ROMANIA'S ECONOMIC GROWTH IN THE CURRENT INTERNATIONAL CONTEXT

Ion Viorel MATEI[*], Associate Professor Ph.D.
viomdean@yahoo.com
Laura Ungureanu[*]**,** Lecturer Ph.D.
ungureanu@lycos.com
[*]*Spiru Haret* University
Faculty of Management Financial Accounting, Craiova

Abstract

Present and future economic growth is increasingly dependent on trends in the global economy. They lead to an intertwining of the economic progress at a national-regional-global level. In particular to bearing economic integration, globalization, globalization of economic, political multipolarity, expanding economy on a continental and global level, etc. The effects of these changes can be both beneficial and negative, so we proposed a study on the evolution of parameters characterizing both economic growth and the evolution of this growth in Romania in the current international context.

Keywords: *economic growth, economic development, economic crisis*

JEL Clasification: F_{50}, O_{11}, O_{52}

1. *Conceptual delimitations*

The entire development process is heavily influenced by contemporary trends in the global economy, and notably, an entire complex interdependency, economic integration organizations or sectors at the global economy, economic multipolarity, increasing the role of international corporations, the globalization of production and services, the presence of set of global problems, building a new international economic order. Each of them has beneficial and negative, so the scale of nations, but also for humanity as a whole, which explains the dialogue and idea disputes.

Growth is seen as a fundamental component of economic and social development, as a means of creating support materials for raising the living standard of citizens from one state. Romania had and still has need for sustained economic growth to create a modern material and technical basis, in any economic and social life. Qualitative changes taking place in all branches of national economy, social and economic structures, after joining the European Union should mark the transition to a liberalized economy performance. The overall effect will result in the development of domestic product, gross or net, per head, an indicator that must be on a level compared to that achieved by other European countries.

Classical theories of growth are being developed based on modern theories and ideologies.

This decrease in labor productivity leads to an equilibrium point where individuals can obtain only the necessary existence. If you try to overcome this point and continue the human species reproduction, the excess will be disposed of population resulting from hunger, disease and wars. We are now talking about the *steady state,* a situation toward which all societies tend to, the irreversible end point of growth process.

2. *Literature review*

Industrial growth has occurred evident from the second half of the eighteenth century required a different explanation. The model developed by *Ricardo* and *Marx* therefore included capital growth as the main factor. Thus these many similarities with its predecessors and also led the pessimistic conclusions. Workers are those who act as a limiting factor in this situation. The accumulation of capital must increase the amount of existing capital for a worker. Increasing shortage of workers is that real wages charged to increase and capital productivity decreases. Income tax is reduced continuously until it becomes zero and stops the accumulation phenomenon. It comes back as a stationary state.

All these facts contradict the assumptions of classical models overall. Economic growth depends not only on growth factors – the quantity of land, labor and capital available – but also on improving the knowledge, technology and business organization.

Robert Solow and other modern economists have tried to measure the contribution of each factor to economic growth through the sources of growth accounting techniques.

Schumpeter gave an explanation of economic growth that is compatible and the law of decreasing returns other facts observed in reality: the wave of discoveries and inventions that occur periodically cause unforeseen increases profits from capital investment rate, so spread the new knowledge and new mimic technologies, the benefits begin to be reduced and with them, and investment rate until a new wave of discoveries bring new expansive phase.

Further more, Harrod-Domar’s models emphasized the search for a stable growth rate that prevents periodic crises. They believed that the natural rate of increase should coincide with the rhythm of “efficiency unit” of labor. For *Von Neumann* this rate must be equal to real interest provided that all benefits to be reinvested.

In 1970, the Club of Rome, a private association composed of entrepreneurs, scientists and politicians, instructed a group of investigators from the Massachusetts Institute of Technology (MIT) under Professor Dennis L. Meadows to conduct a study on trends and issues that threatens the economy. The results were published in March 1972 under the title “Limits to Growth.”

