



Gaidar Forum

Russia's Fiscal Gap

Gaidar Institute

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RUSSIA'S FISCAL GAP

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**This paper is dedicated to the memory of
Yegor Gaidar**

Motivation

- ❑ Fiscal policy is a hot topic today
 - Most advanced economies are in really bad fiscal shape

- ❑ Emerging economies are doing better
 - But they also face problems

- ❑ Russia's current fiscal stance seems solid
 - But what about long run perspectives?

- ❑ **Fiscal gap** – is a good measure for long run fiscal imbalances

Fiscal gap – fiscal policy sustainability indicator

$$\mathbf{FISCAL\ GAP = G - T + B}$$

- **G** – present value of all future government spending
- **T** – present value of all future government revenues
- **B** – current government net debt

- ❑ To get Fiscal Gap value we should have projections of future government expenditures and revenues

Very important note!

- ❑ Fiscal Gap is derived under assumption of ***no major changes in fiscal policy***
 - Since it is designed to evaluate sustainability of CURRENT fiscal policy regime

- ❑ Budget expenditures and revenues are linked to demographics, labor productivity and GDP
 - Pensions, healthcare defense, housing, corporate tax revenues etc

- ❑ We build economic and demographic projections to 2100

- ❑ Major uncertainty
 - Population
 - Labor productivity
 - Oil price and reserves

- ❑ Three scenarios to capture uncertainty
 - Pessimistic , Intermediate, Optimistic

- ❑ Rely on Rosstat and Ministry of economic development projections
 - Demographic (Rosstat, 2013) and economic (MED, april 2013) projections to 2030

- ❑ Demographic projection to 2100
 - Total population, Labor force, Number of Pensioners
- ❑ Labor productivity projection
 - GDP per worker

$$\text{GDP} = [\text{LABOR FORCE}] \times [\text{PRODUCTIVITY}]$$

- ❑ GDP projection
 - Derived from demographic and productivity projections

Demographic projections

- ❑ Explicit demographic projections to 2100
 - Total population (age and sex), Labor force, Pensioners

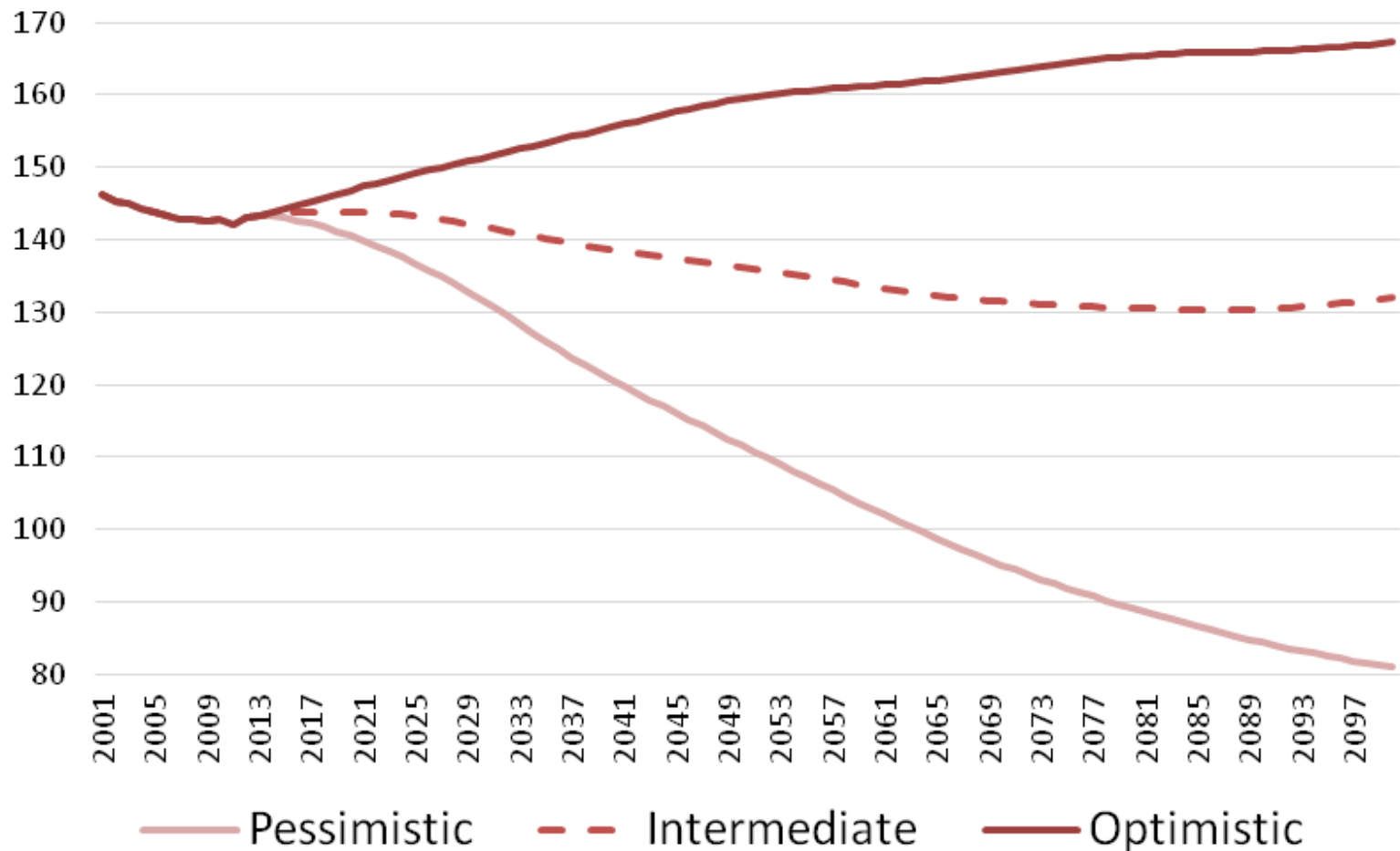
- ❑ Rosstat projections (to 2030)
 - + extrapolation (after 2030)

