



ISTITUTO DI STUDI E ANALISI ECONOMICA

## **A new notion of progress: Institutional quality**

by

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*“There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system. For the initiator has the enmity of all who would profit by the preservation of the old system, and merely lukewarm defenders in those who should gain by the new one”*

Il Principe (1513), Niccolò Machiavelli

## **ABSTRACT**

The notions of human capital and growth have been debated for a long time in economic literature. The limits of these concepts are generally recognised. In fact, recently, there has been an attempt to articulate a more extensive definition of “human capital” by considering all the attributes embodied in individuals that are relevant to economic activity. On the other hand, the GDP growth rate has been included into the Human Development Index, taking into account different aspects of development such as life expectation, literacy and health.

Nevertheless, the evolution of the definitions of human capital and growth is in some way restricted to their economic meaning, neglecting the intrinsic complexity of concepts demanding an in-depth re-examination of their social, cultural, and historical value.

Using an interdisciplinary approach, this paper focuses on the conceptual meaning of progress. Progress was considered as the economic, social, and cultural evolution of a country. The idea of evolution has ancient roots and is subjective. In economic and social terms, evolution may be deemed as the path human beings follow towards freedom. Since the earliest times, humanity has been fighting against poverty, scarcity of resources, disease, abuse of power by a group, environmental disaster.

In order to give a more complex definition of progress entailing the idea that freedom is its driving force, we used the main concepts of institutional and evolutionary economics. Highlighting the contributions of the best Old Institutionalists (Veblen, Commons, Dewey, and Ayres), we introduced two alternative notions: “knowledge” in place of human capital and “progress” instead of economic growth. Local knowledge is the most important factor of

development, while, on the other hand, the model of ongoing institutional change is the “alarm bell” for progress or stagnation.

In this way, institutional change towards freedom and the providing of incentives for progressive forces become a proxy for the level of cultural, social, and economic progress reached by a society. Progressive forces may grow in societies where there are no barriers to the free exchange of opinions and knowledge and where education and training systems are conceived to create autonomous people. The enemy of progressive forces are “ceremonial institutions”, that is institutions opposing any kind of renewal.

Using the available data, we showed that the GDP growth rate is not necessarily a factor of human life satisfaction and that it does not necessarily improve the quality of life. We compared some European Countries to demonstrate that there is no clear-cut link between material wealth and the quality of life. Instead, at a given level of material wealth, the freedom of choice and the governance indicators seem much more correlated to life satisfaction.

Finally, utilizing the Veblen’s notion of “recursive causality”, we highlighted that it is possible for policy makers to foster a given institutional context rather than an alternative one. Therefore, it is possible that the culture of “GDP growth” has influenced institutions and has created a number of problems (pollution, social distrust, social immobility, life dissatisfaction, corruption, and rent-seeking) which emerged in the recent financial and economic crisis.

Keywords: human capital, growth, institutional economics.

JEL codes: J24, J31, O3, B52.

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# 1 HUMAN CAPITAL: AN INSTITUTIONAL ECONOMICS PERSPECTIVE

In economic literature, human capital is one of the most important determinants of growth.

In the 1960s, there was a flourishing of studies on “human capital” (Schultz, 1961; Becker, 1964; Kiker, 1966), mainly defined as “the aggregation of investments in education and job training, that improve individuals’ productivity in the labour market”.

Since factors different from accumulated knowledge, training and ability may affect the income profile, the validity of the Becker-Mincer human capital approach has been widely verified. To do so very sophisticated statistical and econometric instruments were used<sup>1</sup>. Nevertheless, we may conclude that there is no generally accepted answer to the question concerning the reasons for wage differentials.

Every society aspires to have a more highly educated population, given the positive externalities that this generates. The core premise of the reasoning is that “*The structures of physical, human, and social capital constrain future production, and wealth is always and everywhere a ‘residuum of past activities’*” (Mises L., 1996).

The Old Institutional Economics, in general, recognised the importance of knowledge for the progress of societies, but did not term it “human capital”.

Actually, the Old Institutional Economics<sup>2</sup> rejected the use of the term “capital”, with the meaning of stock, wealth, and goods and, in particular, its association with “social terms”<sup>3</sup>. Following that reasoning, it is not correct to link the term “capital” to too many different concepts: physical assets, financial assets, specific social relations, or non-monetary entities. On the other hand,

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<sup>1</sup> For a review of the literature on human capital see: Bottone, G. (2008), “Human Capital: An Institutional Economics point of view”, ISAE Working Papers, n. 107, December.

<sup>2</sup> The Old Institutional Economics has its roots in the philosophical school of pragmatism, originated in the late nineteenth century with Charles Peirce, William James, and John Dewey. Pragmatists consider practical consequences or real effects to be vital components of both meaning and truth (Wikipedia, <http://en.wikipedia.org/wiki/Pragmatism>).

<sup>3</sup> Despite criticisms, ‘capital’ has today become a very popular term among social scientists, especially when promiscuously combined with different adjectives. Theorists from various perspectives – including sociologists keen to emulate economics – have discovered ‘personal capital’ (Dei Ottati, 1994; Becker, 1996), ‘linguistic and cultural capital’ (Bourdieu, 1977), ‘symbolic capital’ (Bourdieu, 1990), ‘political, social and cultural capital’ (Mouzelis, 1995), ‘organizational capital’ (Tomer, 1987), ‘cognitive capital’ (Rescher, 1989), ‘environmental capital’ (Hartwick, 1991), and even ‘self-command capital’ (Lindenberg, 1993).

those who emphasize the importance of historical and institutional features for economics have questioned this misleading attitude (Hodgson, 2001).

