



# **MACROECONOMIC AND REFORM PRIORITIES**

**Prepared by IMF Staff with inputs from the OECD and the World Bank**

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# MACROECONOMIC AND REFORM PRIORITIES

## SUMMARY

**The recovery has been disappointing, with G-20 output still below longer-term trend.** Output losses have been especially large in advanced deficit economies, and reflect both cyclical and structural factors. They can be decomposed into losses in productivity, investment, and employment. External imbalances have narrowed alongside weak demand and hence lower imports in deficit countries, while adjustments toward desirable policies have been modest.

**Joint action is needed to boost output and to lower global risks substantially through more sustainable and balanced growth.** As the output losses reflect both the output gap and lower potential growth, demand and supply measures are needed. But as output gaps close, external imbalances may increase again, implying that further action on internal and external rebalancing is also required to ensure the sustainability of medium-term growth. Policies should aim at three goals: bringing output back to potential; raising potential; and rebalancing growth.

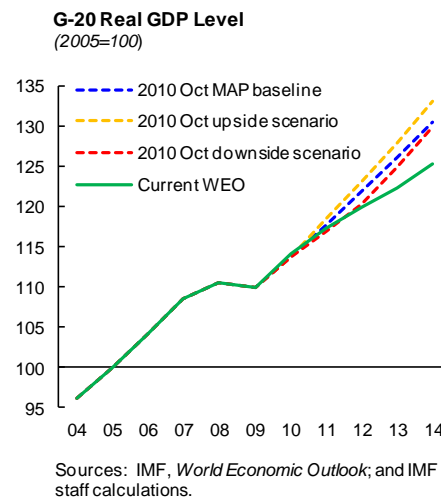
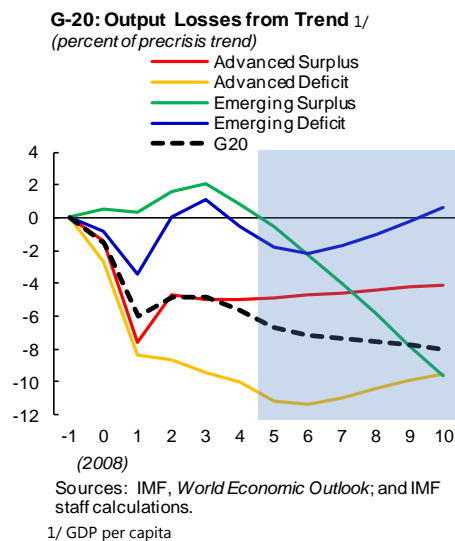
- ❖ *Bringing output back to potential.* Monetary policy should remain accommodative in advanced economies given the still large output gaps and the ongoing fiscal consolidation. In emerging economies, credible macroeconomic policies and frameworks, alongside exchange rate flexibility, are critical to weather turbulences in a context of tighter external financing conditions. There is also scope for better cooperation on unwinding UMP, especially through wider central bank discussions of exit plans.
- ❖ *Rebalancing growth.* Further action and cooperation is needed to avoid a resurgence of global imbalances as the recovery proceeds and ensure sustainable medium-term growth. In surplus countries, reforms are needed to boost domestic demand or rebalance demand from investment to consumption. In deficit countries, reforms should boost competitiveness and remove supply bottlenecks to strengthen exports.
- ❖ *Raising potential.* Strengthening medium-term growth requires action on structural policy gaps, including product market reforms, labor market reforms, and infrastructure investment. Most members have considerable scope to improve the functioning of product markets. Some members also need to make their labor markets more job-friendly, while many can boost employment and output by removing disincentives to participation in the (formal) labor market for women, older workers, the low-skilled and youth. Finally, infrastructure needs are high in emerging markets, especially those experiencing supply bottlenecks, while some advanced economies would benefit from a modernization and upgrading of their infrastructure.

**Strengthened and cooperative policies would deliver stronger, more balanced and sustainable medium-term growth while reducing risks of renewed global turmoil.** Simulations of a plausible reform scenario suggest that desirable product and labor market reforms, together with rebalancing policies in key external deficit and surplus economies, would raise world output by 2¼ trillion dollars by 2018 (about 0.5 percentage point higher growth per year), while reducing substantially global imbalances and lowering public debt ratios. While most of the gains are attributable to domestic policies, joint action could produce beneficial growth spillovers in the medium to long term. Even more importantly, joint action can also reduce risks of renewed global turmoil both by reducing external imbalances and internal distortions, and by strengthening market confidence.

## RECOVERY FROM THE GREAT RECESSION: STOCKTAKING

*The recovery has been disappointingly weak, with G-20 output still far below longer-term trend, reflecting both cyclical and structural factors, and large output losses, notably in advanced deficit economies. At the same time, progress on internal and external rebalancing has been limited.*

1. **The recovery from the Great Recession has been disappointing, with G-20 output still below longer-term trend.** Global activity strengthened during the second half of 2013 on account of firming activity in advanced economies, and global output growth is projected to increase from 3 percent in 2013 to around 3¾ percent in 2014 and 4 percent in 2015. However, five years since the Great Recession, output remains far below the longer-term trend level, especially in advanced economies.<sup>1</sup> In 2013, output losses relative to trend amount to 8 percent for the G-20 as a whole, with a higher loss in advanced deficit economies (11 percent).<sup>2</sup> Trade volumes (real exports and imports) remain well below trends as well. Notably, the recovery has also been much slower than was anticipated in the wake of the crisis: the G-20's 2013 real GDP level is 2 percent below the downside scenario projection prepared for the 2010 Mutual Assessment Process. The strong growth projected in 2010 was based on an expected rapid decline in unemployment, accompanied by a strong crowd-in of private demand, which did not materialize.



