

Statistics in focus

INDUSTRY, TRADE AND SERVICES

2/2007

Author

Liliana APOSTOL

Contents

Industrial production index.....	2
Domestic producer price index.....	3
Industrial employment.....	4
Construction.....	5
Retail trade and repair	6
Wholesale trade	7
Hotels and restaurants	8
Land transport.....	9
Computer and related activities.....	10

Short-term developments in the business economy: Bulgaria and Romania

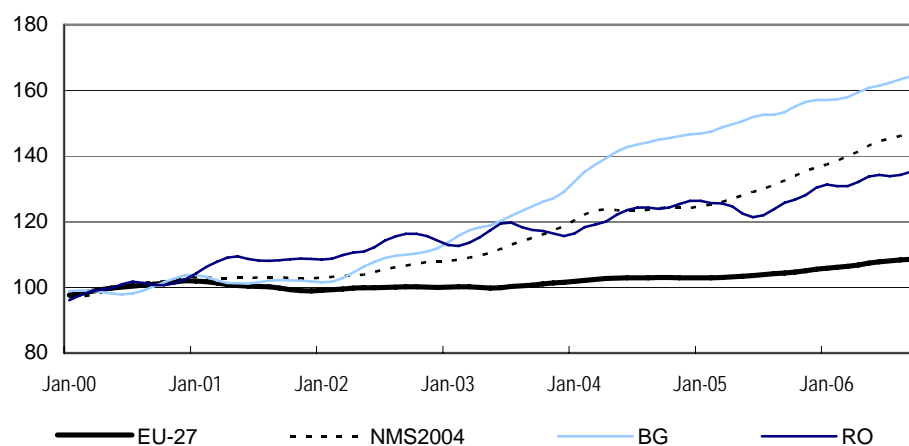
At the time of the accession of Bulgaria and Romania to the EU, this publication provides an overview of key short-term business statistics for these two countries, and compares their development to that of the EU as a whole and of the ten Member States that joined the EU in 2004.

The data presented are for the EU with 27 Member States, including Bulgaria and Romania: these data are already available in Eurostat's on-line data base. The data presented for the ten Member States that joined the EU in 2004 have been specially compiled for the analysis presented in this publication, and are not available on-line: this aggregate is referred to in the figures that follow as "NMS2004". As can be seen from this publication, the availability of Bulgarian and Romanian short-term statistics is generally good, with relatively long time series available for both countries. Data series generally start in 2000 or earlier.

The figures presented clearly illustrate the major changes in the business economy in Bulgaria and Romania:

- strong growth in industrial output;
- rapid industrial domestic output price increases in local currency in Romania;
- ongoing decline in industrial employment in Romania and a rebound in industrial employment in Bulgaria since the beginning of 2001;
- increased construction activity;
- increased retail sales activity;
- turnover and employment growth in some services sectors, notably computer and related activities in Romania.

Figure 1: Monthly production index, industry, trend cycle, 2000=100



RO, latest month provisional.



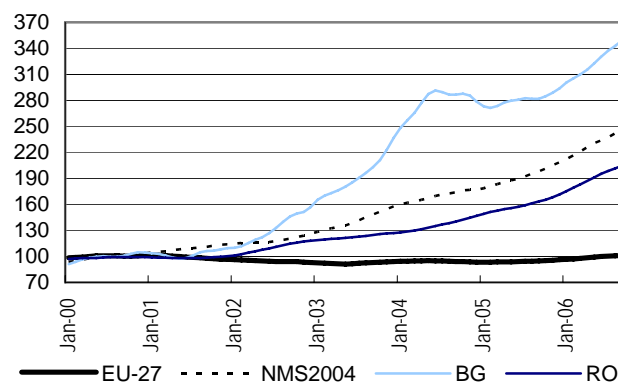
Industrial production index

Figures 1 to 6 show the industrial production index for industry (NACE Rev. 1.1 Sections C to E) and for the five main industrial groupings (MIGs). Note that different scales are used in these figures.

Romania experienced a period of expansion starting from June 1999, with average growth of 5.3 % per year through to September 2006, well above the EU-27 average of 1.9 % over the same period, but below the 6.8 % average of the 10 Member States that joined the EU in 2004. Growth was particularly strong in the production of consumer durables (see Figure 4).

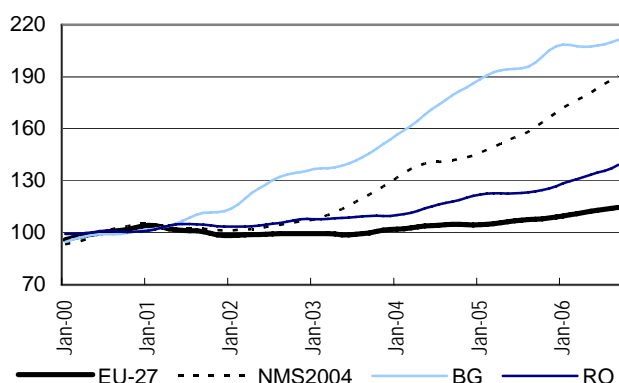
Overall strong growth was recorded in Bulgaria from May/June 2000 to the latest period (September 2006). As in Romania, growth was particularly strong in the production of consumer durables.

Figure 4: Monthly production index, consumer durables, trend cycle, 2000=100



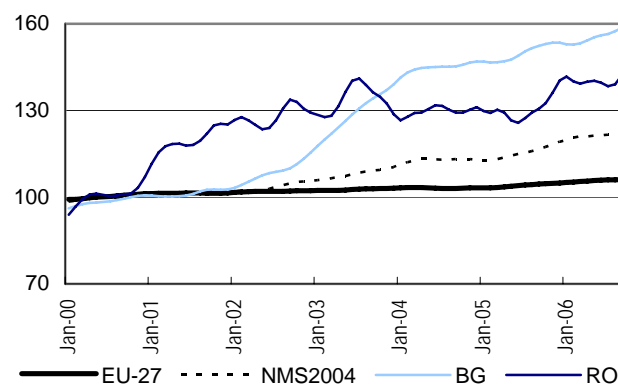
RO, latest month provisional.

Figure 2: Monthly production index, capital goods, trend cycle, 2000=100



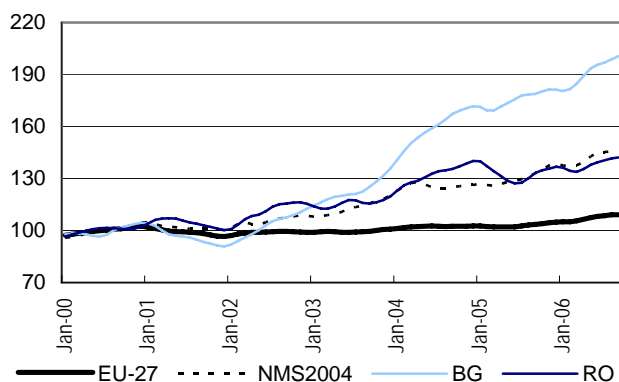
RO, latest month provisional.

