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INNOVATIONS AND CONSUMPTION VERSUS RAISING THE QUALITY OF LIFE OF SOCIETY

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Abstract. The article analyses innovation and consumption as growth factors that are conducive to raising the quality of life of society. Factors taken into consideration include the source, factors and effects of innovation. They show consumption as the original source of innovation and a potential long-term driving force of economic development and social progress. I make an attempt to answer the following questions: whether the development of innovation and changes in consumption resulting from it are factors which lead to the raising of the quality of life in society or not, and if not – what conditions should be fulfilled. I also raise the question of further modifications of development – development which serves to increase the quality of society's life. And in order to achieve this to increase the investments in human and social capital as well as make other significant changes of a cultural nature.

Key words: innovations, consumption, quality of life, solution revolution, cultural changes, inclusive economy

INTRODUCTION

Twenty-five years of development of a market economy in Poland has resulted in numerous and significant changes. These changes are, to begin with, the improvement and modernisation of market supply. These changes also include large modifications in market structure and the development, strengthening and implementation of marketing-oriented companies. Currently companies are focused on the development of innovation and aim to balance the economy and consumption. At the present stage of development consumption and innovation are the leading sources and factors determining further growth. The aim of this article is to show innovation and consumption as the leading factors of economic development which in turn improve the quality of society's life. These

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considerations are the basis for searching for answers to the following questions: are these factors sufficient on their own to improve the quality of life in society or not, and if not – then what other conditions should be fulfilled.

INNOVATION AS A FACTOR OF SOCIO-ECONOMIC CHANGE

Innovations are not a new phenomenon either in the social or economic sphere. They have accompanied humans throughout history. But it was only one hundred years ago that Schumpeter saw in them a pro-developmental factor. And ever since, the development of innovations has been spreading at an ever faster rate.

Innovations have many definitions and descriptions. In economic literature, the notion of innovation never was and is not to this day a uniform concept. There are a great diversity of views on innovation as well as on the factors by which innovative changes are analysed and evaluated. At their base however there is always a reference to the nature of changes, their scope, the time-period of change introduction, and the effects of these changes. Innovative changes may have a sharp or continuous, process-like nature. Sharp changes are connected with the suddenness of their occurrence. They are of an unexpected nature. They may appear as crucial innovations. Continuous changes on the other hand are understood as being those which occur as part of a long process of evolution of economic phenomena and as activities which are accompanied by systematic and long-term research.

Many-years of observations concerning the development of innovations as well as the contemporary experience in this area show that, as a rule, innovations are a result of the evolution of economic and social phenomena and processes. They manifest themselves in the changes of many processes and activities, which does not preclude as an exceptional event the occurrence of sharp-type, decisive innovations. The essence of all innovations, both continuous and sharp, is that they have to result in the better meeting of needs than offered by previous products and, at the same time, to serve the development of business, and economy while not damaging the natural and social environment.

In line with contemporary knowledge, innovations emerge based on human, social and intellectual capital[1]. In fact, this means that the source of innovation is the human being, and occurs due to the reproductive and incentive effects of his consumption.

The reproductive effect means that the human being in order to live and act needs to meet his needs which are not only constantly renewed but are also developing. During consumption there takes place the destruction of the object of consumption, as a result of which the organism gains substance, energy and maintains the ability to work. Nowadays,

[1] We understand human capital as an accumulated stock of knowledge, qualifications, skills, abilities, and readiness to create values and to increase the economic potential by owners thereof.
Social capital is defined as the potential stocked in units and the society, in the form of institutions, norms, values, behaviour, which forms the basis for building social relations based on confidence, thus facilitating cooperation, creativity, on exchange of knowledge and contributing to reaching the goals which could not be achieved by individual persons alone.
Intellectual capital expresses wealth of the enterprise being a result of expertise of its employees engaged in accrual of that enterprise's goodwill.

meeting needs mostly goes substantially beyond basic needs and beyond the basic level of meeting them. It is connected with continuous education, personality development, and an investment in one's physical and psychical condition, hence in the purchase and consumption of many intangible services. In this way, the human being develops his skills which can also be described as creative capacities which when accumulated in the mind and muscles, acquire the features of capital that is human capital.

