
The Challenges of Euro Adoption in Romania: Some Lessons from the Greek Experience

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Abstract

Romania belongs to the group of the new EU members that are committed by the Treaty to adopt the euro, which implies that they must strive to fulfill all the nominal convergence criteria. Analyzing the Greece's monetary experience towards the EMU and its available policy instruments for this goal, this paper tries to derive some challenging lessons for Romania on its path to euro adoption. The present Greek debt crisis and the background of the global financial crisis are also taken into consideration. The Greek situation shows that an overly ambitious timetable and effort for adopting the single currency can be rather costly for the country concerned and the endeavor to improve the performance of the economy must be a permanent process and not be limited to satisfying the Maastricht convergence criteria.

Keywords: Economic and Monetary Union (EMU), Exchange Rate Mechanism (ERM), Romania's nominal convergence, Greek debt crisis, global financial crisis.

JEL Classification: E5, O52, O570

1. Introduction

The Greek road to euro adoption and then to the current debt crisis provide some lessons for Romania as a new EU member searching the right setting of priorities in achieving the Maastricht nominal convergence criteria.

Greece acceded to the EU in 1981 but, for economic reasons, could not introduce the euro until 2001. This paper analyzes the Greek monetary path to EMU and the available policy instruments for this goal. On the basis of the Greek experience and against the background of Romania's commitment to join the euro area in 2014 or 2015, we try to shed light on the current debate about the optimal path for participation in the ERM and the adoption of the euro by a new EU member. The context of the global financial crisis is also taken into account.

The paper is organized as follows. Section 2 describes the three distinct periods (1981-1992; 1992-1994 and 1995-2001) of the convergence efforts of Greece – the first EU country joining the euro area after the first wave of the eleven founding members. Section 3 presents briefly the main features of the present Greek debt crisis. Section 4 analyzes the Romanian path on the way towards euro adoption, with regard to developments in prices, fiscal balances and debt ratios, exchange rates

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and long-term interest rates, together with other relevant factors. The last section provides the concluding remarks.

2. The Greek road to the euro

We will describe first the monetary path to EMU of Greece to the euro area². Greece acceded to the EU in 1981 but, for economic reasons, could not introduce the euro until 2001.

The period 1981-1992

The main feature of the Greek economy in the interval 1981-1992 was stagflation, with an inflation rate of around 20% and a real growth rate of only 1.5%. While disinflationary monetary policies began in most industrial countries in the early 1980s, in Greece the ability to use monetary policy to reduce inflation was curtailed by the obligation to finance large fiscal deficits with money-creation. The general government deficit-to-GDP ratio jumped from around 2.5% in 1981 to around 8.5% in 1982 and attained about 11% in the next decade. Powerful incentives for money creation were provided by the influential role of the government in setting the objectives of the monetary policy combined with an underdeveloped tax system. Monetary and credit aggregates reached thus double-digit growth rates, while real interest rates *ex post* were negative until 1987. Table 1 presents selected economic indicators for Greece in the period 1981-2001.

In the first half of the 1980s, Greece registered an increase in the current-account deficit and a build-up of external debt, resulting in devaluations of the drachma (GRD) in 1983 and 1985. The competitiveness of the economy and the growth of potential output were undermined by long-standing structural weaknesses such as high concentration of industrial activity in declining traditional industries and the pervasiveness of rigidities and controls in labor and product markets and the financial system. EU membership from January 1981 meant that Greece had to compete with other European economies that were more advanced and more efficient. The potential benefits from EU accession were limited by the large domestic and external imbalances. The unemployment rate witnessed a rise from about 4% in 1981 to almost 10% in 1991.

² The description of the Greek economic situation prior to euro adoption is based on Hochreiter and Tavlas (2004).

Table 1: Selected macroeconomic indicators of Greece: 1981-2001

	1981	1992	Change 1981-1992	1998 (t-3) ¹	1999 (t-2)	2000 (t-1)
GDP per capita ²	74	67	-6.8	67	68	68
Real GDP Growth (%)	-1.6	0.7	12.9 ³	3.4	3.6	4.2
Labour Productivity Growth (%)	-7.1	-0.9	9.4 ³	-0.9	4.0	4.9
General Gov. Bal. (% of GDP)	-8.7	-12.6	128.4 ⁴	-2.5	-1.9	-1.8
Public Debt level (% of GDP)	27.0	87.8	60.8 ⁵	105.8	105.1	106.2
Inflation rate (CPI) (%)	24.5	15.9	18.2 ⁶	4.8	2.6	3.2
Exchange Rate: (Nat. currency per DEM)	25.56	132.96	-80.7 ⁷	168.85	N/A	N/A

Source: IMF International Financial Statistics, various issues.