Figure 5: Monthly production index, consumer non-durables, trend cycle, 2000=100



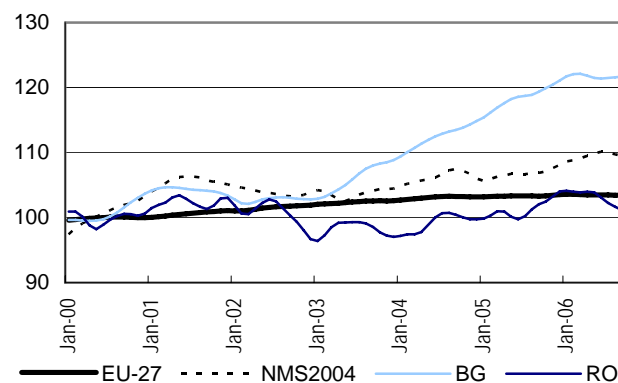
RO, latest month provisional.

Figure 3: Monthly production index, intermediate goods, trend cycle, 2000=100



RO, latest month provisional.

Figure 6: Monthly production index, energy, trend cycle, 2000=100

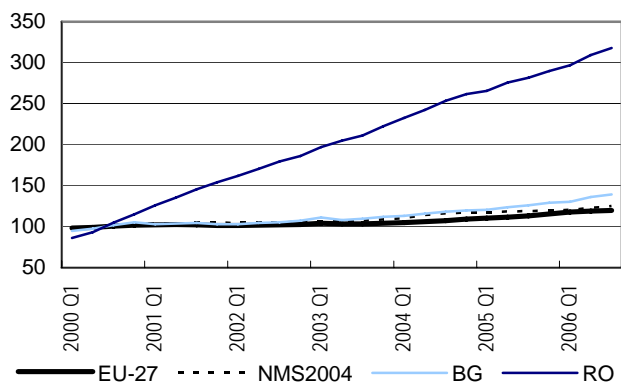


RO, latest month provisional.

Domestic producer price index

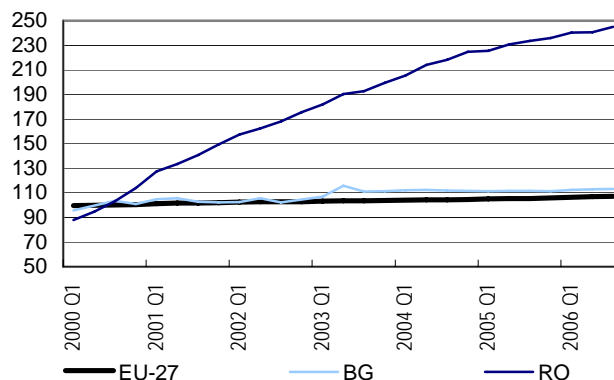
Figures 7 to 12 show the domestic producer price index: these are compiled from prices in local currencies. Again, note that different scales are used in these figures.

Figure 7: Quarterly producer price index, industry, gross, 2000=100



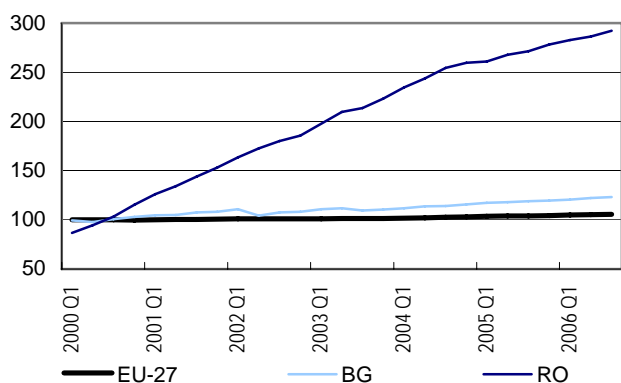
RO, latest month provisional.

Figure 10: Quarterly producer price index, consumer durables, gross, 2000=100



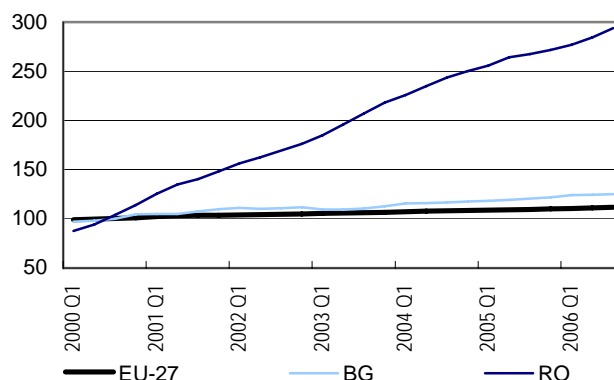
RO, latest month provisional.

Figure 8: Quarterly producer price index, capital goods, gross, 2000=100



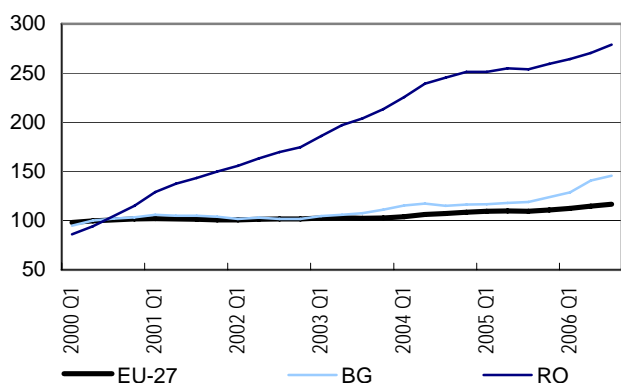
RO, latest month provisional.

Figure 11: Quarterly producer price index, consumer non-durables, gross, 2000=100



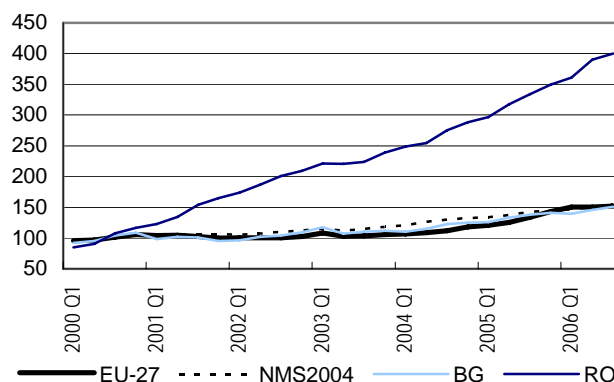
RO, latest month provisional.

Figure 9: Quarterly producer price index, intermediate goods, gross, 2000=100



RO, latest month provisional.

Figure 12: Quarterly producer price index, energy, gross, 2000=100

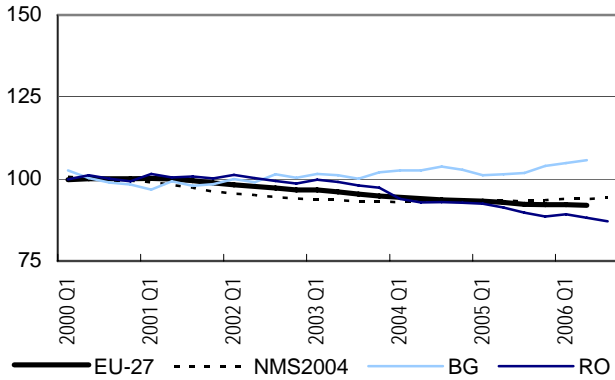


RO, latest month provisional.

