

An Overview of the Romanian ICT Sector in the Context of European Emerging Markets

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Information and Communication Technology (ICT) has really meant an economic boost to new and innovative activities worldwide. It comprises a host of high-tech elements; such as IT services software, computer hardware, and telecommunications equipment as well as technical services, including provider and carrier services. The first benefits were clearly accruing to the developed regions of our world, but we witness nowadays a gradual diffusion and proliferation of this new sector into developing economies and even into the lagging markets in the developed world. Regions in our globalizing world are increasingly involved in fierce competition to exploit to the maximum extent possible the prospective economic benefits of the ICT sector. This has sometimes led to an uncritical reliance on the ICT sector as a key driver for national or regional growth. With the disappearance of the 'new economy phantom' a more realistic view has evolved aiming to provide a balanced assessment of both the potentials and the risks of this sector. Public policy has realized the importance of new technologies for economic growth, but has also recognized the need for a balanced perspective on economic growth utilizing the indigenous potential of regions in a growing world economy. This holds for both developed markets and emerging markets, e.g., in the new member states and the accession countries of the EU.

Keywords: *ICT, emerging market, FDI, economic growth, valuation, e-business.*

An important strand of literature has been devoted to the seedbed conditions for attracting ICT business (like favorable tax concessions, public subsidies for projects, land use policy, educational policy, R&D expenditures etc.) as well as to the (regional and national) economic impacts of the ICT sector (in terms of economic growth, new jobs etc.). Far less attention has been paid to the economic value of firms involved with the new economy sector, which make up the financial assets of a given region. Electronic business (e-business) is a rapidly growing sector that is underpinned by the ICT sector as an enabling technology. It aims to conduct business on the basis of (mainly) the Internet technology, through buying and selling transactions, but also through servicing customers and collaborating with business partners.

Clearly, e-business has in the past decade gone through a very dynamic cycle, from rapid growth to a booming climax and then to a sudden decline. That was then followed by slow growth moving to the current phase

we are witnessing today, representing a more balanced development.

Most ICT markets exhibit a steady recovery after the crisis in the year 2000 and the slowdown in 2001 to 2003. On a global market, Europe is still underperforming compared to North-America and Asia. The general ICT market had been negatively affected by the 2000 dot.com collapse, as the disappearance of many companies - together with their corresponding supply chain - impacted negatively on the major ICT spending capacity of the world market, in addition to prompting cautionary attitudes across other industries. After the gradual recovery of the market the estimated total transaction on the entire European ICT market in 2005 was 659 billion euros (Bruno Lamborghini, Chair of EITO¹, 2006). An important question is what the contribution of emerging markets in Europe will be in the future. This will be further discussed using Romania in a case study.

¹ EITO stands for: European Information Technology Observatory

Romania has enjoyed an above average growth rate in this particular market sector, due to a long established tradition ably fuelled by successive young graduates in mathematics, physics, informatics and computer science. Romania aims nowadays to gain a lot from its well-established ICT market, especially since it is supported by a thriving e-business sector utilizing the capabilities and the technologies, whether home grown or internationally acquired.

Trends in emerging markets

The ten new member states of the EU and the foreseen accession countries (Bulgaria, Romania, Turkey and others) will most likely exert a great impact on the ICT sector in Europe. The Baltic States are recorded to be a driving growth force of the ICT market in Europe in 2005, having the second fastest growth after Poland, where a thriving proliferation and infusion of electronic media in most public, municipal and private aspects of citizens, has resulted in a corresponding demand for ICT services that underpins the e-business growth aspect of life. Other countries are following this trend, especially Ro-

mania, where the ICT market has responded well to this growing demand, which has been further fuelled by the country's commitment to e-government, resulting in a steady upward trend as can be observed in Figure 1. below.