- ❑ Scenarios differ in assumptions about life expectancy, fertility, migration

Demographic projections

- Population increases only under optimistic scenario

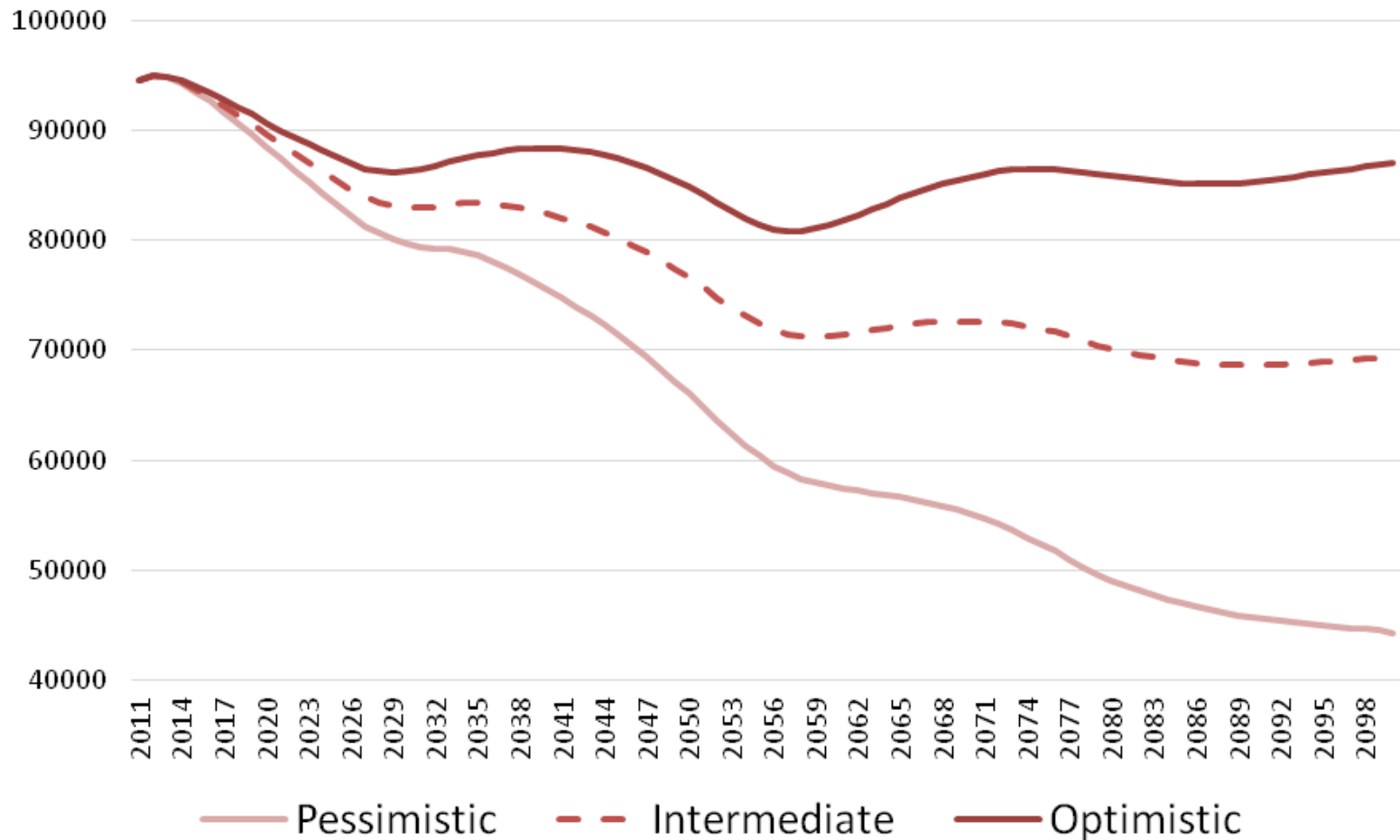
Total Population Projection (in millions)



Demographic projections

- ❑ Labor force declines in all scenarios

Working-Age Population (in thousands)

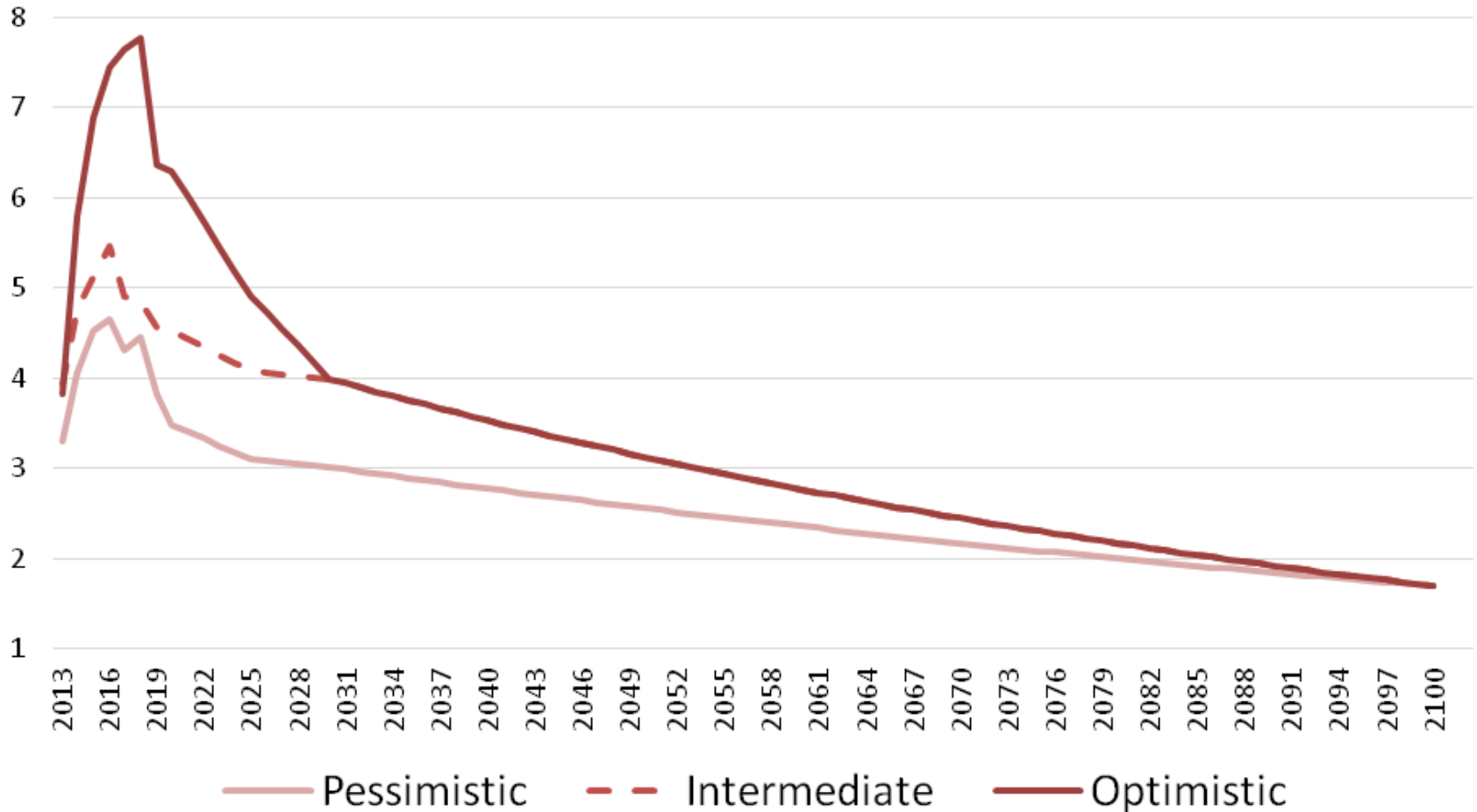


Productivity projections

- ❑ Need labor productivity to get GDP projections from demographics (after 2030)
- ❑ Exogenous productivity growth
 - Productivity growth converges to 1,7%
 - 1,7% - annual productivity growth in US after 2022 (Congressional Budget Office, US)

