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Macroeconomic Changes in Romania During the Transition Period

2.1 The Macroeconomic Picture of Transition

Since 1990, Romania's economy has undergone a transition from the centralized economic system to an economy based on free initiative and market mechanisms.

The mutation from a private sector contribution to GDP of 16.4% in 1990 to more than 75% in 2015 was achieved through complex transformations across society and all sectors of the economy. During this period decision-makers, state institutions, companies, and individuals experienced a process of learning and permanent adaptation.

At the beginning of 1990, the Romanian economy was an overwhelming state-owned and super-centralized economy; the economy comprised almost exclusively state-owned enterprises and production cooperatives that were extremely large, and most of their output was destined for investment and export goods.

The sudden dismantling of CMEA (Council for Mutual Economic Assistance) in October 1991 and the dissolution of Eastern European market; the collapse of the domestic market, which had been dominated by economic agents with low flexibility; the liberalization of prices

L. Chivu et al., *Deindustrialization and Reindustrialization in Romania*,
DOI 10.1007/978-3-319-65753-0_2

(November, 1990) and the loss of significant export market segments caused a severe economic recession.

During the first decade post-communism, the transition to a market economy brought some economic reforms and restructuring, especially in terms of privatization and fundamental changes in economic and employment structures. The process itself was notably complex, complicated and difficult, as it was hard to harmonize and synchronize the individual components—economic, institutional-legal, social, political, cultural-educational, mental, and psychological among others. Often, the economic and technological sides of the restructuring outpaced the institutional, legal, political and social-cultural components and have resulted in the first decade in a dramatically decreased GDP, substantial changes in the structure of gross added value and employment, galloping and persistent inflation and high unemployment (Ciutacu and Chivu 2010).

Among other essential elements in the process of law building, the institutions of the market economy had a special importance. In this regard, the first interim government in 1990 dismantled the centralized economy, transforming the former State Committee of Planning into the Ministry of National Economy.

In 1990, a decree for the promotion of free initiative was promulgated, followed by the institution of Law No. 31, which transformed state-owned enterprises into commercial companies; in 1991 Law No. 58 on the privatization of commercial companies was promulgated, followed by a whole series of laws (Law No. 77/1994 and Law No. 55/1995, etc.) which fundamentally changed the property-ownership structure of the Romanian economy.

Prior to 1990, the economic environment had been based on the fundamentals of vertical (enterprise, central unit, ministry), but also horizontal, integration and value chains (e.g., mining industry—primary processing industry—secondary processing industry—trade enterprise, or agriculture—agro-food industry—trade). That economy, in which the workers were common owners of companies' assets, did not necessarily focus on the profit of each link, but rather the value added to the whole value chain and "full employment". The new legal framework laid the foundations for a competitive environment in which each link, company or person had the freedom to handle its own business.

Despite the enthusiasm for the new climate of freedom and initiative brought about by these profound changes, in the context of mass privatization, lack of experience, coupled with a lack of financial liquidity and specific support mechanisms, in many borderline cases lead to heavy layoffs, loss of assets or even dismantling of companies. In fact, in most countries in transition, repercussions on wealth and income distribution and on social structure caused by large-scale privatization have been unavoidable (Chilosi 1996, 75–93).

The property destructuring and restructuring that took place in Romania can be summarized as follows: starting from a total of 197,000 enterprises (more than 90% of them large) in 1989, in 2015 a total of 513,989 companies (out of which 95% were small and medium-sized enterprises) were registered.

In agriculture, the land law (Law no. 18/1991) laid the foundations for a dual mechanism of land reform and the reestablishment of land ownership rights. The result of retrocession can be summarized as follows: at the beginning of the transition, 85% of the agricultural land was owned by the state or agricultural cooperatives; in 2015, a total of 93.6% of the agricultural lands were private property, divided into 3,629,656 agricultural holdings, of which 3,601,776 were without legal status (subsistence farms with an area of less than 5 hectares, divided into two to three plots separated by large distances). The remainder, 27,880 holdings, had legal status. The excessive fragmentation of land, the advanced age and the lack of financial resources of the new landowners (necessary for the efficient exploitation of the land) and the lack of support mechanisms for setting up networks for collecting and selling agricultural products led to a gradual loss of important segments of the internal market for agro-food products.

In the service sector, under-dimensioned in the centralized economy in Romania, in addition to the privatization or concession of large electricity transport and distribution companies, the concession of local interest services; the transfer of educational, health and cultural services to private operators; and the expansion of financial and banking services and telecommunications led to an increase in the number of service companies from 190,000 in 1989 to 463,460 in 2015 (of which over 200,000 had no employees). Most businesses in the service sector—171,959 (of which 99.9% were small to medium-sized enterprises [SMEs])—were in commerce, followed by construction with 48,341 companies (99.8% SMEs), transport and storage with 41,746 companies (99.7% SMEs), hotels and restaurants with 25,497 companies (99.9% SMEs) and IT with 20,619 companies (99.6% SMEs).

In 2015, a total of 297,148 private entrepreneurs were active in the economy, including 15,869 family businesses and 274,065 independents.

The magnitude and complexity of the transformations have always been reflected in the evolution of institutional architectures: the Romanian Agency for Investment and International Technical Assistance (1990), then the Romanian Agency for Foreign Investments and, since 2014, the Department for Foreign Investments and Public-Private Partnership, within the government's internal structure; the National Agency for Privatization and Small and Medium Enterprises Development (1991), the Department for Reform and Economic Integration (1991), the Coordination, Strategy and Economic Reform Council and the European Integration Department (1992), the Ministry of Integration, Local Public Administration (1991), later Ministry of Administration and Interior and Ministry of Internal Affairs; the State Property Fund, transformed in 2001 into the Authority for Privatization and State Ownership Management and merged in 2004 with the Authority for the Capitalising of Banking Assets (established in 1998) and transformed into the Authority for the Valuation of the State Assets in 2012; five Regional Private Property Funds, transformed into five Financial Investment Companies (1996); the Romanian Development Agency, merged in 2000 with the National Agency for Small and Medium Enterprises and the National Agency for Regional Development; Restructuring Agency (1994), Department for Relations with Trade Unions and Employers (1994), Stock Exchange (1995), National Securities Commission, Court of Accounts, Competition Council, National Authority for Consumer Protection, among others.