The reproductive effect of consumption is reinforced by the incentive effect which expresses the human being's desire to act towards upgrading his prestige, level of self-realisation and quality of life which can be expressed in a simple relation: the higher the expectations, the stronger the motivation and the greater the activity. Contemporary education in principle has to serve the aspiring individual's activity, their enterprise and creativity in order to expect from adult, educated people effects in the form of innovative attitudes, activities and results (ideas, products). With the above in mind, axiomatic is the assertion that innovations are created by human, social and intellectual capital, in which one must first earlier invest. That investment is repaid by the absorption of that 'bailed out' capital in the implementation of innovative tasks and by overcoming the risk accompanying the undertaking of challenges and new steps.

In the current world, we deal with numerous and various innovations. The following innovations are mentioned most often: technological, process, organisational, managerial, marketing, and, in the recent decade, also social [Olejniczuk-Merta 2013]. The specified types of innovations may be and are set up at various levels; in the micro, mezzo and macro scale; at a functional level of the human being and household, social groups, entire societies, nations, as well as at the level of the micro, medium-sized and large firm. They may take place in various functional areas of a society: in various socio-professional groups as well as in various sectors of the economy and in various business sectors. In a subject-organisational aspect, the participants of an innovative process may be: business (small and large), research units, the state, local self-governments, administrative units, non-business and non-governmental organisations from the so-called business-related environment, social enterprises and more and more often society itself, including consumers. All, depending on the type and scope of innovations, have definite roles and tasks in the innovative processes. Thus, acting as a network, they exert influence on the created innovations, within their competences, by sharing invention, creativity and activity. And this means that the creation of innovation is already not assigned only or mainly to business but also reaches other organisations. Moreover, innovative processes demonstrate variety in many other aspects, including forms of participation, cooperation, the types of problem being resolved and, in result, in the effects of innovative processes [Eggers and Macmillan 2014]. What makes this real is the cooperation of entities with various forms of ownership: private, public, social, group, and individual. And the scope of participation by individual entities may be clearly diversified; it may relate to the entire innovative process but also it may be restricted to the use of a narrow scope of competences within a given organisation or unit. On the other hand, the types of problems being resolved are practically unlimited. This indicates the formation of numerous ties between the innovative processes' participants, which results in the integration of many different entities around important innovative tasks.

An effect of such contemporary development of innovations is in principle the enrichment of the market, with many new and modern goods facilitating society's life and improving its activity and functionality. It is also the development of firms which take part in the creation of innovations and the sale of innovative products and services, which translates into the country's socio-economic development. This may be verified based on the changes which have occurred in the past quarter-century in the development of the countries which are most advanced in the development of innovations and rely for their economic growth on innovations. To a lesser degree, this phenomenon can also be noticed in Poland[2].

As presented by PARP (the Polish Agency for Enterprise Development) the characteristics of the innovativeness of Polish enterprises show, in addition to their general ineffectiveness in this area, also a considerable differentiation in the 14 levels of that innovativeness within individual groups of large-chain and sector enterprises. Relatively higher are the indices of innovativeness at large enterprises and those from the ICT group, while they are low are in services as well as in small and medium-sized enterprises. In general, the gap between the innovation indices of Poland vis-á-vis other EU countries, despite the fact it is slightly improving, has not seen any significant change. In Poland, the overall index of innovation, measured in terms of a firms' innovative activity (introduction of new products, processes and new solutions), oscillates for large companies between 45–60% of those firms. Within the group of small enterprises, the share of those that implement innovations does not exceed 10%. And taking into account the share of their revenues from the sale of new or substantially improved products, then, irrespective of the size of firms, the index is low and does not reach 15%. Manufacturing companies reach this index value at the level of up to 12%, while services rendering ones – up to 7%. Overall, the general picture of the development of innovations within enterprises in Poland is not very optimistic. This indicates the rationality of undertaking significantly more activity in this area, particularly in the perspective of the year 2020 when it will be possible to participate in EU programmes within the *Horizon 2020* scheme. At the same time, we may conclude on this basis that the chosen path for the development of innovations is right as it leads to the improvement and extension of the market offer, market success for firms and, as a result, also to the country's economic growth. However, there are factors that are not conducive to that development or they even may reduce it. It would seem that also required is their identification and in-depth analysis which will then allow forth implementation of improvements within this area.

