



Strategic Analysis

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IS GREECE HEADING FOR A RECOVERY?

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Summary

In this report we discuss recent developments in the Greek economy and, given an increase in GDP, evaluate the prospects for a market-driven recovery. Our estimates show that the speed of a recovery based on market forces alone would be insufficient to address the urgent problems of poverty and unemployment. We then evaluate the impact of alternative policy options aimed at stimulating the economy without endangering the country's current account.

Introduction

Politics in Greece is unraveling and before too long there will be a change of government. The country will be holding elections on January 25, after the government's candidate for the ceremonial post of the head of state failed to garner the parliamentary votes required to be elected. Poll after poll gives the electoral edge to the radical left Syriza party over the current, mostly right-wing, coalition government. Syriza has promised to renegotiate the terms of the country's bailouts, including reversing many of the austerity measures, repealing labor market reforms, and restructuring the portion of the country's sovereign debt held by the International Monetary Fund (IMF), the European Union (EU), and the European Central Bank (ECB). This would be a serious negotiation challenge not only for a Syriza government, but also for Berlin, Brussels, and Frankfurt. Voices from within Germany are heard insisting that measures agreed upon by the current government be continued; otherwise, they say, it might be time to let Greece exit the eurozone. By contrast, the Syriza

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economic plan would halt and reverse these measures as soon as a new government was in place, but the party insists that this could be done without Greece exiting the eurozone.

The European argument for a Greek exit is that 2015 is not 2012, and that if it occurred, it would be unlikely to precipitate a European financial system crisis. Furthermore, it is argued, such an event would send an unambiguously clear message to the citizens of other countries with public deficit problems—i.e., France, Italy, Portugal, and Spain—that playing by the rules of fiscal discipline and structural reform is not a matter to be questioned. Others are raising concerns about the many real risks of contagion and a crisis of confidence, subsequent to a post-exit bank run in Greece, that could cause other eurozone depositors to follow suit, precipitating a European banking crisis that the ECB would be unable to contain. Post exit, Greece would most likely default on its official debt—its bailout loans from the IMF, ECB, and EU—creating yet another crisis of confidence among European taxpayers if the presumption that lending to other eurozone member-states is risk free turned out to be folly. No one can be sure which of these events would result from a Greek exit, but many media outlets are bringing back memories of the Lehman Brothers bankruptcy, and in so doing, are urging policymakers to think carefully before pushing Greece out of the eurozone.

After more than six years of continuously declining real GDP, the Greek economy reported some timid signs of recovery in 2014, notably in the tourism sector. In addition, the govern-

ment achieved a substantial primary surplus of €1.9 billion over the last four quarters, according to the latest sectoral accounts, such that further fiscal austerity—which fully contributed to the long and deep recession—should no longer be necessary.

However, other recent short-term indicators, such as the turnover index in industry, still show a decline for 2014 (based on available data up to August), confirming that the signs of recovery seem to be limited to the tourism sector.

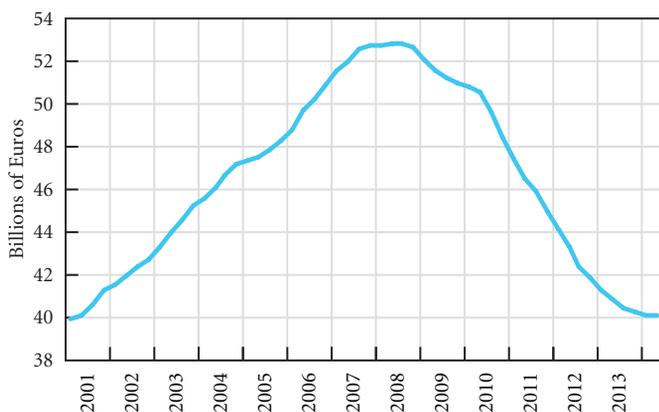
In what follows, we will show that in the intermediate run, a recovery of the Greek economy will not be achieved from market forces alone; that is, if no stimulus were provided to the economy, how long would it take for real GDP to return to precrisis levels and for unemployment to fall within the relevant time?

It follows, then, that such processes would be too slow, taking perhaps more than a decade, and thus we propose alternative scenarios based on options for a fiscal stimulus that would rapidly accelerate the recovery.

