

# RECONCEPTUALIZING DEVELOPMENT IN THE GLOBAL INFORMATION AGE

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# Dignity as Development

*Pekka Himanen*

### **What is the goal of development?**

In this final chapter, we must come back to the question that was raised at the very beginning of this book, and which has been present throughout: what is development in the Global Information Age?

Ultimately, one is forced to ask the following fundamental philosophical question: What is the ultimate goal of a sustainable development model? Or, to put it another way: What is the values frame of such development? Ultimately, this is the answer to the question: what really is “development”? So this last chapter looks at the key issue of this book finally from an ethical viewpoint and will complete it by making the philosophical argument for “dignity as development.”

Second, as we have argued in this book, in our new Global Information Age the question about development has to be raised in relation to the new theoretical framework that best describes the conditions of development in this age. As always, everything here will be tightly tied with the social scientific analysis on development that we have made throughout this book. So, viewed from this perspective, this chapter completes the social scientific framework we presented, starting in Chapter 1, especially from the viewpoint of the cultural link in development.

Third, the question also has very significant practical importance. The question of the new goals of development is currently being debated extensively among both researchers and policymakers from the UN to individual countries and organizations such as the World Economic Forum. In June 2012, in the UN's Rio+20 meeting (United Nations Conference on Sustainable Development), the decision was reached to formulate new goals for sustainable development. Consequently, the UN has been working to define these new goals in a way that would go beyond the industrial era's GDP and HDI. These processes have indicated their openness to additional contributions that would go beyond their already very valuable status.

In fact, the greatest problem in this otherwise extremely valuable research and policymaking discussion is that often it ends by presenting an ad hoc type collection of aims and indicators, which lacks a systematic philosophical argument on the goal of development as well as a well-grounded social scientific framework on what the requirements of development are in the Global Information Age.

To underline the connections, the chapter proceeds in three parts: (1) It makes a philosophical argument on the ultimate goal of development, for "dignity as development," using the elements of the development theories of John Rawls, Amartya Sen, and Joseph Stiglitz, and taking a step forward from there. (2) Throughout this book, we have sought to root all theory directly in the best empirical data. So, therefore, in order to operationalize the concept of "dignity as development," its links to the main elements of the social scientific theoretical framework for the Global Information Age used in this book are explicated, emphasizing now the cultural link. (3) Finally, based directly on the grounds of these two first parts of the chapter, the concept of "dignity as development" is operationalized in a preliminary way that also gives it policy connectivity.

### **The philosophical argument: dignity as development**

Industrial society was long dominated by economic growth as the goal of development. However, undefined economic growth alone is no longer a sufficient aim, for the simple reason that such a thing has become ecologically impossible and aside from the fact that its relation to the

sustained increase in wellbeing is unclear (the same applies to GDP as an indicator of development, as activity that diminishes wellbeing and is ecologically destructive also counts as growth in GDP).

At the outset of this examination is the contention that the fundamental aim of sustainable development is the furthering of the requirements of a dignified life. Now it is appropriate to define exactly what that entails.

This examination has used especially the three most significant recent theories of the wider aims of development: the two most influential theories from the late twentieth century are Amartya Sen's *Development as Freedom* (1999) and John Rawls' *A Theory of Justice* (1971). At the beginning of the twenty-first century, a third significant approach has developed: wellbeing economics and psychology, whose principal exponents include Nobel Prize laureates Joseph Stiglitz and Daniel Kahneman.

### *Rawls: Justice as Fairness*

Rawls' *A Theory of Justice* (1971) is perhaps the single most influential opus of political philosophy in the twentieth century, a work in which he presents his theory of "justice as fairness." In later works Rawls was to define certain aspects of the theory further (e.g. Rawls 2001; for the development of Rawls' thinking, cf. Freeman 2007 and Weithman 2011, and for interpretations on his theory, see the article collections by Daniels 1975, Kukathas 2003, and Richardson and Weithman 1999).

In this book, this theory has been used as an ethical argument for a renewed wellbeing society as a basis for sustainable wellbeing, by linking it to the concept of *justice*.

Rawls begins his presentation by asking the reader to imagine humans in the "original position," asking from behind the "veil of ignorance:" what is a just society like? The starting point here is that, in this original state, humans do not know which position in society they will come to inhabit. Based on this, they first reach a consensus that a just society is driven by a set of principles that everyone can feel are just, regardless of which societal position they themselves inhabit. From this initial consensus, Rawls extrapolates the two famous defining principles that drive a just society. The first of these is the Liberty Principle and the second is the Equality Principle.

According to the Liberty Principle, every person has an equal right to basic freedoms in a manner that is compatible with the same rights of other people. These freedoms include the freedom of religion, opinion, self-expression, and self-realization, and, for instance, the freedom to own private property.

The Equality Principle is concerned with the principle of fair equality of opportunity. In this context, fairness means that what is at stake is not only a formal principle of equal opportunity; rather, crucially, all people should in practice have fair equal opportunities to access things such as education, whereby they may more completely realize their full potential. From the Equality Principle it follows that everyone should in practice have fair and equal opportunities for wellbeing.

Based on these principles, people enter into a “social contract” regarding the establishment of a just society. In this light, Rawls’ thought marks a continuation of the philosophical “social contract” tradition of Thomas Hobbes, John Locke, Jean-Jacques Rousseau, and Immanuel Kant, in which the contract was established in order to replace the survival struggle of a “natural state” (see Hobbes *Leviathan* [1651]; Locke *Second Treatise of Government* [1689]; Rousseau *Du contrat social* [1762]; Kant *Die Metaphysik der Sitten* [1797]).

### *Sen: Development as Freedom*

Similarly, in the field of development philosophy the most influential analysis of the twentieth century is Amartya Sen’s theory of “development as freedom” (e.g. Sen 1980, 1999; for later developments, see Sen 2009; for the continuation of Sen’s line of thinking cf. e.g. Ul Haq 1999; Nussbaum 2000, 2006, and 2011; Alkire 2002).

According to Sen’s famous “development as freedom” thesis, development means increasing freedom. In other words, development entails, for example, ever-greater levels of freedom from hunger, disease, lack of knowledge, and poverty as well as increased freedom for self-expression and self-realization.

In this book, Sen’s theory has been applied to the goal of economic development: the ethical ground for economic development is increasing such *freedoms* of wellbeing.

In a philosophical sense, Sen marks the continuation of a liberalist tradition of Adam Smith and John Stuart Mill. From the perspective of the present examination, it is important to note that for Adam Smith, often referred to as the “father of capitalism,” economy existed to serve primarily ethical objectives. The famous contention at the heart of Smith’s *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776)—namely that, in economy, focusing on the fostering of self-interest will also produce the best results with regard to overall interests, when such self-interest is conducted in competition within the free market—argues the ethical case for self-interest by linking it to the fostering of collective interest in the best possible way. This is the ethical argument for capitalism. Indeed, Smith was at least as much a moral philosopher as he was an economic theorist, and he considered *The Theory of Moral Sentiments* (1759) as his most significant work. The moral theory he expounds in this work contends that, when it is correctly understood, self-interest takes other people into account, because humans are creatures who experience joy at other people’s joy and sorrow at other people’s sorrow. As a pair of works, *The Wealth of Nations* and *The Theory of Moral Sentiments* reveal a broader vision in which the function of economy is to serve essentially ethical objectives.

Sen’s most significant contribution is in linking the notion of freedom to the concept of capability, i.e. to the notion of “freedom as capability.” Freedom is *capability*. Capabilities are freedoms in the sense of real opportunities. Here, capability encompasses both the levels of the external real opportunity and the inner capacity.

Sen stresses that freedom is a rather empty notion unless it is linked to real economic, social, and cultural capabilities. For instance, the freedom of self-realization is meaningless if such a freedom does not include a real opportunity of gaining access to education in order to more fully develop oneself. The most famous example of Sen relates to famines. In practice, most famines are not the result of a lack of food; rather, they arise because people lack genuine capability, i.e. they cannot in practice afford to buy food that nonetheless exists. As an example, Sen refers to the 1943 Bengal famine, a crisis of which he had personal experience, in which three million people died of starvation. No one’s negative freedom was infringed (i.e. nobody was prevented from buying food), but people nonetheless died of hunger and malnutrition because they had no positive freedom or real opportunity to afford to buy food (Sen 1981).

Sen's approach gives further practical tools for moral choices. Instead of Rawls' theoretical veil of ignorance surrounding individuals' original position, as a vehicle for moral choices Sen employs Smith's notion of the "impartial spectator," who assesses the action of the self by setting himself apart from it and observing it from the outside. The moral choice is therefore what the impartial spectator would do. Sen seeks to bring morality even further into the realm of practice, and it is to this end that he has recently updated his approach (Sen 2009). He continues to encourage the assessment of situations from the perspective of the impartial spectator, i.e. imagining what a situation would look like in the eyes of an outside observer. Notions of capability become the object of particular moral scrutiny. Most notably, Sen's impartial spectator is characterized by the fact that he compares different possible options: he asks which option is better (or worse). In this way he can choose, in practical situations, the option that is morally better (or less bad), regardless of what a "perfect" society may entail.

### *A dignified life as the goal: Dignity as Development*

Both Rawls and Sen depict their chosen subject in a most valuable way. Rawls outlines the philosophical consequences of the concept of justice. Sen, meanwhile, does the same for the concept of freedom. On a practical level, they both provide strong philosophical arguments for largely the same rights as those listed in the UN's Universal Declaration of Human Rights (UN 1948).