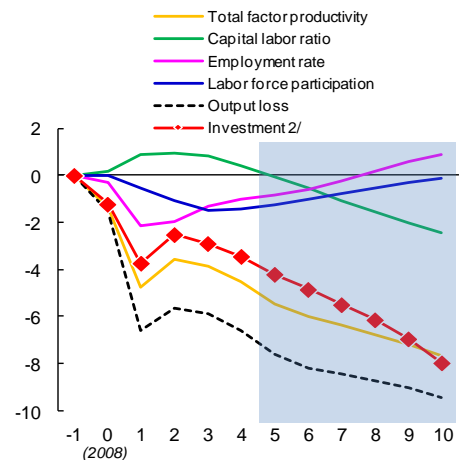
2. **Output losses can be decomposed into losses in investment, productivity, and employment.** To better understand the sources of these losses, actual per capita output and its (demand and supply) components are compared with the level they would have reached had they followed their longer-term trend.

<sup>1</sup> Trend growth is calculated over the period 1998–2005, excluding the boom years just before the crisis. Using an even longer trend (1988–2005) yields qualitatively similar conclusions.

<sup>2</sup> The U.K., Spain, and Italy are the main contributors for advanced deficit economies' average output losses.

- A demand-side decomposition of output losses shows that *investment* in the G-20 remains well below pre-crisis trend, by 18 percent. The losses are especially large for advanced deficit economies but also in advanced surplus and emerging deficit economies. For the G-20 as a whole, consumption is only mildly below trend; however, this masks regional variation, with consumption depressed in advanced deficit economies and above pre-crisis trend in emerging economies.
- A supply-side decomposition of output losses shows that for the G-20 as a whole the main driver has been *productivity losses*, followed by *labor force participation* and *employment losses*. Weak total factor productivity explains about 5 percentage points of the output losses in all analytical groups, while labor force participation and employment rates account each for 1 percentage point and are an issue mostly for advanced deficit economies.<sup>3</sup> While the capital-labor ratio appears to have recovered to trend on average in the G-20, this masks a strong slowing of capital accumulation in line with the employment losses, and consistent with the large investment losses implied by the demand side decomposition. The capital-labor ratio also shows worrisome developments from the perspective of rebalancing demand, as it has been above-trend in emerging surplus countries (where in some key members investment has been too high) and a below trend in advanced surplus countries (where investment has been too weak).

**G-20: Supply Side Decomposition 1/ 3/**  
(percentage pts; contribution to output losses from trend)



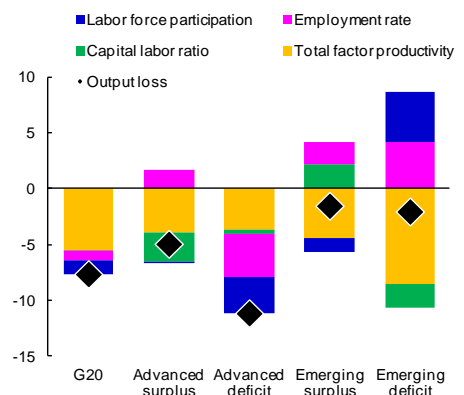
Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

1/ Excludes Argentina, Saudi Arabia and India.

2/ Investment contribution to output losses is based on a demand-side decomposition; excludes Russia.

3/ GDP per capita

**G-20 Analytical Group: Supply Side Decomposition 1/**  
(percentage pts; contribution to output losses from trend; 2013)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

1/ Excludes Argentina, Saudi Arabia and India.

3. **Below trend output levels across the G-20 reflect both cyclical and structural factors.** Output gaps remain significantly negative in advanced deficit countries, suggesting that the demand shortfall is the binding constraint to growth in the short term. However, potential output was also damaged following the Great Recession in many economies. The WEO baseline projections for the medium term suggest permanent crisis-related output losses for the G-20 as a whole, driven by large losses for advanced economies. One could argue that the pre-crisis boom and productivity hike were not sustainable and that the underlying output gaps and TFP losses are smaller than currently estimated. But calculating the trend over a longer period yields

<sup>3</sup> Employment is above pre-crisis trend in the other groups, while labor force participation has been above trend in emerging deficit economies and close to trend in surplus economies.

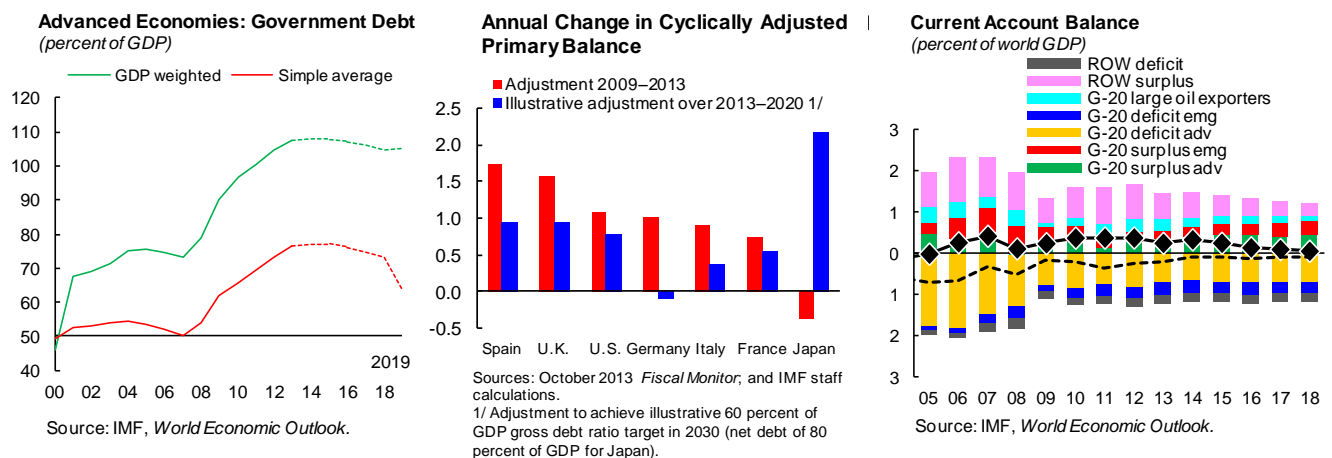
similar losses. These losses suggest that the scarring effect of the crisis (for instance, difficult-to-reverse misallocation of capital over pre-crisis booms, reductions in research and development spending) may have dominated its cleansing effect (the fact that the least productive firms are forced first out of business).

