

HAPPINESS, HUMAN DEVELOPMENT,  
AND ECONOMIC (DE)GROWTH

MAURIZIO PUGNO <sup>★</sup>

ABSTRACT

Happiness is not just a pleasurable experience to pursue as a goal, as hedonism prescribed. Human development does not simply mean health, formal education, and economic growth, as the UNDP's index suggests. This paper proposes a new definition of 'human development': an increase in individual human skills that interact with the social and economic context in order to enable people to be the agents of their own lives, and then happy because satisfied with themselves. The hedonistic happiness-as-a-goal and this happiness-as-a-process are thus distinguished as two pathways to happiness with different properties and implications. The paper finally argues that while degrowth, as advocated for ecological reasons, may damage human development, policies for individual human development can encourage ecological behaviour.

**Keywords:** Happiness, Well-being, Human Development, Degrowth.  
JEL codes: I31, O15, O44.

1. INTRODUCTION

The word 'happiness' has changed meaning throughout history, from 'good fortune' in ancient times to a desirable achievement that modern people wish to pursue (McMahon 2006). Economics usually interprets 'happiness' as the outcome of individual's choices and behaviours, i.e. ex-

---

<sup>★</sup> Università degli studi di Cassino e del Lazio Meridionale. Address for correspondence: m.pugno@unicas.it. Acknowledgements: I wish to thank the participants in the workshop "Happiness, Well-being, and (De)growth" at the Fondazione Luigi Einaudi, Torino, 21 June 2019, and in particular the discussants of a previous version of this paper, Leonardo Becchetti and Sergio Cremaschi, whose comments have helped me to improve the paper. Any remaining errors are obviously mine.

perienced utility, which can be obtained in exchange for goods and working time. The recent subfield of Happiness Economics suggests that happiness, measured as a state of mind or as life satisfaction, is a better reference than GDP for policy purposes.

Happiness thus appears as a most desirable outcome. However, this perspective can be challenged by the simple thought experiment proposed by the philosopher Robert Nozick:

Suppose there were an experience machine that would give you *any experience you desired* [...]. All the time you would be floating in a tank, with electrodes attached to your brain [...]. Of course, while in the tank you won't know that you're there; you'll think that it's all actually happening [...]. *Would you plug in?* (Nozick 1974: 42-43; italics added).

Nozick suggests that most of us would not. Indeed:

We want to *do* the actions [...and] thinking we've done them. We want to *be* a certain way, to be a certain sort of person [...]. Perhaps what we desire is to live (an active verb) ourselves, in contact with reality (Nozick 1974: 43-45).

This thought experiment makes it clear that most people prefer to have a life as a *process* in which they feel to have *agency*, even if such a life is not as happy as they wish. Happiness as an outcome is thus not what people necessarily prefer. Even the description of happiness in the surveys using the Cantril ladder that fixes the top step at "the best possible life for you" does not seem complete, because people's agency is ignored.<sup>1</sup>

Nevertheless, exercising agency may be not pleasurable. This is clearly illustrated by Amartya Sen with a nice example.

You are enjoying eating a sandwich [...] sitting on the bank of the river Avon. Meanwhile, [...] a man who cannot swim is drowning [...] right in front of you. [...] You decide to save him [...]. You will chuck your sandwich, jump into the cold river, and haul the man out [...]. You may, of course, enjoy saving a life, and a part of your well-being may certainly be influenced by the opportunity to do good (Sen 1985A: 206).

In this example, Sen shows how a person gives up the pleasure of eating the sandwich, and chooses "to do good", i.e. she enjoys "agency freedom"

---

<sup>1</sup> The complete description in the survey question is the following: "Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" (CANTRIL 1965).

(Sen 1985A: 203). However, even if the person bothers to jump in the cold river, Sen recognises that “doing good may make the person contented and fulfilled” (Sen 1993: 36). An important distinction thus emerges between the pursuit of pleasure, such as spending some money and time to enjoy the sandwich, and the achievement of contentment as consequence of pursuing agency. But Sen does not explore further this distinction.

Nozick’s case of preferring to do not plug in the experience machine, and Sen’s case of preferring “to do good” suggest that what makes people’s live ‘happy’, whatever the exact meaning of this word, is unclear, in particular, for the economists. It is not immediately helpful assuming that people maximise utility, and that income and consumption automatically provide the necessary means for happiness. More structure in the analysis is needed.

To this end, we introduce the concept of ‘human development’, as both an outcome of people’s choices, and pathway for their ‘happiness’. More precisely, we advance and discuss the hypotheses (i) that pursuing agency under changing social and economic conditions is a typically human process, which will be called *individual human development*, and (ii) that this process is an alternative pathway to ‘happiness’ with respect to the pursuit of pleasure, which will be called happiness-as-a-goal. Attention will be paid on the properties of these two pathways to achieve ‘happiness’, and on their implications, while the possible difference of how happiness is subjectively felt will remain unexplored.

An implication of these hypotheses is that economics can extend the field of inquiry by exploring how people’s choices end up changing their identity, and hence their preferences. The research in the capability approach and in human development may also find it useful to consider this micro-dynamics.

The last part of the paper is devoted to explore some interesting links with economic growth. Namely, while happiness-as-a-goal is expected to increase with economic growth, it is not clear whether ‘individual human development’ should go with economic growth. And if not: how does individual human development relate to economic *degrowth*? This question is interesting if one acknowledges that economic growth involves environmental problems because it consumes natural resources which are limited.

The organisation of the paper is as follows. Section 2 makes evident how ‘happiness’ (which is here used as a general term) remains a poor concept in the economics of textbooks, in particular with respect to the role of time (2.1); how, by contrast, ‘happiness’ is enriched with the agency dimension in Sen’s capability approach (2.2); and how the UNDP’s *Reports*, although following Sen, elaborates only a descriptive concept of ‘human development’ (2.3). Section 3 presents and discusses the hypothesis of Individual Human Development (IHD) and, consequently, of happiness-as-a-

process (3.1), by also providing comforting evidence drawn from the literature (3.2), and by considering happiness-as-a-goal as the alternative choice option (3.3). Section 4 explores the links of IHD with economic growth, and in particular with degrowth. Section 5 concludes the paper.