The institutional construction—referring both to the rule of law and to the specific aspects of the functioning of the market economy—has seen two distinct periods, not only from the point of view of the architecture of the institutions, but also from the perspective of the mechanisms of action, the content and the way of functioning.

After the events of February 1, 1995, when the Agreement for Romania's Association to the EU was promulgated, and June 22, 1995, when Romania officially submitted its application for the EU membership, with the support of all its political forces, the pace and content of the reforms changed significantly. In December 1999, Romania was invited by the EC to the accession negotiations; and, from 2000 to 2005, all the negotiation files were closed.

This process, besides the efforts for the proper transposition of the Acquis Communautaire, has involved another kind of transformation and restructuring that has had an impact especially on the level of administrative, managerial and anticipatory capacity.

In accordance with the EC timetable, Romania signed the Accession Treaty in 2005 and, on January 1, 2007, became a full member of the EU.

Since April 1, 2004, Romania has also been a full member of NATO.

A retrospective look at the processes of transition and economic reforms in Romania shows that a gradual strategy has been adopted, in which the economic shocks were less drastic in the first years, later becoming more and more painful. Although initially it seemed that the transition would take place at most over the medium term, it has had a long-term impact. The internal processes of the institutions' profound restructuring and the market economy mechanisms overlapped with the efforts required by the political and institutional–legal reforms necessary for NATO and EU integration.

In the first decade of transition, the GDP experienced dramatic falls (Table 2.1). Only after 2000, did the GDP reach, in real terms, the pre-transition level, though obviously in a significantly different structure.

Starting in 2000, the economy has grown, sometimes even spectacularly, and consumption—supported by loans—has boosted expansion since 2008. Starting with 2008, the effects of the global economic and financial crisis have made their presence felt, highlighting the fragility of macroeconomic balances. Against the backdrop of the global economic downturn, it has been noticed that Romanians consume more than just products; and for macroeconomic balance, new sectoral restructurings and reductions in the number of employees, especially in the public sector, are needed.

Table 2.1 The macroeconomic indicators, 1990–2015

		1990	1995	2000	2005	2007	2010	2011	2012	2013	2014	2015
GDP (bn. euro, current prices)		31.26	29.09	40.58	79.75	124.65	126.80	133.34	133.90	144.28	150.63	160.37
GDP index in euro (%)		100.0	93.1	129.8	255.1	398.8	405.6	426.6	428.3	461.5	481.9	513.2
Real GDP index (%)		100.0	89.7	87.9	116.1	133.2	132.0	134.9	135.7	140.3	144.4	149.9
Industrial production (bn. euro, current prices)		42.38	22.94	31.67	58.25	82.73	80.62	89.01	86.4	88.2	…	….
Gross value added in industry (bn. euro, current prices)		12.7	8.7	10.1	20.0	29.0	35.5	38.0	33.5	36.3	37.4	…
Real value index of the production (%)	Industry (%)	100.0	65.4	58.1	72.7	82.1	89.7	94.7	90.5	99.7	102.9	105.7
	Manufacturing industry (%)	100.0	62.7	57.9	76.4	87.7	98.5	104.0	96.1	107.5	112.4	116.3
	Mining/extraction industry (%)	100.0	83.0	65.1	65.7	67.1	81.1	56.7	97.3	97.9	101.9	89.2
	Electricity, heating, gas and water (%)	100.0	79.2	58.5	53.2	55.0	59.4	63.2	71.5	74.1	68.8	69.7
Added value index (%)	Manufacturing industry	100.0	75.9	74.9	100.8	115.5	117.2	114.5	108.7	117.3	…	…
	Mining/extraction industry	100.0	64.5	50.4	49.0	49.9	51.9	42.8	35.0	24.6	…	…
	Production of electricity, heating, gas, and water	100.0	420.3	281.0	275.6	286.0	316.4	387.6	356.6	342.3	…	…
Total net investment (bn. euro, current prices)	National economy	6.1	4.9	6.3	13.2	25.1	17.2	20.7	20.0	18.3	19.4	…
	Industry	2.8	2.1	2.5	4.9	8.2	6.5	7.8	7.97	7.84	7.89	…

Source: Authors' own compilation based on the NIS and NBR data
Note: … = Not available data

These changes have also overlapped with the effects of the four freedoms of the internal market of the EU, for which the Romanian economy and, in particular, the economic agents, have not been sufficiently prepared. The years following the transition have been marked by increased public and private external debt; growing external trade deficits (especially in relation to the EU member states); the loss, mainly by the domestic companies, of important segments of the domestic market; and the migration of important population contingents (especially young and highly skilled people), leading to skilled labour shortages in many sectors of the economy.[1]

In recent years, following macro-stabilization efforts, the economic indicators have resumed their upward trend. Starting in 2013, macroeconomic statistics signal an exit from the crisis, and investors' perceptions about the risk of businesses in Romania have improved further since then.

In 2015, Romania's GDP, expressed in euro, totalled approximately 160.4 bn. euro, compared to 31.3 bn. euro in 1990, 40.6 bn. euro in 2000 and 124.6 bn. euro in 2007, which was the year of Romania's accession to the EU (Table 2.6).

In constant prices, compared to 1990, the GDP index for 2015 stood at 149.9%. In current euro, the nominal value of the GDP was 5.1 times bigger in 2015 than in 1990.

As to the GDP per capita, in purchasing power standards, Romania's convergence process is on the rise: 34% of the EU 28 average in 2004, and 57% in 2015 (Table 2.2).