Industrial employment

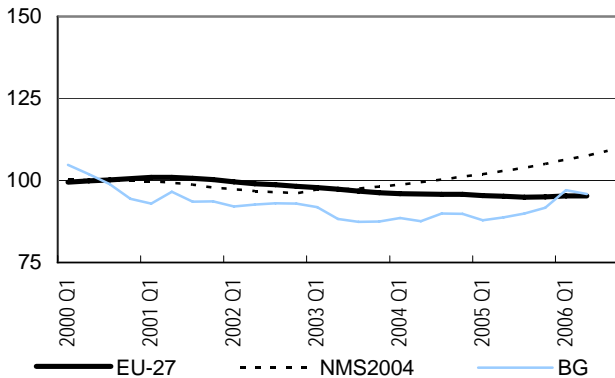
Romania recorded a period of strong decline in industrial employment (NACE Rev. 1.1 Sections C to E) from 2003 quarter 1 to the latest period available.

Figure 13: Quarterly employment index, industry, seasonally adjusted, 2000=100



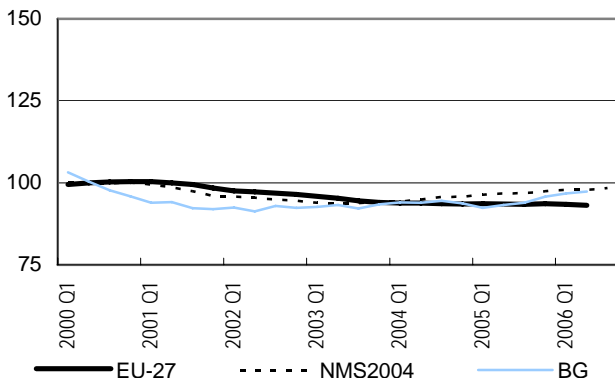
BG, provisional from 2005Q1.

Figure 14: Quarterly employment index, capital goods, seasonally adjusted, 2000=100



BG, provisional from 2005Q1; RO, not available.

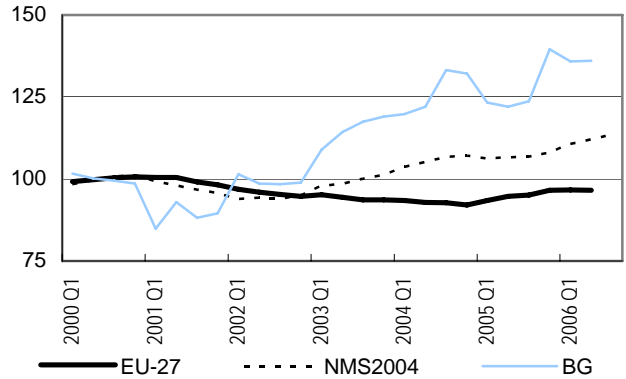
Figure 15: Quarterly employment index, intermediate goods, seasonally adjusted, 2000=100



BG, provisional from 2005Q1; RO, not available.

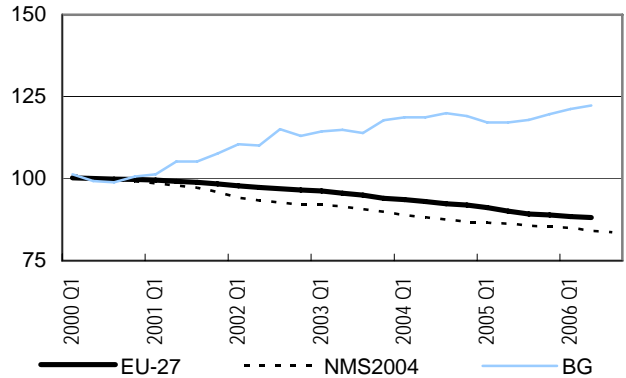
Bulgaria recorded a decline in industrial employment through to 2001, however the index rebounded, and in 2006 quarter 2 it was 9.3 % above its low in 2001 quarter 1: growth was mainly in consumer goods

Figure 16: Quarterly employment index, consumer durables, seasonally adjusted, 2000=100



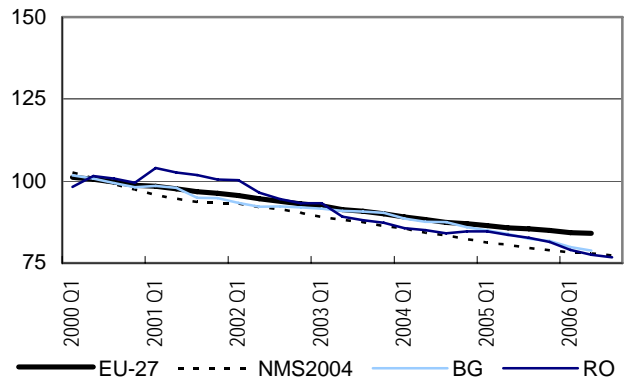
BG, provisional from 2005Q1; RO, not available.

Figure 17: Quarterly employment index, consumer non-durables, seasonally adjusted, 2000=100



BG, provisional from 2005Q1; RO, not available.

Figure 18: Quarterly employment index, energy, seasonally adjusted, 2000=100



BG, provisional from 2005Q1.

Construction (NACE Rev. 1.1 Section F)

Both Bulgaria (since 2000 quarter 1) and Romania (since 2002 quarter 1) have recorded increased output in construction, particularly in civil engineering (see Figure 21), the latter in contrast to the contraction experienced in the EU-27 as a whole.

The construction employment index in Romania alternated between short periods of increase and decrease (see Figure 22). In contrast in Bulgaria the index rose more than 50 % between a low in 2002 quarter 2 and the latest period (2006 quarter 2), despite falls during 2005.

Figure 19: Quarterly production index, construction, seasonally adjusted, 2000=100

