THE IMPACT OF CURRENT DEMOGRAPHIC TRENDS ON SUSTAINABLE BUSINESS AND CONSUMPTION

Cristina Burghelea¹, Mirela Ionela Aceleanu², Andreea Claudia Şerban³ and Mariana Vută⁴

¹⁾ Hyperion University, Bucharest, Romania
^{2) 3) 4)} Academy of Economic Studies, Bucharest, Romania
E-mail: crystachy@yahoo.com; E-mail: aceleanu_mirela@yahoo.com;
E-mail: andre_serban@yahoo.com; E-mail: mariavuta@yahoo.fr

Abstract

Economic growth is no longer sufficient for the general progress of society. Global environment currently overrides the regional and, moreover, in relation to the narrow interests on obtaining short-term profit of the business environment. Sustainable development requires new constraints for all participants to economic activity and requires long term aiming measures.

This paper aims to analyze the current demographic developments in the context of concerns for sustainable development. Currently, evaluations performed by the business environment on efficiency concern to an ever greater extent human health and environmental, aspects which have to be taken into account in order to ensure sustainable development. Knowledge of demographic trends is important for characterization of consumption and analysis of all phases of production.

The two aspects, demographic and sustainable business enjoy a wide literature, but their relationship has not been widely debated. The link between sustainable business and demographic issues can be analyzed through the labor market. Therefore, our work captures demographic characteristics that influence the sustainable business model, in this respect taking into account aspects concerning labor productivity, education level and availability for innovation.

Keywords: sustainable business, sustainable consumption, demographic aging, sustainable development, education.

JEL Classification : Q01, J11, L21

Introduction

Demographic change is one of the main challenges of today's society, as well as globalization, revolution in knowledge, green economy, climate change and social inclusion. Human resource is the most important for the development of the new economy and for ensuring sustainable development. None of these challenges can not and should not be considered separately. They should be analyzed considering correlations between their component elements in different geographical areas or periods. (OECD, 2012).

Population dynamics, knowing the probable evolution of population by certain characteristics affect every aspect of the social and economic human development. Population is the central element in defining and structuring of any strategy for sustainable economic and social development. (Aceleanu, 2011)

Today it was understood and realized that not only population growth can threaten the environment due to limited capacity to feed a growing population, as Thomas Robert Malthus showed. Current demographic trends, characterized by reducing and aging population requires increasing intervention by national, regional or global authorities through setting rules and regulations to guide economic activity towards sustainable use of resources. These are constraints to which economic agents have to respond to, in addition to the traditional constraints related to the economic efficiency of any agent. They refer to limiting the use of natural resources.

The environmental impact of economic activities is not limited to climate change due to rising emissions of greenhouse gases, they are deeper, regarding further pressure on food security concerns and human health, as well as political tensions to allocate limited resources. Statistics show that at whole EU level, as well as for each Member State the dependence of growth on emissions of greenhouse gases has been overcome; thus, during 1990-2012 the EU registered a growth of 45% and a reduction in greenhouse gas emissions by 19% (European Commission, 2014).

Initially, the Club of Rome (UN, 1972) was the one who drew attention to the limits of growth, by linking issues relating to economic growth with environmental concerns, as premises for development. Thus, it emphasizes the importance of qualitative aspects in the development equation, where the environment is a key requirement. Moreover, the present challenges to ensure sustainable development at European level are higher because increasing the welfare of individuals and ensuring economic stability must be achieved in the context of an aging and declining population.

1. The impact of demographic changes on business and consumer models

Demographic trends will influence business and consumption models, through the number, structure and health of the population. Based on these characteristics business and consumer models should focus on specific solutions to match needs with resources as efficiently as possible.

The world population is growing, following to reach in 2050 to around 9 billion people. Population growth is higher in poor areas, while in developed countries, it remains relatively constant or decreasing (Danciu, 2013). In Europe, in most countries, change in the population is decreasing and it is experiencing a pronounced aging trend, which will create imbalances in certain sectors of the economy and will affect both production and consumption. These trends will increase migration to areas with declining population, which will bring new challenges for marketing strategies, which must take into account cultural diversity, which will increase. In this case, innovation and information technologies can support marketing, facilitating consumer access to information about companies, brands, products. However, companies must be socially responsible and sustainable.