In addition to the information provided by the Table 2.2, the convergence can be also demonstrated by the share Romania holds of the total GVA generated by the EU 28 member countries. While in 2000, Romania's share of the overall EU GVA was only 0.44%, this share had grown to 1% in 2007, and to 1.09% in 2008; the onset of the economic crisis pushed this ratio down to approximately 1% in 2010; it then rose again slightly, reaching 1.08% in 2015. Eurostat detailed statistics indicate that Romania's share of the total EU GVA was higher in agriculture (2.4% in 2000, 4.3% in 2006, 4.8% in 2008, 3.9% in 2010 and 3.6% in 2015), while Romania's share of the EU 28 GVA in industry was 0.6% in 2000, 1.4% in 2007, 1.7% in 2010 and 1.6% in 2015.

Table 2.2 The GDP per capita, in purchasing power standards (EU 28 = 100.0)

	2004	2007	2010	2011	2012	2013	2014	2015
EU 28	100	100	100	100	100	100	100	100
Belgium	121	115	120	120	120	120	118	117
Bulgaria	34	40	43	44	46	46	47	46
Czech Rep.	79	84	81	83	82	83	84	85
Denmark	125	122	126	126	124	124	126	125
Germany	116	116	119	122	124	124	126	125
Estonia	55	69	63	68	74	75	76	74
Ireland	143	147	129	130	131	131	134	145
Greece	95	91	87	77	74	74	73	71
Spain	100	103	98	95	92	91	91	92
France	110	107	108	108	107	108	107	106
Croatia	57	61	59	60	60	59	59	58
Italy	108	105	104	103	101	98	96	95
Cyprus	97	100	102	96	91	84	82	81
Latvia	48	60	53	57	60	62	64	64
Lithuania	50	61	60	65	70	73	75	74
Luxembourg	246	254	254	265	258	264	266	271
Hungary	62	61	65	65	65	66	68	68
Malta	81	78	86	84	84	86	86	89
Netherlands	133	136	135	135	132	132	131	129
Austria	128	123	126	128	131	131	129	127
Poland	49	53	62	64	66	67	68	69
Portugal	77	79	81	78	77	77	78	77
Romania	**34**	**42**	**50**	**51**	**54**	**54**	**55**	**57**
Slovenia	86	87	83	83	81	80	82	83
Slovakia	57	67	73	73	74	76	77	77
Finland	117	118	115	117	115	113	110	108
Sweden	129	128	126	127	127	124	123	123
United Kingdom	125	118	108	106	107	108	109	110

Source: Eurostat data

2.2 Developments in Sectoral Structures

In the past 25 years, the *sectoral structure* of the national economy has undergone significant changes. The data in the *National Accounts* system indicate that, for the entire economy, the gross production expressed in current euro (by converting into euro the annual production expressed in lei, at the annual average leu/euro exchange rate published by the National Bank of Romania, NBR) moved from 76.2 bn. ecu in 1990 to 302.79 bn. euro in 2014 (Table 2.3, Appendix A.1).

Table 2.3 The evolution of the gross production, intermediate consumption and gross value added, by economic sectors (current bn. euro)

Branch	Indicator	1990	1995	2000	2005	2007	2008	2009	2010	2011	2012	2013	2014
National economy, total	Gross production	76.22	60.86	78.63	151.21	234.92	267.65	230.57	244.74	266.90	268.60	288.73	302.79
	Intermediate consumption	47.50	33.45	42.18	80.77	124.55	143.14	124.14	133.96	149.90	151.00	162.42	169.77
	Gross value added	28.72	27.41	36.45	70.44	110.37	124.51	106.43	110.78	117.00	117.60	126.31	133.02
Agriculture, forestry, fishing	Gross production	11.14	9.62	8.53	13.70	15.86	19.90	15.92	15.31	17.20	13.40	16.46	15.67
	Intermediate consumption	4.32	4.37	4.14	6.99	8.68	10.63	8.30	8.21	8.60	7.10	8.72	8.56
	Gross value added	6.82	5.25	4.39	6.71	7.18	9.27	7.62	7.10	8.60	6.30	7.75	7.10
Industry and construction	Gross production	49.98	32.01	37.34	70.74	112.16	125.16	108.64	115.87	126.00	124.40	130.42	130.03
	Intermediate consumption	35.64	21.47	24.81	45.74	70.48	78.86	68.48	70.98	79.40	81.70	85.58	83.78
	Gross value added	14.34	10.54	12.53	25.00	41.68	46.30	40.16	44.89	46.60	42.70	44.84	46.24
Services	Gross production	15.1	19.23	32.76	66.77	106.9	122.59	106.01	113.56	123.70	130.8	141.85	157.09
	Intermediate consumption	7.54	7.61	13.23	28.04	45.39	53.65	47.36	54.77	61.90	62.20	68.12	77.42
	Gross value added	7.56	11.62	19.53	38.73	61.51	68.94	58.65	58.79	61.8	68.6	73.72	79.67

Source: Authors' own compilation based on data from Romania's *Statistic Yearbook*, NIS, Bucharest, various editions, and NBR data

The gross value added in agriculture grew from 6.8 bn. euro in 1990 to 7.1 bn. euro in 2014. The highest value of this indicator was reached in 2008 (9.27 bn. euro), and the lowest was recorded in 2000 (4.39 bn. euro).

Services was a sector that contributed to GAV with 7.6 bn. euro in 1990, 68.9 bn. euro in 2008, 58.8 bn. euro in 2010 and 79.7 bn. euro in 2014.

From a relative point of view, agriculture lost part of its share in the total gross production of the economy, from 14.6% in 1990 to 6.3% in 2010 and to 5.2% in 2014, with intermediate consumption following a descending trend, from 9% to 6% in 2010 and to 5.0% in 2014, with a similar decline in its contribution to the total GVA from 23.7% in 1990 to 12.1% in 2000, 6.4% in 2010 and 5.3% in 2014 (Table 2.4).

Industry and construction also reduced their contribution to gross production (from 65.6% in 1990 to 42.9% in 2014), to intermediate consumption (from 75% to 49.4%) and to the GVA (49.9% in 1990 and 34.8% in 2014, after a low of 34.4% in 2000).

The growth in the services sector is visible for all the three indicators, particularly for intermediate consumption (from 15.9% in 1990 to 45.6% in 2014), and the GVA (from 26.3% in 1990, to 55.7% in 2007 and to 59.9% in 2014).

