OECD long-term projections for the global economy

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Overview of long-term model

Coverage: OECD & non-OECD G20 countries to 2060

Potential output projections based on Cobb Douglas production function (labour, human & physical capital, mfp)

Provides baseline consistent with **OECD Economic Outlook** for **policy analysis**:

- Structural reforms, product and labour market
- Fiscal imbalances
- Global current account imbalances

Productivity from convergence framework

- **Multi-Factor Productivity** driven by:
  - global rate of technological progress: assumed 1.3% pa
  - Competition-friendly Product Market Regulation boosts long-run MFP levels, trade openness speeds up convergence.
- **Assumed policy convergence**: PMR ➔OECD average.
- **Convergence in human capital:** Average yrs of schooling of 25-29 olds ➔"frontier" (Korea), frontier also gradually increasing. Measure of human capital assumes decreasing returns.

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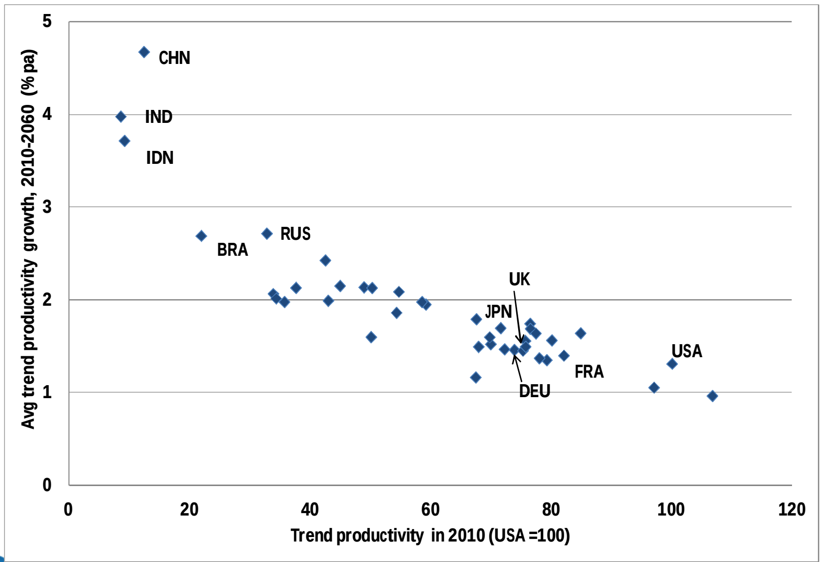
Convergence of trend productivity



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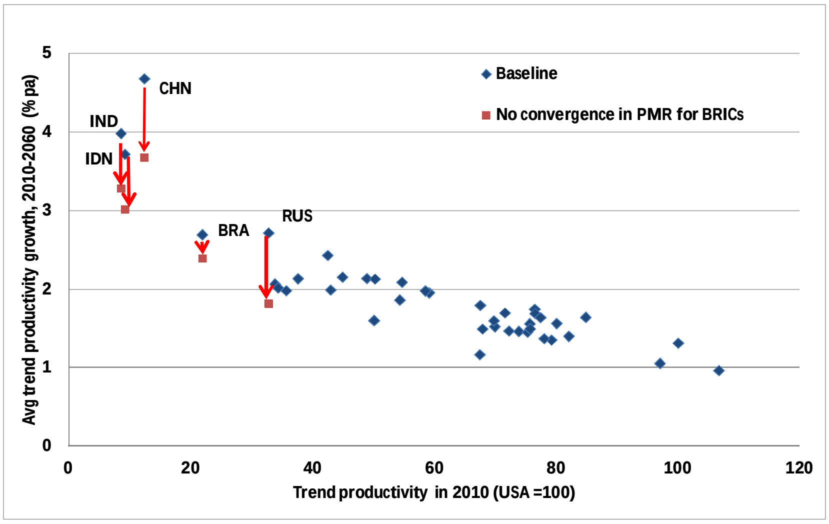
Convergence depends partly on polices