¹t represents the year of euro adoption: 2001.

²As a percentage of the EU average (definition of EU at that time).

³The change for real GDP, labor productivity and the inflation rate is calculated as the cumulative change given by: (Value 1992/Value 1981) - 1.

⁴Cumulative general government deficit 1981-1992.

⁵Cumulative increase 1981-1992.

⁶Average inflation rate between 1981 and 1992.

⁷Cumulative depreciation 1981-1992.

The period 1992-1994

At the beginning of the 1990s, EU countries were struck by a number of negative shocks. Economic growth decreased significantly, leading to a recession in 1993. The absence of realignments in the EMS in the 5 years after 1987 tended to aggravate the economic slowdown of the early 1990. In the absence of nominal exchange rate changes, there was an increased need of domestic adjustment, which was not adequate in many EU countries. This circumstance, combined with market concerns about the future economic policies, led to speculative attacks against EMS currencies and forced the suspension of the pound sterling (GBP) and the Italian lira (LIT) from the ERM in September 1992. This determined the widening of the ERM exchange rate band from $\pm 2\frac{1}{4}$ percent to ± 15 percent in August 1993.

The early 1990s were characterized by large macroeconomic imbalances in Greece. In 1991 inflation was about 20%, the fiscal-deficit-to-GDP ratio reached 16%. The current-account deficit exceeded 8% of GDP, and real interest rates approached zero. In response to the macroeconomic imbalances, incomes policy was tightened and wage-indexation system was eliminated, leading to a decrease in weekly earnings in manufacturing in the interval 1992-1994.

The tightened incomes policy, the appreciation of the real exchange rate and the weak economic growth led to a fall in inflation to low double-digit rates.

As we have already mentioned, in the early 1980 the financial system was highly regulated and monetary policy operated through direct instruments of monetary control. By the mid 1980s, a series of deregulation measures allowed the financial markets to begin to function more efficiently, permitting the gradual adoption, in the 1990s, of indirect instruments of monetary control. Financial liberalization, however, had to be a gradual process, for avoiding potentially-destabilizing effects in the economy.

Financial reform initially involved raising interest rates on deposits, loans, and government securities to market-clearing levels. This step was followed by the abolition of interest-rate ceilings and the elimination of quantitative restrictions on credit allocation. Financial liberalization was accompanied by the lifting of foreign-exchange controls, with the last vestige of capital controls removed in May 1994. Essentially, by 1995 financial deregulation was completed.

Convergence to EMU: 1995-2001

By 1994 Greece's performance in achieving the nominal convergence criteria was weak. In 1994 the inflation was more than double the rates experienced in such formerly-high-inflation EU countries as Italy, Portugal and Spain, and the fiscal deficit was considerably higher in Greece than in any of those countries. If EMU was to be a realistic medium-term commitment, a regime change was necessary. This change came in 1995. The signing of the Maastricht Treaty in 1992 and the government's publicly-stated objective of joining the euro area provided powerful incentives for mobilizing broad public support for policy adjustment.

The Bank of Greece adopted in 1995 a "hard-drachma policy"³ under which the exchange rate was used as a nominal anchor (Tavlas, 2000). For the first time, the Bank announced a specific exchange-rate target. Underlying this policy was the belief that the adoption of a visible anchor could enhance the credibility of the Bank's disinflation effort. By pegging the exchange rate at an appropriate level, inflation could be brought down rapidly because of (1) the stabilization of prices in the traded-goods sector, (2) the attendant restraint imposed on wage-setting and price-setting behavior, and (3) the restraint imposed on government spending.

During the first three years of the hard-drachma policy, inflation was more than halved (from over 10% in 1995 to under 5% by the end of 1997). Although inflation fell sharply, real growth accelerated: real GDP growth averaged about 2.8% during 1995-1997 compared with 1.0% during 1992-1994.

Why did real growth accelerate during a period when inflation fell from a moderate level to single digits? Of course the credibility is difficult to be quantified, but the hard drachma policy provided an unambiguous target for monetary policy, exerting a measure of self-discipline and serving to tie down inflation expectations. Credibility was also strengthened by:

³ The "hard drachma policy" was an application of the Barro-Gordon (1983) model to an open economy.