The study used more advanced techniques of analysis for the *systems dynamics* of the moment. First off all gathered data on trends in the first 70 years of the 20^{th} century, a conjunction of variables: population, industrial and agricultural contamination, known mineral reserves. They created the formulas that relate these variables between them – industrial production with stocks of natural resources, contamination with industrial production, agricultural production with the contamination, the population with agricultural production, etc.. – And proved that these equations are used to describe relations between the data fairly well known that they gathered. Finally, they calculated future values of these variables, getting some negative results, meaning that, as a consequence of diminishing natural resources in 2000 would have to produce a serious crisis of industrial and agricultural production that would reverse its evolution. With some delay the population would reach a historic top to start with that would diminish rapidly. In 2100 is planned to approach a *stationary level* of industrial and agricultural output per local lower than those existing in sec. XX and a population decrease to decency.

The term of **economic growth** summarizes this process and preserves one of the most exciting and controversial issues of the post-war period of economic thinking.

Some authors reduce growth only quantitative changes (Lewis), while others believe that it requires qualitative changes, including structural (S. Kuznets).

Economic growth is a process that expresses the overall upward trend of aggregate economic size in a time horizon, nationally and internationally, with favorable effects in terms of economic and social life.

In the literature, the concept of growth is used in two ways:

On the one hand, economic growth refers to increasing the social product and national income and thereby national wealth, including production capacity expressed both as absolute and per capita, including changes in the structure of economies. This sense of the term is used in the work of *S. Kuznets*.

On the other hand, economic growth means increasing national income per member and involves the analysis of quantitative aspects of this process, namely the functional relations between the variables involved in the endogenous growth model.

Economic growth takes place in a spatial and temporal framework. Over time, the macroeconomic results may record quantitatively, growth, stagnation and even decline. So, economic growth should not be understood as a linear process.

By its content, growth is a positive development trend of national economies, various international-global supervisees, medium and long term, but that does not exclude cyclical oscillations, even time of economic setbacks. We appreciate that the national economy, a supervise, recorded an economic growth it is based on the existence of real positive growth trend in an appropriate time horizon.

In conclusion, we can estimate growth as a process whose positive development achieved in the long term average, means the general trend of increase (in real terms and per capita) which does not exclude, however, short-term negative oscillations of the stagnation them. Being a dynamic process, economic growth is not reduced to mere quantitative changes (increase in gross national product or national income) of a technical nature (the relationship between volume and growth factors of production employed by VN), but requires a blend of technical processes, economic, social, political and cultural, which enhances or limit each other. It cannot be isolated from all social and economic processes, is a component of wider social reproduction, premise and result of economic and social development, material support of historical progress.

3. ***Concepts and correlations for predicting growth***

Economic growth is a complex whole, which is manifested by an increase in economic size, with the transformation of its structures.

It is a component of sustainable development, a concept accepted by most scholars and people, synonymous with the development of viable, sustainable, humane, ecological. Continue to be problems of economic growth in recent decades: ecological dimensions, technical, scientific, cultural, demographic, military, etc.

To characterize more complex development using **human development index** (HDI), usually built with four indicators: life expectancy at birth, adult literacy rate, average length of schooling, GDP per capita. Is an upper limit to the weight of that country and show the best achievements in the world. In other situations, using several indicators. To this end, each developing country (or should develop) the annual report of human development (Pârvu, 2000).

The concept of economic growth can get a precise meaning only if it is possible to **quantify** it. This is resolved with the national accounts, operating with aggregate macroeconomic indicators.

The main indicators of this kind are gross domestic product (GDP) and national product (GNP), which in turn is linked with a number of exogenous variables and parameters are optional.

4. ***Growth in the current international context***

Economic and social development issues more strongly interact in time and space, in the context of the growing role of all its component parts. Enhancing effect of driving the scientific-technical progress on a national show diminishing the relative importance of competitive local markets, increasing the role of national markets, regional, international and global. A shift also reflects the globalization of serious phenomena such as poverty in the midst of plenty, environmental degradation, loss of confidence in institutions, uncontrolled expansion of urbanization, employment job insecurity, alienation of youth and traditional values, inflation, unemployment, etc. Economics being increasingly required to include in its study of economic phenomena and processes at the macro scale open interdependence that globalization generates. Thus the foundations of a new economic theory of development from the perspective of rationality, in conditions of limited resources and hope, based on equal opportunity ethics generations coexist and succeed in life.