**4. Going forward, the G-20 is now on a lower potential growth path than pre-crisis.**

The trend growth rate slowed in recent years as underlying growth drivers have weakened, notably in emerging economies. This slowdown likely reflects various factors, some of which may be desirable, including policy efforts in China to steer demand away from investment and towards consumption. In emerging economies as a whole, there are now fewer remaining opportunities to achieve “catch up growth” in productivity by reallocating production away from agriculture and adopting existing technologies from elsewhere. Structural bottlenecks and slow progress in structural reforms hold back growth in many countries. Finally, slower growth in the working age population in advanced and emerging economies is reducing overall growth rates.

**5. The narrowing of external imbalances has occurred alongside compressed demand in advanced deficit economies.**

External imbalances have declined appreciably since the crisis reflecting in part healthy adjustments, such as a rebound in low private saving and, more recently, improvements in fiscal balances in external-deficit economies, and resilient domestic demand in key emerging surplus economies. However, a sizable part of the narrowing of imbalances also reflects weaker demand in advanced deficit economies, while adjustments toward desirable policies over the medium term have been modest in general and played only a small role in reducing global imbalances so far. Against, this background, there remains a risk that global imbalances may re-emerge when advanced deficit economies close their output gaps, especially if desirable policy adjustments are not taken.<sup>4</sup> On the fiscal front, despite sizable consolidation efforts, imbalances remain large in advanced economies, partly on account of slow growth. Fiscal deficits are still above their pre-crisis levels, and public debt is projected to stabilize only at very high levels—too high to rebuild needed policy space or to deal with future challenges such as aging.



<sup>4</sup> See IMF (2013): “Imbalances and Growth: Update of Staff Sustainability Assessments for Selected G-20 Members”: <https://www.imf.org/external/np/g20/pdf/map2013/map2013.pdf>.

## POLICIES FOR GROWTH AND REBALANCING

*For a successful recovery, advanced economies should continue supporting their still weak demand, while emerging economies should prepare for tighter external financing conditions. Bringing output back to potential though is unlikely to be enough to deliver robust recovery. In both advanced and emerging economies, structural reforms are also needed to lay the foundations for stronger medium-term growth. Moreover, further progress on internal and external rebalancing is needed in surplus and deficit economies to ensure sustainable medium-term growth. The beneficial spillovers from joint action could be sizable.*

6. **Joint action is needed to achieve the G-20 shared objectives of strong, sustainable and balanced growth.** Policies should aim at three goals: getting output back to potential; increasing potential; and further rebalancing growth, focusing on external demand in deficit countries and internal demand in surplus countries. The relative weights on these three objectives should depend on the relative contributions of output gaps and weaker potential to output losses. If (current and projected) output losses largely reflect weaker potential, then policies should focus on increasing potential output, and the need for rebalancing policies may be less—as the observed narrowing of imbalances would be more durable. In contrast, if the output gap is larger, then getting output back to potential while further rebalancing growth should be a priority. While there is an inherent uncertainty in estimating output gaps (as potential output is unobservable), the above analysis suggests that output losses reflect both large output gaps and weaker potential.

### **Bring Output Back to Potential**

7. **Monetary policy should continue supporting demand in advanced economies in view of the still large output gaps and ongoing fiscal consolidation.** With prospects improving, it will be critical to avoid a premature withdrawal of monetary policy accommodation, including in the United States. In the euro area, more monetary easing is needed, to raise the prospects of achieving the ECB's inflation objective, complemented with further repair of banks' balance sheets and efforts to complete the banking union. In Japan, the BoJ should watch carefully for risks of a loss of momentum in inflation expectations, and it is essential to meet the overall goals that there is timely implementation of the other two arrows of Abenomics, structural reform to boost investment, employment, and productivity, and strong medium-term fiscal consolidation plans. Fiscal consolidation is still needed in most countries but should remain gradual and anchored in credible and concrete medium-term plans (see below). Consolidation should rely on a more balanced distribution of spending cuts and tax revenues, where revenue ratios are already high; where there is scope to raise revenues, the emphasis should be on broadening the tax base.

8. **Meanwhile, in emerging economies, credible macroeconomic policies and frameworks, alongside exchange rate flexibility, are needed to weather the turbulence.** The strengthening of the recovery and future unwinding of accommodative monetary policy in advanced economies will result in tighter external financial conditions, lower capital inflows, and

possibly further bouts of volatility in capital flows for emerging economies. In economies where inflation is still relatively high, or where policy credibility has come into question, further monetary policy tightening in the context of strengthened policy frameworks is necessary. On the fiscal front, emerging economies need first and foremost to ensure policy credibility, subsequently buffers should be built to provide policy space for counter-cyclical policy action. Exchange rate flexibility should continue to facilitate external adjustment, particularly where currencies are overvalued, with FX intervention—for countries with adequate reserves—targeted to smooth excessive exchange rate volatility or prevent financial disruption. Finally, prudential policies should ensure that financial institutions address credit quality and profitability problems, which may have resulted from the recent rapid credit growth or lower capital inflows, while containing excessive leverage and foreign exposure.