## 2. AN OVERVIEW OF HAPPINESS AND HUMAN DEVELOPMENT IN ECONOMICS

### 2.1. *Happiness and Textbook Economics*

‘Happiness’ is almost an extraneous word in textbook economics, since ‘utility’ is the standard word to approximate the concept, and the fact that ‘preferences’ can be inferred from the observation of choices even makes subjective measures as unnecessary. Nevertheless, ‘happiness’, or more generally subjective well-being, is often taken as a proxy for experienced utility, as suggested by the empirical applications in Happiness Economics (Stutzer and Frey 2010). Experienced utility closely reflects the utility that are expected to be maximised, at least after proper learning, and if there are no perceptual and cognitive biases.

When more monetary and material resources become available to consumers, more utility is expected and then experienced, and more happiness is enjoyed. Standard economics thus would predict that income is positively associated with happiness, both across people and over time.

Consumption in textbook economics is an instantaneous act, and the derived happiness can be considered instantaneous as well, not because this is realistic, but because time is irrelevant to the analysis. Consumption goods need time to be produced and then bought by labour income, so that time is a cost that must be exchanged for consumption goods. Leisure time is workers’ opportunity cost of working, so that it can also be conceived as a cost for happiness.

If people want more consumption, and thus more happiness, they normally should consider some time to obtain it. They should partially abstain from consuming, i.e. they save, and/or study during a certain span of time, in order to accumulate physical and/or human capital, and thus to obtain more consumption. Time is a cost for happiness also in this case, although it is in the form of cumulated working time and/or cumulated study time.

Therefore, happiness over time is conceived in the textbook economics as sequence of moments in which people enjoy consumption, possibly after having got the habit of consuming some specific goods.<sup>2</sup> Time is im-

---

<sup>2</sup> Gary Becker introduces the interesting case of yielding more utility from learning by

portant for happiness, but as a cost in order to buy and possibly to learn appreciating the necessary goods for happiness. Money and time are thus the means, and happiness is the goal. This concept of happiness is similar to *hedonism*, which is however limited to the immediate pursuit of pleasure.

The experiment with Nozick experience machine, which has been mentioned in the Introduction, helps understand that textbook economics is unsatisfactory, because it makes evident that people want to be agent in their lives, rather than passive consumers. They want to experience themselves as acting, and then experience the consequences of such actions in the social and economic context, even if such experiences are not at the top of their preferences. They rather prefer to live in such real time.

## 2.2. Happiness in Sen's Capability Approach

Sen does not adopt rational choice theory, and he argues that people's well-being should be measured as a collection of capabilities, besides a collection of goods (or commodities) (Sen 1985B). "The 'capability' of a person – according to Sen (1993: 31) – reflects the alternative combinations of functionings the person can achieve, and from which he or she can choose one collection", where 'functionings' refer to "what the person succeeds in doing with the commodities" (Sen 1985B: 10). The set of functionings "can be thought to be the person's being", which generates person's 'happiness' (Sen 1985B: 12).

Sen uses the term 'happiness' to mean the subjective 'pleasurable state of mind', while he coins the term 'freedom' to refer to the set of capabilities that can be objectively evaluated. Sen regards 'happiness' as an unreliable and inaccurate measure with respect to 'freedom', because 'happiness' is subject to the moderating effect of subjective adaptation to the possible deprived conditions which can be objectively evaluated (e.g., Sen 1984: 309). This criticism, however, is not so important empirically, because adaptation has been proved to be partial, especially when deprivations are severe, and because the bias can be both negative and positive, if subjective well-being is related to income in large samples (Clark *et al.* 2016; Teschl and Comim 2005). The subjective/objective distinction thus becomes less relevant, at least when large samples of people are considered.

The distinction between 'happiness' and 'freedom' in Sen's approach is more interesting if observed from the perspective of timing. 'Happiness'

---

consuming. The individual who learns to appreciate music by listening to it, for example, obtains more utility from the same good, until he takes the pleasurable habit of listening music (BECKER and MURPHY 1988). Time spent to build up the habit can be considered as a cost, although it is not painful.

describes person's state of mind as *consequence* of what s/he has been able to achieve, while 'freedom' describes person's *potential* condition of doing and being, and hence what s/he could do and be in the future. Indeed, Sen distinguishes between achieved 'happiness' from the possibility to achieve 'happiness', which is a kind of freedom, and, similarly, achieved 'agency' from 'agency freedom' (Sen 1993: 35), which refers to "what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important", thus following his or her "conception of the good" (Sen 1985A: 203). These are agency goals to which the person is committed, thus possibly countering 'happiness' as immediate pleasure, as illustrated by the example in the Introduction.

The agency goals depend on person's identity, which is "how the person sees himself or herself" (Sen 1985C: 348). But, – according to Sen – the person has many identities, such as "[c]ommunity, nationality, class, race, sex, union membership, the fellowship of oligopolists, revolutionary solidarity, and so on" (Sen 1985C: 348), and some of them can be subject to person's choice. More precisely, Sen argues that the person can exercise his/her agency freedom when s/he chooses his/her goals and identity with the help of "reflection and analysis" and public debates (Sen 1999A: 273), especially when not conformed to traditions and social norms (Sen 1999B). Therefore, according to Sen, 'identity' rather means 'social identity'.

Sen's approach is an advance toward the definition of 'happiness-as-a-process'. In fact, person's enjoyment is not limited to the outcome of her behaviours, but it includes the choice of some social identities and the implied agency goals, as well as the realisation of these goals, by possibly consuming goods. This process may thus be seen in two steps, in which the person chooses her identity first, given the available biological and social constraints, and then chooses the consumption goods, given the available economic constraints.