The constraints of their arguments, however, arise from where each of them chooses to begin.

Rawls invites us to imagine ourselves in the original position and to ask from behind the veil of ignorance: what is a just society like? However, this in itself cannot be considered the "original position." Rawls jumps directly to the question "What is a just society like?" as if this were self-evidently something that all people necessarily ask. But where does the notion come from that society should be just in the first place? This requires a foundation. This foundation is the notion that all people have the same *dignity*. It is because of the fact that all people have the same value that they are all worthy of the same justice.

In the same way, Sen sets out from the concept of freedom, but he does not provide a reason for why people should be free. This notion, too, requires



a foundation, which is the idea of *dignity*; that is, that all people are worthy of freedom.

This is the first reason why *dignity* has to be elevated to be the most fundamental value—and, accordingly, to elevate the notion of a dignified life that fulfills this dignity to be the most fundamental goal of development. Dignity means the *worthiness* of every human being. Therefore, *all people have rights because they are worthy of rights* (such as freedom and justice). A dignified life means a life with such dignity. (Etymologically, the word “dignity” derives from the Latin *dignitas*, “worthiness,” whose root is the word *dignus*, “worth.” For the history of the concept, see e.g. Rosen 2012.)

There are, however, several other important philosophical reasons for this. Both Rawls and Sen presented their theories of justice and development without taking into account the environment. This can be seen in the UN Human Development Index—extrapolated from Sen’s theories—which, on a practical level, features no ecological values (cf. UNDP 1990). In practice, the Human Development Indicator is an aggregate of life expectancy, schooling, and income.

One of the key expressed assumptions in Rawls’ theory on the other hand is that, with regard to the satisfaction of people’s material needs, there is no significant material scarcity. Given the challenges of ecological sustainability, neither of these approaches is valid any longer.

Therefore, another key reason why dignity is here elevated to our central concept and value is because, in addition to freedom and justice, it is also the fundamental basis of life values.

Here the concept also goes much further than, say, the UN’s Universal Declaration of Human Rights, which, though it is indeed divided into values relating to life, freedom, and justice, views the notion of rights as the rights of the living individual to life. In the present examination, the notion of dignity additionally signifies the right of future generations to a similarly dignified life, which of necessity includes the notion of ecologically sustainable values.

Therefore, philosophically, *dignity* is the fundamental concept, because it is the foundation of the values and rights outlined above, namely freedom, justice, and life:

dignity → freedom  
→ justice  
→ life

The above now makes it also possible to link the key concepts of a sustainable development model—sustainable wellbeing, sustainable economy, and sustainable environment—to their ethical foundation. The notion of justice was used as an ethical foundation for sustainable wellbeing that is based on a wellbeing society. Now the entire foundation of this value goal can be expressed, taking the concept of dignity as its ultimate basis:

dignity → justice → equality → sustainable wellbeing  
(wellbeing society)

In a similar manner, a sustainable economy, whose ethical imperative is the fostering of capabilities (in the sense of freedoms from hunger, disease, and poverty, and the freedom for self-realization, etc.), can be positioned thus within the framework of the notion of dignity:

dignity → freedom → capability → sustainable economy

Finally, the ethical foundation of ecological sustainability can be expressed in the following way, linked to the life values based on the concept of dignity:

dignity → life → sustainability → sustainable environment

There are, however, still other philosophical reasons for the concept of dignity.

### *Dignity is the heart of ethics: Caring and Reciprocity*

Ultimately, one further important difference is that the concept of dignity is here seen not merely as the “heart of human rights” but also as the “heart of ethics.” What is meant by this is that dignity should not be understood only as the intellectual basis of the other fundamental values but also as the emotional heart that brings ethics to life. The concept brings with it the dimension of *caring*: empathy. Without that emotional heart, ethics remains merely a set of abstract principles that are not lived truly in practice. Dignity is the sense of worth of oneself and the other. From the ethical viewpoint, caring is dignity operationalized.

This is another important difference to the approach of Rawls. Rawls may be correct in his thought experiment that if people were put in the original position and behind the veil of ignorance to debate the nature of a just society, they could achieve a consensus regarding the fundamental *principles* of justice. However, mere structural principles are insufficient with regard to

practically lived ethics. Practical ethics is not merely about abstract thoughts or structural principles. It requires a heart: it requires the ability to *care*, the ability to empathetically place oneself in another's position. It is actually only through this ability to empathize with the possibility that we could have been born into the societal position of any other person, and that suffering that afflicts another person could equally afflict us ourselves, that the Rawlsian thought experiment comes to life. In other words, it is an ability to empathize with another person to such an extent that we could imagine that, "We would be 'we' the way we are now, but the other way around, so that you would be 'me' and I would be 'you'." The ability to empathize in this way already makes people start acting better. Ethics is not about mere words. Ethics is about acts. Ethics is the heart that makes us live our values truly. Without emotion, there is no motion. Without being moved, there is no movement.

In fact, the very idea of justice remains ultimately pretty empty unless humans are beings who can empathize with others. Why would a person otherwise concern themselves with the question of "justice" after the "original position?" For example, upon finally perceiving their good, real position in society, they might well reject the whole notion of justice: Why would they continue to concern themselves with whether something is "just" in regard to someone else? Maintaining justice in society requires that we have the ability to caringly empathize with others as similarly valuable persons like ourselves: as the same kind of human beings who share the same longing for a dignified life.

A similar need for further elaboration goes for Sen's concept of "freedom as capability." This notion encompasses an important level that is not made explicit. Namely, that the concept of "freedom as capability" requires as a complement the concept of *responsibility*: freedom is a right. Ultimately, this right is left empty if it is not linked to the other half of the coin: the notion of responsibility. For instance, the right to the freedom to make one's own choices is in fact also the duty of others not to restrict such choices. Similarly, the right to privacy implicitly signifies the duty of others not to impinge on those aspects of a person's privacy that they have not themselves made public. Otherwise these freedoms, also in the sense of "capabilities," are empty. This could well be argued to have already happened to both of the cited freedom rights through the current media: there is no longer privacy as a right because the mass and social media do not implement their corresponding duty to respect privacy, for example, related to personal life.

From the perspective of practical ethics, this is of crucial importance. Sen's notion of capability accounts for only one half of the matter. Rights must always also mean duties. We might call this the need for the operationalization of rights—similar to the above operationalization of ethical principles. The problem is illustrated by the example of the Universal Declaration of Human Rights: in addition to a declaration of human rights, we would actually also need a declaration of human duties. In other words: “you have the following right, and that implies the following duties...” For example, the fact that you have the right to practice your religion means that you have the duty to let others also practice their religion. From the perspective of the notion of dignity, this has to be our starting point: you have the right to a dignified life, and this, in turn, implies that you have a duty to give the same right to a dignified life to everyone else.

In order for ethics to work in practice, the notion of capability must thus be complemented with the notion of *duty*—in addition to *freedom* there must also be *responsibility*. The notion of dignity expresses this reciprocity: It is about both receiving the respect of dignity from others and giving the same respect of dignity to others. You may not take away from others what you want for yourself. The right to our own dignity is simultaneously also our duty to respect other people's right to their own dignity. Dignity is reciprocal.

### *Dignity is a globally uniting value in a multicultural world*

Finally, there is yet another and very important reason for adopting dignity as the founding concept. From the perspective of the universality of ethics in our definitively newly global times, the additional strength of the notion of dignity lies in the fact that it is a notion shared by all cultures, faiths, and secular traditions (cf. Kühn 1993).

Here's how this heart of ethics is found in all the great systems of ethics:

- Judaism: “What is hateful to you, do not do to your neighbor: that is the whole *Torah*; all the rest of it is commentary” (Talmud, Shabbat 31a).
- Christianity: “Do to others what you would have them do to you, for this sums up the *Law and the Prophets*” (Matthew 7.12).
- Islam: “Not one of you is a *believer* until he desires for his brother what he desires for himself” (40 Hadith of an-Nawawi 13).

- Hinduism: “Do naught to others which, if done to thee, would cause thee pain: this is the *sum of duty*” (Mahabharata 5.1517).
- Buddhism: “Hurt not others in ways that you would find hurtful” (Tripitaka Udana-varga 5.18).
- Confucianism: “Tse-kung asked, ‘Is there one word that can serve as a principle of conduct for life?’ Confucius replied, ‘It is the word “*shu*” – reciprocity. Do not impose on others what you yourself do not desire’” (Analects 15.23).
- Secular philosophy: “Act as if the maxim of thy action were to become by thy will a *universal law* of nature” (Immanuel Kant, Grundlegung zur Metaphysik der Sitten 2.3).

Notice especially that this same core of ethics is not just found in all great religions and secular systems of ethics, but it is actually hailed as their greatest principle. In Judaism, this principle is said to be “the whole Torah (teaching);” in Christianity, “the Law and the Prophets;” in Islam, a condition for calling yourself a believer. In Hinduism, it is “the sum of dharma (religious duty);” in Confucianism, “*shu*, the principle of conduct for life;” and in the philosophy of Immanuel Kant, “the categorical imperative.”

Therefore, the concept of dignity offers a radically globally uniting goal: a global basis for a “dignity revolution of values,” after the Western Enlightenment revolution of values—if one wishes to put this in a very big historical context (although all human rights also follow from this universal conceptual basis). Whereas the slogan of the Western Enlightenment was “liberty, equality, fraternity,” now in the global values revolution it can be summed up with the word—“dignity.”