The Impact of the Crisis: An Update

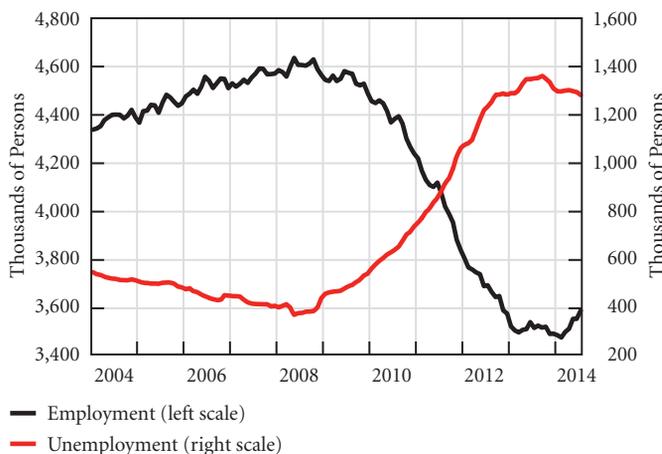
Is the war over? As we documented in 2013 (Papadimitriou, Nikiforos, and Zezza 2013), the reduction in output experienced by the Greek economy since the start of the recession is comparable to the impact of a major war, and worse in relative terms than the impact of the 1929 depression on the US economy. Real GDP has continued to fall (Figure 1), with a

Figure 1 Greece: Real GDP (Four-quarter Moving Averages)



Source: ElStat

Figure 2 Greece: Employment and Unemployment



Source: ElStat

record sequence of 23 consecutive quarters of negative growth that has brought it back to where it was in 2001, wiping out all of the gains obtained in the 2000s. Real GDP is now 24 percent lower than its prerecession peak in 2008, and median income fell by 30 percent for the period 2010–13.

The good news is that the descending path of GDP in Figure 1 seems to be flattening, suggesting that no further drop will occur in the next quarters, and possibly, that the Greek economy could begin to recover.

But the damage done by the current crisis has been astonishing. From a peak of 4.6 million jobs in 2008 (Figure 2), over one million jobs, or 22 percent, have been lost, with more than 900,000 people added to the unemployment roll, and a net migration of about 340,000 (measured as the decline between the active population in 2008 and the latest available value for July 2014). The process, documented in our previous report (Papadimitriou, Nikiforos, and Zezza 2014a), of a decline in the active population resulting from reduced immigration to Greece and increased migration abroad has continued. Figure 2 also shows an increase in employment in the latest months, which will be examined in more detail below.

A consequence of the long economic slump is that the largest share of the unemployed has been out of work for more than a year (Figure 3). This is in concert with the dramatic

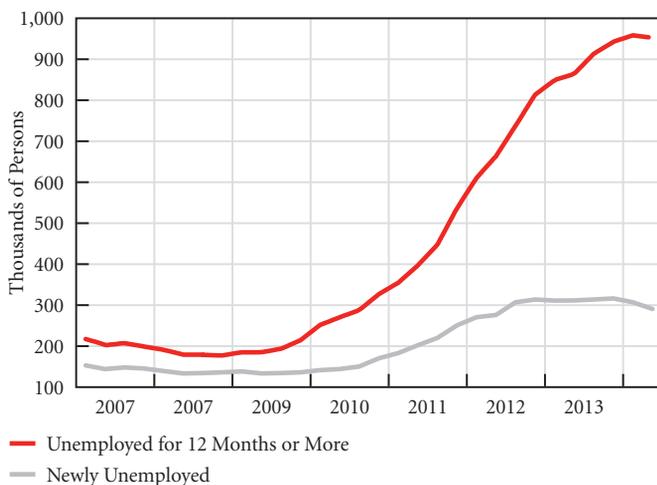
increase in the percentage of the population at risk of poverty: the latest Survey of Income and Living Conditions (ElStat 2014) shows that the risk-of-poverty rate (after social transfers) for the unemployed rose from 38.5 percent in 2010 to 46.3 percent in 2013, and from 20 percent to 23 percent for the general population over the same period. Figure 3 also shows that the number of people entering unemployment for the first time was still high in the second quarter of 2014, albeit lower than in previous quarters.

Is an Economic Recovery on the Way?

In Figure 4, we report a breakdown of the components contributing to GDP growth. For the second consecutive quarter, exports have been the major determinant of the recovery in output. Investment is still falling: it is now (2014Q2) roughly €21 billion (sum of the last four quarters), representing a 35 percent drop from its peak in 2007.

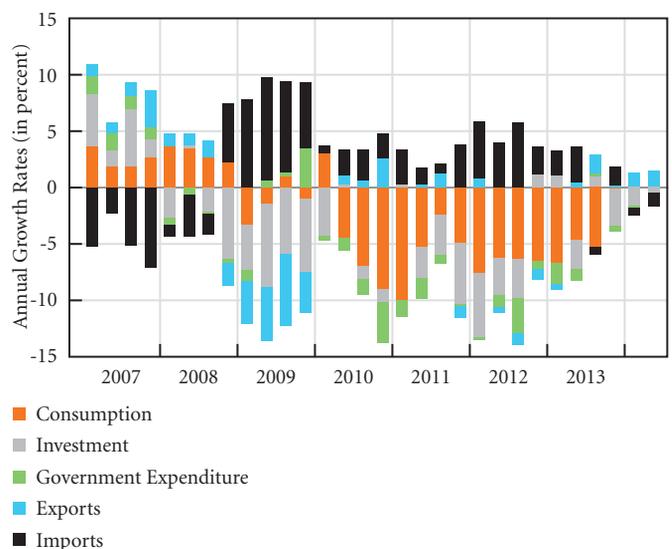
Two of the most important components of private investment and industrial production are the manufacturing and construction sectors. As shown in Figure 5, both have been declining since the recession began, with the drop in construction spending being more pronounced—a loss of gross value added in excess of 80 percent.