Each state has a national economy that is a universe in itself. On the other hand the process of *internationalization* and *globalization* of the economy induces a series of common features of most national economies of the world. These could be defined as a *complex economic aggregate*, being in a particular stage of development, autonomous entities, bringing together the national borders in an interrelated network of activities and micro, macro and mondoeconomics (Welfe, 2003).

According to most experts the most relevant parameters for *assessing the national economy* are: the level of development, spectral composition, structure factors and productive way of combining their internal-external ratio approach, financial strength of the State, nature of property or at least its dominant, traditions and conditions of freedom, the specific forms of management and organization, etc.. Any attempt at classification of modern national economies requires a complex approach, multicriteria.

Since 2003 (Sapir Report), the European Union agreed typology “models” presented in the European Development famous work “The Diversity of Modern Capitalism” (Amable, 2003). According to this typology EU does not have nor wants to have a unique development model, considering that diversity does not result in reduced integration benefits, but rather enhances them. Currently, the European Union known four models of development (Dobrescu, 2005):

1. **The European capitalist model** (UK), characterized by increased market competition and a modest social protection in volatile market conditions of employment;

2. **The continental European capitalist model** (France, Germany, Netherlands, Austria, Belgium), characterized by massive involvement of the banking system in financing medium and long term projects, a more stable labor market and more attention by greater social protection granted, whilst an insufficient volume of investment in training and retraining processes of labor;

3. **The development of the European social-democratic model** (Sweden, Ireland, Finland), characterized by a system of monitoring labor market, year to maintain unemployment at a reasonable rate through macroeconomic and social protection system developed very well funded;

4. **Mediterranean model development** (Spain, Italy, Greece, Portugal), characterized by an effective system of monitoring and control of unemployment, but also by impaired social protection system.

Therefore, national interest that it should express a program or a post-accession **development strategy** can not allow the use of the term sui generis confusing the European model of development, presented as a well and accurate accounts of the future Romanian society.

4.1. Economic increase in Europe

Two years ago, five of the ten new European Union member states from Eastern Europe – the three Baltic States, Hungary and Romania – seemed to be devastated by global financial crisis, being under threat of social protests and some massive devaluations. But now, these countries seem to give lessons of economic recovery in the euro area (Matei and Ungureanu, 2010).

Currently, these countries are on the road to a healthy tax system to economic growth, without encountering, in most cases, the major problems that many economists predicted.

The reason is that Eastern Europe's financial problems were caused by a standard cycle of credit growth, followed by a drop of it. These countries have attracted major foreign capital flows, but, ultimately, loans proved to be excessive. In addition, it was wrong and used in consumer and real estate investments, giving free rein in inflation.

Although public finances were in relatively good condition, except for **Hungary**, current account deficits have continued to rise, the “warming” of the economy reminding of the East Asian crisis from 1997-1998.

IMF forecasts an economic increase of 3.6% for Central and Eastern Europe in 2011. There are good prospects for growth in emerging Europe, in **Poland**, for example, and even the Baltic countries, where the most severe recession was now giving signs of recovery. The IMF forecasts a growth of 3.6% for Central and Eastern European region in 2011. **Germany** could be the engine for the removal of the Eurozone from the crisis, with the Nordic countries, **Netherlands**, **Austria** and **France**, but the prospects are less certain for the **UK**, although this country is on track.

The biggest problem is that there are countries in the euro area that are placed before the illusion of economic growth, an increase that cannot be supported by fact. A high level of spending was financed by foreign loans, which was the advantage of some firms, but was not sustainable, and those countries have lost competitiveness when adopting the euro.

