Public Spending:
Fiscal projections to address long-term fiscal challenges

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Fiscal projections to address long-term fiscal challenges

- Medium-Term Expenditure Framework (MTEF)
  - What is it and why is it useful
  - International experience and benefits
- Long-Term fiscal projections, in the context of aging populations and growing pensions
  - Fiscal implications of aging populations
  - Assessing long term fiscal costs in EU, New Zealand and the USA
- Overcoming budget rigidity
  - Different sources of rigidity, different responses

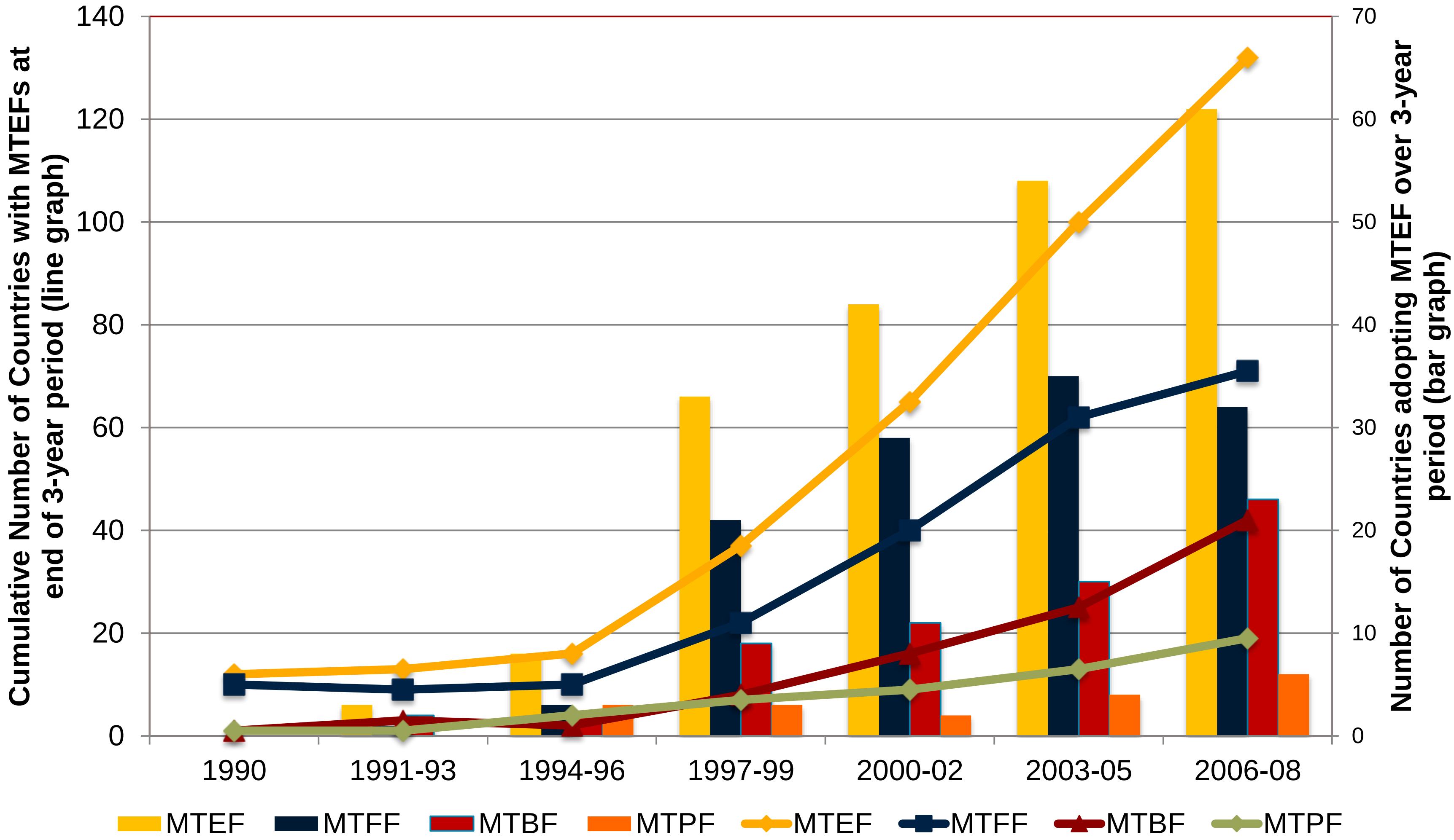
Medium-Term Expenditure Framework: What is it?

- Management tool aimed at enhancing fiscal performance by planning for medium term. Hierarchy of frameworks:
- Medium-Term Fiscal Framework (MTFF)
  - Resource envelope; Agency ceilings; Top down, input based
  - It is likely to impact fiscal discipline more than efficiency
- Medium-Term Budget Framework (MTBF)
  - National and sector strategies, forward estimates; Reconciliation with MTFF, agency/program ceilings; Top down and bottom up, primarily input based
  - This is likely to impact most on allocative efficiency
- Medium-Term Performance Framework (MTPF)
  - Systematic use of quantitative performance information; Output/outcome based; Funding linked to results
  - This would impact most on technical efficiency

Medium-Term Expenditure Framework: Why is it useful?

- Address shortcomings of annual budgeting: short-sightedness, conservatism (budget rigidities), parochialism (competition for incremental resources)
  - **Multi-year planning** takes future costs and benefits into account
  - **Strategic**, forward-looking approach provides a basis for establishing and shifting priorities
  - **Collaborative** approach to achieving agreed objectives rather than pursuit of narrow self-interest
- Impact on several dimensions of fiscal performance:
  - **Fiscal discipline:** indicates how well spending relates to revenues
  - **Allocative efficiency:** measures the extent to which resources flow toward the most needed public projects
  - **Technical efficiency:** shows the extent of waste of resources allocated to a given project

Medium-Term Expenditure Framework: Global MTEF Adoption



Source: World Bank (2013). *Beyond the Annual Budget: Global Experience with MTEFs.* Washington, DC: World Bank.