Figure 3 Greece: Unemployment by Duration



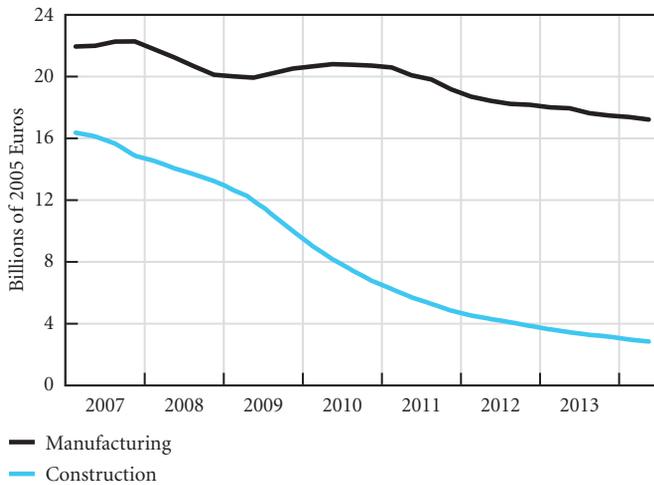
Source: ElStat

Figure 4 Greece: Contributions to Real GDP Growth



Source: ElStat

Figure 5 Greece: Gross Value Added (Four-quarter Moving Averages)



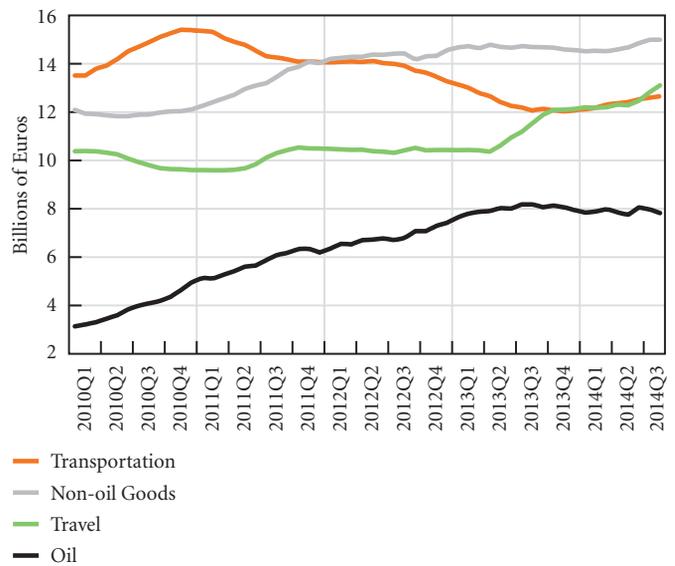
Source: ElStat

Exports stopped falling at the end of 2009, after the 2007 crisis, and have recovered in the last five years by about €9 billion, but this increase is too small a value to counter the drop in the other components of GDP.

To see which components of exports are driving the nascent recovery, we use the monthly balance-of-payments data published by the Bank of Greece and illustrate the major components in Figure 6. As we have discussed elsewhere (Papadimitriou, Nikiforos, and Zezza 2013), a large increase in the value of the exports of goods is related to oil, which is imported to Greece, refined, and then exported. This increase is largely due to movements in the international price of oil, and since this has been falling in recent months, so has the value of this category of exports. Other exports of goods have also increased somewhat, but these have been rather stable in the last two years, notwithstanding the significant decline in wages, unit costs, and prices. The impact of price competitiveness on non-oil exports of goods is therefore hard to see from the data in Figure 6.