…what if no convergence of BRIICs PMR



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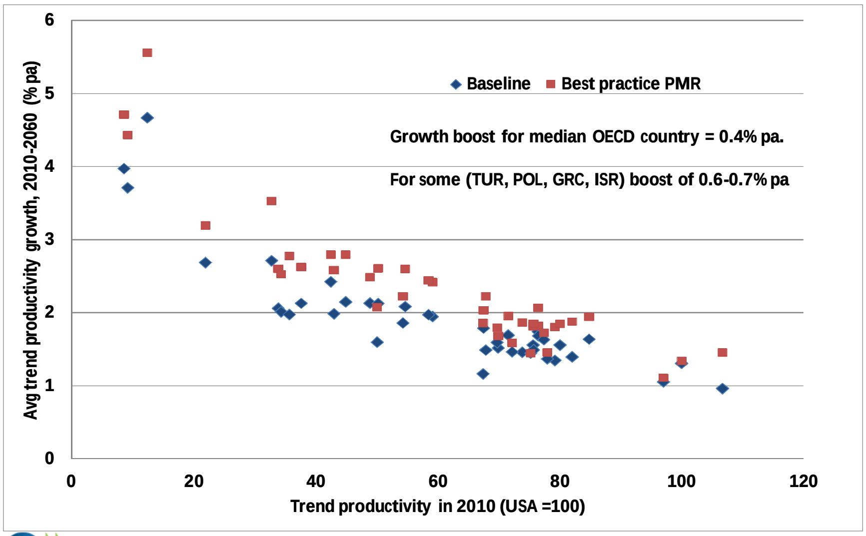
Convergence depends partly on polices

… what if PMR converges to best practice



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Labour input

1) **Population** projections from UN and Eurostat.

2) **Labour force participation** rates

- Cohort method to account for changing demographics and differences in exit/entry rates across cohorts

-Indexation to longevity

3) **Trend unemployment** returns to pre-crisis level.

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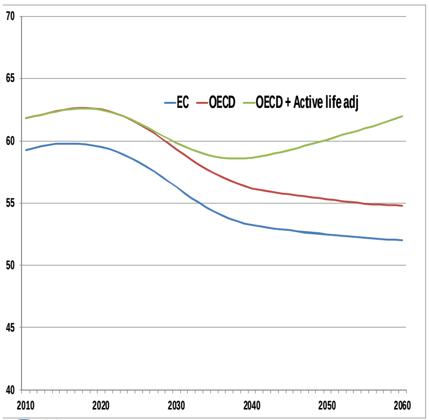
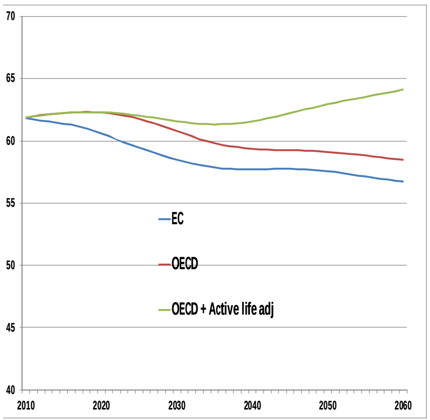
Participation projections similar to EC Ageing Working Group,

participation rate 15+

Germany



United Kingdom



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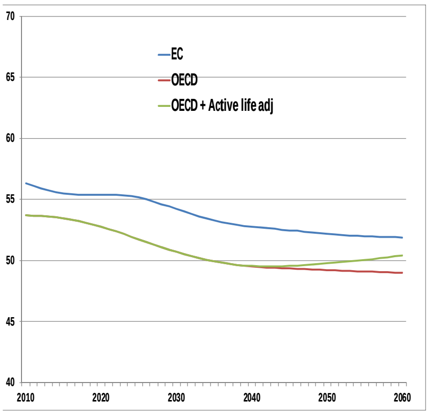
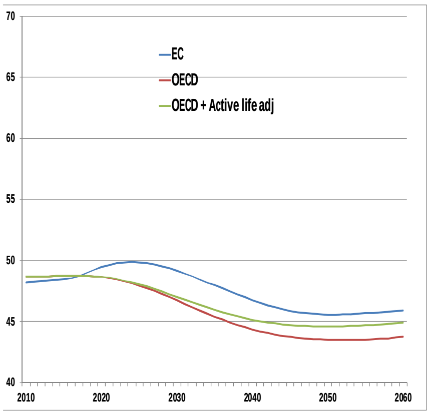
Participation projections similar to EC Ageing Working Group

