

# The Greek Economy: Which Way Forward?

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## Acknowledgements

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# Executive Summary

In the past six years the Greek economy has gone through a massive adjustment at a steep price, with unemployment currently at 25.8 percent and youth unemployment at 49.6 percent, and lost output of about 26 percent. The current account and primary government budget balances have been brought into surplus; Greece now has the largest cyclically adjusted primary budget surplus in Europe, at 6.0 percent of potential GDP.

The economy finally grew in 2014, by 0.6 percent, but the recovery is weak, slow and fragile. While some have attributed the nascent recovery to the success of years of austerity, in fact it is due to the near end of fiscal tightening. The cyclically adjusted budget surplus – which measures the government’s fiscal tightening -- moved from 5.7 percent in 2013 to 6.0 percent of GDP in 2014, or just 0.3 percentage points. In the three years prior, the adjustment had been 3.2 percent of GDP (2012-13), 3.8 percent of GDP (2011-12), and 5 percent of GDP (2010-11). It should be obvious that this huge drop-off in fiscal tightening would be the main cause of the return to growth.

The IMF projects unemployment to remain at 12.7 percent in 2019, yet this is considered “full employment,” since the economy will be above its potential GDP according to IMF estimates. In order to meet Greece’s current program debt targets, the government is required to run very large primary budget surpluses – more than 4 percent of GDP – for “many years to come,” beginning in 2016. This will be a serious drag on growth.

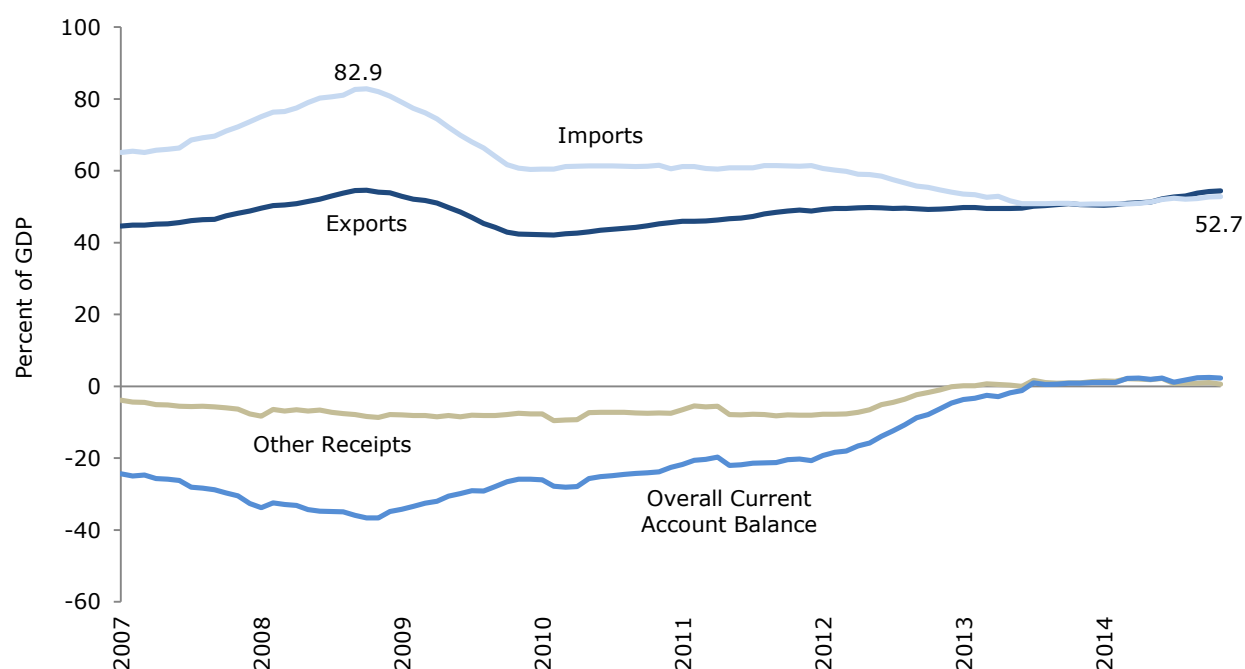
This paper argues that prolonged mass unemployment and reduced living standards, brought about by years of recession and budget cuts, are unnecessary, and that a robust recovery is feasible. It presents an alternative macroeconomic scenario with a moderate fiscal stimulus, which brings the economy much closer to full employment over the next five years, with a lower net debt than currently projected by the IMF. This alternative is just one of many possible scenarios, some of which might include debt cancellation, or more help from the European Central Bank in maintaining low interest rates, especially in light of its recently announced quantitative easing program. The current program, which forecasts a weak recovery with many downside risks, as well as continued mass unemployment in the years ahead, should be replaced with policies that offer a much stronger and faster recovery.

