



Levy Economics Institute of Bard College

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# *Strategic Analysis*

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## Greece

### WILL TOURISM SAVE GREECE?

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#### Summary

In this strategic analysis, we discuss the prospects for economic recovery if Greece continues to follow the troika strategy of fiscal austerity and internal devaluation, with the aim of increasing competitiveness and thus net exports.

We argue that the unprecedented decline in real and nominal wages may take a long time to exert its effects on trade—if at all—while the impact of lower prices on tourism will not generate sufficient revenue from abroad to meet the targets for a surplus in the current account that outweighs fiscal austerity.

A shift in the fiscal policy stance, toward lower taxation and job creation, is urgently needed.

#### Introduction

In its latest assessment of the performance of the Greek economy, the International Monetary Fund (IMF 2014) appears more optimistic on the future of Greece, reporting that the country shows “initial signs of economic stabilization,” since the fall in GDP in the last quarters is lower, year-on-year (YoY), than in previous years, and unemployment has declined slightly.

The IMF praises the government for having achieved, ahead of schedule and above target, a primary surplus in 2013, but still recommends further fiscal tightening to close the fiscal gap in the next year and ensure the “primary surpluses of over 4 percent of GDP” needed to meet the troika’s targets for debt reduction. Moreover, the IMF expects GDP growth to be above 2 percent, to close the output gap by 2019.

This report challenges the IMF view—and, in effect, the policies emanating from that view—as being nothing more than (internally inconsistent) wishful thinking. More specifically, for

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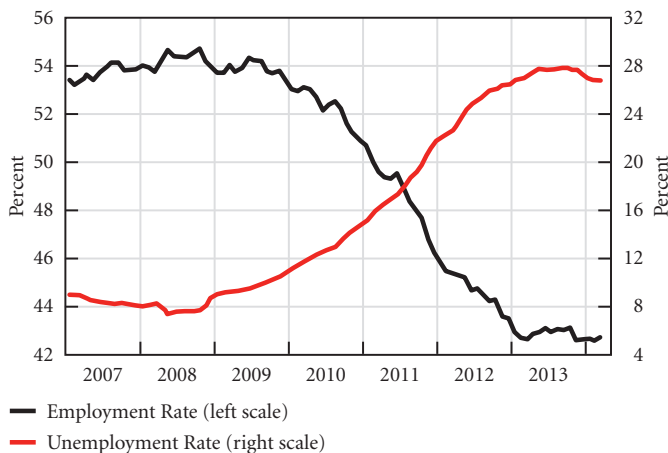
The Levy Institute’s Macro-Modeling Team consists of President DIMITRI B. PAPADIMITRIOU, and Research Scholars GREG HANNSGEN, MICHALIS NIKIFOROS, and GENNARO ZEZZA. All questions and correspondence should be directed to Professor Papadimitriou at 845-758-7700 or dbp@levy.org. Copyright © 2014 Levy Economics Institute of Bard College.

growth to resume above 2 percent, some components of aggregate demand would need to start increasing. A significant increase in private investment would be required, with a composition favorable to the expansion of exports, while wages rose in line with productivity, allowing for growth in domestic consumption. Investment, however, usually increases in concert with expected profitability. And in the case of Greece, the domestic economy is depressed—and maintained in a depressed state by fiscal austerity—while external demand is stagnant, creating lower expectations for a recovery in profitability. In addition, the hypothesis that fiscal austerity has no impact—or rather, has a *positive* impact—on growth has been discredited by events from the very start of the eurozone crisis. The simulation results<sup>1</sup> of the Levy Institute’s macro-economic model for Greece (LIMG),<sup>2</sup> based on the financial balances approach, make it impossible for a policy of prolonged fiscal consolidation to succeed unless a large and growing current account surplus is achieved, which is probably impossible in the foreseeable future.

### Output and Employment

Employment has stopped falling, and the unemployment rate has improved somewhat in recent months. In Figure 1 we report