### *The culture of dignity as a culture of freedom, justice, and life*

Finally, the concept of dignity has been chosen as a unifying concept also because it can serve in the above way as the culture of a sustainable development model that our world now greatly needs: from sustainable environment to sustainable wellbeing to sustainable economy. Using the above concepts, the culture of dignity is a culture of freedom, justice, and life—the foundations of sustainable economy, wellbeing, and environment. Or, to use the alternative expressions from above, it is a culture of creativity, caring, and life.

This is a very important formulation. Because of the numerous connotations of the word “dignity,” it is essential to underline that it is a *moral*, not a *moralistic*, concept.

Dignity means the worthiness of every human being as a *subject*. For example, freedom then means the *subject's* right to freedom: *to make free choices about one's life that are consensual with the free choices of the other subjects*. In research literature, expressions such as autonomy, agency, etc. are also used for the same basic idea. What is talked about here is the subject's right to define their subjectivity.

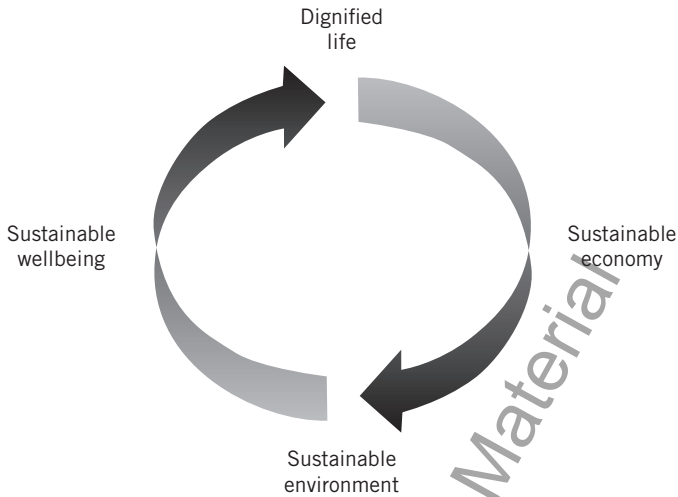
Likewise, caring means the ability to see the world genuinely from the viewpoint of the *other subject*—whose wishes may be different from one's own. So it is to *do to the other subject as you would wish done to you as another subject*. In literature, expressions such as otherness also capture this notion. What is being discussed here is the subject's duty to see the other subject genuinely as another subject.

The reason why this clarification is so important is that, in fact, otherwise the moralistic concept of a “dignified life” could easily be used *against* the moral concept of dignity: for example, such as in expressions like “carrying yourself with dignity” (as in the medieval idea of emulating the external behavior of royal dignitaries) that could easily become simply a way for societal use of power to push its moralistically restricting mannerisms on the subject. A “dignified life” does not refer to external appearances. Dignity does not mean moralism, which is in fact a culture of shame, guilt, and envy, and therefore the complete opposite of dignity. Dignity means that you are worthy of freedom, justice, and life as a *subject*.

With the above important clarification made, we can then proceed to describe the key elements of such a culture of freedom, justice, and life—as a basis of a sustainable development model. Ultimately, a dignified life in the above moral (not moralistic) sense is a notion that both forms the cultural foundation of sustainable wellbeing, economy, and environment, while at the same time providing the “missing link” between them. This symbiosis can be best depicted by the following diagrammatic model of sustainable development (see Figure 10.1 below).

### *Culture of freedom = culture of creativity*

On a cultural level, the notion of a dignified life represents a culture of *freedom*, i.e. a culture in which people can realize themselves and which might therefore also be called a *culture of creativity*. On a very practical level,



**Figure 10.1 Dignified life as the goal of the sustainable development model**

this is also the cultural foundation of a sustainable economy. The culture of creativity is characterized by the idea that all people should have the opportunity to realize their individual potential to the fullest extent.

In practice, this implies the existence of education, research, and development systems that create the real freedom, i.e. the capability with which individuals can achieve their full potential. Thus self-realization can (in the case of economy) manifest itself through, for instance, innovation and entrepreneurship, as people put ideas into practice, and through a work and leadership culture, which encourages people to use the full gamut of their abilities. (Thus the cultural ethos of our information age differs radically from what Max Weber described as the “Protestant ethic” of the industrial age; cf. Himanen’s 2001 analysis of “the hacker ethic” as the spirit of the information age for a more full description.)

*Culture of justice = culture of caring*

In a similar way, on the cultural level, a dignified life means a *culture of caring*, in which people empathize with others to such a degree that they can identify with the others’ positions. This is the basis for the equality of opportunity, protection, and inclusion in wellbeing that follows from the notion of *justice*. Ultimately such a culture requires the ethical heart or operationalized dignity outlined above. In their essence, these are especially

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values related to a subject's life as part of a community. (See also Himanen 2005, 2007.)

### *Culture of life*

At the foundation of ecological sustainability is a *culture of life*, a culture in which, in addition to respecting the lives of those living now, we also respect the lives of future generations. In other words, this is a culture of inviolability with regard not only to humans' physical inviolability (physical security, peace, etc.), but also to the inviolability of the environment, such that future generations will have the opportunity to live a dignified life. Thus, in their essence, these are especially values relating to the sustainability of all humankind. (See Himanen 2010.)

In the above way, in a culture of creativity, a person realizes the valuable within himself to the greatest possible extent in a way that, through a culture of empathy, connects to the recognition of the same value in all other people—and, then, through a culture of life, to a respect for the right to the same for the future generations.

On a cultural level, the functioning of a culture of dignity as a basis for a sustainable development model—that is, sustainable economy, sustainable wellbeing, and sustainable environment—can be summarized thus:

|                                   |                            |                           |
|-----------------------------------|----------------------------|---------------------------|
| dignity → freedom<br>(individual) | → culture of<br>creativity | → sustainable economy     |
| dignity → justice<br>(community)  | → culture of<br>caring     | → sustainable wellbeing   |
| dignity → life<br>(humanity)      | → culture of<br>life       | → sustainable environment |

Ultimately, such sustainable growth will serve the continued improvement of the requirements for a dignified life, and thus, on a conceptual level, a dignified life is both the foundation of the factors affecting sustainable development and the goal that links them together.

### *Wellbeing economics and psychology: Wellbeing as the Goal?*

Finally, it is important to position the notion of dignified life in relation to the new framework of wellbeing economics and psychology that has lauded wellbeing (or “happiness” as a name of its highest degree) as the highest



goal of development. Perhaps the most important work in this field has been the *Report of the Commission on the Measurement of Economic Performance and Social Progress* (Stiglitz et al. 2009), an analysis by a team of top economists guided by Joseph Stiglitz. The Stiglitz commission argued that the objective should be “to shift emphasis from measuring economic production to measuring people’s wellbeing.”

Research into the economics and psychology of wellbeing has resulted in significant scientific work questioning industrial society’s notion of economic growth as the ultimate goal (for this extensive new literature, on the relationship between economic growth and wellbeing, cf. especially Easterlin 1974, 2004, and 2010; Stevenson and Wolfers 2008; Veenhoven and Hagerty 2006; Kahneman et al. 2006 and 2011; and on the empirical sources of wellbeing: Seligman 2002 and 2011; Csikszentmihalyi 1990 and 1996; Kahneman et al. 1999 and 2011). Development has to advance wellbeing.

Wellbeing is also viewed as an objective within the frame of a dignified life. This important body of literature has been applied in this book to the deepening of the content of the concept of wellbeing. The following three classic factors affecting the experience of wellbeing (and happiness) are especially important:

- autonomy: freedom, agency, empowerment
- sociability: social relationships and belonging to a community
- meaningful activity: work, free time, play

In fact, in this work, these have been added as important qualitative dimensions of the new wellbeing society, in addition to the more traditional quantitative ones of the industrial age:

wellbeing → autonomy  
→ sociability  
→ meaningful activity

There is something immediately alluring about the notion that “wellbeing should be the goal of development.” Surely, the objective of development should precisely be wellbeing—or “happiness,” as the name of its highest degree? What else could it be?

In the present examination, however, instead of wellbeing, dignified life has been chosen as the most fundamental notion. As already mentioned, it does include the concept of wellbeing; but wellbeing alone is not sufficient as

a complete goal for development. The biggest problem of the concept of wellbeing is that it does not include all the dimensions that must definitely be seen as part of the ultimate goal of development, such as the concepts of justice and freedom argued for by Rawls and Sen. In the end, this problem is due to the philosophical fact that wellbeing is not an ethical concept. And because it is not an ethical value, it cannot serve as a foundation for the ethical categories of justice and freedom.

Even the empirical facts speak against this: for instance, in an authoritarian society people may experience both material and psychological wellbeing, even if they lack freedom and justice. If we posit that the definition of the notion of *wellbeing* also contains aspects such as political freedom—and go on to say that a person who claims to be well off cannot be really well off, if he is not free—then we would be guilty of stretching the notion so far that both conceptually and with regard to the empirical facts it would be rendered entirely meaningless.

In addition, the concept has another significant limitation. In fact, wellbeing is by its very nature a markedly hedonistic and utilitarian concept; something that is reflected in the decision of Nobel Prize laureate Daniel Kahneman to call his research “hedonic psychology.” Accordingly, Kahneman’s book, written in collaboration with two other leading wellbeing researchers (Ed Diener and Norbert Schwarz), is entitled *Well-Being: The Foundations of Hedonic Psychology* (1999). This brings us back to Jeremy Bentham, the father of utilitarianism, and his idea of a “hedonic calculus” as a principle guiding choices. (*An Introduction to the Principles of Morals and Legislation* 1789). However, it is easy to imagine examples of persons who are not happy but still lead good and meaningful lives. The classic conundrum here was originally posed by John Stuart Mill: is it better to be a satisfied pig than an unhappy Socrates (Mill 1863)?