During the 1960s and 1970s, a debate arose on the meaning of the word “capital” (Harcourt, 1982). Since then, economists have been trying to define the term “capital” more correctly.

Joan Robinson (1979) stated that the term capital should be applied only to financial assets.

Frank Fetter<sup>4</sup> was one of the staunchest authors against the use of the term capital. He also gave an interesting historical derivation of this word (Quoted by Hodgson, 2008a):

*Thus the business as a whole might be thought of either as the sum or fund of purchasing power invested, or as the mass of goods which, although not bought with borrowed funds, embodied the owner’s business fund.*

*These two types of capital concepts are so distinctive in essential thought and practical application that confusion inevitably resulted from the use of one word to designate both. This confusion occurred not later than the early years of the seventeenth century, when Cotgrave defined capital in 1611 as ‘wealth, worth; a stock, a man’s principal, or chief, substance.’ Here the idea of ‘worth,’ implying a valuation, is thoroughly mixed with that of substance, no doubt in the sense of material things in possession. ‘Capital’ thus used is a superfluous and confusing synonym of wealth, goods and stock (Quoted by Hodgson, 2008a).*

Notwithstanding the wide debate, “capital” is still utilized to denote the stock or reserve of any element. Probably, in spite of the initial definition of capital as the accumulation of financial assets, the enlargement of its meaning is the result of the economic-driven thought whereby every phenomenon must be explained in economic terms (Hodgson, 2001).

Economic theory would be more transparent if notions were more precisely named according to their nature:

*Physical objects of value are not capital, being sufficiently designated as goods, wealth or agents (Quoted by Hodgson, 2008a).*

The link between the two words “human” and “capital”, so successful in economic literature, seems particularly strident. It is not clear whether it refers to

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<sup>4</sup> Frank Albert Fetter (born 8 March 1863 – died 21 March 1949) was an American economist of the Austrian School. Fetter's treatise, *The Principles of Economics*, contributed to increase American interest in the Austrian School.

the stock of human beings, considered only as production factors, or to the stock of a number of attributes, particularly difficult to specify, which render individuals more productive. In the Institutional Economics thought, labour is a factor of production. Moreover, knowledge, in general, and not only education and training, is conceptually analysed. In the following paragraphs, a brief review of the Old Institutionalists' description of knowledge is presented.

Ayres (1962) opposed the conventional economic tendency to explain the notion of value in terms of price system, equilibrium, and "utility". He introduced the idea of "social medium": the environment in which an individual lives and where his/her utility is determined<sup>5</sup>.

According to Ayres (1962), the evolution of human beings has been guided by two main forces: *...one progressive, dynamic, productive of cumulative change; the other counter-progressive, static, inhibitory of change.* In *Toward a Reasonable Society* (1961), he explained the coexistence of scientific (objective) knowledge and socially accepted values rooted in traditions, beliefs, and customs. He considered technology to be a progressive force inducing human beings to use new instruments. Ceremonial institutions are antagonistic to technological change and protect themselves by social stratification, conventions or customs and ideology (Ayres, 1962). The accumulation of knowledge is therefore important not only for individuals but for the society as a whole because it nourishes progressive forces.

Commons (1913) described labour as the principal wealth of a nation. He always used the term "labour" and never the term "human capital". He warned that human beings, and not money or commodities, are the real measure of prosperity of a nation.

In his opinion, firms had the necessity to create a separation between "brain" and "hands" of low-skilled workers, as they only need workmanship. Therefore, workers' need for education had to be found outside the firms: *What is the part that industrial education should perform in preventing vagrancy, irregular employment, and pauperism? Before we can answer the question, we need to know what kind of industrial education we mean, and what kind of industry it is that needs this education* (Commons, J. R., 1913).

At the beginning of the industrial revolution, workers were not educated. Consequently, Commons (1913) wondered what kind of education (academic or practical) was necessary to educate workers. His answer was that society requires *universal* education in order that "every boy and girl become a

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<sup>5</sup> Human capital investment implies, without any doubt, a financial investment. Every financial investment should gain an interest, but, in this case, the return is not assured as it depends upon the institutional context (wage bargaining, income structure...).

*business man... an intelligent worker...a citizen... and must protect his health. All these requirements are common to all occupations, yet no occupation of modern industry teaches them*". He emphasised the importance of education in preventing mental degradation, irregular work, underpaid work or pauperism, and in creating autonomous people. Having analysed the facts – that is, the situation of the labour market in Wisconsin at the beginning of the twentieth century – he anticipated the concept and underlined the importance of education externalities for social and economic progress, rather than for increasing wages. On the contrary, he observed that workers are able to acquire stronger and stronger ability in manual jobs<sup>6</sup>. Consequentially, they can continually change job and earn higher wages as time goes by. Thus, they do not need further general education to increase their earnings<sup>7</sup>.

Veblen (1919) affirmed that production was not only the outcome of capital and labour, as owned factors of production, but also of "*accumulated, habitual knowledge developed and transmitted in social groups*". This simple practice can be observed among human beings since prehistoric times.