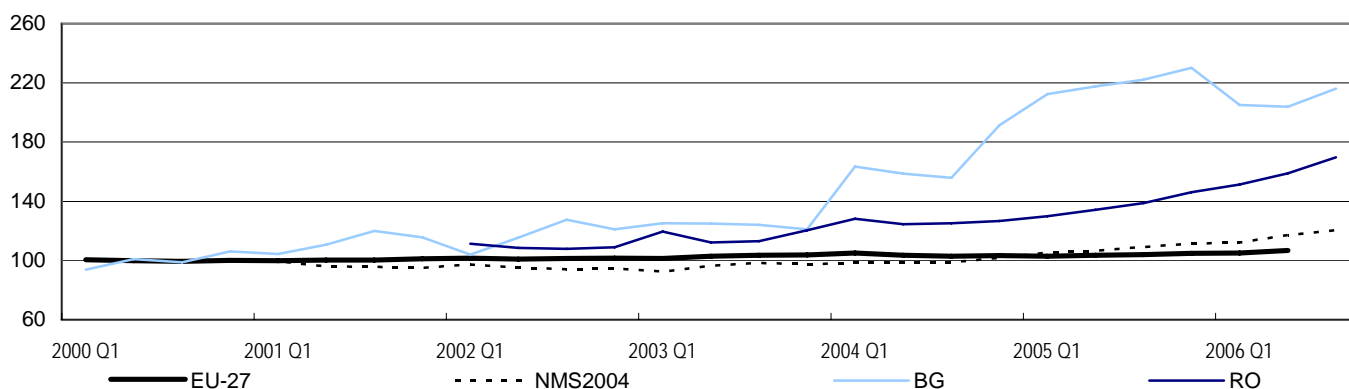


Figure 20: Quarterly production index, building, seasonally adjusted, 2000=100

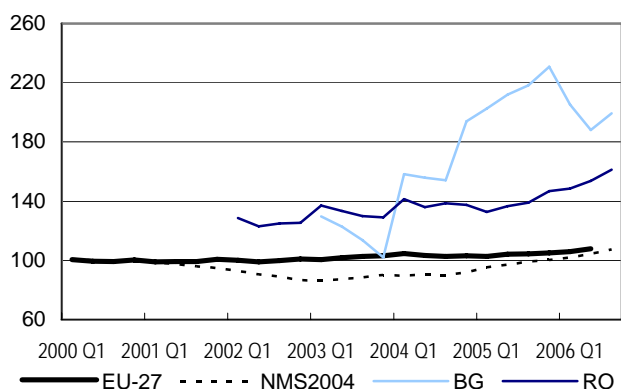


Figure 21: Quarterly production index, civil engineering, seasonally adjusted, 2000=100

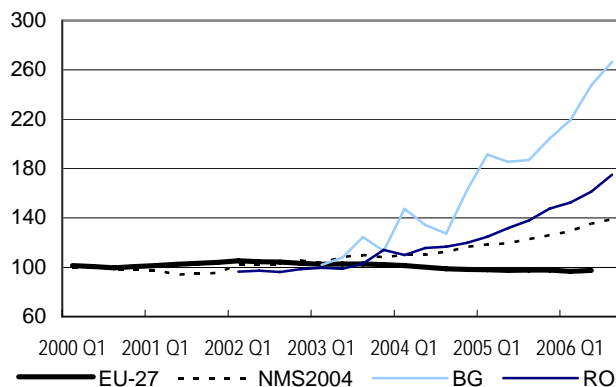
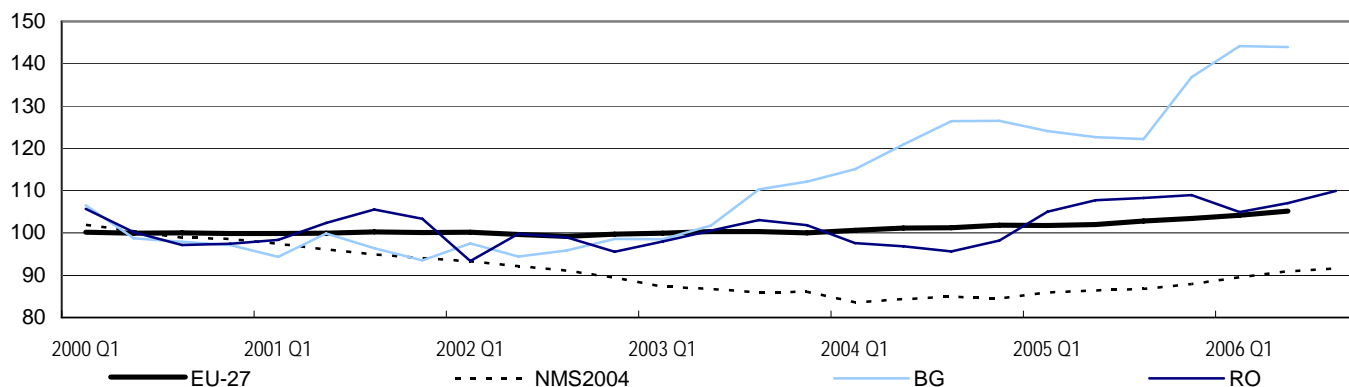


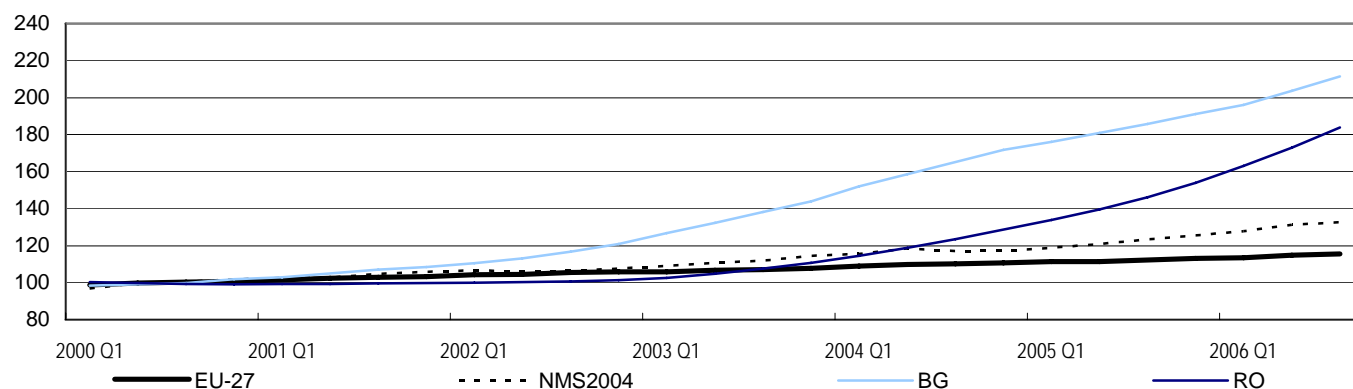
Figure 22: Quarterly employment index, construction, seasonally adjusted, 2000=100



BG, provisional from 2005Q1.

Retail trade and repair (NACE Rev. 1.1 Division 52)

Figure 23: Volume of sales index, retail trade, seasonally adjusted, 2000=100



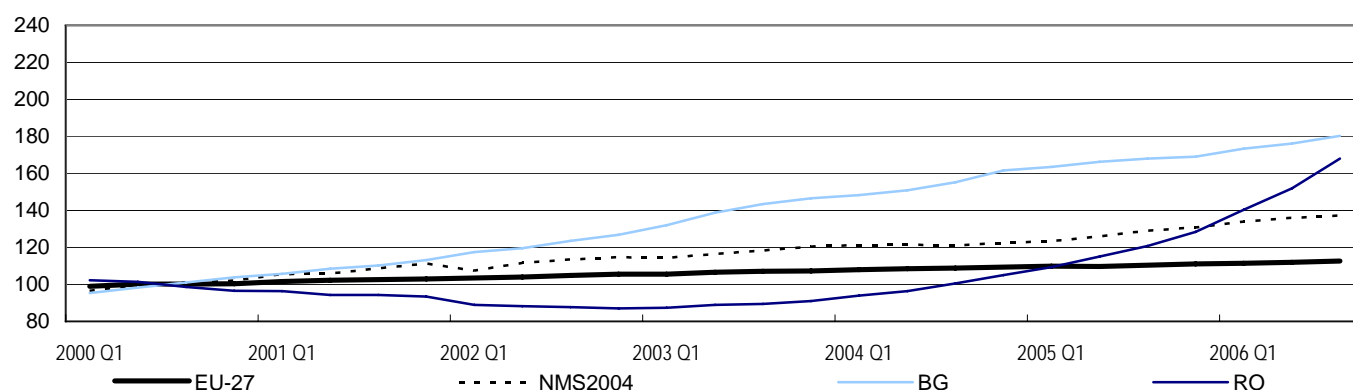
RO, provisional.