Productivity projections

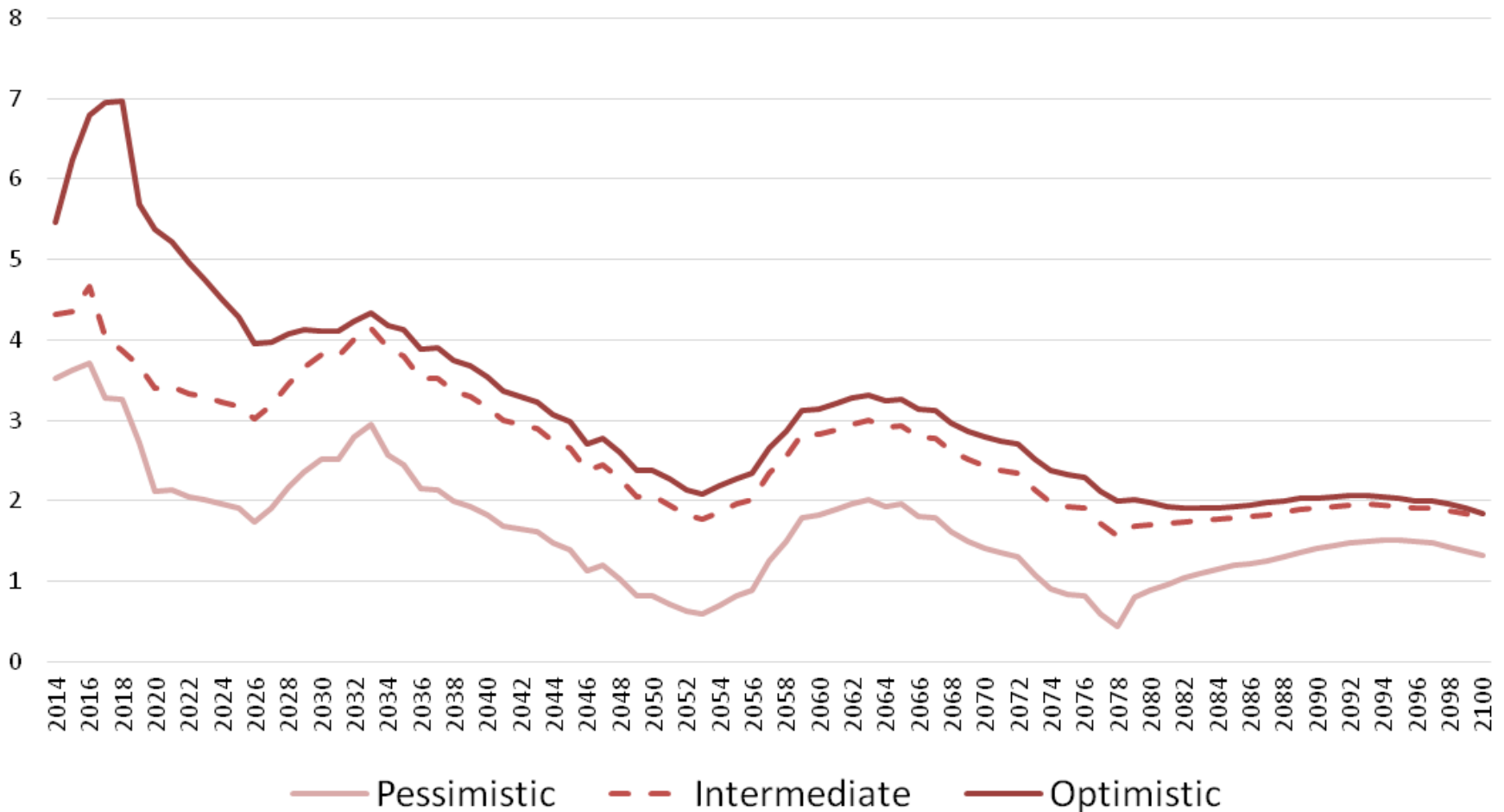
Labor Productivity Growth Rate (%)



