Quantifying the Impact of G-20 Members’ Growth Strategies

This note provides preliminary estimates 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. These preliminary estimates are based on the approach in the IMF-OECD-WBG reform scenario set out in February¹ and focus on structural reform and public infrastructure investment commitments assessed to be new relative to the St. Petersburg Summit. Reform measures include product 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. The impacts of these policy measures are combined in the IMF’s G20MOD to estimate the impact on GDP accounting for demand and supply responses as well as international spillovers. Acknowledging the high degree of uncertainty entailed in quantifying the impact of members’ policies as well as implementation uncertainty, the resulting estimates suggest that the measures in the growth strategies will raise G-20 GDP by roughly 1.8 percent by 2018.

Scoring of Growth Strategy Measures

The OECD assesses the draft Growth Strategies to include more than 900 individual policy commitments, of which more than 700 are new. This represents a large increase from earlier exercises. The clarity and concreteness of measures has increased, although 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.

¹ G20 Macroeconomic Reform Priorities Report
Structural Reform and Public Infrastructure Commitments

The preliminary estimate of the impact of members’ 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.\footnote{The OECD bases the estimated impact of reforms on a “top down” indicator-based approach. Estimates are not derived from a detailed assessment of the impact of specific measures. These estimates have a high degree of uncertainty for reasons including lack of detail in the specification of some commitments and the assumption that all measures will be fully implemented.} The reforms include measures aimed at changing product regulations, tax structures, retirement incentives, unemployment benefits and labor market regulations, as well as support for active labor market programs, childcare provision, 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 G20 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 G20 Output

Using these inputs and the IMF’s G20MOD, the policy commitments in members’ growth strategies are estimated to increase G-20 GDP by roughly 1.8 percent by 2018. The text chart contains the estimates of the additive impact of the five key layers. The first is the impact of labor market policies. The second is the impact of product market reforms, including traded related measures. The third is the impact of new research and development initiatives and some tax reform measures. 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. Infrastructure investment and labor market reforms make the next most substantive contributions.
**Contribution by Analytical Groups**

The chart below presents progress towards the target by analytical group expressed as a percent of each group’s contribution to the increase in GDP in the February Policy Reform scenario. Emerging surplus countries have achieved the same contribution as included in the February scenario. Advanced deficit and surplus countries follow, achieving roughly 90 percent, with emerging deficit countries achieving around 70 percent. The group of major oil exporters is estimated to be achieving roughly 40 percent.
Annex: Quantifying the GDP Impact of G20 Members’ Growth Strategies

The IMF-OECD approach to quantifying the impact of G-20 Members’ 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. 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.\(^3\)

To fully capture the demand, supply and international spillovers affects, the estimated increases in productivity and long-run labor supply for each G20 country are then introduced into the IMF’s G20 Model (G20MOD)\(^4\) 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 G20 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.

\(^3\) 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 Bourlès, Cette, Lopez, Mairese and Nicoletti (2010).

\(^4\) A working paper documenting the structure and properties of G20MOD is forthcoming.