**Figure 1 Greece: Employment and Unemployment**



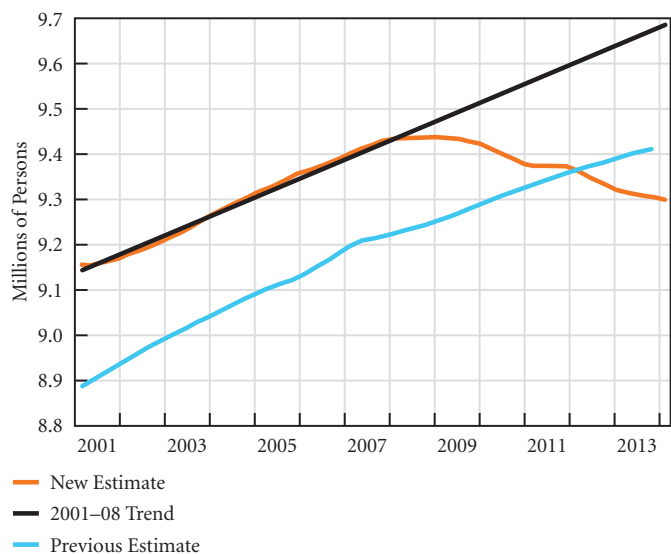
Source: ElStat

the employment rate, given by the ratio of the employed to the population aged 15 and over; and the unemployment rate, measured by the ratio of the unemployed to the labor force.

Taken together, the two measures show that the fall in the unemployment rate has not been due to the creation of new jobs. Indeed, the Hellenic Statistical Authority (ElStat) recently released new quarterly data on employment and the labor force, including a measure of the population aged 15 and older. While the series published in previous releases exhibited a stable upward trend (as illustrated by the blue line in Figure 2), the new estimates show that this population peaked at 9.437 million at the end of 2008 and then started declining, reaching 9.296 million in the first quarter of this year—that is, returning to its 2004 level.<sup>3</sup>

Since ElStat does not publish a comprehensive, up-to-date measure of net migration, we assumed it could be calculated from the difference between the precrisis population trends and the actual reported values. We therefore computed a simple linear trend based on the 2001–08 data, which showed that Greece’s population would now stand at 9.686 million had the previous trend continued. The difference between this value and the population reported for the first quarter of 2014 is thus approximately 390,000 persons (4 percent). This rough estimate was not too far off the mark, since employment is

**Figure 2 Greece: Population Aged 15 or Older**



Sources: ElStat; authors’ calculations

now 1.115 million below its 2008 average and unemployment is up by 886,000, with the difference represented by previously employed persons no longer in the labor force.

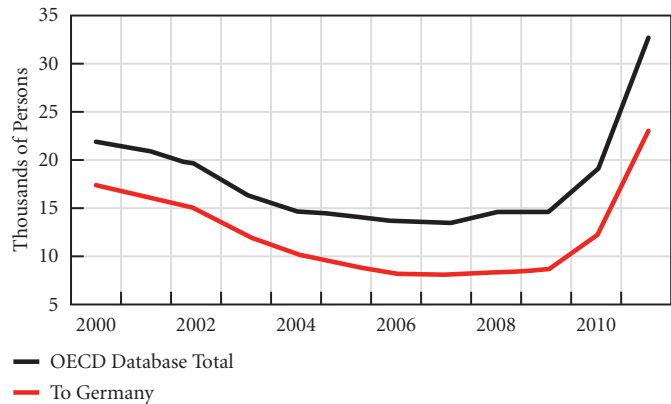
ElStat also breaks down the population by age group, which shows the number of younger Greeks to be steadily declining (a trend common to many developed countries that have chosen to reduce the average number of children per family) while the number of older people is steadily increasing (another trend common to many countries, one linked to longer life expectancy). Comparing the 15–29 age group to the 45-plus age group, we find that the decline in the younger population accelerated after 2007, compensating for the increase in the number of Greeks aged 45 and over, so that the inverted U-shape of the population shown in Figure 2 can largely be attributed to the decline in the number of residents aged 30–44 (2.442 million in the first quarter of 2014, compared to a peak of 2.544 million at the end of 2008).

With only limited information available, we cannot ascertain whether this decrease is due to Greeks in this age cohort emigrating abroad, or to a smaller number of immigrants. The Organisation for Economic Co-operation and Development (OECD) migration database contains some (as yet incomplete) statistics on immigrants by country (the figures largely underestimate total migration, as some major European countries such as France and Italy do not report any figures to the OECD). The OECD data for Greece are illustrated in Figure 3.

As should be expected from the perspective of unemployment rates among European countries, Germany—a country with low unemployment—is the main destination for Greek emigrants, the number of whom almost doubled from 2010 to 2011 (the last year for which data are available). The other portion of the fall in population (not shown in Figure 3) is accounted for by immigrants to Greece, the number of which decreased from 65,300 in 2005 to 33,300 in 2010 and 23,200 in 2011.

Given the very high unemployment rate in Greece (still at 26.8 percent as of March 2014, seasonally adjusted), it is assumed that migration of Greeks abroad and the decline in the immigration of skilled workers to Greece will continue on the same paths. This combined loss of human capital is yet another reason making the recovery of the Greek economy much more difficult. From the balance of payments statistics published by the Bank of Greece, this brain drain is not

**Figure 3 Greece: Migration**



Source: OECD International Migration Database

reflected in increased payments from abroad that could be related to emigrants’ remittances: both employee compensation received from abroad and current transfers to the private sector have actually declined since the crisis began.