# The Greek Economy

After six years of recession, Greece has completed one of the largest adjustments in the world. Spending on imports has fallen by 36 percent since 2008 (see **Figure 1**). Fiscal consolidation has also been enormous: As the IMF has noted, Greece now has the highest cyclically-adjusted primary budget surplus in the euro area, at 6.0 percent of GDP (see Table 1). Both the current account and the actual primary budget balance are now in surplus.

**FIGURE 1**

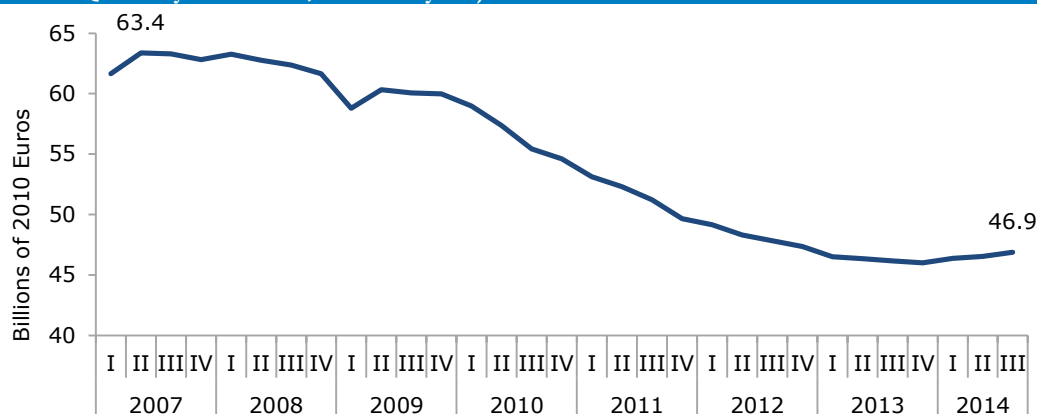
Greece: Current Account 12-month Cumulative Total, by Component



Source: Bank of Greece (No date, a).

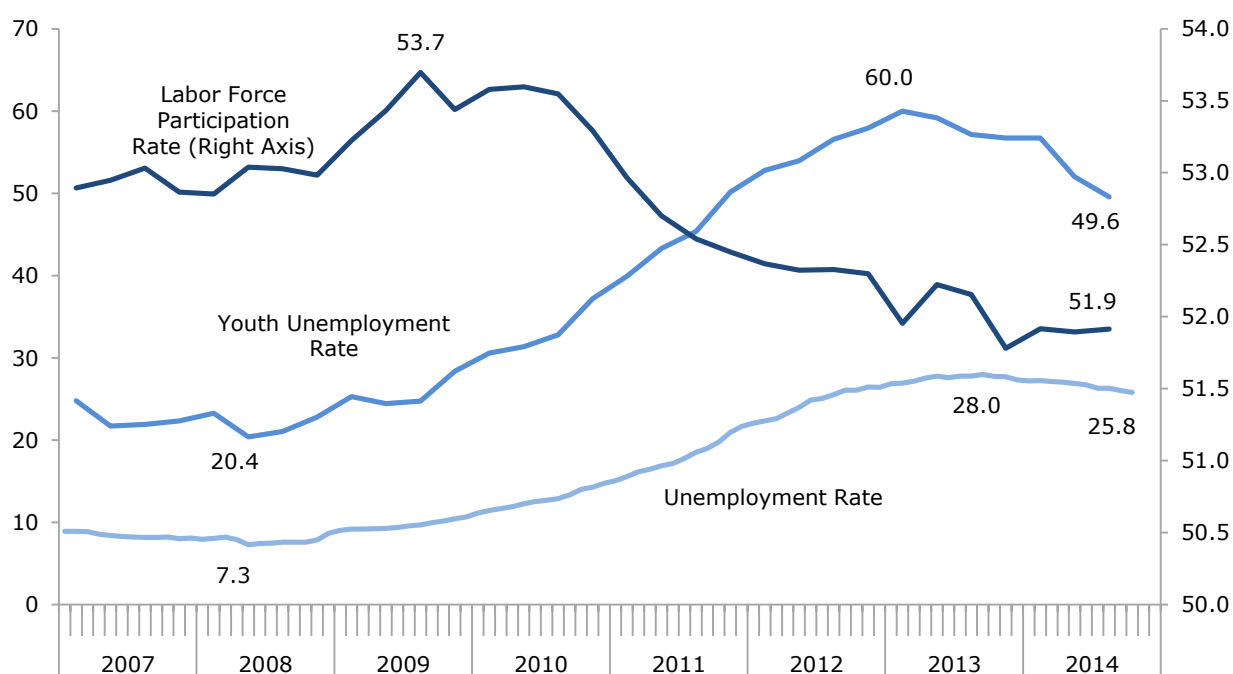
The economic and social costs of this adjustment have been very high. Output is down about 26 percent, as shown in **Figure 2**. Unemployment is currently at 25.8 percent, with youth unemployment at 49.6 percent. The labor market situation is somewhat worse than this, if we take into account the drop in the labor force participation rate (**Figure 3**) and increase in emigration.<sup>1</sup>