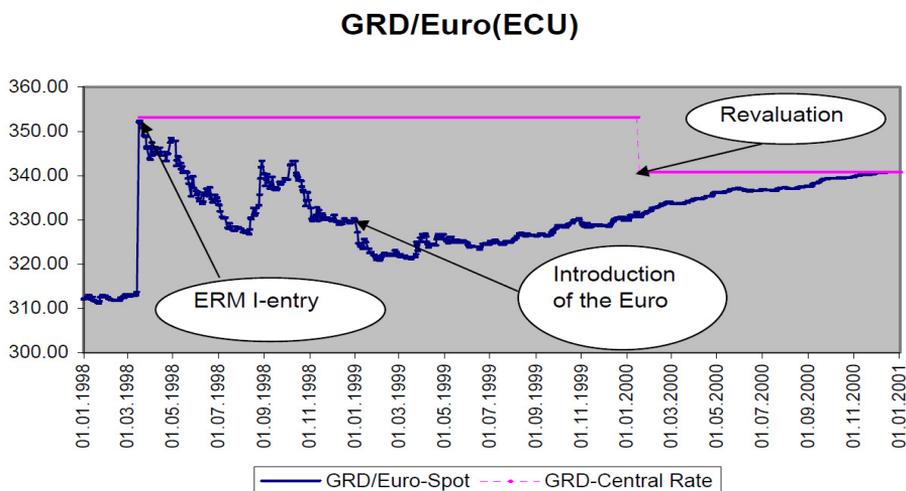
The substantial fiscal adjustment; relative to GDP, the fiscal deficit fell from about 10% in 1995 to around 4% in 1997. Measures to increase the efficiency of tax collection were stepped up so that seignorage became a less-significant source of revenue;

With the complete deregulation of the financial system by 1995, the Bank of Greece was increasingly able to use interventions that were flexible and reduced the operational costs of monitoring and controlling incurred by the Bank of other financial institutions;

The Greek Parliament approved central-bank independence and provided the Bank of Greece with a mandate to achieve price stability.

However, as it is typically the case with nominal anchor exchange-rate pegs, which are a double-edged sword, this regime entailed difficulties. During the transition to low inflation, the anchor generated an appreciation of the real exchange rate that reduced competitiveness, contributing to a widening current-account deficit. A devaluation of the GRD followed. The shift was provided by the ERM. On March 16, 1998, the GRD joined the ERM at a central rate that implied a 12.3% devaluation against the ECU (central rate: ECU 1 = GRD 353.109), as illustrated in Figure 1.

Figure 1



March 16, 1998: Central rate: ECU/EUR 1 = GRD 353.109
 January 17, 2000: New CR = GRD 340.75 = Conversion rate

Source: National Bank of Greece

But unlike other devaluations of the 1990s, this one was not accompanied by speculative attacks or by a financial crisis or a contraction in the economic activity.

GRD registered a successful exit from one pegged rate to another due to the following circumstances:

Fiscal tightening continued following the devaluation. The fiscal deficit, relative to GDP, fell to about 1% in 1999, from 4% in 1997. Labor market policy gradually adjusted to the necessity of fiscal discipline, which enhanced international competitiveness.

Prudential regulation and supervision of the banking system were strictly enforced so that there was no net foreign exposure of the banking system.

The ERM provided another important advantage. Entry at the standard fluctuation bands of +/-15% provided the Bank ample room for maneuver. Thus, when capital inflows resumed following ERM entry, the Bank allowed the exchange rate to appreciate relative to its central rate, helping to maintain its tight monetary-policy stance and to contain the inflationary impact of the devaluation.

As a result of the tightened and consistent policy mix, inflation reached a low of 2% annual rate during the second half of 1999. Then, in order to limit the degree of depreciation that would be required for the market rate of the GRD to reach its central rate and the resulting inflationary pressures, the central rate was revalued by 3.5% in January 2000 (new central rate: EUR 1 = GRD 340.75). All the Maastricht criteria were thus fulfilled, allowing Greece to become the 12th member of the euro zone on January 1, 2001.

2.1. The present debt Greek crisis

Over the past ten years, Greece borrowed heavily in international capital markets to fund government budget and current account deficits. The reliance on financing from international capital markets left Greece highly vulnerable to shifts in investor confidence. Investors became worried in October 2009, when the newly elected Greek government revised the estimate of the government budget deficit for 2009 from 6.7% of GDP to 12.7% of GDP. In April 2010, Eurostat estimated Greece's deficit to be even higher, at 13.6% of GDP. Investors feared then Greece's ability to repay its maturing debt obligations, estimated at €54 billion (\$72.1 billion) for 2010. On April 23, 2010, the Greek government requested financial assistance from other European countries and the International Monetary Fund to help cover its maturing debt obligations.

The debt crisis has both domestic and international causes (Nelson, Belkin, and Mix, 2010). Domestically, analysts point to high government spending, weak revenue collection, and structural rigidities in Greece's economy. Internationally, observers argue that Greece's access to capital at low interest rates after adopting the euro and weak enforcement of EU rules concerning debt and deficit ceilings facilitated Greece's ability to accumulate high levels of external debt.

