



## Working Paper No. 484

---

### **Expensive Living: The Greek Experience under the Euro**

by

Theodore Pelagidis\*

and

Taun N. Toay\*\*

December 2006

---

\*Corresponding author. University of Piraeus, 40 Karaoli and Dimitriou Street, 18532 Piraeus, Greece, Tel./Fax+30-210-7216033. Email: [pelagidi@unipi.gr](mailto:pelagidi@unipi.gr)

\*\*University of Piraeus affiliated Fulbright Grantee, 2005–2006, The Fulbright Foundation, 6 Vas. Sophias Avenue, 10674 Athens, Greece, Email: [Tauntoay05@fulbrightweb.org](mailto:Tauntoay05@fulbrightweb.org)

We thank Y. Stournaras and P. Kazakos for their helpful comments and suggestions. The usual disclaimer applies.

---

The Levy Economics Institute Working Paper Collection presents research in progress by Levy Institute scholars and conference participants. The purpose of the series is to disseminate ideas to and elicit comments from academics and professionals.

The Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan, independently funded research organization devoted to public service. Through scholarship and economic research it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

The Levy Economics Institute  
P.O. Box 5000  
Annandale-on-Hudson, NY 12504-5000  
<http://www.levy.org>

## **Expensive Living: The Greek Experience under the Euro**

### **ABSTRACT**

Apart from its widely accepted direct advantages, the introduction of the euro has been accompanied by a surge of inflation in most of the EU member states. At the same time, wages—in part, wages of the unskilled—are relatively losing ground, while the purchasing power of the average European seems also to have weakened since the introduction of the single currency. In this paper we deal with five relevant central issues to interpret “expensiveness” in Greece. First, we examine to what extent recent inflation trends are attributable to the constraints imposed by the monetary union—namely negative demand disturbances in certain Greek regions. Second, we investigate to what extent these patterns are also due to the adoption of the euro—including conversion period effects—over product market and other domestic rigidities. Third, we investigate the impact of seasonal effects on inflation, in the context of the Greek so-called traditional “petit-bourgeois capitalism.” Fourth, we explore the extent to which unemployment is another factor that drives wages and purchasing power down. Fifth, we apply the Balassa-Samuelson effect to see whether it constitutes the culprit for price hikes in nontradable products in particular. We find that all the aforementioned factors contribute to the Greek expensiveness.

**JEL Classification:** E310

**Keywords:** Inflation, Greek Economy, Balassa-Samuelson Effect, Seasonal Effect, Product Markets, Unemployment, Monetary Union

## 1. INTRODUCTION

There is one phrase on the lips of Europeans today more than any other, “life is getting too expensive.” Whether at the market, paying rent, or traveling, Europeans pain over recent prices and often attribute the cause to the adoption of the euro. No matter what language you speak, Europeans increasingly cringe at prices under the euro—support for which has eroded from the time of its introduction. A growing divide is apparent in Europe between the proposed benefits of monetary union and the public discontent surrounding reforms that accompany it.

Greece is aptly the center of this fissure, caught between integration and a society uncomfortable with the recent pace of change. In particular, although the majority of Greeks remain proponents of European Union (EU) widening and deepening, public disappointment over the euro is increasingly prevalent. Previously, Greece witnessed a hard push for inclusion in the European Monetary Union (EMU), both from policy-makers and its citizens. Now, Greece is among the nations most opposed to the euro. The most recent Eurobarometer survey finds only 49% of Greeks in favor of the European Monetary Union, versus the 59% average for the EU. The figures are more divergent when comparing opinion against the EMU, where Greece boasts the second highest percentage against the EMU (England: 64%; Greece: 49%; EU average: 35%). These figures are a far cry from the 62% of Greeks that favored EMU membership in previous surveys (EKEM 2005). Such a rapid shift in sentiment warrants exploration.

The European Commission (EC) retorts that the overall effect of changeover on prices was limited, with the “all items” category of the “Harmonised Index of Consumer Prices” falling between 0.12 to 0.29%—depending on the country (EC 2005). In fact, the overall Consumer Price Index (CPI) rose cumulatively only by 20.1% over the six-year period of 2000 to 2005 (NSSG 2005). Many people are quick to attribute this seemingly stark figure to the adoption of the euro—understandably, as the entrance of Greece into the European Exchange Rate Mechanism (ERM) and later into the eurozone nicely overlays to this time period. Overlooked, however, is the same comparison for the six years preceding 2000. The cumulative inflation of 1994 through 1999 was 40.9%. Far more staggering is the comparison to the six years preceding 1994 (an astonishing 97.4%). In short, recent levels of inflation in Greece pale in comparison to previous chapters of Greek history (see Figure I).

However, the real concern is not the *overall* inflation rate. It is often argued that the harmonized inflation index disguises enormous price hikes. Most observers acknowledge that the changeover to the euro precipitated price increases in certain sectors and for specific goods and services in everyday consumption items such as coffee, vegetables, bread, newspapers, a haircut, local taxes (including parking meters), and so on (European Parliament 2005). These price hikes are regularly matched with “slow growth” or even stagnated wages for the unskilled labor in particular (see Table 1 for minimum wages), a possible consequence of increasing open labor markets, trade globalization, and an increasing pool of supply of ready-to-work labor, mainly due to high rates of unemployment.

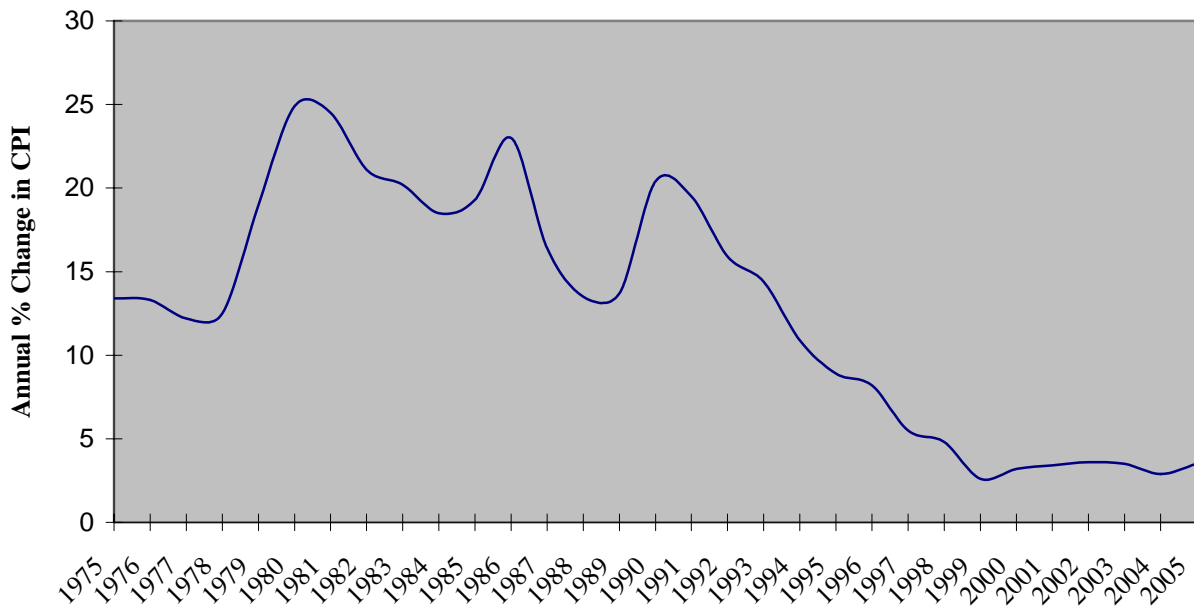
**Table 1**  
**Minimum Statutory Wages and Salaries**