### **Further Rebalance Growth**

9. **Gradual fiscal consolidation should proceed in the medium term, while better supporting long-run growth.** It should be anchored in concrete and credible medium-term plans, which are notably lacking in the United States and Japan. Moreover, past fiscal consolidation in advanced economies has been heavily focused on wage cuts and public investment, exacerbating the trend decline in public capital stocks. Going forward, the design of fiscal policy should be careful to support the long-run growth potential of these economies, including by enhancing infrastructure investment, which will also boost demand. In India, there is a need for sustainable fiscal consolidation and reorientation of spending toward investment and social sectors, requiring subsidy reform and an overhaul of taxation. In Brazil, strengthening the fiscal framework to rebuild fiscal buffers and bolster confidence would entail adherence to a primary balance that puts gross debt firmly on a downward path and more fully recognizing contingent fiscal risks.

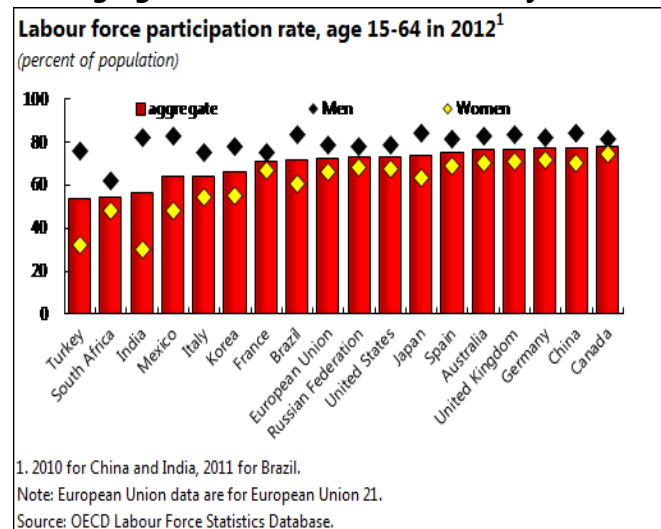
10. **Further action and cooperation is needed to avoid a resurgence of global imbalances as the recovery proceeds and ensure sustainable medium-term growth.** Making growth more balanced and sustainable requires boosting internal demand in surplus countries and shifting from internal to external demand in deficit countries. In *surplus* countries, reforms are needed to increase domestic demand or modify its composition. Specifically, in *China*, steadfast implementation of the recently announced reform blueprint is required to achieve desired rebalancing toward consumption through (i) improving financial intermediation; (ii) strengthening social safety nets; (iii) fostering competition by opening up the services sector and leveling the playing fields; and (iv) allowing more flexibility in the exchange rate by reducing intervention over time. In *Germany*, policy should focus on boosting domestic demand, especially investment, through tax and financial system reform, but also services sector liberalization and higher public investment (see below). In *deficit* economies, structural reform is needed to improve external competitiveness (France, Italy, South Africa, Spain, and U.K.) and remove supply bottlenecks to strengthen exports (India and South Africa). In some cases (e.g. China), the implementation of rebalancing reforms could somewhat slow near-term growth, but they are vital in containing vulnerabilities and achieving sustainable growth. In other cases, structural reforms can contribute to both rebalancing and stronger growth (see below).

## Increase Potential<sup>5</sup>

11. **Stronger growth rates would be sustained by more ambitious reforms to close the gap between current policies and more favourable structural policies.** While some trends and differences across countries in economic performance are long-standing and reflect underlying economic conditions, there is a gap between current growth trends and what could be achieved under a more ambitious - but nevertheless realistic - set of policies based on international best practice. Across the G-20, there are significant differences in economic performance as a result of structural policy settings that could be more growth-friendly. Equally, uneven performance within economies, for example between different groups in the labour market, indicates differences in the effectiveness of policies for the less well performing groups. Essential to raising potential growth, structural reforms are important also to promoting inclusive growth.

12. **There is a structural “employment-policy gap” reflected in high long-term unemployment and low participation in labour markets, including many people stuck in informal or low-quality jobs.** High unemployment, including the post-crisis increase, has an important component that will not disappear as activity recovers because it results from underlying skill-mismatches and the often adverse interaction between taxation, social protection, and work incentives, especially for low-income workers. In some economies, the lack of jobs risks a quasi-permanent reduction in labour force participation, for example through disability schemes that are too loosely designed and lack work incentives, rather than unemployment. The creation of jobs, notably in the formal sector, has long been held back in some economies by labour market institutions and disincentives created by tax-benefit systems.

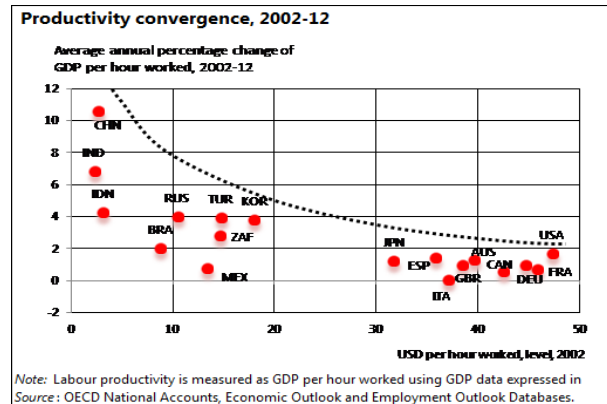
13. **Labour participation is relatively low for specific groups, including women, youth, older workers and the low skilled. Mostly in emerging economies, informal sector jobs are widespread.** These groups are especially vulnerable to the potential negative impact of tax-benefit systems, and the effects of labour market institutions on job creation and participation. These vulnerable groups face specific challenges such as poor child care support, discrimination, lack of effective vocational training, and incentives to early retirement. People in these groups are most likely to have low quality jobs, either with less secure contracts in “dual” labour markets or outside the formal sector.