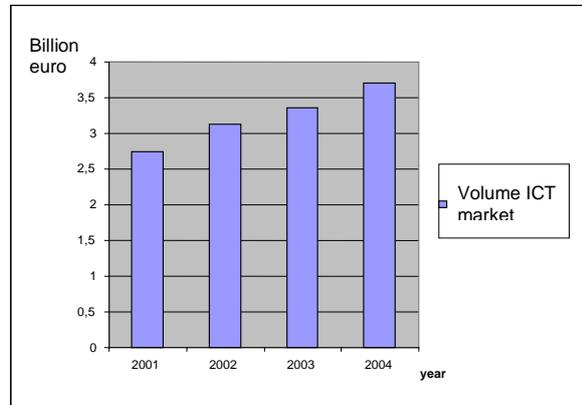


Figure 1. Evolution of the Romanian ICT market (2001-2004)

Source: Ministry of Communication and Information Technology Statistics, Romania, 2005

As can be seen from the Figure 2, Romania's rate of growth in this sector is twice as fast as next fastest follower.

Most dynamic technology market in Europe

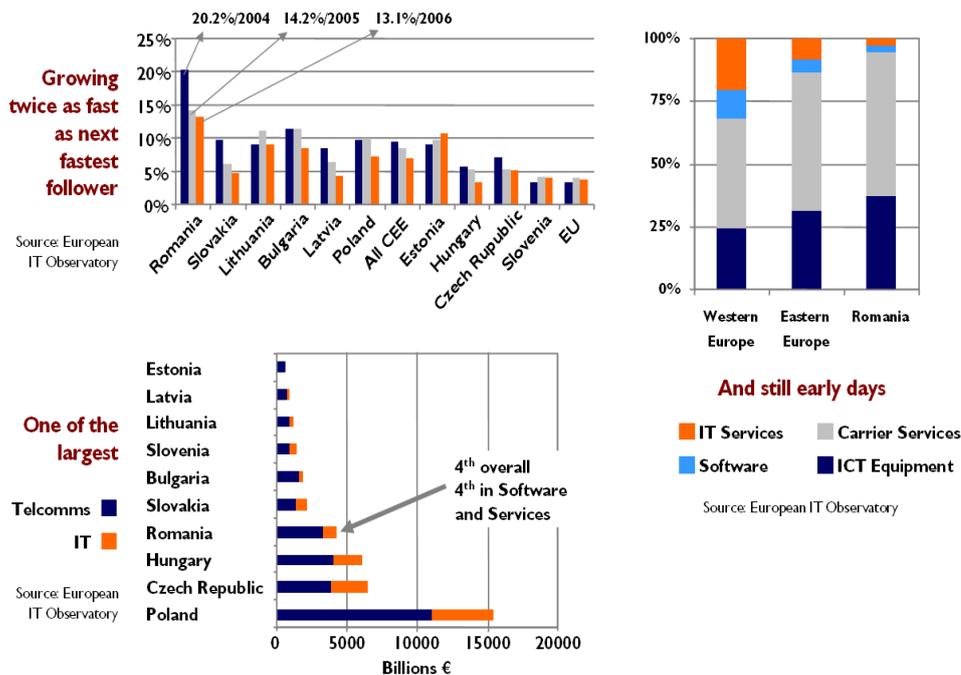


Figure 2. Facts on ICT market

About three after the market liberalization, Romania has over 750.000 high speed Internet access connections - 500.000 active, with;

- An estimated number of over 460.000 subscribers on alternative fixed telephony suppliers networks;
- 43,41% of international calls realized by alternative fixed telephony suppliers;
- 52 interconnection agreements and 17 agreements to access the local loop.

The Central and East European M&A (*mergers and acquisitions*) market registered a boom in 2005, with 146 percent rise in value terms and 35 percent in terms of complete transactions. The growth originated mainly from the telecommunications, financial services and utilities sector. For 2006, it is expected that these sectors will continue to remain stars for M&A sector.

In most emerging markets in Europe, an increasing number of investors in the ICT sector is expected. This also holds for Romania,

witness the following quotation: *"After the conclusion of the Siveco - the leading Romanian IT companies - Intel - EI partnership, one should expect both Softwin and Romsys become flexible to such partnerships or mergers/acquisitions."* (Source: ACT Media News Agency Reports 2006). Romania has also experienced a fast growth over the past few years as an important emerging market in the IT/.com sector; hence the urgent need for an appropriate methodology for the valuation of businesses in this particular sector, a need which has been highlighted in many industry reports, in order to better serve the market when undertaking, for instance, buy and sell transactions. The various prospects are summarized in the following SWOT table (see Table 1).