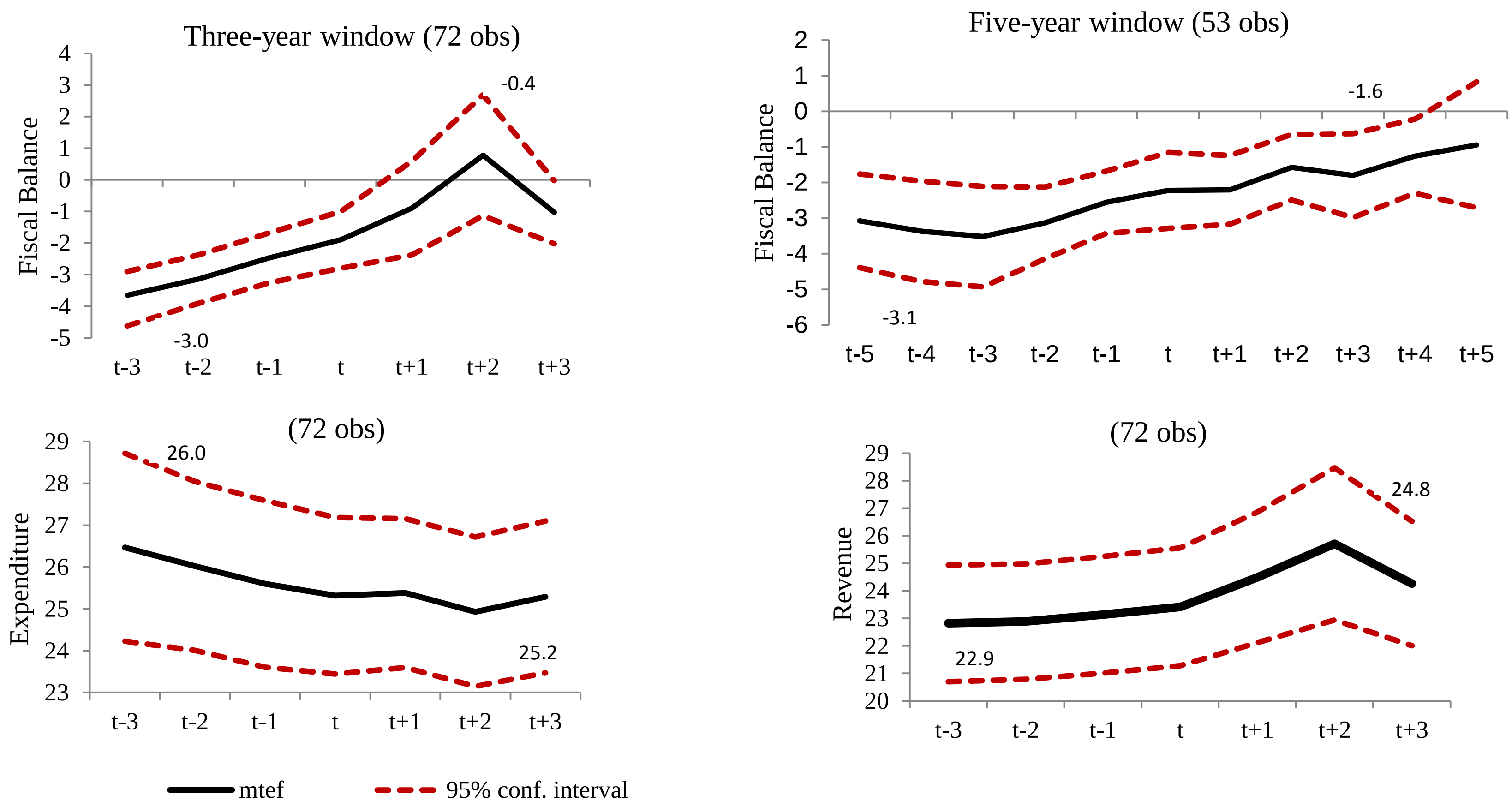
Medium-Term Expenditure Framework: Do they work?

- World Bank study in 2013 (*) analyzed the impact of MTEFs on fiscal performance: Fiscal discipline, Allocative efficiency, Technical efficiency
- Database describing MTEF status of 181countries in every year over the period 1990-2008
- Econometric analysis to compare fiscal performance across countries before and after MTEF implementation date, controlling for other determinants of fiscal discipline and efficiency

(*) World Bank (2013). *Beyond the Annual Budget: Global Experience with MTEFs.* Washington, DC: World Bank.