<sup>1</sup> Annual emigration from Greece to OECD countries increased from 14,000 in 2006 to 39,000 in 2011. OECD (No date).

**FIGURE 2****Greece: Quarterly Real GDP, Seasonally Adjusted**

Source: ELSTAT (No date, a).

Nominal wages have fallen by 16 percent in the private sector, according to the IMF,<sup>2</sup> and by 23.5 percent overall.<sup>3</sup> The government has laid off about 19 percent of its workforce, and is planning to lay off more. Spending on public health has fallen by more than 40 percent. About half of the adjustment in primary spending has come from compensation of employees and social benefits.<sup>4</sup>

**FIGURE 3****Greece: Unemployment and Labor Force Participation, Percent**

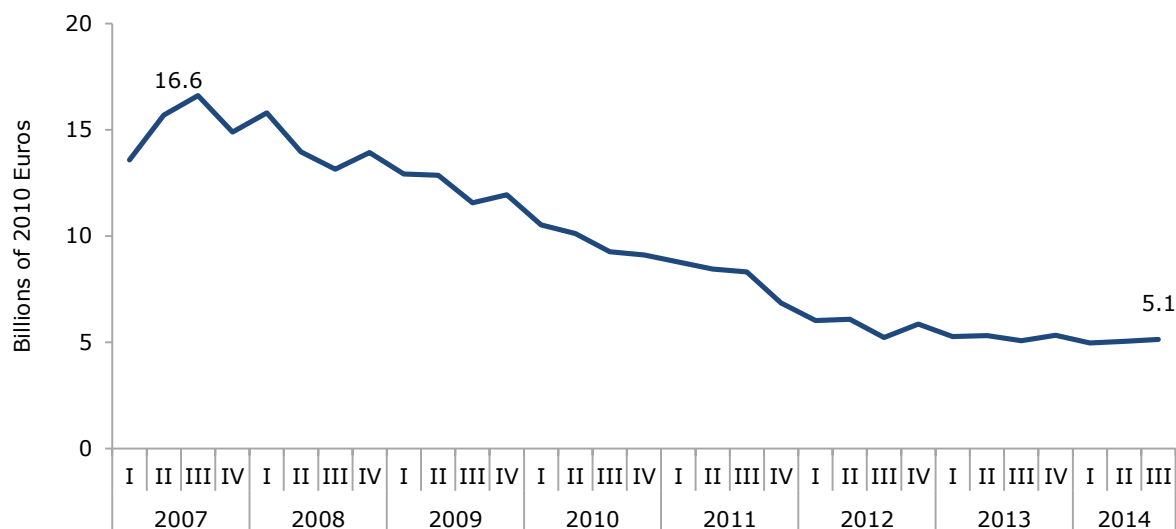
Source: ELSTAT (No date, b), ELSTAT (No date, c).

Note: Unemployment Rate series is monthly and seasonally adjusted, all other series are quarterly.

2 IMF (2014a).

3 Eurostat (No date, a). Series is seasonally adjusted and adjusted for working days.

4 IMF (2014a).

**FIGURE 4****Greece: Real Gross Fixed Capital Formation, Seasonally Adjusted**

Source: ELSTAT (No date, a).