Nevertheless, the approach appears limited because the two-step process remains exogenously pushed by societal opportunities and by adequate policies, including policies for education, health and economic growth. The two steps can thus circumscribed as logical steps, so that time becomes inessential. Society, nature, and the economy provide the sets of constraints, and the individual can choose her preferred identity and goods.

At the aggregate level, economic growth relaxes the economic constraint, but this may be not sufficient to improve freedom of the entire population, because some people may be impaired in their agency freedom. Opportune policies can contribute to relax the constraints, thus enabling people to enjoy more capabilities. The dynamics is thus exogenously driven, although the positive relationship between economic growth and happiness is not warranted (Pugno 2017).

### 2.3. *The Human Development Reports*

Sen's capability approach provides the conceptual foundation for the *Human Development Reports* issued annually by the United Nations Development Programme (UNDP) since 1990. These *Reports* elaborate a specific definition of 'human development' that can thus be quoted:<sup>3</sup>

Human development is a process of enlarging people's choices. The most critical ones are to lead a long and healthy life, to be educated and to enjoy a decent standard of living. Additional choices include political freedom, guaranteed human rights and self-respect – what Adam Smith called the ability to mix with others without being "ashamed to appear in public" [...]. Human development is, moreover, concerned not only with basic needs satisfaction but also with human development as a participatory and dynamic process [...]. The expansion of output and wealth is only a means. The end of development must be human well-being (UNDP 1990: 10).

This definition provides the basis for the *Reports* to build up the Human Development Index. This aggregates, by using the geometric mean, GNI per capita (in PPP\$), years of life expectancy at birth, means years of schooling, and expected years of schooling (UNDP 2018).

The concept of 'human development' that emerges from the *Reports* is both interesting and limited.<sup>4</sup> The interesting aspects are that output and wealth are seen just as a means, that human development is defined as a dynamic process enlarging people's choices with well-being as the end, and that the social dimension is captured by participation to the development as collective process. However, these aspects are simply described, because the focus of the *Reports* is to evaluate states of affairs with respect to people's lives, and to advocate policies that advance capabilities and human development. The *Reports*, in fact, eventually construct a simple and synthetic measure to compare countries and to observe changes over time.

The focus of the *Reports* is not on the internal mechanics of human development, and on how it interacts with the external conditions. For example, the claim that wealth is only a means for human development disappears in the construction of the Human Development Index. The conditions under which wealth is an effective means are not specified. Indeed, people may prefer wealth as end because they are unable to appreciate human development, not only in terms of education, which benefits are

---

<sup>3</sup> The definitions of 'human development' vary rather little through the *Reports* (ALKIRE 2010).

<sup>4</sup> These considerations also apply to the extended versions of the same approach (see, e.g., RANIS *et al.* 2004).



in fact usually underestimated, but also in terms of health, which in fact requires a self-controlled life-style. The expansion of people's choices may thus be hindered by people's preceding choices themselves, rather than by external constraints or inadequate policies.

The limits of the analysis of the *Reports* also emerge from how the social dimension and well-being are described. The former is limited to the participation to social life as signal of belonging to the community and to contributing to social decisions, like voting. But the social dimension also includes interpersonal relationships, which are crucial to trigger and enrich human development at the individual level. Well-being is described as an outcome in the *Reports*, while it may play an important role within human development itself.

### 3. TOWARD A MODEL OF INDIVIDUAL HUMAN DEVELOPMENT AND HAPPINESS

#### 3.1. *The Theoretical Background*

If we want to study human development as a process that is not simply determined by external conditions, but also depends on people's choices about their lifestyle, friendships, studies, work, family life, etc., a multidisciplinary approach is needed. In this section we propose a hypothesis of human development that takes up some theoretical insights coming from different disciplines, like philosophy and psychology, besides economics. A brief outline of these insights can be useful as introduction.

The most ancient insight is Aristotle's conception of eudaimonia. This refers to the way of life in which the person realises his potential by functioning well (Aristotle 2000; Keyes and Annas 2009). The main interesting property of eudaimonia is that happiness emerges as a consequence of person's search to improve himself and the social context close to him. Material resources are necessary, but opulence is not, and this latter should be not pursued in itself. Indeed, the person can rationally choose eudaimonic behaviours rather than the pursuit of richness, because – according to Aristotle – rationality is the distinctive characteristic of human beings. Our hypothesis of human development can be read as a revised and amended version of this conception of eudaimonia (Pugno 2019).

The Capability Approach provides other insights in line with Aristotle's thought (Sen 1993; Nussbaum 2011). Sen's version of this approach has been already discussed above. Martha Nussbaum's version goes deeper in distinguishing different types of capabilities. In particular, "*internal capabilities* [...] are trained or developed traits and abilities," which are distinct from the innate traits and abilities because they interact with "the political, social,



and economic environment” (Nussbaum 2011, p. 21). This interaction is so tight that she talks about “combinate capabilities,” which are not innumerable, but can be listed in the minimum of ten, according to what can be considered essential for human dignity and social justice. Our hypothesis of human development will better detail this interaction (Pugno 2017).

Other interesting insights come from Positive Psychology, which recognises that absence of mental problems does not necessarily imply happiness. One of the founders of this branch of psychology, i.e. Mihalyi Csikszentmihalyi, argued that happiness is a flow that the person lives when he is engaged in activities that are adequate to his skills, neither too complex, nor too simple (Csikszentmihalyi 1990). This intermediate position was also theorised by Tibor Scitovsky, who was one of the first economists that heavily drew evidence from psychology in order to make economics more realistic (Scitovsky 1976; Pugno 2016).