Figures 23 to 25 show the volume of sales index for retail trade (Division 52 excluding Group 52.7). The volume of sales index for the retail sale of food, beverages and tobacco fell in Romania from the beginning of the series shown until the end of 2002, after which it rose strongly. In contrast there was a sustained rise in the equivalent index for Bulgaria.

Both Bulgaria and Romania recorded stronger increases in the volume of sales index for the retail sale of non food products.

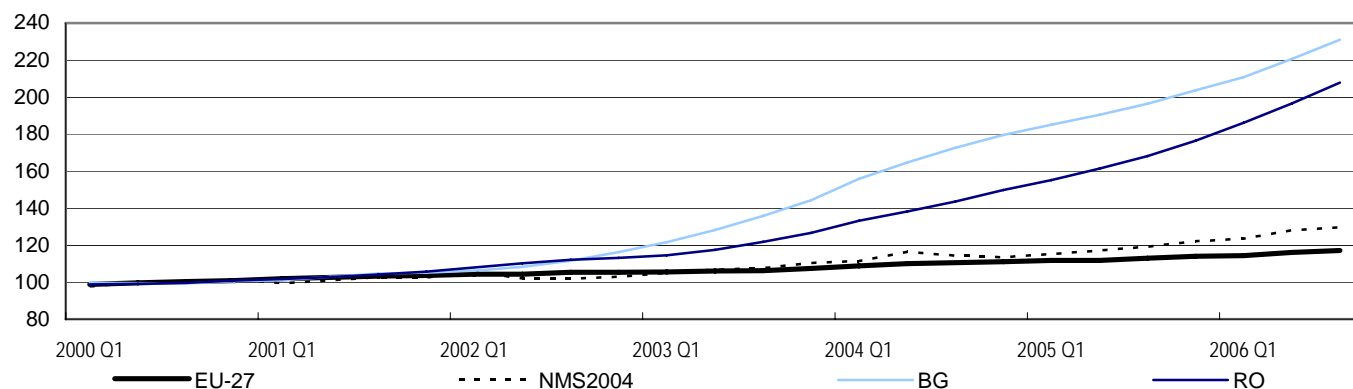
The retail trade and repair employment index (figure 26) shows a sustained increase in Bulgaria, and a recent rebound in Romania.

Figure 24: Volume of sales index, retail sale of food beverages or tobacco, seasonally adjusted, 2000=100



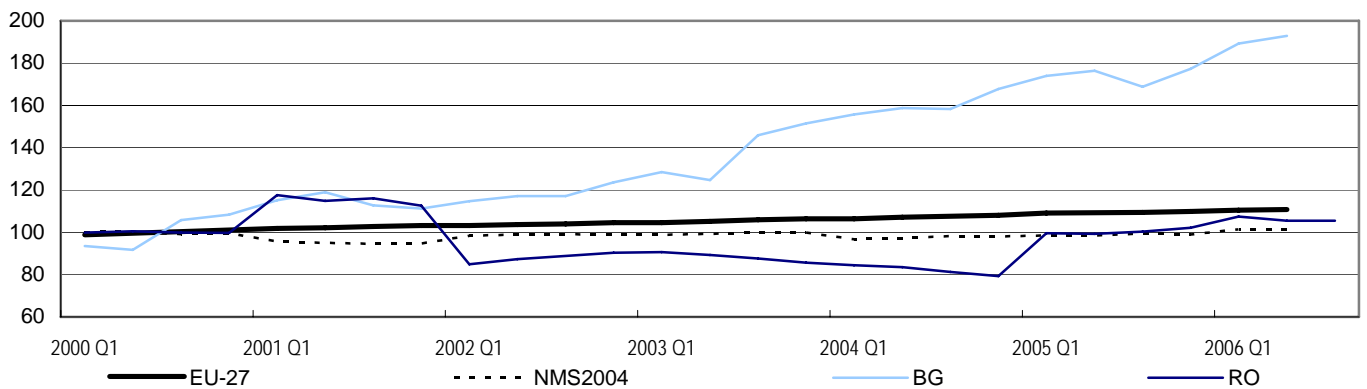
RO, provisional.

Figure 25: Volume of sales index, retail sale of non food products, seasonally adjusted, 2000=100



RO, provisional.

Figure 26: Employment index, retail trade and repair of household goods, seasonally adjusted, 2000=100



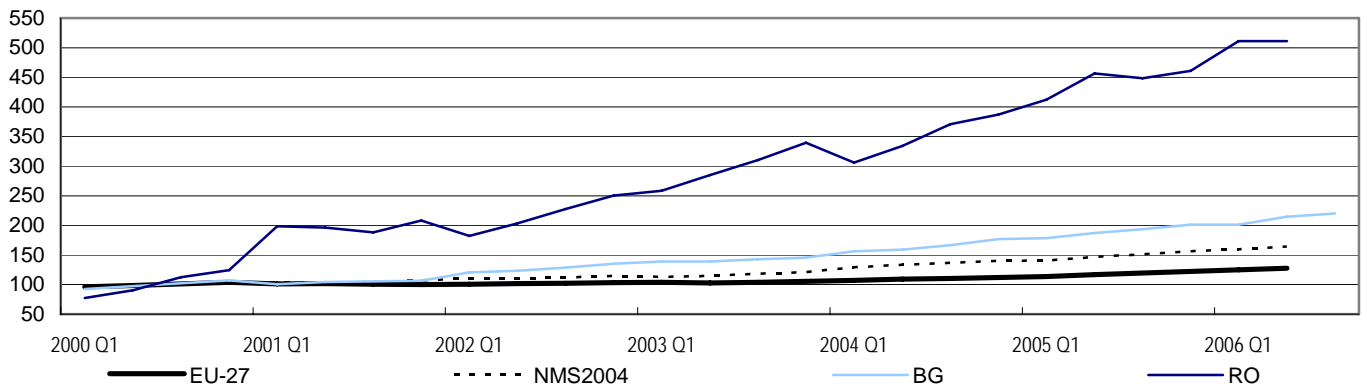
BG, provisional from 2005Q1.

Wholesale trade (NACE Rev. 1.1 Division 51)

From 2000 quarter 1 to 2006 quarter 2 the turnover index in wholesale trade grew by 14.3 % per year on average in Bulgaria, and by 35.2 % in Romania, compared to 4.6 % for the EU-27.

