The Indian economic miracle and the commercial and cultural–scientific relations with Romania

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In this article, the author explains the use of the phrase 'Indian economic miracle' in relation to the latest economic performance of this country, with particular focus on the formula (model) that turned out to be successful. Its main feature consists in the Indian macro-policymaker's orientation towards the domestic market rather than towards exports, towards consumption rather than investments, towards services – and not so much towards industry – with specific focus on the 'high-tech' sector. The recent parameters of the Indian economy are also mentioned, based on reliable statistical data and information, followed by an analysis of the regulatory framework, the history (a 66-year-old tradition) and the characteristics of the commercial, cultural and scientific relations with a member state of the European Union – Romania. Based on the conducted research and after resorting to various bibliographical resources, the author believes that the Indian government rightfully contemplates the perspective of becoming an economic super-power in the South Asian region, thus being acknowledged by the whole world.

Keywords: Cultural relations, emerging power, scientific cooperation, young population.

Preliminary considerations

THE Indian sub-continent has long been a region known for the historical commercial routes and vast empires. There have been several cultural influences throughout the centuries: Arab, Ottoman and British, shaping the modern Indian reality. Starting from the 1990s, India stood out as an emerging power with a strong cultural influence worldwide and a fast-growing economy. Its statute as a promising player among the world's emerging powers, such as Russia and China is well-known¹. Nowadays, the elite are driving the country towards Western civilizations, by prioritizing the development of education, science and technology. India is already acknowledged as a nuclear weapons state, building ballistic missiles and creating state-of-the-art technologies. India also ranks fourth in the world's software industry, accounting for 44% of the global IT products².

Indians, particularly those belonging to the middle class are believed to be an excellent workforce for multinational companies, due to their skill and competence, especially in the IT sector³. Indian companies are currently developing software programs for almost all industries, from telecommunications, medical assistance and aviation to transport and finance. The accelerated globalization of the Indian economy has led to an increased demand for modern software, with India currently believed to account for a market share of over 11% in the region and generating revenues of more than US\$ 30.0 billion. India's market share in the software enterprise sector will have reached about 12.68% by 2016 (ref. 4).

These developments will otherwise occur under the circumstances of constant economic growth, at various (but positive) rates that will position India as China's main rival as an economic superpower in South Asia in the following 10–15 years. Mention must be made of the fact that India has the great advantage of a young population, unlike all the other world states, where the aging process is visibly taking its toll on each country's economy.

Practically, those aged under 25 years account for 50% of the total population and, by 2025, individuals aged above 65 years will account for only 6% of India total population⁵. The young and cheap workforce that attracts foreign investors to India is thus an important advantage for the country.

Overall performance of the Indian economic system

The notable results of the Indian economic system are due to the implementation of the development model

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suggested in the 80s as an alternative to overcome the post-war decades of economic stagnation.

The impressive reform of the Indian economy, both in terms of magnitude and depth was started by the former Prime Minister Manmohan Singh, with his directives regarding the reduction of the tariff barriers and loosening of the taxation framework, dissolution of state monopolies, encouragement of competition and international outreach⁶. Unlike other Asian countries, India did not opt for a strategy relying on the export of intensively manufactured goods later sold at low prices, but has rather focused on the domestic market and not on exports; it relied more on larger consumption than on investments, on services rather than manufacturing industries and more on high-tech products rather than on low manufacturing cost goods using poorly skilled workforce.

Therefore, the engine fuelling economic growth $(Figure 1)^7$ consisted in the tertiary sector, i.e. the service sector, a phenomenon that has undergone a multi-annual expansion.

When we refer to the financial year 2012-13, the economic growth amounted to 5.0%, as compared to 9.6% in 2010 and 6.9% in 2011, the GDP reaching US\$ 1,870,651 billion⁸. Even though the situation was more encouraging overall, especially if we consider the large number of states that have gone through economic decline for several years consecutively, the Indian government has however decided to initiate some additional reforms that would contribute to a massive revival of the economy. Among these – allowing for an increased level of foreign direct investments in various sectors classified as strategic (energy, defence, transport, telecommunications, etc).