A sustainable business is one that ensures growth and favorable long-term financial results, meeting the economic, social and environmental needs of employees, consumers, shareholders, communities and all stakeholders. Profitability is necessary but not sufficient to generate sustainable value. It requires adaptation, innovation, growth and respect for the environment. (Ficksel, 2003)

Current demographic trend at European level shows an aging population, which, according to forecasts performed by specialized institutions, will continue in the coming years. An aging population has different needs than a young population, which will bring changes both in consumer behavior and in the production.

Population structure affects business and consumer, by level of education and population quality. For example, an educated population is more open to the new, economic environment changes are more easily accepted and also is supporting environmental protection. Public health in its turn affects sustainable development, while it is a prerequisite for development, but also one of its targets.

Thus, the level and structure of consumption are also the result of demographic developments, which are reflected on the production patterns and levels. Population size and its age influence the demand for certain goods and the supply must adapt to this demand and promote products through a marketing strategy adapted to the population, according to age.

The business environment is one of the three pillars of society, along with civil society and government. The three pillars need to progress at the same time with the same speed, not to wait for the other to react. Although each of them has accepted sustainable development as a guiding principle, implementation proved difficult. Businesses realize that if resources are wasted and pollution is not sanctioned, the world will not put in the right direction. Eco-efficiency is needed to discourage waste and pollution (Holliday et all, 2002; Drexhage and Murphy, 2010). In addition, in this context of sustainable development, businesses face an additional constraint, that of aging.

In the literature, socio-demographic aspects have a very important role in how to conduct business. Among the sociodemographic characteristics, age and sex play an important role in entrepreneurship and even different influences on intrapreneurship (development of new business within an existing organization) and entrepreneurship (development of new business outside an existing organization). (Benyovszki, Nagy and Peter, 2013). With the age, availability to start a business also increases, but only up to a point, then that availability starts decreasing. (Levesque and Minniti, 2006). On the other hand, there are studies showing that age affects labor productivity, meaning that individual performance decreases with age, especially for those individuals who need to solve problems, they need to act quickly or learn in activities at work (Skirbekk, 2003). These trends are manifested in conditions in which, of all sources of economic growth, productivity will become dominant. (Carone et al, 2005) Other authors show that not only productivity but also the structure of consumption and supply of goods shall be adjusted according to age. (Thießsen, 2007).

According to Blanchflower (2004), men have a greater disposition to start a business than women. Other authors, such as Bosma and Levie (2010) also highlights the role of demographics in shaping a country's entrepreneurial characteristics.

The study performed by Pete et al. (2010) on the determinants of early-stage entrepreneurial activity has also shown by an econometric research that age, gender, occupation and fear of failure are the main factors influencing entrepreneurship in Romania.

Sustainable businesses and demographic developments are correlated through labor market. On the one hand, sustainable businesses refer to the ability to meet the consumption needs of present generations in an environment friendly manner so that consumption possibilities of future generations are not affected. To this end, companies need workers with a certain level of training and with certain qualifications. On the other hand, demographic changes will influence the size and characteristics of the workforce, in terms of qualification, age, productivity and motivation (Coenen and Galjaard, 2009).

Companies need a consumer-oriented approach. In the current context of the market, very complex and dynamic, we can observe the creation of a new generation of consumers, with a specific behavior and a particular manner of approaching the quality of products. (Popescu, Negrea and Voinea, 2011) Therefore demography affects the orientation of business and marketing strategy execution. A business sector that will develop on the background of demographic aging will be silver sector, ie the sector which involves activities that are aimed at people over 65 years (tourism and leisure, health, etc).

Demographic information is useful in all stages of a business. These include age, income, gender, race, level of education of the consumer, influencing his consumer habits and characteristics. Consumer behavior differs between men and women, in terms of the types of products purchased and used in their selection criteria. Also age distinguishes purchase decisions and with age changes occur in consumer behavior. (Brătucu and Brătucu, 2007). Knowing these aspects, the initiator of a business will develop specific marketing strategies, in terms of product packaging, advertising, price setting. Given the fact that a business can not take account of consumer preferences and characteristics of each consumer, demographics are very useful for targeting marketing to groups of people with similar characteristics. (Sessoms, 2015).

2. Education - part of the business transition towards sustainable way

Concerns about the environment and economic development must take into account the important role of mankind. Public policies must cover the relationship between demographic, use of resources, environmental impact, dissemination of clean and modern technologies development. The human factor plays a central role in all factors of production, because it enhances and mobilizes other factors of production. Businesses can not exist without the environment (providing material resources) or without human resources.