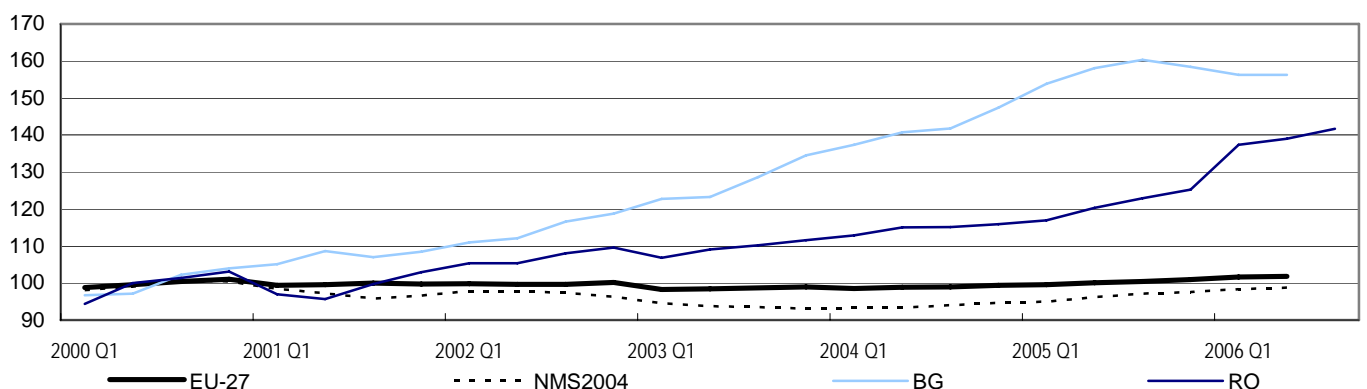
The employment index for wholesale trade shows strong growth in both Bulgaria (since the beginning of the series) and Romania (since 2001 quarter 2), although in Bulgaria there has been a slight fall in the index since 2005 quarter 3.

Figure 27: Turnover index, wholesale trade, seasonally adjusted, 2000=100



BG, 2006Q3 provisional.

Figure 28: Employment index, wholesale trade, seasonally adjusted, 2000=100



BG, provisional from 2005Q1.

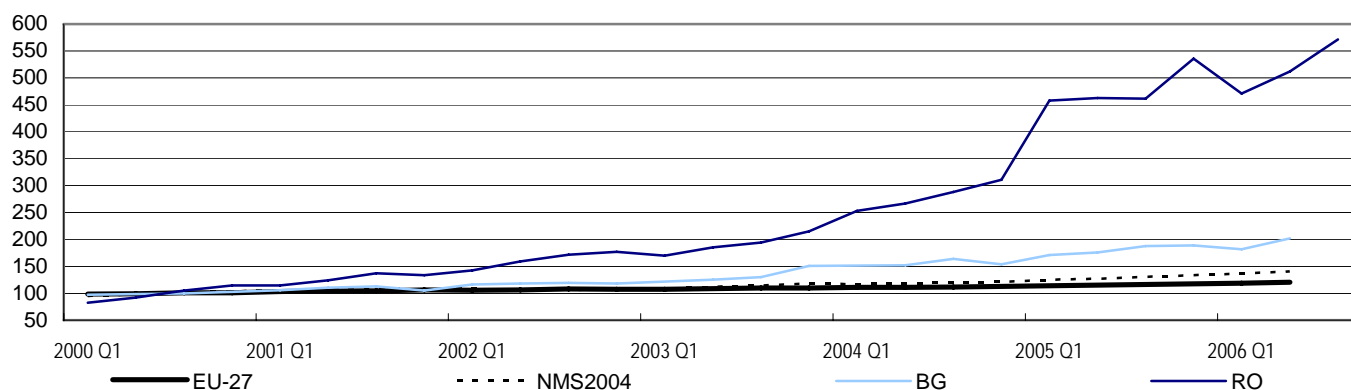
Hotels and restaurants (NACE Rev. 1.1 Section H)

From 2000 quarter 1 to 2006 quarter 2 the turnover index in hotels and restaurants grew by 12.4 % per year on average in Bulgaria, and 33.8 % in Romania, compared to 3.3 % for the EU-27.

It should be remembered that value indices such as the turnover index reflect changes not only in terms of the volume of sales but also prices.

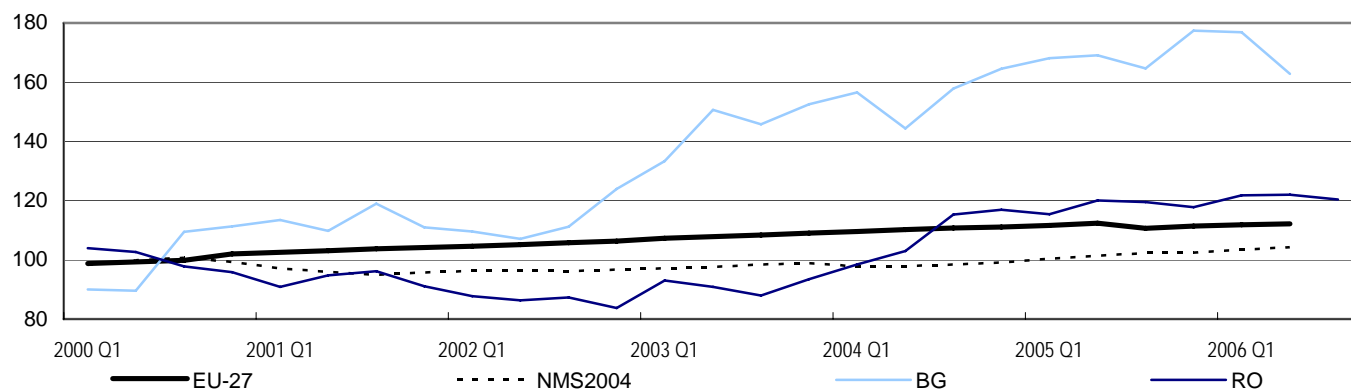
Figure 30 shows the employment index for hotels and restaurants. As can be seen, the dramatic growth in the turnover index in this sector in Romania has coincided with a decline in employment from the beginning of the series through to 2002 quarter 4, followed by a stronger increase through to 2005 quarter 2, and a subsequent period of stability. In contrast the more modest turnover growth in Bulgaria coincided with stronger employment growth interspersed with short declines in the employment index, with particularly strong growth between the second quarters of 2002 and 2003.

Figure 29: Turnover index, hotels and restaurants, seasonally adjusted, 2000=100



RO, provisional.

Figure 30: Employment index, hotels and restaurants, seasonally adjusted, 2000=100



BG, provisional from 2005Q1.