A popular insight in economics has been proposed by Akerlof and Kranton with their book on identity (Akerlof and Kranton 2010). They adhere to rational choice theory, but they introduce ‘identity’ (or self-image) in the agent’s utility function. This extension is interesting because it overcomes the standard representation of happiness as a pleasant experience of consuming goods because enjoyment also comes from the pursuit of ‘identity’, although this may require effort and sacrifice of some material opportunity. Akerlof and Kranton’s proposal reveals that standard economics is flexible enough to consider a psychic reward from the image one has of oneself. However, ‘identity’ refers in this case to social categories, i.e. to ‘social identity’, which remains exogenous to the person. In other words, the limitation is that “identity as self-image in the Akerlof-Kranton model is not reflexive” (Davis 2007: 352).<sup>5</sup>

### 3.2. *The Individual Human Development*

A model of human development in which the individual is the agent, i.e. s/he prefers to pursue her/his agency rather than only living pleasurable experiences, should consider that the individual is able to appreciate the benefits of agentic behaviours, as suggested by Nozick’s experiment and Sen’s example mentioned in the Introduction. In other words, since people can appreciate to see themselves as active, the model should consider that they can be, at the same time, reflexive and effective in changing their relationship with the context.

---

<sup>5</sup> For the distinction between personal and social identity see VIGNOLES (2017), who stresses the importance of the process that constructs them.

Such reflexivity and effectiveness are indeed distinctive characteristics of human species, and are also primarily mental characteristics. Let us then conceive Individual Human Development (IHD) as the process in which *the person enjoys the effective exercise of her skills so as (i) to learn about the relationship between her skills and the socio-economic context, thus reinforcing her skills, and (ii) to possibly provide new useful knowledge for others.* If the process of human development is thus conceived, material conditions, as captured by GDP per capita, health, and education can play a functional role.

In order to take into consideration all these aspects in details, a full-fledged model would be required. The present paper contributes to the core of such model by providing an analytical formulation of the hypothesis of IHD and happiness-as-a-process.<sup>6</sup>

Let us first assume that the person is endowed with a set of ‘skills’, where this term is extensive since it includes cognitive, social and emotional skills.<sup>7</sup> They can be substituted one with other to some limited (and variable) extent over person’s life-cycle. These are called ‘skills’, and not simply human characteristics, because they can be learned, and produce personally and socially valuable outcomes, in terms of school and work performance, criminal and risky behaviours. These skills influence personality traits and preferences, and shape personal identity (together with traits and preferences), i.e. how the person sees herself on the basis of her personal past, and, respectively, of community’s reports. The external conditions and the intentional use of resources can change these skills over person’s life cycle (Heckman 2008; Almlund *et al.* 2011). Although this set of skills is a private stock, the person does not completely know it, because these skills cannot simply be codified, and because some skills can be revealed through actual experience and challenge.

Let us then assume that the person, in order to relate with the social and economic context, chooses to perform some activities, such as studying math, working in a sales office, playing piano, dining with friends. Each activity is characterised by a scale of complexity, going from elementary steps to a maximum, where ‘complexity’ means difficulty in understanding, reporting, and using the matter, so that the activity requires laborious tasks to be effectively performed. The complexity scale is defined on the basis of cumulated social experience, rules and social conventions.<sup>8</sup>

---

<sup>6</sup> Partial but detailed and formal versions of the model are provided in PUGNO (2008, 2013, 2016, 2017).

<sup>7</sup> The socio-emotional skills mentioned by HECKMAN (2008) are sociability, motivation, perseverance, attention, self-confidence, and locus of control.

<sup>8</sup> A proxy for complexity could be the inverse of the frequency with which the activity is successfully achieved in society.

For example, the topics in mathematics are usually organised according to a rising scale of complexity through the different school grades. Even interpersonal relationships exhibit a scale of complexity, from fluency in friendship to the problems of communication between strangers. These complexity scales can thus be regarded as exogenous for the single persons, though endogenous to the communities. Nevertheless, complexity cannot be precisely specified and known, because communities, their perceptions and evaluations differ, even through time.

Normally, the greater the complexity of an activity, the higher is the level of skills required to effectively perform that activity. This relationship can be represented by a positively-sloped line in a diagram, where an index for the set of skills required is measured on the x-axis, and the complexity of the activity is measured on the y-axis (see Figure 1).<sup>9</sup> As the person is endowed since birth by some minimal skills, this set can be read on the x-axis as the initial skills level. For this level, the person will be fully satisfied if s/he picks up the complexity degree corresponding to the positive line, which can thus be called as the 'optimum line'. If s/he picks up a higher or a lower complexity degree, s/he will be dissatisfied. The larger the gap between the optimum line and the complexity degree picked up by the person, the more intense the dissatisfaction. Note that the height and slope of the optimum line depends on the specific talent and aptitude owned by the person for that activity. In fact, the same set of skills, which are rather general in our definition, can be more or less effective to perform the activity depending on person's innate talent and aptitude.

However, the person does not exactly know which is the optimum complexity degree for his/her skills until s/he has experienced it. Therefore, s/he will seek to approach the optimum line on the basis of his/her dissatisfying experience, his/her intuition and information from others. This dynamics is represented in the diagram by a vertical trajectory on the initial skills going from some complexity degree towards the optimum line. The person may quit this attempt altogether if the gap is too large, or if other activities become more satisfying. Seeking to approach the optimum line, and searching for other activities require time, and can be facilitated by social and economic resources.

In performing the activities, and seeking both the most satisfying ones and the best complexity degrees of them, the person experiences his/her agency, with the consequence of improving his/her skills. This fact is captured in the diagram by a deviation of the trajectory to the right. It is evi-

---

<sup>9</sup> This diagram is inspired by CSIKSZENTMIHALYI (1990). For the mathematical properties of this diagram see PUGNO (2016).