In addition, one can ask: Whose wellbeing (or happiness) are we talking about—that is, whose wellbeing (or happiness) matters? In fact, the concept of wellbeing requires the concept of dignity as its foundation: wellbeing is advanced for those who are seen as worthy of wellbeing. The goal of all people’s wellbeing requires all people’s dignity. In fact, the pioneer of utilitarianism, Francis Hutcheson, already made this connection when he stated that the principle of greatest happiness is linked to the concept of dignity: “the virtue of [action] is in proportion to the number of persons to whom the happiness shall extend (and here the dignity, or moral importance of persons, may compensate numbers)” (*An Inquiry into the Original of Our Ideas of*

*Beauty and Virtue* 1725). If all people don't have the same dignity, then their wellbeing or happiness does not have the same relevance either.

The most important observation from all of the above is that, in actual fact, wellbeing as an objective of development is a notion of a different dimension from that of justice and freedom. This crucial difference can be characterized in this way: freedom and justice are *ethical values*, whereas wellbeing is a *philosophy of life* objective. The most significant reason for the choice of dignified life as the most fundamental concept is that, philosophically speaking, it can be used as a foundation for both of these levels.

As outlined above, on the ethical level, the values of freedom, justice, and life are founded on the concept of dignity. On a philosophy of life level, wellbeing (or happiness) is one of the contents of a dignified life, that is, a worthy life. However, just as the concept of wellbeing is insufficient on the level of ethics, it is also insufficient alone as a philosophy of life objective. Wellbeing is not the only source of the experience of a worthy life.

It must also be complemented by other sources of a worthy life. The three key elements could be summed up in this way:

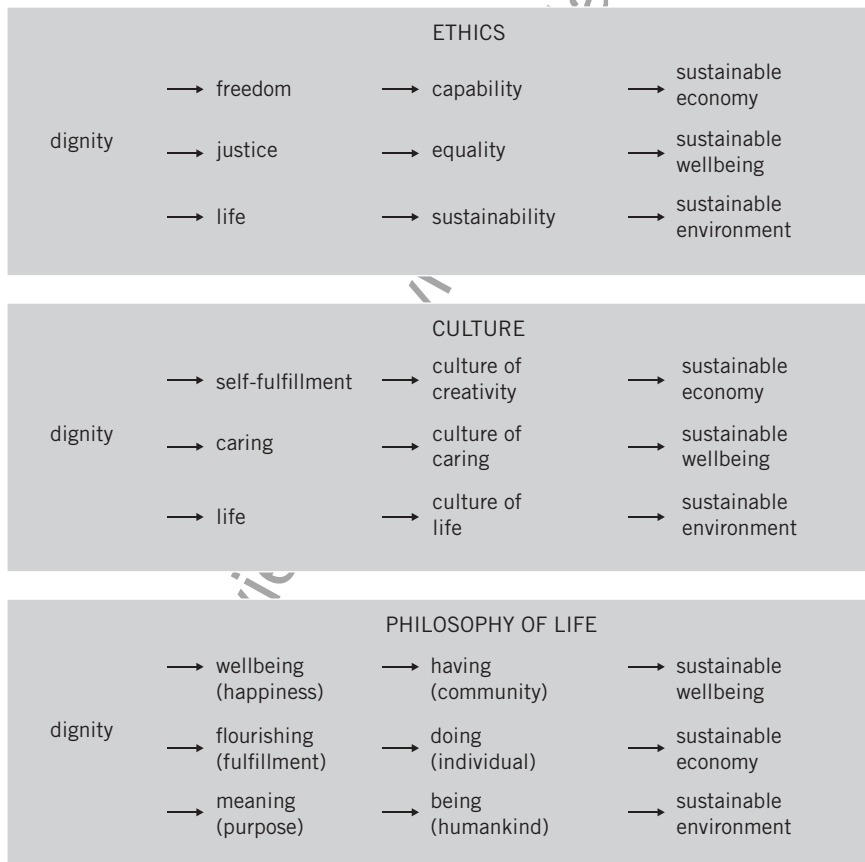
- dignity → wellbeing
- dignity → flourishing
- worthiness → meaningfulness

Wellbeing (and happiness as the name of its highest level) does give rise to the experience of a dignified, worthy life. However, it is also important to note that self-realization is an independent source of the experience of a worthy life. Flourishing and happiness are often linked together, but this is by no means always the case: let us take by way of an example the numerous artists and researchers throughout history who would not think of abandoning their creative work for anything despite the personal malaise that it may bring them. On the contrary, many of them would always choose their creative work, even in the certain knowledge that it means an unhappy life. Another indication of the distinctiveness of self-realization with regard to wellbeing can be seen in the fact that, according to the wellbeing literature itself, in the state of "flow" one does not actually experience any emotions, even happiness (Csikszentmihalyi 1990 and 1996; Seligman 2002 and 2011).

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Ultimately, the experience of dignity includes a level of meaningfulness beyond activity: life can be meaningful even if it is characterized neither by happiness nor flourishing. Indeed, happiness and flourishing are not wholly under our control. This we may call the fragility of life. Here is demonstrated a mystery of life: we may experience life as meaningful even if we are neither happy nor successful. In this sense, the deepest philosophy of life goal is not wellbeing but meaningfulness (i.e. a life that has a purpose, a “worthy life”).

To summarize, the concept of dignified life serves as the ultimate basis for other goals of development in all three of the dimensions discussed (Figure 10.2):



**Figure 10.2 Dignity as development**

## Bridging dignity to the social scientific theoretical framework

The philosophical argument for why dignity should be seen as the ultimate goal of development (instead of its presently used alternatives that have been analyzed) has now been made. However, in this book, we also want to ground everything in the best theoretical knowledge that we have on the conditions of development in the Global Information Age. Therefore, it is still important to bridge the concept of dignity explicitly to the social scientific theoretical framework presented in Chapter 1 and supported empirically by the case studies.

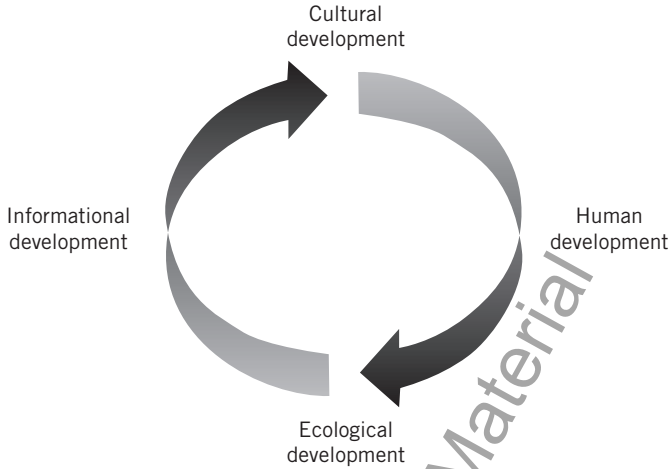
In the context of the social scientific theoretical framework that has been guiding this book (starting from Chapter 1 by Castells & Himanen and including Chapter 9 by Calderon)—which has been built on the key concepts of informational development and human development and their cultural link—*dignity as development can be seen as a fulfillment of human worth*. Or to put it in more practical terms, *dignity as development can be seen as a fulfillment of our human potential in these areas of informational development, human development, and cultural development*.

Or, to employ the other terms that we have also been using, dignity as development can be seen as a fulfillment of human potential through sustainable economy, sustainable wellbeing, and sustainable culture—all of this of course having to take place in an ecologically sustainable way to make it a genuinely sustainable development model.

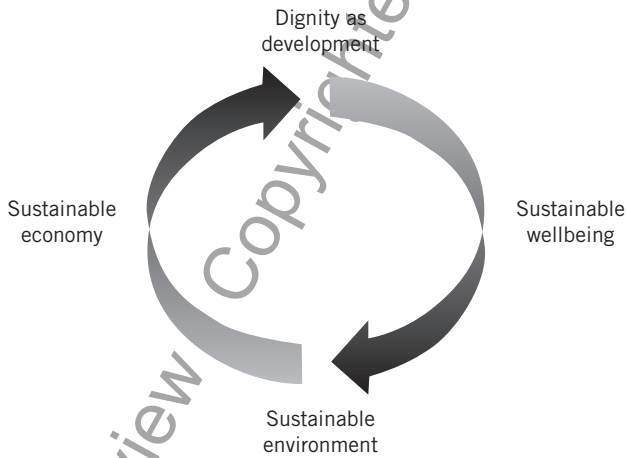
So, in practical terms, dignity as development can be interpreted as *sustainable fulfillment of human potential*, whether it is in the area of economic innovation and productivity growth toward a higher quality of life, or in the area of human development toward higher wellbeing in health, education, and social inclusion, and, of course, including the fulfillment of human potential in its cultural development, which ultimately links or delinks informational development and human development.

So, therefore, dignity as a concept is directly connected to the other key concepts of our theoretical framework on development. The following diagrams illustrate this connection. First, the relationship with our primary analytical terms—and, second, with their more practical translations (see Figures 10.3 and 10.4).

For the sake of operationalizing the concept of dignity, the following key features of our guiding theoretical framework should now be recalled—and complemented slightly further, with the view of being able to ultimately



**Figure 10.3 The model of development in the Information Age**



**Figure 10.4 Dignity as development**

choose the most relevant features of measurement for the Dignity Index grounded on this theory.