The new law of the state budget for the fiscal year 2013– 14 suggested reaching an economic growth of 6.5%, and a decline of the budget deficit from 5.3% of the GDP at the end of the fiscal year 2012–13, to 4.8% for the fiscal year 2013–14 (ref. 9). In April 2013, the inflation in India, measured against the Wholesale Price Index (WPI), amounted to 4.89%. In the accounting period 2012–13, the Indian exports amounted to US\$ 304.6 billion, decreasing by 1.76% compared to the previous year. The trade balance increased from US\$ 183.4 billion in the

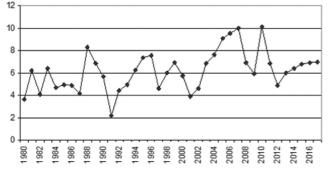


Figure 1. The Indian GDP growth rate in real terms (in percentage points)⁷. Note: Forecast for 2014, 2015 and 2016.

previous fiscal year to US\$ 190.91 billion in the fiscal year 2012–13.

A large part of the Indian exports consists in added value products, of which technical-engineering products accounted for US\$ 57.0 billion, textile industry products for US\$ 26.0 billion, and pharmaceuticals for US\$ 15.0 billion. Exports in agricultural produce have increased in the past years and India has become the largest rice exporter in the world and the second largest wheat exporter. Throughout the fiscal year 2012-13, exports in invisibles increased by 20.4% compared to the previous fiscal year, while imports in the invisibles decreased by 1.7%. Foreign investments have amounted to US\$ 19.1 billion during April 2012–January 2013, while the sectors that have attracted the most foreign investments include: services (US\$ 4.66 billion), the tourism and accommodation sector (US\$ 3.19 billion), metallurgy (US\$ 1.38 billion), construction (US\$ 1.20 billion) and pharmaceuticals (US\$ 1.0 billion).

The Indian-Romanian bilateral agreements

India's considerable economic development in the past years could not go unnoticed in the bilateral agreements with the European Union (EU) and Romania. The range of issues deriving from this development have been the focus of important research studies^{10–16}. Clearly, their number surpasses the amount of research conducted strictly on the Indian–Romanian relations^{17–19}.

The fact that the two countries are located in entirely different regions of the world, separated by a distance of more than 7000 km (ref. 20), did not impede the collaboration between them on several levels. Moreover, diplomatic relations had been established as early as 66 years ago²¹.

The legal framework has always evolved as far as trade is concerned (Table 1), certain agreements having been renegotiated in order to be aligned with international standards, with the regulatory changes in the two countries and with the economic scenarios²². For instance, the enforcement of the new amendments on the double tax avoidance agreement will stimulate the circulation of capital, technology and workforce between the two countries and will provide stability in the taxation system.

Moreover, the extended partnership between the two countries was signed by the ministries of Foreign Affairs on 8 March 2013 – in a multilateral framework, they have also signed the Agreement on the Global System of Trade preferences between developing countries²³, that reiterates their willingness to cooperate in sectors such as economy, trade, defence, culture, science and technology, education, agriculture or nuclear power.

Certain considerations on trade exchanges

In the accounting year 2012–13, India's exports amounted to US\$ 304.62 billion, increasing by 20.14% as

Document signed	Place and year of signing
The Convention between the Government of the Republic of India and the Romanian Government on the double taxation avoidance and prevention of fiscal evasion with respect to taxes on income.	New Delhi, 1987 (updated 2013)
The scientific and technological cooperation agreement between the Government of the Republic of India and the Romanian Government.	New Delhi, 1993
Agreement on air services.	New Delhi, 1993
Romanian-Indian governmental agreement of cooperation in the tourism sector.	Bucharest, 1994
Agreement between the Government of the Republic of India and the Romanian Government for the mutual promotion and protection of investments.	New Delhi, 1997
The Memorandum of Understanding (MoU) on the cooperation in the IT sector, signed in October 2002 between the Indian and the Romanian Ministries of Communication and Information Technology.	New Delhi, 2002
The convention on plant protection and phytosanitary quarantine.	New Delhi, 2004
The economic cooperation commercial agreement between the Government of the Republic of India and the Romanian Government.	New Delhi, 2006
The MoU between the Ministry of Textiles of the Republic of India and the Romanian Ministry of Economy, Trade and Business Environment on the cooperation in the textiles, clothing and fashion design sector.	New Delhi, 2013
The programme for scientific and technological cooperation between the Government of the Republic of India and the Romanian Government for the period 2013–2015	New Delhi, 2013

Table 1. The legal framework applied to the trade between India and Romania⁹

opposed to the previous year, while imports amounted to US\$ 489.18 billion, increasing by 32% (ref. 9).

Given the specific circumstances in the economies of the two countries, and the resources they have or need, India exports goods to Romania such as: iron and manganese ore, organic chemical products, pharmaceutical goods, tobacco, plastics, cotton, optical instruments and apparatus, tanning and colouring agents, etc. Here we can also add products such as coffee, tea, pepper, cereals (rice), peanuts, textiles, leather manufactures, clothing, footwear, electronics and electrical equipment.