Medium-Term Expenditure Framework: Impact on Fiscal Discipline

- Adoption of MTEF is correlated with steady improvements in fiscal balance



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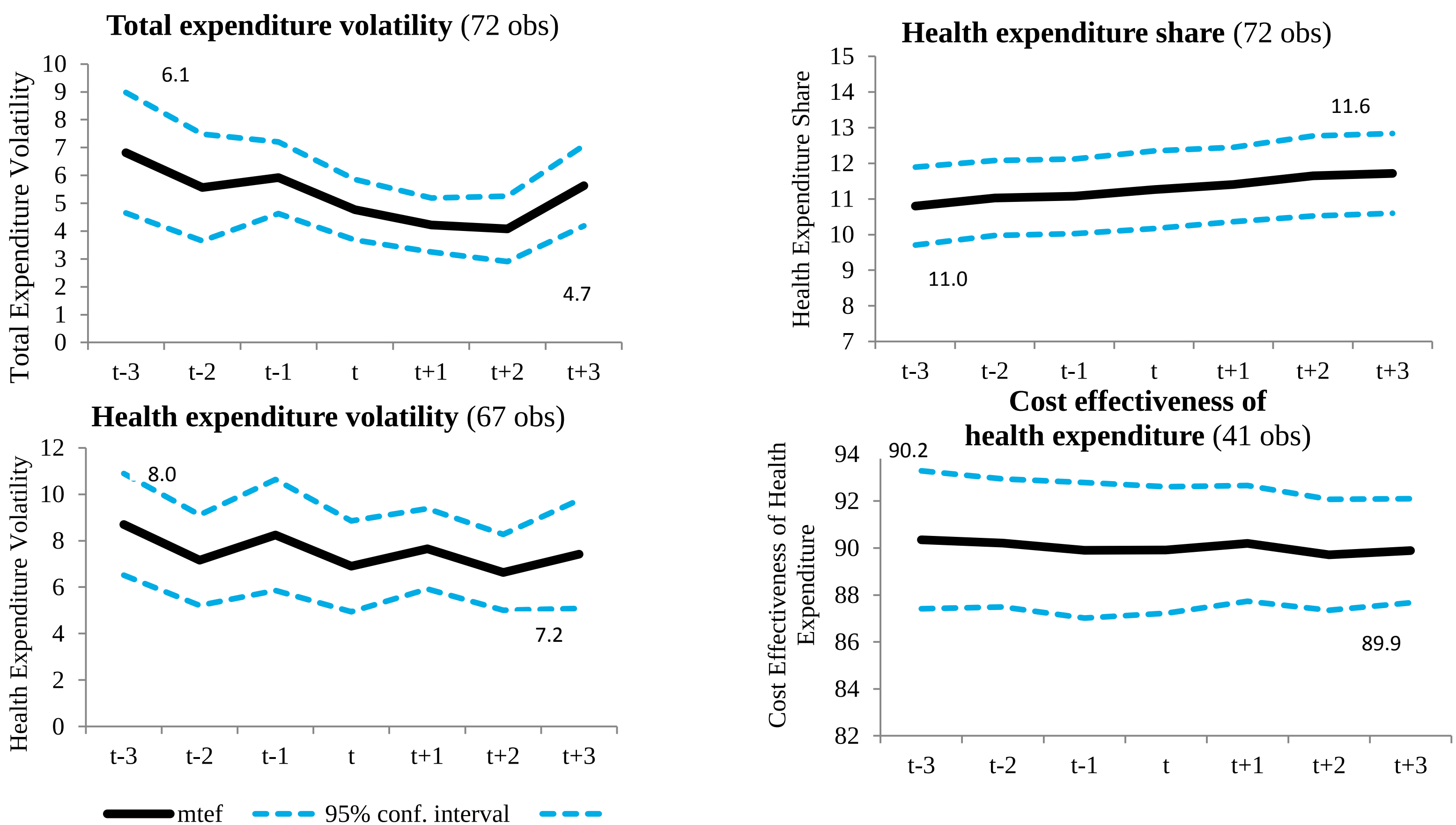
Source: World Bank (2013). *Beyond the Annual Budget: Global Experience with MTEFs.* Washington, DC: World Bank.

Medium-Term Expenditure Framework: Impact on Allocative and Technical Efficiency

- Impact of MTEF on allocative efficiency seems positive, but impact on technical efficiency is unclear



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Source: World Bank (2013). *Beyond the Annual Budget: Global Experience with MTEFs.* Washington, DC: World Bank.

Medium-Term Expenditure Framework: Econometric Analysis of Impact

MTEFs' impact on fiscal discipline, technical efficiency, allocative efficiency

	Fiscal discipline – overall balance as share of GDP	Allocative efficiency – health spending volatility (- effect means improvement)	Allocative efficiency - health spending as a share of overall government spending	Technical efficiency – health spending 's effect on life expectancy	Technical efficiency – health spending's effect on child mortality
	(1)	(2)	(3)	(4)	(5)
MTFF	0.845**	-2.660***	0.352***	0.105	0.0778
	(0.419)	(0.911)	(0.136)	(0.125)	(0.289)
MTBF	0.986*	-2.948***	0.429**	0.0725	-0.751**
	(0.524)	(0.966)	(0.176)	(0.173)	(0.333)
MTPF	2.816***	-2.191	1.038***	0.513***	0.107
	(0.959)	(1.554)	(0.376)	(0.186)	(0.411)

Notes: Robust standard errors clustered by country are in parentheses, *** p<0.01, ** p<0.05, * p<0.1. The results reported are based on the AB System GMM estimations with year effects and IV. All the specifications include a set of regressors and the constant term.

Source: World Bank (2013). Beyond the Annual Budget: Global Experience with MTEFs. Washington, DC: World Bank.