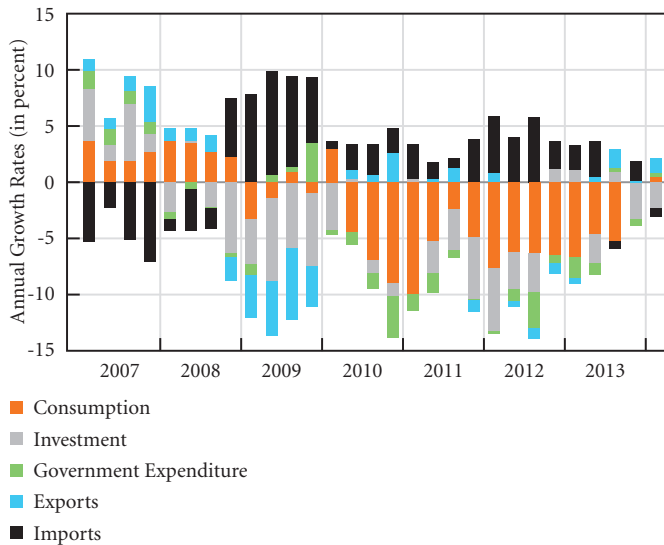
Last but not least, the decline in the working-age segment of the active population together with the increase in the number of elderly will put the country’s pension system under severe strain.

### Components of demand

The components of aggregate demand and their respective contributions to GDP growth are demonstrated in Figure 4. The provisional GDP figures for the first quarter of 2014 show a slower drop in real GDP, where the largest positive contribution comes from the increase in exports. (As the performance of exports is crucial to the success of the troika strategy imposed on the Greek government, we will turn to it in more detail in the next section.)

In the first quarter of 2014, consumption provided a positive contribution to growth, increasing by 0.7 percent over the same quarter of the previous year. It is not, however, easy to reconcile this estimate with available data on household income and wealth. A possible explanation may relate to the increase in wages: the seasonally adjusted index of wages reveals an increase of 0.6 percent YoY for the first quarter of 2014. Given the fall of about 1.5–2.0 percent in the consumer price index, the increase in nominal wages translates into a stronger increase in real wages for those who are employed.

**Figure 4 Greece: Contributions to Real GDP Growth**



Source: ElStat

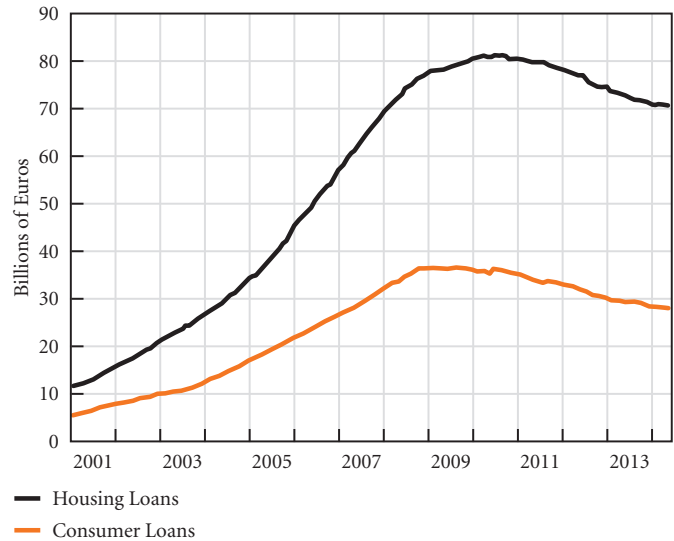
Another explanation may be due to the 1.2 percent YoY increase in government expenditures on goods and services.

On the other hand, the household sector is still deleveraging, with a net decrease in the stock of outstanding debt (Figure 5). In May 2014, this sector still had almost €100 billion in debt outstanding—€70.7 billion in housing loans, and €27.8 billion in consumer loans—against a stock of deposits that was down to €155 billion at the end of March 2014, from its peak of more than €200 billion in 2009.

A clearer picture will emerge when the detailed nonfinancial sector accounts are published by ElStat. It is possible that the increase in consumption at the beginning of the year was also supported by government transfers. Regardless, the increase in this component of aggregate demand—with its beneficial effects on output—was due to either the end of the wage deflation process or the (temporary) end of fiscal consolidation. Its lasting effects will depend on whether these processes continue or revert. (It is worth noting that the increase in consumption was accompanied by a 2 percent increase in imports.)