The concept of *informational development* is already explained in Chapter 1. It is a synonym for the concept of informationalism, as originally presented in Manuel Castells' theory of the network society (the trilogy *The Information Age*, 1st ed. 1996–8, 2nd ed. 2000–4, and updated in other publications after

that). Informationalism is meant as a parallel to the concept of industrialism. They both refer to *the mode of development*. In the industrial society, development is based on the industrial mode of development. Likewise, in the informational society (which can also be referred to as “the Information Age” for the sake of convenience and to match the expression “the Industrial Age”), development is based on the informational mode of development.

From the viewpoint of economy, there are three critical factors of informational development that are increasingly important for economic development: that it is founded on (1) innovation-based (2) productivity growth driving economic growth using (3) the new forms of organizing knowledge made possible by information technologies. This theory of informationalism has been strongly supported by empirical research. Also in this book, Chapter 2 shows that the exceptionally strong informational development in Silicon Valley is based on the ability to strongly combine the three factors; the same is supported by the observations in Chapters 3 and 4 on the informational development in the Finnish model and in Europe.

For a long time, there already existed the assumption by Nobel economics laureate Richard Solow on the relationship of informational development and productivity. In his theory on growth, Solow suggested that in addition to labor and capital, technological advancement also plays a significant part in productivity growth (Solow 1956). Although the so-called “Solow residual”—a factor seen in the statistics as an additional explanation of productivity growth to labor and capital—supported this at a theoretical level, in respect to information and communication technology we long lacked a more specific demonstration of the relationship between informational development and productivity growth. This came to be called the “Solow paradox,” which he personally summed up in the statement, “You can see the computer age everywhere but in the productivity statistics.”

However, in the late 1990s, the situation changed. A particularly important analysis of the growth in informational productivity was made by MIT professor Erik Brynjolfsson, along with his colleagues. Brynjolfsson was finally able to demonstrate the strong correlation between informational development and productivity growth (Brynjolfsson & Hitt 1998 and 2003; Brynjolfsson & Yang 1999; Brynjolfsson & Saunders 2010; Jorgenson & Stiroh 2000 and 2002). Informational development shows up in productivity statistics in two ways: first, as the effect of ICT investments; and, second, less directly as part of the “Solow residual,” which includes all use of technology in the broadest sense of the word (total factor productivity).

Productivity growth is increasingly based on informational development, using innovatively the combination of information technology and the new forms of organization it enables. For example, while productivity growth in the United States for the two decades preceding the mid-1990s, 1975–85 and 1985–95, was about 1.5%, following the breakthrough of the Internet, during the subsequent decade it rose to 3% and has been on average 2.5% since 1995 (US Department of Labor STAN 2013).

Informational development as the mode of development means that the combination of the above three dimensions is increasingly the source of economic growth: therefore, indicators for these three dimensions of economy, innovation, and technology must be chosen to root the measurement of informational development in the Dignity Index to the best available empirical and theoretical knowledge.

As for human development as part of our social scientific theory, a framework has already been provided in Chapter 9 by Calderon. Our case studies supported empirically the conclusion that if society's investment in human development is very low, this also undermines broader informational development: the result is a divided society where only a very small segment is connected to the Global Information Age and the gap between this power elite and the rest of the population generates social tensions, as Hsing showed in Chapter 5 for the case of China, and Cloete & Gillwald showed in Chapter 6 for South Africa. A reason for this is that in this situation social inequity combines with a low general educational base, reducing the capacity for informational development. On the other hand, Chapters 7 and 8 on Chile and Costa Rica give hope that even an economically less-developed country can, through systematic policy-making, form some positive circle between informational and human development, even if the results are so far partial.

The most important notion here, looking at human development from a broader viewpoint of "dignity as development," is that even if the United Nations Development Program's Human Development Index (HDI) is a hugely valuable addition to the old GDP measure, for the reasons Calderon presents the whole concept of human development cannot really be reduced to a combination of only three basic indicators: life expectancy, basic amount of schooling, and income level (as is done in the HDI).

In the HDI, human development is calculated simply in the following way:



$$\text{HDI} = \sqrt[3]{\text{LEI} \cdot \text{EI} \cdot \text{II}}$$

in which:

$$\text{LEI (Life Expectancy Index)} = \frac{\text{LE} - 20}{82.3 - 20}$$

$$\text{EI (Education Index)} = \frac{\sqrt{\text{MYSI} \cdot \text{EYSI}}}{0.951}$$

$$\text{MYSI (Mean Years of Schooling Index)} = \frac{\text{MYS}}{13.2}$$

$$\text{EYSI (Expected Years of Schooling Index)} = \frac{\text{EYS}}{20.6}$$

$$\text{II (Income Index)} = \frac{\ln(\text{GNI}_{\text{pc}}) - \ln(100)}{\ln(107,721) - \ln(100)}$$

Calderon makes a strong argument as to why this is not enough for the concept of human development. One must consider broader indicators of health, education, and the social dimension. Here, the notion of a more fully interpreted human development is elaborated further in order to be able to operationalize its measurement—in a way that reflects not only the traditional industrial welfare state's measures of deprivation elimination but also the informational wellbeing society's measures of the actual quality and experience of wellbeing (cf. especially Chapter 3 and the idea of human development agency in Chapter 9).

One analytical point has to be emphasized separately. As an Industrial Age measure of development, despite being much broader than the GDP, the HDI also has severe limitations because it does not take the ecological sustainability of development into account. Therefore, using the HDI one may have to give the name "human development" to a development that destroys our environment and thus our own wellbeing. This is clearly untenable in the context of the ecological crisis of the old development model. In the Dignity Index, no country can achieve a rating of the highest level of sustainable development if it performs very badly in ecological sustainability.

In the end, sustainable development requires a cultural link that combines informational and human development in a positive cycle. Again, these measures for cultural development must be built directly on a theoretical framework that is most tenable. Therefore, they must be built directly on the

cultural framework presented at the beginning of this chapter: they include the culture of life, the culture of creative freedom, and the culture of justice.

With these additional remarks related to the social scientific theoretical framework and the concept of dignity, we are now ready to proceed toward the actual building of the new Dignity Index.

## **The Dignity Index: preliminary operationalization**

The third and final part of this chapter's analysis will now operationalize the concept of "dignity as development" that has been presented above and grounded on both a philosophical and social scientific foundation.

While doing so, it is fully acknowledged that we already have a number of alternatives for the "old" GDP growth as a measure of development. In addition to the UN Human Development Index (UNDP 1990; Ul Haq 1999), these include among others:

- Genuine Progress Indicator (in which in principle the social and ecological cost of development is subtracted from the GDP, but the indicator is not systematically defined and in use);
- Gross National Happiness (the measure suggested by the King of Bhutan in 1972; it was first operationalized by Karma Ura and then universalized by the Canadian researchers Michael and Martha Pennock; still, it lacks a generally accepted definition);
- Happy Planet Index (New Economic Foundation: an aggregate of experienced wellbeing, life expectancy, and ecological footprint);
- Happiness Index (Gallup World Poll: subjective wellbeing);
- World Happiness Report Happiness Ranking (UNSDSN 2013, based on the Gallup World Poll Happiness Index, but analyzing the factors influencing it, edited by Helliwell, Layard, and Sachs);
- Your Better Life Index (OECD 2013b: an aggregate based on 11 themes; no uniform definition and calculated only for the OECD countries).

Related to these suggested alternatives to GDP, it is also important to keep in mind that GDP itself is also in fact a relatively new suggestion as a development measure that has in a short time been adopted as a surprisingly "self-evident" measure. However, it was formulated by Simon Kuznets only in 1934 for the US Congress in the context of helping the country to move

economically forward from the Great Depression (see Kuznets 1934). Its international use started after the Bretton Woods conference in 1944, which established the current global financial institutions of the International Monetary Fund, World Bank, and the World Trade Organization, in the context of the post-World War II goal of reconstructing devastated economies.

In the current context of the Great Recession—which combines with three even deeper structural challenges of sustainable development: sustainable environment, sustainable wellbeing, and sustainable economy in the long run—there is an increased need for a new, more holistic measure to guide sustainable development (for the Great Recession see Himanen 2012 in Castells et al. (eds) 2012).

What differentiates the Dignity Index from all of the currently existing alternative indices that are all also very valuable (such as, e.g., the Human Development Index) are the following three criteria that have been used for its construction:

- The Index has to be directly built on a solid and systematic philosophical/ethical argument on what development is.
- The Index has to be directly grounded on the most recent knowledge in social scientific theory, based on empirical data, that we know about development in the global information age.
- The Index has to be in practice useful in guiding actual policy-making in order to see each country's weaknesses and strengths so that better policy can be made to advance development.

This is how the Dignity Index has been built based on the philosophical and social scientific theories presented in this chapter and the book. What the Dignity Index then measures is development in the following three dimensions:

- Informational development
- Human development
- Cultural development

These components of the Dignity Index are important measures by themselves—as well as in terms of their subcomponents (therefore, the Dignity Index is not only an aggregate measure but also emphasizes that it is as important to focus on all of its sub-components separately). Finally,

based on the combination of these three main dimensions, an overall Dignity Index can be calculated as a measure for any country's sustainable development—or "dignity as development."

At the same time, it is important to underline that in the context of this chapter this formulation of the Dignity Index is meant only as preliminary and is intended to illustrate what kind of categories should be included in an index based on this book's systematic philosophical and social scientific theory. (For further materials, a separate web page, [www.dignityasdevelopment.org](http://www.dignityasdevelopment.org), is being established.)