Medium-Term Expenditure Framework: Econometric Analysis of Impact

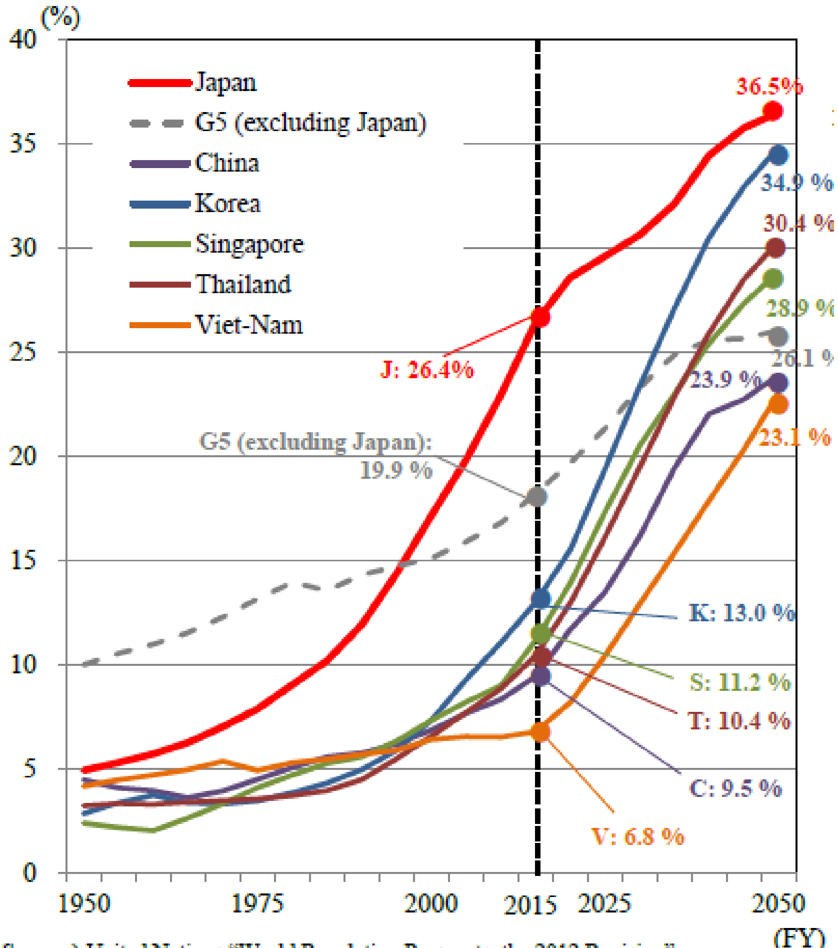
- MTEFs improve fiscal discipline as measured by fiscal balance. Effect is significant and increasing as country moves from MTFF to MTPF.
- MTEFs improve allocative efficiency measured as volatility of health expenditures to total expenditures. As expected, effect is larger as country goes from MTFF to MTBF.
- While volatility drops after introduction of MTEFs, the spending in health increases (as expected). Results vary with estimator used, but always positive when significant.
- Results on technical efficiency measured as health spending's impact on health sector outputs (life expectancy or infant mortality) are mixed.
- High variance: Quality and credibility of process is critical.

Long Term fiscal projections: Why do we need them?

- Assessing fiscal sustainability over medium to long run:
  - Projected evolution of the debt, taking into account the projected cost of an aging population (pensions, healthcare and long-term care)
  - Creating fiscal space to cope with projected implicit liabilities related to aging population
- Policy sustainability and managing shifts over time
  - Anticipating and managing impact of major shifts as countries transition from younger to older populations, and from rural to urban
  - Designing policies to sustain shared wealth creation over longer term

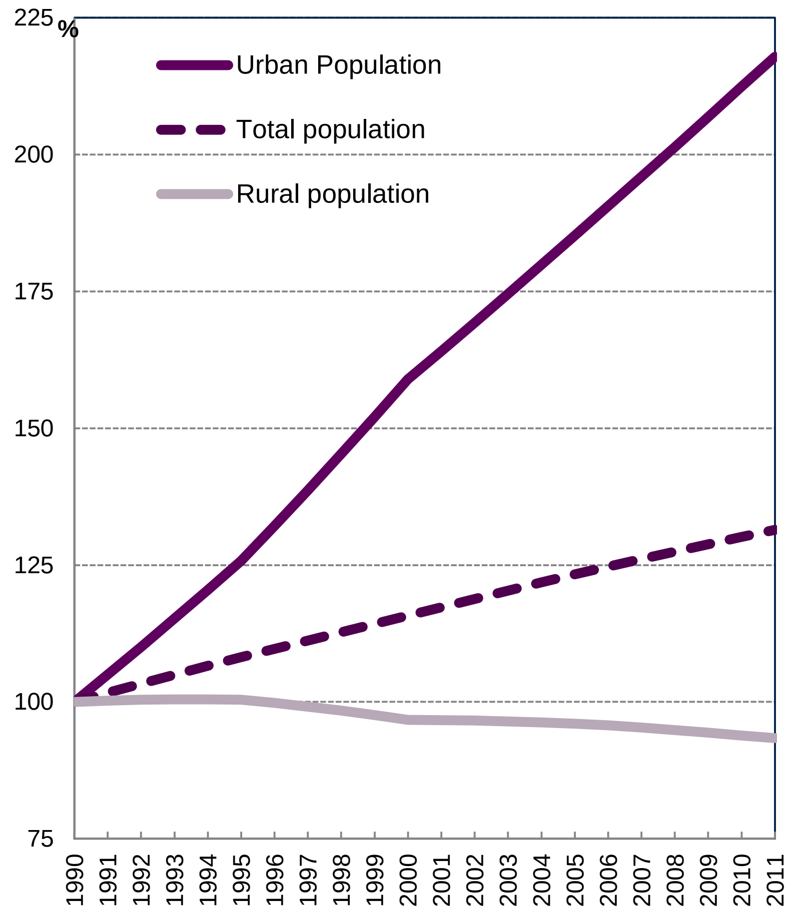
Long Term fiscal projections: Major Shifts in Demography and Urbanization

<Ratio of people 65 years old and over to total population>



Sources) United Nations "World Population Prospects: the 2012 Revision"
Data after 2010 are projections based on Medium Fertility..