Despite the literature on human capital, Old Institutionalists focus in particular on the notion of institutionalised knowledge. Therefore, we concentrated our attention upon the more general concept of knowledge, including all the acquisitions by formal and informal organisms (Hayek, 1988). Knowledge is the tool necessary to develop capabilities. In any case, the power and freedom of knowledge, except for the unusual and genial discoveries, can be exercised if the environment and the institutions make it possible. Ultimately, knowledge is a product of the institutions:

*But habits of thought are the outcome of habits of life. Whether it is intentionally directed to the education of individuals or not, the discipline of daily life acts to alter or reinforce the received institutions under which men live (Veblen, 1901).*

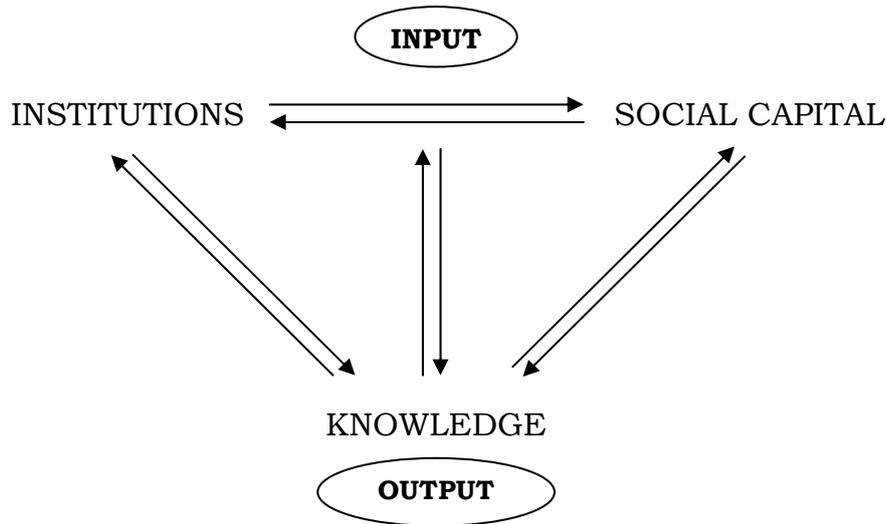
Considering the shortcomings of the traditional orthodox literature, we may suggest a more suitable expression to denote "human capital", that is namely "labour quality". The concept of quality has an intrinsic historical nature, because it changes over time according to the needs of societies. The expression "labour quality" implies the capacity of workers to produce a quality output in a quality-working environment.

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<sup>6</sup> In this way, he also anticipates the concept of Learning by Doing deepened by Arrow (1962).

<sup>7</sup> According to that view, Learning by Doing is the variable influencing future wages.

In addition, Institutional Economics has deeply dealt with the notion of social capital, mainly defined as a set of relations among social groups. Social capital, however, is directly affected by institutions. *Social capital differs from institutions, but it is partly based on them and may contribute to their development* (Nooteboom, B., 2007). The link among institutions, social capital and knowledge can be described as follows:



The process of “recursive causality” (Veblen, 1909) determines that knowledge is not an input but rather an output of institutions and social capital, while in turn the latter affect the former. The kind of knowledge built in the society according to the institutional framework and the social capital develops certain “capabilities” rather than others. The idea that institutions crystallize both knowledge and ignorance was already endorsed in the younger German Historical School and in American Institutionalism (Chavance, 2009).

In summary, we may state that knowledge is the whole set of information individuals acquire from the institutional context. People are rational in the sense that they act in the most effective manner given the institutional context<sup>8</sup>.

We may call “specific knowledge” the personal elaboration of the set of information individuals acquire from the institutional context, given a number of characteristics: age, country, region, family background, health, psychological conditions, cognitive capacities, and so on<sup>9</sup>.

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<sup>8</sup> For example, if corruption is generalized, people tend to have a corrupted behaviour in seeking their interests.

<sup>9</sup> The hedonic method could be a way for measuring specific knowledge; see Rosen (1974).

## 2 THE FORMULATION OF THE PROGRESS NOTION USING EVOLUTIONARY THEORY

The reason why, in the previous paragraph, we have started the discussion with the traditional formulation of the human capital concept is due to the fact that human capital is one of the most studied determinants of growth. It seems, however, that both human capital and economic growth – as traditionally defined – cannot be useful for understanding the recent scenario<sup>10</sup>.

Empirical analysis has shown that economic growth depends upon physical capital, human capital, and new technologies. Nevertheless, countries with similar economic characteristics grow more rapidly than others do. This remains an open issue<sup>11</sup>.

Beyond the discussion on the determinants of growth, a large part of researchers criticised the validity of the GDP growth rate as an indicator of wellbeing (Layard, 2005). In addition, it has been argued that reforms aimed at improving economic growth may fail in the absence of an adequate institutional context (Rodrik, 1999)<sup>12</sup>.

According to the recent literature (Fitoussi et al., 2008), the GDP growth rate, actually, is not the only parameter measuring the development of a country. It measures only the growth of commodities. Simon Kuznets (1934), the creator of the GDP, noted in his report to the US Congress that:

*... the welfare of a nation (could) scarcely be inferred from a measure of national income.*

Apart from the intrinsic statistical limit of the GDP, hereafter we will tackle the theoretical and conceptual debate. In fact, the GDP growth rate encompasses also negative economic activities such as the production of cigarettes, or highly polluting activities. Therefore, even from a strictly material

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<sup>10</sup> In fact, human capital does not seem to be the only wage determinant; economic growth will be discussed hereafter.