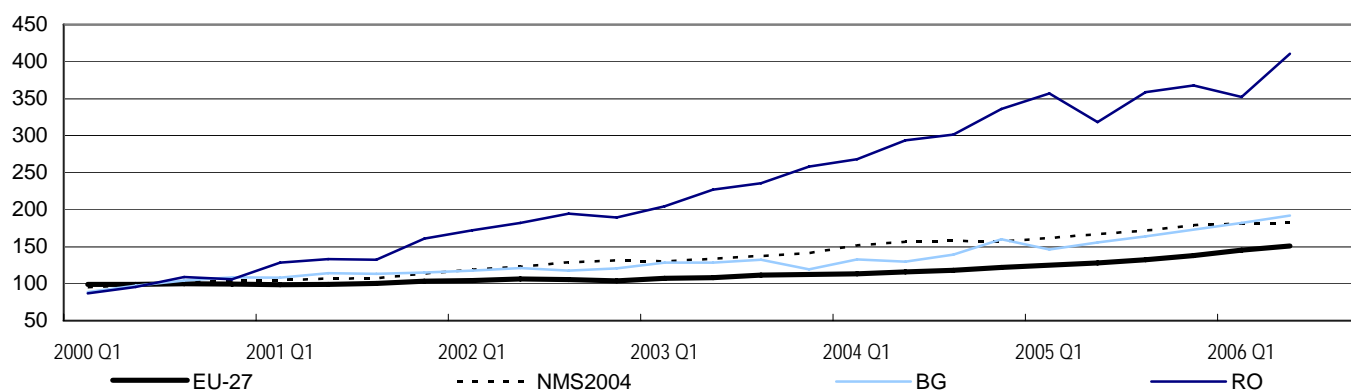
Land transport (NACE Rev. 1.1 Division 60)

In land transport the turnover index in Romania grew by 28.2 % per year on average between 2000 quarter 1 and 2006 quarter 2, compared to 13.1 % in Bulgaria, which was just ahead of the average for the ten Member States that joined the EU in 2004 (10.9 %).

The employment indices presented in Figure 32 provide a simpler picture of the development of this sector, unaffected by price increases.

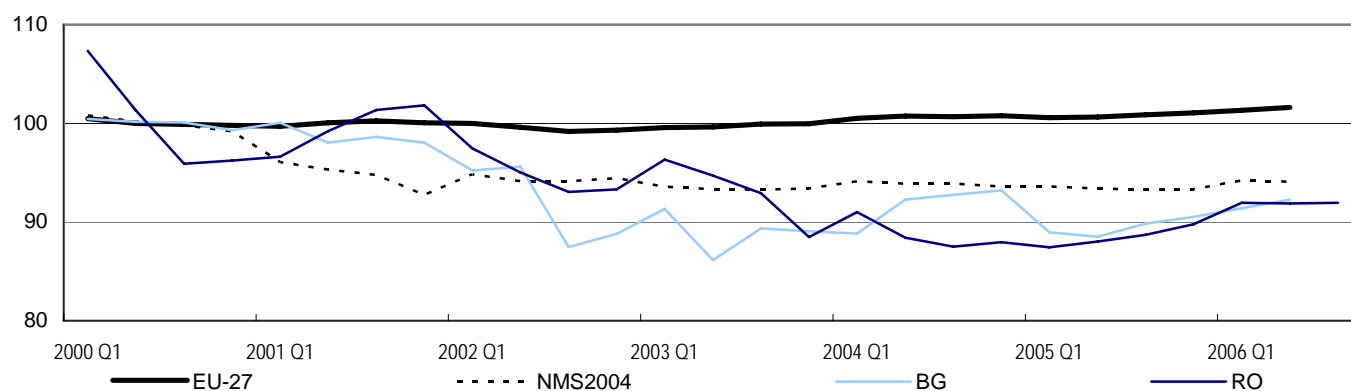
From 2000 the employment indices of both Bulgaria and Romania reflected a development in the land transport sector that was broadly similar to that of the ten Member States that joined the EU in 2004, and which contrasted with the development for the EU-27. Bulgaria recorded a decline in employment through until 2003 quarter 2, whereas in Romania the employment index for land transport continued to fall until 2005 quarter 1. However, since these recent low points in the indices, both Bulgaria and Romania have recorded increases in employment in this sector, whereas the employment index for the ten Member States that joined the EU in 2004 remained relatively stable since the beginning of 2002.

Figure 31: Turnover index, land transport, seasonally adjusted, 2000=100



RO, provisional.

Figure 32: Employment index, land transport, seasonally adjusted, 2000=100



BG, provisional from 2005Q1.

Computer and related activities (NACE Rev. 1.1 Division 72)

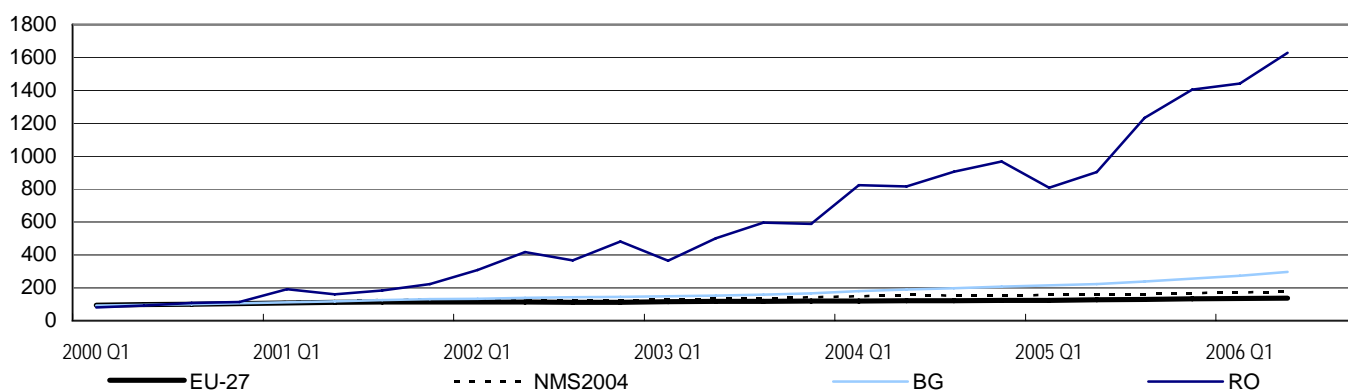
As in the other services presented on the previous pages, in computer and related activities the turnover index in Bulgaria and particularly Romania grew strongly in recent years. In Romania the annual average growth between 2000 quarter 1 and 2006 quarter 2 was 61.5 %, and in Bulgaria the average was 20.2 %. These were both considerably higher average growth rates than recorded in this sector in the ten Member States that joined the EU in 2004 (10.6 %) and the EU-27(6.2 %).

Although these high rates of turnover growth almost certainly reflect in large part rapid price increases, the employment indices for Bulgaria and Romania suggest underlying growth in computer and related activities.

In Romania the employment index in computer and related activities was relatively stable or fell during 2000 and 2001, since when it increased nearly every quarter. By 2006 quarter 2 the index was five times as high as in 2001 quarter 4.