Urban population growth in Indonesia (1990=100)



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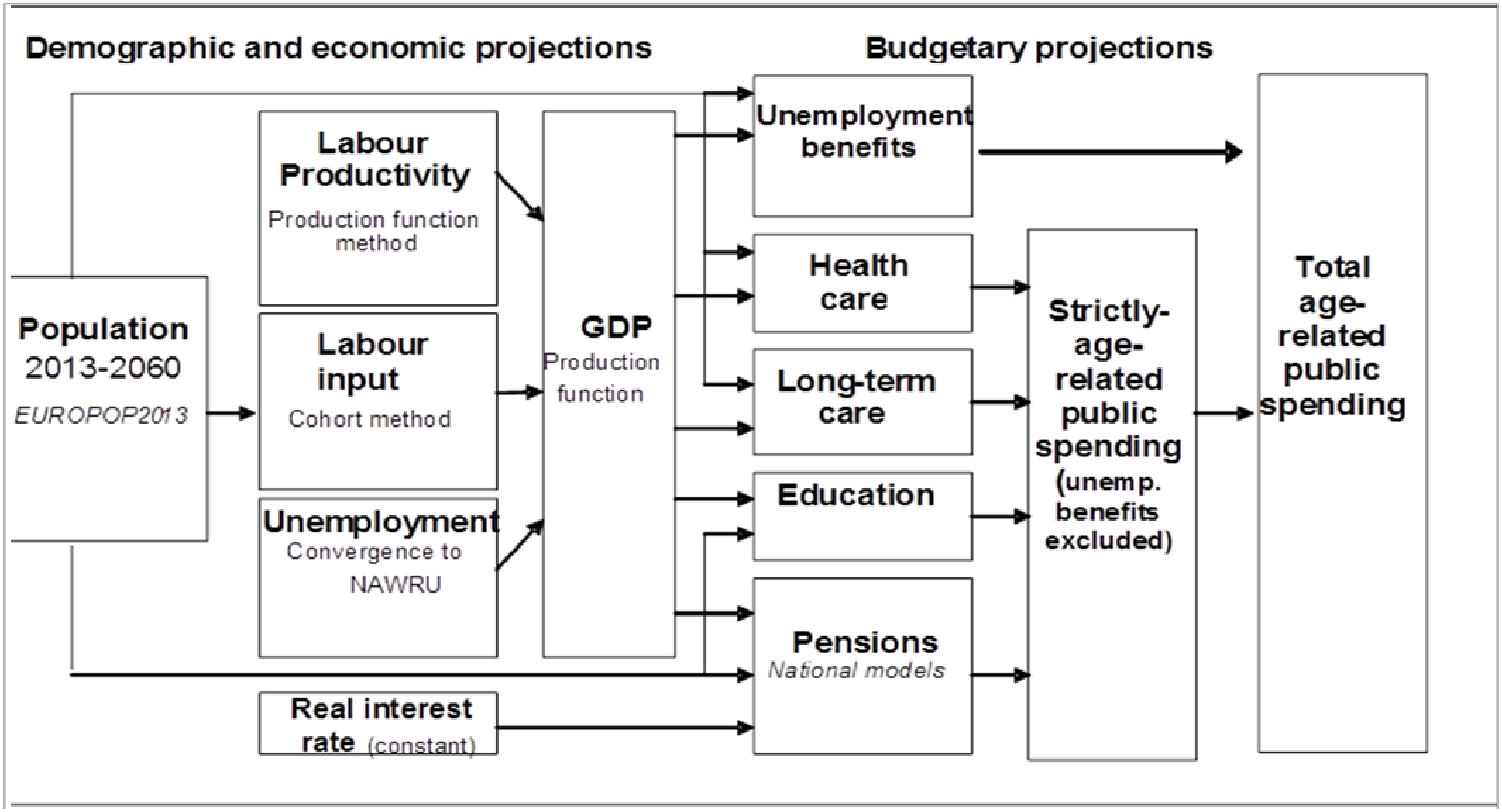
Long Term fiscal projections: Macro-Fiscal Implications of aging Population



Source: European Commission (2015). The 2015 aging Report. Economic And Budgetary Projections for the 28 EU Member States (2013-2060). European Economy, 3|2015. Luxembourg: Publications Office Of The European Union.