Let's look therefore at the second factor of development, which, at the same time, determines and sets up the grounds for the development of innovations and an improvement of society's quality of life – consumption.

[2] The assessment is based on the following bases: per capita GDP equal 3,000–9,000 USD as the condition for the country being qualified to the second (higher) advancement of its development and the share of innovations in shaping the development at the level of 30% and more. Poland meets only the first criterion. For this, it is at the transition stage between the stage 2 and 3, considered as the stage of development through innovations. [*Global Competitiveness Report*, World Economic Forum, p. 3].

CONSUMPTION AS A FACTOR IN IMPROVING SOCIETY'S QUALITY OF LIFE

The impact of consumption on the development and improvement of quality of life (though not directly) was mentioned in his works by the renowned Polish economist E. Lipiński in the 1960s. He described consumption as a driving force for the development of the human being and the whole of society and, thanks to this, also to enterprises and the economy. He wrote: "(…) in the process of consumption, the human being not only reproduces the life process but it expands, deepens, and changes it. In this meaning, consumption is not only the purpose of production but it is its assumption, condition, driving force. In the process of consumption, there grows human being's intellectual and moral strength, increases his production capacity, develops imagination, increases mind power. Consumption becomes the most powerful manufacturing power as when at leisure, at the time free of production, there takes place the human being's development [Lipiński 1969]. This development forms in the human being his creativity, openness, curiosity, propensity to examine his abilities and to create something new. And the American Noble Prize winner of 1992, G.S. Becker spoke in this way of consumers and their households: "(…) households are already not treated as passive consumers of goods and services purchased in the market sector, but as active producers of such non-market goods as, for instance, health or prestige. These goods are an effect of the combination of market commodities, time at the disposal of household's members, and environmental variables such as education, abilities, and others" [Becker 1990].

The attainment of the large role of consumption in creating innovations, also inclusive of innovations which are part of the consumption, was achievable due to marketing. Thanks to marketing research and other tools including social communication, it has been possible since the second half of the 20th century for a fuller and clearer recognition of consumption, consumers' needs, and the meeting of these needs at an ever higher level.

Such assessments and comments as to the place and the role of consumption in development confirm, at the same time, that it is within the human being, in his mind and through his activities that the great productive potential, also described as creative and innovative, lies. Hence, the validity of investment in this potential and the transformation this causes in innovative effects seems to be undisputable, and should be a conscious priority, at least as regards educational, cultural and medical services as well as those in the ICT area.

Let's see, therefore, what consumers' wealth in Poland looks like and their consumption habits. We look at wealth on the basis of individual incomes within households in differentiated quintile groups. In the fifth, the highest quintile group, the bottom line of per capita incomes in the household amounts to 1,867 PLN, while in the first, the lowest quintile group the value of the highest incomes amounts to 694 PLN in 2014 (according to GUS). The level of disposable per capita income in households reaches an average value of approx. 1,300 PLN. The spread between the highest and the lowest disposable incomes is 2.7-fold in 2014 (according to GUS). It is also worth mentioning that since 2000 disposable income has more than doubled and its real value has increased over that time by almost 49%. The main source of incomes is paid work. This illustrates the changes taking place in the consumers' purchasing abilities and, at the same time, indicates

generally the positive nature of those changes. They are expressed both in consumers' behaviours and in consumption[3]. Generally, consumers do not have trouble meeting their needs. More than 45% of families do not report financial troubles as a limiter of their purchases. About 11% of consumers speak of minor troubles. The value of household equipment including various durables in the period since 2000 has grown several times over (e.g. printer, computer, and video camera) and even more than ten times (dish washer) or even a few dozen times in the case of motorcycles, passenger cars, mobile phones, and new generation electric cookers). Better household equipment is a result of the better financial condition of households but also from the opportunity to use consumer credit and favourable prices, particularly in case of audio-visual and multimedia devices. However, we must remember that the degree of household saturation as regards durables is socially highly differentiated, and the degree of saturation does not tell us about the innovativeness of the goods possessed or of the innovativeness of consumers' attitudes. And the latter, as research shows, is characterised by a low indicator. Purchases of foodstuffs and the pattern of their consumption confirm the systematic improvement in the health aspect. As regards the purchase of many groups of products within the FMCG segment, Polish consumers are quite conservative and economical. They are convinced they are able to well assess product quality. They perceive themselves as rational consumers, who can simultaneously take care of their own aesthetic needs as well as that of the environment. Polish consumers are moderately open to innovations and they take into account low price, though it is not the dominating factor determining their choice. A purchase decision is most often made for a mixture of economic and technical reasons as well as overall preferences and reputation.