	<i>Minimum daily wage of of blue collars (grc)*</i>	<i>Minimum monthly salary of white collars (grc)*</i>	<i>Minimum monthly salary average for Eurozone**</i>
2000	20,7	461,5	848,6
2001	21,1	469,7	890,0
2002	22,2	494,8	923,0
2003	23,3	519,9	951,6
2004	24,5	547,6	979,8
2005	25,9	579,0	1019,6

Sources: \*Bank of Greece and General Statistical Service of Greece

\*\* Eurostat 2005—averages are for the eurozone nations with a minimum wage: Belgium, France, Greece, Ireland, Luxembourg, Netherlands, Portugal, and Spain.

**Figure I**  
**Historic Inflation in Greece**



*Source: National Statistical Service of Greece and Ministry of Finance*

This paper aims to explore whether or not the common perception among Greeks that the euro has been *the* primary cause of recent price hikes is sound. Below we deal with five relevant central explanations to approach the issue. First, we examine the extent to which any recent inflation trends are attributable to the constraints imposed by monetary union and the single currency, namely negative demand disturbances in certain Greek regions. Second, we question to what extent these patterns are also due to the adoption of the euro—including conversion period issues—versus domestic product market rigidities. Third, we investigate the impact of strong seasonal effects on inflation, in the context of the Greek so-called traditional “petit bourgeois capitalism” that still survives despite some Europeanization of the economy. Fourth, we explore the extent to which unemployment is another factor that drives wages and purchasing power down. Last, but not least, we apply the Balassa-Samuelson effect to see whether it constitutes the culprit for non-tradable products price hikes.

## 2. THEORETICAL UNDERPINNINGS OF OPTIMAL CURRENCY AREAS AND “EXPENSIVENESS”

In theory, monetary union entails a host of positives for the countries concerned. Most importantly, the single currency promotes trade by reducing uncertainty over interest and exchange rates, and by eliminating transaction costs and red tape by the banks. In addition, a single currency provides better access to markets for European enterprises, both within the European Union and outside of it, thus helping to improve their competitiveness—again, theoretically, as the opposite has been observed in Greece. It also *should* benefit consumers by increasing price transparency and competition. These benefits of the single currency were thought to be potent enough to boost growth for the European economies. Reality, however, turned out quite differently.

The main criticisms against the single currency originate from the theory of “Optimal Currency Area” (OCA), which argues against a common monetary policy (Pelagidis 1996a, 1997). The basic premise is that the mobility of factors of production is a fundamental requirement for a successful currency area. This would inject sufficient flexibility in the system to hedge against asymmetric demand shocks. Truthfully, however, the mobility of labor remains at low levels across Europe—not to mention the absence of a uniform and timely transfer payment system (Pelagidis 1996b). This makes adjustment in response to exogenous shocks slow, incomplete, and asymmetric, leading to considerable output and employment losses for certain regions and sectors under a one-size-fits-all monetary policy.

In particular, the incidence and magnitude of aforementioned demand disturbances ultimately depends on the output mix and degree of specialization across countries and regions. This, in turn, tends to undermine the OCA. The EMU in itself tends to create convergence but, at the same time, it also tends to deepen market integration. This increases the degree of sector specialization and reinforces differences in the structure of production. The greater the differences in the structure of production, the greater the incidence and magnitude of demand shocks on individual countries and regions will be. Thus, the lower the respective speed of adjustment will tend to be. The rigidity of labor and product markets only aggravates the problem.

Within the EU there are marked differences in the structure of production. Germany and France, for instance, have relatively large manufacturing sectors. Conversely, the manufacturing sectors of Greece and Portugal are very small, accounting for equally small employment ratios. One wouldn't expect a demand shock to affect these countries the same.

Differences in the composition of output from one country to another means that terms of trade shocks affect countries differently. Hence, loss of domestic control over monetary policy tends to make macroeconomic shocks more asymmetric (McKinnon 2000). In fact, empirical evidence shows that the core EU countries (Germany, France, the Netherlands, and Denmark) experience very different supply shocks from those affecting other member countries, including the U.K., Italy, Spain, Ireland, Portugal, and Greece (Eichengreen 1997), meaning the EU-15 alone is prone to asymmetric shocks. Extending analysis to countries as economically diverse in their composition as the EU-25 leaves policy-makers with a group of nations that are anything but homogeneous.

Within the EMU, monetary policy is entirely in the hands of the ECB and outside the control of national monetary authorities. Hence, an adverse demand shock is expected to have a heterogeneous impact on member states and regions. The heterogeneous impact will be more pronounced as economic integration promotes specialization and the deepening of production.

The internal cost of adjustment will depend on the size and incidence of asymmetric shocks and on the efficacy of alternative adjustment mechanisms, namely labor markets and fiscal policies. That is, the country affected must deflate internally, which means that wages should lag inflation to prevent a loss of competitiveness. On the other hand, the corresponding required fiscal contraction raises regional unemployment and, as a consequence, the supply of the unemployed and unskilled in the labor market. Thus, overall wages stagnate for the “unprivileged” sectors and regions; while on the opposite end of the spectrum, the winners concentrate wealth, demanding superior, modern products and services. At this point—despite greater theorized market efficiency—the introduction of euro creates favorable conditions for growing inequalities in incomes and eroding standards of living. In other words, winners (agents and regions) see their purchasing power increasing, while losers (other regions and mainly poor, unskilled labor and low-income pensioners) see their wages stagnating, experiencing higher prices even for some basic—albeit highly demanded—goods and services. As Greece's structure

of production, employment, and its general division of labor is quite different from the EU average (due to the relatively high share of GDP stemming from the agricultural and petit-professional sectors), any demand shocks in the European economy are likely experienced in Greece as both asymmetric and negative, with catastrophic results for the Greek purchasing power.