On the other hand, the statistical data above reveal that the services sector was more exposed to the negative effects of the economic and financial crisis than was the industrial sector.

The real index of gross production, intermediate consumption and GVA shows that, from 1990 to 2014, overall growth in the economy was 2.8 times for intermediate consumption, 2.13 times for gross production and 1.53 times for the GVA (Appendix A.2).

In real terms, the highest increase of the GVA compared to 1990 took place in 2014: production and supply of electricity, heating, gas and hot water (3.71 times); followed by commerce (3.14 times); construction (2.58 times); and transport, warehousing and communications (1.48 times), while in the manufacturing industry, the GVA increased only 1.25 times.

During the same interval, the GVA underwent a downward trend in the extraction/mining industries (to 16.0% less than the GVA in 1990), the hotel and restaurant sector (down to 70.2% of the 1990 level), as well as in agriculture, forestry and fishing (down to 92.5% of the 1990 level). (Appendix A.2).

Table 2.4 The structure of the gross production, intermediate consumption and gross value added, by economic sectors (%, prices for each year, total economy = 100.0)

Branch	Indicator	1990	1995	2000	2005	2007	2008	2009	2010	2011	2012	2011	2012	2013	2014
Agriculture, forestry, fishing	Gross production	14.6	15.8	10.9	9.1	6.8	7.4	6.9	6.3	6.4	5.0	6.44	4.99	5.70	5.17
	Intermediate consumption	9.1	13.1	9.8	8.7	7.0	7.4	6.7	6.1	11.5	8.9	5.74	4.70	5.37	5.04
	Gross value added	23.7	19.2	12.1	9.5	6.5	7.4	7.2	6.4	7.4	5.4	7.35	5.36	6.13	5.34
Industry and constructions	Gross production	65.6	52.6	47.5	46.8	47.7	46.8	47.1	47.3	47.2	46.3	47.21	46.31	45.17	42.94
	Intermediate consumption	75.0	64.2	58.8	56.6	56.6	55.1	55.2	53.0	53.0	54.1	52.97	54.11	52.69	49.35
	Gross value added	49.9	38.5	34.4	35.5	37.8	37.2	37.7	40.5	39.8	36.3	39.83	36.31	35.50	34.77
Services	Gross production	19.8	31.6	41.7	44.2	45.5	45.8	46.0	46.4	46.3	48.7	46.35	48.70	49.13	51.88
	Intermediate consumption	15.9	22.7	31.4	34.7	36.4	37.5	38.2	40.9	41.2	41.2	41.29	41.19	41.94	45.61
	Gross value added	26.3	42.4	53.6	55.0	55.7	55.4	55.1	53.1	52.8	58.3	52.82	58.33	58.36	59.89

Source: Authors' own compilation based on data from Romania's *Statistic Yearbook*, NIS, and Bucharest

Intermediate consumption grew at a much faster pace than gross production in the overall economy (up 279.87% in 2014 from the 1990 level of intermediate consumption, and 213.48% for gross production). In agriculture, gross production in 2014 rose to 111.81% of the 1990 level and the level of intermediate consumption grew to 157.4%; in the extraction/mining industries, intermediate consumption was approximately equal, and gross production fell to 46.4% of the reference year; in the processing industry, intermediate consumption was 188.9% and gross production was 164.0%.

Energy is the only sector where intermediate consumption grew less that gross production (intermediate consumption in 2014 was 75.8% of the 1990 level, and the gross production was 91.1%).

Viewed from the perspective of the real indices of gross production, intermediate consumption and GVA, for the period 1990–2014 (where 1990 = 100.0), Romania's economy had a very modest (not to say alarmingly poor) evolution.

In 25 years, the total value of the GVA increased by only 53.4%, which represents annual average growth of less than 2%; at such a growth rate, it is hard to imagine that in the following 50–100 years Romania could take such spectacular leaps forward to compensate for the lag in economic development compared to other EU member states.

In spite of big debates during the past 20–25 years regarding the potential for the development of agriculture, tourism and other services, the results have disappointing: in 2014, gross agricultural production represented 111.8% of the production level of 1990, and the GVA of agriculture barely achieved 92.5% of the same reference year. During the same period, gross production in the hotels, restaurants and the catering sector dropped to 85.7% of the 1990 level, and the GVA declined to 70.2%.

2.3 Inflation and the Exchange Rate of the National Currency

Inflation has been one of the persistent characteristics of the economic transition in Romania: if we take consumer prices in 1990 as a reference of 1.0, inflation increased by a factor of 2.892 between 1990 and 2007, and 3.977 between 1990 and 2015.

After Romania's accession to the EU, the average annual growth of consumer prices increased more slowly: from 7.85% in 2008 against 2007, and to 3.14% in 2011 against 2010; prices increased by 4.95% in 2012, by 1.55% in 2013 and by 0.83% in 2014. In 2015, consumer prices dropped by 0.93% (December 2015 against December 2014).

An analysis of the indices of the main prices in the economy reveals a lack of strategic thinking at times, be it at micro-, mezzo- or macroeconomic level (Table 2.5).

The most spectacular growth in an economy that, at least at a declarative level through all information channels, was seeking to achieve competitiveness and a resettlement of its values in consonance with the market requirements, and with the principles of supply and demand—and was doing this in many ways, including with the assistance of the International Monetary Fund (IMF), WB and other internationally known consultants—was in the sector of *catchment, treatment and distribution of water*, where prices in 2015 were 37,564.3 times higher than in 1990!. Following closely behind were the prices in the extraction/mining industries, which grew more than 11,530 times (accompanied by a correspondingly high growth of the subsidies received every year), and the prices for the production, transport and distribution of energy, gas and hot water: 7555.5 times, which, in one word, spells plunder.

The much faster rise in input prices (energy, water, raw materials and so on) compared to output prices has generated tensions and bottlenecks that have affected both companies and the general population.