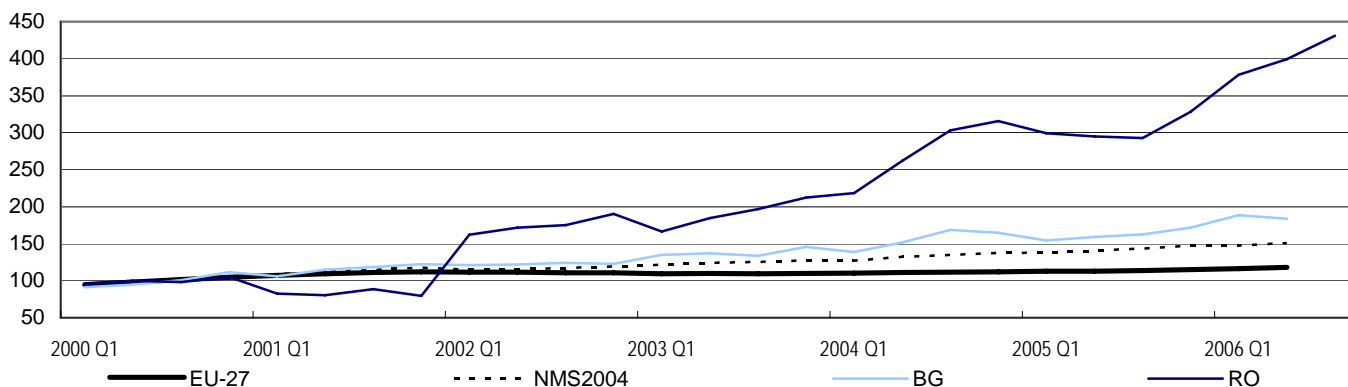
The employment index rose less dramatically in this sector in Bulgaria in comparison to Romania, but growth was nevertheless considerable. In fact the employment index in computer and related activities in Bulgaria doubled between 2000 quarter 1 and 2006 quarter 2, an average of 11.8 % growth per year. For the 10 Member States that joined the EU in 2004 average annual employment growth in this sector over the same period was 7.5 % while for the EU-27 it was 3.6 %.

Figure 33: Turnover index, computer and related activities, seasonally adjusted, 2000=100



RO, provisional.

Figure 34: Employment index, computer and related activities, seasonally adjusted, 2000=100



BG, provisional from 2005Q1.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

SOURCES

Source of all data, graphs and tables in this publication: Eurostat.

SHORT-TERM STATISTICS (STS) REGULATION - THE LEGAL BASIS

The main basis of the information presented in this publication is the Council Regulation No 1165/98 of 19 May 1998 concerning short-term statistics. This Regulation was amended by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005.

CLASSIFICATIONS AND RELATED DEFINITIONS

The economic activities used in this publication are defined in the classification of economic activities within the European Communities, known as NACE: this publication uses NACE Rev. 1.1.

Main industrial groupings (MIGs)

The objective of the MIGs is to provide an activity breakdown of industry (NACE Rev. 1.1 Sections C to E inclusive) which is an intermediate level between the Sections and the Subsections of NACE. There are five MIGs, which, despite the reference to 'goods', in fact regroup all activities in NACE Sections C to E. These are:

- intermediate goods;
- capital goods;
- consumer durables;
- consumer non-durables;
- energy.

Classifications of types of constructions (CC)

The principal breakdown, at the Section level is between civil engineering and buildings. For more information see: CC, Eurostat, 14 March 1997.

VARIABLES/INDICATORS

The production index provides a measure of the volume trend in value added at factor cost over a given reference period. The industrial production index is compiled for activities within NACE Rev. 1.1 Sections C, D and E. The production index for construction is compiled for building and for civil engineering. The data necessary for the compilation of such an index are generally not available on a sub-annual basis and suitable proxy values are needed for the compilation of the indices.

The turnover index aims to show the evolution of the market for goods and services. Turnover comprises the total invoiced by the observation unit during the reference period, excluding all duties and taxes on the goods or services invoiced by the unit.

The volume of sales represents the value of turnover in constant prices and as such is a volume index. It can be calculated as turnover at current prices deflated by the deflator of sales.

The employment index is based on the total number of persons who work for the observation unit (paid employees, working proprietors or partners and unpaid family workers). The index of the number of employees can be used as an approximation of the index of the number of persons employed.

The output price index (or producer price index) shows monthly price changes. The indices are compiled for activities within NACE Rev. 1.1 Sections C, D and E. Indices are compiled for the domestic and the non-domestic market. All price-determining characteristics of the products should be taken into account. The price excludes all duties and taxes on the goods and services invoiced by the unit.

DECOMPOSITION - FORMS OF INDICES

The normal breakdown of a gross or unadjusted time series makes it possible to identify the trend, the cycle, the seasonal variation and the erratic fluctuations.

Seasonal adjustment aims, after adjusting for calendar effects, to take account of the impact of the known seasonal factors that have been observed in the past. If the national statistical office providing the data does the seasonal adjustment, these series are used. If no seasonally adjusted series are supplied, Eurostat perform the seasonal adjustment.

The trend is a slow variation over a long period of years, generally associated with the structural causes of the phenomenon in question.

The cycle is a quasi periodic oscillation, characterised by alternating periods of higher and lower rates of change possibly, but not always, involving expansion and contraction. In most cases it is related to fluctuations in overall economic activity.

The seasonally adjusted and trend-cycle data in this publication are calculated by Eurostat from the gross or working day adjusted data provided by the countries.

GEOGRAPHICAL AGGREGATES

Geographical aggregates (such as EU-27) are estimated when 60 % of the weighted national data is available. Missing data is estimated using ARIMA. Geographical aggregates are calculated for gross series and for working day adjusted series, and from these two forms, seasonally adjusted and trend cycle forms are derived.

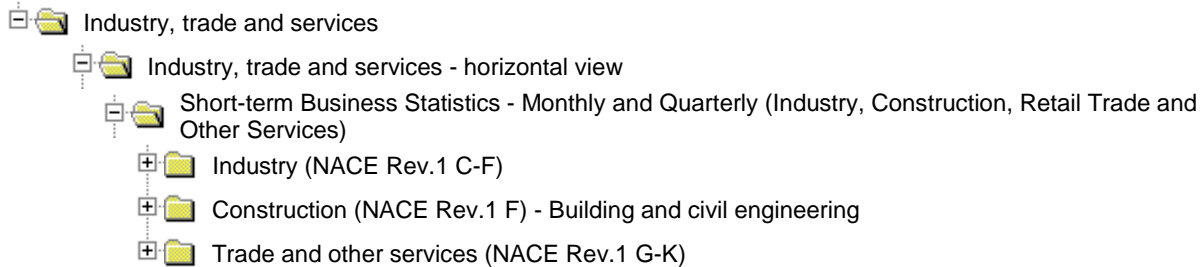
EU-27	27 Member States of the European Union
NMS2004	the 10 EU member States that joined the EU on 1 May 2004: the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia
BG	Bulgaria
RO	Romania

Further information

Liliana Apostol
Tel.: (352) 4301 36673,
Fax: (352) 4301 34359,
Liliana.Apostol@ec.europa.eu

Further information:

Data: [EUROSTAT Website/Home page/Industry, trade and services/Data](#)



Journalists can contact the media support service:

Bech Building Office A4/125
L - 2920 Luxembourg

Tel. (352) 4301 33408
Fax (352) 4301 35349

E-mail: eurostat-mediasupport@ec.europa.eu

European Statistical Data Support:

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

Contact details for this support network can be found on our Internet site: <http://ec.europa.eu/eurostat/>

A list of worldwide sales outlets is available at the:

Office for Official Publications of the European Communities.

2, rue Mercier
L - 2985 Luxembourg

URL: <http://publications.europa.eu>
E-mail: info-info-opoce@ec.europa.eu