We will go further and examine the above argument in context of the Balassa-Samuelson effect in section six. First, however, we must discuss another channel with which the euro and its “asymmetrical consequences” might contribute to the “expensive living” in Greece, namely product market rigidities that allow price abuses to flourish.

### **3. CONVERSION PERIOD AND DOMESTIC PRODUCT MARKET RIGIDITIES**

While the terms of entry and constraints of the eurozone could be argued to place upward pressure on prices, the changeover period is where attention should focus. It is clear that there was some rounding up in the conversion process to the euro. While the official conversion rate was enforced at the exchange and banking level, new prices for goods and services were left to providers—offering a convenient opportunity to price gouge.

Beyond the sectors that could claim menu-cost pricing strategies, many of the less formal markets draw the greatest complaints for price hikes. Unfortunately, due to the discretion exercised by sellers and the lack of consistency in such informal markets, these same areas are very difficult for economists and statisticians to accurately track (prices of goods bought at the *laiki*, or open-air market, for example). The range of price level changes is staggering, with some consumer groups claiming 20 to 147% increases in the price of certain goods since 2002 [Greek Consumer Centre (ELKEKA) 2006]. Again, despite complaints over prices, there was not a sharp overall spike in prices at the time of conversion. That said, many trends are overshadowed when looking at the economy as a whole.

It should be noted that countries with more complex conversion rates witnessed higher inflation during changeover than those nations with easily calculated rates. The conversion period in these countries, Greece included, created an information asymmetry between buyers and sellers. This mismatch in available information—or discrepancy in the cost of gathering



accurate information—allowed a price wedge to be driven between the buyers and the market clearing rates (Ehrmann 2006), meaning the cost of converting many prices for many purchases was higher for buyers in countries with complex exchange rates to the euro. While marginal on aggregate, these changeover inflationary effects were especially pronounced in low priced goods—an asymmetry to which we will return. Equally pronounced, as Table 2 shows, was the inflation acceleration in services.

<b>Table 2</b>		
	<b><u>March 2002</u></b>	<b><u>March 2003</u></b>
<b><u>Prices determined by the State</u></b>		
Water/Sewage	3,1%	4,1%
Electricity	4,4%	3,9%
Medical services	4,9%	5,7%
Hospital stays	4,5%	4,4%
Hotel expenditures	12,7%	5,3%
Airline tickets	12,2%	0,0%
Taxi fares	0,0%	8,0%
Ferry tickets	6,1%	26,9%
Tuition fees	3,6%	4,5%
<b><u>Prices determined by the market</u></b>		
Take-away food	6,7%	3,8%
Books and Newspapers	3,7%	4,0%
Served beverages	8,4%	5,0%
Haircuts	11,0%	7,9%
Car services	3,2%	7,2%

*Source: Alpha Bank (2003), Economic Bulletin No 86.*

In particular, several goods and services in the Consumer Price Index stand out for accelerated inflation in the years surrounding changeover to the euro (see Table 3). “Food and non-alcoholic beverages” along with “hotels, cafés, and restaurants” witnessed inflation rates of 5.1% and 4.6% for 2001, respectively, and 5.3% and 6.7% for 2002. Such figures are well above the economy’s average rate of 3.4% for 2001 and 3.6% for 2002. More pronounced was the acceleration in “alcoholic beverages and tobacco,” which soared 7.6% higher for 2001 and 7.2% higher for the following year. This is in sharp contrast to a category such as “transport,” which boasted rates of 1.1% for 2001 and 0.9% for 2002 (NSSG 2006a). While these accelerations in prices for certain categories correspond to the adoption of the euro, one should be careful in saying the new currency caused these trends. It is, however, reasonable to say that the areas marked by more rapid inflation surrounding the adoption of the euro had a high degree of flexibility in determining prices under the new currency.

**Table 3**  
**CPI Sub-indices Inflation (%)**

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
General Index	3,2	3,4	3,6	3,5	2,9
Food-Beverages	1,9	5,1	5,3	5,0	0,5
Alcohol/Tobacco	2,8	7,6	7,2	4,2	4,6
Garment-Footwear	2,1	3,3	3,6	2,0	4,1
Housing	6,1	1,8	3,3	4,4	4,8
Durable goods	1,0	2,3	1,6	2,0	1,6
Health	3,3	2,9	4,7	4,3	4,6
Transportation	6,4	1,1	0,8	3,0	3,5
Telecommunications	-10,5	-0,8	-4,6	-4,2	-4,3
Leisure and recreation	1,3	3,5	3,3	2,9	2,8
Education	3,2	3,6	3,9	4,5	4,4
Hotels, cafes & Restaurants	4,7	4,6	6,7	4,8	4,2
Other goods and services	2,2	4,9	3,6	3,2	2,2

*Source: National Statistical Service of Greece (NSSG), various issues.*

While it is clear that there was a mix of accelerated inflation for certain goods and services surrounding the adoption of the euro (Alpha Bank 2003), those same years were marked by historically low inflation rates for Greece (recall Figure I). How, then, can we explain the prevalence of the view that the euro has caused higher prices? The answer lies, as we will argue below, to a great extent, in product market rigidities, which institutionalize any temporary effects such as the conversion one-off changeover.

Truth be told, inflation remains problematic in Greece today for many of the same reasons it was troublesome in the past. Strong unions, especially in public sectors, successfully demand wage hikes beyond levels that productivity gains would otherwise dictate (McDonald 2005). Furthermore, restrictions on hiring and firing employees drive up the cost of a company taking on new workers. Such costs are easily passed onto the consumer in Greece due to fairly uncompetitive markets. The lack of open markets and excessive regulation further impede competition from driving down prices. It should be pointed out here that Greece's economy is the least "trade open" among the EU member-states, with trade only 15% of GDP (openness index) (NCCD 2006). That makes the life of domestic monopolies much easier, as competition from abroad is rather restricted, but on the other hand it accelerates prices at the expense of consumer's welfare. It worth mentioning that, according to Eurostat and National Bank of Greece estimations (National Bank of Greece 2005), the "core inflation" (prices of fuel and fresh fruits and vegetables excluded) in Greece is around 3.0%, the highest by far in the EU (average 1.6%). Where fuel and vegetables are generally the main culprits for inflation volatility, in Greece, price hikes seem to result mostly from the malfunction of the product markets and, to a lesser extent, to the Balassa-Samuelson effect, as standard macroeconomics would suggest.