Table 1 SWOT Analysis of the ICT sector in Romania

<p>Strengths</p> <ul style="list-style-type: none"> ○ Good education system generating more than 7.000 IT profile graduates per year ○ Highly skilled and motivated human resource ○ Large pool of extremely efficient multi-language speakers ○ Workforce mobility and flexibility ○ Increasing usage of Hi-Tech solutions in the business community ○ Internationally recognized and award winning software products in IT field ○ Competitive labour costs ○ Ideal geographic location to collaborate with EU and CIS countries 	<p>Weaknesses</p> <ul style="list-style-type: none"> ○ High cost for use of Internet and telephone infrastructure with low productivity (but steadily increasing per employee compared to regional competitors) ○ Insufficient absorption capability of IT industry due to low demand and lack of entrepreneurship ○ No marketing and brand building strategy. Insufficient promotion and market development founding resources ○ Limited incentives in stimulating local IT industry and FDI ○ Lack of specialized management capabilities in the IT industry. No proper training in place ○ Insufficient match between education curricula and IT industry needs ○ Limited understanding of the importance of the certifications, process management, standards and quality control.
<p>Opportunities</p> <ul style="list-style-type: none"> ○ Growing domestic demand for complex IT solution enabling the development of competences and internationally successful products ○ Growing demand in Western Europe for IT services and software products ○ Cultural attitude and understanding as a great asset ○ Growing world market demand for BPO, IT enabled services and development outsourcing ○ Growing competition on fixed and mobile communications market will encouraging quality at lower service costs ○ Growing number of IT clusters, like: Bucharest, Timisoara, Cluj-Napoca, Galati ○ Great potential for e-commerce market 	<p>Threats</p> <ul style="list-style-type: none"> ○ Growing labor cost on medium and long term ○ Lack of relevant market information and market analysis capabilities ○ No consolidated/result oriented marketing and branding programs for Romanian IT ○ Strengthening regional competition among traditional and emerging IT exporters

The e-business sector is thus a new and rapidly developing sector, even in the well established Western markets, where valuation methods remain in flux and are constantly

being fine-tuned to reflect newly acquired experience in this exciting and dynamic environment. It is a prerequisite for balanced economic development of a region to have

due insight into the financial value of e-businesses.

Romania is well equipped with an indigenous home grown ICT industry that is supported by competent and well-trained personnel, well positioned to exploit the fast emerging market opportunity and able to offer a solid foundation for successful thriving e-business industry. On the other hand however, the scarce use of electronic payment methods has so far hindered a fast growth of e-transactions in the B-2-C sector, a sector which has been yet growing, but mainly in the field of promotional material and provision of marketing information and associated announcements, published on numerous, fast developing and competing web sites of most retail and distribution organizations. ICT companies themselves appear to fuel the growth and proliferation of the e-environment by offering affordable and well honed facilities to implement web-site technologies for SMEs. In addition, all major banks and financial institutions themselves are wholly or partly owned by major financial international institutions (e.g., BRD – Societe Generale, etc.) and are exploiting the market opportunity by implementing ready-made solutions developed by their parent groups and adapted to their Romanian operations.

This dynamic environment is clearly stimulated by the rapid growth of a comprehensive and sophisticated back-bone of telecommunication infrastructure that is underpinning major international financial transactions from a nation wide network, on the one hand, and thus in increasing their investment in creating the other complementary part of this e-commerce revolution by facilitating both the issue of charge and credit cards to organizations and their employees as well as massively investing in installing ATMs and cash registers in many small organizations across country, on the other side. This is a pre-requisite to create the cultural habit of using e-money instead of cash, much as it is now the established norm in Western economies.

References

www.mct.ro

www.eito.org