For the first time in six years, Greece had positive GDP growth in 2014 – currently estimated at 0.6 percent. Many are pointing to this growth as a result of the “success” of Greece’s six years of austerity, and arguing that Greece should stick with the program. However there are several serious problems with this argument. First, it is clear that the last six years of recession were in large part a result of the pro-cyclical policies. No matter what Greece’s pre-crisis situation, no country should ever have to go through a depression of that length and magnitude before restoring growth, followed by years of mass unemployment and sluggish growth. There are always other options, generally including devaluation. If we look at the worst financial crises associated with devaluations of the past 20 years – including the countries hardest hit by the Asian crisis, Argentina, Mexico and others – there is nothing comparable to Greece in terms of lost output and the length of recession.<sup>5</sup>

Second, Greece’s return to growth last year was not a result of any success attributable to the policies implemented since the economy went into crisis, but rather to the end of fiscal consolidation. This can be seen in **Table 1**, where the cyclically adjusted budget surplus moves from 5.7 percent in 2013 to 6.0 percent of GDP in 2014, or just 0.3 percentage points.<sup>6</sup> In the three years prior, the adjustment had been 3.2 percent of GDP (2012-13), 3.8 percent of GDP (2011-12), and 5 percent of GDP (2010-11). It should be obvious that this huge drop-off in fiscal tightening would be the main cause of the return to growth.

<sup>5</sup> Weisbrot and Ray (2011). See Table 1.

<sup>6</sup> This is the best available measure of the fiscal adjustment; primary (non-interest) spending, for example, can decrease because the economy is growing or shrinking less, and revenues also change with the growth of the economy.

**TABLE 1****Public Finances (as Percent of GDP)**

	2010	2011	2012	2013 (Preliminary)	2014 (Projected)	2015 (Projected)
Total revenues	40.4	42.2	43.8	44.0	44.6	43.2
Total expenditures	51.4	51.9	50.2	47.2	47.3	45.1
Primary expenditures	45.5	44.7	45.1	43.2	43.1	40.2
Overall balance	-11.0	-9.6	-6.4	-3.2	-2.7	-1.9
Primary balance	-5.1	-2.4	-1.3	0.8	1.5	3.0
Cyclically adjusted primary balance	-6.3	-1.3	2.5	5.7	6.0	6.1
Gross debt	148.3	170.3	157.2	175.1	174.2	171.0

Source: IMF (2014a).

Perhaps most important, looking forward, is the weakness and fragility of the current recovery and what it means for the plight of the unemployed, as well as for incomes. The IMF projects unemployment will be at 15.8 percent in 2018<sup>7</sup> – a decade after the crisis began. Even more disturbing, this is basically considered full employment, since the Fund projects the economy will be operating at just 0.9 percent below its potential for the same year.

In 2019, Greece is still projected to be more than 9 percent below its pre-crisis GDP of 12 years earlier.<sup>8</sup> These are the baseline projections, but the IMF acknowledges that “Greece faces a risk of remaining stuck in a low-growth trap over the medium term.”<sup>9</sup> The weak recovery is also somewhat precarious. Non-performing loans held by banks have risen from 4.7 percent in 2007 to 33.5 percent in 2014,<sup>10</sup> and the IMF notes that “[b]ank balance sheets remain fragile.”<sup>11</sup> Credit to the corporate, housing, and consumer sector continues to fall each year.<sup>12</sup> The problems with bank balance sheets and other weaknesses in the financial system provide additional reasons that Greece needs a much more robust recovery than the one that is currently underway.

Looking forward, Greece is still subject to IMF loan conditions. In order to meet the program debt targets, Greece is required to run very large primary budget surpluses – more than 4 percent of GDP – for “many years to come,” beginning in 2016.<sup>13</sup> This will be a drag on growth, especially if there are any negative external shocks that need to be counteracted. The country will also be expected to institute more labor market reforms that will further weaken the bargaining power of labor. These include moving away from industry-wide collective bargaining to negotiation at the firm level,

7 IMF (2014b).

8 IMF (2014c).

9 IMF (2014a).

10 World Bank (No date).

11 IMF (2014a).

12 Ibid.

13 Ibid, see pages 23 and 45.

making collective dismissals easier, and allowing companies to engage in lock-outs of employees (which are currently illegal in Greece).

There are also reasons to question the underlying theory on which Greece's currently projected weak recovery is based. The IMF, in its recent reviews of Greece's loan agreements, seems to put a lot of faith in efficiency gains from increasing competition in product, service, and labor markets. While some of the proposed reforms are beneficial – e.g., increasing competition for lawyers involved in real estate, or more price competition in pharmaceutical drugs<sup>14</sup> – it is difficult to see how such reforms are going to contribute much to a robust recovery, especially in an economy suffering from a prolonged deficiency of aggregated demand, with mass unemployment, weak investment, and depleted household savings.