Let us first embark on the issue of the uncompetitive markets and excessive regulation. In fact, the two impetuses are closely connected. Stagnation in Europe is often largely attributed to labor market rigidities; namely, too high unemployment benefits, too high minimum wage levels, and too high a degree of worker protection. Overlooked in these factors are the oligopolistic structure of certain markets and the strong and inefficient presence of the state. To stress an important point—focusing on labor rigidities alone misses a large explanation of inflation owed to product and service rigidities. Table 4 lists indices that capture the level of regulation on two professions for various EU countries. A certain level of regulation can be viewed as necessary to

protect consumers. Nevertheless, at high levels, regulation becomes a deterrent for new market entries, allowing insiders to drive up prices and offering little incentive for improving services or productivity performance. Notice the correlation between less regulated countries and employment, with Finland, Sweden, and the U.K. each displacing comparatively low regulations versus the stagnate economies of “old Europe.” Furthermore, while Greece displaces strong growth rates, it also boasts very high levels of unemployment. Although not extensive for professions, the indices are telling in that Greece is at or near the top for regulation in both fields.

**Table 4**  
**Composition of Regulation Indices**

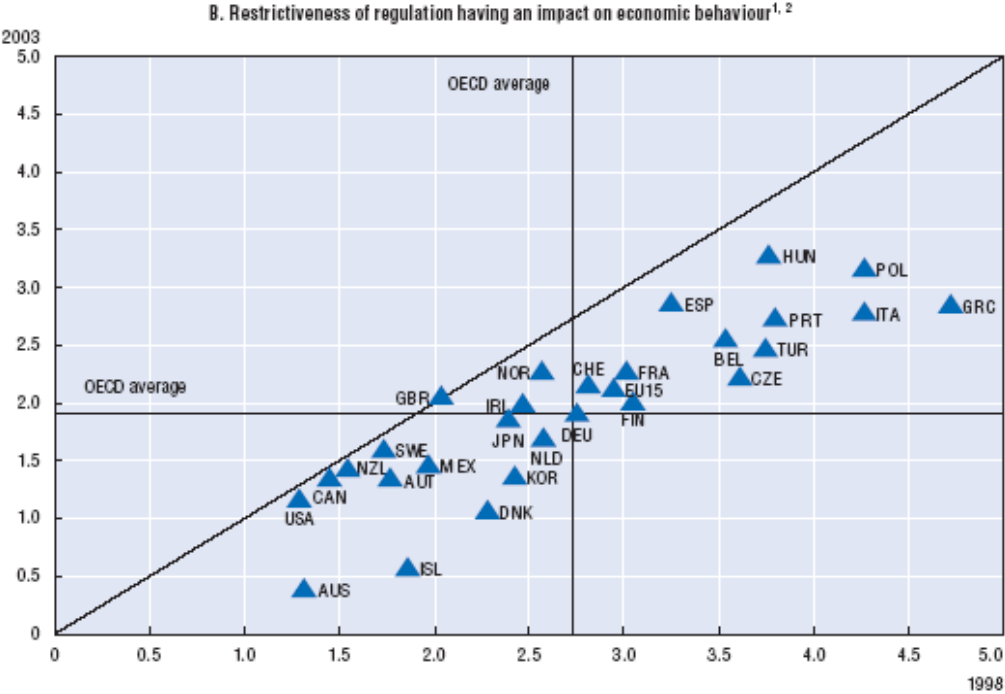
	Lawyers	Notaries Public*
Austria	7.3	5.0
Belgium	4.6	4.3
Denmark	3.0	--
Finland	0.3	--
France	6.6	4.8
Germany	6.5	5.0
<b>Greece</b>	<b>9.5</b>	<b>4.8</b>
Ireland	4.5	--
Italy	6.4	4.3
Luxembourg	6.6	4.6
Netherlands	3.9	3.8
Portugal	5.7	3.9
Spain	6.5	4.0
Sweden	2.4	--
U.K. / E & W Barristers	4.6	--
U.K.	3.5	--

\*Arithmetic mean of market entry regulation indices.  
*Source:* Paterson I. et al (2003), “Economic Impact of Regulation in the Field of Liberal Professions in Different Member States,” Final Report, Part 3, DG Competition, EU. *Emphasis added.*

Figure 2 shows the negative externality of such excessive regulation on economic activity. While Greece displayed an improvement from 1998 to 2003, it still ranks worse than any other EU-15 nation. In addition, Figure 3 places Greece at the top of discriminatory procedures, a strong impetus to competitive market function. An interesting observation is the improvement made for restrictive regulation impacting economic behavior versus no gains in discriminatory procedures. One possible explanation is that restrictions have not eased; rather, strong growth in Greece and the investment preceding the Olympic Games in 2004 offset the