### *The components of the Dignity Index*

#### *1. Informational Development*

Based on the philosophical and social scientific theory presented above, the following key sub-components have been selected to indicate a country's level of informational development, as important determinants of the longer term sustainability of its economy in the global network society.

The first sub-component describes basic economic development, at the level of "hard" economic measures. The second sub-component describes innovation capacity for further economic development under the conditions of the global informational economy. And the third sub-component describes the development level of the technological infrastructure (ICT and knowledge) underlying that.

- a) *Economy (Economic Development)*
  - GDP per capita (purchasing power parity)
  - GDP growth (annual real growth average)
  - Productivity (output per input working hour)
- b) *Innovation (Innovation Development)*
  - Competitiveness index (the World Economic Forum measure)
  - Productivity growth (percentage)
  - Receipts of royalties and license fees (per capita in USD)
- c) *Technology (Technological Development)*
  - Internet users (percentage of population)
  - Research and development investment (percentage of GDP)
  - Patents per capita (per million)

## 2. Human Development

Likewise, based on criteria outlined in this chapter and the book, the following key sub-components have been chosen as indicators of a country's level of a more fully understood human development.

Each of the sub-components describes the level of development on one of the three key components of human development: health, education, and social. Like in the choice of the indicators of the sub-components in general, the first indicator describes a very basic dimension of the sub-component—and is also very traditionally and generally established as such. The second and third indicators add deeper and more modern or fresh measures based on the philosophical and social scientific theory presented in this chapter and book.

### a) Health (*Health Development*)

- Physical health: life expectancy (at birth in years)
- Health gender equality: maternal mortality rate (per 100,000)
- Psychological health: happiness (life satisfaction)

### b) Education (*Educational Development*)

- Quantity of education: expected years of education (years of schooling)
- Quality of education: student performance (OECD PISA score for secondary level students)
- University level: scientific publications (citations Hirsch index)

### c) Social (*Social Development*)

- Income inclusion: income inequality (Atkinson index)
- Health inclusion: social health differences (life expectancy inequality)
- Social belonging (youth unemployment)

## 3. Cultural Development

In accordance with the theory presented, for the cultural level the sub-components are the following three values following from the concept of dignity:

### a) Life (*Culture of Life*)

- Natural life: sustainability by ecological footprint (CO<sub>2</sub> emissions)
- Physical life: peace (Global Peace Index)
- Social life: trust (trust of other people in society)

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### b) *Freedom (Culture of Creativity)*

- Autonomy: basic freedom of expression (Freedom House)
- Creativity: entrepreneurialism (GEM start-up entrepreneurship percentage)
- Openness: to others (percentage of foreign-born population)

### c) *Justice (Culture of Caring)*

- Basic justice: rule of law (Freedom House)
- Gender justice: equality (representation of women in parliament)
- Global justice: foreign aid (percentage of GDP)

### *Statistical note*

There have been three additional important statistical criteria for the selection of the above indicators:

- The indicators must represent the most modern research in their areas, from the most trusted international research institutions.
- The indicators must be as universally available and comparable as possible.
- The indicators must be kept up to date and as real-time as possible and must continue to be systematically updated annually or on another regular basis.

The purpose of the Dignity Index is to express the overall level of each country's development. The purpose of each of its three main components is to show how the country is doing in terms of informational, human, and cultural development individually. The purpose of the sub-components of these is to indicate how the country is performing in each more specific key area of that development.

In order to not get lost in statistics as an end in itself, in conclusion, the level of development of each indicator is translated from its mathematical figure to one of the following five levels:

- very high
- high
- medium
- low
- very low

The mathematical formulas used for calculating each indicator and translating them into the levels from very low to very high are included in the statistical Appendix to this chapter.

### *Dignity operationalized: Dignity Index for a selection of countries*

As a conclusion to this chapter's operationalization of dignity, the following tables give a sample of how the countries included in this book's case studies are performing on the Dignity Index—both on an overall level and on each component separately.<sup>1</sup>

Tables 10.1, 10.2, and 10.3 show the Dignity Index divided into the three components of the countries' informational, human, and cultural development, before giving the overall "dignity as development" score (Table 10.4). The full source information for each indicator is listed in the Appendix.

And, finally, as a combination of all three components, the overall Dignity Index is calculated in Table 10.4.

### *Policymaking conclusions*

For visualization purposes, the levels of development in each component and overall could also be expressed with the colors of red, yellow, and green (as in traffic lights), to give a quick indication of the situation.

The mere aggregate-level ranking in the Dignity Index is not alone the most interesting piece of information. In that regard, in fact, the most important observation is that *no country achieves in the Index its highest, that is "very high," level, which is the one that can be truly called fully sustainable. For this reason, it could be best said that the biggest political message is that the real number-*

<sup>1</sup> For the actual statistical data collection work for this chart, I must express my gratitude for the help of Dr. Isidora Chacon, with whom I've completed the hard work of compiling all of this data from its numerous sources. Any possible errors in data as well as the indicator selections, formulas, and calculations of the scores remain wholly my responsibility. Unfortunately, global statistics have the limitation that they are still mostly collected systematically based on the categories of the Industrial Age, so the construction of a Dignity Index fully in line with the new theory would require updating the indicators that are collected in the Global Information Age.

**Table 10.1 Dignity Index—informational development**

| INFORMATIONAL 1.<br>DEVELOPMENT<br>OVERALL SCORE | GNI per cap. (PPP USD) | GDP Growth % (real annual) | 2012 | 2011 | 2012 | Productivity % (output per hour, US = 100) | Productivity 2.<br>INNOVATION overall score | Competitiveness Index (WEF index) | 2012 | 2005–11 | 2005–11 | Productivity growth (index, 2005=100) | Receipt of royalties and license fees (USD per capita) | 3.<br>TECHNOLOGY overall score | Internet users (% of pop.) | R&D investment (% of GDP) | Patents per capita (per million) |
|--|------------------------|----------------------------|------|------|------|--|---|-----------------------------------|------|---------|---------|---------------------------------------|--|--------------------------------|----------------------------|---------------------------|----------------------------------|
|  |                        |                            |      |      |      |  |   |                                   |      |         |         |                                       |  |                                |                            |                           |                                  |
| <b>NORTH AMERICA</b>                             |                        |                            |      |      |      |  |   |                                   |      |         |         |                                       |  |                                |                            |                           |                                  |
| United States                                    | 43,480                 | 1.8                        | 100  | 100  | 5.47 | 108.2                                      | 387.1                                       | Very high                         | 81.0 | 2.8     | 707.6   |                                       |  |                                |                            |                           |                                  |
| <b>EUROPE</b>                                    |                        |                            |      |      |      |  |   |                                   |      |         |         |                                       |  |                                |                            |                           |                                  |
| Finland  | 32,510                 | 2.7                        | 77   | 100  | 5.55 | 104.1                                      | 556.5                                       | Very high                         | 91.0 | 3.8     | 172.1   |                                       |  |                                |                            |                           |                                  |
| Sweden   | 36,143                 | 4.0                        | 86   | 100  | 5.53 | 103.4                                      | 619.4                                       | Very high                         | 94.0 | 3.6     | 147.1   |                                       |  |                                |                            |                           |                                  |
| Denmark  | 33,518                 | 0.8                        | 81   | 100  | 5.29 | 101.5                                      | N.A.  | Very high                         | 93.0 | 1.8     | 27.9    |                                       |  |                                |                            |                           |                                  |
| United Kingdom                                   | 32,538                 | 0.8                        | 90   | 100  | 5.45 | 105.4                                      | 226.3                                       | Very high                         | 87.0 | 1.8     | 90.2    |                                       |  |                                |                            |                           |                                  |
| Germany  | 35,431                 | 3.1                        | 90   | 100  | 5.48 | 106.2                                      | 174.9                                       | Very high                         | 84.0 | 2.8     | 166.2   |                                       |  |                                |                            |                           |                                  |
| France   | 30,277                 | 1.7                        | 93   | 100  | 5.11 | 104.1                                      | 240.0                                       | Very high                         | 83.0 | 2.2     | 157.7   |                                       |  |                                |                            |                           |                                  |
| Italy  | 26,158                 | 0.4                        | 72   | 100  | 4.46 | 100.4                                      | 59.8  | Very high                         | 58.0 | 1.3     | 303.4   |                                       |  |                                |                            |                           |                                  |
| Spain  | 25,947                 | 0.4                        | 76   | 100  | 4.60 | 109.1                                      | 23.0  | Very high                         | 72.0 | 1.4     | 60.2    |                                       |  |                                |                            |                           |                                  |
| Portugal   | 19,907                 | -1.7                       | 42   | 100  | 4.40 | 109.6                                      | 5.7   | Very high                         | 64.0 | 1.7     | 13.1    |                                       |  |                                |                            |                           |                                  |
| Greece   | 20,511                 | -6.9                       | 50   | 100  | 3.86 | 100.2                                      | 6.1   | Very high                         | 56.0 | 0.6     | 42.2    |                                       |  |                                |                            |                           |                                  |
| Austria  | 36,438                 | 2.7                        | 86   | 100  | 5.22 | 108.7                                      | 92.6  | Very high                         | 81.0 | 2.7     | 134.6   |                                       |  |                                |                            |                           |                                  |
| Netherlands                                      | 37,282                 | 1.1                        | 96   | 100  | 5.50 | 104.0                                      | 320.8                                       | Very high                         | 93.0 | 1.8     | 117.6   |                                       |  |                                |                            |                           |                                  |
| Belgium  | 33,429                 | 1.8                        | 98   | 100  | 5.21 | 100.7                                      | 232.1                                       | Very high                         | 82.0 | 2.0     | 49.7    |                                       |  |                                |                            |                           |                                  |
| Ireland  | 28,671                 | 1.4                        | 90   | 100  | 4.91 | 120.3                                      | 574.2                                       | Very high                         | 79.0 | 1.8     | 54.4    |                                       |  |                                |                            |                           |                                  |
| <i>EU-15 avg.</i>                                | 30,626                 | 0.9                        | 80   | 100  | 5.04 | 105.6                                      | 240.9                                       | High                              | 79.8 | 2.2     | 109.7   |                                       |  |                                |                            |                           |                                  |
| <b>ASIA</b>                                      |                        |                            |      |      |      |  |   |                                   |      |         |         |                                       |  |                                |                            |                           |                                  |
| China  | 7,945                  | 9.2                        | N.A. | 100  | 4.83 | N.A.                                       | 0.6   | Medium                            | 42.3 | 1.5     | 100.7   |                                       |  |                                |                            |                           |                                  |
| <b>LATIN AMERICA</b>                             |                        |                            |      |      |      |  |   |                                   |      |         |         |                                       |  |                                |                            |                           |                                  |
| Chile  | 14,987                 | 5.9                        | 27   | 100  | 4.65 | 116.9                                      | 3.7   | Low                               | 61.4 | 0.4     | 59.6    |                                       |  |                                |                            |                           |                                  |
| Costa Rica                                       | 10,863                 | 4.2                        | N.A. | 100  | 4.34 | N.A.                                       | 0.9   | Medium                            | 47.5 | 0.4     | 9.7     |                                       |  |                                |                            |                           |                                  |
| <b>AFRICA</b>                                    |                        |                            |      |      |      |  |   |                                   |      |         |         |                                       |  |                                |                            |                           |                                  |
| South Africa                                     | 9,594                  | 3.1                        | N.A. | 100  | 4.37 | N.A.                                       | 1.3   | Low                               | 41.0 | 0.9     | 106.3   |                                       |  |                                |                            |                           |                                  |