Poles' hierarchy of values has been changing, but only slowly and not by much. The place of new technologies in the value hierarchy is still low. Poles mostly appreciate health, both their own and that of their relatives. Next there are family values, then life self-reliance, tolerance, and having other people's respect. Even the most up to date devices and the possibility to contact other people through the use of new technologies are placed low in the value hierarchy. However, the low place of new technologies is not surprising when compared to such universal values such as health and the family. Nevertheless, it is worth emphasising that the importance of up-to-date products and new ways of making contact with people is apparently growing among younger better educated and better off people.

In addition expert evaluations show that the Polish consumer is a consumer who is innovative and pro-innovative to a small extent as they lack sufficient knowledge about innovations and they are also often afraid of innovation. Moreover, Poles have been attributed with "anti-innovative roots", stemming from the political past, including the situation in the country and a lifestyle which did not promote innovation. The lack of a pro-innovative attitudes amongst Poles is a result, in experts' opinions, also from the traditional approach to the upbringing of children as well as the educational system in

[3] The presented below information is a result of our own research carried out within the project of the National Science Centre, NCN: *Konsumpcja w innowacyjnej gospodarce*, 2012/05/B/HS4/04006. They are of the synthetic and, at the same time, selective nature.

Poland, connected with our historical past, which doesn't facilitate the development of independence, creative thinking and general openness.

Being an innovative consumer relates more to the young generation, people currently learning/studying (secondary school youth and students). This consumer group is characterised by the greatest openness, mobilisation, and desire for change and experiencing new things; therefore, one may see among them innovative consumer behaviours and attitudes towards innovation. Greater innovative thinking and pro-innovative consumer activities may be generated through the development of educational background – that is changes in the educational system which are aimed at the promotion of creative and not merely imitative thinking as well as making the society more aware and knowledgeable about their needs and how to meet them as well as, opportunities for development and benefits from innovations.

The segmentation procedure applied in the research allowed for the singling out of five groups of consumers characterised by a different approaches to innovative products and services as well as by estimates as to the size of their segment in the overall population. They are as follows:

- innovative – 15%. The segment of innovative are people who are not only oriented in market novelties but also buy them. This innovative segment is relatively small. The innovativeness of this group of consumers depends on their curiosity, particularly at a stage when they are striving to offset civilizational distances in their standard of living and consumption;
- oriented – 16%. This segment is made up of people who are in the flow, though only some of them actually buy novelties. It may result from the fact that innovative products are expensive and to put it simply, despite their interest in novelties, they often cannot afford to buy them;
- aspiring – 18%. This group is set up by those who sometimes buy and one out of two of them are not interested in novelties, though they do sometimes buy them. Nevertheless, only one fifth of this group exhibit an interest in innovative products even though they don't buy them;
- indifferent – 27%. This is the segment of people indifferent to innovations, albeit 47% of them sometimes buy innovative products while not paying them any great attention. For these consumers, innovative products are those which are marketed with a label novelty and therefore their purchase may be motivated by a desire to satisfy idle curiosity;
- withdrawn – 24%. The segment of withdrawn are people who are completely cut off from novelties. They are not interested in innovative products/services; however, 39% of them sometimes buy such products.

The above description may suggest that Poles' consumption habits, are not limited, however, they do not translate necessarily into an improvement of society's wealth, and the making of anticipated progress in this respect. They don't definitely help in raising society's life quality. On the other hand, both the analysed innovations and consumption although insufficient in themselves to cause an improvement of the society's life quality still remain indispensable.