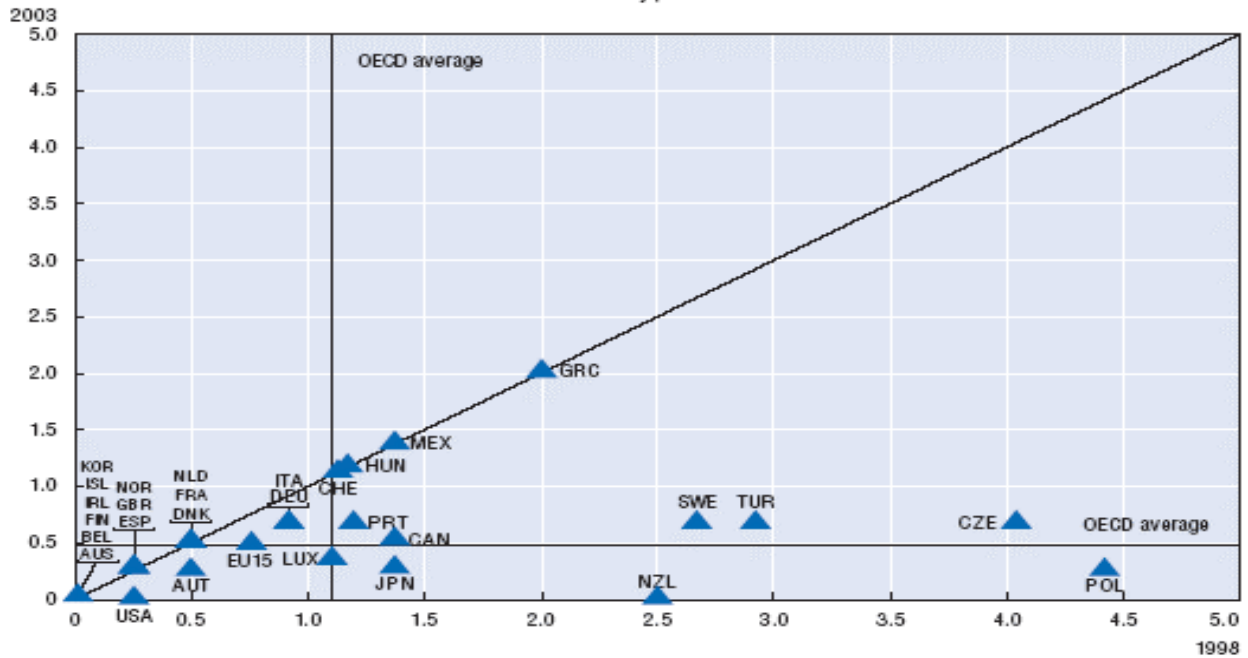
otherwise negative impact on behavior. The figures should raise alarm for policy-makers. Unfortunately, the degree of regulation and discriminatory procedures is both a cause and product of the state occasionally serving clientelistic pressures (Kazakos 2001). Regulation creates insiders who are then better leveraged to influence liberalization—or lack thereof—in industries and services (Stournaras 2004).

**Figure 2**



1. EU15, excluding Luxembourg.  
 2. Economic regulation includes all domestic regulatory provisions affecting private governance and product market competition such as state control and legal barriers to entry in competitive market.  
 Source: OECD, *Economic Policy Reforms: Going for Growth*, 2005.

**Figure 3**  
**B. Discriminatory procedures**



Source: OECD, *Economic Policy Reforms: Going for Growth*, 2005.

In conclusion, government regulation should focus on fighting firms’ rent-seeking behavior that is directly linked with product market rigidities and “entry to the market” restrictions. Such restrictions are the direct result of the influence of special interests in entrepreneurial activities and professions that exercise pressures to keep significant parts of product and service markets under oligopolistic controls, favoring price increases which reduce consumer welfare and purchasing power. Thus, the government concern should revolve around regulating price abuses and freeing up product and service (professional) markets. Seemingly, one way to facilitate this is to ease regulation on professions and the hiring burdens of companies. Again, markets more open to competition through lowering barriers to entry will promote hiring, as well as drive prices lower.

#### 4. STRONG SEASONAL EFFECTS AND OTHER DOMESTIC ISSUES

While the euro fostered information asymmetry during conversion—and, consequently, price gouging—it also allowed for the exacerbation of a pattern we term the “Pasha Effect.”\* The “Pasha Effect” refers to price discrimination surrounding traditions. The implications of this effect are found during periods in which producer’s price gouge certain products favored by traditions. The application to Greece revolves around religion’s role in society and seasonal consumption patterns dictated by a Mediterranean diet—as opposed to high consumption levels of processed foods. In effect, Greek consumers are almost always subject to some “seasonal effect,” with the tradition of shopping at the *laiki* for fresh produce or dietary restrictions for Easter and Christmas. This “Pasha Effect,” along with often unfavorable weather conditions that hurt perishable vegetables and fresh products, allows price hikes to precede demand and supply movements, given the changing nature of consumer demand elasticity over periods of tradition-constrained consumption patterns. While not necessary unique to Greece, the “Effect” is likely observable in any society where tradition has a strong influence on free-market mechanisms. Although the folly of this effect lies in rigid product market where producers can easily exploit periods of inelastic demand allowing for price discrimination, the conversion to the euro likely allowed the Pasha Effect to appear less pronounced—lost in conversion, if you will. The fact that the “Effect” has continued long after the conversion to the euro indicates a lack of free market forces in Greece.

While a great deal of explaining the euro’s perceived contribution to inflation revolves around socioeconomic trends—namely, that more people are feeling greater burdens from inflation compared to previous generations—mention should be given to psychological forces. Psychology plays a strong role in the perceptions of prices, as people factor the smaller everyday costs—such as coffee and parsley—more readily than the rare purchases, on behalf of the

---

\* “Pasha” (Easter) refers to Orthodox Easter in Greece, prior to which a 40-day fasting period takes place. There are fairly strict dietary guidelines over this period, with notable increased consumption of vegetables and certain seafood and, following Easter, lamb. Other similar—although shorter—periods contributing to price run-ups in certain goods and services exist. Other notable “special food periods” that prohibit or favor the consumption of certain foods and products are the “first day of lent,” the 15<sup>th</sup> of August (Assumption), the 1<sup>st</sup> of May (Labor Day), Christmas, and New Year’s Day, and last but not least, the Sunday-Pasha. During summertime holidays in August, the price of ferry and other transportation tickets are also accelerating very fast due to a huge domestic and international seasonal demand for traveling to the islands.

unprivileged in particular, of computers and cars, or the interest rates savings they have on a home loan.

This divergence between perceived inflation and actual inflation is partially attributable to relating successions of price hikes to a single event. Some limited panel research for restaurants in Italy has found much of the inflation coming before the official euro-changeover. The perception of prices doubling is often relating several years to the conversion date and deemed so large due to the number of price revisions (Gaiotti and Lippi 2004).

The importance of these trends and their impact on public perception is that they are often strictly attributed to the euro. As we argued before, it is true that the euro created a conversion price shock and this period was plagued with “price discrimination” that extended beyond the changeover period. Furthermore, the continued “seasonal effects” in their different forms in Greece have likely had a real impact on inflation; however, “conversion,” as well as “seasonal,” impacts became extended well beyond conversion and entrenched price hikes due to producers’ power and were fuelled by rigid product markets. It follows that higher prices and eroded purchasing power help explain the strong public discontent over the euro, as many people believe that the single currency is the culprit. Nonetheless, apt blame for recent price trends should, as we argue, focus more on structural forces that perpetuate inflation.

## **5. THE UNPRIVILEGED UNEMPLOYED**

By looking at purchasing power relative to other European nations, Greece lacks rapid real convergence (OECD 2005a), meaning Greece has not created a much higher standard of living for its citizens—especially for the unemployed and underemployed—since joining the European Union, despite structural fund transfers. Those socially marginalized in the integration process are especially prone to populist rhetoric and scapegoating the euro for stagnated wages and high rates of unemployment.