<sup>11</sup> Some empirical studies show that human capital may be the cause of different levels of economic growth (Drazen and Azariadis, 1990).

<sup>12</sup> Rodrik (1999) gives a number of examples to show that institutions matter: the failure of the Russian transition to a liberal system; the Asian crisis due to financial liberalization without financial regulation; the structural reforms in Latin American without a welfare system.

point of view, GDP fails to measure the genuine wealth of a nation<sup>13</sup>, if one considers wealth the beneficial goods and services. The cigarette industry distributes wages to many workers, thus producing wealth, but the damage to smokers and the increase in health expenditure cancel it.

Therefore, several researchers have proposed alternative measures, which try:

- to separate the positive from the negative components of economic activity, like for example pollution<sup>14</sup>;
- to add non-market goods and services, like, for example, child and elderly care;
- to adjust for the income distribution effects<sup>15</sup>.

The above-mentioned valuable efforts intend to overcome the statistical limits of the GDP growth rate but do not question its conceptual meaning. Instead, the progress of a society involves many variables, including knowledge and institutions<sup>16</sup>:

*“(...) While there is evidently a strong relationship, since economic growth is an important means to human development, human outcomes do not depend on economic growth and levels of national income alone. They also depend on how these resources are used – whether for developing weapons or producing food, building palaces or providing clean water. And human outcomes such as democratic participation in decision-making or equal rights for men and women do not depend on incomes”...(Human Development Report 2004).*

In the 1990s, under the influential thought of Amartya Sen, the Human Development Index was constructed combining the normalized measures of life expectancy, literacy, educational attainment, and GDP per capita for countries worldwide. UNDP utilizes this index for measuring the degree of development of

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<sup>13</sup> It would be better to include, in the calculation of GDP, social costs and benefits in addition to private ones.

<sup>14</sup> One way to take into account positive and negative elements of economic growth is to use the Genuine Progress Indicator rather than GDP. For further details, see OECD (2006).

<sup>15</sup> These include the Measure of Economic Welfare (Nordhaus and Tobin, 1972), the Index of Sustainable Economic Welfare (Daly and Cobb, 1989), Redefining Progress' more recent variation of ISEW, the Genuine Progress Indicator (Anielski and Rowe, 1999) and another variation of ISEW, the Sustainable Net Benefit Index (Lawn and Sanders 1999).

<sup>16</sup> In order to build effective institutions, actually, the most important resource is “local knowledge” (Rodrik, 1999).

each country. Although it is a more useful and comprehensive indicator, it looks only at a specific set of variables involved in the development process: incomes, education, and wealth.

Using an interdisciplinary approach, in this paper the discussion has advanced further, focusing on the conceptual meaning of progress. The study defines progress as the economic, social, and cultural evolution of a country.

The idea of evolution has ancient roots and is subjective. In economic and social terms, evolution may be considered the path human beings follow towards freedom. Since the earliest times, humanity has been fighting to free itself from poverty, scarcity of resources, disease, abuse of power by a group, environmental disaster.

Freedom in all its dimensions is both “the primary end and the principal means of development” (Sen, A., 1999).

According to the theory of human development (Inglehart, Welzel, Klingemann, 2003), three closely intertwined components characterise human development or societal progress: socioeconomic development, emancipative cultural value change (which we called progressive forces in the previous paragraph), and democratisation<sup>17</sup>. All of them contribute to determine the freedom of choice.

According to Inglehart, Welzel, Klingemann (2003), the most fundamental question is: “*What is the common denominator underlying socioeconomic development, emancipative value change and effective democracy?*” This paper gives a contribution in this direction, following the Institutional Economics literature.

The Institutional approach focuses primarily on how evolution takes place, in the form of institutional change. Some authors are directly influenced by Charles Darwin’s theory of evolution (Veblen, 1898)<sup>18</sup>. This attitude has been called “Universal Darwinism” (Dawkins, 1983)<sup>19</sup>.

The core of Darwin’s methodology is the causal explanation. Any theological foundation is excluded. The evolution of species involves five notions: variation, inheritance, selection, time, and adaptation. Variation signifies that there are many different specimens in the same species and that

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<sup>17</sup> It is important to differentiate effective democracy from formal democracy. In the first case, you have a concrete chance to exercise your rights (Dewey J., 1989).

<sup>18</sup> An individual economic activity is a “*cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the last process.*” (Veblen, 1898).

<sup>19</sup> Before Darwin, Smith talked about a predetermined social order, but he did not explain how and why this occurs and evolves.

there are many species too. Inheritance refers to what makes similar father and son, without questioning if this depends upon genes or cultural traits. Selection means that there is a natural process leading to the survival and the evolution of the species having the right characteristics for a given environment. Time and adaptation are related to the length of the period a species, adapting itself, can survive in a given environment.

According to Dewey (1916), it would be possible to apply these concepts to social life:

*Society exists through a process of transmission quite as much as biological life. This transmission occurs by means of communication of habits of doing, thinking, and feeling from the older to the younger. Without this communication of ideals, hopes, expectations, standards, opinions, from those members of society who are passing out of the group life to those who are coming into it, social life could not survive. If the members who compose a society lived on continuously, they might educate the newborn members, but it would be a task directed by personal interest rather than social need. Now it is a work of necessity ....*

Similarly, the transmission of habits and information comes not merely from the individual's natural parents but from an indefinite number of "ancestors" (Hayek, 1988).