The GDP deflator shows that prices have risen by a factor of 5830; the price of 1 gram of gold increased to 3792 times its previous level, and the national currency (leu) depreciated relative to euro 1620 times.

In an attempt to understand these flabbergasting developments, we used the following method[2]: we converted the GDP into the equivalent tonnes of gold, and we found that Romania produced, based on the GDP and the price of gold, 2177.4 tonnes of gold in 1990, 1224 tonnes in 1991, 3378 tonnes in 1995, 2680.9 tonnes in 1998, 7686.5 tonnes in 2007, 3207 tonnes in 2012 and 4771.7 tonnes in 2015 (down from 4901 tonnes in 2014).

This raises the question whether it wouldn't have been more profitable for the country to deal only in gold mining from its national natural reserves and trade the gold production on the international stock

Table 2.5 Price index during 1990–2015 (1990 = 100.0)

Year	GDP deflator	Rate of exchange (leu/euro)	Price of 1 gram of gold	Consumer prices	Price of industrial production	Prices in mining industry	Prices in manufacturing industry	Prices for the prod., transp and distrib of energy, gas, hot water	Catchment and distribution of water
1991	295	320	457	27	857	1058	449	1372	1820
1992	885	1458	816	839	1786	2141	1436	2174	1759
1993	2897	3223	1914	2987	4359	5436	3508	5025	4686
1994	6926	7168	4989	7072	11,387	12,242	9446	11,998	14,365
1995	9948	9582	5752	9353	15,383	14,576	13,106	14,313	22,893
1996	14,334	14,076	9609	12,983	23,054	21,536	19,849	19,812	33,071
1997	34,210	29,483	24,321	33,077	58,256	74,753	46,188	63,952	88,564
1998	52,117	36,400	24,436	52,624	77,575	87,783	62,722	81,703	156,294
1999	78,548	59,380	34,939	76,278	110,288	135,205	88,069	116,729	229,745
2000	112,373	72,717	49,239	111,767	167,253	217,689	133,860	166,813	345,626
2001	154,780	94,840	64,358	150,291	227,297	325,227	180,577	231,537	470,743
2002	189,962	113,892	83,614	184,162	278,309	398,153	214,175	334,460	657,727
2003	235,149	136,851	98,501	212,291	330,325	462,589	257,144	375,663	811,530
2004	271,231	147,696	108,846	237,504	393,881	524,848	304,397	470,746	980,887
2005	303,978	132,035	105,829	258,912	426,161	661,121	324,476	524,126	1,193,447
2006	336,532	128,430	138,302	275,900	467,305	821,123	355,531	550,482	1,504,510
2007	381,595	121,608	138,109	289,246	502,596	946,729	380,831	589,683	1,728,822
2008	445,874	134,195	178,311	311,949	579,532	1,055,356	448,697	615,206	1,888,501
2009	464,758	154,404	241,128	329,380	590,403	969,369	455,658	657,910	2,117,306
2010	491,429	153,405	318,798	349,450	627,868	989,178	487,784	682,765	2,278,713

(*continued*)

Table 2.5 (continued)

Year	GDP deflator	Rate of exchange (leu/euro)	Price of 1 gram of gold	Consumer prices	Price of industrial production	Prices in mining industry	Prices in manufacturing industry	Prices for the prod., transp and distrib of energy, gas, hot water	Catchment and distribution of water
2011	514,503	154,426	391,062	369,674	672,525	1,031,845	527,675	699,780	2,540,352
2012	540,019	162,373	472,156	382,002	708,820	1,067,329	557,391	726,803	3,151,073
2013	557,412	161,025	383,032	397,221	723,704	1,100,200	561,273	787,690	3,418,588
2014	566,749	161,958	345,703	401,464	722,825	1,154,206	557,907	792,811	3,643,486
2015	583,014	161,972	379,153	397,666	712,706	1,153,051	553,444	755,549	3,756,434

Source: Authors' own compilation based on data from Romania's *Statistic Yearbook*, NIS, Bucharest, various editions, and NBR data exchanges. Even if, by a *reductio ad absurdum*, Romania would have gained more in terms of wealth, a national economy and a national industry means a lot more than just gambling with demand and supply in certain markets.

Another constant of the economic evolution was the *rise of the amounts transacted on the interbank currency market*. More specifically, in 1996, the national gross production was 65.6 bn. euro, the GDP totalled 29.5 bn. euro, and the volume of foreign exchange transactions was 3.41 bn. euro (8.65 euro GDP per 1 euro of Forex transactions); in 2004, the gross production was 119.4 bn. euro, the GDP had a value of 61 bn. euro, and the annual volume of Forex transactions exceeded, for the first time, the value of the GDP, reaching the level of 64.2 bn. euro.

Going further, we see that, in 2007, the annual volume of foreign exchange transactions of 356.6 bn. euro was higher than both the gross production of overall economy (232 bn. euro), and then the GDP (124.65 bn. euro). In spite of the economic crisis, in 2008, the total value of the foreign exchange transactions was higher than the amount of 465 bn. euro, while the GDP was less than three times less, i.e. 139.8 bn. euro, and the gross production hardly reached 267.7 bn. euro (Table 2.6). Finally, in 2015, the value of the Forex transactions was more than 2.4 times higher than the GDP.

The exponential growth of foreign exchange transactions is a reflection of potential economic and financial stability, and of the imbalances at the macroeconomic level caused by pressure on the exchange rate and by other factors, visible or invisible. The relevance of these evolutions is more important as we know that over 95% of the bank capital is not domestic, and that the share of the Romanian goods exchange is irrelevant, not to mention the fact that many other transactions may exist which are not entered in the official records of the banking system.

One other thing we might add is that an important part of the intermediate consumption and of the gross production derives from imports, which have grown from 4.7 bn. euro in 1991, to 32.6 bn. euro in 2005, 57.2 bn. euro in 2008 and to 63.0 bn. euro in 2015.

Imports accounted for approximately 12.3% of the foreign exchange transactions in 2008 and 16.4% in 2015; if added to the worth of exports, they total an aggregate 30.6% of the overall foreign exchange transactions.

