

**EXECUTIVE  
BOARD  
MEETING**

SM/15/92  
Correction 1

June 2, 2015

To: Members of the Executive Board

From: The Secretary

Subject: **Fiscal Policy and Long-Term Growth**

Board Action: The attached corrections to SM/15/92 (4/21/15) have been provided by the staff:

**Evident Ambiguity** **Pages 8 and 20**

**Typographical Errors** **Pages 11 and 31 (Figure 14, right panel)**

Questions: Mr. Senhadji, FAD (ext. 38380)  
Mr. Akitoby, FAD (ext. 36646)



**12. The pace of fiscal consolidation is important for medium- to long-term growth.** A vast literature, largely from the pre-crisis period, emphasizes the scope for expansionary fiscal adjustments—not only for advanced economies, but also for emerging market economies and low-income countries.<sup>6</sup> However, in a deep and lasting recession, fiscal consolidation is likely to have a negative short-term impact on growth when there are large negative output gaps and monetary policy is constrained by the zero lower bound and/or inoperative credit channels. In such an environment, consolidation policies can be harmful to longer-term growth due to possible hysteresis effects, whereby temporary layoffs become permanent (De Long and Summers, 2012). Furthermore, in a deep recession, investment is likely to remain low for a prolonged period of time, reducing further potential output. Overall, these arguments highlight the need to carefully calibrate the pace of fiscal adjustment during a deep recession. In particular, countries that are not under market pressure should proceed with gradual fiscal consolidation, anchored in a credible medium-term plan (Blanchard and Cottarelli, 2010; IMF, 2013b; Jaramillo and Cottarelli, 2013).

**13. The composition of adjustment matters as well.** The appropriate mix of revenue and expenditure measures depends on each country's specific conditions. Policymakers need to consider the durability of the selected measures and their impact on growth and equity. For advanced economies, expenditure-based fiscal consolidations have been shown to be more durable (Alesina and Ardagna, 2012), and have been associated with growth in private investment (Alesina and others, 2002). In contrast, for LICs Baldacci and others (2004) find that revenue-based adjustment leads to more durable consolidation episodes, with greater benefits for growth. In addition, credit-constraints matter: in the presence of high private debt and credit supply restrictions, deficit reductions achieved through tax-base broadening while protecting public investment are supportive of medium-term growth in both advanced and emerging economies (Baldacci, Gupta, and Mulas-Granados, 2015). Large expenditure-based consolidations tend to increase inequality, which can undermine long-term growth (Ball and others, 2013; Woo and others, 2013; Berg and Ostry, 2011). Some degree of pragmatism is therefore needed to strike the proper balance between revenue and spending measures.<sup>7</sup>

- Faced with sluggish growth and high fiscal deficits (10 percent of GDP in 1986), Malaysia cut current spending and rationalized inefficient public investment. As a result, the budget was close to balanced during most of the 1990s, the private investment-to-GDP ratio more than doubled, and annual growth averaged around 8 percent. Similarly, in the Netherlands, an

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can reduce annual average growth by more than 0.1 percentage point. Kumar and Woo (2010) confirm this effect on a sample of advanced and emerging economies. For developing countries, estimated thresholds are generally much lower: Pattillo and others (2011) find that the marginal effect of additional debt becomes negative when the net present value of debt reaches 20-25 percent of GDP. Clements and others (2004) obtain a similar result for low-income countries and external debt.