At the same time, it imports CDK and automobile components, steel manufactures, railway components, organic and inorganic chemical products, metallurgic and energetic equipment, petrol extraction equipment, machinery, equipment and hand tools, rolling contact bearings, aluminium and aluminium products, newsprint, etc.

The evolution of the trade exchanges between the two countries (2004–2012) is presented in Table 2.

Three large groups of products are in demand, in agreement with the trends in the Indian economy²⁴: (i) vehicles, aerospace products and equipment (approximately half of inflows/imports in Romania), (ii) cars and electrical appliances (approximately one-fifth) and (iii) metalwork manufactures, common metals and common metal manufactures (approximately one-tenth).

Starting from 2006, the energy sector – particularly the crude oil and natural gas sectors – and the defence sector have been considered as strategic priorities of the economic bilateral cooperation between Romania and India, while the pharmaceutical sector, small and medium-sized

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enterprises and the communication and IT sectors have been considered as the main pillars of economic cooperation²¹.

Subsequently, during the 7th session of the mixed committee on economic cooperation between India and Romania (I&R), held in Bucharest during 1 and 2 February 2012, new mutual interest sectors have been identified, such as: the metalwork industry, transport and infrastructure, the banking sector, agriculture, research, textiles and tourism.

In the following period, the trade exchange indicators are expected to rise considerably in the above-mentioned sectors.

Scientific and cultural cooperation

Inspired by the desire to promote and encourage the technical and scientific progress as well as by the benefits conveyed by the development of the cooperation programmes that would impact the economic and social development of each country, India and Romania have mutually agreed upon several important aspects.

Among others, they have agreed since 1993 to promote scientific and technological cooperation through²⁵: (a) implementation of common research and development programmes; (b) exchange of specialists, researchers, academics and fellows who would conduct analysis, research and exchange of scientific ideas; (c) cooperation between the well-established research institutes, as well as advanced training and research centres and laboratories to the benefit of both countries; (d) organization of

Table 2. Evolution of the trade exchanges (US\$ billion) between India and Romania (2004–2012)⁹

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	265.6	449.9	457.3	799.2	919.1	817.0	879.3	815.9	740.2
Exports	129.8	272.3	240.9	449.1	310.2	256.9	190.0	271.8	273.1
Imports	135.7	177.6	216.4	350.1	608.9	560.1	689.3	544.1	467.1
Balance	-5.9	+94.7	+24.5	+99.0	-298.7	-303.2	-499.3	-272.3	-194.1

Values in million USD.

Table 3. Action plans in the cooperation in the field of art, culture and education between India and Romania (I&R; 2011–2015)²⁸

Art and culture	Education				
 I&R will exchange crafts exhibits and will organize demonstrations with 4–5 craftsmen. R will translate and publish in Romanian an Indian poetry anthology, and I will translate and publish in Hindi a similar collection of contemporary Romanian poetry. I&R will encourage the exchange of 2–3 writers/critics throughout the duration of the programme. I&R will promote joint organization of cultural events: conferences, symposia on cultural topics, book exhibits, etc. I&R will exchange information in the field of visual arts and contemporary architecture. The Indira Gandhi Rashtriya Manav Sanghrahalaya Museum (IGRMS) will send a mobile exhibit to Romania as well as video tapes on the Indian nomad tribes for a period of approximately 3 weeks, accompanied by a museum official who will hold lectures on the migration phenomenon in India. IGRMS will send a Romanian museum a set of photographs documenting the life of the nomad Indians. IGRMS will host a similar exhibit related to the Romani population in Romania and Eastern Europe, accompanied by a curator and a Romani researcher who will hold lectures on Romani culture. IGRMS is also interested in collecting art objects of the Romani population in Romania in order to create a collection for a Romani art gallery at IGRMS, Bhopal. I&R will exchange 2–3 visiting experts in the field of architecture, archaeological preservation as well as art history for periods that will not exceed 3 weeks at a time. I&R will organize film weeks in one or several centres, with 23 participant films, accompanied by an official coordinator of each film organization for periods of 7 days at a time. 	 I&R will encourage the exchange of books, journals and audio-visual materials in order to get acquainted with each other's culture and education systems. I&R will encourage mutual newsletters related to the events organized in the field of education. I&R will exchange textbooks and audio-visual materials in the field of school education. I&R will organize joint exhibits, seminars and joint research programmes in the field of education. I&R will organize training programmes for teachers and specialists in the field of education. I&R will disseminate and promote the study of each other's language and culture. I&R will encourage the exchange of lecturers of Romanian and Hindi language and literature, as well as of other Indian languages. I&R will promote the exchange of university professors teaching Romanian and Sanskrit languages as well as other specific aspects related to these fields. I&R will promote and develop bilateral agreements and exchanges in the fields of higher education institutions. I&R will alternatively organize joint seminars or symposia on mutual interest topics in India and Romania. I&R will exchange information and documents in order to facilitate the recognition and equivalence of diplomas and degrees, etc. I&R will each grant two undergraduate degree scholarships and three Master's degree and/or Ph.D. scholarships each year. I&R will each grant two scholarships each year for the participation to summer school courses of language, culture and civilization organize ourses is 3–4 weeks. 				

