

Quantifying the Impact of G-20 Members’ Growth Strategies

This note provides an estimate of G-20 members’ progress towards raising the level of their combined GDP by 2 percent by 2018 relative to the October 2013 WEO baseline projections. This estimate is based on the approach in the IMF-OECD-WBG reform scenario set out in February¹ and focusses on structural reform and public infrastructure investment commitments assessed to be new relative to the St. Petersburg Summit. Reform measures include product, trade-related and labor market reforms, public expenditures on research and development, tax reform measures, and the earlier-than-expected implementation of the Single Supervisory Mechanism (SSM) in the euro area. OECD estimates of the impacts of these policy measures on productivity and labor supply are combined in the IMF’s G20MOD to estimate the overall increase in GDP, accounting for demand and supply responses as well as international spillovers.

The estimate suggests that the measures in the comprehensive growth strategies submitted as part of the Brisbane Action Plan would raise G-20 GDP by roughly 2.1 percent by 2018 if fully implemented, while recognizing the high degree of uncertainty entailed in quantifying the impact of members policies.

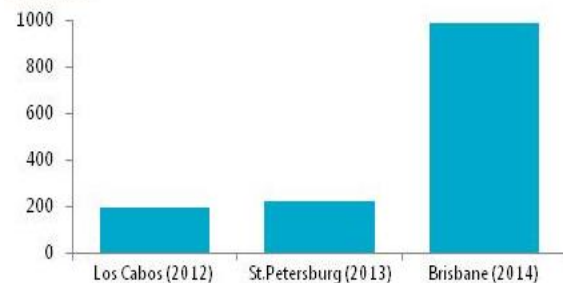
Scoring of Growth Strategy Measures

The OECD assesses the draft growth strategies to include close to 1000 individual structural policy commitments, of which more than 800 are new. This represents a large increase from earlier G-20 action plans. The clarity and concreteness of measures has increased, although some measures remain that are insufficiently precise to allow for robust quantification of their impact.

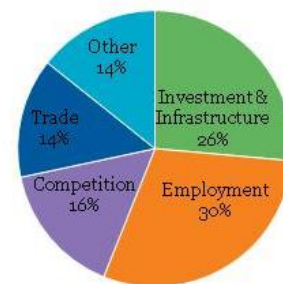
G-20 countries’ own categorization shows that significant numbers of policy commitments have been made in each of the priority areas of investment, employment, trade and competition, with more than half of commitments related to infrastructure or jobs.

Structural Reform and Public Infrastructure

Number of measures for Brisbane compared to St. Petersburg and Los Cabos



Commitments by template section headings in growth strategies



¹ [G-20 Macroeconomic Reform Priorities Report](#)