<sup>5</sup> This section is prepared by the OECD and the WBG.



14. **There is substantial potential for reforms to support faster trend productivity growth.** Closing the very large differences in productivity across countries, together with continuing to push out the technological and efficiency frontier, is the main driver of long-term growth. The speed of “catch up” in productivity and the rate of innovation depend in part on supportive policy settings. The ability of countries to achieve “catch up” in productivity has differed widely over the past decade, with underperformers among both emerging and advanced economies.

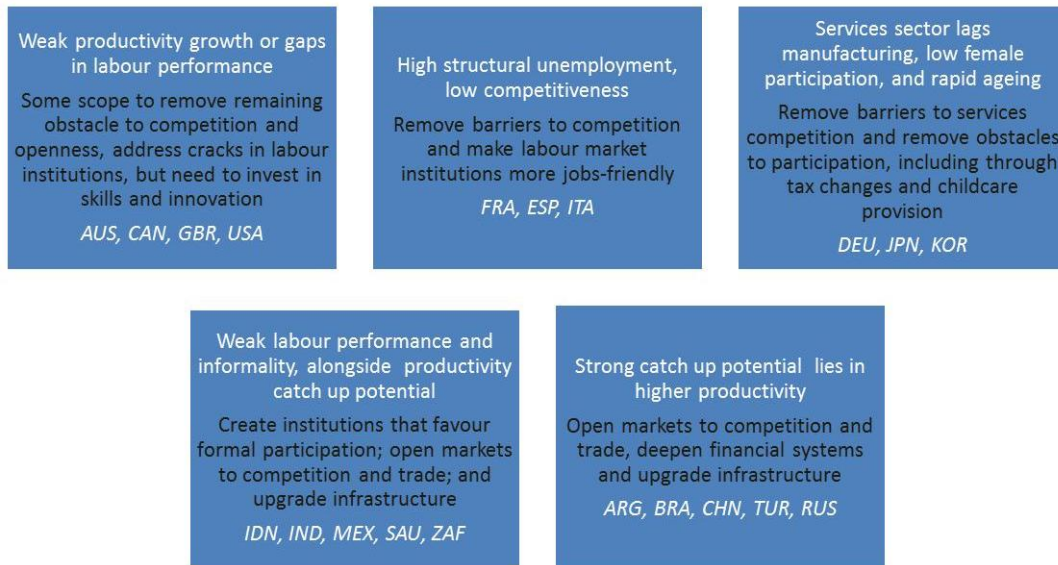


15. **Weak underlying productivity growth partly reflects less than fully supportive policy settings.** Increasing productivity over the medium term depends in part on faster progress in capital deepening, development of global value chains, and stronger competition that reallocates resources to more dynamic firms and spurs innovation. There is significant scope in these areas to make conditions more favourable to higher productivity:

- **Investment, notably in infrastructure, and more efficient use of capital** is held back by a range of obstacles. There are large investment needs to upgrade infrastructure, especially in emerging economies but in some advanced economies as well. Barriers include unfavourable regulatory conditions, financial regulations and lack of depth in markets for long-term financing, constrained public investment, and lack of capacity to plan and deliver projects. The quality and efficiency of investment needs to be increased, not least in some emerging economies where investment levels are high, including through an improved investment climate to boost the productivity of investment.
- **Trade and the development of global value chains (GVCs)** are constrained by remaining barriers in manufacturing and agriculture, lack of progress in opening services markets, a range of behind-the-border restrictions and the need to improve trade facilitation. Indeed, some countries have resorted to new protectionist measures since the crisis. The interconnected nature of production in GVCs magnifies the cost of protectionist measures and highlights the importance of services sector performance as input into traded goods.
- **Competition** in many markets, notably in the services sector, is held back by regulations that restrict activities to the detriment of consumers, users of intermediate products and new innovative firms. The cost and complexity of regulatory processes play a major role in deterring new businesses. Gaps in the enforcement of competition policy further hinder effective competition.

16. **The policy gaps to raising potential growth in the G-20 vary across countries, but there are common challenges.** Based on where there is scope to raise potential growth, five groups of countries that face similar challenges can be distinguished. Among advanced

economies, some have good labour performance overall but are weaker in terms of productivity, while others achieve better productivity but with weaker labour outcomes. In some advanced economies, a successful export performance masks weaker services performance and low female participation combined with rapid ageing. In emerging economies, common challenges include making the most of the “catch up” potential in productivity and ensuring adequate and efficient infrastructure investment. In addition, some emerging economies are held back by high labour informality.