participation rate 15+

France



Italy



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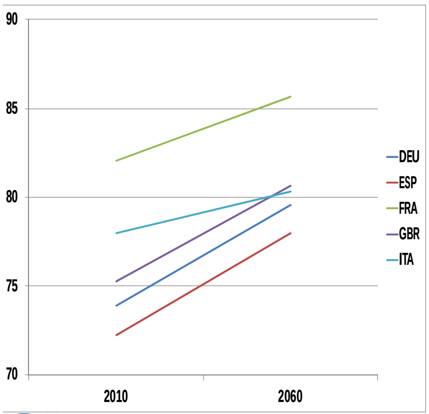
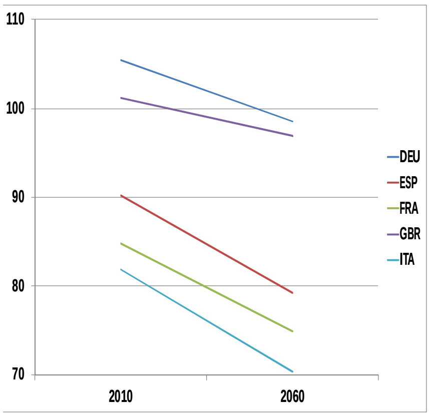
Divergence in participation can outweigh productivity convergence

Trend productivity, USA =100



Employment / pop, USA =100



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Fiscal side of model

- Fiscal balances have a **cyclical** component
- Don't include increased **ageing / health** expenditures
- **Rules** to stabilise or target a specific debt-to-GDP ratio
- **Implicit interest rate on debt service** moves to a weighted average of **R^L** and **R^S**, speed depending on initial maturity structure of debt

Interest rate determination

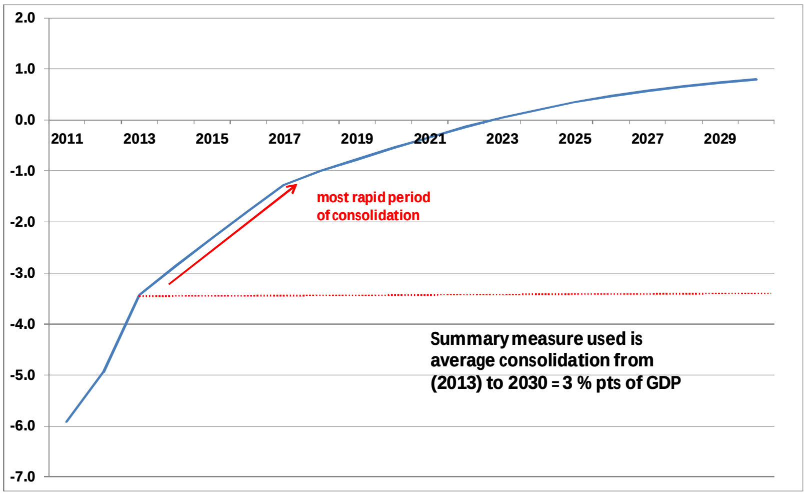
- **R^S ➔ Eqbm** R^S as GAPs close
- **Eqbm R^S** = pot. growth + **global balance premium**
- **R^L** $= \sum R^S$ (+10 yrs) + term prem.+ **fiscal risk premium**
- **Fiscal risk premium** = 2 bp per % pt debt ratio> 75% ,