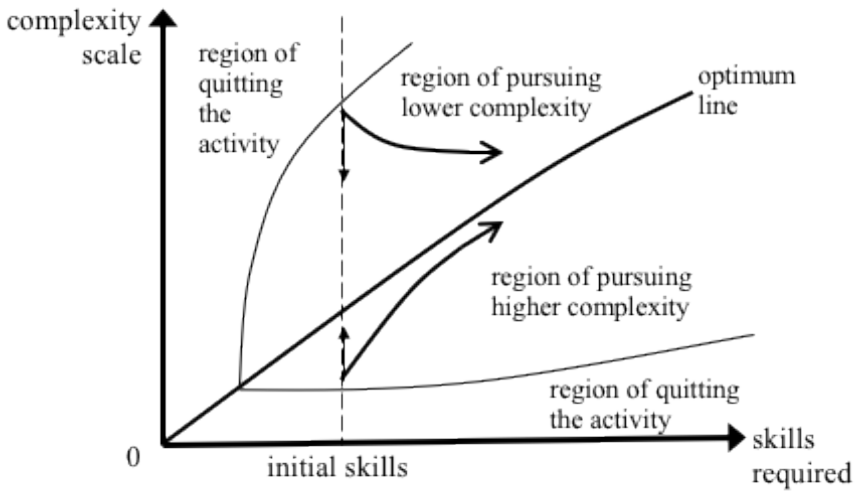


Figure 1. The dynamics of the complexity/skills matching, and of skills.

dent from the positive slope of the optimum line that the person becomes ready to successfully deal with a greater complexity degree. Therefore, his/her search is renovated, and it will continue, as shown by the trajectory pointing to the right and towards the optimum line. Note that in the case of a prolonged trajectory but running along a high and steep optimum line, the person reveals great talent for that activity, but moderate IHD from it, at least directly.

The process of IHD can thus be conceived as individual's 'home production',<sup>10</sup> which employs as inputs the flows of person's and others' time and goods, as well as the stocks of person's initial skills and of community's knowledge. The person can obviously utilise the available inputs only partially, but all inputs are essential up to some minimum amount, above which they can be imperfectly substituted one with the other. The process of IHD produces as outputs the increase of person's human skills, his/her satisfaction (or 'happiness'), and, possibly, new knowledge and things that are useful for others. The first two outputs make the process *endogenous*, because the person appreciates what enables him/her to increase such appreciation. In fact, s/he is not only satisfied when the optimum line is approached, which is 'happiness' for goal achievement, but s/he also enjoys to challenge his/her skills, which is 'happiness' from pursuing the

<sup>10</sup> The idea of 'home production' has been popularised by BECKER (1965).

goal. Note that this latter source of happiness turns the time used in IHD from a cost to a benefit. Finally, the possible output of new knowledge and things, up to very discoveries and inventions, is a positive externality that others receive. This output, together with the inputs of others' ideas and knowledge, besides material concerns, makes the person and his/her community dynamically interacting, so that also the development of the community becomes endogenous.

The process of IHD is not at all smooth, and it can hardly approach an equilibrium path, because the external inputs are subject to various shocks. In fact, better material conditions and economic growth provide new opportunities and challenges that can strengthen this process, especially when the subsistence level is being overcome. Unemployment and economic crises are clearly negative shocks, instead. Similarly, meeting interesting persons and bereavements in the family are examples of opposite shocks.

The three measures that compose UNDP's Human Development Index can thus be functionally related to IHD. Growth of GDP per capita favours but not guarantees IHD. Better life expectancy permits a prolonged IHD but is not a component of it. Education takes part of IHD, but it should be nevertheless complemented by informal early education and by the formation of socio-emotional skills in general.

The process of IHD also helps understand the issues raised by Nozick's and Sen's cases. People do not necessarily pursue pleasurable experiences only, but they can appreciate undertaking agentic behaviours. They may be dissatisfied of how their personal identity relates with the world, so that they search for more adequate external conditions. This challenges their skills, and changes their personal identity. Therefore, people can be both subjects and objects of themselves (besides objects of the surrounding circumstances in their life), i.e. they are reflexive and effective in their choices. Nothing excludes that pleasurable activities are undertaken, but in functional way for this long-life search, rather than pursued as final goals.

### *3.3. Some Evidence from the Literature*

The formation of people's skills from infancy to adulthood has been extensively investigated by James Heckman and others. Some relevant results of their work have already been mentioned above, but the further result that skills are self-productive, as it emerges from their estimates, is consistent with our result that IHD is endogenous.<sup>11</sup>

---

<sup>11</sup> Heckman (and his colleagues) estimates a reduced-form equations for children in which their time and effort are not made explicit, while the complete theoretical model for adults provides more structure (CUNHA *et al.* 2008; ALMLUND *et al.* 2011).

The source of ‘happiness’ due to pursuing interesting search, besides the usual source due to having achieved goals, characterises what psychologists call ‘intrinsic motivations’ (Deci and Ryan 2000). The importance of the former source of happiness and of intrinsic motivations has been recognised by both psychologists (Klug and Maier 2015; Kaftan and Freund 2018) and economists (Scitovsky 1986; Frey 1997). Intrinsic motivations appear as especially effective when the tasks are complex and creative (Camerer and Hogarth 1999; Amabile and Pillemer 2012).

The fact that people with high IHD lead happier lives is comforted by a number of evidence in neuroscience. For example, people who attach special importance to personal growth, together with purpose in life and psychological autonomy, which are considered proxies for IHD, also exhibit better health indicators like cardiovascular, neuroendocrine, and immune biomarkers (Ryff and Singer 2008). Happiness can thus have a solid ground on health.

The positive two-ways externalities between the development of single persons and the common stock of ideas and knowledge have been effectively studied by Michael Tomasello. In fact, by comparing the behaviour of children with that of chimpanzees, he clearly finds that social learning as a cumulative process is a typical human phenomenon (Tomasello 2009).

#### 3.4. *Happiness-as-a-goal and Happiness-as-a-process*

People do not employ all of their resources in the process of their Individual Human Development, however. Happiness-as-a-process is not the only one that they enjoy. In fact, people can employ resources in order to pursue happiness-as-a-goal, or more precisely, they can exchange resources with the final purpose to buy happiness as a pleasurable experience. The time and budget constraints cannot be avoided. A question thus arises: which of the two pathways to happiness is more effective?<sup>12</sup>

The answer is not easy both theoretically and empirically, especially because of the long-standing problem of interpersonal comparability of happiness. However, some considerations can be drawn by taking a dynamic perspective, as the process of IHD suggests.