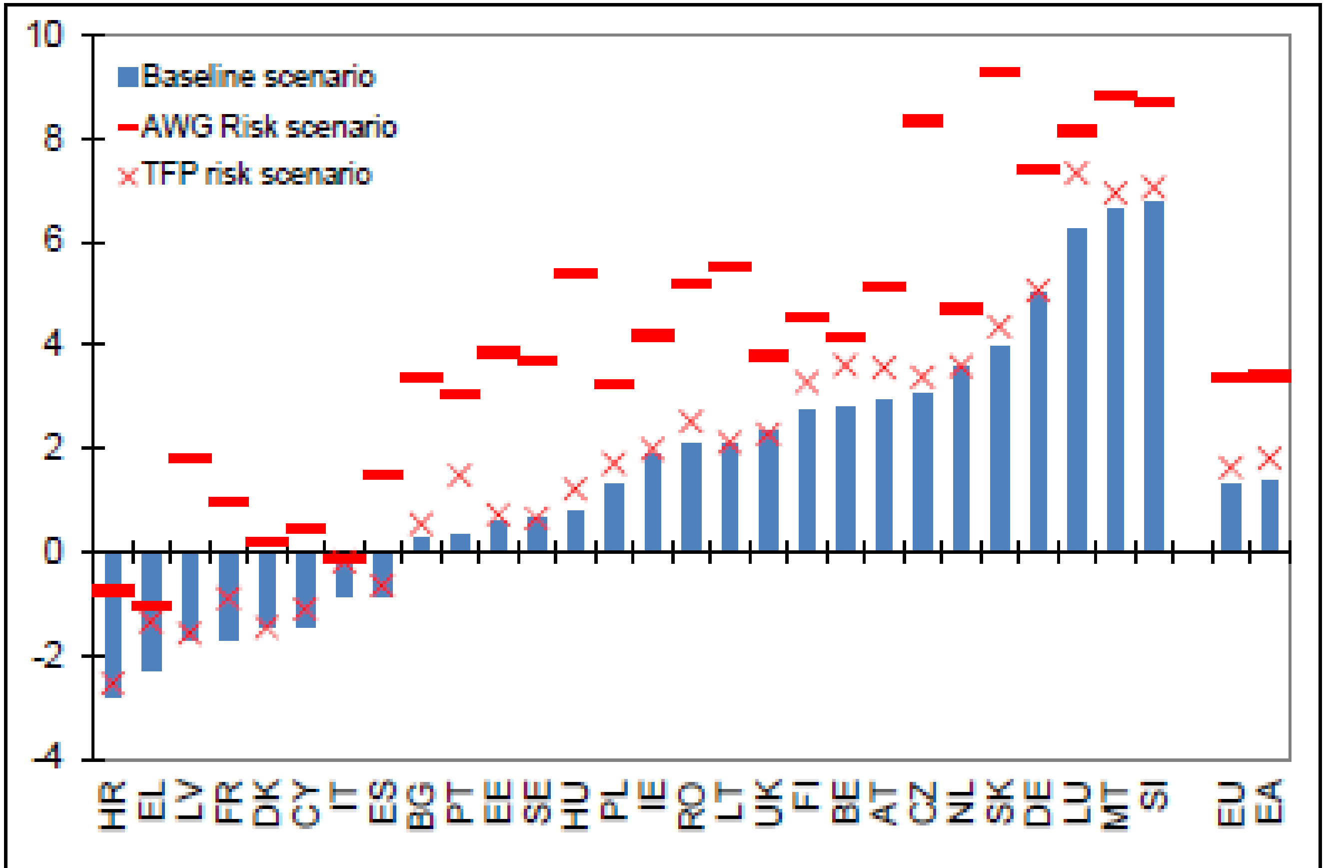
Long Term fiscal projections: Fiscal costs of aging Population in the EU

- European Commission, Fiscal Sustainability Reports
- Dependency ratio (people 65+ relative to 15-64) projected to increase from 28% in 2013 to 50% by 2060 in the EU
- EU would move from 4 working-age people for every person over 65 years to about 2 working-age persons
- Projected change in EU age-related public expenditure to increase by 1.5% of GDP between 2013 and 2060 in baseline scenario, and by +3.5% under risk scenarios
- A few countries projected to lower expenditures by 2% of GDP, but most projected to increase spending by 2% to 7% of GDP under baseline, and up to 9% under risk scenarios

Source: European Commission (2016). *Fiscal Sustainability Report 2015*. Institutional Paper 018, January 2016. Luxembourg: Publications Office of EU.

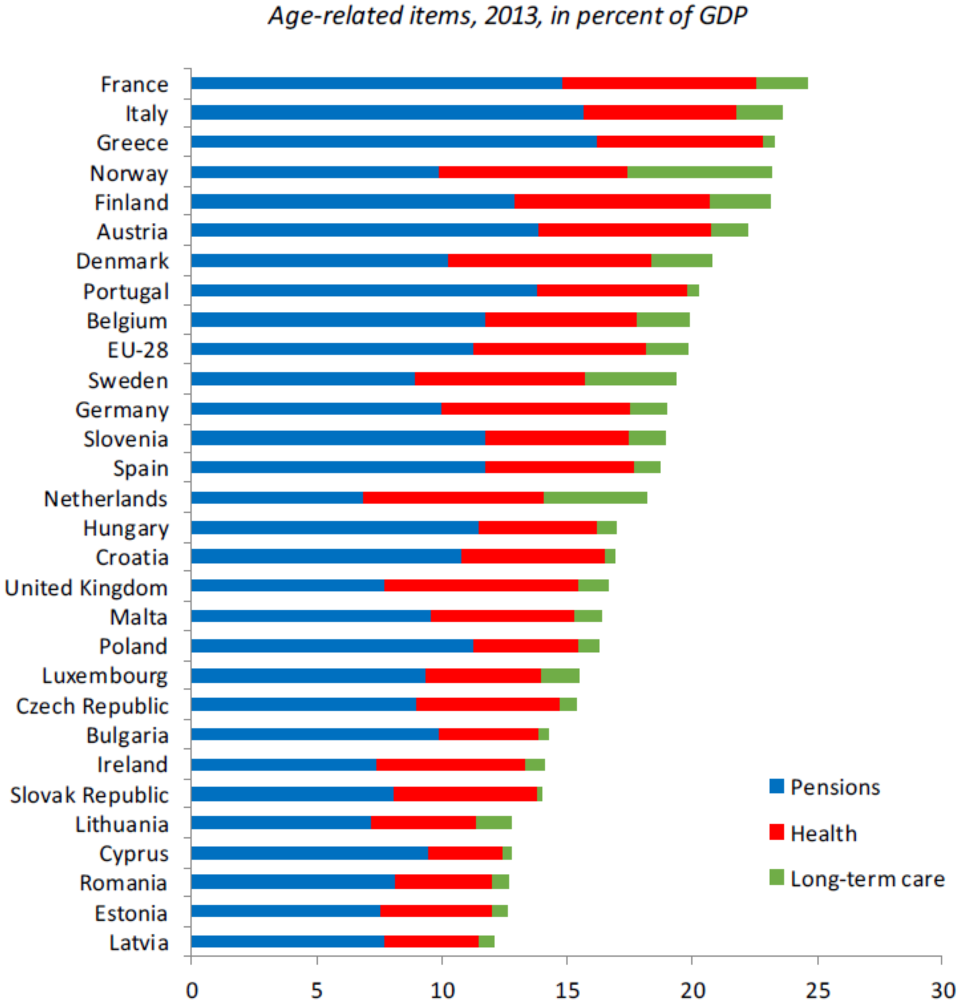
Long Term fiscal projections: Fiscal costs of aging population in the EU