More crucially, private investment remains in free fall, although the decrease in the first quarter of 2014 was “only” 7.9 percent against the same quarter of 2013. During 2013, investment dropped by more than 10 percent YoY. A recovery

**Figure 5 Greece: Credit to Households**



Source: Bank of Greece

in investment in transport equipment (a positive 23.6 percent YoY) has been more than offset by a large drop in residential investment (-25 percent YoY) and investment in machinery (-13.6 percent).

Related to the decline of private sector investment is the still shaky and unstable condition of the Greek banking system. The capital adequacy of the lending sector is still tenuous, rendering credit liquidity very hard to access, and only by the most creditworthy individuals and businesses. One of the biggest problems of the major systemic banks is the size of their nonperforming loan (NPL) portfolios—a symptom of the debt-deflation trap that Greece finds itself in today. According to data from the European Central Bank, the gross total of doubtful and nonperforming loans as a percentage of the total debt instruments, including total loans and advances, increased from 5 percent in the first half of 2010 to a staggering 25 percent in the second half of 2013. In absolute terms, this means an increase in gross total doubtful and nonperforming loans of €56 billion (from €18.6 billion to €74.6 billion) over the period.

More recent data point to a further increase of the NPL stock. According to the Parliamentary Budget Office (PBO 2014), the loans left unserviced for more than 90 days stood at €77 billion, or 36 percent of the total portfolio, in April

2014. Of this total, €42 billion were loans of nonfinancial corporations, €25 billion were housing loans, and €10 billion were consumer loans. If we include the loans that have already been restructured but have again become nonperforming, the total amount reaches €86 billion, or 40 percent of the total loan portfolio. According to the PBO report, the four big systemic banks own close to €70 billion of the total €77 billion in NPLs. This is echoed in the recent report by the IMF (2014), which warns that NPLs pose “a serious threat to banks’ ability to support a recovery.” Moreover, the IMF mentions that the Bank of Greece targets for the recapitalization of the banks reflect optimistic assumptions about their ability to cope with the NPL problem. The IMF mentions that the Bank of Greece estimated the needs for further recapitalization based on a baseline scenario as opposed to an adverse scenario, as is the standard practice in similar situations. The baseline scenario assumes the troika’s projections for the recovery of the Greek economy, while the adverse scenario assumes a delay in the recovery. According to the baseline scenario (and the Bank of Greece), Greek banks will need a further €6.4 billion in capital enhancement, while in the case of the adverse scenario the need rises to €9.4 billion.

All in all, there is an urgent need for a policy to deal with the sizable magnitude of the banking sector’s NPLs. A carefully crafted policy could be implemented to provide debt relief for burdened homeowners and other indebted households that included some combination of debt write-downs to reflect market values and/or negotiation of better terms, and possibly government assumption of troubled mortgages. The latter would entail the government buying the nonperforming housing mortgages, as the US government did during the Great Depression by establishing the Home Owners’ Loan Corporation, which provided a significant return to the government when it was dissolved in 1951. Such a policy would stabilize the Greek housing market by halting its continuing decline.

The overall decline in real GDP is, therefore, to a large extent due to the continuing fall in private investment, and the prospects for financing such investment remain grim.

## Actual and Target Financial Balances

In order for the troika strategy to successfully achieve output and employment growth together with a permanent primary surplus, the current account balance must reach a large positive value. This is the consequence of the simple and well-known macroeconomic accounting identity linking financial balances:

$$S - I \equiv NAFA \equiv DEF + CA$$

*NAFA* is the net acquisition of financial assets from the private sector, given by the difference between saving (*S*) and investment (*I*), which must always equal the sum of the government deficit (*DEF*) and the current account balance (*CA*). If *NAFA* is negative, the private sector is borrowing (usually from the foreign sector), and this implies a potentially unsustainable path. In most countries, *NAFA* was positive relative to income or GDP in the 1950–80 period, reflecting the desire of the private sector to accumulate financial assets.

Let us assume that future values of *NAFA* will be zero for Greece, and let us separate the primary surplus (*PS*) from interest payments (*IP*) made by the government, so that

$$DEF = -PS + IP$$

Let us also assume that the totality of interest payments on government debt is paid abroad (an assumption not too far from reality), so that

$$CA = BT - IP$$

where *BT* stands for the balance of trade (plus other minor net income payments and transfers).

We therefore have

$$NAFA = (-PS + IP) + (BT - IP)$$

$$0 = -PS + BT, \text{ or } BT = PS$$

In other words, if the private sector is in balance in terms of saving and investment, a government primary surplus target of 4 percent requires a current account surplus of 4 percent of GDP, net of interest payments. Should private sector saving exceed investment, the required surplus in the current account would increase correspondingly.