AN ATTEMPT TO INDICATE THE CONDITIONS CONDUCIVE TO RAISING THE SOCIETY'S LIFE QUALITY

In the light of the above considerations, there appears the question of the legitimacy of continuing along the development path outlined which to a definite degree takes place at the expense of less affluent social groups. Why at their expense? Because the free market is an effective system and induces producers to economise and innovate. It rewards them for achieving the lowest price which requires the use of cheap manpower and raw materials. It can turn against society including many consumers, particularly its poorer parts, and it neither serves development nor health (environmental pollution, high unemployment or wages much lower than the minimum, decline of natural ecosystems and bio variety) [Bendyk 2015]. In contrast, the large, one can say even too large, scale of variety of the offer for affluent customers and the development of consumerism are the effects of the development among the affluent part of the society of excessive consumption, not justified by needs, and simply harmful. Consumerism contributes to wastage of manufactured goods, human work, and natural resources [Gilder 2015]. Very significant have become the words assessing this situation, uttered by J.K. Galbraith: they expected the growth of material wealth would solve all social problems, while it has become our main problem.

R. Branson speaking of three issues: unequal growth distribution of social incomes and, more precisely the, growing differentiation of incomes, especially in the aspect of the division of income between remuneration of labour and capital; groundless, too low or imperfect investment in the knowledge-based economy in human, social and intellectual capital; and full identification of the sources of income and property inequalities and their impact on imbalances also on a macroeconomic scale, wrote: "It is time to turn capitalism upside down. It is time to screw business as usual" [Branson 2015]. The saying can be applied – only to a lesser extent – to the situation in Poland. The issue here is with the diffusion of new solutions, often coined as revolutionary, which deal with the issues of: greater socialisation of the economy, reduction of unemployment and the development of social economics [Kołodko 2013, Kowalik 2013].

On the other hand, G. Gilder sees the future development of society, including improvements in its life quality, through the harnessing of human's and society's activity. He writes: "Interventionism and social work activities have appeared to be ineffective, generating more and more divisions. It is the human being and his creativity that is the source of wealth of nations and unrestricted enterprise provides the economic power and hope for the poor" [Gilder 2015].

In order to improve our, Polish conditions, both for an efficient development of innovations and changes in consumption, which serve to raise society's life quality, it is worthwhile to pay attention to the contents of the report *Cultural reform 2020–2030––2040. Success demands changes* [2015]. The authors present in it the concepts and measures that may stimulate innovativeness at (Polish) enterprises, approaching the problem also innovatively, from the side of culture and habits. They indicate, like W.D. Eggers and P. Macmillan [2014] in their book *The Solution Revolution*, the areas of activities and also partly the tools that may be useful in enhancing the innovativeness of consumers, enterprises, and the state.

They are:

- the deliberative state intruding, i.a., with the following solutions: universal participative budgets, "local planning cells", technological panels at the national level, and the state's deliberation – in order to socialise and introduce elements of reforms independent of parties;
- the inclusive state which is conducive to creativity and entrepreneurship, increasing the propensity to take reasonable risk by reinforcement of positive ties based on confidence, respect of principles, sense of co-responsibility, security, and community;
- changes in education, including holistic reforms of schools;
- individual communities enabling empowerment of the state, economy, education, and relations between the state and its citizens/consumers in various ways.

An in-depth analysis of these solutions, as well as other new and interesting proposals considered, i.a., by authors such as T. Piketty [2015a, b], V.W. Hwang and G. Horowitt [2012], as well as this year's Nobel Prize winner for economics – A. Deaton [2014] will be discussed in a separate publication devoted to them.

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Streszczenie. Artykuł jest poświęcony analizie innowacji i konsumpcji jako czynników rozwoju, sprzyjających poprawie jakości życia społeczeństwa. Rozważania w nim zawarte uwzględniają źródła, czynniki i efekty rozwoju innowacji. Pokazują konsumpcję jako praźródło innowacji i potencjalną siłę sprawczą długotrwałego rozwoju gospodarki i postępu społecznego. Podjęta zostaje próba odpowiedzi na pytania: czy rozwój innowacji i zmiany konsumpcji zeń wynikające są czynnikiem zapewniającym podnoszenie jakości życia społeczeństwa, czy też nie, a jeżeli nie – to jakie warunki powinny być spełnione. W ramach tego jest podniesiona kwestia modyfikacji dalszej drogi rozwoju, służącego podnoszeniu jakości życia społeczeństwa i zwiększenia w tym celu inwestowania w kapitał ludzki i społeczny oraz dokonanie innych istotnych zmian o charakterze kulturowym.

Słowa kluczowe: innowacje, konsumpcja, czynniki rozwoju, jakość życia, rewolucja rozwiązań, zmiany kulturowe, inkluzywna gospodarka

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