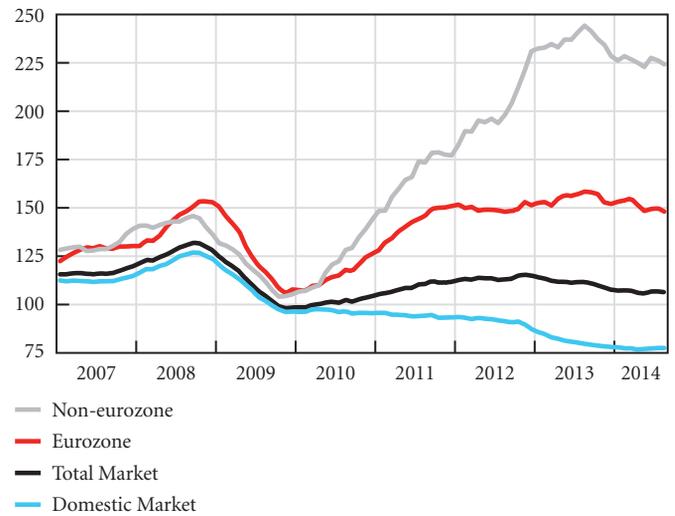
Among services, the largest increase in revenues is in the “Travel” category, which has risen by almost €3 billion in the last 16 months, while the “Transportation” category, which still accounts for a large share of Greek exports, has remained relatively flat. All in all, Figure 6 demonstrates tourism’s major role in the recent signs of recovery.

Figure 6 Greece: Exports of Goods and Services (Annual Moving Averages)



Source: Bank of Greece

Figure 7 Greece: Turnover Index in Industry (Annual Moving Averages, 2005=100)



Source: ElStat

Indeed, data on employment by branch of economic activity show that the greatest increase in employment in the second quarter of 2014 was for “Accommodation and food service activities,” while other sectors—such as manufacturing, retail trade, and finance—continued to drag down the overall employment level.

This result is confirmed by one of the few¹ other up-to-date short-term indicators: the turnover index in industry (Figure 7). The domestic market for industrial products has stopped falling, but in August 2014 it did not yet show signs of recovery, while the indices related to foreign markets have been declining in recent months. The large increase in industrial output for noneuro markets is related to trade in oil, as discussed above, as well as to exports to noneuro neighbor countries, (i.e., Turkey and Bulgaria), as outlined in Papadimitriou, Nikiforos, and Zezza (2014b).

In short, the only activities that have been recovering in recent months are related to tourism, and our first model simulation assesses the impact this sector could have on the economy as a whole, absent other fiscal stimulus policies.

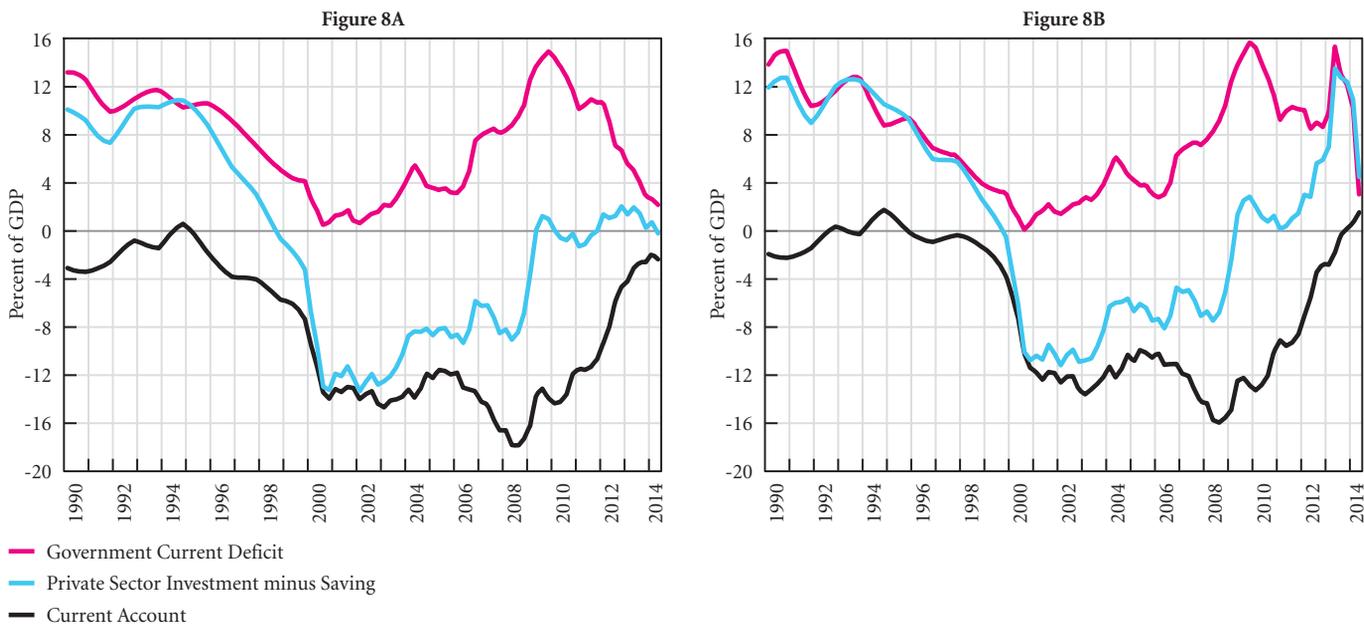
The Story of the Three Balances So Far

Before reviewing the intermediate-run simulations of our baseline and alternative policy scenarios, we wish to show how the trajectories of the sectoral balances have evolved to 2014Q3, the last quarter for which data are available.