  + 2 bp > 125%

==> Implicit rate on government debt will be rising

Fiscal consolidation to stabilise debt

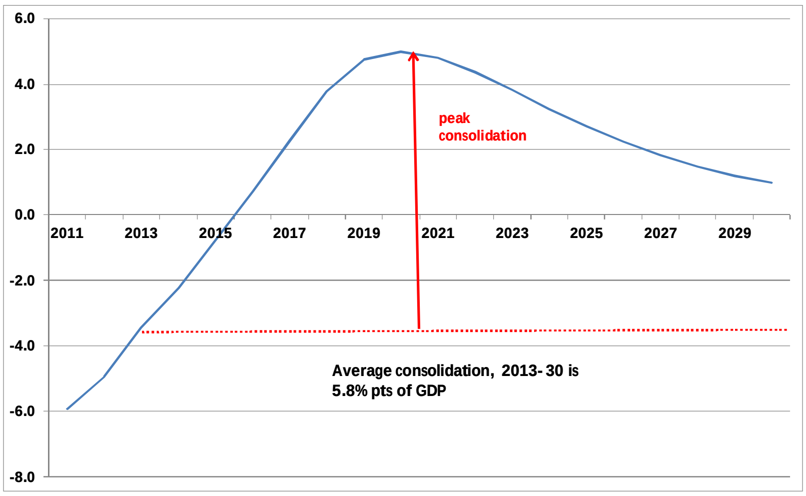
US primary underlying balance, % GDP



Source: OECD Economic Outlook May 2012

Fiscal consolidation to target 60% debt

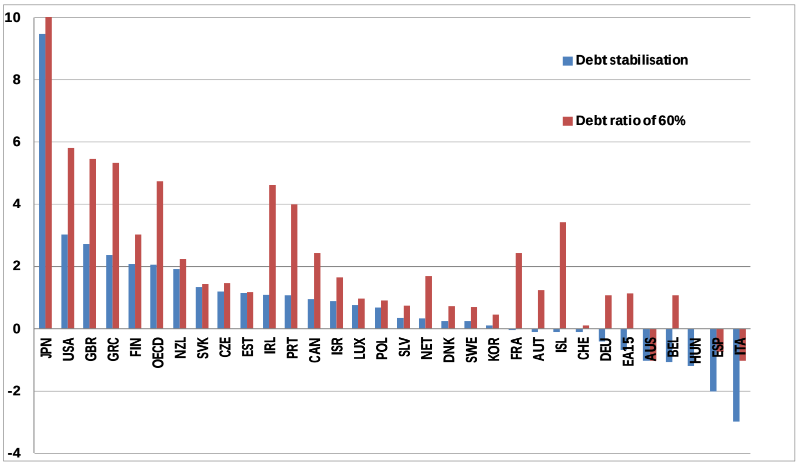
US primary underlying balance, % GDP



Source: OECD Economic Outlook May 2012

Consolidation to meet alternative debt targets

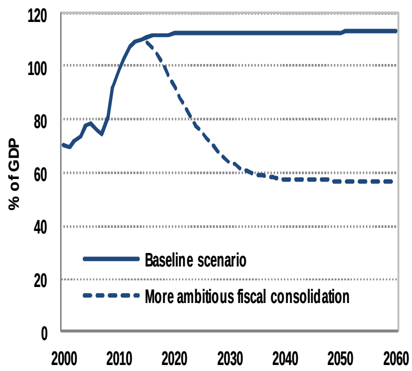
Average increase in underlying primary balance 2013-30, % pts of GDP



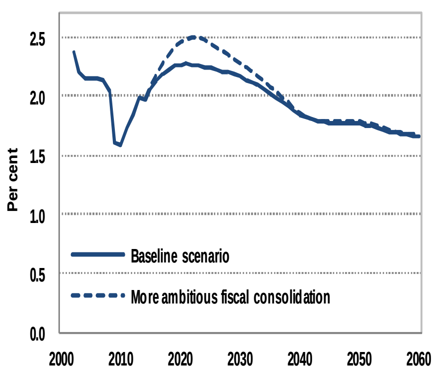
Source: OECD Economic Outlook May 2012

Ambitious consolidation boosts growth

OECD gross debt,
% of GDP



Potential output growth,
OECD average, %pa



Saving rates

➢ Saving equations based on **panel estimation**

OECD private saving rates depend on

- **old-age & youth dependency ratios**,
- **fiscal balances** (40% Ricardian offset from public saving)
- terms of trade, pdy growth, private credit, life expectancy, (+output gap)