Years of unrestrained spending, cheap lending and failure to implement financial reforms left Greece badly exposed when the global economic downturn struck. This whisked away a curtain of partly fiddled statistics to reveal debt levels and deficits that exceeded limits set by the eurozone.

National debt, put at €300 billion (\$413.6 billion), is bigger than the country's economy, with some estimates predicting it will reach 120 percent of gross domestic product in 2010.

Greece's credit rating (the assessment of its ability to repay its debts) has been downgraded to the lowest in the eurozone, meaning it will likely be viewed as a financial black hole by foreign investors. This leaves the country struggling to pay its bills as interest rates on existing debts rise. The Greek government must implement harsh and unpopular spending cuts.

3. Romania's accomplishment of the nominal convergence criteria

Romania belongs to the group of the new EU members (Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland and Romania) that are committed by the Treaty to adopt the euro, which implies that they must strive to fulfill all the convergence criteria.

On the basis of the ECB Convergence Report of May 2010 (ECB 2010), we analyze in this section the Romanian path on the way of Euro adoption, with regard to developments in prices, fiscal balances and debt ratios, exchange rates and long-term interest rates, together with other relevant factors.

Rate of inflation

Over the reference period from April 2009 to March 2010, the 12-month average rate of HICP inflation in Romania was 5.0%, i.e. considerably above the reference value of 1.0% for the criterion on price stability (see Table 2).

Table 2: HICP inflation in Romania (annual percentage changes)

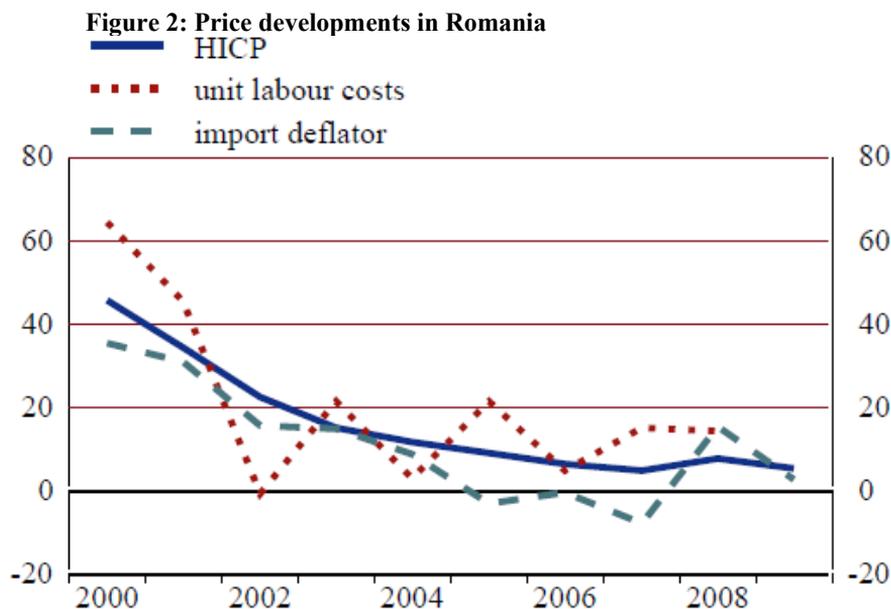
	2009 Dec.	2009 Jan.	2009 Feb.	2010 Mar.	Apr. 2009 To Mar. 2010
HICP inflation	4.7	5.2	4.5	4.2	5.0
<i>Reference value</i> ¹					1.0
<i>Euro area</i> ²	0.9	1.0	0.9	1.4	0.3

1) The basis of the calculation for the period April 2009-March 2010 is the unweighted arithmetic average of the annual percentage changes in the HICP for Portugal, Estonia and Belgium plus 1.5 percentage points.

2) The euro area is included for information only.

Source: European Commission (Eurostat).

Looking back over a longer period, consumer price inflation in Romania has followed a clear downward trend (see Figure 2), but has nevertheless remained high at around 5.6% on average in 2009.



Source: European Commission (Eurostat)

Inflation dynamics over the past ten years should be viewed against the background of robust GDP growth until mid-2008, followed by a sharp contraction in economic activity. Wage growth outpaced productivity growth, which in turn boosted unit labour cost growth and overheating pressures, leading to an erosion of competitiveness. In the course of 2008, however, the trend in HICP inflation reversed, mainly owing to the decline in energy and food prices, followed by a strong contraction in economic activity from the end of 2008. Looking at recent developments, HICP inflation picked up at the end of 2009, reaching 5.2% in January 2010, before falling to 4.2% in March 2010. This temporary rise was mainly attributable to increases in excise duties on tobacco. Notwithstanding the significant decline in economic activity, inflation has been particularly persistent, reflecting major rigidities in the product and labour markets and strong but slowing unit labour cost growth.