GDP projections

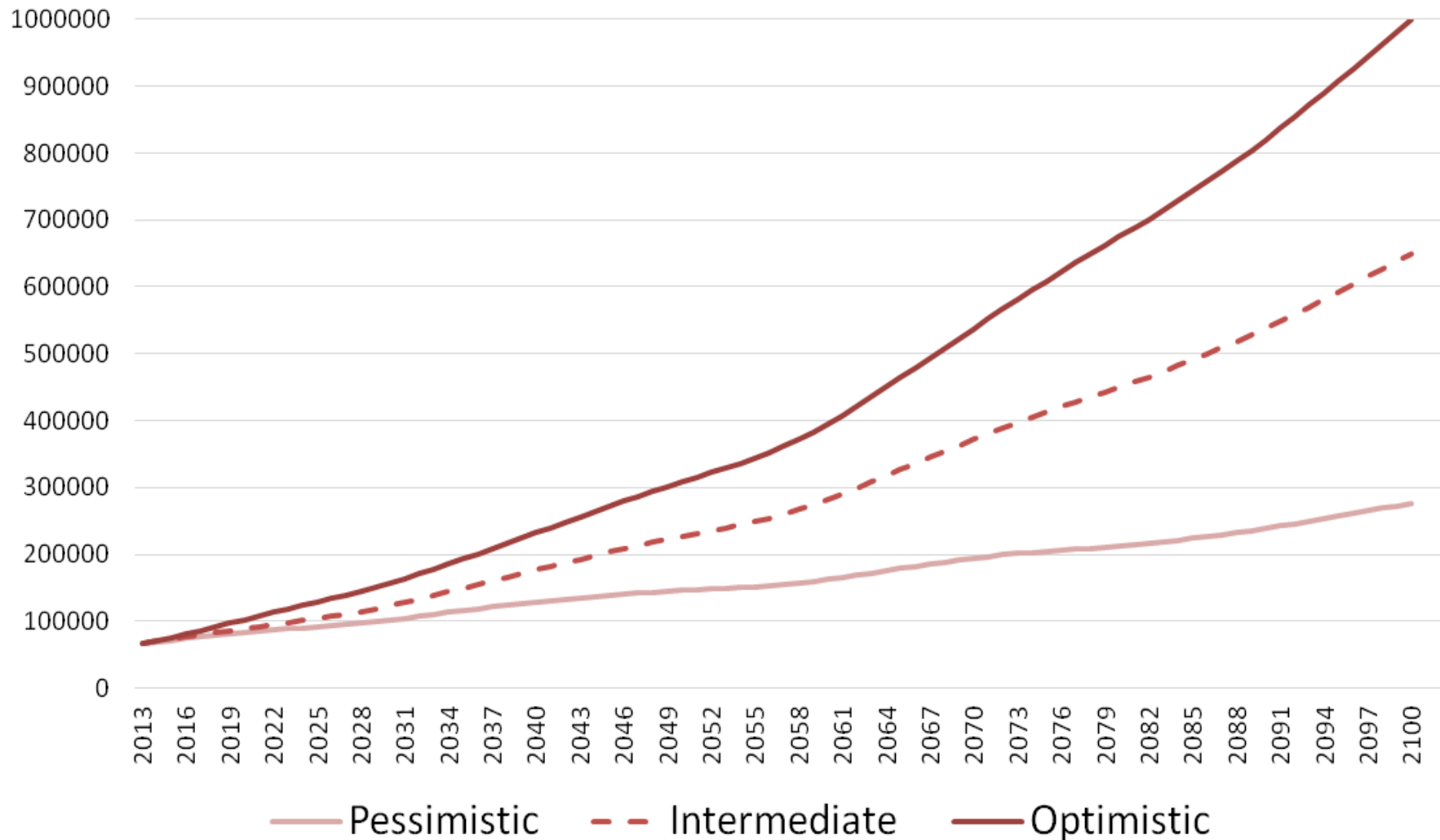
- Finally we get three GDP paths
 - All scenarios assume declining economic growth

Annual GDP Growth (%)



GDP projections

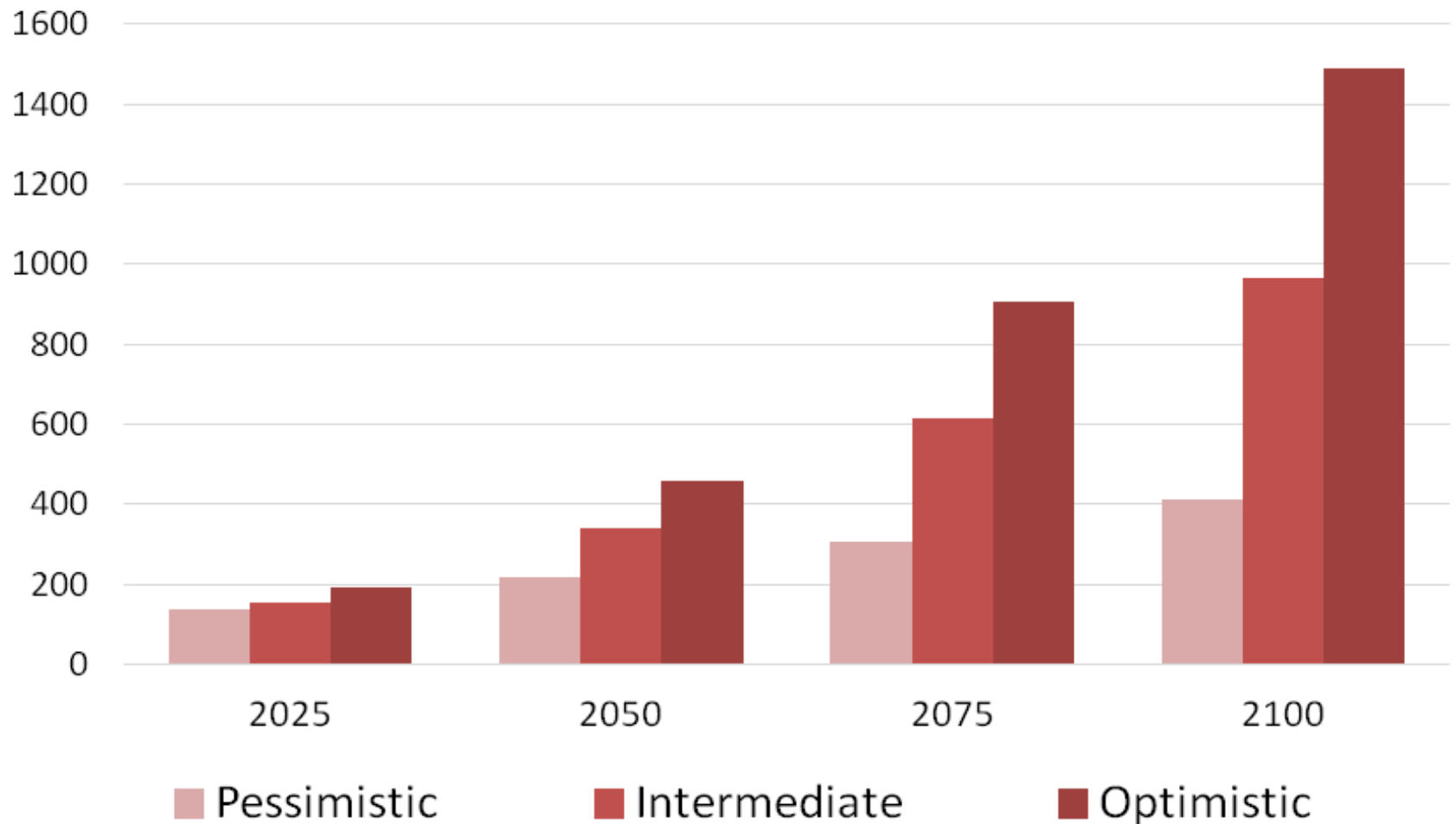
GDP (in 2013 prices, billions of rubles)