There are two key-differences between the two pathways to happiness. First, the increase of happiness-as-a-goal depends on the greater availability of external resources only, e.g. working time, wealth, consumption goods. The increase of happiness-as-a-process also depends on the self-generation of internal resources, i.e. more skills. Consequently, happiness-as-a-goal is

---

<sup>12</sup> Nozick advanced the uncomfortable suggestion that: “Plugging into the machine is a kind of suicide” (Nozick 1974: 43-45).

more vulnerable to negative shocks on the available (external) resources, because happiness-as-a-process can rely on internal resources as a buffer, and it can less heavily rely on material resources because these may be unnecessary above the subsistence level. Happiness-as-a-goal is thus expected to display an unfavourable dynamics with respect to happiness-as-a-process over people's life-cycle.<sup>13</sup> However, if the initial conditions, as typically represented by the family background and socio-economic status, are especially deprived, the process of IHD can be compromised, and the advantage of happiness-as-a-process could not materialise.

The second difference between the two pathways regards uncertainty. Not only has the process of IHD made happiness-as-a-process more uncertain, because this can rely less on past experience and information from others than happiness-as-a-goal. But the modern rise of pressure coming from producers makes more effective the promise of immediate satisfaction from consuming, and thus more appealing happiness-as-a-goal. One would thus expect that happiness-as-a-goal will prevail in modern societies (Pugno 2016).

The two pathways may be complementary in principle. But the endogenous dynamics of IHD, and habituation in pursuing happiness-as-a-goal point towards substitutability.

Therefore, people's life can be described not only through the flow of events that happen to them, but also through their choices between the two pathways, i.e. between the goal of experiencing pleasure, and the goal of matching their growing skills with the context. In such latter case their personal identity can evolve in relationship with others, thus possibly going through different social identities (Davis 2005). By contrast, stable social identities are due to people's conformism, which means little individual search to develop personal talent and aptitude.

#### 4. COULD DE-GROWTH ENCOURAGE HUMAN DEVELOPMENT AND HAPPINESS?

Individual Human Development for an enjoyable life needs time and effort, but also a favourable social and economic context, i.e. a caring and stimulating family background and education, safe and cooperative

---

<sup>13</sup> A consistent empirical result is obtained by regressing 'life satisfaction', as the common index of 'happiness', on intrinsic and extrinsic motivations on the job, with the usual controls, and by distinguishing the two worldwide samples of individuals according to the two motivations. People with intrinsic motivations thus exhibit an almost monotonic growth of life satisfaction over their age, while extrinsic people exhibit the standard inverted-U pattern (SALINAS-JIMÉNEZ *et al.* 2010: table 3).



neighbours, qualified schools, satisfactory public services, and an interesting and secure job. In few words, IHD needs the conditions for people to think about their future and to plan their life goals. For these conditions, a minimum level of income is necessary, but *growth* of income above this minimum level is not strictly necessary, because IHD is essentially a personal mental phenomenon that rather requires social richness and progress.<sup>14</sup>

But what are the effects on IHD and the ensuing happiness due to *de-growth* of income?

This question is not an academic one because economic growth consumes natural resources, and the dramatic point in which consumption exceeds self-reproduction of these resources is achieving in our days. Therefore, degrowth could bring the economy towards a path of environmental sustainability. This is the argument of some ecologists, who are worried about the deterioration of the natural environment and the consequent heavy heritage for the future generations. They thus advocate opportune policies for economic degrowth, or at least for no-growth.

Some ecologists push the argument even further, maybe because these policies likely encounter the opposition of producers. Effective ecological policies – thus runs the extended argument – should encourage ecological behaviours in consumers with the consequence of properly re-directing their demand for market products, and in so doing people can re-discover a more human dimension. In particular, people would re-discover the richness of social life, because longer leisure hours would offer more social opportunities, the shift to local and domestic production would make social interaction closer, ecological behaviours would be a good opportunity for the formation of social groups (Cosme *et al.* 2017; Jackson 2005; Latouche 2009).

This argument, however, suffers from significant flaws. First, it should be reminded that ecological policies aim to be effective by making people afraid of the environmental deterioration due to economic growth, and by imposing penalties for anti-environmental behaviours. But the environment is a public good, and rationality prescribes to minimise the private contribution to reduce the deterioration of the environment. This fact makes the ecological policies inefficient. Second, it is unlikely that people give up some secure comfort from consuming in exchange for an uncertain benefit from the opportunity of more social life. Free time and social in-

---

<sup>14</sup> For example, in the case of children, Heckman and colleagues thus conclude a report for the OECD: “quality parenting – stimulation, attachment, encouragement, and support – is the true measure of child advantage, and not the traditional measures of poverty commonly used in policy discussions” (KAUTZ *et al.* 2014: 12).

teraction are already abundant, as the intense use of social media recently reveals, while the real problem is the purpose with which to use free time and relationships. Third, people disproportionately suffer the reduction of growth and degrowth because of habituation to growing standards of living, because of savouring future possibilities, and because of 'loss aversion' (Loewenstein and Sicherman 1991; Kahneman and Tversky 1979). Last but not least, the policies against poverty, inequality, and unemployment become more difficult with no-growth or degrowth.

Therefore, the effects on IHD and on the ensuing happiness due to degrowth of income are likely to be negative. In particular, the perspective of a reduced standard of living threatens the conditions for people to think about their future and to plan their life goals.

The link of IHD with degrowth, or, better, with the ecological reasons behind it, becomes more convincing if the causality is reversed. *Policies for IHD can be effective in encouraging people to undertake ecological behaviours, thus reducing consumption of natural resources.* In fact, IHD is a process of improving the matching between person's skills (and hence personal identity) and the socio-economic context, by thus drawing from and contributing to the context. This process facilitates the internalisation of the external effects of consumption behaviour on the environment. Policies for IHD can thus also improve the effectiveness of the ecological policies.