Without dwelling on to what extent Darwinism has influenced economic thought (Hodgson, 2003), it seems important to debate the teleological basis of neoclassical thought compared to the causal foundations of Darwinism<sup>20</sup>. From an historical point of view, institutions act in response to the environment and progressive forces determine the change of general rules, imposing new rules. Progressive forces can be compared to the fittest species generating the biological evolution. In our opinion, progressive forces arise from two elements: the natural attitude of human beings to free themselves<sup>21</sup> and understand life's meaning and phenomena. Utilitarianism and teleology are not useful to explain progress. For what purpose would have Galileo Galilei affirmed a new scientific principle, going to prison for that?

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<sup>20</sup> See also Asso, P.F. and Fiorito L. (2003), "Lawrence Kelso Frank's Proto Ayresian Dichotomy. A note", Quaderni, n. 395, September, Università degli Studi di Siena, Dipartimento di Economia Politica. The authors examine the scarcely known Kelso's thought, according to which (in America, at the beginning of the XX° century) social sciences were *backward and inadequate* as they failed to deal with real problems. Social sciences, in other words, were far from the scientific methods of inquiry.

<sup>21</sup> The attitude of human beings embodying progressive forces to free themselves generates somehow a struggle against the surrounding environment for survival.

In our view, progressive forces are more than the Ayres technological change<sup>22</sup>, even if we are aware of the importance of scientific advancements. In a way, we consider progressive forces a comprehensive notion coming from institutional thought. In other words, they entail:

Veblen's dichotomy between instinct and rational behaviour (historically, scientific progress has been much more the result of human instinct to solve a problem than a rational behaviour);

Ayres' dichotomy between science and ceremony;

Dewey's focus on the importance of freedom and culture for a truly democratic society.

All these authors, in any case, contributed to lay the foundations of an alternative theory of Economic Progress.

As far as socio-economic studies are concerned, we concentrated mainly on how the environment (institutions) fosters and encourages evolution.

It seems worthwhile to give a definition of "institution" before going on with the discussion.

An institution may be formal and informal.

Informal institutions, in a given society, are a range of social rules, conventions, moral values, traditions, religious beliefs, and other behavioural rules that have been transferred from generation to generation over time and have survived. If all the members of a society share them, they affect their behaviour (Knight, 1992).

Formal institutions are the law, including the constitution, rules and organizations. As we have seen for knowledge (Fig. 1), a process of recursive causality determines that institutions affect economic development and economic development affects them (Nugent-Lin, 1995).

Institutions – as defined above – change thanks to progressive forces<sup>23</sup>. Knowledge – as described in paragraph 1.2 – is the source of progressive forces. Institutional transformations come from a dialectic process among progressive forces and ceremonial attitudes<sup>24</sup>. The transformations may derive from formal (law, revolution) or informal changes (technology, values). Economic transformations are mainly generated by informal changes.

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<sup>22</sup> Ayres stated that "deceremonialization, deinstitutionalization, and 'institutional decomposition' can occur only if there are advances in science and technology that are so rapid and pervasive that more and more people become increasingly occupied, in thinking and doing, in activities that are devoid of ceremonial and mythological contents." (Quoted in Asso, Fiorito, 2003, op. cit.).

<sup>23</sup> See paragraph 1, Ayres (1962).

<sup>24</sup> Dewey (1916), *Life is a self-renewing process through action upon the environment*.

On the other hand, institutions may survive even if they are inefficient, if they satisfy the goals for which they are set.

Moreover, the literature on the relation between institutions and economic growth shows that the quality of institutions explains cross-country differences in productivity growth (Olson, 1998), as institutions affect all aspects of human life. The rules established for reaching a desired level of development are highly specific to local conditions. This entails also various ideas of development. When, in fact, a “manual” of neoclassical rules aimed at building a market society is utilized (Washington Consensus), it fails to reach its purpose. This is empirically proved for a number of countries (Rodrik, 1999).

Following this reasoning, a proxy for the progress of a society may be institutional change aimed at freeing people from the “chains” of daily life: starvation, illness, family yoke, political dictatorship, corruption, violence, and rent-seeking. As societies develop over time, the rule system has to be modified. If the adjustment does not occur the development process may be delayed. *Institutional rigidity and corruption pave the way for persistent poverty* (Kasper, W., 1997).

For example, historians, economists, and sociologists have underlined how institutions made possible the beginning and the consolidation of the Industrial Revolution in Europe (Kasper, 2002).

The role of economic growth in preventing starvation is undeniable. Nevertheless, economic growth alone cannot guarantee freedom of choice, the idea of progress we are supporting. The freedom of choice is linked in particular to the guarantee of equal opportunities, to the level of democracy, and to the possibility for progressive forces to produce the change.

A number of elements guarantee “equal opportunities” as well as the possibility for progressive forces to produce the change: employment policies, tax system, distribution choices, welfare state, lifelong learning, quality educational system, and developed system of communication of knowledge. However, other institutional characteristics are to be taken into account as well: corruption, absence of meritocracy, social immobility, red tape, rent-seeking, and all those behaviours obstructing the creation of a free cultural environment<sup>25</sup>.