Greece and **Ireland** are relatively small countries that can benefit from global economic recovery and increase rapidly, if they reallocate their resources quickly.

Several renowned economists, including Paul Krugman, Kenneth Rogoff and Nouriel Roubini have argued that **Latvia**, **Estonia** and **Lithuania** has to devaluate their currency, as did East Asian countries, and **Russia**, in 1998, and **Argentina** in 2001. None of these countries did take such a measure, yet they got through the crisis.

The Baltic countries had no reason to devaluate their coins, since they have the right target euro adoption as soon as possible. In addition, economic activities in these countries are in euros, mostly, and devaluation would have meant the collapse of banking systems that are quite healthy. Instead, these countries have opted to cut spending. In 2009, these countries have reduced public spending by 8-10 percent of GDP, including cutting public sector wages.

Despite expectations, especially after the experiences of **Greece** and **France**, social protests have been minimal and there was an increase in the popularity of extremist parties.

The new EU members are in a better state than the old ones, however, three countries in the region needed the help from the International Monetary Fund, namely Hungary, Romania and Latvia. The IMF has shown that they've learned the lesson from the crisis in East Asia and imposed more relaxed conditions, and allocating money to finance the budget deficit, given that the problems were temporary and not structural.

As a result of these measures, new European Union member's state is better than the old member countries of the eurozone. Of the 12 countries that were part of the euro area in 2001, only two, **Finland** and **Luxembourg**, have public debt below 60 per cent of gross domestic product, compared with nine of the ten countries have entered recently. Only Hungary has a higher public debt. Otherwise, Eastern European countries have problems with private debt, which, however, have avoided transforming them into public debt.

Germany could be the engine to remove the Euro Zone from the crisis, among other countries that are going very well, namely the Nordic countries,

Netherlands, **Austria** and **France**, but the prospects are less certain for the **UK**, although the country is on track. There remain serious concerns in the financial system and still must be overcome and resolved sovereign debt crisis of systemic risks associated with it.

It is difficult to predict the impact of the new regulatory framework applied by the EU, which is a real revolution in the field. Countries that are on their way to a deeper integration in Europe, but are not yet members of monetary union, have a wider set of economic policy instruments available and fiscal policy should remain an important element, which's application must be pragmatic enough.

4.2. **Economic growth in Romania**

Two years after the beginning of the crisis, Romania has not managed to find another way to recovery. From the speech "the crisis won't reach us", Romania had the largest economic decline in Central and Eastern Europe.

But the global crisis, which included extensive areas on the planet, revealed not only many drawbacks of globalization without global economy undermine the objective of first order in 2000. It highlighted the numerous shortcomings of our economy, not to deny the leap made by Romania for nine years one after another, from 2000 until the summer of 2008, the duo led growth-deflation. But crisis hit and us too as a worldwide hit, forcing us to resort to emergency measures and restrictions. Under the impact of the crisis, our society has begun to learn a new lesson. We saw in particular that we need profound changes. Until now, because half-measures, the formation of a critical mass assurance for change was not formed, in order to foster an optimal ratio between gains and losses in the economy.

Now however, in 2011, after two years of recession, it takes action to mitigate the power of the crisis. Diagnosis and treatment of this crisis is today a fundamental concern. Two landmarks are fundamental: how GDP will be doing and how much capital this year and we rely on in future years. That is why we are looking in the mirror of a world obsessed with the financing of economic growth, trying to find our answer to the question about how we will (or will not) succeed, we are not close to sources of capital. One response that we can not ignore is the economic, political, social and psychological climate in the country.

The fourth quarter 2010 witnessed the slowdown in the rate of decline of real GDP to -0.6 percent (a pace three times slower compared to that seen in the previous quarter). The seasonally adjusted data series shows that this outcome was attributable, on the one hand, to the slight quarterly recovery in the current period (+0.1 percent) and, on the other hand, to the base effect associated with the quarterly contraction of economic activity in October-December 2009 (-1.4 percent).