Recent empirical studies on this matter find consistent results with our conclusions. A study on the UK finds that people draw enjoyment from the ecological aspect of their personal identity (or more precisely from their assessment of how ecological is their behaviour), rather than from their *actual* ecological behaviour (Binder and Blankenberg 2017). A study on a pool of 35 European countries confirms that people draw enjoyment from their ecological personal identity, and it further finds that sharing such self-assessment with others adds enjoyment (Welsch and Kuehling 2017). A study on representative samples of the US and Canada finds that perceived ecological threat predicts ecological behaviour, but it also predicts such a *reduction* in life satisfaction from this behaviour that the positive effect of ecological behaviour on life satisfaction is neutralised (Schmitt *et al.* 2018). A survey on the determinants of ecological behaviours concludes that education is a more important determinant than income and employment status, and that both sharing ecological identity with others and assessing themselves as able to control life events predict more ecological behaviours, while old habits impacts in opposite direction (Blankenberg and Alhusen 2018). Finally, a study using the 'public good game' finds that advising players to contribute to ecological behaviour is effective but only temporarily (Festré *et al.* 2017).

## 5. CONCLUSIONS

Human development might appear going together with people's rise of happiness and with economic growth. But before exploring these links, 'human development' should be distinctly defined. Unfortunately, economics seems ill-equipped for such exploration, because this requires some analysis of human development *within* the individuals.

This paper thus proposes the hypothesis of Individual Human Development (IHD) as the process in which the person exercises her cognitive, social, and emotional skills, with the purpose to search for the activities and challenges that give the best opportunities to develop her talents and aptitudes. IHD thus emerges as an endogenous process, which makes people's life worth living, and which can draw much benefit from economic growth, although this is not an essential input for IHD when the subsistence level is overcome.

The paper further distinguishes a second pathway to happiness that can bypass IHD by directly pursuing happiness-as-a-goal. In this latter case, resources must be spent in exchange, so that economic growth is always a necessary input for such happiness-as-a-goal. Therefore, negative economic shocks will hurt more happiness-as-a-goal than happiness-as-a-process, because IHD endogenously provides resources to the person.

The paper concludes by observing that degrowth, as advocated by some ecologists, unlikely favours human development, as they seem to claim, while degrowth likely damages people's happiness. Rather, policies for IHD are advisable, not only to make happiness less vulnerable to external shocks, like the economic recessions, but also to spread ecological behaviours in society as an internalised aspect of IHD.

## REFERENCES

- AKERLOF G.A. and KRANTON R.E. 2010, *Identity Economics*, Princeton: Princeton University Press.
- ALKIRE S. 2010, "Human Development: Definitions, Critiques, and Related Concepts", *United Nations Development Programme – Human Development Research Paper*, 2010/01.
- ALMLUND M., DUCKWORTH A.L., HECKMAN J.J. and KAUTZ T.D. 2011, "Personality Psychology and Economics", in E.A. Hanushek, S. Machin and L. Woessmann (eds.), *Handbook of Economics of Education*, Amsterdam: Elsevier: 1-181.
- AMABILE T.M. and PILLEMER J. 2012, "Perspectives on the Social Psychology of Creativity", *Journal of Creative Behavior*, 46 (1): 3-15.
- ARISTOTLE 2000, *Nicomachean Ethics*, translated by Roger Crisp, Cambridge Texts in the History of Philosophy, New York: Cambridge University Press.

- BECKER G.S. 1965, "A Theory of Allocation of Time", *Economic Journal*, 75: 493-517.
- BECKER G.S. and MURPHY K.M. 1988, "A Theory of Rational Addiction", *Journal of Political Economy*, 96 (4): 675-700.
- BINDER M. and BLANKENBERG A.-K. 2017, "Green Lifestyles and Subjective Well-being: More about Lifestyles than Actual Behavior?", *Journal of Economic Behavior and Organization*, 137: 304-323.
- BLANKENBERG A.-K. and ALHUSEN H. 2018, "On the Determinants of Pro-environmental Behaviour", University of Goettingen, *CEGE Discussion Paper* 350, May.
- CAMERER C.F. and HOGARTH R.M. 1999, "The Effects of Financial Incentives in Experiments", *Journal of Risk and Uncertainty*, 19: 7-42.
- CANTRIL H. 1965, *The Pattern of Human Concerns*, New Brunswick: Rutgers University Press.
- CLARK A.E., D'AMBROSIO C. and GHISLANDI S. 2016, "Adaptation to Poverty in Long-run Panel Data", *Review of Economics and Statistics*, 98 (3): 591-600.
- COSME I., SANTOS R. and O'NEILL D.W. 2017, "Assessing the Degrowth Discourse: A Review and Analysis of Academic Degrowth Policy Proposals", *Journal of Cleaner Production*, 149: 321-334.
- CSIKSZENTMIHALYI M. 1990, *Flow*, London: Rider.
- CUNHA F. and HECKMAN J.J. 2008, "Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation", *Journal of Human Resources*, 43 (4): 738-782.
- DAVIS J.B. 2005, "Social Identity Strategies in Recent Economics", *Journal of Economic Methodology*, 13: 371-390.
- 2007, "Akerlof and Kranton on Identity in Economics", *Cambridge Journal of Economics*, 31: 349-362.
- DECI E.L. and RYAN R.M. 2000, "The 'What' and 'Why' of Goal Pursuits", *Psychological Inquiry*, 11: 227-268.
- FESTRÉ A., GARROUSTE P., KIRAKOZIAN A. and TOUMI M. 2017, "The Pen is Mightier than the Sword: How Thirdparty Advice or Sanction Impacts on Pro-environmental Behavior. Technical Report", Groupe de Recherche en Droit, Economie, Gestion (GREDEG CNRS), Université de Nice Sophia Antipolis, *GREDEG Working Papers Series*, 2017-15
- FREY B.S. 1997, "On the Relationship between Intrinsic and Extrinsic Work Motivation", *International Journal of Industrial Organization*, 15 (4): 427-439.
- HECKMAN J.J. 2008, "School, Skills, and Synapses", *Economic Inquiry*, 46 (3): 289-324.
- JACKSON T. 2005, "Live Better by Consuming Less?", *Journal of Industrial Ecology*, 9 (1-2): 19-36.
- KAUTZ T., HECKMAN J.J., DIRIS R., WEEL B. and BORGHANS L. 2014, "Fostering and Measuring Skills", Paris, OECD Publishing, *OECD Education Working Papers* 110.
- KAFTAN O.J. and FREUND A.M. 2018, "The Way is the Goal: The Role of Goal Focus for Successful Goal Pursuit and Subjective Well-being", in E. Diener, S. Oishi and L. Tay (eds.), *Handbook of Well-being*, Salt Lake City, UT: DEF.
- KAHNEMAN D. and TVERSKY A. 1979, "Prospect Theory: An Analysis of Decision Under Risk", *Econometrica*, 47 (2): 263-291.
- KEYES C.L.M. and ANNAS J. 2009, "Feeling Good and Functioning Well: Distinctive Concepts in Ancient Philosophy and Contemporary Science", *Journal of Positive Psychology*, 4: 197-201.