In Figure 6 we report our reconstruction of the financial balances for the Greek economy. In what we may label the “prebubble” years (1990–95), the private sector was accumulating financial assets (government bonds) at about 8 percent of GDP, while the current account was roughly in balance. This composition of balances was not very different, albeit at different levels with respect to GDP, from financial balances in other countries (e.g., the United States). With the first wave of

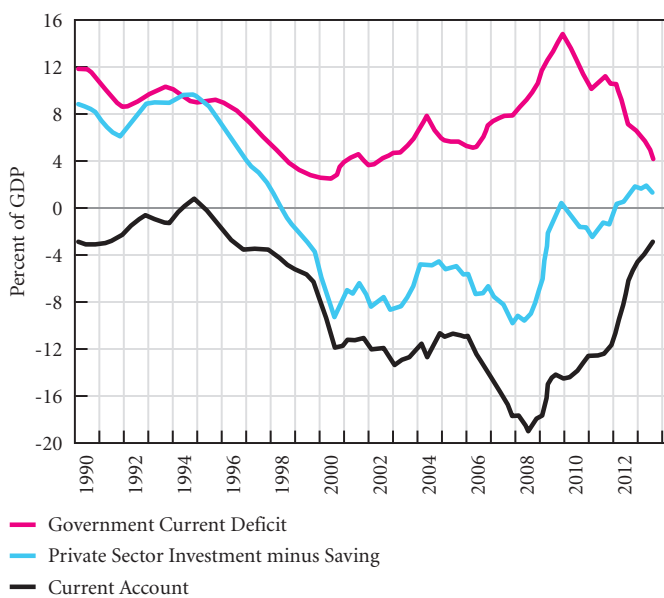
financialization and the borrowing frenzy of the 1990s, private demand started to increase relative to income, and the current account deteriorated—again, a pattern common to other western economies. The switch to a fixed exchange rate and, ultimately, the adoption of the euro—which eliminated one means of correcting imbalances in the current account—shifted the external imbalance to an unsustainable path, given the economy’s growth rate. Since the start of the crisis, the current account has improved, and the private sector balance has gone back to positive territory.

However, the requirement of the troika strategy that the current account balance reach more than 4 percent of GDP is—based on the historical evidence reported in Figure 6—highly unlikely.

### The Current Account and Competitiveness

As documented in Figure 6, the current account has improved dramatically since the crisis began in 2009. In Figure 7, using monthly data published by the Bank of Greece, we provide a detailed account of the dynamics of the different components of the current account.

**Figure 6 Greece: Main Sector Balances (Four-quarter Moving Averages)**



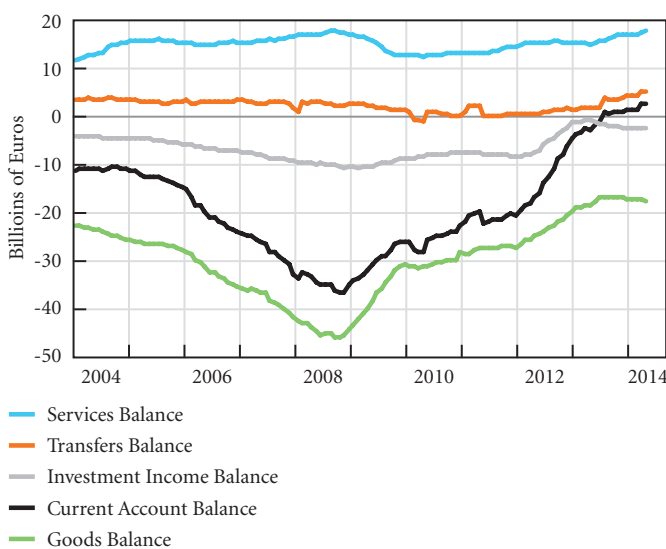
Sources: ElStat; OECD; AMECO; authors’ calculations

A first, sizable contribution to the improvement in the current account is the shrinking trade balance in goods, which dropped from a peak of €45 billion in 2008 to about €17 billion in 2014. The other largest source of adjustment is related to the net cost of borrowing from abroad, as measured by the difference in the “investment income” balance, which is the sum of interest and dividends received from abroad less interest and dividends paid. Over the 2008–14 period, investment income dropped from €10.6 billion to €2.3 billion. Another improvement (€2.8 billion) came from larger net current transfers from abroad, mainly directed to the public sector.