GDP projections

☐ GDP in 2100 varies from 400 to 1600% of 2013 GDP

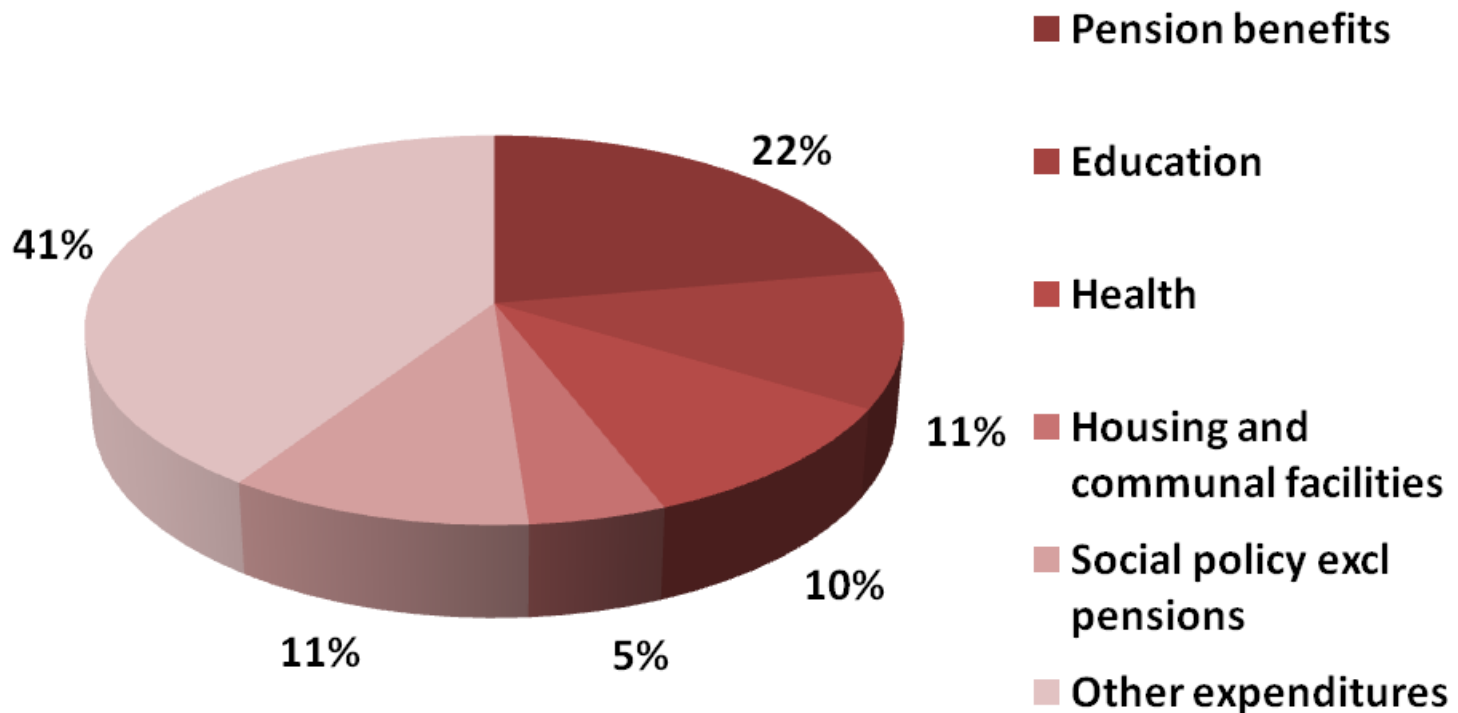
GDP (% of GDP in 2013)



Expenditures

- Divide expenditures to several groups

General government budget expenditures structure (2012)



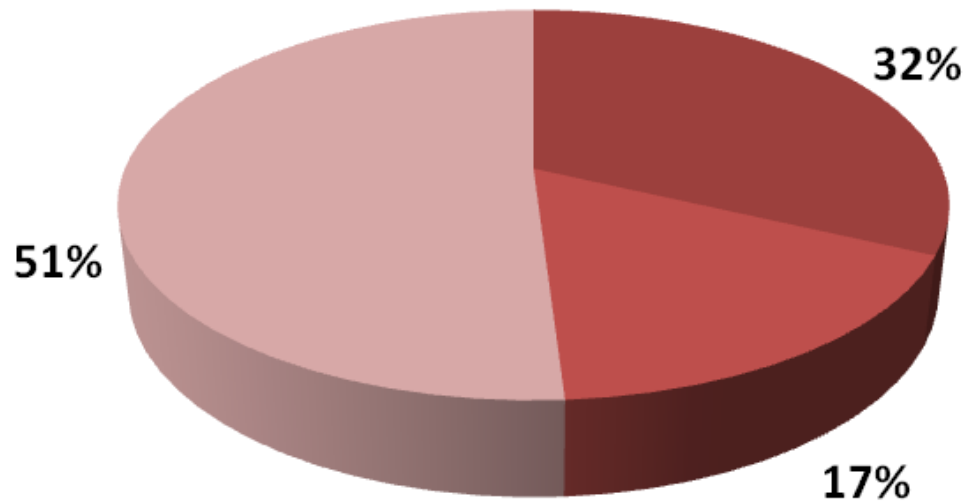
Expenditures

- ❑ Pension expenditures
 - Derived from the model of pension system
- ❑ Healthcare and education expenditures
 - Use expenditures age profile to catch heterogeneity
- ❑ Expenditures for social needs
 - Are linked to total population
- ❑ Other expenditures are proportional to GDP

Revenues

- Three broad groups of revenues

General government budget revenue structure (2012)



- Oil & Gas revenues
- Taxes and Contributions for Social Needs
- Other Revenues

Revenues

- ❑ Contributions to social needs (pension system)
 - Derived from pension system model
- ❑ Oil & Gas revenues
 - Depend on price of resources, extraction, exhaustion
- ❑ Other revenues proportional to GDP