To remind our readers, our argument for policy change is cast within the operational principle of the three balances in the national accounting identity, whose trajectories we simulate for the next three to four years. Our approach to evaluating macro policy is framed within an analysis of the key financial balances of the economy we study. As is well known, the national accounting identity shows that in a three-sector model, the sector’s financial balances (revenues minus expenditures) sum to zero.

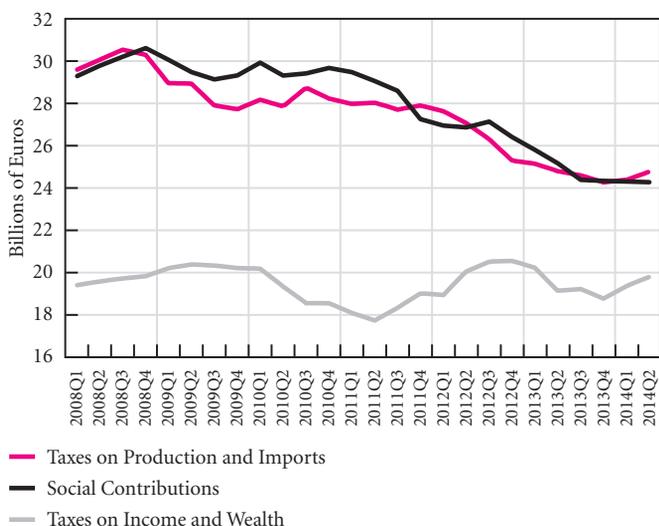
In Figures 8a and 8b, we report our estimates for the financial balances of the private sector, the government, and the rest of the world, with and without net capital transfers. The data in Figure 8a show the impact of the austerity strategy on each of the three balances. Fiscal austerity steadily reduced the government current deficit, while at the same time contributing to the severe economic recession, which in

Figures 8A and 8B Greece: Main Sector Balances (Four-quarter Moving Averages)



Source: ElStat

Figure 9 Greece: Government Receipts (Four-quarter Moving Averages)



Source: ElStat

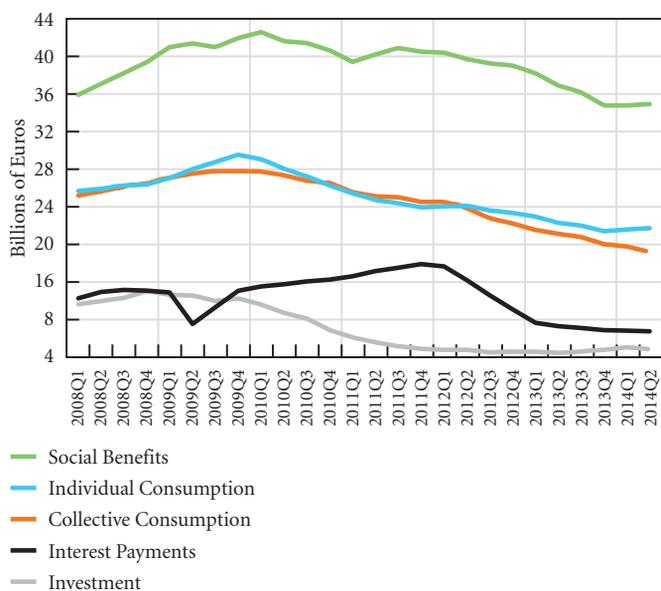
turn generated a drop in imports that helped reduce the external deficit. The precrisis excess of private sector investment over saving was reduced with saving falling even more dramatically than investment.

A comparison of Figures 8a and 8b shows the very large transfers put in place by the government to recapitalize the banking sector, with transfers of bailout funds on capital account over 10 percent of GDP. As large as these transfers were, they had negligible effects, if any, on output and employment, and what would have happened had these transfers been used in different ways is a matter of debate.

To achieve the precipitous drop in the government deficit as illustrated in Figure 8a, severe fiscal austerity was put in place, with unprecedented negative effects on output and employment. Public revenues have decreased, since indirect taxes and social contributions have fallen, but less rapidly than income (Figure 9). Taxes on income and wealth have remained stable, but in relation to a decrease in disposable income, they represent a large increase.