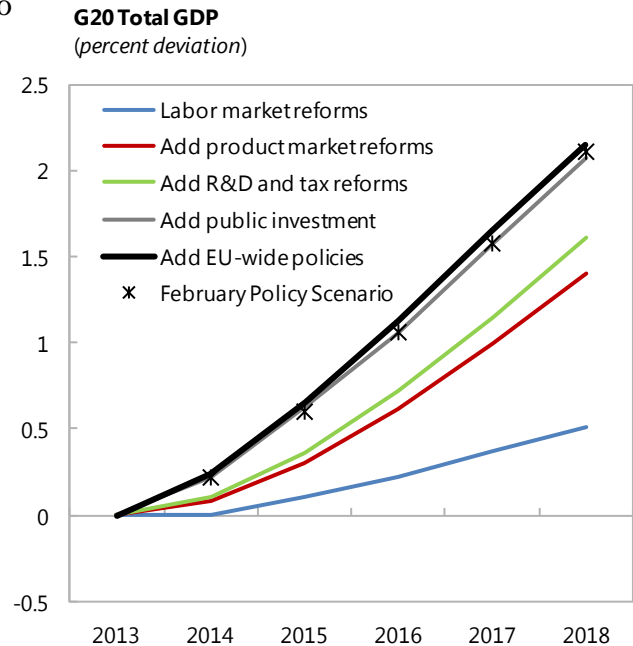
Commitments

The estimated impact of members' comprehensive growth strategies is based on an OECD assessment of structural reform commitments' long-run effects on policy indicators and their subsequent impact on productivity and labor supply. The reforms include measures aimed at changing product and labor market regulations, tax structures, retirement incentives, unemployment benefits and labor taxation, as well as strengthening support for active labor market programs, childcare provision, immigration, and research and development (R&D). Only commitments assessed jointly by the IMF and OECD as new and as having a significant GDP impact are included in the quantification. Measures with low GDP impact may nevertheless be important or have higher impact for other G-20 inclusive, sustainable and balanced growth objectives. The G-20 growth strategies also contain significant public infrastructure spending commitments and those assessed by IMF country teams to be new relative to commitments in St Petersburg have been included in the assessment.

Estimated Impact on G-20 Output

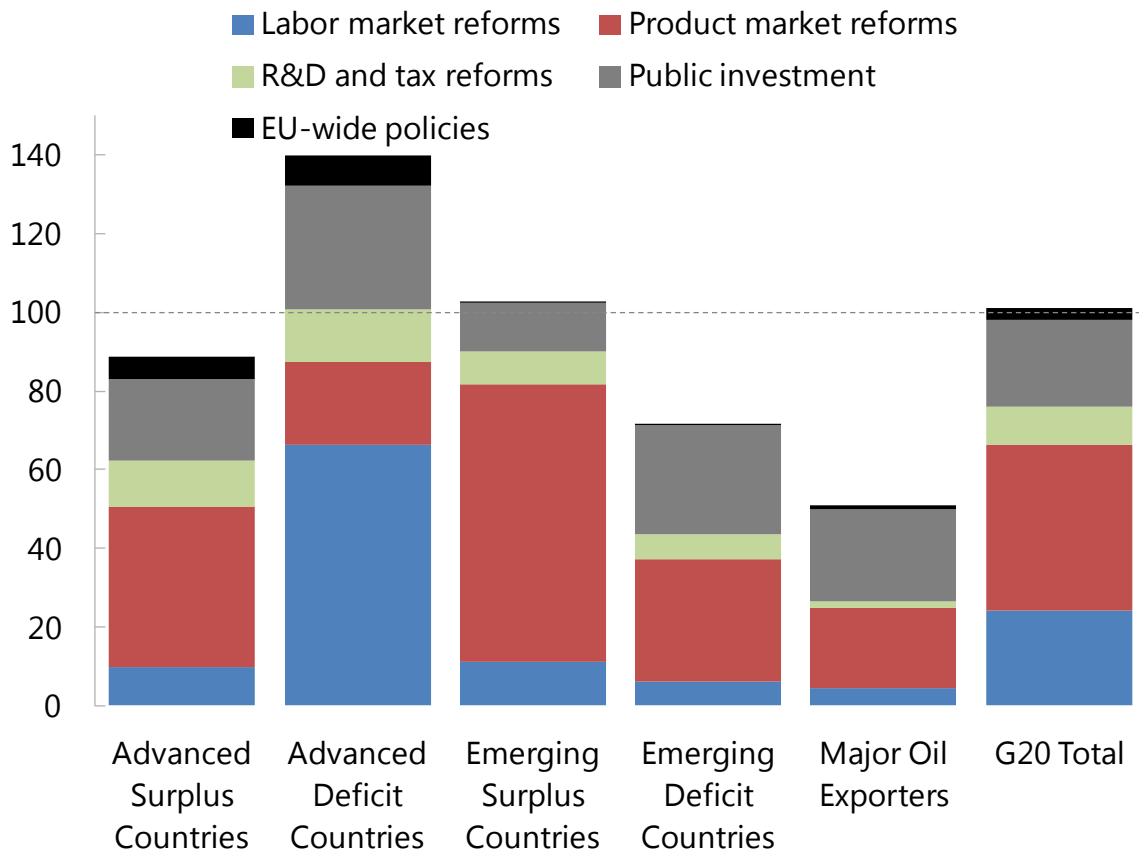
Using these inputs and the IMF's G20MOD, the policy commitments in members' comprehensive growth strategies are estimated to increase G-20 GDP by roughly 2.1 percent by 2018. The chart shows the estimates of the additive impact of each of the five key policy layers.