Turning to domestic demand, the annual growth rates of the two main components saw mixed developments. Specifically, the downward path of final consumption steepened (to -2 percent versus -1 percent in the preceding quarter), due to both private and government consumption, while the pace of decline of investment decelerated markedly (to -4.7 percent from -15.5 percent).

The annual changes in the GDP volume and its components were determined against the gross series. The changes from the previous quarter are calculated based on the seasonally-adjusted series. In 2010, government final consumption shrank by 4.5 percent in annual terms, in conjunction with larger staff adjustments in the public sector (www.bnr.ro, 2011).

GDP by Expenditure

percent; against same period a year ago

	2010 Q3	2010 Q4
Gross Domestic Product	**–2.2**	**–0.6**
Final consumption	–1.0	–2.0
Households	–1.1	–1.7
General and local governments	–0.2	–4.5
Gross fixed capital formation	–15.5	–4.7
Exports	11.3	17.1
Imports	7.8	12.2

Figure 1

Source: National Institute of Statistics, Ministry of Public Finance, National Bank of Romania.

The marked slowdown in the fall of gross fixed capital formation was due, on the one hand, to the current upturn (+0.5 percent, after four consecutive quarters of declines) and, on the other hand, to the base effect associated with the 2.4 percent contraction in 2009. All the main components contributed to the slowdown in investment demand – the volume of equipment purchases (including transport means purchased by companies and institutions) was only 0.4 percent lower than that reported in 2009 (compared to an annual decline of more than 9 percent in July-September 2010), construction activity relative to new construction works saw the halving of the pace of decline (to -11 percent), while capital repair works witnessed a trend reversal.

Similar to the other quarters of 2010, the economic growth recorded by the main trade partners led to the rise in Romania's exports of goods and services, the national accounts data indicating an even faster **real growth rate** (by 5.7 percentage points, to 17.1 percent). Imports also showed an accelerating **growth rate** (to 12.2 percent), but its pace was slower than that in the case of exports, amid the slight recovery of domestic demand for intermediate goods (+1.9 percent) and certain categories of finished products – capital goods and durables.

As far as supply is concerned, the slower pace of decline of real GDP was bolstered by three economic sectors (industry, agriculture and construction), while the annual dynamics of the gross value added in the services sector fell deeper into negative territory by 0.4 percentage points.

In the last part of 2010, industry continued to show the best performance as concerns gross value added, the annual 5.8 percent rise covering three consecutive periods of positive quarterly changes.

In this context, it is worth noting the significant contribution made by the postponement for 2010 of harvesting certain crops – a spillover effect of the heavy rains in July, which prevented the “according to schedule” harvesting of grains. Actually, in 2010, gross value added in agriculture was 1 percent lower than a year earlier.

In January 2011, the industrial output volume rose 11.9 percent in annual terms, thus peaking at a 12-month high. Favorable results were also manifest across manufacturing, owing mainly to signs of rebound in domestic demand for Industrial products.

GDP by Origin

percent; against same period a year ago

	2010 Q3	2010 Q4
Gross Domestic Product	**–2.2**	**–0.6**
Agriculture, forestry and fishery	–7.6	7.4
Industry	4.2	5.8
Construction	–14.8	–7.0
Trade and transport	–6.5	–2.9
Financial activities	2.6	1.2
Other services activities	–0.3	–4.8
Gross value added - total	**–2.4**	**–0.4**
Net taxes on product	0.6	–3.1

Figure 2

Source: National Institute of Statistics, Ministry of Public Finance, National Bank of Romania.

The chemical industry witnessed the fastest pace of increase in the production volume, up 56.5 percent year on year, primarily on account of external demand from non-EU countries, Turkey in particular. Signs of a recovery in activity surfaced in other industrial subsectors as well, especially in pharmaceuticals, metallurgy and the manufacturing of computers and electronic and optical products. The outlook for February-April is further favorable, returning to positive territory (0.2 points) for the first time since the summer of 2008.