Trade in services has contributed to the improvement in the current account only recently. But since exports of services fell considerably in the first stages of the recession, the recovery has not been sufficient to bring these exports back to 2008 levels, measured at current prices.

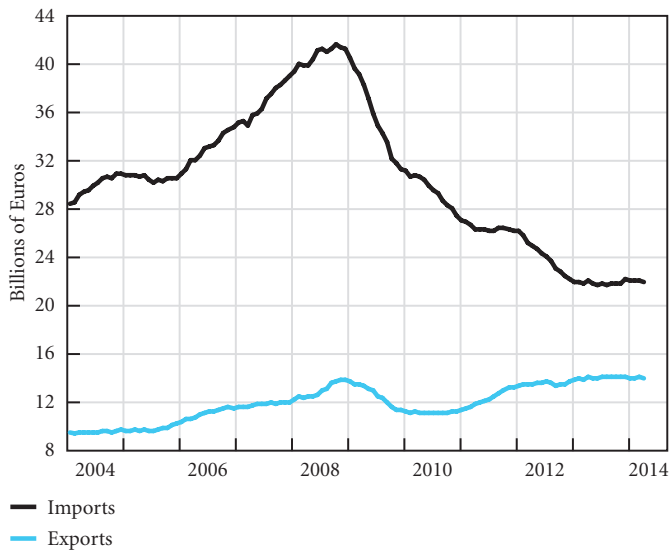
In Figures 8, 9, and 10 we examine goods exports and imports, netting out oil and ships, as reported in the balance of payments statistics provided by the Bank of Greece. Figure 8 clearly shows that, with the exclusion of oil and ships, the recovery in the trade balance is entirely due to the dramatic fall in imports generated by the recession. Exports of goods

**Figure 7 Greece: Current Account and Its Components (Annual Moving Averages)**



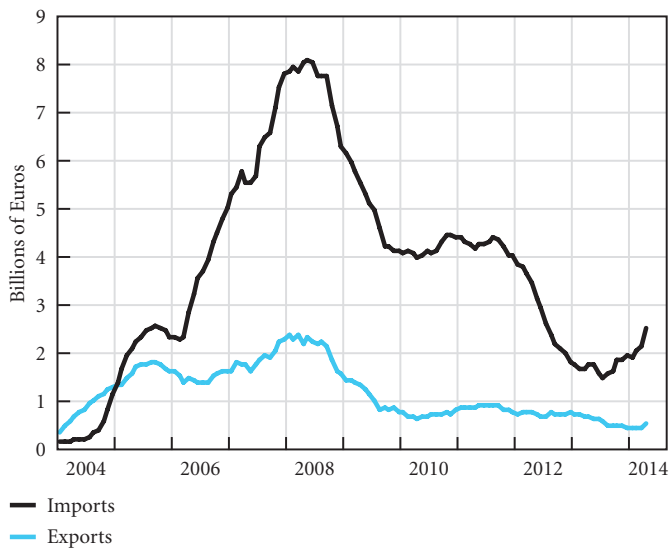
Source: Bank of Greece

**Figure 8 Greece: Trade in Goods, Excluding Oil and Ships (Annual Moving Averages)**



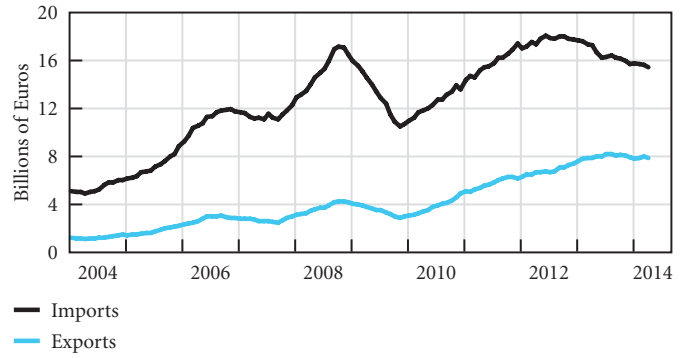
Source: Bank of Greece

**Figure 10 Greece: Trade in Ships (Annual Moving Averages)**



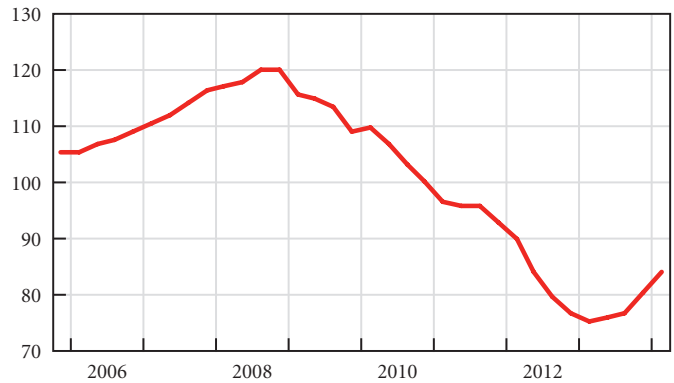
Source: Bank of Greece

**Figure 9 Greece: Trade in Oil (Annual Moving Averages)**



Source: Bank of Greece

**Figure 11 Greece: Turnover Index in Tourism (Four-quarter Moving Averages, 2010=100)**



Source: ElStat



other than oil and ships have recovered to 2008 levels, while imports have nearly halved.

