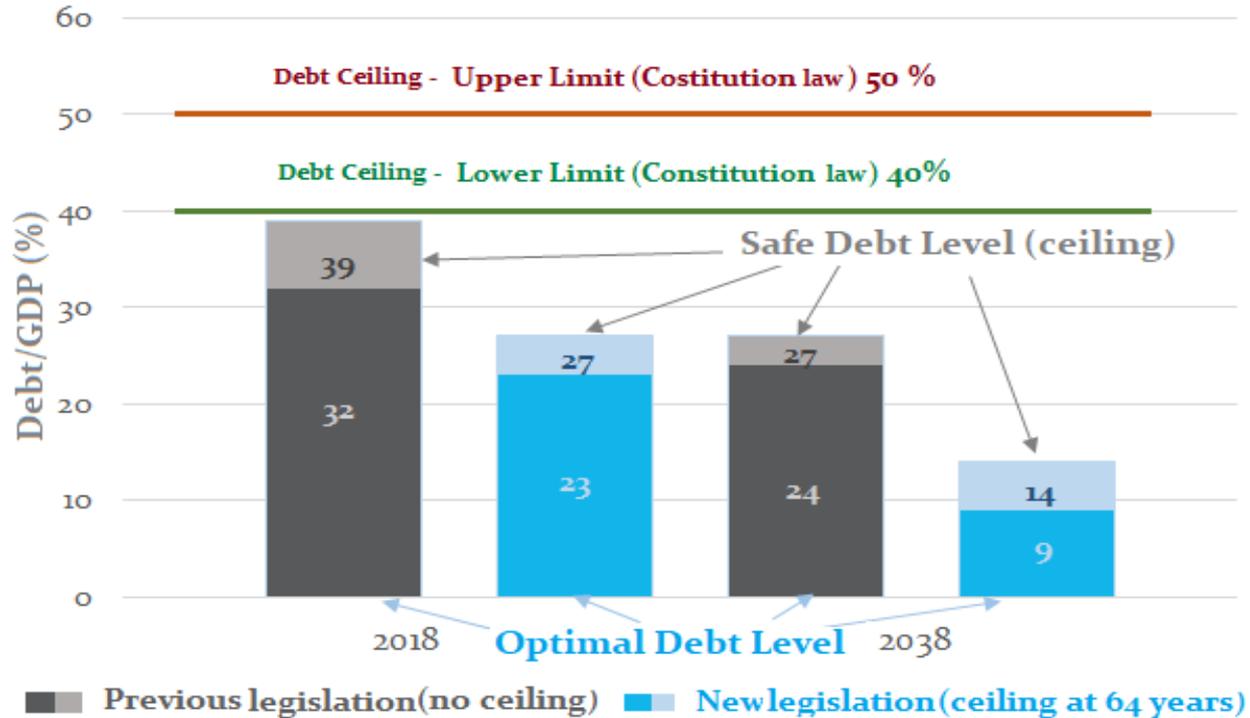
Fiscal limit in 2038 (%)



probability of default in 2038		Previous legislation	Ceiling at 64 years
<1%	AA-AAA	24	9
5%	A	26	12
10%	BBB	27	14

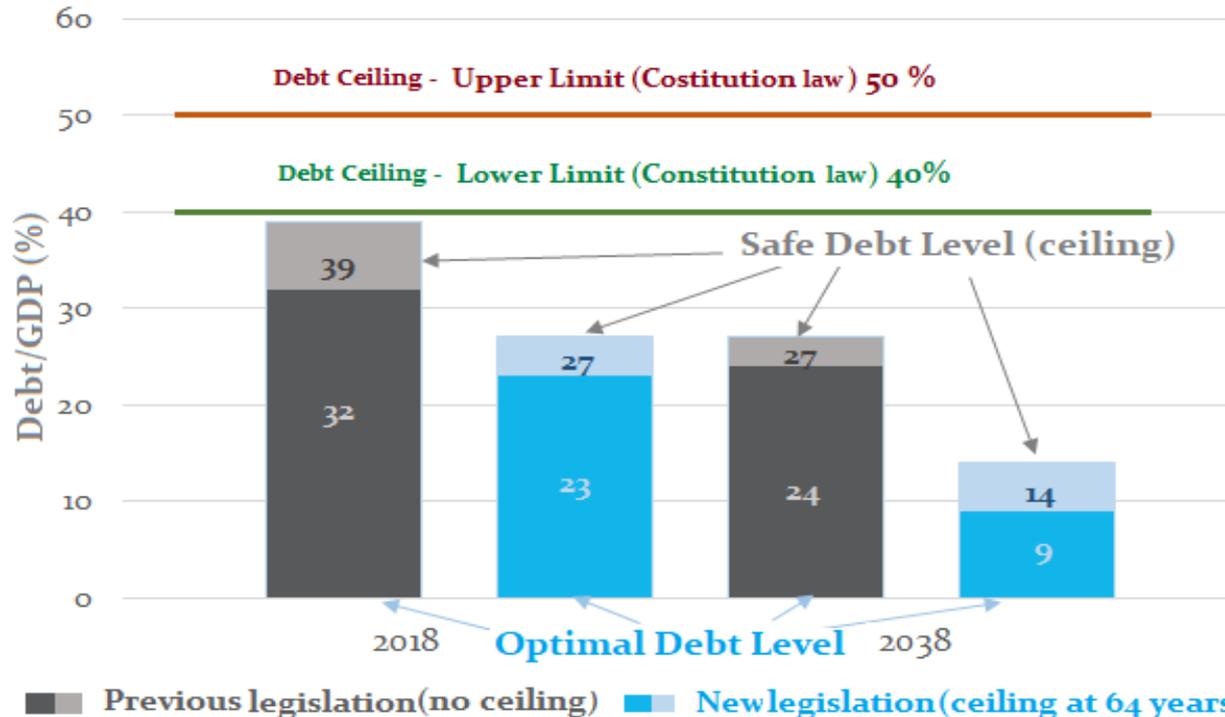
Policy Summary

Safe Debt Level



Policy Summary

Safe Debt Level



➤ **Safe/Optimal debt levels evolve over time**

➤ possible future problems with fixed debt ceilings due to changes in demography

➤ **Adopt additional measures now:** create adequate fiscal space to face future challenges in demography & external shocks



Council for Budget
Responsibility

Imricha Karvaša 1
Bratislava 1
813 25
Slovakia

**Thank you for your
attention**