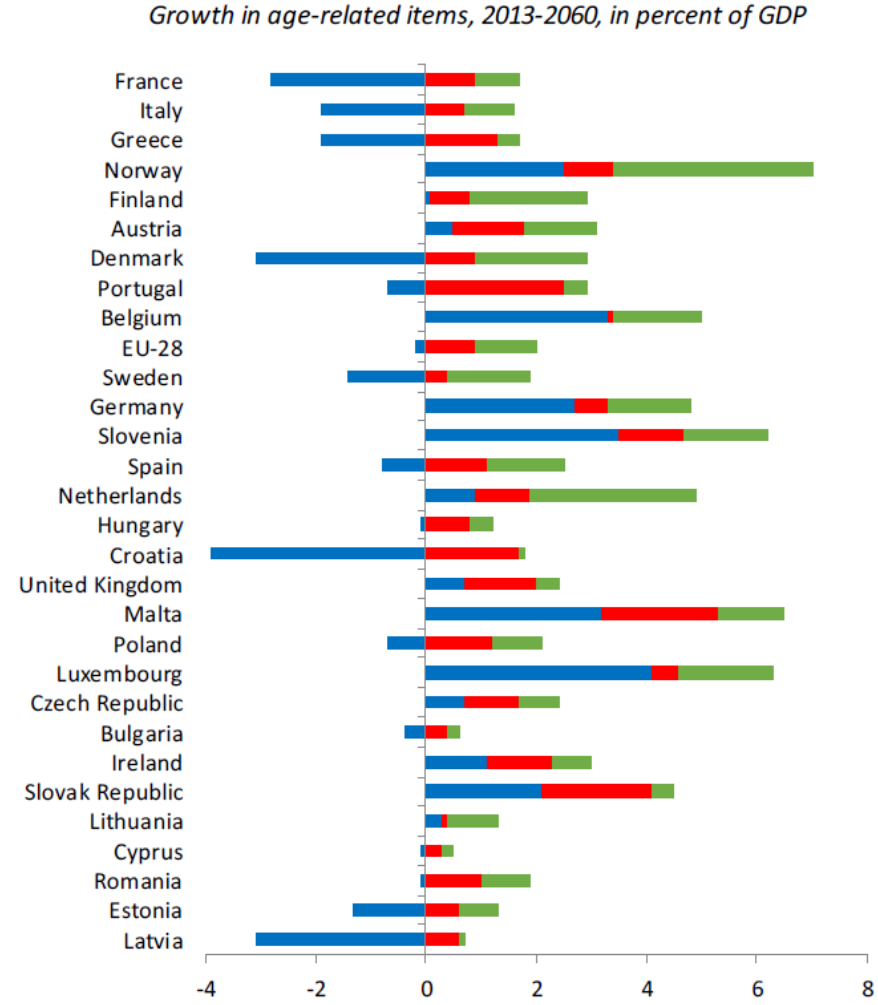
Projected Increase in Fiscal Costs due to aging in EU to 2060



Source: European Commission (2016). *Fiscal Sustainability Report 2015*. Institutional Paper 018, January 2016. Luxembourg: Publications Office of the European Union.

Long Term fiscal projections:
Fiscal cost of aging population in the EU





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Source: Source: World Bank (2015). *What's next for Old Europe? aging with Growth in Central Europe and the Baltics.* The World Bank, Washington D.C.; based on: European Commission (2015). *The 2015 aging Report. Economic And Budgetary Projections for the 28 EU Member States (2013-2060).* European Economy, 3|2015. Luxembourg: Publications Office Of The European Union.

Long Term fiscal projections: Dealing with fiscal cost of pensions in the EU

- Increasing labor market participation and adapting pension system to longer lives to manage negative working-age population growth and rise in numbers of retirees.
- Countries have reduced generosity of benefit package: All countries have restricted eligibility by enacting higher retirement ages and longer length of service requirements.
- Higher retirement ages offset by increases in life expectancy and implemented slowly: Average duration of retirement is only two years shorter in 2009 than in 2001
- Persistently high prevalence of early retirement has kept effective retirement ages below legislated ages.
- Pension spending as % of GDP has not fallen in most countries even though generosity of pensions is smaller.

Source: World Bank (2015). *What's next for Old Europe? aging with Growth in Central Europe and the Baltics*. The World Bank, Washington D.C.

Long Term fiscal projections: New Zealand's Long Term Fiscal Statement

- At least every four years since 2006 the Treasury has prepared LTFSs projecting long-term fiscal trends and highlighting challenges of demographic and economic trends for long-term fiscal sustainability.
  - Projections from 2013 LTFS highlight the long term unsustainability of current policies, due to pressures from the rapidly aging population.
  - Operating balance would move into a rising deficit from mid-2020s on, and net public debt would escalate to 200 percent of GDP by 2060.
- The projection exercise therefore highlights the need for changes in the policy settings.
- Alternative scenarios explore the extent of necessary adjustment to stabilize net public debt at, or below, 20% of GDP, and discuss policy options to bridge the gap.