Standard of living indices often look at purchasing power levels over a period of time. In the past, money in Greece rapidly lost value, but was offset by large wage increases—fuelling the inflation cycle of higher prices, higher wages, and so on. Today, inflation has been dramatically reduced, but so, too, has wage growth. Further, while wage hikes continue to



outpace inflation overall, wage growth in lower income jobs is often below the appropriate inflation rate for these income groups (Bank of Greece 2004), as the unskilled labor supply has massively increased from the one million unskilled immigrants that entered the country the last decade or so. These trends, coupled with already highly entrenched unemployment, leave more people feeling greater impacts from price hikes.

Unemployment, with some interplay from trade and labor globalization (Chortareas and Pelagidis 2004), is certainly one of the factors exerting downward pressure on wages. Greece only trails Germany in overall unemployment, at 9.7%, and long-term unemployment, at 5.2% (Kathimerini 2006). These stubbornly high rates of unemployment exacerbate the burdens of inflation for different segments of the population. Greece boasts the eurozone’s highest percent of unemployed individuals under 25 years old, at an unsettling 25%. For the ages 25 to 29, the unemployment rate is 16%. Unemployment for women is also shockingly high, with an astonishing 27% of those between 15 and 29 unemployed. One would expect these groups to be the demographics driving growth. The problem is not constrained to new job seekers either. For women between 30 and 44, the figure is 14.9% (NSSG 2006b). Such stark figures indicate a large mismatch between skills and available jobs. Compare this environment to 1981, when Greece joined the EU and enjoyed unemployment rates around 4% (see Table 5).

**Table 5**  
**Unemployment Rate**

<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>10.9%</b>	<b>10.4%</b>	<b>11.0%</b>	<b>10.4%</b>	<b>9.8%</b>

*Source: Alpha Bank (2006), “The Greek Economy,” Short-term Economic and Financial Outlook, No. 56, June.*

Furthermore, it is not only that jobs are more difficult to acquire, but also that the pay scale is low by recent standards due to trade globalization and immigration further increasing labor supply in the domestic markets. Minimum wage in Greece is little over half of the average of other euro nations (recall Table 1), with Greeks claiming 668 euros a month, compared to the average 1019,6 euros and a far cry from the U.K. or Luxembourg levels: 1244 and 1467 euros a month, respectively (Eurostat 2006; Regnard 2005). Equally troubling is that to obtain the same goods, an average Greek must work 92% more than an average German worker by some measures.

Research at the Bank of Greece recently looked at the effects of inflation on different income groups in Greece (Mitrakos and Zografakis 2005). Underlying the report are the different consumption patterns that separate socioeconomic groups display. Naturally, a low-income individual will devote a greater percentage of his or her income to primary products, such as fruits, vegetables, and other foods. The same individual will spend less on other areas of the CPI, such as entertainment, leisure, and restaurants. It follows that the unemployed, pensioners, farmers, and the poor are particularly sensitive to inflation in Greece. Furthermore, over most of the period of examination, these groups faced inflation well above the average rate.

These trends contribute to a negative perception of the euro in general. As we argued, those most burdened by inflation have been, until very recently, a rather growing segment of the population. Greece has witnessed many of the changes that follow Western Europe: weakened labor rights, high unemployment, constrained state spending, and so on. Still, the nation has yet to reap the income gains of a country like Ireland, which joined the EU after Greece and now enjoys a living standard higher than the EU average.

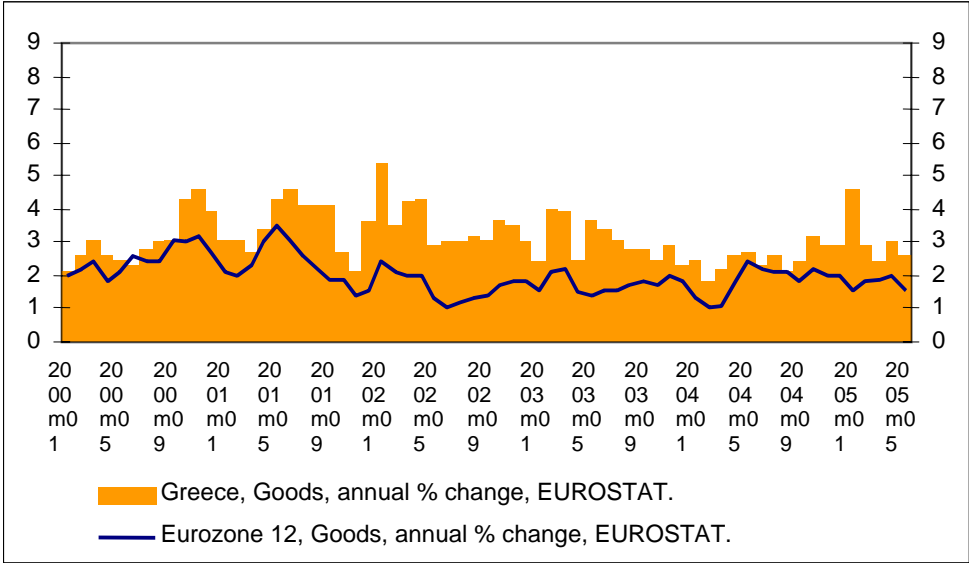
## **6. THE BALASSA-SAMUELSON EFFECT**

Greece today is still less developed than other eurozone countries. At the same time, it shows greater rates of growth and, simultaneously, higher rates of inflation than other member states. Consequently, it is worth studying whether Balassa-Samuelson (B-S) effect can be applied to Greece in explaining the relatively higher rate of inflation and, as a consequence, of “expensiveness.”