Finally, we may say that the level of democracy is the field where equal opportunities and progressive forces may rise and grow.

Democracy is a subject much discussed from all points of view. For our purpose, better institutions are likely to be found where executive, legislative,

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<sup>25</sup> To this respect also religion plays an important role. Historically, new scientific discoveries have met the opposition of religious institutions. An example for all is Galileo Galilei.

and judicial powers are independent, can control and sanction each other, and where party interests do not prevent politicians from pursuing collective purposes (Straub, 2000). Democracy is also the output of a country's historical and cultural features. The way by which people reach it and its duration influence the level and the kind of democracy.

It seems interesting to conclude with the following Dewey's (1989) statement:

*... an undesirable society, in other words, is one which internally and externally sets up barriers to free intercourse and communication of experience. A society which makes provision for participation in its good of all its members on equal terms and which secures flexible readjustment of its institutions through interaction of the different forms of associated life is in so far democratic. Such a society must have a type of education, which gives individuals a personal interest in social relationships and control, and the habits of mind, which secure social changes without introducing disorder.*

The examined literature underlines the importance of knowledge and institutions for social and economic progress. Institutional change towards greater freedom in all the aspects of social life may be seen as a good proxy for progress. Hereafter, we will try to specify the meaning of institutional change and the way to measure it<sup>26</sup>.

## 2.1 Institutional change

The important question is what triggers institutional change. Usually, institutional change is treated as an exogenous variable. In few cases (North, 1990) it is endogenized. When you construct a model for endogenous institutional change, you have to analyse the causes generating it<sup>27</sup>.

The agent (decision maker) evaluates costs and benefits associated with the alteration of the environment. Both the structure of incentives provided by the institutional context and the mental process of the decision-maker — built on the knowledge system — condition his choices and then determine the path of change. Institutional change is path-dependent (North, 1990): the choices made in the past affect the present situation.

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<sup>26</sup> It would be better to improve national accounting too, in order to reduce the statistical limits of GDP.

<sup>27</sup> External change, learning and skills are the most cited causes of institutional change.

Two approaches emerge when considering the behaviour of decision makers: bounded rationality and strategic conduct.

Traditional economic literature builds its models assuming that individuals carry out a strategic conduct aimed at reaching the maximum utility under the constraint of available resources. The Institutional Approach focuses on the bounded rationality, that is the possibility that *institutionalised* people act according to the rules of the environment where they live.

For many reasons<sup>28</sup> we assume that decision makers implement a very complex decision process entailing many variables. This process is a function of institutions – the rules of the game:

$$D_n=f(I,O_n)$$

Where “D” are the decisions put into action by n individuals, “I” are institutions as defined previously, and “O” synthesises personal characteristics of the “n” decision makers<sup>29</sup>. We have n functions of decision (D), the form of which depends upon the kind of decision implemented. Decisions are divided in two groups: progressive decisions (towards freedom) and ceremonial decisions (towards stagnation). Many datasets are already available for measuring institutional quality<sup>30</sup>. In this way, it is possible to derive personal characteristics and institutional qualities correlated to progressive decisions and then shape economic policy to encourage those characteristics, providing the right structure of incentives<sup>31</sup>.

The sum of decisions shapes a society and the Veblen’s “recursive causality” determines that “D” and “I” influence each other. Time is very important in the decision process because the process is “path dependent” or - to put it differently - historically determined.

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<sup>28</sup> See Bottone, G. (2009), “Education in Italy: is there any return?”, ISAE Working Papers n. 109, March.

<sup>29</sup> Decision makers may be individuals or policy makers.

<sup>30</sup> See Bottone, G. (2008), “Human capital: An Institutional Economics point of view”, ISAE Working Papers n. 107, December.

<sup>31</sup> For example, the decision to invest in knowledge (human capital) depends upon the institutional context (Bottone, 2008, op. cit.) and the personal characteristics of the decision-maker. The institutional context provides economic (future wages) and social (the importance of knowledge for the society as a whole) incentives to such investments. At the aggregate level, it could also be useful for policy makers to investigate in which sectors large investments in knowledge are made (education, lifelong learning, free exchange of knowledge...) and which are the institutions and the personal characteristics of people that make such investments.

Empirically, we need to specify progressive decisions, grouping them according to the various fields: politics, economics, social, and cultural advancements<sup>32</sup>.

Undoubtedly, the decision mechanism and the results of the decision process have an effect on the evolution of a country, in particular, and the evolution of human beings, in general. Institutional change, being correlated to implemented decisions, is therefore a proxy for progress.

A society is more advanced than another one if institutions allow people (individuals and policy makers) to take progressive decisions.

### **3 AVAILABLE DATA ON INSTITUTIONS, FREEDOM OF CHOICE, AND LIFE SATISFACTION**

The idea that progress is something more than simply material wealth has led to the creation of a new dataset for monitoring the various aspects of “subjective wellbeing”.

The six main international datasets are: Eurobarometer ([http://ec.europa.eu/public\\_opinion/index\\_en.htm](http://ec.europa.eu/public_opinion/index_en.htm)), the World Values Survey (<http://www.worldvaluessurvey.org/>), the Legatum Prosperity Index (<http://www.prosperity.com/default.aspx>), the Gallup World Poll (<http://www.gallup.com>), the OECD Report: Society at a Glance: OECD Social Indicators – various editions (<http://www.oecd.com>), and the International Country Risky Guide (<http://www.prsgroup.com/>)<sup>33</sup>.