**Table 10.2 Dignity Index—human development**

|                      | 1. HEALTH     |                                  | 2. EDUCATION                     |                               | 3. SOCIAL                   |                                      | Income inequality (Atkinson Index) | Inequality of life expectancy (% lost) | Youth unemployment (% of 15–24 yrs) |   |               |      |
|----------------------|---------------|----------------------------------|----------------------------------|-------------------------------|-----------------------------|--------------------------------------|------------------------------------|--|-------------------------------------|---|---------------|------|
|                      | overall score | Life expectancy (years at birth) | Maternal mortality (per 100 000) | Happiness (life satisfaction) | Expected years of education | Student performance (OECD PISA avg.) |                                    |  |                                     | Scientific publications (citations H-index) | overall score |      |
|                      | 2012          | 2010                             | 2012                             | 2010–11                       | 2009                        | 2011                                 | 2012                               | 2012                                   | 2011                                |   |               |      |
| <b>NORTH AMERICA</b> |               |                                  |                                  |                               |                             |                                      |                                    |  |                                     |   |               |      |
| United States        | High          | 78.7                             | 21                               | 7.2                           | Very high                   | 16.8                                 | 496                                | 1305                                   | Medium                              | 24.1  | 6.6           | 11.9 |
| <b>EUROPE</b>        |               |                                  |                                  |                               |                             |                                      |                                    |  |                                     |   |               |      |
| Finland              | VERY HIGH     | 80.1                             | 5                                | 7.4                           | Very high                   | 16.9                                 | 544                                | 352                                    | Very high                           | 11.3  | 3.9           | 19.3 |
| Sweden               |               | 81.6                             | 4                                | 7.5                           |                             | 16.0                                 | 495                                | 484                                    |                                     | 11.2  | 3.3           | 23.8 |
| Denmark              |               | 79.0                             | 12                               | 7.8                           |                             | 16.8                                 | 499                                | 399                                    |                                     | 11.0  | 4.4           | 15.7 |
| United Kingdom       |               | 80.3                             | 12                               | 7.0                           |                             | 15.3                                 | 500                                | 802                                    |                                     | 16.9  | 4.8           | 22.0 |
| Germany              |               | 80.6                             | 7                                | 6.7                           |                             | 19.7                                 | 524                                | 704                                    |                                     | 14.5  | 4.0           | 9.1  |
| France               |               | 81.7                             | 8                                | 6.8                           |                             | 16.1                                 | 497                                | 646                                    |                                     | 13.3  | 4.2           | 23.2 |
| Italy                |               | 82.0                             | 4                                | 6.4                           |                             | 16.2                                 | 486                                | 550                                    |                                     | 18.1  | 3.9           | 32.0 |
| Spain                |               | 81.6                             | 6                                | 6.2                           |                             | 16.4                                 | 484                                | 448                                    |                                     | 19.7  | 4.1           | 48.2 |
| Portugal             |               | 79.7                             | 8                                | 4.9                           |                             | 16.0                                 | 490                                | 218                                    |                                     | 20.8  | 4.9           | 31.7 |
| Greece               |               | 80.0                             | 3                                | 5.8                           |                             | 16.3                                 | 473                                | 247                                    |                                     | 18.1  | 4.8           | 51.5 |
| Austria              |               | 81.0                             | 4                                | 7.3                           |                             | 15.3                                 | 487                                | 355                                    |                                     | 12.7  | 4.2           | 8.8  |
| Netherlands          |               | 80.8                             | 6                                | 7.5                           |                             | 16.9                                 | 519                                | 545                                    |                                     | 12.3  | 4.3           | 7.8  |
| Belgium              |               | 80.0                             | 8                                | 6.9                           |                             | 16.4                                 | 509                                | 428                                    |                                     | 11.9  | 4.4           | 18.7 |
| Ireland              |               | 80.7                             | 6                                | 7.3                           |                             | 18.3                                 | 497                                | 254                                    |                                     | 13.8  | 4.3           | 35.3 |
| <i>EU-15 avg.</i>    | High          | 80.7                             | 6.8                              | 6.8                           | High                        | 16.6                                 | 500                                | 459                                    | High                                | 14.7  | 4.3           | 24.8 |
| <b>ASIA</b>          |               |                                  |                                  |                               |                             |                                      |                                    |  |                                     |   |               |      |
| China                | MEDIUM        | 73.7                             | 37                               | 4.7                           | High                        | 11.7                                 | 577                                | 353                                    | Medium                              | 29.5  | 13.5          | N.A. |
| <b>LATIN AMERICA</b> |               |                                  |                                  |                               |                             |                                      |                                    |  |                                     |   |               |      |
| Chile                | MEDIUM        | 79.3                             | 25                               | 6.6                           | Medium                      | 14.7                                 | 439                                | 181                                    | Low                                 | 34.1  | 6.6           | 21.1 |
| Costa Rica           | MEDIUM        | 79.4                             | 40                               | 7.3                           | Medium                      | 13.7                                 | N.A.                               | 97                                     | Very low                            | 37.9  | 7.8           | 21.6 |
| <b>AFRICA</b>        |               |                                  |                                  |                               |                             |                                      |                                    |  |                                     |   |               |      |
| South Africa         | LOW           | 53.4                             | 300                              | 4.7                           | Medium                      | 13.1                                 | N.A.                               | 216                                    | Very low                            | 63.1  | 28.4          | 55.0 |