- KLUG H.J.P. and MAIER G.W. 2015, "Linking Goal Progress and Subjective Well-being: A Meta-analysis", *Journal of Happiness Studies*, 16: 37-65.
- LATOUCHE S. 2009, *Farewell to Growth*, Cambridge: Polity.
- LOEWENSTEIN G. and SICHERMAN N. 1991, "Do Workers Prefer Increasing Wage Profiles?", *Journal of Labor Economics*, 9: 67-84.
- MCMAHON D. 2006, *Happiness: A History*, New York: Atlantic Monthly Press.
- NOZICK R. 1974, *Anarchy, State and Utopia*, New York: Basic Books.
- NUSSBAUM M.C. 2011, *Creating Capabilities*, Cambridge (Mass.): Belknap Press.
- PUGNO M. 2008, "Economics and the Self. A Formalisation of Self-Determination Theory", *Journal of Socio-Economics*, 37: 1328-1346.
- 2013, "Scitovsky and the Income-happiness Paradox", *Journal of Socio-Economics*, 43: 1-10.
- 2016, *On The Foundations of Happiness in Economics: Reinterpreting Tibor Scitovsky*, London: Routledge [paperback edition in 2018].
- 2017, "Scitovsky Meets Sen: Endogenising the Dynamics of Capability", *Cambridge Journal of Economic*, 41 (4): 1177-1196.
- 2019 (forthcoming), "The Economics of Eudaimonia", in L. Bruni (ed.), *A Modern Guide to the Economics of Happiness*, Elgar.
- RANIS G., STEWART F. and SAMMAN E. 2004, "Human Development: Beyond the Human Development Index", *Journal of Human Development*, 7: 323-358.
- RYFF C.D. and SINGER B.H. 2008, "Know Thyself and Become What You Are", *Journal of Happiness Studies*, 9: 13-39.
- SALINAS-JIMÉNEZ, M.D., ARTÉS J. and SALINAS-JIMÉNEZ J. 2010, "Income, Motivation, and Satisfaction with Life", *Journal of Happiness Studies*, 11: 779-793.
- SCHMITT M.T., AKNIN L.B., AXSEN J. and SHWOM R.L. 2018, "Unpacking the Relationships between Pro-environmental Behavior, Life Satisfaction, and Perceived Ecological Threat", *Ecological Economics*, 143: 130-140.
- SCITOVSKY T. 1976, *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction*, Oxford: Oxford University Press.
- 1986, *Human Desires and Economic Satisfaction*, New York: New York University Press.
- SEN A.K. 1984, *Resources, Values and Development*, Oxford: Basil Blackwell.
- 1985A, "Well-being, Agency and Freedom", *Journal of Philosophy*, 83: 169-221.
- 1985B, *Commodities and Capabilities*, Amsterdam: North Holland.
- 1985C, "Goals, Commitment, and Identity", *Journal of Law, Economics, and Organization*, 1: 339-354.
- 1993, "Capability and Well-being", in A. Sen and M. Nussbaum (eds.), *The Quality of Life*, Oxford: Clarendon Press: 30-53.
- 1999A, *Development as Freedom*, New York: Knopf.
- 1999B, *Reason before Identity*, Oxford: Oxford University Press.
- STUTZER A. and FREY B.S. 2010, "Recent Advances in the Economics of Individual Subjective Well-being", *Social Research*, 77: 679-714.
- TESCHL M. and COMIM F. 2005, "Adaptive Preferences and Capabilities", *Review of Social Economy*, 63 (2): 229-247.
- TOMASELLO M. 2009, *Why We Cooperate*, Cambridge: Boston Review Book.

- UNITED NATIONS DEVELOPMENT PROGRAM (UNDP) 1990, *Human Development Report 1990: Concept and Measurement of Human Development*, New York: Oxford University Press.
- 2018, “Human Development Indices and Indicators. Technical Notes. Statistical Update”. Available at: [http://hdr.undp.org/sites/default/files/hdr2018\\_technical\\_notes.pdf](http://hdr.undp.org/sites/default/files/hdr2018_technical_notes.pdf) (accessed: August 29, 2019).
- VIGNOLES V.E. 2017, “Identity: Personal and Social”, in K. Deaux and M. Snyder (eds.), *The Oxford Handbook of Personality and Social Psychology*, 2<sup>nd</sup> ed., Oxford: Oxford University Press: 289-316.
- WELSCH H. and KUEHLING J. 2017, “How Green Self Image Affects Subjective Well-being: Pro-environmental Values as a Social Norm”, *Oldenburg Discussion Papers in Economics* 404.