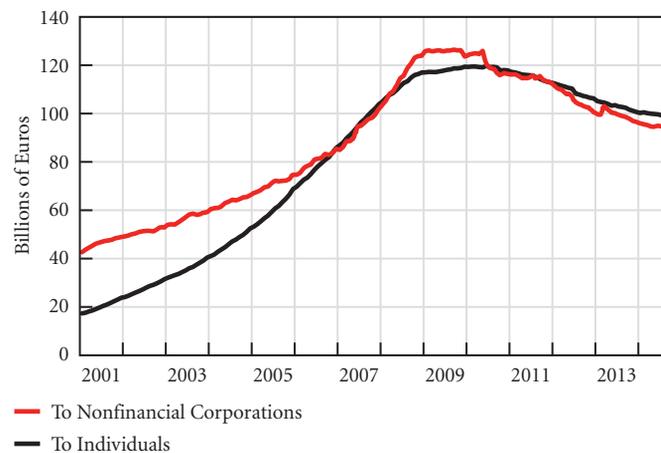
Most general government outlays have been falling (Figure 10), including social benefits that should be increasing in a recession along with increasing unemployment. Other government spending cuts include reductions in investment

Figure 10 Greece: Government Outlays (Four-quarter Moving Averages)



Source: ElStat

Figure 11 Greece: Domestic Loans to the Nonfinancial Sector



Source: Bank of Greece

and public employment, which has shed 68,400 jobs since the recession began in 2007.

On the other hand, as shown in Figure 8b, the government used large sums from the troika bailout funds to massively intervene in propping up the shaky banking sector. This has taken the form of purchases of equity in the country's four systemic banks. The banking sector shares held by the government increased from less than €1 billion in the first quarter of 2012 to €17.8 billion in the second quarter of 2012, and to more than €30 billion in the first quarter of 2013. Following the sale of a significant position in one of the banks to the private sector, the government's position was valued at around €27 billion at the close of the first quarter of 2014.

This extraordinary amount of liquidity notwithstanding, the financial system remains in trouble, since very little support has been given to the private nonfinancial sector, which has a large stock of debt owed to banks (Figure 11).

At the beginning of the crisis, the private sector began deleveraging, while at the same time credit dried up. The household sector, while in the process of deleveraging as best as it could under distressed circumstances, still had an outstanding stock of debt that was about €100 billion as of the end of the third quarter of 2014, while the corresponding debt

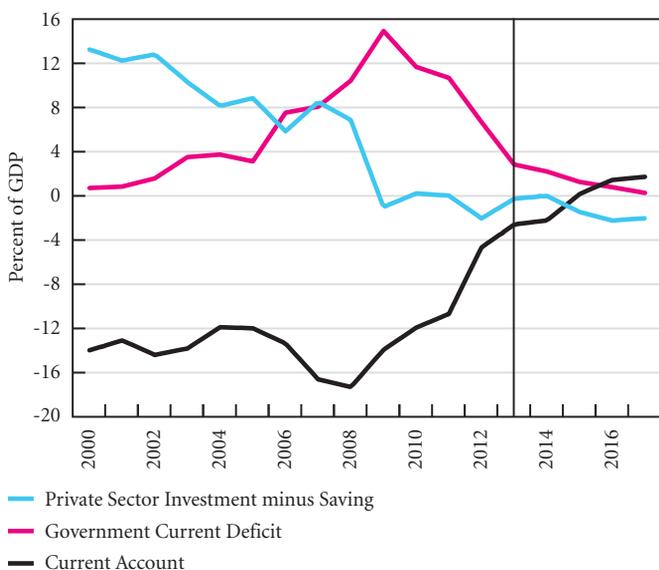
outstanding of the nonfinancial corporate sector was almost equally large at €98 billion.

As we have detailed elsewhere (Papadimitriou, Nikiforos, and Zezza 2014a), the consequence of the crisis has turned a large and growing amount of this outstanding credit into nonperforming loans that estimates place at €90 billion, or about 50 percent of the total outstanding private debt shown in Figure 11.

The Implications of Following the Troika Policy

A projection of current economic trends—our baseline scenario—estimated from the Levy Institute Model for Greece (LIMG) offers a benchmark against which to compare the outcomes of the three policy scenarios we provide below. The parameters in the model are set in accord with the IMF forecasts for world economic growth and inflation. Interest rates, the nominal effective exchange rate between the US dollar and the euro, and equity market prices stabilize at the November 2014 level, while private sector deleveraging slows to zero and credit availability remains negative. We also assume that deflation ends by December 2014 and there will be zero inflation thereafter. Regarding the government's fiscal policy stance, we

Figure 12 Greece: Baseline Main Sector Balances



Source: Authors' calculations

Table 1 Greece: Baseline Government Accounts (Billions of Euros)