Oil exports are the only component of trade in goods that show a strong recovery from 2008, as the activity of Greek refineries has increased, resulting in higher imports of oil from OPEC countries and higher exports of refined oil products to OPEC countries. As illustrated in Figure 9, this has contributed to a narrowing of the oil balance, from €12.8 billion in 2008 to a current deficit of €7.5 billion.

Exports of ships, which exceeded imports back in 2004, have remained more or less flat after the fall at the beginning of the crisis (Figure 10). Notice the large increase in recent months in the value of imports of ships, which is of interest if it signals that the recovery in tourism implies a larger dependence on foreign capital.

### Tourism and trade in services

Some indicators of output in tourism have improved recently. In Figure 11, we report the turnover index, where the value in the first quarter of 2014 improved by 14 percent over the same quarter in 2013. The value of this index, however, is still 30 percent below its peak in 2008.

The recovery in tourism is having some impact on the balance of trade in services. Data from the Bank of Greece show some improvement in exports in the “travel” category,

which accounted for €12 billion in the year ending April 2014; that is, just slightly above its previous peak in 2008. In contrast, exports in the “transportation” category have fallen to €12 billion from a peak of almost €20 billion in 2008, and saw only a small improvement in the first months of 2014 (less than €1 billion, annualized).

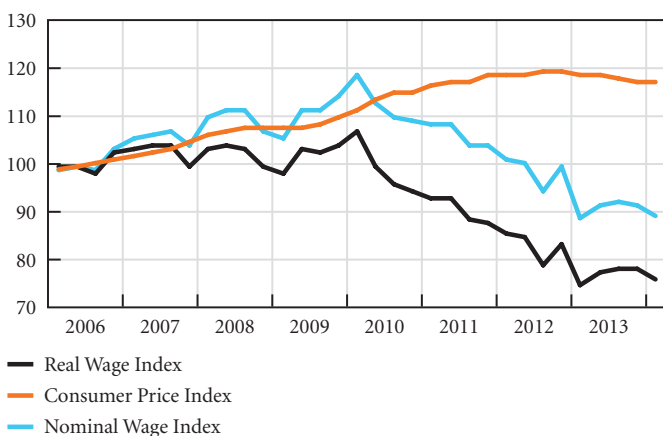
The improvement in tourism has had minimal impact on employment. For the year ending 2014Q1, net employment in this sector increased by about 3,150 employees, reflecting an increase of 5,925 salaried employees and a fall of 2,775 in employers and own-account workers. The tourism sector is thus showing signs of restructuring that may simultaneously imply higher productivity and a smaller potential for absorbing unemployment.

Overall, then, the rise in tourism activities has so far contributed only modestly to the improvement in both the balance of payments and employment, and it is unlikely to dramatically change the conditions that would result in a significant impact on either the balance of payments or employment in the short to medium term.

### Competitiveness

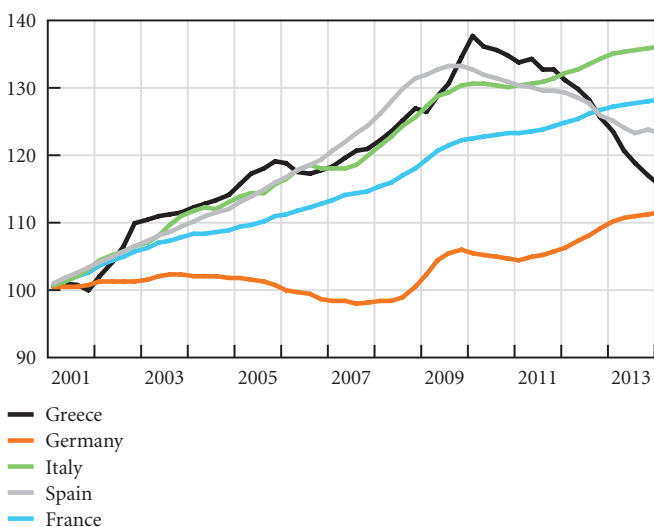
Wage deflation has taken place in Greece at a pace never before experienced in a developed country in the post-World War II era. As Figure 12 documents, nominal wages are now