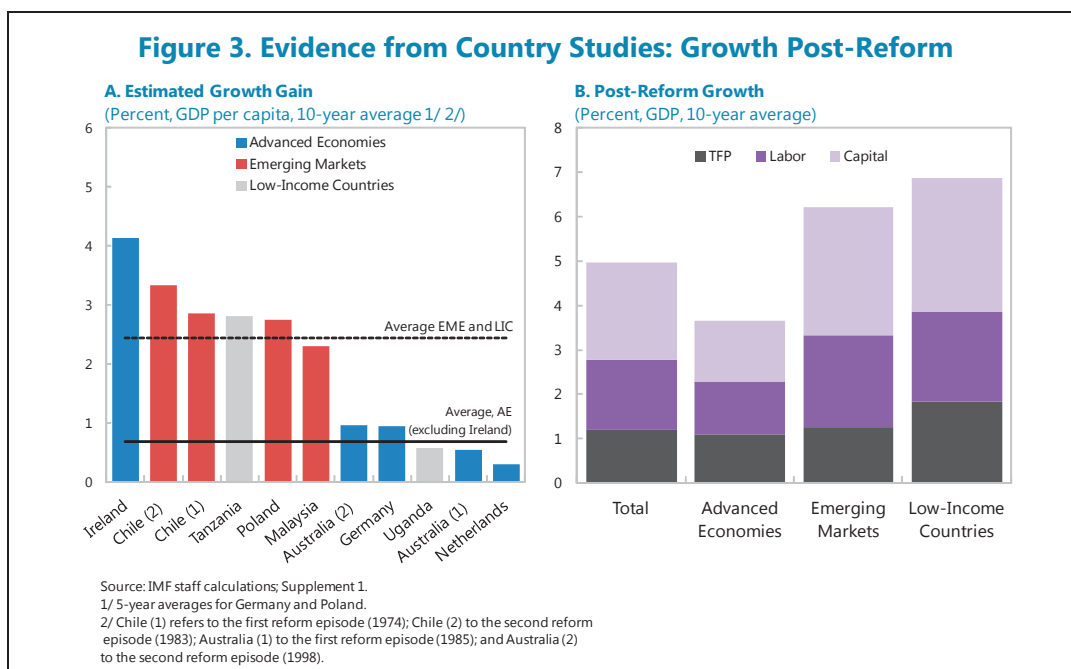
<sup>6</sup> Key papers include Alesina and Perotti (1995, 1996); McDermott and Wescott (1996); Alesina and Ardagna (1998); Bleaney, Gemmel, and Kneller (2001); Alesina, Ardagna, Perotti, and Schiantarelli (2002); Baldacci and others (2004); Gupta and others (2005).

<sup>7</sup> For a fuller discussion on the nexus between the composition of fiscal adjustment and growth, see IMF (2013b).

Poland. Baier and Glomm (2001), and de Hek (2006) present endogenous growth models where public investment increases total factor productivity and ultimately long-term growth.

**17. Country studies reflect the potential of fiscal reforms to affect growth through these channels (Figure 3; and ~~SM/15/xx~~SM/15/92, Supplement 1 ).** Using the Synthetic Control Method (SCM), country studies show a significant increase in average growth during the 10 years following fiscal reform episodes, compared with the counterfactual (Figure 3a). However, the limitations of the SCM suggest interpreting the results with care (Box 1). While biases may run in both directions, one should be particularly cautious in attributing the increase in growth entirely to fiscal reforms, as they were often part of broader reform packages (e.g., reforms of labor and product markets) that also played an important role. With this caveat, the country studies find that:

- In advanced countries, excluding Ireland which experienced a significantly higher growth dividend, per capita growth in the post-reform period is about  $\frac{3}{4}$  percentage points higher than the counterfactual. In developing economies, the estimated divergence in growth paths reaches almost  $2\frac{1}{2}$  percentage points, on average.
- Relative contributions of capital, labor, and total factor productivity (TFP) to total growth showed different patterns across income groups: while advanced economies experienced relatively balanced contributions, in emerging markets and LICs capital accumulation was the dominant growth driver (Figure 3b).
- Shifts in the contribution of capital, labor, and TFP to growth at times coincided with the focus of fiscal reform efforts: for example, in cases where an overhaul of labor taxation and reductions in the tax wedge were at the core of tax changes (e.g., Ireland, the Netherlands), the contribution of labor in total output growth increased after the reform.