Policies developed following international meetings on Sustainable Development (Johannesburg Summit, 2002, Rio Summit, 2012) abandoned the effects that population growth has on the environment, and addresses how demographic issues are addressed or ignored by businesses in the current environmental problems. In this respect, the concern relates to knowledge, learning skills, the role that HR plays in transforming business into sustainable business, - oriented to social responsibility. To meet this objective education is required (Kopnina and Blewitt, 2014).

In this regard, in 2007, the United Nations launched six principles for a responsible management of education. By this was meant incorporating universal values of society, such as social responsibility and the environment, in curricula and research (UN, 2007).

In 2012, the same organization supports the critical role of higher education to meet environmental requirements by including environmental sustainability issues in management decisions of graduates, and direct effects on sustainable consumption behavior (UN, 2012). Education is considered the essential element of business success in engaging the sustainable path, because educated individuals have a greater ability to understand and adapt to changes in production or consumption, can innovate and, thereby, generate growth. At EU level, 25% of the population has finished higher education while only 14% in Romania has. So there are differences between countries in terms of level of education, but also significant differences within the same country. Differences in the level of education among different age groups within a country are important for sustainable development, given the current demographic trends. The European Union has educated 36% of the population aged 25-34 years and only 21% of the population aged 55-64 years (fig.no.1). In Romania the situation is even more worrying because only 9% of the population aged 55-64 has completed higher education. Although there is a growing trend for all age groups, the share of people with higher education decreases as age increases across the EU. This should be approached with interest, because both at EU and Romania level, there is a tendency of aging, ie increase in the share of total population age groups with lower levels of education. This means that, although in relative terms, we recorded increases in the level of education for young people, in absolute terms, the situation will have to be managed carefully, because the elderly are more numerous and need further training in order to meet new requirements.



EU and Romania (% of total)

Source: Eurostat Statistics (edat_lfs_9901)

The economic crisis has drawn attention to the need to increase the educational level of the population and productivity. This happens because adapting to change is easier when the workforce is well trained.

In addition, some sectors are facing aging workforce or with increasing aging of workforce, due to the low training level required by the current development of those sectors, which turns them into real shelters for unproductive or low-skilled labor. Agriculture in Romania is a case, for example. However, such areas may represent future source of sustainable business. In this regard there are required both innovation and investment in clean technologies and in up-skilling of the workforce.

Sustainable businesses especially should aim at use of renewable local resources (ie tourism) and other elements that promote sustainable development (ie clean technologies). Therefore, innovation is essential for sustainable development process, requiring routing with priority to clean technologies. The green economy creates premises for growth and for increasing and improving the quality of employment. But the growth of green jobs and complexity of skills required should not affect social cohesion.

Conclusions

The transition to the global economy and a new sustainable type of economic development, brought to the attention of all participants in economic activity, public or private, the need to understand how work and social actions are interrelated and interact with environment, viewed globally. The problem with this correlation does not only concern the wellbeing of individuals, but even their existence. In the previous period, economic activities were directed towards narrow interests of profit, which caused imbalances between the environment and economic activity.

Therefore, immediate action is needed now because any delay could have an effect difficult to correct. Actions to support sustainable development are more effective if they are adopted quickly. Current strategies must target both the unfavorable impact of man on the environment and the rights that environment already claims, the environmental change impacts on humans.

It is requires a formulation of integrated national policies that take into account current demographic trends and unsustainable consumption structures that increase pressure on the environment by the effects they produce on land use, water, air, energy and other resources. Businesses need to take account of demographic aging trends when defining their development and marketing strategies in order to better match the new requirements of consumption.

However, demographic aging trends which influence the patterns of consumption and production, can be mitigated through education policies and improve quality of life. Environment, development, life and standard of living are issues that concern all of us. Therefore all effort is needed to understand the priorities so that decisions are taken voluntarily and have positive effects in ensuring sustainable development.

Bibliography:

Aceleanu, M.I., 2011. Demographic Changes And Their Implications On The Labour Market In Romania. *Proceedings of the 6th International Conference on Business Excellence*, vol. 1. Brasov, Romania. pp.16-20.

Benyovszki, A., Nagy, A. and Petru, T.P., 2013. Is there a difference between intrapreneurs and early-stage entrepreneurs in Romania? *Theoretical and Applied Economics*, 20(6), pp.53-60.