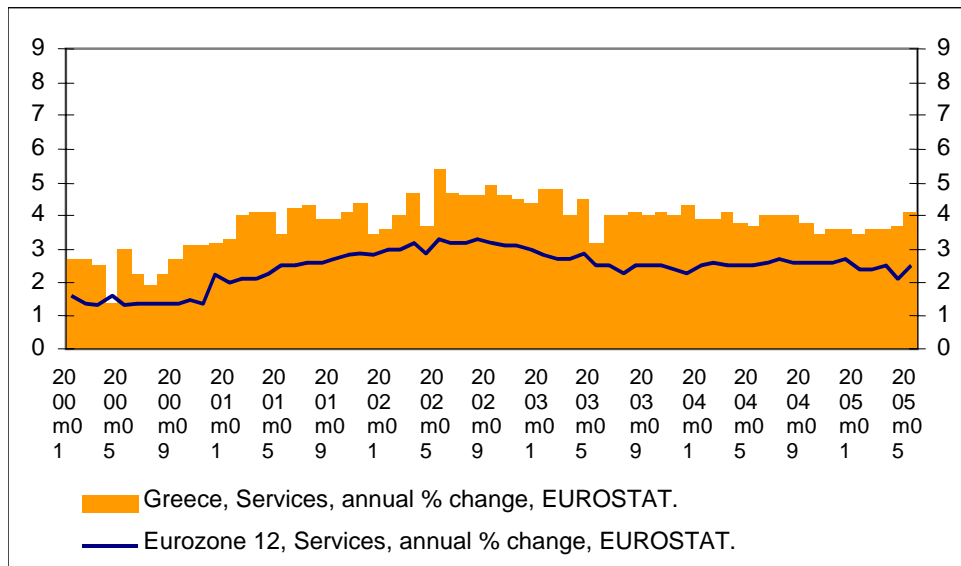
In accordance with B-S theory, Greece’s tradable sector, in the common market context, is facing the pressure of competition and, as a consequence, its productivity is rising. The resulting increase in exports drive the tradable sector’s wages up. This wage increase is not inflationary, as productivity follows equally and offsets inflationary pressure within the sector. However, higher wages are spent on both tradable and non-tradable products (services) that are not facing international competition. A typical example of such services is hairdressers. In accordance with the B-S effect, although productivity is not enhanced in hairdressing and as the increased demand is not counterbalanced by a rise in quantity or quality of the offered service, the result is higher priced hairdressers.

In the case that the B-S effect holds for Greece, one must first demonstrate that inflation pressures are solely derived from the sectors of the economy which produce non-tradable goods. However, in both the tradables and non-tradables sectors there do not appear to be other relative price reductions, with the exception of telecommunications, in which free-market competition prevailed. It is also noted that divergence is observed between Greek and eurozone inflation rates in both tradable *and* non-tradable sectors (Figures 5 and 6).

**Figure 5**



**Figure 6**



A second reason that the B-S effect can only offer a partial explanation of recent Greek inflation is that a significant increase in income flows from abroad is missing, as tradable sector’s exports rather stagnated [10% of GDP in 2000, 7.5% of GDP in 2004, although their average annual increase during the period of 2001 through 2005 was only around 2.3%, excluding oil (National Statistical Service of Greece 2006a)]. For the B-S effect to hold in Greece’s case, there should have been a well-observed increase in exports due to higher domestic productivity. Although we are witnessing an increase in FDI for the 10 new member-states, Greece is an exception to this tendency. In both categories—exports and FDIs—what is missing for Greece is a significant increase in receipts and inflows that are of such a magnitude that it would justify a typical (100%) Balassa-Samuelson effect.

On the other hand, as previously mentioned, there are important inflows from the EU in the form of structural funds, as well as Common Agricultural Policy funds, which in total come to about 3% of the GDP, substituting to an extent for the missing FDIs. This is perfectly illustrative of what we refer to as a “quasi B-S effect.”

EU funds are, in truth, enough to increase domestic demand significantly and, consequently, prices of non-tradable services that avoid—by definition—the competitive pressures of open markets. An expansionary fiscal policy that revolves around the Maastricht

limit of 3% of GDP according to the methods used to measure deficits also contributes to increasing domestic demand and favors further price hikes. To the same direction, inflows from the huge (around 30% of the official GDP) “shadow” economy contribute to “expensiveness” through massively increasing demand for certain products and mainly non-tradable services that show weak increases in productivity rates.

A third cause for constraint in fully attributing Greek trends to B-S theory is the lack of a significant rise in productivity of certain sectors of the economy, such as tourism and transportation, that generate income from abroad. However, the impact of both EU structural funds and the expansionary fiscal policy may reflect some general increases in domestic productivity of around 2% annually. It has to be noted that these increases are only superficially in accordance with the B-S effect, as EU structural fund transfers and fiscal expansion—not effective resource allocation—increase in GDP and, subsequently, artificially increase the productivity rate (GDP/person).

## **7. CONCLUDING REMARKS**

Greeks’ disappointment and frustration over the euro is understandable. It is clear that Greece is a more expensive place to live after the euro. Gone is the drachma, and with it, a certain sense of national autonomy. The euro is the embodiment of the changes for Greek society, changes that have left many losers. Labor disputes have entered a new realm of desperation, where unions are torn between honoring their constituents and ceding some of the inevitable concessions in a globalizing world. In addition, the notion of European integration as the road to higher standards of living has not come to bare fruit for the majority of Greeks.

In this paper we dealt with five relevant central issues to approach inflation in Greece. First, we examined the extent to which recent inflation trends are attributable to the constraints imposed by monetary union and the single currency, namely negative demand disturbances in certain Greek regions. Second, we investigated to what extent these patterns are also due to the adoption of the euro—including conversion period issues—over domestic rigidities such as strict product market regulations. Third, we investigated the impact of strong seasonal effects on inflation, in the context of the Greek so-called traditional quasi-capitalism that still survives despite some modernization of the economy. Fourth, we explored the extent to which

unemployment is another factor that drives wages down. Last, but not least, we applied the Balassa-Samuelson effect in order to assess the theory's explanatory power for higher prices—in particular of non-tradable services.

We found that all the aforementioned factors play a role, although of different weights. Asymmetric disturbances contribute mainly to the phenomenon of both high prices and stagnating wages, especially for labor and regions hit by negative demand shocks. As expected, some “expensiveness,” especially concerning non-tradable services, is also attributed to the Balassa-Samuelson effect. However, the greater part of “expensive living” is argued to be a result of domestic issues, such as strong seasonal effects and product markets rigidities. We considered the latter as the most important factor. Henceforth, we argued that freeing companies from excessive regulations while monitoring price abuses would go far in breaking the oligopolistic nature of many Greek industries. By opening markets to competition while easing hiring burdens, the government can help stimulate formal economic activity, create jobs, support wages, and drive down artificially high prices.

Membership in the EMU carries with it an acknowledgment of stability, both political and economic. This perceived stability is vital in drawing foreign and domestic investment funds, furthering growth, and encouraging employment. Moreover, it is expected that further European integration should create price convergence and ease inflation pressures as transaction costs are reduced and nations converge. Herein lies a major shortcoming in the expected gains from widening and deepening, especially in the case of Greece.