Results

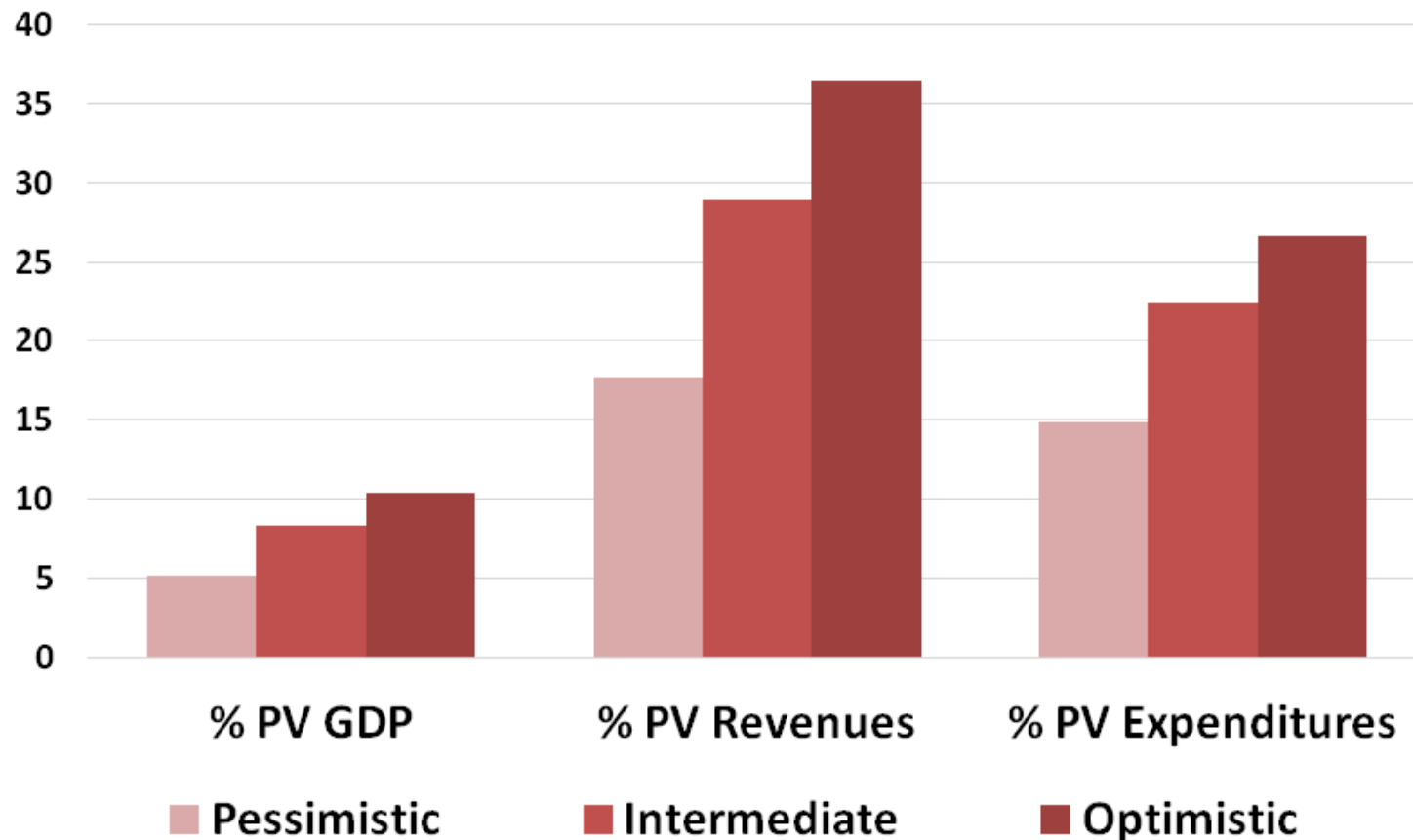
- ❑ Fiscal gap is 890 trln 2013 RUR (\$28 trln)
 - Under intermediate scenario
 - Russian GDP in 2012 is 62,4 trln RUR

- ❑ Closing the gap requires fiscal adjustment
 - Permanent adjustment equal to 8,4% of GDP (intermediate scenario)
 - Cut expenditures by 22% permanently
 - Raise taxes by 29% permanently

Results

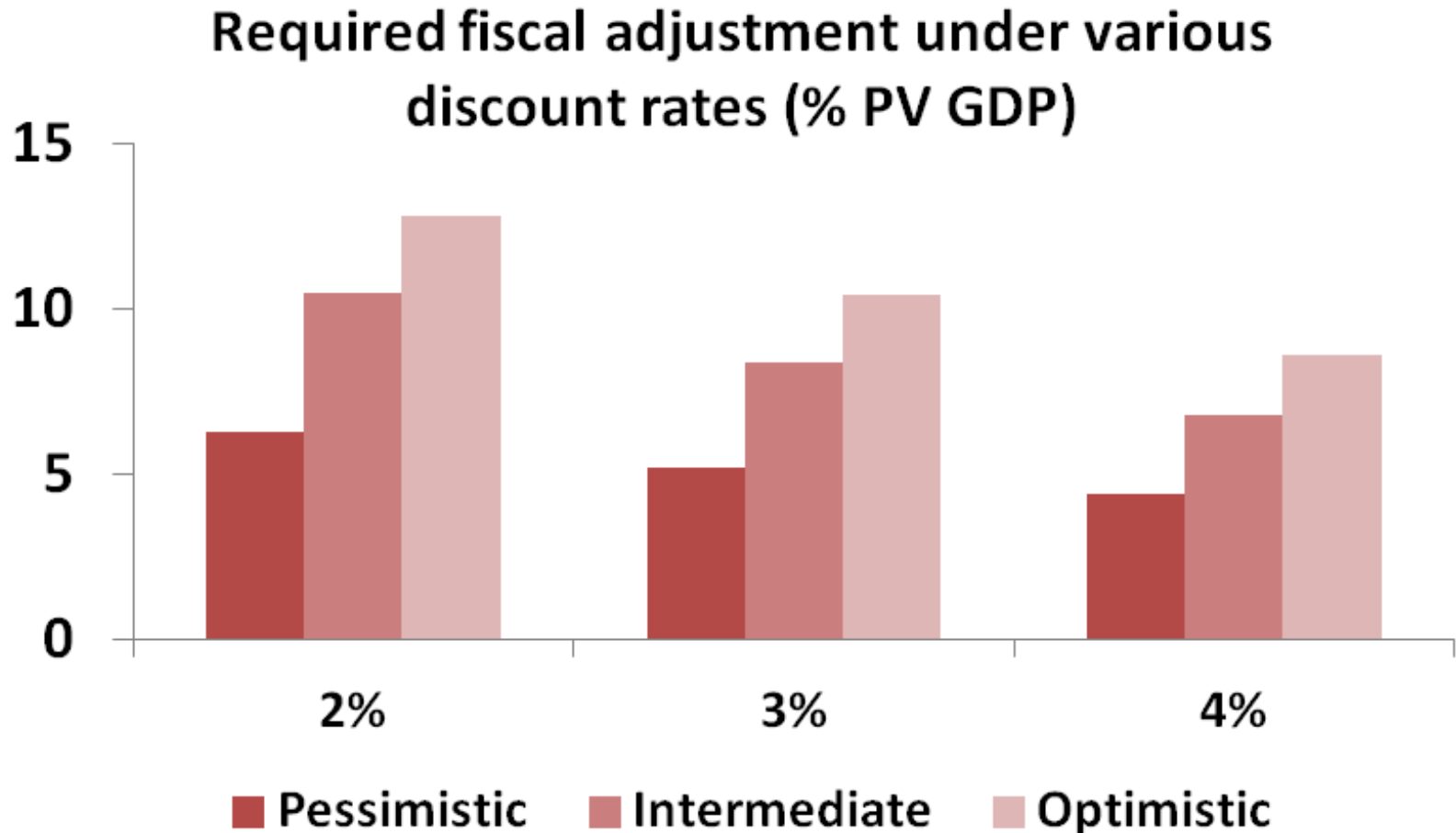
- ❑ Other scenarios tell the same story
 - Current fiscal policy is unsustainable under wide range of macroeconomic assumptions