The latest available inflation forecasts from major international institutions range from 4.0% to 4.4% for 2010 and 3.0% to 3.5% for 2011. The main upside risks to this outlook relate to the dynamics of commodity and administered prices. On the downside, the decline in domestic price pressures could be larger or more protracted than currently envisaged if economic activity recovers more slowly than expected at present. Looking further ahead, the catching-up process is likely to have

a bearing on inflation, and/or on the nominal exchange rate over the coming years, given that GDP per capita and price levels are still significantly lower in Romania than in the euro area (see Table 3). However, it is difficult to assess the exact size of the effect resulting from this catching-up process.

Table 3: Measures of inflation and related indicators

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Measures of inflation										
HICP	45.7	34.5	22.5	15.3	11.9	9.1	6.6	4.9	7.9	5.6
HICP excluding unprocessed food and energy	-	-	19.0	15.1	12.2	6.3	5.8	5.5	7.6	6.6
HICP at constant tax rates ¹⁾	-	-	-	-	10.9	8.1	5.4	4.2	7.1	4.0
CPI	45.7	34.5	22.5	15.3	11.9	9.0	6.6	4.8	7.9	5.6
Private consumption deflator	37.6	34.5	20.3	15.8	12.7	6.9	4.9	4.8	9.5	3.3
GDP deflator	43.3	37.8	22.7	23.4	15.5	12.2	10.6	13.5	15.2	2.8
Producer prices ²⁾	56.4	39.4	25.3	18.3	19.2	10.8	10.3	8.4	12.8	2.1
Related indicators										
Real GDP growth	2.4	5.7	5.1	5.2	8.5	4.2	7.9	6.3	7.3	-7.1
GDP per capita in PPS ³⁾ (euro area = 100)	23.2	24.8	26.4	28.3	31.2	31.9	35.1	38.1	.	.
Comparative price levels (euro area = 100)	42.4	41.5	42.7	42.1	42.0	53.3	56.5	62.8	58.6	.
Output gap ⁴⁾	-9.6	-6.1	-3.1	-1.1	3.5	3.5	6.6	7.4	9.3	-1.8
Unemployment rate (%) ⁵⁾	6.9	6.4	8.4	7.0	8.0	7.2	7.3	6.4	5.8	6.9
Unit labour costs, whole economy	64.5	45.4	-0.6	21.5	3.1	21.6	4.9	15.2	14.5	.
Compensation per employee, whole economy	69.8	55.1	16.2	28.0	13.7	28.6	12.4	22.0	23.2	.
Labour productivity, whole economy	3.2	6.7	16.9	5.3	10.3	5.7	7.2	5.9	7.6	.
Imports of goods and services deflator	35.5	30.9	15.7	14.9	8.9	-2.9	-0.4	-7.6	15.5	2.8
Nominal effective exchange rate ⁶⁾	-21.1	-23.3	-16.3	-13.7	-6.4	11.0	2.6	6.7	-8.5	-12.2
Money supply (M3)	-	-	-	-	.	40.0	31.1	31.5	13.4	7.4
Lending from banks	30.0	57.6	51.9	68.6	35.4	52.2	61.4	56.1	25.0	-1.6
Stock prices (The Bucharest Exchange BET index)	8.1	-4.8	126.9	26.0	103.8	38.0	28.5	32.6	-70.3	37.3
Residential property prices	.	.	.	39.5	30.7	63.8	53.2	51.5	-10.9	-27.8

Sources: European Commission (Eurostat), national data (CPI, money supply, lending from banks and residential property prices).

- 1) The difference between the HICP and the HICP at constant tax rates shows the theoretical impact of changes in indirect taxes (e.g. VAT and excise duties) on the overall rate of inflation. This impact assumes a full and instantaneous pass-through of tax rate changes on the price paid by the consumer.
- 2) Total industry excluding construction and domestic sales.
- 3) PPS stands for purchasing power standards.
- 4) Percentage difference of potential GDP. A positive (negative) sign indicates that actual GDP is above (below) potential GDP.
- 5) The definition conforms to ILO guidelines. The data for reference periods 2000-2004 are provided by the Romanian national statistical institute.
- 6) A positive (negative) sign indicates an appreciation (depreciation).

Fiscal deficit and government debt

Romania is at present subject to an EU Council decision on the existence of an excessive deficit. In the reference year 2009 the general government budget showed a deficit of 8.3% of GDP, i.e. significantly above the 3% reference value.

The general government gross debt-to-GDP ratio was 23.7%, i.e. far below the 60% reference value (see Table 4).