In conclusion, the solutions to the entrenched issue of domestic “structural expensiveness” would not come through scapegoating the euro or the EU. Rather, by implementing structural reforms that will benefit both economic effectiveness and social cohesion, while tailoring policies to mitigate the losses of those marginalized by Europeanization and globalization, real reform can be achieved. The single currency provides a convenient “cause” for the domestic structural inefficiencies encouraging inflation in Greece. In the end, as much as Greece's future lies in the EU, the solutions to the present lie at home.

## REFERENCES

- Alpha Bank. 2003. "Inflation and Competitiveness." *Economic Bulletin* 86(June): 15–23.
- . 2006. "The Greek Economy." Short-term Economic and Financial Outlook 56(June): 1–10.
- Bank of Greece. 2004. *Annual Report 2003*. Athens: Bank of Greece.
- Chortareas, G. and T. Pelagidis. 2004. "Trade Flows: A Facet of Regionalism of Globalization?" *Cambridge Journal of Economics* 28(2): 253–271.
- Elliniko Kentro Eyropaikon Meleton (EKEM). 2005. "European Developments: The Greek View." *Newsletter* 10(September) University of Athens Institute of European Integration and Policy and the Hellenic Center for European Studies.
- European Commission. 2005. *The Euro: Our Currency*. [http://europa.eu.int/comm/economy\\_finance/euro/faqs/faqs\\_16\\_en.htm](http://europa.eu.int/comm/economy_finance/euro/faqs/faqs_16_en.htm). (last accessed: October 24, 2005).
- European Parliament. 2005. "Report on the implementation of an information and communication strategy on the euro and Economic and Monetary Union." Committee on Economic and Monetary Affairs, *Session Document–Report*, June, 11–12.
- Eurostat. 2006. "Monthly Minimum Wages—Member States and Candidate Countries." Eurostat.
- Eichengreen, B. 1997. *EMU: Theory, Practice, and Analysis*. Cambridge: Cambridge University Press.
- Ehrmann, M. 2006. "Rational Inattention, Inflation Developments and Perceptions After the Euro Cash Changeover." *Working Paper Series No. 588*, European Central Bank, February.
- Gaiotti, E. and F. Lippi. 2004. "Pricing Behavior and the Introduction of the Euro: Evidence from a Panel of Restaurants." *Discussion Paper No. 4893*, Center for Economic Policy Research (CEPR), October.
- Greek Consumer Center (ELKEKA). 2006. Levels Cited from January 2002 through January 2006 in *Kathimerini (English Edition)* March 24.
- Kathimerini. 2006. "Greece's long-term Jobless Rate still among EU's Highest." *Kathimerini (English Edition)* January 5.
- Kazakos, P. 2001. *Between the State and the Market*. Athens: Patakis Publishing.

- McDonald, R. 2005. *The Competitiveness of the Greek Economy*. Athens: Athens News.
- McKinnon, R. 2000. "Mundel, the Euro and OCAs." Stanford University manuscript.
- Mitrakos, T. and S. Zografakis. 2005. "The Redistributive Impact of Inflation in Greece." *Economic Bulletin* 24(January): 45–82.
- National Bank of Greece. 2005. November 14 press release. [www.nbg.gr/pr\\_release/](http://www.nbg.gr/pr_release/)
- National Council for Competitiveness and Development (NCCD). 2006. *Annual Report for Competitiveness*. Athens: NCCD.
- National Statistical Service of Greece (NSSG). 2005. "Evolution of the 12-month Rates of Change of Overall CPI, during the Years 1959-2005." [www.nssg.gr](http://www.nssg.gr) (last accessed: December 12, 2005).
- . 2006a. "Monthly Sub-indices of Groups of Items of CPI 1999-2005, November." [www.nssg.gr](http://www.nssg.gr) (last accessed: January 17, 2006).
- . 2006b. "Population of 15 years and Over by Employment, Age, and Sex: 1998-2005." *Labour Force Survey*. [www.nssg.gr](http://www.nssg.gr) (last accessed: March 9, 2006).
- OECD. 2005a. "Economic Survey of Greece, 2005." *Policy Brief*, July. Paris: OECD.
- . 2005b. *Economic Policy Reforms: Going for Growth*. Paris: OECD.
- Paterson, I. et al. 2003. "Economic Impact of Regulation in the Field of Liberal Professions in Different Member- States." *Final Report*, Part 3. DG Competition, EU.
- Pelagidis, T. 1996a. "OCA Approach and the Third Stage of EMU. A Review of Recent Evidence." *International Review of Economics and Business* XLIII(4): 759–790.
- . 1996b. "Europe at a Monetary Crossroads: Problems and Prospects." *Cahiers Economiques de Bruxelles* 4(152): 451–486.
- . 1997. "Divergent Real Economies in Europe." *Economy and Society* 26(4): 546–559.
- Regnard, P. 2005. "Minimum Wages 2005: Major Differences between EU Member States." *Statistics in Focus* (7), Eurostat.
- Stournaras, Y. 2004. "Price Levels and Expensiveness in Greece." *Eleftherotupia* August 7. [www.ppol.gr](http://www.ppol.gr).



## SHORT BIOGRAPHICAL NOTE

Corresponding author Theodore Pelagidis is Professor of Economics at the University of Piraeus. He received his M.Phil. from Sussex University, U.K., and his Ph.D. from Paris University, being at the same time an EU SPES researcher at the same University. He has also conducted post-doctoral research on the EMU at the Center for European Studies, Harvard University (1993–94 and 1995–96 as a NATO scholar). He has published extensively in professional journals such as, *The Journal of Policy Modeling*, *Cambridge Journal of Economics*, *International Review of Law and Economics*, *Journal of Post-Keynesian Economics*, *Challenge*, *The Magazine of Economic Affairs*, *Industrial Relations*, *Review of International Studies*, *Current Politics and Economics of Europe*, *Economy and Society*, *International Review of Economics and Business/Finance*, *Cahiers Economiques de Bruxelles*, *Actualite Economique: Review d'Analyse Economique* etc. He is also co-editor of the book *Welfare State and Democracy in Crisis*, Aldershot, Ashgate, 2001.

Taun Toay studied economics at Bard College in New York, where he also served as a Research Assistant at the Levy Economics Institute. He was awarded a Fulbright Grant to Greece for 2005–2006 as a University of Piraeus affiliated research scholar, where he researched inflation patterns surrounding the adoption of the euro. His research interests are monetary policy and union, as well as exchange rate regimes. In 2005–2006, he was affiliated with the University of Piraeus, Greece. He holds an Economics degree from Bard College, Annandale-on-Hudson, New York.