The first is the impact of labor market policies, such as labor market programs and childcare provision. The second is the impact of product market reforms, including traded-related measures. The third is the impact of tax reform measures and new research and development initiatives. The fourth is the impact of increased public infrastructure investment. The final is the impact arising from earlier-than-expected implementation of the SSM in the euro area. Product market reforms aimed at increasing productivity are the largest contributor to raising GDP, followed by infrastructure investment and labor market reforms. Spillovers play a significant role in raising output. Spillovers among G-20 countries account for roughly one quarter of the 2.1 percent increase in G-20 GDP and spillovers from the G-20 to the rest of the world raise non-G-20 GDP by over half of one percent by 2018.



Contribution by Analytical Groups

The chart below presents progress towards the target by analytical group expressed as a percentage of each group's contribution to the increase in GDP in the February Policy Reform scenario. Advanced deficit economies achieved close to 140 percent of the gains in the February scenario, while emerging surplus countries have achieved the same contribution as included in the February scenario. Advanced surplus countries follow, achieving roughly 90 percent, with emerging deficit countries achieving around 70 percent.



Annex: Quantifying the GDP Impact of G-20 Members' Growth Strategies

The IMF-OECD approach to quantifying the impact of G-20 Members' comprehensive growth strategies covers only new measures since the St Petersburg commitments, as assessed by the IMF and OECD. Commitments are assessed as new if they were neither explicitly included in the St Petersburg commitments nor factored into the October 2013 WEO baseline projections nor well-advanced by September 2013.

Measure in countries' growth strategies are divided into five key areas:

- Product market reforms, including trade related measures;
- Labor market reforms;
- Expenditures on research and development;
- Tax reforms; and
- Expenditures on public infrastructure.

The impact of the new measures in the first four policy areas on either *productivity* or long-run *labor supply* are estimated using an OECD assessment of the impact of structural reform commitments, derived by assessing - where possible - the changes that commitments imply for policy indicators such as the OECD's Product Market Regulation (PMR) indicator of the competition-friendly stance of market regulation. OECD estimates of the long-run supply-side impact of reforms are then used to derive initial impacts, allowing in some cases for reforms to be phased in.²

To fully capture the demand, supply and international spillovers affects, the estimated increases in *productivity* and long-run *labor supply* for each G-20 country are then introduced into the IMF's G-20 Model (G20MOD)³ along with the increases in *public expenditure on infrastructure*. In the model, higher infrastructure spending raises the level of the public capital stock which in turn lifts the productivity of the private capital stock. *Private investment* in each individual country in the model then rises in response to the increases in productivity and labor supply. As a result, each country's long-run *potential output* rises owing to higher productivity, a larger employed labor force, and more private capital. In each individual G-20 country, household *incomes* rise owing to higher real wages and more employment and this, along with increased investment demand, leads to an increase in demand for exports from other countries. Higher demand for their exports further raises the return to capital in those countries, prompting even more investment and thereby further strengthening demand and adding to the increase in long-run supply potential.

² The basic OECD framework of indicators and empirical estimates is that used for the OECD's *Going for Growth* report (OECD, 2014). The key empirical relationships are based on papers by Bassanini and Duval (2006 and 2009) and Boursès, Cètte, Lopez, Mairesse and Nicoletti (2010).

³ A working paper documenting the structure and properties of G20MOD is forthcoming.