Fiscal gap (% PV GDP, Expenditures, Revenues)



Results

- ❑ Fiscal gap is positive regardless of choice of discount rate



Sources of fiscal imbalances

- ❑ Aging population requires increase in pension spending
 - Absent pension system fiscal gap decreases from 8,4% to 4,5% PV of GDP

- ❑ Oil & Gas revenues decline as a share of GDP
 - Extraction is stagnating
 - Real oil & gas price won't rise forever

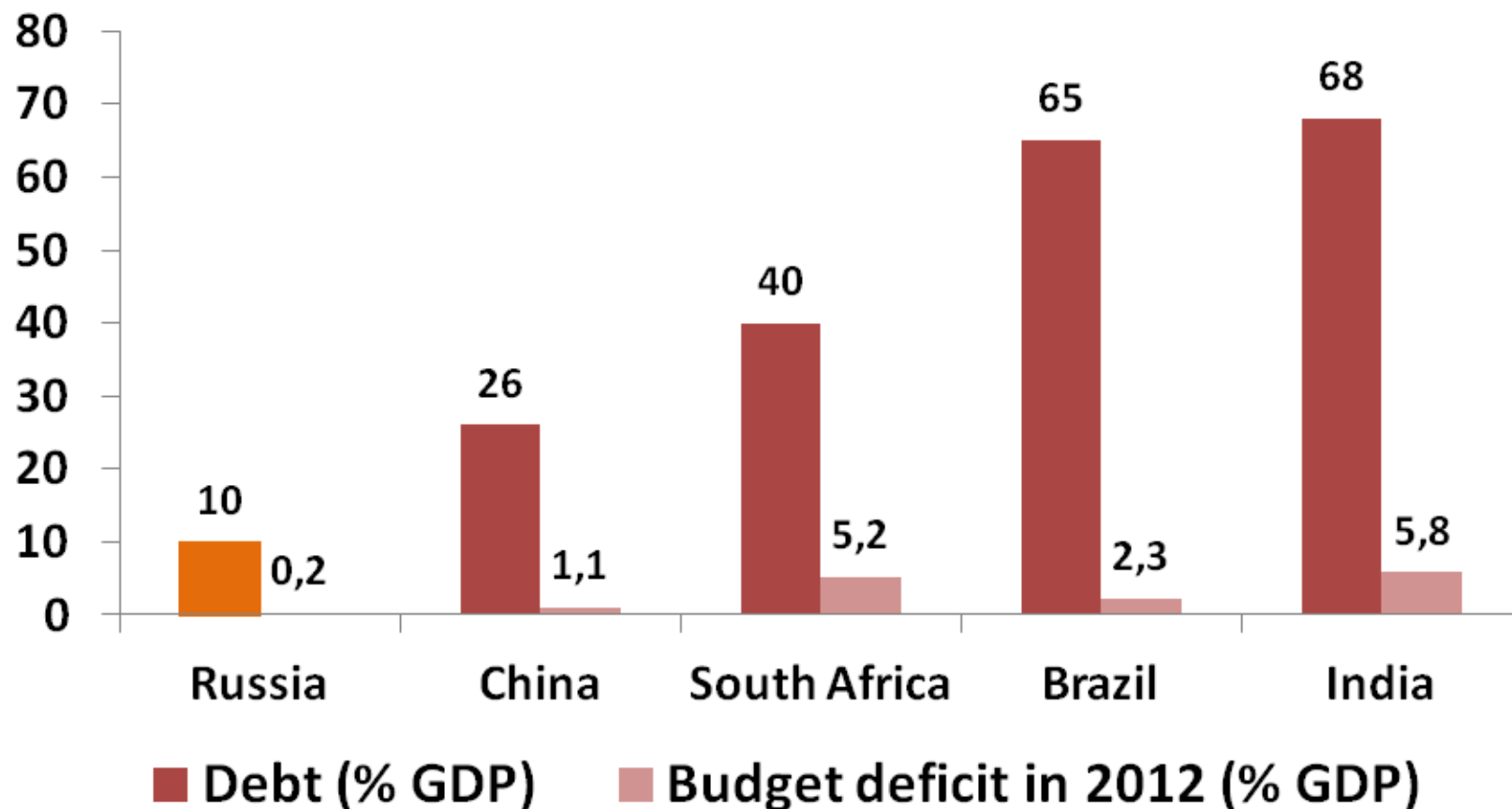
Sources of fiscal imbalances

- ❑ It's not because of oil & gas exhaustion
 - Fiscal gap is 7,9% if no oil & gas exhaustion is assumed

- ❑ High economic growth leads to large fiscal imbalances
 - All expenditures will grow with GDP ...
 - ... but revenues from energy sector will not