Table 2.6 Gross production, the GDP, and the annual worth of transactions on the inter-bank foreign exchange market (bn. euro)

	1996[a]	2000	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gross production	65.6	78.6	151.2	232.0	267.7	230.6	246.8	266.9	268.6	290.4	299.7	314.3
GDP	29.5	40.6	79.8	124.7	139.8	183.3	126.8	133.3	133.9	144.3	150.6	160.4
Volume of Forex transactions	3.4	24.8	97.3	356.6	465.0	352.8	397.9	440.6	414.9	388.3	363.1	384.4

Source: Authors' own compilation based on NIS and NBR data

[a]For the year 1996, the quotations are in ecu

In general, Forex transactions generate short-term analyses and reactions, most often with regard to the daily rate of exchange and short-term anticipations. Long-term analyses and anticipations are less often used, mostly by academic researchers.

Consultancy and economic and financial prognosis services work mostly with monthly, quarterly or semester aggregations of such data, losing sight of the curve of real indices of some of the macroeconomic indicators that are crucial for economic policy-making, and of genuine strategies for growth and sustainable development.

This may explain why the gross production of the overall economy has grown by only 1.73 times, while in commerce the gross production has increased 3.44 times, and why the highest growth of value added is also in commerce (2.81 times) and in energy (3.42 times), although the production and the consumption of energy are constantly declining.

2.4 International Trade in Goods

During the entire transition period, Romania has been confronted with growingly severe *trade balance deficits*. Practically, from 1997 until 2014, the cumulative trade deficit (export FOB–import CIF) totalled over 154.3 bn. euro, which is equal to the GDP for the year 2014.

While in 2004 the trade deficit was approximately 7.3 bn. euro, in 2006 it had doubled to 14.9 bn. euro and soared to over three times this level in 2007 and 2008 (21.7 bn. euro in 2007, and 23.5 bn. euro in 2008). Romania's accession to the EU may also have been an element that favoured this growth of the trade deficit as an effect of the Romanian economy's opening to the EU internal market. The economic crisis that started in 2008 somewhat slowed the increase of the trade deficit, which was approximately 10 bn. euro until 2012 and then dropped to 5.7 and 6.0 bn. euro in 2013 and 2014, respectively, only to then rise again to 8.4 bn. euro in 2015.

In fact, the trade balance deficit of 23.5 bn. euro in 2008 was higher than the total annual amount of 21.523 bn. euro of net salaries paid to the 5.046 mil. employees on record in that year.[3]

The deficit decreased as an effect of the faster growth of exports (from 33.7 bn. euro in 2008, to 45.3 bn. euro in 2011 and to 52.5 bn. euro in 2014); after the value of imports went down to 39 bn. euro in 2009, imports started growing again in 2010, and they reached 55 bn. euro per year in the period 2011–2013 and 58.5 bn. euro in 2014. In 2015, exports totalled 54.6 bn. euro, and imports jumped to 63.0 bn. euro.

The share of the trade balance deficit in the GDP followed an ascending curve, from 5% in 1991 to 10.3% in 2001 and 17.5% in 2007; then it dropped to 3.9% in 2013 and 2014 and went up again to 5.3% in 2015 (Table 2.7).

While Romania was in the pre-accession seven-year phase the overall worth of the country's imports was 171.3 bn. euro and exports totalled 121.3 bn. euro;[4] in the following seven post-accession years (2007–2013), the overall imports totalled 359.4 bn. euro, compared to only 269.6 bn. euro worth of exports, which resulted in a deficit of 89.7 bn. euro (Table 2.8).

The balance of imports, exports, and the balance of foreign trade transactions by groups of industrial products, and by EU member countries, spanning the time intervals 2000–2006 and 2007–2014 are illustrated in Appendix A.3.

The data therein indicate that, overall, for the transactions with the EU members, the sections of industrial products (according to Standard

Table 2.7 Romania's foreign trade balance in 1991–2015 (bn. euro, %)

	1991	1995	2000	2005	2008	2010	2011	2014	2015
Exports	3.5	6.1	11.3	22.3	33.7	37.4	45.3	52.5	54.6
Imports	4.7	7.9	14.2	32.6	57.2	46.9	55.0	58.5	63.0
Surplus/deficit	–1.2	–1.8	–3.0	–10.3	–23.5	–9.5	–9.7	–6.0	–8.0
GDP	25.1	29.1	40.6	79.7	139.8	124.4	131.5	150.6	160.4
% exports in GDP	13.9	21.0	27.8	27.9	24.1	30.0	34.4	34.9	34.0
% imports in GDP	18.9	27.3	35.1	40.9	40.9	37.7	41.8	38.8	39.3
% surplus/deficit in GDP	–5.0	–6.3	–7.3	–12.9	–16.8	–7.6	–7.3	–3.9	–5.3

Source: Authors' own compilation based on Tempo online, NIS data

Table 2.8 Trade balance during the periods 2000–2006 and 2007–2013 (bn. euro)

	2000	2001	2002	2003	2004	2005	2006	2000–2006	2007	2008	2009	2010	2011	2012	2013	2007–2013
Import	14.2	17.4	18.9	21.2	26.3	32.6	40.7	**171.3**	51.3	57.2	39.0	46.9	55.0	54.7	55.3	**359.4**
Export	11.3	12.7	14.7	15.6	18.9	22.3	25.9	**121.3**	29.5	33.7	29.1	37.4	45.3	45.1	49.6	**269.6**
Balance	−3.0	−4.7	−4.2	−5.6	−7.4	−10.3	−14.8	−50.0	−21.8	−23.5	−9.9	−9.5	−9.7	−9.6	−5.7	−89.7

Source: Authors’ own compilation based on NIS data

International Trade Classification SITC REV3) have recorded a deficit balance of 17.7 bn. euro in 2000–2006, accounting for 82.5% of the total trade deficit with the EU countries, and an even higher deficit—57.7 bn. euro—in 2007–2014, representing some 76.2% of the entire trade balance deficit with these countries.[5]

Romania had a positive trade balance for industrial products with six of the EU member countries: Belgium, Cyprus, Croatia, Estonia, Malta and the United Kingdom (with the last of them, the positive trade balance stood at 1.4 bn. euro in 2000–2006, and at 2.6 bn. euro in 2007–2014).