In the latter half of 2010 it became increasingly obvious that developments in registered unemployment departed from the trend in the number of employees and January saw a further drop in the former to 6.74 percent despite ongoing layoffs during the reported month. Average net wage economy-wide was virtually unchanged in January, concealing opposite developments in the public and private sectors. On the one hand, the annual dynamics of public sector wages fell deeper into negative territory given that the effects of implementing Law No. 285/2010 cancelled themselves out – the 15 percent pay rise versus the October 2010 wages was offset by the decision not to grant in January 2011 the so-called “13th-month wage" for the previous year. On the other hand, the annual growth rate of private sector wages gained momentum, with industry and private services displaying the most significant pick-ups.

The annual dynamics of receipts from market services rendered remained in positive territory in January, although decelerating markedly compared to the December 2010 reading amid more sluggish activity on the "hotels and restaurants" segment.

The annual rate of increase of domestic market producer prices held steady at 8.4 percent in January 2011, amid ongoing pressures related to developments in external commodity prices.

The annual inflation rate came in at 6.99 percent in January 2011, down 0.97 percentage points versus the previous month, amid favorable base effects manifest in the case of tobacco prices, fuel prices and administered prices.

However, current developments point to rising inflationary pressures, as the month-on-month inflation rate inched up to 0.77 percent against 0.53 percent in the previous month. The major determinants in this direction were the scant domestic supply of fruit and vegetables, the upward trend in global prices of agri-food commodities, as well as the higher excise duties on fuels.

5. ***Conclusions***

In the euro area, the split between northern and southern flank is more evident, both economic dynamics and prospects of the two countries bouquets are different. The reform of the economic governance in the EU is trying to find an answer to this fracture from several findings: it needs a mechanism for sovereign debt crisis management, coordination of policies and new rules on national economic policies are necessary.

If the priority of the past decade has been the accession of Romania to the European Union for the next five years the new model of sustainable economic growth and adoption of the euro is entered in the list of challenges.

It is not yet clear how the new model will show growth for Romania, but a consumption-based growth achieved on capital inflows and debt, as it existed in the years before the global economic crisis, is no longer a viable solution given the reluctance of foreign investors in countries that live on debt finance.

Potential exports to help the economy are limited given their low share in GDP, about 30%. It demonstrated in 2010 when despite having had a good evolution, exports have failed to lead the economic recovery.

The food crisis in the world (which was announced by the developments in commodity prices in 2007-2008) highlights an asset of extraordinary value for Romania: the good quality of the land. In a study on reforming the EU budget and EU shown the value of agricultural land in Romania. It is an asset that must capitalize on it with great skill in obtaining EU funds to modernize the countryside, the CAP reform.

How are decisions taken in the Union is an interest to us in the highest degree. We are talking about the decision-making process itself (if one takes into account the voices of all member countries) and specific interests of economy structural problems that are confronting the large economic gaps. Through this dialogue, we must avoid that part of the structural and cohesion funds allocated to Romania to be redirected to other uses.

Further on, globalization puts into question both the possibility of developing or adapting to their external requirements, as well as those related to benefit from *new* economic growth in all components, because as P. Drucker wrote "The economic resource is no longer the capital, and no natural resources, no work. It is and will be **knowledge**".

REFERENCES

Amable B., *The Diversity of Modern Capitalism*, Oxford University Press, 2003.

Băcanu B., *Management strategic*, Editura Teora, Bucureşti, 1999.

Campbell Jh., *The econometrics of Financial Economics*, Princeton University Press, 1997.

Caracota D., ş.a., *Strategii de dezvoltare. Previziune economică*, Editura Sylvi, Bucureşti, 2000.

Carter D.A., Brody A., *Contribution to Input – Output Analysis*, vol. I-II, North Holland Publishing Co, Amsterdam, 1970.

Ciurlău C., Tomiță I., *Previziunea economică*, Editura Dova, Craiova, 1998.

Dachin A., ş.a., *Evaluări ale dezvoltării durabile în România*, Editura ASE, Bucureşti, 2003.

Dobrescu E., Albu L., *Modelarea şi dezvoltarea durabilă în România*, Editura Academiai Romane, Bucuresti, 2005.