	2013	2014	2015	2016	2017
Revenues					
Net indirect taxes	23.7	25.5	26.2	26.9	27.7
Taxes on income and wealth	18.7	19.7	19.5	20.0	20.5
Social contributions	24.3	24.3	24.5	24.5	24.6
Transfers from abroad	5.1	4.6	3.2	3.2	3.2
Government operating surplus	6.6	6.5	6.5	6.5	6.5
Outlays					
Collective consumption	18.9	19.8	19.4	19.4	19.4
Individual consumption	12.4	11.2	11.3	11.3	11.3
Investment	4.9	4.4	3.8	3.8	3.8
Social benefits	38.8	38.6	38.1	38.4	38.6
Interest payments	7.3	7.3	7.4	7.4	7.4
Other net transfers	-3.8	-1.6	-1.6	-1.6	-1.6
Net capital transfers	22.2	3.2	3.2	3.2	3.2
Government surplus/deficit	-22.3	-2.3	-1.7	-0.7	0.4
Government primary surplus/deficit	-15.0	5.0	5.7	6.7	7.8
Memo: GDP	182.1	180.0	184.0	189.0	194.3

Table 2 Greece: Real Growth and Financial Balances under Alternative Scenarios

	2013	2014	2015	2016	2017
Real GDP Growth (percent)					
Baseline	-3.95	0.50	2.05	1.93	2.01
New Deal scenario	-3.95	0.50	6.78	2.46	2.19
Debt freeze scenario	-3.95	0.50	4.91	2.25	2.12
Combined scenarios	-3.95	0.50	9.63	2.74	2.29
Government Surplus/Deficit (billions of euros)					
Baseline	-22.3	-2.3	-1.7	-0.7	0.4
New Deal scenario	-22.3	-2.3	0.3	2.0	3.6
Debt freeze scenario	-22.3	-2.3	0.7	2.1	3.5
Combined scenarios	-22.3	-2.3	2.7	4.7	6.6
Current Account Balance (billions of euros)					
Baseline	0.4	1.2	4.8	6.9	7.6
New Deal scenario	0.4	1.2	10.2	11.0	11.2
Debt freeze scenario	0.4	1.2	9.3	10.6	10.9
Combined scenarios	0.4	1.2	14.7	14.7	14.4

assume that expenditures will stabilize in real terms, with social benefits expenses remaining stable in nominal terms but decreasing slightly as a percentage of GDP and tax rates remaining at current levels. Government revenues and outlays reflecting actual values for 2013 and projected to 2017 are tabulated in Table 1.

We report the result of our simulations in Figure 12, which shows the trajectories of the three financial balances. The current account deficit decreases and moves into positive territory in 2015, remaining there until the end of the simulation period in 2017, while the government deficit continues to decline, approaching balance. Private sector investment minus saving continues to reflect the deleveraging process that ends by the end of the simulation period. Real GDP growth in 2014 is expected to be barely positive at 0.5 percent, despite the latest release from ElStat showing a more exuberant growth rate. We expect the ElStat figures to be revised downward when final data for 2014 are reported in April 2015. Our estimates show GDP growth to be 2.05 percent, 1.93 percent, and 2.01 percent for 2015, 2016, and 2017, respectively (Table 2).

We have shown above that these results are not significant enough to restore employment (Figure 14) and incomes

(Figure 13) to precrisis levels, at least within the relevant time frame, and for this we consider alternative policies to which we turn next.

A New Deal Plan for Greece

We simulate the effects of an EU-funded quarterly transfer of €1.650 billion starting in the first quarter of 2015 and continuing for three years, for total transfers of €19.8 billion. These funds could be used for additional public expenditures targeted at investments fostering growth in production of goods and services, or to finance a direct job creation program of at least 300,000 jobs to unemployed workers as described in Antonopoulos et al. (2014). The effects of this alternative policy on real growth are shown in Table 2 and in Figure 13, while Figure 14 illustrates the path of decreasing unemployment.

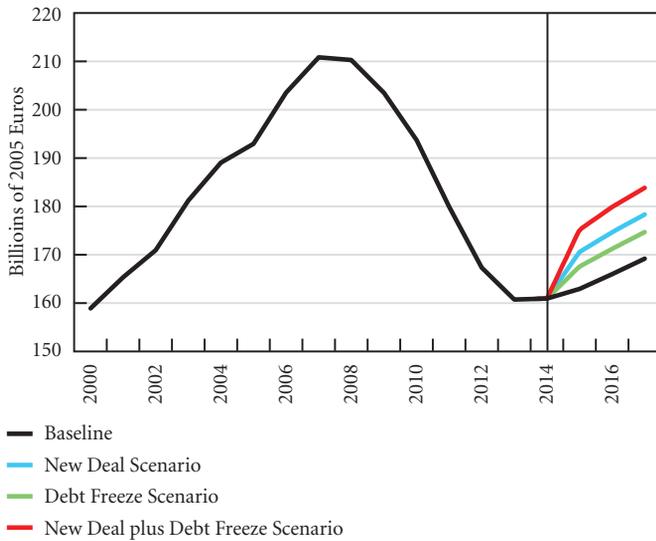
Implications of a Moratorium on Interest Payments and the Freezing of Public Debt