Table 4: General government position (as a percentage of GDP)

	2008	2009	2010 ¹
General government surplus (+)/deficit(-)	-5.4	-8.3	-8.0
<i>Reference value</i>	-3.0	-3.0	-3.0
Surplus/deficit, net of government investment expenditure ²	0.1	-2.9	-2.6
General government gross debt	13.3	23.7	30.5
<i>Reference value</i>	60.0	60.0	60.0

Source: European Commission (Eurostat)

1) European Commission projections.

2) A positive (negative) sign indicates that the government deficit is lower (higher) than government investment expenditure.

In 2010 the deficit ratio is forecast by the European Commission to decline to 8.0% and the government debt ratio is projected to increase to 30.5%. With regard to other fiscal factors, the deficit ratio exceeded the ratio of public investment to GDP in 2009 and is expected to do so also in 2010.

Moving on to examine trends in other fiscal indicators, Figure 3 and Table 5 show that the general government total expenditure-to-GDP ratio increased from 38.5% in 2000 to 40.4% in 2009.

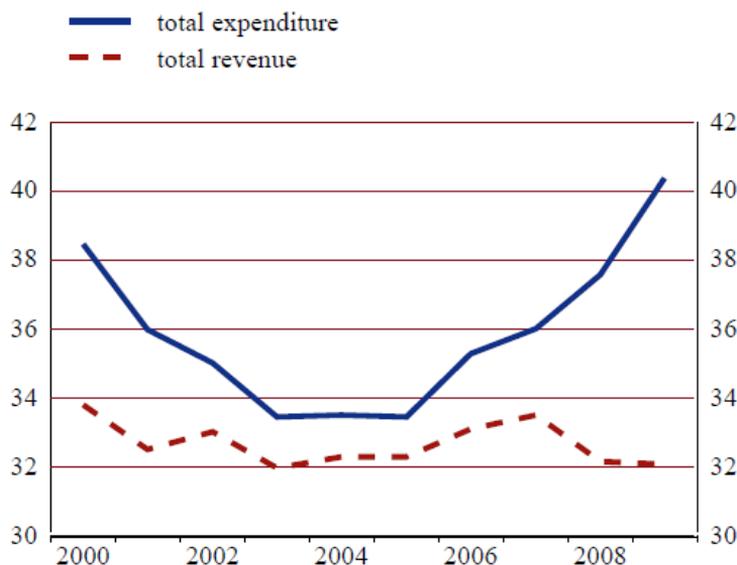
Table 5: General government budgetary position

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue	33.8	32.5	33.0	32.0	32.3	32.3	33.1	33.5	32.1	32.1
Current revenue	33.7	32.4	32.9	31.9	31.9	32.0	32.9	33.4	32.0	31.7
Direct taxes	7.0	6.4	5.8	6.0	6.4	5.3	6.0	6.7	6.7	6.6
Indirect taxes	12.2	11.3	11.6	12.3	11.7	12.9	12.8	12.3	11.7	11.0
Social security contributions	11.4	11.2	11.1	9.9	9.7	10.3	10.3	10.5	10.1	10.4
Other current revenue	3.1	3.5	4.4	3.8	4.1	3.5	3.8	3.8	3.5	3.7
Capital revenue	0.1	0.1	0.1	0.0	0.4	0.3	0.2	0.1	0.1	0.3
Total expenditure	38.5	36.0	35.0	33.5	33.5	33.5	35.3	36.0	37.6	40.4
Current expenditure	34.5	32.9	31.6	29.9	30.5	29.6	30.2	30.4	32.0	35.0
Compensation of employees	7.9	8.3	8.5	8.2	8.1	8.7	9.1	9.3	10.0	10.6
Social benefits other than in kind	9.7	9.7	9.3	8.4	8.7	8.9	8.8	9.2	10.4	12.9
Interest payable	3.9	3.4	2.5	1.6	1.4	1.1	0.8	0.7	0.7	1.5
of which: impact of swaps and FRAs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other current expenditure	13.1	11.4	11.3	11.6	12.2	10.9	11.4	11.1	10.9	9.9
Capital expenditure	3.9	3.1	3.5	3.6	3.0	3.9	5.1	5.7	5.6	5.4
Surplus (+)/deficit (-)	-4.7	-3.5	-2.0	-1.5	-1.2	-1.2	-2.2	-2.5	-5.4	-8.3
Primary balance	-0.7	-0.1	0.5	0.1	0.2	-0.1	-1.3	-1.8	-4.7	-6.8
Surplus/deficit, net of government investment expenditure	-1.2	-0.8	1.4	2.0	1.8	2.7	3.0	3.2	0.1	-2.9

Sources: ESCB and European Commission (Eurostat).