Domar E.D., *Essay in the Theory of Economic Growth*, New York, Oxford University Press, 1957.

Gavrilă I., *Ciclicitatea dezvoltării, crizele economice şi cercetarea lor*, Revista română de statistică, nr. 11/1991, Bucureşti.

Granger J.V.C., *Forecasting in Business and Economics*, Academic Press, Inc., 1989.

Jackuillat B., Solnik B., *Marchés financiens: gestion de portefeuille et des risques*, Dunod, Paris, 1990.

Kaldor N., *Essay in the Theory of Economic Growth*, London, MacMillan, 1963.

Keynes M.J., *Teoria generală a folosirii mâinii de lucru, a dobânzii şi a banilor*, Editura Ştiinţifică şi Enciclopedică, Bucureşti, 1970.

Leca A., ş.a., *Dezvoltarea durabilă. Aspecte conceptuale şi elemente de strategie*, Editura Tehnică, Bucureşti, 1997.

Matei V., Ungureanu L.- *When the U.S. Sneezes Romania is very ill. Economic Crisis in Romania*, *J*ournal of *A*pplied *R*esearch in *F*inance, Volume2, Issue2(4) Winter 2010.

Meadows D., ş.a., *Limitele creşterii*, Editura Politică, Bucureşti, 1974.

Oprescu Gh., ş.a., *Modele dinamice ale economiei de piață. Studii de caz*, Editura Eficient, Bucureşti, 1995.

Pârvu Gh., ş.a., *Macroeconomie*, Editura Universitaria, Craiova, 2000.

Pearce D.W., Turner R.K., *Economics of Natural Resources and the Environment*, Environment Paper nr.15, The World Bank, Washington DC, 1989.

Pearce D.W., Warford J.J., *World Without and Economics. Environment and Sustenaible Development*, Oxford University Press, England, 1993.

Perroux F., *Tehnici cantitative ale planificării*, Editura Academiei Române, Bucureşti, 1969.

Popescu C., Ciucur D., Băbeanu M., Popescu I., *Echilibrul înaintării*, Editura Eficient, Bucureşti, 1998.

Popescu I., Ungureanu L., *Previziunea – premisă a dezvoltării durabile*, vol. I şi II, Editura Fundației *România de Mâine*, Bucureşti, 2003.
Robinson J., *Essay in the Theory of Economic Growth*, MacMillan Publishing Co, London, 1983.
Salvatore D., *International Economics*, MacMillan Publishing Co, London, 1987.
Scarlat E., Mărăcine V., *Dinamică economică – dinamica sistemelor haotice*, Editura Matrix Rom, Bucureşti, 2002.
Thom René, *Stabilité structurelle et morphogenèses. Essai d'une théorie générale des modèles*, W.A. Benjamin, Advanced Book Program Reading, Massachusetts, 1972.
Toffler A., *Powershift, Puterea în mişcare*, Editura Antet, 1995.
Tövissi L., *Metode şi modele ale analizei economice structurale*, Editura Ştiințifică şi Enciclopedică, Bucureşti, 1979.
Tu N.P.V., *Dynamical Systems*, Springer – Verlag, Berlin, 1994.
Ungureanu L., *Stabilitate structurală şi bifurcație în două modele de dinamică economică*, Editura Universitaria, Craiova, 2003.
Ungureanu L, Matei V., *Modeling inflation dynamics. A practical approach*, *J*ournal of *A*pplied *R*esearch in *F*inance, Volume1, Issue2(2) Winter 2009, p. 228-237.
Welfe A., ş.a., *Principiile microeconometrice*, Editura Economică, Bucureşti, 2003.
Zhang B.W., *Economic Dynamics*, Springer – Verlag, Berlin, 1990.
Zhang B.W., *Synergetic Economics*, Springer – Verlag, Berlin, 1991.
*** Revista Capital
*** Revista Săptămâna financiară
*** Ziarul financiar
www.Kmarket.ro
www.bnr.ro