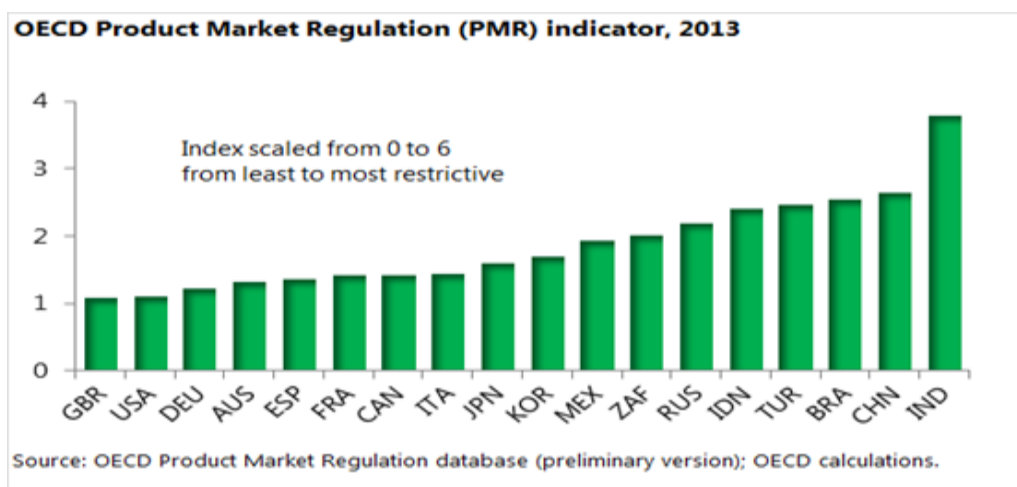


17. **There are common policy priorities for jobs, investment, competition and trade to close the structural gaps hindering strong and sustainable growth in the G-20.** International cooperation is required to close the gaps in policy in the areas of international taxation, financial regulation and trade policy to achieve a consistent outcome. While specific national needs will differ, the majority of G-20 countries face challenges to varying degrees to open markets, increase competition through less restrictive regulation, and develop support for more efficient long-term investment. A more favourable business climate would help to reap greater benefits from catch up in productivity in emerging economies. The right mix of labor policies will depend on the particular challenges faced by each country. Some advanced economies need to prioritize measures to tackle structural unemployment, while others need to raise female participation or address issues for specific groups. Emerging economies with low formal participation should prioritize creating more favorable conditions for high-quality jobs. Key priorities for the G-20 include:

- **Fostering job creation and reducing barriers to labour participation by:**
  - ✓ **Addressing long-term unemployment** and permanent labour force exit through implementation of an activation and mutual obligations approach; use of effective active labour market programmes (ALMPs); and restricting early retirement and the use of “inactive benefits” (such as disability benefits).

- ✓ **Increasing job creation** through reducing non-wage costs, especially for low earnings, reforming labour regulations to balance social protection and the ability to adapt to changing needs, and ensuring that wage bargaining works well.
- ✓ **Reducing obstacles for participation** of specific groups, including women; older workers; youth; and low-skilled workers. This includes support for childcare and measures to promote gender equality; avoiding financial disincentives for older workers to stay in the labour force; and using in-work benefits and an appropriately set minimum wage.
- ✓ **Raising skills** to improve employment prospects and ages, including through better provision of education, raining with targeted support for vulnerable groups and well-designed vocational programmes for youth.
- ✓ **Removing disincentives to formal participation** including through extending safety nets, conditional cash transfer programmes in emerging economies, and ensuring that labour regulations and tax-benefit systems do not create disincentives.
- ***Increasing finance for long-term investment and enhancing the efficiency of capital by:***
  - ✓ **Deepening private provision of finance for long-term investment** through avoiding undesired regulatory obstacles, encouraging sounder bank business models, development of appropriate financing vehicles including for institutional investors, and a stable regulatory environment.
  - ✓ **Removing restrictions on foreign direct investment** and ensuring a level playing field between public and private operators.
  - ✓ **Increasing the supply of public investment** through development of the capacity to undertake Public-Private Partnerships (PPPs), increasing resources of multilateral development banks (MDBs), and raising public sector capacity to realise projects.
  - ✓ **Improving conditions for sound returns on investment projects** through developing user charging mechanisms, improving infrastructure delivery capacity, and more favourable overall regulatory and competitive conditions.
- ***Reducing barriers to trade and the development of global value chains.***
  - ✓ **Restore credibility to the G20 commitment to a standstill on new protectionist measures.** Review protectionist measures put in place since the crisis with a view to unwinding them.
  - ✓ **Further reduce barriers to trade in industrial goods and agriculture.**
  - ✓ **Advance services liberalisation**, including by reducing regulations in sheltered sectors.
  - ✓ **Reduce obstacles to trade** including discriminatory behind-the border measures, domestic regulations and safeguards, and cumbersome border procedures.
  - ✓ **Reduce barriers to cross-border investment.**
- ***Increasing competition to raise productivity and innovation.***
  - ✓ **Ease product market regulations** that restrict competition and limit entry of new firms.

- ✓ **Improve regulatory design and cooperation** to reduce costs to businesses entering new markets and improve the predictability of policy.
- ✓ **Strengthen competition law enforcement** to ensure that markets are open and competitive.
- ✓ **Improve the business environment**, including through better access to finance, a sound framework for investor protection and contract enforcement.