Even more fundamental, six years of recession and the resultant huge declines in nominal wages have failed to bring about the recovery through “internal devaluation” on which Greece's return to growth, according to the plan of the European authorities, is supposed to be based. The theory here is that with the exchange rate (the euro) fixed and domestic demand shrinking due to fiscal tightening, recovery must not only be export-led, but the necessary improvement in international competitiveness must come about through lowering unit labor costs and therefore export prices (despite the fixed exchange rate). While Greece has indeed brought its previously large current account deficit into balance, almost all of the improvement has been due to imports shrinking (see Figure 1). This is of course a result of falling domestic incomes, since imports depend on domestic demand, while exports are a function of foreign demand. (Fortunately, Greece has diversified its exports significantly away from the depressed eurozone during the past few years.) Because of the 16 percent decline in nominal (private sector) wages, Greece's real effective exchange rate (REER) based on unit labor costs has declined significantly, about 24 percent from its peak; but it has not gotten any help from productivity, which fell by 9 percent from 2008-2013.<sup>15</sup> Export prices have not matched the price declines, so that the REER based on inflation remains overvalued, according to the IMF, by about 10 percent.<sup>16</sup> And most importantly, for these reasons and perhaps others, exports have been weak, still far below their real level in 2008.<sup>17</sup> This failure to lay the foundations for an export-led recovery, through an internal devaluation after six years of recession, do not bode well for the near future of Greece's economic recovery.<sup>18</sup>

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14 IMF (2014a).

15 Eurostat (No date, b).

16 IMF (2014a).

17 The IMF October WEO database shows an 8 percent decline in the volume of exports of goods and services for 2008-2014; the IMF Fifth Review shows an even steeper decline.

18 At the moment, the euro is currently at a 9-year low against the dollar, so if it were to stay there it could provide some boost to Greece's exports to non-eurozone countries. However, it is difficult to predict how long this will last, and unfortunately it is partly a result of the weakness of the eurozone economy, which still accounts for about 31 percent of Greece's exports. IMF (No date).



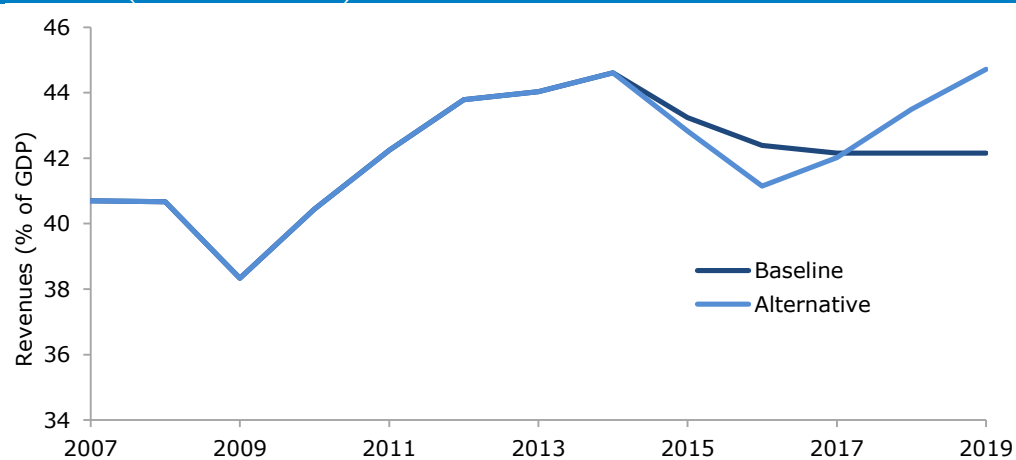
For all of these reasons and more, it is worth looking at feasible alternatives to the current plan that has been put forth by the IMF and the European authorities, and agreed to by the current government. In what follows we offer some brief examples of possible paths to restoring employment and growth.

## Alternatives to Prolonged Mass Unemployment

As noted above, the IMF projections for unemployment in future years, even after the economy has supposedly reached its potential GDP, are unusually high. In 2019, the latest IMF projections have unemployment in Greece at 12.7 percent, even though the economy is slightly above potential output. Although we would expect some reduction in potential GDP due to reduced investment, and some of the long-term unemployed being unable to find jobs when the economy recovers, it does not seem plausible or acceptable that 12.7 percent unemployment should be considered full employment. We therefore take as a starting point a higher level of potential output<sup>19</sup> for 2019, and accordingly seek to close a bigger gap in order to reach a much higher level of employment (and a lower level of unemployment) than is projected by the IMF for 2019. We show that it is quite feasible to bring Greece to this much lower level of unemployment by 2019 with a moderate fiscal stimulus, and to end up with a lower level of net debt to GDP than is envisioned in the IMF baseline projections.

**FIGURE 5**

### Revenues (as Percent of GDP)



Source: IMF (Fall 2014 WEO) and authors' calculations.