The biggest trade balance deficit was recorded in the exchange of industrial products with Hungary, more specifically 122.3 mil. euro in 2000–2006 and 14.98 bn. euro in 2007–2014, followed, in decreasing order, by Germany, with a deficit of 6.4 bn. euro in 2000–2006 and 12.5 bn. euro in 2007–2014, and Poland, with a deficit of 1.5 bn. euro in 2000–2006 and 8.7 bn. euro in 2007–2014.

The industrial product groups for which Romania has the largest deficits in the period 2007–2014 with the other EU member states are chemicals products (21.94 bn. euro), electrical machinery, appliances and equipment (21.32 bn. euro) and metal and related products (10.35 bn. euro); it has the biggest surpluses for shoes and other similar products (6.66 bn. euro), followed by other goods and products (+5.90 bn. euro) and textiles and related products (3.88 bn. euro).

The analysis of Romania's trade balances with each of the 28 member states (Appendix A.3) reveals that deficits generally tend to be in the area of high-technology and processing groups, and surpluses are mainly generated by products requiring less processing or those that are labour intensive. The only positive exception for Romania in the surplus area is the transport group.

2.5 External Debt and Public Indebtedness

A high level of indebtedness is not a problem in itself as long as loans are intended to finance investment projects in industrial sectors that support economic growth and provide increased financial resources that allow compliance with the debt-reimbursement schedule, either by the private sector or by the state. However, if the borrowings are misdirected or discretionary, especially in the case of sovereign loans, and do not support an increase in the efficiency of industrial activities and the services sector in terms of the economy competitiveness as well as GDP growth, sooner or later debt sustainability is affected, and companies encounter difficulties in meeting repayment commitments. The struggle to repay debt, through adverse spillbacks, has a negative impact on growth and its potential in the medium and long term.

The global financial crisis of 2008–2009 dramatically highlighted, in addition to its effects on the real economy and its rapid spread through all markets—transmitted in particular via banking and commercial channels—that debt sustainability is determined, decisively, by the particular situation of each country as well as the specific factors of influence.[6] The effects of the financial crisis, which still persist, have repercussions on sovereign risk due to the rise in public debt, not only in developing countries but also in advanced ones, which has affected their financial soundness and threatens the macroeconomic and financial balances at the regional, continental and global level.

The major lesson from international developments and experiences, including the impact of the global financial crisis, in terms of maintaining external financial stability, is that each state must ensure its own framework of sovereign debt sustainability, increase its capacity for absorbing potential external shocks, properly assess vulnerabilities and take steps to effect timely correction and carefully monitoring the systemic risk.

In the case of Romania, it should be noted that at the beginning of the transition to the market economy the country was in external financial balance. Under the circumstances of the foreign debt liquidation in March 1989 by the communist regime, about 2.5 bn. dollars remained to be recovered from external debtors, especially third world countries.

This exceptional financial situation of Romania, unburdened by debts—a unique case among the countries of Southern and Eastern Europe—could have been a valuable asset in accelerating the nation's transition, which began in 1990 with a series of reforms, from a super-centralized command economy to the market economy.

One of the biggest challenges during Romania's transition to a market economy and its integration into the EU was the accelerated growth of internal and external indebtedness (the most dynamic of all macroeconomic indicators), accentuated by the effects of the global financial crisis, which were not anticipated and counterbalanced and instead became excessive in relation to the requirements of sustainable development, macroeconomic efficiency, debt repayment capacity and cost-bearing support.

Based on WB data,[7] it was estimated that, in 1990–2000, Romania's external debt stock increased moderately, by about one billion dollars on average annually; in the pre-accession period (2001–2006) it increased to about 6 bn. dollars annually; and in the post-accession period (2007–2014) to almost 10 bn. dollars annually. Thus, the share of external debt in GNI (Gross National Income) increased from 3% in 1990 to 30% in 2000, to 45% in 2006 and to over 67% in 2014. Romania's external debt burden, represented by its annual debt service relative to exports of goods and services, increased from 0.3% in 1990 to 20% in 2000 to 27% in 2006 and to 38.3% in 2014.

Unlike the pre-accession period, in which the increase in external debt occurred, in particular, due to the autonomous financial flows required to cover the increasing trade and current account deficits, which exceeded 10% of GDP (largely funded by massive inflows of foreign investments, including "hot money"), the explosive rise in the external debt after 2007 (Table 2.9), occurred during the global financial crisis circumstances, as a result of compensatory financial flows, mainly the IMF–EU loan of 20 bn. euro in April 2009, which was granted as financial assistance in order to avoid a major imbalance in Romania's external balance of payments.

The increase in external debt during the transition period, motivated by the need to recapitalize the economy, was intended to cover the costs of industrial restructuring and upgrading, including attracting foreign investments, and should have resulted in sustainable economic growth, including increasing Romania's capacity for external payments, in particular because of the increase in foreign exchange earnings from exports of goods and services, in such a way that reimbursement of the due external debt outstanding so be smooth and without affecting the development prospects.

Table 2.9 The external debt of Romania during the period 2007–2016 (mil. euro)

External debt	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
I. Long-term external debt	38,526	51,762	65,746	72,909	75,929	78,760	76,894	75,829	70,558	69,116
I.1 Public debt[a]	10,197	10,749	19,057	26,948	31,312	33,833	34,284	35,427	32,984	33,494
I.2 Private debt[b]	28,329	41,013	46,559	45,961	44,617	44,927	42,610	40,402	37,574	35,622
II. Short-term external debt	20,103	20,592	15,417	19,549	22,795	20,921	19,166	18,915	19,876	23,416
Total external debt (I+II)	58,629	72,354	81,163	92,458	98,724	99,681	96,060	94,744	90,434	92,532

Source: For the period 2007–2013, based on NBR-Interactive database. For the period 2014–2016: Press releases on balance of payments and external debt, NBR

[a]Including direct public debt and publicly guaranteed debt, including IMF loans (Ministry of Public Finance and Monetary Authority, including DST allocations from IMF)

[b]Including long-term deposits of non-residents

The decoupling, which became ever more pronounced, of Romania's external indebtedness from economic growth led to a deterioration in the effectiveness of foreign borrowings and, implicitly, Romania's resilience to external shocks, increasing the vulnerabilities and risks associated with debt sustainability (Zaman and Georgescu 2012, 228–265).