Blanchflower, D. G., 2004. Self-employment: More may not be better. *NBER Working Paper*, 10286.

Bosma, N., Levie, J., 2010. *Global Entrepreneurship Monitor*. London: Business School and Global Entrepreneurship Research Consortium (GERA).

Brătucu G., Brătucu T.O., 2007. The Analysis of the System of Factors Influencing Individual Consumer Behaviour, *Management&Marketing Journal*, No.2/2007, pp.11-26.

Coenen, F., Galjaard, R., 2009. Demographic change in regional labour markets: finding solutions for negative effects and searching for opportunities, first lessons from the DC NOISE labour markets demonstration projects. *INTERREG North Sea midterm conference*. Available at <<u>http://doc.utwente.nl/82133/</u>> [Accessed 5 February 2015].

Danciu, V., 2013. The future of marketing: an appropriate response to the environment changes. *Theoretical and Applied Economics*, 20(5), pp.33-52.

Drexhag, J., Murphy, D., 2010. Sustainable Development. From Bundtland to Rio 2012, United Nations Headquarters. Available at: <<u>http://www.un.org/wcm/webdav/site/climatechange/shared/gsp/docs/GSP1-</u>

6_Background%20on%20Sustainable%20Devt.pdf> [Accessed 8 February 2015]

European Commission, 2014. Combaterea schimbărilor climatice, Luxemburg, Library Website . Available at: <<u>http://bookshop.europa.eu/ro/combaterea-schimb-rilor-climatice-pbNA0614034/?CatalogCategoryID=sciep2OwkgkAAAE.xjhtLxJz></u> [Accessed 15 February 2015].

Fiksel, J., 2003. Revealing the value os sustainable development. Corporate Strategy Today, VII/VIII.

Holliday, C., Schmidheiny, S., Watts, P., 2002. *Walking the Talk. The Business Case for Sustainable Development*. Sheffield: Greenleaf Publishing Limited.

Kopnina, H., Blewitt, J., 2014. Sustainable Business: Key Issues. New York: Routledge.

Levesque, M., Minniti, M., 2006. The effect of aging on entrepreneurial behavior. *Journal Business Venturing*, 21(2), pp. 177-194.

OECD, 2012. Demographic Change and Local Development: Shrinkage, Regeneration and Social Dynamics. Availbale at:

<<u>http://www.oecd.org/cfe/leed/Demographic changes highlights.pdf></u> [Accessed 25 February 2015]

Pete, S., Nagy, A., Gyorfy, L.Z., Benyovski, A., Petru, T.P., 2010. The Evolution of Early-Stage Entrepreneurial Activity Influencing Factors in Romania. *Theoretical and Applied Economics*, 27(7), pp.5-14.

Popescu, D., Negrea, M., Voinea, L., 2011. Mutation in the foodstuff quality perception of the new consumers in Romania, *Amfiteatru Economic*, 13(5), pp.774-779.

Sessoms, G., 2015. *The Importance of Demographics to Marketing*. Houston: Chron Newspaper.

Skirbekk, V., 2003. Age and Individual Productivity: A Literature Survey, *MPIDR Working Paper*, WP 2003-028, August 2003.

Thießen, U., 2007. Aging and structural change, Discussion papers. German Institute for Economic Research, No. 742. Avalable at:< http://hdl.handle.net/10419/27266> [Accessed 5 February 2015].

UN, 1972. Our Common Future, Report of the World Commission on Environment and Development. Available at: <<u>http://www.un-documents.net/our-common-future.pdf</u>> [Accessed 5 March 2015].

UN, 2007. The Global Compact Leaders Summit 2007 Geneva, New York 2007. Avalable at: <<u>https://www.unglobalcompact.org/docs/news_events/8.1/GC_Summit_Report_07.pdf</u>> [Accessed 5 March 2015].

UN, 2012. A practical Guide to The United National Global Compact for Higher Education Institutons, New York, 2012. Availabale at: $<\underline{http://www.unprme.org/resource-docs/APracticalGuidetotheUnitedNationsGlobalCompactforHigherEducationInstitutions.pd}$ <u>f</u>> [Accessed 10 March 2015].

UNEP, 1992. United Nations Conference on Environment & Development Rio de Janerio, Brazil, 3 to 14 June 1992, Agenda 21. Available at: <<u>https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf</u>> [Accessed 5 March 2015].