**Figure 5** shows the baseline scenario for government revenues, from IMF data, through 2019. These are projected to decline by about 2.2 percent of GDP in 2014-16, then remain roughly

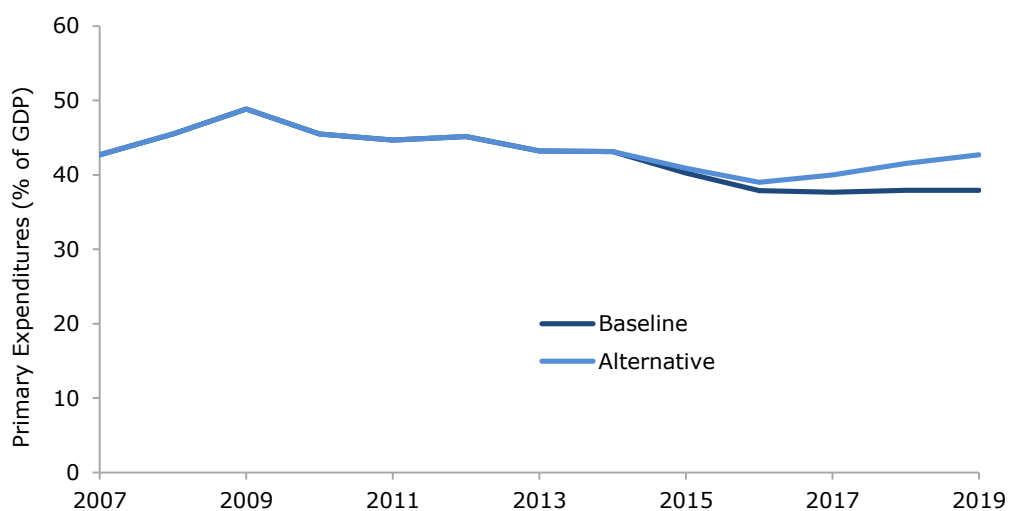
<sup>19</sup> See appendix for details of the calculation of potential GDP, and for other technical details of the alternative scenario described in this section.

constant through 2019. The alternative scenario calls for a further reduction of about 1 percent of GDP. This could be accomplished through some combination of cuts in regressive excise or sales taxes (e.g. the value-added tax, or VAT), and/or a temporary cut in social contributions that could be later made up when the economy returns to normal levels of employment.<sup>20</sup> From 2016-2019, under the alternative scenario, revenues grow as a result of the growth acceleration, which is in turn the result of both the expenditure increases (below) and tax cut.

For expenditures, the alternative scenario also has a decline in 2015, as can be seen in **Figure 6**, with a fall in spending of about 2.1 percent of GDP. For 2016, there is continued decline, but about 1.1 percent of GDP less. Then, for 2017 through 2019, expenditures begin to rise, for a total of 3.7 percent of GDP over the three years.

**FIGURE 6**

**Primary Expenditures (as Percent of GDP)**

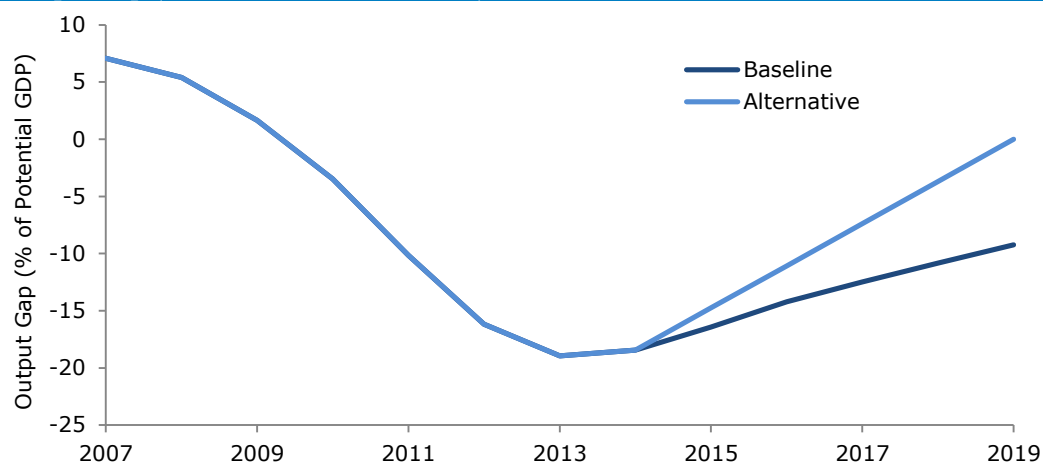


Source: IMF (Fall 2014 WEO) and authors' calculations.