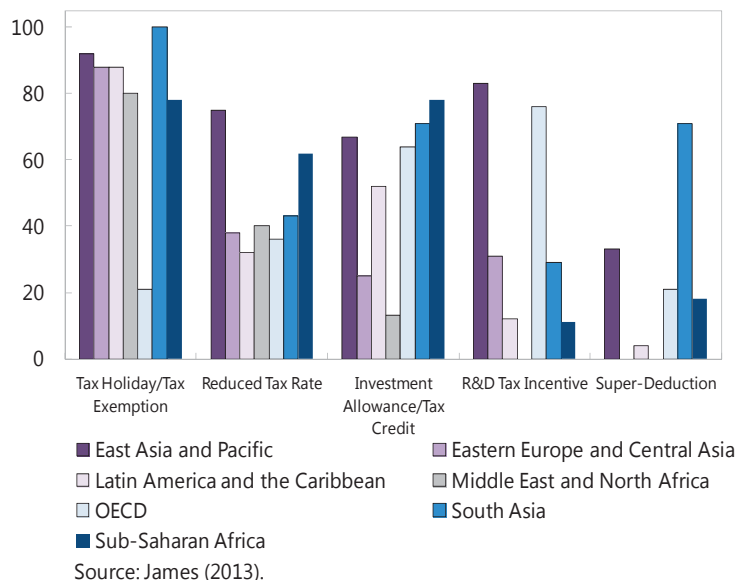


**26. Tax incentives can significantly erode the revenue base without achieving offsetting benefits from increased investment, unless they are properly designed and limited.**

Tax incentives take several forms, such as tax holidays, preferential tax treatments in special zones or targeted allowances for certain investments (Figure 8). The choice of incentive, and the design details, matter critically for the effectiveness of tax incentives (IMF, World Bank, OECD, and UN, forthcoming). Well-targeted incentives that directly reduce the cost of capital, such as accelerated depreciation schemes, investment tax credits, and super deductions, have been used with some success in advanced countries (a discussion on incentives for R&D can be found, for example, in the section *Policies to Increase Total Factor Productivity*). In contrast, open-ended and profit-based tax holidays are less effective and can erode the tax base indefinitely. And they can be very costly: for instance, Cubeddu and others

(2008) estimate the cost of CIT incentives in 15 Caribbean countries at around 5½ percent of GDP, on average; and Villela and others (2010) estimate the cost of preferential treatments under the income tax in Latin America to range between ½-6 percentage points of GDP.<sup>13</sup> This argues for a rigorous cost-benefit analysis of tax incentives. The investment climate more generally is an important determinant of the level of foreign investment: FDI is eight times stronger for countries with good investment climates (James, 2013). For example, an assessment of tax incentives that were introduced in Malaysia in 1986 concluded that—while they succeeded in stimulating domestic investment—foreign investors were primarily influenced by other factors (including macroeconomic stability and the quality of infrastructure, World Bank, 1991). At the same time, they came at a very high cost (2.2 percent of GDP).<sup>14</sup>