What if we assumed a policy of freezing Greece's public debt and suspending the interest payments on its official debt for as many years as it would take to return the country to its 2010 level of real GDP? While Greece's debt to private sector investors would continue to be serviced, the amount of the suspended interest payments could be used to fund targeted investments or a direct job creation program along the lines of the New Deal plan outlined above. The effects on real GDP growth and unemployment are also summarized in Table 2 and Figures 13 and 14. Notice that the real growth rates in this policy option are lower than those in the New Deal plan, while the government surplus is a bit higher and the current account surplus is insignificantly lower (both measured in billions of euros).

Finally, we consider a third policy option: combining the New Deal program together with the moratorium on interest payments to public sector institutions. As the results show, such an option yields higher growth rates in output and employment, which can be seen in Table 2 and, correspondingly, in Figures 13 and 14.

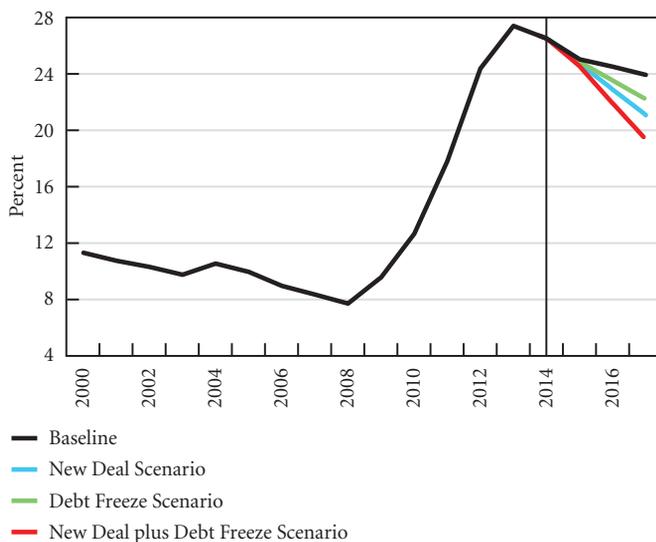
The unemployment rates for all three alternate scenarios illustrated in Figure 14 would be even lower if a program of direct job creation for 300,000 unemployed were funded.

Figure 13 Greece: Projected Real GDP



Source: Authors' calculations

Figure 14 Greece: Projected Unemployment Rate



Source: Authors' calculations

Conclusions

The strategic policy options for Greece are dreadfully narrow. Solving the immense problem of unemployment and reversing the decline in household income—which has fallen by more than 30 percent in the last three years, with poverty rates rising—will not come about from private sector expenditures alone. This will require, instead, the political will of the Greek government and the EU political elite to change the present course and implement policies of the sort offered in this report. These policies are not new. They are identical to those implemented in Germany after World War II, which included a Marshall Plan loan that was never repaid, the suspension of interest payments on the country's enormous sovereign debt, and, finally, a significant write-down of public debt.

Our baseline scenario represents the continuation of business as usual, characterized by anemic growth and an unprecedented high level of unemployment for many years to come. The protracted austerity to achieve the higher level of government surplus (about 4.5 percent of GDP) required to service the country's sovereign debt would all but ensure the continuation of the national crisis, with spillover effects for the rest of the eurozone—especially now, when the euro area is vulnerable to another recession and a prolonged period of Japanese-style price deflation.

Note

1. The index for new orders, which can act as a leading indicator for industrial production, has not been updated by ElStat since December 2013.

References

- Antonopoulos, R., S. Adam, K. Kim, T. Masterson, and D. B. Papadimitriou. 2014. *After Austerity: Measuring the Impact of a Job Guarantee Policy for Greece*. Public Policy Brief No. 138. Annandale-on Hudson, N.Y.: Levy Economics Institute of Bard College. October.
- ElStat. 2014. *Survey of Income and Living Conditions: Indicators, 2010–2013*.
- Papadimitriou, D. B., M. Nikiforos, and G. Zezza. 2013. *The Greek Economic Crisis and the Experience of Austerity: A*

Strategic Analysis. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. July.

———. 2014a. *Will Tourism Save Greece?* Strategic Analysis. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. August.

———. 2014b. *Prospects and Policies for the Greek Economy*. Strategic Analysis. Annandale-on-Hudson, N.Y.: Levy Economic Institute of Bard College. February.

Data Sources

Bank of Greece. www.bankofgreece.gr. Last accessed December 2014.

ElStat (Hellenic Statistical Authority). www.statistics.gr. Last accessed December 2014.

OECD (Organisation for Economic Co-Operation and Development). stats.oecd.org. Last accessed December 2014.