Notes: Differences between totals and the sum of their components are due to rounding. Interest payable as reported under the excessive deficit procedure. The item "impact of swaps and FRAs" is equal to the difference between the interest (or deficit/surplus) as defined in the excessive deficit procedure and in the ESA 95. See Regulation (EC) No 2558/2001 of the European Parliament and of the Council on the reclassification of settlements under swap arrangements and under forward rate agreements.

Figure 3: General government expenditure and revenue (as a percentage of GDP)



Source: ESCB.

During the period under consideration, and particularly in 2008-2009, “compensation of employees” and “social benefits” increased their share in GDP. Capital spending also increased as a ratio to GDP, especially following an acceleration of infrastructure projects in 2006 and 2007. Total government revenue as a share of GDP remained broadly stable between 2000 and 2007 at around 33% of GDP, despite the significant reduction in taxation introduced in 2005 under the flat tax reform. The total revenue-to-GDP ratio started to decline towards the end of 2008 and particularly in 2009 following the global financial crisis, when it reached 32.1% of GDP.

As regards the sustainability of its public finances, according to the European Commission’s 2009 Sustainability Report, Romania appears to be at high risk. Further fiscal consolidation is required for Romania to comply with the medium-term budgetary objective specified in the Stability and Growth Pact.

Looking ahead, Romania’s medium term fiscal policy strategy envisages a gradual reduction in the deficit-to-GDP ration in 2011 (to 4.4% of GDP) in order to bring it to the 3% reference value in 2012.

Exchange rate

Over the two-year reference period, the Romanian leu did not participate in ERM II, but traded under a flexible exchange rate regime. The leu depreciated strongly against the euro between mid-2008 and early 2009 before recovering slightly thereafter. The international financial assistance programme led by the EU and the IMF helped in late March 2009 to ease the downward pressure on the Romanian currency.

Until April 2009 the exchange rate of the Romanian leu against the euro showed a high degree of volatility, as measured by annualized standard deviations of daily percentage changes. Thereafter, in the context of gradual normalization of global financial market conditions, volatility decreased, although it still remained at relatively high levels. Short-term interest rate differentials against the three-month EURIBOR remained on average at a high level of around 9.1 percentage points for the entire reference period, on account of both the inflation differential vis-à-vis the euro and the unfavourable outlook for Romania's economy, as reflected in a downgrade of the Romanian sovereign credit rating by rating agencies and the global financial crisis. The spread stood at 6.5 percentage points in the three-month period ending March 2010.

In March 2010 the real exchange rate of the Romanian leu was somewhat above its ten-year historical averages, both bilaterally against the euro and in effective terms (see Table 6).

**Table 6: Romanian leu: real exchange rate developments
(monthly data; percentage deviation in March 2010 from ten-year average calculated
for the period April 2000-March 2010)**

	Mar. 2010
Real bilateral exchange rate against the euro ¹⁾	11.3
<i>Memo items:</i>	
Nominal effective exchange rate ²⁾	-16.9
Real effective exchange rate ^{1), 2)}	11.9

Source: ECB.

Note: A positive (negative) sign indicates an appreciation (depreciation).

1) Based on HICP and CPI developments.

2) Effective exchange rate against the euro area, non-euro area EU Member States and ten other major trading partners.

As regards other external developments, Romania reported a progressive increase in the deficit in the combined current and capital account of its balance of payments, from 3.1% of GDP in 2002 to very high levels of 12.8% in 2007. Following a strong fall in domestic demand, which led to lower imports, the current and capital account deficit of 11.1% of GDP in 2008 decreased sharply to 4.0% in 2009. The country's net international investment position deteriorated significantly from -26.9% of GDP in 2000 to -61.9% in 2009.

Long term interest rate

Long-term interest rates were 9.4% on average over the reference period from April 2009 to March 2010 and thus well above the 6% reference value for the interest rate convergence criterion (see Table 7).

Table 7: Long-term interest rates (LTISs)

	2009 Dec.	2010 Jan.	2010 Feb.	2010 Mar.	2009 Apr. to 2010 Mar.
Long-term interest rate	8.7	9.1	7.9	7.1	9.4
Reference value ¹⁾					6.0
Euro area ²⁾	3.6	3.8	3.7	3.6	3.8

Sources: ECB and European Commission (Eurostat).

1) The basis of the calculation for the period April 2009 - March 2010 is the unweighted arithmetic average of the interest rate levels in Portugal and Belgium plus 2 percentage points.

2) The euro area average is included for information only.

From late 2005, despite significantly decreasing inflation, Romanian long-term interest rates increased until the end of 2006 (see Figure 4).

Figure 4: Long-term interest rate (LTIR) (monthly averages in percentages)



Sources: ECB and European Commission (Eurostat).