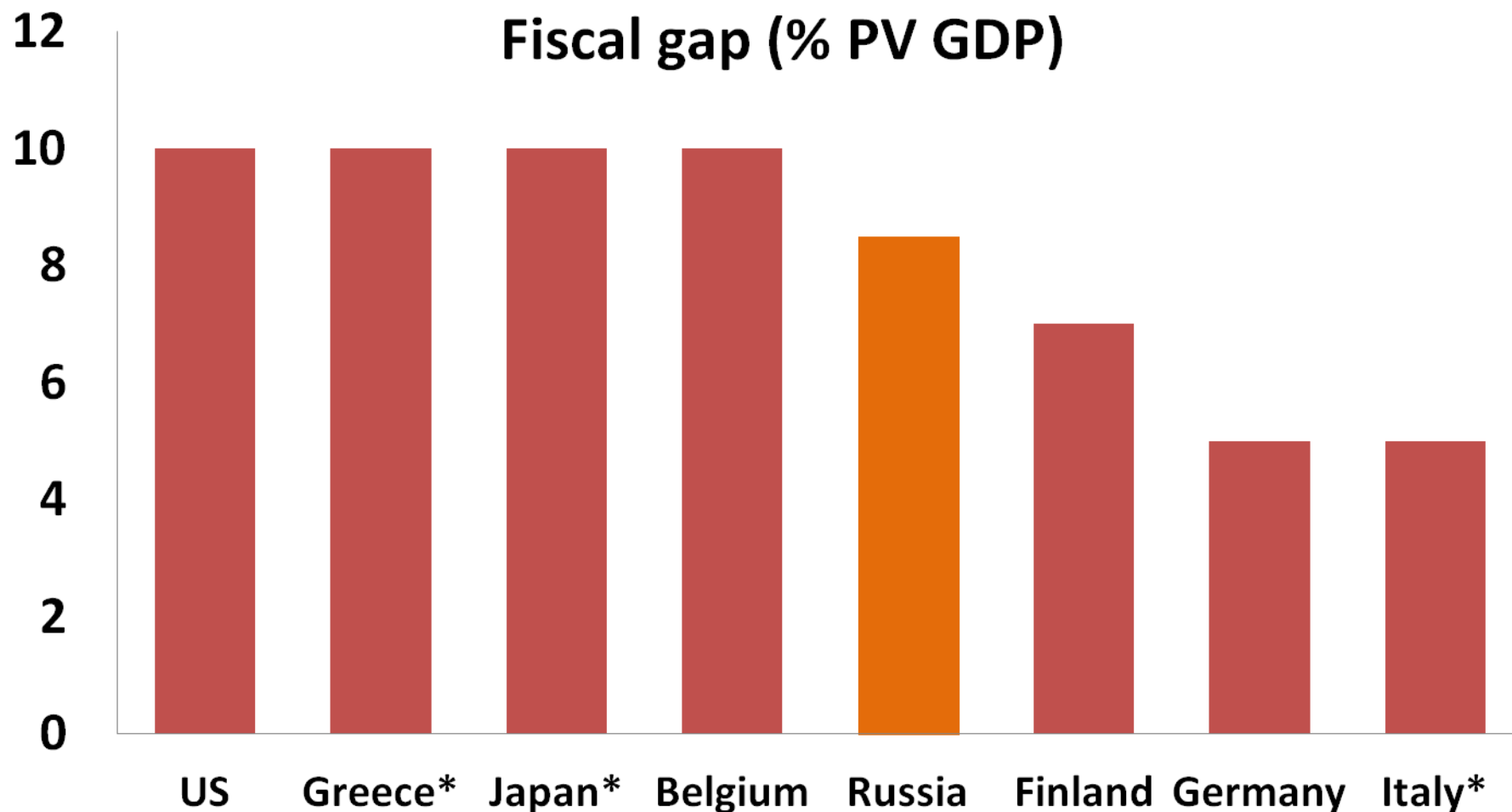
□ Even though current fiscal stance in Russia looks healthy....

- Russia has lowest Debt-to-GDP ratio and budget deficit among BRICKS
- Bank of Russia has International Reserves of 500 bln USD

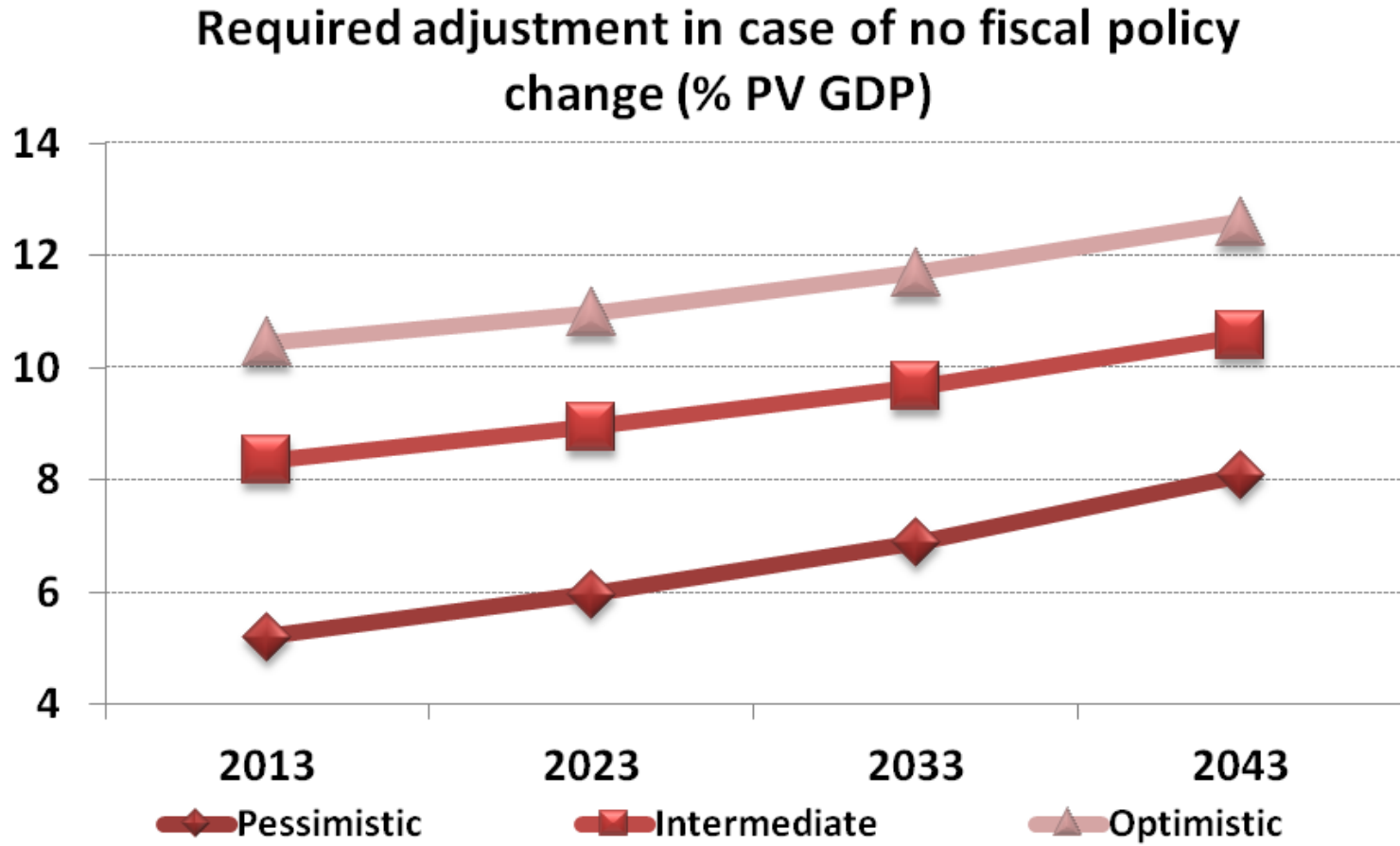


❑ ... the long run perspective Russia faces a major fiscal imbalances

- Fiscal gap value in Russia is close to these in advanced economies



- ❑ Current fiscal policy is unsustainable, so it should be adjusted in the future
 - When? Now? 10 years later?
- ❑ The later adjustment starts, the stronger it should be to close the gap



Policy implications

- ❑ Our results do not imply catastrophe in short run...
 - Russia has sizable fiscal space to deal with possible macro shocks in the short run

- ❑ ... but fiscal policy should be adjusted to prevent catastrophe in the long run