In real terms, in the post-accession period, the ratio GDP/long-term external debt decreased from 3.2 in 2007 to 2.2 in 2015, a trend reflecting the weak macroeconomic performance of Romania. In terms of the long-term external debt burden, the share of debt service relative to the GDP reached more than 14% in 2015 compared to 7% in 2007 (Zaman and Georgescu 2016, 99–114).

The vulnerabilities of the external financial situation are also evident from the analysis of the net international investment position (NIIP), an indicator included in the EC's scoreboard under the Macroeconomic Imbalance Procedure [MIP]). In the case of Romania, the NIIP deteriorated sharply, its deteriorating from −29.4% to GDP in 2005 to −70.4% in 2012, mainly due to the increase in external debt in the debt instrument segment FDI, portfolio investment, other investment), followed by an slight improvement trend, reaching −57.2% in 2014 and −50.2% in 2015, a level that remained well above −35%, the alert threshold of MIP scoreboard (European Commission 2015).[8]

Romania's net debtor's position vis-à-vis the rest of the world entails a number of risk factors, both on the external assets side, supported by about two-thirds of the international reserves pillar (with low immediate liquidity and coming partly from minimum reserve requirements due by commercial banks, most of them with foreign capital), and on the external liabilities side, given the volatility of capital flows, including FDI, as well as the maintenance of a high degree of dependence on external financing (Georgescu 2016, 361–381).

Not only is Romania's external financial situation under pressure, mainly as a result of the imbalances generated by the accumulation of trade and current account deficits, but so is its internal financial framework, with fiscal deficits (representing more than 5% GDP annually in 2008–2011 and reaching a peak of 9.1% in 2009), exacerbated by expansionary budget policies funded by sovereign and private loans, which were also used for repayments and debt refinancing. Additionally, the effects of the global financial crisis and the financial assistance package granted to Romania by the IMF and the EU in 2009 lead to an explosive increase in public indebtedness.

In nominal terms, in lei, between 2000 and 2016, Romania's public debt stock (government and local authorities) increased more than 12 times, and in euro, more than 8 times, reaching 339.2 bn. lei (74.7 bn. euro) on December 31, 2016.[9] Expressed in euro *per capita*, the public debt increased from 370 euro in 2000 to 3790 euro in 2016. The debt-to-GDP ratio rose from 6.6% in 1995 to 19.8% in 2007, and to 36.4% in 2010 and 44.5% in 2016.[10] The almost sevenfold increase of the public debt share in GDP over the past two decades is by far the most significant of all EU 28 countries, an unenviable record for Romania.

Romania's high internal and external public indebtedness, as well as the deterioration of debt sustainability parameters, hinder the recovery and sustainable growth of the economy, diminish the country's investment capacity, maintain the vicious circle of outstanding payments—debt rollover—borrowing costs—sovereign risk—unsustainable growth, combined with neglecting the hidden debt surfaces and violating the principle of intergenerational equity, has lead to an increase in the unpredictability of the business environment associated with overhang effects, as well as to the worsening of the frictions between the various components of the debt (short-term versus long-term, internal versus external, public versus private).[11]

Rehabilitating Romania's financial position and, above all, ensuring debt sustainability, requires firm action by governmental and monetary authorities in order to promote coherent macro-economic policies aimed at recoupling the internal and external indebtedness of the economic cycles, mainly in industrial sectors; respecting the fundamental correlation between economic growth and indebtedness level, conditioned by getting below the prudential threshold of 40% debt-to-GDP ratio in the long run; as well as keeping all risk factors under control, whether generated by domestic vulnerabilities or by more or less predictable events of the international economic, financial and geopolitical environment.

Notes

1. See Chivu and Ciutacu (2016).
2. The method is not new, and in the context of the analysis of the relationship between GDP and gold prices, at global and country levels, to help demonstrate the idea, sometimes the GDP is converted to tonnes of gold, as, for example in the case of United States (http://pricedingold.com/us-gdp/) or in international comparisons (https://www.quora.com/Comparing-the-GDP-according-to-tonnes-of-gold-according-to-the-gold-rate-in-those-years-how-much-have-each-country-progressed).
3. Calculations based on NIS data regarding the average number of employees, and the average net monthly salary earnings, multiplied by 12 months (1309 lei × 12 months × 5.046 mil. persons).
4. See Ciutacu and Chivu (2015, 216–221).
5. In this evaluation, the expansion of inward/outward processing trade operations, which accounted for over one-third of Romania's international trade in 2004 and 2005, should also be considered (for more on this see Georgescu 2006, 24–31).
6. See Stiglitz and Heymann (2014), Darvas and Huttl (2014), Cecchetti, Mohanty and Zampolli (2011), Belhocine and Dell'Erba (2013).
7. The WB database provides long-time data series on external debt stocks for more than 200 countries. The gross external debt (including long-term external debt and short-term external debt) is expressed in USD. http://datatopics.worldbank.org/debt/ids/country/ROU
8. European Commission, *Macroeconomic imbalances. Country Report Romania 2015*, in: "European Economy Occasional Papers", No. 223, EC-DGECFIN, Brussels, June, 2015, pp. 12–26.
9. Public debt registered according to Romanian methodology (OUG 64/2007), including state guarantees.
10. Structure of the public debt 31 of March 2017, Ministry of Public Finance, Romanian Government. http://discutii.mfinante.ro/static/10/Mfp/buletin/executii/Structuradatorieipublice2000-2017martieRo.pdf
11. See Georgescu (2013, 353–361).

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