OECD total saving = public + private saving

Non-OECD total saving depends on

- **old-age and youth dependency ratios**, **social spending,**
- terms of trade, private credit, life expectancy & pdy growth

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Investment

➢ **Capital intensity varies with changes in real interest rates**. Higher real interest rates => lower capital intensity => temporarily lower growth => permanently lower LEVEL of output

➢ Non-housing investment consistent with capital intensity

➢ Housing investment returns to average level prior to the crisis

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Current account determination

- **CB = S – I**
- **For other oil exporters**,
  CB = f(IEA net oil export volume, oil price)
- **Interest rates ensure consistency of world CB:**
  If $\sum CB > \sum CB(-1)$ => ex ante global savings surplus
  => Fall in "global balancing premium" on interest rates
  => Interest rates in all countries fall, raises I relative to S

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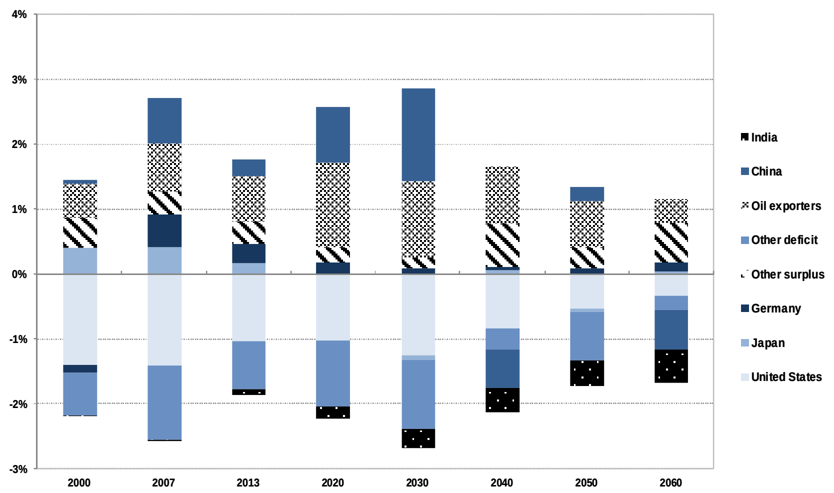
Current account balances as % of world GDP



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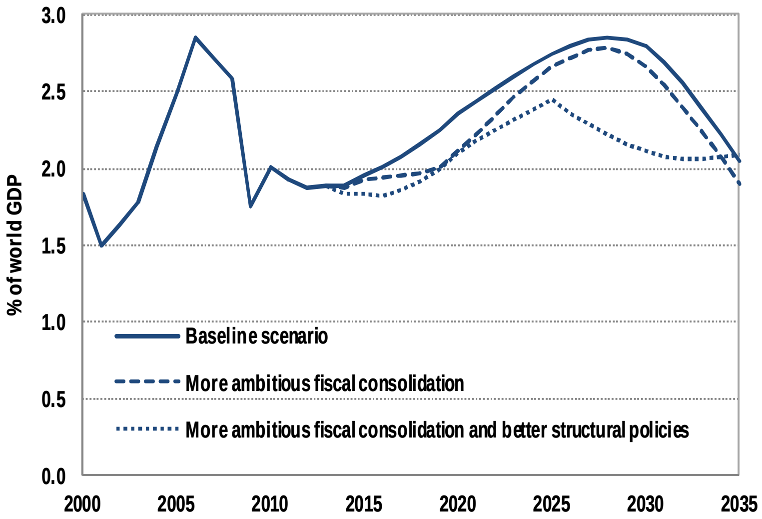
Polices can reduce global imbalances

Sum of absolute current balances / 2



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