Note: (1) A Romanian language department is currently available at the University of Delhi, while the University of Bucharest, the Faculty of Foreign Languages and Literatures offers a Hindi language section and Sanskrit language courses; (2) The art and culture section of the programme also provides that India and Romania will each organize: a tour of a dance, music and folklore group of no more than 10 members for a period of one week; research placements in the field of arts and crafts for one person for periods of up to two weeks; theatre performances (once a year) by authors from India and Romania, as well as a exchange visit to two universities for two weeks.

scientific and technological exhibits and events; (e) organization of bilateral scientific and technical seminars, symposia, workshops and advice in the field of science and technology; (f) exchange of scientific and technical information, journals and other research resources; (g) provision of consultancy services, etc.

The mixed committee for scientific and technological cooperation that includes representatives of the two states and experts appointed by each country has defined the priority areas we have mentioned above. The remaining permanent task of the committee is to monitor the implementation of the developing programmes and to establish clear measures for reaching industrial outcomes as a result of the cooperation activities.

Cooperation in the nuclear sector was further tackled on 19 September 2012, and the specific organizations in the field will subsequently provide mutual information related to the peaceful use of nuclear power²⁶. The special memorandum that was signed provides the legal framework for the regulation of nuclear and radiation activities for peaceful uses, including the procedures, practices and standards employed for the licensing and regulation of nuclear and radiation equipment.

The document also mentions the security standards of the nuclear and electrical power plants, including the regulatory positions and practices related to important security issues occurring in the areas where these plants are located, designed, activated and operated. It also includes the regulatory requirements and the procedures for radiation protection in sectors using radiation sources, such as medicine and industry, as well as the experience in operating nuclear and electrical power plants and radiation equipment, including security reports in case of security breaches.

The programme for cooperation in the field of culture and education for the years 2011–2015 (ref. 27) was signed on 28 March 2011 in Bucharest, in an attempt to provide a better coverage in the field of cultural and scientific cooperation as well as human development.

In compliance with the provisions of the Agreement on Cultural Relations of 1957 (ref. 28), the Romanian Government and the Government of the Republic of India have agreed on several action plans (Table 3).

The programme also includes the component 'youth and sports', but to a lesser extent. In this respect, India and Romania could thus enable each other's participation to international youth events organized in each of the two countries. They would also be able to share their experience in the field of sports and analyse the existing opportunities for the exchange of teams/trainers in various disciplines.

Conclusion

In the past two decades, India stood out as an acknowledged emerging power, while the economic model it has embraced can be considered as fairly righteous. The macroeconomic indicators have had an ascending trend, which also positively influenced and reinforced the cooperation in terms of its economy and trade, defence, culture, science and technology, higher education and research. The joint declaration to establish an extended partnership between India and Romania, signed in 2013 when the tradition of Indian-Romanian relations celebrated its 65th anniversary - offers a bright perspective for the further development of mutual agreements. Ever since 2006, the oil and natural gas sector, as well as the defence industry have been established as strategic priorities for the bilateral cooperation between Romania and India, while the pharmaceutical industry, small and medium-sized enterprises and the IT sector have been considered the main pillars of economic cooperation. The total trade exchanges between India and Romania during the year under analysis have amounted to US\$ 740,18 billion. New cooperation areas have also emerged in the field of nuclear power (for civilian use), aerospace industries and agriculture. However, we believe that both parties should focus on the implementation of the developing programmes and suggest concrete measures for obtaining better results, both in terms of increased bilateral trade exchanges and in terms of the mutual attraction of investments. Moreover, they should pay special attention to the aspects related to the cultural cooperation and to the strengthening of the legal framework that defines the relations between the two countries.

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