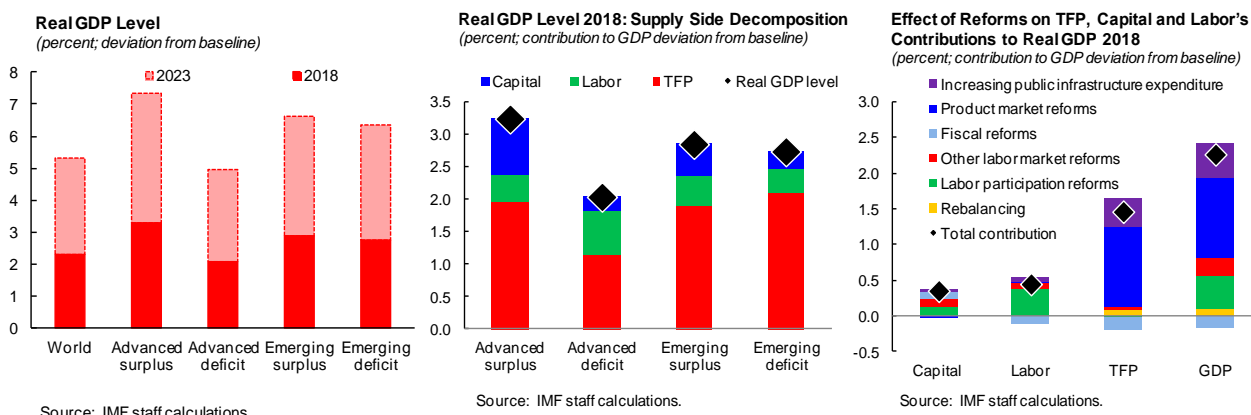
### Upside Reform Scenario<sup>6</sup>

18. **Model simulations suggest that the above reforms would deliver stronger medium-term growth.** A plausible reform scenario is simulated with the IMF Research department G-20 model to illustrate the medium-term impact of these policy actions on the shared growth objectives.<sup>7</sup> The model is calibrated using the 2012 OECD estimates about the impact of product and labor market reforms on productivity and employment. The specific policy assumptions for each country are based on IMF desks' assessments of policy gaps across six reform areas—fiscal, rebalancing, labor supply, other labor market reforms, product market reforms, and infrastructure investment (see Box 1), which are used to scale the OECD estimates for the impact of reforms. The policies assumed in the scenario raise world real GDP by about 2¼ percent (or 2¼ trillion U.S. dollars) in 2018 (relative to the October 2013 WEO baseline), implying 0.5 percentage points higher growth over the next five years. Such gains would be sustained over a longer horizon until all the effects of the reforms have played out. World output gains stem largely from productivity increases, with substantial contributions from higher employment and capital accumulation.<sup>8</sup> Product market reforms contribute the most to the higher growth, followed by labor participation reforms and infrastructure investment.

<sup>6</sup> This section is prepared by the IMF based on OECD estimates about the effect of structural reform on productivity.

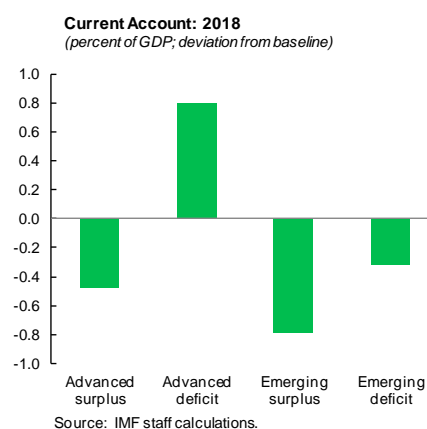
<sup>7</sup> The scenarios are based on observed and thus achievable magnitude of reforms in countries that have reformed over the past 10 years.

<sup>8</sup> In line with what would be desired, contribution from capital is more important in advanced surplus countries, while employment contribution is more important in advanced deficit countries.



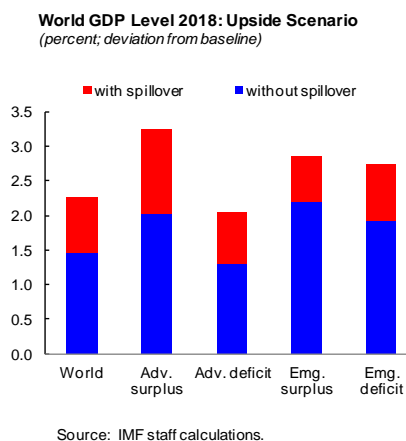
**19. Policies aimed at boosting domestic demand in surplus economies and shifting it from internal to external demand in deficit economies, lower sizably global imbalances.**

The assumptions about surplus and deficit economies in this scenario are as follows: (i) *China*—reduction in private saving rate, higher overall cost of capital due to better pricing of risks and liberalizing interest rates, gradual shift towards more productive investment, and increase in government transfers to strengthen social safety nets; (ii) *Germany*—a boost in investment and a small economy-wide increase in productivity driven by services; (iii) *United States*—increase in saving rate. While rebalancing policies do not contribute much to medium-term growth (except in advanced surplus countries where they boost investment), they are needed to reduce risks to the sustainability of growth arising from domestic and external imbalances, including risks of financial crises. Specifically, the reform scenario policies reduce current account imbalances by 1/2 to 1 percentage points of GDP for each analytical group, except emerging deficit countries.



**20. While the gains stem mostly from policies that countries need to implement for their own good, joint action could produce large beneficial spillovers in the longer term.**

The reform scenario suggests that most of the gains stem from policies that are beneficial from the country's own perspective. However, about 1/3 of the world output gains in the medium term stem from positive productivity spillovers between members, the main source of growth spillovers. Productivity increases in the home country lead to productivity spillovers in trade partners through technology diffusion, the more so the higher the capacity of the recipient country to adopt technological innovations.<sup>9</sup> Product market reforms and infrastructure, to the extent that they increase productivity, are the strongest sources of growth spillovers. Finally, labor market



<sup>9</sup> Productivity spillovers are higher for countries closer to the technological frontier which moves further out under the reform scenario.

reforms which increase the domestic supply of labor do not generate productivity spillovers; however, they can create positive welfare spillovers, if consumers in other countries benefit from cheaper imported goods.

21. **Even more importantly, cooperative action can reduce the risk of renewed global turmoil.** Cooperative policies that raise growth, reduce global external imbalances and the internal distortions that give rise to them, would improve market confidence and reduce risks. Demonstrated commitment to these joint actions would send a strong signal to market participants about the importance that global policy makers attached to the objective of reducing global risks through policy cooperation.

## Box 1. Policy Assumptions for the Reform Scenario

The reform scenario consists of six layers: (i) fiscal consolidation over the medium term; (ii) rebalancing reforms in China, Germany, and the United States; (iii) product market reforms; (iv) labor participation reforms; (v) other labor market reforms; and (vi) infrastructure investment. Specifically:

**Fiscal Reforms.** Fiscal consolidation is based on the country desks' estimate of the gap between the 2013 cyclically-adjusted fiscal balance and the desirable future fiscal balance. An attempt is made to ensure consistency with the desirable fiscal balance underlying the External Balance Assessment and the External Sector Report, though these numbers are still subject to revisions. The fiscal consolidation is phased in progressively over 5 years, except for Japan where it is phased in over 10 years.