**Figure 8. Regional Prevalence of Tax Incentives**  
(Percent)

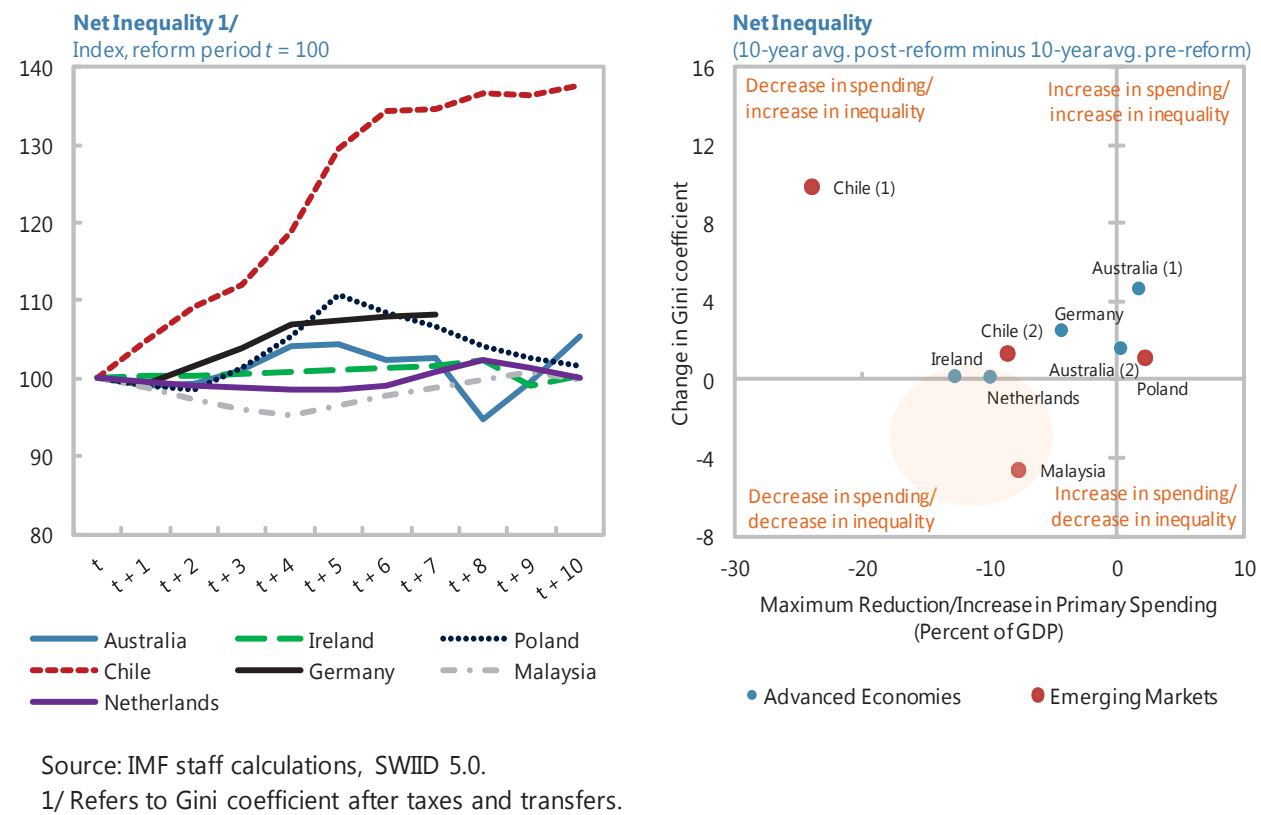


<sup>13</sup> For further discussion please see IMF (2011).

<sup>14</sup> Cost ~~estimate for~~ refers to direct revenue foregone in 1991. The main incentives that were introduced included (i) five-year tax holidays for priority sectors; (ii) investment tax and industrial tax allowances; and (iii) export incentives, such as tax abatements and tax allowances—(see World Bank, 1992, [Annex 4A for](#) ~~the methodology~~).

equity. In particular, measures such as public employment reductions or pension freezes can increase unemployment and reduce the purchasing power of lower income groups, with adverse consequences for the income distribution (Ball and others, 2013; Woo and others, 2013). In the country studies, inequality worsened especially where current spending cuts involved reductions in social benefits, including in Chile and Germany (Figure 14). In Australia, income inequality widened in part because the reforms in the 1980s increased wage dispersion, and the introduction of the GST in the early 2000s reduced the progressivity of the tax system (Singh and others, 1998; Greenville and others, 2013).

**Figure 14. Trends in Inequality Post-Reform**



**44. Appropriately designed, fiscal reform packages can serve both growth and equity objectives.**<sup>19</sup> Cross-country analysis finds that a reduction in inequality does not diminish the association between fiscal reforms and growth accelerations. For example, if the proceeds of a regressive, yet growth-enhancing tax reform are used to finance higher health and education spending, the overall outcome may be higher growth and lower inequality (Muñoz and Cho, 2004; IMF, 2014e). In particular, providing conditional cash transfers tied to the schooling of young

<sup>19</sup> Ostry, Berg and Tsangarides (2014) argue that on average fiscal redistribution has no clear direct negative consequence for growth and thus can indirectly promote sustainable growth.