The common base of these datasets is to ask people a number of questions regarding their feelings, their personal judgements about the country where they live and its institutions (generally democracy, social capital, human relationships, friendship, family relationships, and religious belief), the satisfaction with their life, and their personal and general economic situation. The aim of those surveys is to measure subjective perceptions.

Many objections have been raised against this approach. In particular, the ability of individuals to make judgements is questioned. It is odd that, on the one

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<sup>32</sup> For example, if citizens vote for a progressive party they implement a progressive decision. Moreover, if many associations against corruption emerge in a country, this factor shows progressive cultural and social advancement.

<sup>33</sup> Unfortunately, the Gallup World Poll is very expensive. The other datasets do not allow building a time series for life satisfaction since not all years are available.

hand, orthodox economics considers individuals rational enough and perfectly able to make their own choices according to their preferences, but on the other hand, people are not deemed clever enough to evaluate their level of satisfaction. Possible cultural differences, in addition, are a false problem. Of course, people judge and think according to their cultural, social, and economic context, but, whatever the context, their feelings and perceptions are what really matters. It is the analysts' duty to discover the causes of those feelings.

Institutional Economics suggests using for scientific analysis the inductive method instead of the deductive one. Therefore, one should build economic models starting from real situations and real preferences and perceptions of people<sup>34</sup>.

*The subjective perceptions (mental models) of entrepreneurs determine the choices they make..... it is the perceptions of the entrepreneur--correct or incorrect--that are the sources of action. (Institutional change: a framework of analysis, Douglass C. North, 1990)*

The following tables present some data for the Legatum Prosperity Index<sup>35</sup>, illustrating the importance of the freedom of choice for the progress of societies and life satisfaction. Table 2 compares Italy with some European countries: Denmark, Sweden, Finland, the United Kingdom, France, Germany, the Netherlands, and Spain<sup>36</sup>.

Among the numerous indicators provided by the Legatum Prosperity index that investigate material and non-material aspects of life (Legatum Institute, 2008), we chose those which in our opinion are crucial for the progress of society. They were described in the previous paragraph and are shown hereafter in Table 1.

Table 2 illustrates that countries with the same amount of GDP per capita do not have the same level of quality of life indicators. For example, Italy and Spain have the same GDP per capita, whereas they have a different level of life satisfaction, probably because governance and freedom indicators – except for education – are significantly higher in Spain. Also Finland and the United

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<sup>34</sup> Perception is defined in the on-line Business Dictionary as the process by which people translate sensory impressions into a coherent and unified view of the world around them. Though necessarily based on incomplete and unverified (or unreliable) information, perception is 'the reality' and guides human behavior in general (<http://www.businessdictionary.com/definition/perception.html>).

<sup>35</sup> Source: The Legatum Prosperity Index (<http://www.prosperity.com/default.aspx>).

<sup>36</sup> The 2007 and 2008 Legatum Prosperity Index Reports show a robust link between freedom of choice and wellbeing in more than 80 countries worldwide (<http://www.prosperity.com/default.aspx>).

Kingdom show virtually the same GDP per capita, but highly diverse freedom and governance indicators.

**Table 1 THE LEGATUM PROSPERITY INDEX VARIABLES**

<b>Government effectiveness</b>	<i>World Bank Governance Indicators</i>
<b>Control of corruption</b>	<i>World Bank Governance Indicators</i>
<b>Freedom of choice</b>	<i>Average response to the question "In your country, are you satisfied or dissatisfied with your freedom to choose what you do with your life? (Gallup World Poll)</i>
<b>Equal opportunities</b>	<i>Average answers to the response: "Can people in this country get ahead by working hard, or not? (Gallup World Poll)</i>
<b>Education</b>	<i>Average years of secondary education per worker (own estimation)</i>
<b>Environment</b>	<i>Natural log of ecosystem services product per capita (Costanza et al., 1997) Average response to the question "In the city or area where you live, are you satisfied or dissatisfied with the quality of air?" and average response to the question: "In your country, are you satisfied or dissatisfied with efforts to preserve the environment? (Gallup World Poll)</i>
<b>Time for leisure</b>	<i>Average working hours per week in manufacturing (OECD) - Average response to the question "Approximately how many hours of your time yesterday was free time, where you could do what you wanted to do? (Gallup World Poll)</i>

Source: The Legatum Prosperity Index (<http://www.prosperity.com/default.aspx>).

**Table 2 Quality of life indicators**

Country/Indicators	Italy	Denmark	Sweden	Finland	UK	France	Germany	Netherlands	Spain
<b>Population</b> (in millions)	58.1	5.5	9.0	5.2	60.9	64.0	82.4	16.6	40.5
<b>Average life satisfaction</b>	6.7	7.9	7.4	7.7	6.9	6.8	6.5	7.4	7.1
<b>GDP</b> (growth)	1.5%	1.8%	2.6%	4.4%	3.1%	1.9%	2.5%	3.5%	3.8%
<b>GDP</b> (per capita) \$	30,400	37,400	36,500	35,300	35,100	33,200	34,200	38,500	30,100
<b>Governance</b>									
Government effectiveness	48%	100%	92%	94%	87%	71%	79%	87%	66%
Control of corruption	42%	97%	92%	100%	84%	71%	81%	86%	65%
<b>Freedom</b>									
Freedom of choice	58%	95%	97%	100%	81%	74%	72%	86%	79%
Equal opportunities	45%	62%	67%	87%	67%	60%	62%	72%	87%
Education	34%	61%	56%	56%	65%	68%	100%	50%	34%
<b>Other</b>									
Environment	31%	62%	60%	74%	50%	47%	68%	58%	25%
Time for leisure	32%	100%	34%	60%	86%	65%	88%	97%	69%

Source: Our calculations on the Legatum prosperity Index available at <http://www.prosperity.com/country.aspx?id=AU>

A simple correlation coefficient between life satisfaction and the other indicators was calculated (Table 3) in order to investigate the variables having the most important influence.