**Figure 12** Greece: Wage and Price Indices (2006=100)



Source: ElStat

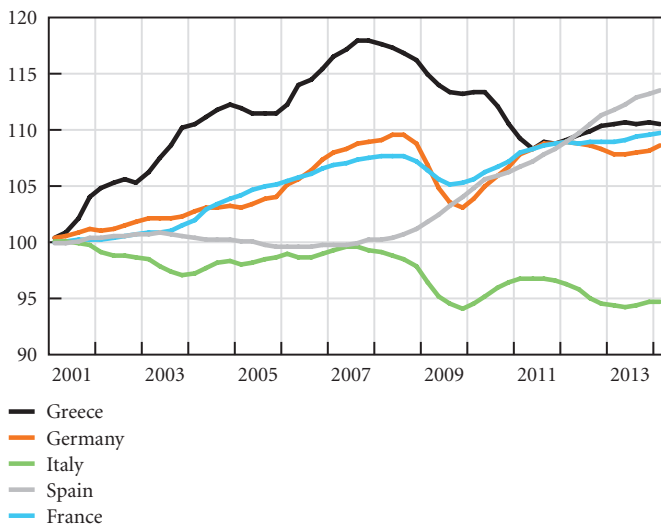
**Figure 13** Greece: Unit Labor Costs Index (2000=100)



Source: OECD



**Figure 14 Greece: Productivity Index (GDP per Person Employed, 2000=100)**



Source: OECD

(2014Q1) 24.8 percent lower than their peak at the beginning of 2010, while real wages are 28.7 percent lower than their 2010 peak.

Greece experienced fast growth in nominal wages leading up to the crisis, as it was closing the gap with the other eurozone countries: in 2000, the average monthly wage in Greece was €1,623, or 58 percent of the average monthly wage in Germany. The gap narrowed to 70 percent by 2009, only to widen again with the onset of the crisis, so that in 2012 the average wage in Greece was 56 percent of that in Germany, or 2 percent less than in 2000. As Figure 13 shows, since 2012 the relative position of Greek workers has continued to deteriorate even further.

Since real wages are not a reliable measure of competitiveness, in Figure 13 we report the dynamics of unit labor costs for Greece and several other countries in the eurozone.

As mentioned earlier, unit labor costs grew faster in Greece than in the eurozone as a whole (with the possible exception of Spain) until the beginning of 2010 but have since fallen by 16 percent, bringing Greece's unit labor cost index very close to that of Germany. As measured by unit labor costs, Greece has more than recovered its competitiveness relative to the other countries shown in Figure 13, with Germany the only exception.

Despite the precipitous drop in wages and labor costs, it has had little impact, if any, on trade. To be sure, labor costs are the result of the dynamics of both wages and productivity. According to the OECD's 2000-based index (Figure 14), productivity was rising much faster in Greece than in any other eurozone member-state during the run-up to the Great Recession in 2007. Productivity started to drop in concert with decreased production, and it is unlikely to recover unless aggregate demand rises, stimulating increases in output.

## Conclusions

The recent optimism about Greece due to the decline in its sovereign bond yields is not well founded. As Desmond Lachman (2014) put it, "Despite encouraging signs of an incipient economic recovery, Greece remains mired in the deepest of economic depressions and it is now burdened by a mountain of debt"—its strategic options are limited. Reducing the stubbornly high unemployment rate and reversing the declining fortunes of households are urgent public policy priorities. Economic growth and increased domestic demand will not come about from private sector expenditures while the household sector, overburdened by ever-increasing taxation, continues to deleverage and the business sector is without viable options for financing investment. And as we have shown, increased tourism, despite the millions of tourist arrivals, is unlikely to deliver the expected recovery.

High unemployment and declining production, which weigh heavily on domestic demand, have pushed Greece into deflation territory, which is unlikely to be a relatively short-term phenomenon.

The business-as-usual approach—characterized by harsh austerity programs that deliver no growth and maintain unprecedented levels of unemployment into the intermediate term—must come to an end. What must come to pass instead is a shift in the fiscal policy stance toward lower direct and indirect taxation, and publicly funded work (Antonopoulos et al. 2014).

## Notes

1. See Papadimitriou, Nikiforos, and Zezza (2014).
2. See Papadimitriou, Nikiforos, and Zezza (2013).
3. The change in the series is due to ElStat incorporating the latest census data, and revising the existing series on the basis of the new census results.

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