As can be seen in **Figure 7**, the fiscal stimulus here, with conservative assumptions about multipliers on revenue and spending changes (see Appendix), causes the output gap to close by 2019. This is distinct from the baseline scenario which has an output gap of more than 9 percent of potential GDP in 2019.<sup>21</sup> This implies a much higher level of employment in 2019 than in the IMF baseline scenario, roughly 10 percent more, and therefore a much lower level of unemployment than the 12.7 percent envisioned as “full employment” in the IMF projections – perhaps about 4-8 percent unemployment.

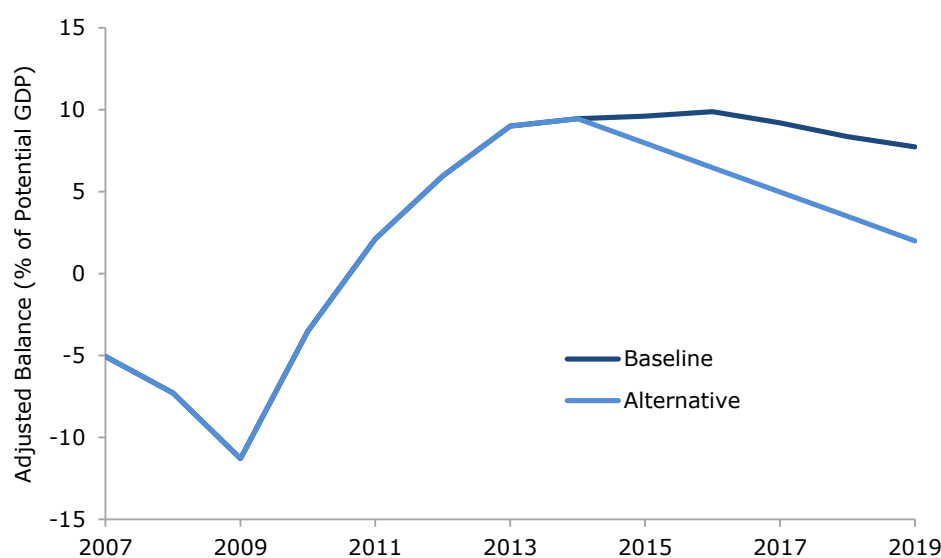
<sup>20</sup> The cut in Social Security payroll taxes in the U.S. in 2011, which amounted to about 0.7 percent of GDP, would be an example of a temporary tax cut in social contributions. The tax cut expired at the end of 2012.

<sup>21</sup> The IMF baseline projections also have the output gap closed by 2019, but that is based on a much lower level of potential GDP than the baseline here.

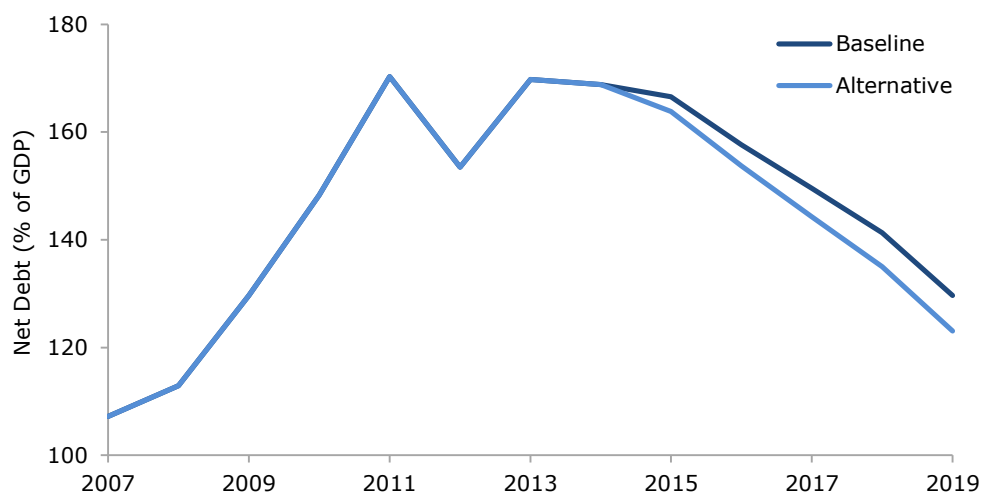
**FIGURE 7****Output Gap (as Percent of Potential GDP)**

Source: IMF (Fall 2014 WEO) and authors' calculations.