It is noteworthy that the variable most correlated to life satisfaction is freedom of choice. More interesting though is the fact that education is also negatively correlated to it. One can find the reasons analysing the specificities of each country<sup>37</sup>.

Governance indicators matter as well. On the contrary, equal opportunities do not seem to affect life satisfaction, but nevertheless the correlation is positive. The results depend largely on how the question is formulated. The question asks whether people can get ahead working hard. It is possible that the term “working hard” is badly perceived, since individuals may prefer a more easy-going life. The variable ought to be investigated more deeply.

**Table 3 Correlation coefficient between life satisfaction and other indicators**

GDP (per capita) \$	0.61
Government effectiveness	<b>0.72</b>
Control of corruption	0.69
Freedom of choice	<b>0.87</b>
Equal opportunities	0.46
Education	<b>-0.29</b>
Environment	0.41
Time for leisure	0.19

Source: Our calculations on the Legatum Prosperity Index available at <http://www.prosperity.com/country.aspx?id=AU>

In our view, people’s main frustration derives from the impossibility to choose. Institutions may simplify or complicate the freedom of choice. It is superfluous to underline how negatively government ineffectiveness and corruption can influence our choices in daily life.

In order to further investigate, we need more detailed data on institutional change, a proxy for the progress of societies. We should develop a scheme aimed at portraying institutional change and highlighting whether it is improving the level of democracy, equal opportunities, and the capacity to generate and maintain progressive forces.

If such a scheme is made public, given the Veblen’s process of “recursive causality”, it could in turn affect institutions. In other words, if we say that GDP is decreasing, the feelings and perceptions of people become negative.

<sup>37</sup> According to North (1990), *the kinds of skills and knowledge that will pay off will be a function of the incentive structure inherent in the institutional matrix.*

Feelings and perceptions, however, are also a direct consequence of how those data are presented. Similarly, if we publicly say that institutional change has followed a negative pattern and, by that, we communicate a negative fact, people could become aware of it and start making an effort in order to change it. In this sense, we stated in the introduction that policy makers might create a given institutional context rather than an alternative one.

Economic modelling, simplifying the real world, gives policy makers a tool to take prompt decisions. Up to now, policy makers use only four main variables in their decision making mechanism: GDP growth, unemployment, inflation, and the external trade balance. They should acquire more clear consciousness of the importance of the institutional variable for the progress of a country.

## 4 CONCLUSIONS

Notwithstanding the theoretical debate within heterodox economics, economic modelling has privileged the study of the so-called “steady state” at the expense of what is defined as “shocks”.

Both New Keynesian and Neoclassical Economics avoid focusing on abnormal situations. We lack, therefore, a theoretical framework to face periods of crisis (Colander et al., 2008).

According to Hodgson (2008):

*To understand the current economic crisis we have to look at both economic history and the history of economic thought. To understand how economics has taken a wrong turning we have to appreciate work in the philosophy of economics and the relationship between economics and ideology. These unfashionable discourses have to be brought back into the centre of the economic curricula and rehabilitated as vital areas of enquiry.*

The recent crisis is not only a financial crisis. In the United States, the real economy is slowing down too, mainly because of the following two factors: delocalization, caused by globalisation, and inflation, due to the increase in the price of oil. Moreover, the United States consumes more than it saves. Therefore, it has a huge internal and external debt.

Probably the culture of economic growth is under discussion. The limits to growth have recently become increasingly clear and evident. Using the conceptual Veblen’s framework of “recursive causality”, we may say that the

culture of growth has affected the culture of daily life and the whole structure of societies. The idea behind “financial insanity” is that life satisfaction is strictly correlated to material wealth. It is a common belief that poverty is bad and wealth is good, while no relativity is applied to these concepts. On the contrary, poverty is as a relative concept, as wealth is. A poor person in the United States is not in the same conditions as a poor one in Africa. From an institutional point of view, poverty is a multidimensional situation and institutions play an important role in determining the threshold that places an individual among the poor. For example, is one richer than another simply because he/she lives in a less polluted environment? Yes, but these considerations are not included in the GDP calculation.

Institutions up to now have brought forward the idea that the richer one is the freer he is. In other words, money is considered a tool to exercise power. Paradoxically, regardless of material possession it may conduct to “slavery”.

The culture of the GDP growth rate has guaranteed the validity of current economic modelling, without questioning the capacity to solve real economic situations. If we had recognised the importance of institutions in reaching a fair level of development and a greater quality of life, probably we would have taken a different direction and would have built different economic models.

Together with material safety, people aspire to social trust, peace, public services, friendship, meritocracy, democracy, freedom of choice, and whatever contributes to life satisfaction or quality of life. None of these elements is included in the GDP.

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