In general, in recent years, long-term interest rates in Romania have increased sharply in an environment of high levels of risk aversion among investors and uncertainties regarding the economic outlook. More recently they started on a downward trend, but remain at relatively elevated levels, with the long-term interest rate on government bonds in Romania reaching 7.1% in March 2010. Developments in Romanian long-term interest rates should be interpreted with caution, however, as the market for Romanian government bonds is rather illiquid and is characterized by a limited number of transactions.

The Romanian capital market is much smaller than that of the euro area and remains underdeveloped (see Table 8).

**Table 8: Selected indicators of financial development and integration
(as a percentage of GDP, unless otherwise stated)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Memo item euro area (2009)
Debt securities issued by corporations ¹⁾	1.2	0.8	1.7	1.1	0.8	6.2	1.4	0.7	0.2	0.2	101.9
Stock market capitalisation ²⁾	1.2	3.0	5.5	5.6	12.8	17.1	18.8	18.1	8.2	10.3	49.2
MFI credit to non-government residents ³⁾	-	-	-	-	16.6	20.7	26.9	35.7	38.5	40.7	136.4
Claims of euro area MFIs on resident MFIs ⁴⁾	-	-	-	-	-	-	-	27.2	33.0	27.3	9.1

Sources: ESCB, Federation of European Securities Exchanges, OMX and national stock exchanges.

1) Outstanding amount of debt securities issued by resident non-financial corporations, MFIs and other financial corporations.

2) Outstanding amounts of quoted shares issued by residents at the end of the period at market values.

3) MFI (excluding NCB) credit to resident sectors other than general government. Credit includes outstanding amounts of loans and debt securities.

4) Outstanding amount of deposits and debt securities issued by resident MFIs (excluding the NCB) held by euro area MFIs as a percentage of resident MFIs' liabilities.

By international standards, the corporate bond market is still at an early stage in terms of volume of issuance: the amount of debt securities issued by corporations reached just 0.2% of GDP at the end of 2009. Bucharest Stock Exchange capitalization declined sharply in 2008 and the beginning of 2009 and reached 10.3% of GDP in December 2009.

In the light of its assessment on legal compatibility and on the fulfilment of the convergence criteria, and taking into account the additional factors, the European Commission (2010) considered that Romania does not fulfil the conditions for the adoption of the euro.

Achieving an environment conducive to sustainable convergence in Romania requires, inter alia, stability-oriented monetary policy and the strict implementation of the fiscal consolidation plans. In addition, Romania needs to deal with a wide range of economic policy challenges.

4. Conclusions

The Greek experience helps to shed light on the debate about the optimal path for participation in the ERM and the adoption of the euro by the new EU members, including Romania.

The convergence effort of Greece is of particular importance because it was the first successful attempt by a member state to join the euro area after the first wave of the eleven founding members. Such a single effort involved increased difficulties to manage the convergence operation, both because the “distance” Greece had to cover in order to comply with the convergence criteria was significantly greater than was the case for most of the other member states but, also, because in the case of the eleven member states of the first wave the risks involved in their convergence operation were “pooled” within the joint effort (Papasprou, 2004).

At the same time, taking into account the present debt crisis, the Greek experience shows that an overly ambitious timetable and effort for adopting the euro can be rather costly for the country concerned. Troubles encountered at present in Greece could lead EU newcomers, as Romania, to reassess the costs and benefits of euro adoption (Stokes and Vukotic, 2010). Greek fiscal woes highlight the fact that joining the eurozone does not automatically protect against crisis and could even leave EU newcomers vulnerable since it takes away policymakers’ ability to carry out price adjustments via exchange rate movements.

It seems that in certain cases, a delay of entry into ERM II would be to the benefit of both the country concerned – by allowing a higher degree of freedom in setting policy priorities – while also preserving the credibility of the ERM II.

The available evidence from the fiscal imbalances and public debt in Greece suggest also that the effort to improve the performance of the economy and its competitiveness must be a permanent process and not be limited to satisfying the Maastricht convergence criteria.

The global financial and economic crisis might delay the euro adoption in Romania, because the nominal convergence criteria accomplishment lost their pace. Enlargement of the eurozone is likely to be put on the back burner. Moreover, the Greek evolutions are contributing to a case of euro enlargement anxiety among policymakers, who will probably put Romania and the other new members under a very harsh microscope in the run-up to euro entry. The euro project is thus in the midst of its biggest test.

Greece and Romania appear as two blessed countries, with too many common advantages but also an increasing number of common challenges. While the Greeks try to wake up from the “bad dream” they lived over the last decades, Romanians seem ready to enter into big trouble if they follow all possible mistakes that Greeks in the last 30 years.

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