Source: Teresa Ter-Minassian (2014). *New Zealand: External Review of the Treasury's Fiscal Policy Advice.*

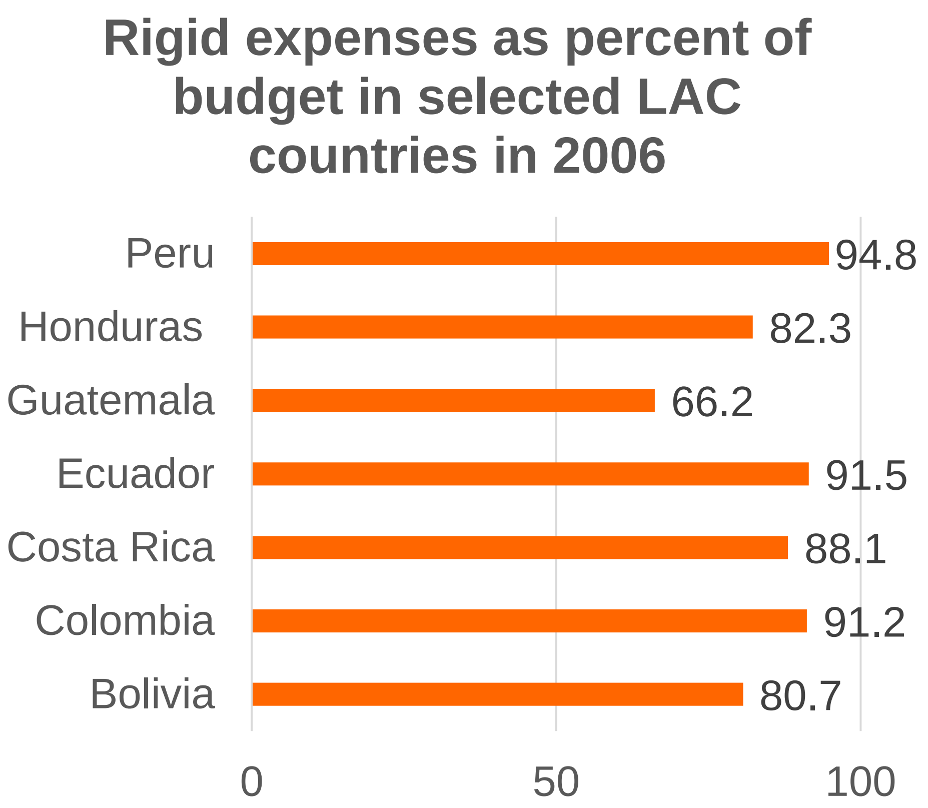
Long Term fiscal projections: Long-Term Analysis of Fiscal Policy at CBO/USA

- Each year CBO produces assessment of short-term and long-term fiscal implications of President's budget proposal:
  - Short term (5 yrs): Changes in fiscal policies influence demand by consumers, businesses, and governments, which leads to changes in output relative to potential output.
  - Long term (10 yrs): Changes in fiscal policies alter national saving, foreign investment in the U.S., federal investment, and people's and firm's incentives, thereby changing potential output.
- CBO uses two models to estimate effects of changes in fiscal policies on overall economy over the long-term: Solow-type growth model and Life-cycle growth model.
- CBO reports estimated range of budgetary outcomes owing to uncertainty of macroeconomic effects.

Source: Congressional Budget Office, "Economic Effects of Fiscal Policy"
www.cbo.gov/topics/economy/economic-effects-fiscal-policy

Fiscal projections and budget flexibility to prioritize and address fiscal challenges

- Managing fiscal impacts requires spending flexibility
- Many countries, especially in LAC, have rigid budgets, with 80% to 90% in mandatory expenditures
- But there are good examples: Ecuador has since reduced rigidities; Chile does not allow them.



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Overcoming budget rigidity: Different types of rigidities need to be addressed differently

Main characteristic	Specific types found
1. Benefit principle	Social Security
	Infrastructure funding
	Funding of specialized government agencies
2. Rights and guarantees established in various kinds of regulations	Meritorious goods
	More or less generic rights
	Guarantees of assured supply
	Priority or protected spending
3. Intergovernmental relations	Basic transfer systems
	Transfers with sector-specific allocations
	Other transfers between levels of government
4. Macroeconomic dynamics	Payment of debt service
	Countercyclical fiscal policy
	Clauses for wage adjustment, assets and others
5. Extraordinary income	Non-renewable resources (royalties, etc.)
	Privatization of public enterprises
	Loans from multilateral lending institutions
6. Other disputes within the public sector	Explicit priorities (Judiciary, Legislature, spending priorities, etc.)
	Politically inflexible expenditures (wages and operating expenses)
7. Implicit in fiscal policy	Tax expenditure

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Source: Cetrángolo O., Jiménez J.P., and Ruiz del Castillo R. (2010). *Rigidities and fiscal space in Latin America: a comparative case study*. CEPAL - Serie Macroeconomía del desarrollo N. 97. Economic Development Division. Santiago, Chile, April 2010

Overcoming budget rigidity: Different types of rigidities need to be addressed differently

- “Benefits” require changing policies that include rigid allocation of resources, notably to social security and social protection.
- “Rights and guarantees” require an explicit definition and a discussion about funds available to finance them, which will help define their limits.
- “Fiscal federalism” depends on political organization of each nation. Focus to ensure that transfers are efficient and equitable.
- Rules linked to “Macroeconomic” performance (eg. minimum wage rule; countercyclical fiscal policy) need to ensure long-term fiscal solvency.
- “Extraordinary income” resources should not finance current expenditures, and be managed through a stabilization fund.
- “Public-sector policies” introducing rigidities to protect non-priority areas from budget pressure should be eliminated most quickly.
- Finally, making explicit the effects of public policies that are now implicit in the tax structure is an indispensable step towards rethinking the rationality of all earmarks.

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Summing up….

- Importance of appropriate fiscal projections to anticipate and manage fiscal challenges
- MTEF and Longer-Term projections both have important roles to play
- Credibility of the process and fostering a discussion about spending priorities is important
- Managing fiscal impacts requires spending flexibility: Need to remove rigidities in budget
- Creating fiscal space and improving fiscal outcomes also requires assessing and improving efficiency and effectiveness of public spending

Thank you