**Rebalancing reforms.** In China, additional reforms to education, healthcare, and pensions raise public transfers by 1.1 percent of GDP and reduce private savings by 1 percent of GDP over 5 years. Financial sector reforms help better pricing of risks, raising its cost to tradable sector firms by 50 basis points after 5 years. The financial sector reforms also result in a shift to higher quality investment, implying a reduction in the private capital depreciation rate of 50 basis points after 5 years. These policies are accompanied by a fully flexible exchange rate. In Germany, reforms are implemented that lower the cost of capital by 90 bps and increase economy-wide productivity by 1 percent after 5 years. In the United States, reforms encourage an increase in the private saving by 0.6 percent of GDP after 5 years.

**Labor and Product Market Reforms.** Three types of structural reforms are considered: product market reforms, labor participation reforms and job-friendly labor market reforms. *Product market reforms* (PMR) and *labor market reforms* to ease overly restrictive employment protection legislation (EPL) boost productivity. Reforms that increase the labor force participation rate include increases in childcare spending (CHILDC) and pension reforms (PENTOT). Finally, *other labor market policies* cover active labor market policies (ALMP) and in some cases reductions in average replacement rates (ARR). The magnitude of reforms is based on OECD inputs and scaled by desk priorities. For instance, PMR reform is defined as a 20 per cent reduction in the degree of regulation in services industries, based on the average decline observed in OECD countries that have made reforms over the past 10 years. Similarly, EPL reform corresponds to a 20 per cent reduction in the strictness of employment protection legislation based on the magnitude of observed reforms in OECD countries over the past 10 years. If the reform is ranked as first priority by desks, the full OECD shock is implemented. For second priority reforms, 75% of OECD shock is implemented, and if reform is ranked as low priority (3), 50% of OECD shock is implemented. Product market reforms are phased in gradually and the productivity shocks become fully credible in 2018 (see Table 1 for the rule-of-thumb assumption and Table 2 for impact in 2018).

**Infrastructure Investment.** The reform scenario includes a permanent increase in public investment by  $\frac{1}{2}$  percent of baseline GDP in the United States, Germany, Brazil, India, and Indonesia. The increase takes place gradually over two years and is financed by a reduction in general transfers.

**Table 1. OECD rules of thumb - steady-state or 10-year gains**

Effect on:	Indicator	Shock	Size of impact
<b>Productivity</b>			
<i>Total Factor Productivity</i>	Product Market Regulation index	10% reduction	1.3% level gain (OECD)
	(Upstream service industries)		1.7% level gain (BRICS)
<i>Investment (short-run gain)</i>		10% reduction	0.15p.p. increase in investment share or 1.4% increase in private investments
<b>Labour participation</b>			
	Labour tax wage	10% reduction	0.7 p.p. increase in participation rate (decrease in unemployment rate)
	ALMP expenditure (per unemployed person over GDP per capita)	10% increase	0.04 p.p. increase in participation rate (decrease in unemployment rate)
<b>Older workers</b>			
	Implicit tax on working at old age	10% reduction	0.4 p.p. increase in participation rate
	Standard retirement age	1 year increase	0.6p.p. increase in participation rate
<b>Females</b>			
	Childcare spending (per child)	10% increase	1.2 p.p. increase in female participation rate

**Table 2. Impact of Reforms**

	Impact on Productivity (in percent)				Impact on Participation rate (in percentage points)				Impact on Unemployment rate (-) (in percentage points)			
	PMR	Priority rank	EPL	Priority rank	CHILDC	Priority rank	PENTOT	Priority rank	ALMP	Priority rank	ARR	Priority rank
Argentina	1.22	1.0	...	...	...	...	...	...	...	...	...	...
Australia	0.54	3.0	0.03	3	0.24	3	0.06	3	...	3	...	3
Brazil	1.34	1.0	0.12	1	...	...	...	...	...	...	...	...
Canada	1.03	2.0	0.03	3	0.68	3	0.05	3	0.22	1	...	3
China	1.48	2.5	0.13	3	0.67	2	...	3	...	3	...	3
France	1.16	1.0	0.10	1	0.12	3	0.51	1	0.08	1	0.59	1
Germany	0.69	2.0	0.07	3	0.52	1	0.12	1	0.05	3	0.17	3
India	1.77	1.0	0.13	1	0.67	2	...	3	0.21	1	...	3
Indonesia	1.79	1.0	0.15	1	...	3	0.07	2	0.21	1	...	...
Italy	1.25	1.0	0.10	2	0.23	2	0.05	3	0.16	1	0.20	3
Japan	1.10	1.0	0.10	1	0.56	1	0.27	1	...	1	...	3
Korea	0.85	1.0	0.16	1	0.89	1	0.06	2	0.21	1	...	3
Mexico	0.89	3.0	0.06	3	...	3	...	3	...	3	...	3
Russia	1.44	1.0	0.10	2	0.67	2	0.09	1	0.21	1	...	2
Saudi Arabia	0.64	3.0	...	2	0.67	2	...	3	0.16	2	...	...
South Africa	2.33	1.0	0.12	1	...	3	...	3	0.21	1	...	3
Turkey	2.00	1.5	0.18	1	0.67	2	0.04	2	...	3	...	3
United Kingdom	0.50	3.0	0.03	3	...	3	0.07	3	0.15	2	...	3
United States	0.41	3.0	...	3	0.43	2	0.07	2	0.25	1	...	3
Other Euro Area	0.30	1.0	0.04	...	0.15	...	0.04	...	0.06	...	0.17	...
Other European Union	...	...	...	...	...	...	...	...	...	...	...	...

Source: IMF staff calculations, with inputs from the OECD.