**Figure 8** shows that the alternative primary fiscal surplus as a percent of GDP in 2019 is 2 percent. This is lower than the 7.7 percent of GDP primary fiscal surplus under the baseline scenario. However, given the faster growth path of the economy, it is still able to reach a lower level of net debt to GDP in 2019 than the baseline scenario. This is shown in **Figure 9**, where net debt is 123.1 percent of GDP in 2019, versus 129.7 percent of GDP in the baseline scenario.

**FIGURE 8****Adjusted Balance (as Percent of Potential GDP)**

Source: IMF (Fall 2014 WEO) and authors' calculations.

**FIGURE 9****Net Debt (as Percent of GDP)**

Source: IMF (Fall 2014 WEO) and authors' calculations.

The European Central Bank's (ECB) quantitative easing (QE) program, announced January 22, 2015, would contribute to this stimulus program. It is assumed here that the interest on Greek bonds bought by the ECB (or by the Greek Central Bank in collaboration with the ECB's new QE program), is refunded to the Greek treasury. This amounts to about 0.075 percent of GDP in revenues for the four years 2016 through 2019. This does not make a very big difference, but of course the ECB could do much more to advance the Greek recovery in this or any other scenario involving a fiscal stimulus.

It must be emphasized that this is just one possible scenario that brings Greece much closer to full employment over the next five years, and helps avoid some of the downside risks that could push the economy back into recession. There are many possible scenarios, some involving debt cancellation that would free up funds for the kind of stimulus envisioned here. The amounts of money needed to guarantee a robust Greek recovery are extremely small for the European authorities, especially given the size of the ECB's announced 60 billion euro per month QE program.

## Conclusion

Greece has already gone through a wrenching adjustment during six years of recession, and most Greeks have paid a high price for it. Although the economy is currently growing because fiscal tightening has slowed almost to a halt, there are many downside risks to the weak recovery. The projected growth through 2019 will not be enough for the country to exit from mass

unemployment. And, with the exception of 2014, IMF projections for Greece's economic growth as well as unemployment have been consistently over-optimistic, often by wide margins, since 2010.<sup>22</sup> There are human costs associated with long-term unemployment and prolonged recession that have not been detailed here, including reduced life-time earnings, the erosion and obsolescence of skills, and negative health outcomes.<sup>23</sup> Harmful effects of the long recession in Greece on physical and mental health in Greece have already been documented.<sup>24</sup> These are important reasons to speed up the recovery.

As we have seen, it is feasible with a moderate stimulus to move the economy toward full employment over the next five years, reaching a drastically lower level of unemployment than current projections allow. There is no sound economic reason not to pursue such a path, and many reasons to do so.

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22 See e.g. Weisbrot and Montecino (2012) and Weisbrot, Loungani and Griesgraber (2013).

23 For a summary of research on these effects in the U.S., see von Wachter, Till (2010).

24 See most recently Kentikelenis et. al. (2014).

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# Technical Appendix

## Potential GDP

As an alternative estimate for potential GDP in Greece, we start with the Fall 2014 WEO projections for nominal GDP, the output gap, general government structural balance, and structural balance as a share of potential GDP.

We extend the real potential GDP numbers out by 1.87 percent per year, and assume that half the difference in potential GDP between the Spring 2011 estimates and a pre-crisis trend of 3 percent after 2005 is due to structural changes.

We then revise downward the potential GDP numbers to reflect lower levels of investment over the period of depression. Starting in 2006, every percentage point of GDP in lower investment lowers our estimate of potential GDP growth by about 0.11 percentage points.

## Alternative

We construct one possible path for the output gap—achieving full employment in 2019. The alternative scenario steadily closes the output gap throughout the projection period.

We also construct an alternative path for the cyclically adjusted primary budget balance (CAPB) as a percent of potential GDP (that is, revenues divided by GDP minus primary expenditures divided by potential GDP.) It steadily lowers the annual CAPB to 2 percent of potential GDP by 2019.

We assume that net taxes have a fiscal multiplier of -0.5—that is, an additional 1 billion euros in net taxes per year reduce GDP by 500 million euros per year. Likewise, we assume that direct government expenditures have a multiplier of 1.5, so that an additional 1 billion euros in direct expenditures annually increase GDP by 1.5 billion euros per year.

The assumptions for multipliers, combined with those for the output gap and CAPB imply paths for revenues and expenditures.

## Interest and ECB Refunds

We assume that the rate of interest on Greek government debt is elastic with respect to the supply of debt, with a 10 percentage-point increase in the previous year's debt-to-potential GDP ratio leading to a 1 percentage point increase in the interest rate.



We also consider the effect of ECB purchases of Greek government debt in the amount sufficient to fund half the increase in the primary deficits. We assume that the ECB refunds the interest payments back to the government.