**Table 10.3 Dignity Index—cultural development**

|                      | <b>CULTURAL DEVELOPMENT OVERALL SCORE</b> | <b>1. LIFE overall score</b> | Ecological footprint (CO <sub>2</sub> emissions) | Global Peace Index (GPI) | Trust of others in society (%) | <b>2. FREEDOM overall score</b> | Freedom of press (House) | Creativity (GEM entrepreneur index) | Openness to others (% of foreign-born pop.) | <b>3. JUSTICE overall score</b> | Rule of law (Freedom House) | Gender equality (% of women in parliament) | Foreign aid (% of GDP) |
|----------------------|---|------------------------------|--|--------------------------|--------------------------------|---------------------------------|--------------------------|-------------------------------------|---|---------------------------------|-----------------------------|--|------------------------|
| <b>NORTH AMERICA</b> |   |                              |  |                          |                                |                                 |                          |                                     |   |                                 |                             |  |                        |
| United States        | MEDIUM                                    | Low                          | 7.2  | 2.06                     | 37.0                           | Very high                       | 18                       | 0.717                               | 13.5  | Medium                          | 1                           | 17.0                                       | 0.2                    |
| <b>EUROPE</b>        |   |                              |  |                          |                                |                                 |                          |                                     |   |                                 |                             |  |                        |
| Finland              | MEDIUM                                    | Medium                       | 6.2  | 1.35                     | 58.0                           | Medium                          |                          | 0.564                               | 4.2   | High                            | 1                           | 42.5                                       | 0.6                    |
| Sweden               |   |                              | 5.7  | 1.42                     | 55.0                           |                                 | 10                       | 0.685                               | 14.1  |                                 | 1                           | 44.7                                       | 1.0                    |
| Denmark              |   |                              | 8.3  | 1.24                     | 60.0                           |                                 | 12                       | 0.763                               | 8.8   |                                 | 1                           | 39.1                                       | 0.9                    |
| United Kingdom       |   |                              | 4.7  | 1.61                     | 35.0                           |                                 | 21                       | 0.561                               | 11.2  |                                 | 1                           | 22.1                                       | 0.6                    |
| Germany              |   |                              | 4.6  | 1.42                     | 31.0                           |                                 | 17                       | 0.544                               | 13.1  |                                 | 1                           | 32.4                                       | 0.4                    |
| France               |   |                              | 4.9  | 1.71                     | 20.0                           |                                 | 24                       | 0.498                               | 10.7  |                                 | 1                           | 25.1                                       | 0.5                    |
| Italy                |   |                              | 4.5  | 1.69                     | 20.0                           |                                 | 33                       | 0.407                               | 7.4   |                                 | 1.5                         | 20.7                                       | 0.2                    |
| Spain                |   |                              | 4.7  | 1.55                     | 22.0                           |                                 | 24                       | 0.401                               | 15.2  |                                 | 1                           | 34.9                                       | N.A.                   |
| Portugal             |   |                              | 4.1  | 1.47                     | 27.0                           |                                 | 17                       | 0.350                               | 8.6   |                                 | 1                           | 28.7                                       | 0.3                    |
| Greece               |   |                              | 4.9  | 1.98                     | 16.0                           |                                 | 30                       | 0.318                               | 10.1  |                                 | 2                           | 21.0                                       | N.A.                   |
| Austria              |   |                              | 5.3  | 1.33                     | 29.0                           |                                 | 21                       | 0.454                               | 15.6  |                                 | 1                           | 28.7                                       | 0.3                    |
| Netherlands          |   |                              | 6.3  | 1.61                     | 46.0                           |                                 | 12                       | 0.616                               | 10.5  |                                 | 1                           | 37.8                                       | 0.8                    |
| Belgium              |   |                              | 7.1  | 1.38                     | 30.0                           |                                 | 11                       | 0.576                               | 13.7  |                                 | 1                           | 38.9                                       | 0.6                    |
| Ireland              |   |                              | 6.2  | 1.33                     | 30.0                           |                                 | 16                       | 0.631                               | 19.6  |                                 | 1                           | 19.0                                       | 0.5                    |
| <i>EU-15 avg.</i>    | MEDIUM                                    | Medium                       | 5.5  | 1.51                     | 34.2                           | High                            | 18.4                     | 0.526                               | 11.6  | High                            | 1.1                         | 31.1                                       | 0.6                    |
| <b>ASIA</b>          |   |                              |  |                          |                                |                                 |                          |                                     |   |                                 |                             |  |                        |
| China                | LOW                                       | Medium                       | 2.1  | 2.06                     | 57.0                           | Very low                        | 85                       | 0.281                               | 0.1   | Low                             | 8.5                         | 21.3                                       | 0.0                    |
| <b>LATIN AMERICA</b> |   |                              |  |                          |                                |                                 |                          |                                     |   |                                 |                             |  |                        |
| Chile                | MEDIUM                                    | Medium                       | 3.2  | 1.62                     | 15.0                           | Low                             | 31                       | 0.414                               | 1.9   | Medium                          | 1                           | 13.9                                       | -0.1                   |
| Costa Rica           | HIGH                                      | Medium                       | 2.5  | 1.66                     | 14.0                           | High                            | 19                       | N.A.                                | 10.5  | Very high                       | 1                           | 38.6                                       | -0.3                   |
| <b>AFRICA</b>        |   |                              |  |                          |                                |                                 |                          |                                     |   |                                 |                             |  |                        |
| South Africa         | MEDIUM                                    | LOW                          | 2.6  | 2.32                     | 17.0                           | Low                             | 34                       | 0.277                               | 3.7   | High                            | 2                           | 41.1                                       | -0.3                   |

Table 10.4 Dignity Index for selected countries, with rankings

|                      | DIGNITY INDEX<br>OVERALL SCORE | RANK |
|----------------------|--------------------------------|------|
| <b>NORTH AMERICA</b> |                                |      |
| United States        | HIGH                           | 3    |
| <b>EUROPE</b>        |                                |      |
| Finland              | HIGH                           | 2*   |
| Sweden               |                                |      |
| Denmark              |                                |      |
| United Kingdom       |                                |      |
| Germany              |                                |      |
| France               |                                |      |
| Italy                |                                |      |
| Spain                |                                |      |
| Portugal             |                                |      |
| Greece               |                                |      |
| Austria              |                                |      |
| Netherlands          |                                |      |
| Belgium              |                                |      |
| Ireland              |                                |      |
| <i>EU-15 average</i> | HIGH                           | 4    |
| <b>ASIA</b>          |                                |      |
| China                | MEDIUM                         | 7    |
| <b>LATIN AMERICA</b> |                                |      |
| Chile                | MEDIUM                         | 5    |
| Costa Rica           | MEDIUM                         | 6    |
| <b>AFRICA</b>        |                                |      |
| South Africa         | LOW                            | 8    |

one ranking is left empty, as no country is yet sufficiently grounded on a sustainable development model in the Global Information Age. ( \* above indicates this)

Another important aggregate observation related to the Dignity Index is that, unlike, for example, in the UN's Human Development Index, the European Union is left behind by the United States (except Finland, for the moment). This is because in the Global Information Age a sustainable development model requires sufficiently strong informational development that is ultimately also a prerequisite for financing a high level of human

development. Europe is here less renewed for the Information Age. For the reasons mentioned in the chapter on the Finnish model, its situation may also change, if it does not soon accomplish the listed renewals of its economy and wellbeing society.

As one more global observation one can note that, despite the strong economic growth of the Asian countries (such as China, which was analyzed as a case study), Latin America (for example in our case studies of Chile and Costa Rica) reaches higher levels of “dignity as development.”

As we emphasized in Chapter 1, instead of there being one universal political answer that suits all countries, each country will have to make its policy specifically in its own context. On the most practical level, the sort of questions a policymaker should ask based on the Dignity Index include the following: Where are my country’s weak points? What is the reason for low performance in these specific areas?

And then, going deeper to look at the country’s situation in each of the individual components separately: informational development, human development, and cultural development. And from there, going to an even deeper level of the sub-components, such as innovation or education or the cultural sub-components.

And then, finally coming back to the big-picture level, one can ask: How is this all forming a virtuous or a vicious circle between informational and human development, mediated by cultural development? And ultimately: What should be done in practice to improve this, in order to achieve a sustainable development model—or “dignity as development?” These questions are part of what constitutes dignity-based leadership in the Global Information Age.

## APPENDIX: CALCULATING THE DIGNITY INDEX

The following tables list the sources as well as the threshold values for each Dignity Index indicator and their levels: very high—high—medium—low—very low. Because in this Index we have wanted to emphasize the overall levels of development instead of marginal numerical differences, each indicator is normalized by assigning these levels the values of 3—2.5—2—1.5—1. In this way, we have intentionally sought to avoid the problem that comes in many forms of operationalizing indicators, namely that countries that are practically on the same level can get very different results in terms of their “ranking number.” Naturally, it is also easy to think of using statistically more complex methods in the future development of the index, especially when new global statistical data reflecting the Information Age becomes available. This preliminary index is in fact also meant as an invitation for collective further development (to contact for that, see [www.dignityasdevelopment.org](http://www.dignityasdevelopment.org)).

The overall levels for each component, sub-component, and the aggregate Dignity Index are derived by adding these values and dividing by the total number of indicators. Based on this, the results are then again translated into the scale of very high—high—medium—low—very low, rounding the figure to its nearest equivalent (that is, 2.75 is the threshold for “very high,” 2.25 is the threshold for “high,” 1.75 is the threshold for “medium,” 1.25 is the threshold for “low,” and below that is ranked “very low”).

The intent of this procedure is to grasp the overall level of development, instead of focusing on marginal decimal differences. In addition to the overall Dignity Index, the levels of its components and their sub-components are all presented separately, from informational to human to cultural development; this makes it possible to focus not only on the aggregate level but also on the specific sub-dimensions of development.

# Appendix: Calculating the Dignity Index

|                      | INFORMATIONAL 1. ECONOMY DEVELOPMENT OVERALL SCORE |        | GNI per cap. (PPP USD) | GDP growth (real annual) | Productivity (output per hour) | 2012 | 2011 | 2012     | 2012       | Competitiveness Index (WEF index) 2012 | Productivity growth | Receipt of royalties and license fees (USD per capita) | 3. TECHNOLOGY overall score | Internet users (% of pop.) | R&D Investment (% of GDP) | Patents per capita (per million) |
|----------------------|--|--------|------------------------|--------------------------|--------------------------------|------|------|----------|------------|--|---------------------|--|-----------------------------|----------------------------|---------------------------|----------------------------------|
|                      | VERY HIGH  | HIGH   |                        |                          |                                |      |      |          |            |  |                     |  |                             |                            |                           |                                  |
| <b>NORTH AMERICA</b> |  |        |                        |                          |                                |      |      |          |            |  |                     |  |                             |                            |                           |                                  |
| United States        | VERY HIGH  | High   | 43,480                 | 1.8                      | 100                            | 2012 | 2011 | 2012     | 5.47       | 108.2                                  | 387.1               | Very high  | 81.0                        | 2.8                        | 707.6                     |                                  |
| <b>EUROPE</b>        |  |        |                        |                          |                                |      |      |          |            |  |                     |  |                             |                            |                           |                                  |
| Finland              | VERY HIGH  | High   | 32,510                 | 2.7                      | 77                             | 2012 | 2011 | 2012     | 5.55       | 104.1                                  | 556.5               | Very high  | 91.0                        | 3.8                        | 172.1                     |                                  |
| Sweden               |  |        | 36,143                 | 4.0                      | 86                             |      |      |          | 5.53       | 103.8                                  | 619.4               |  | 94.0                        | 3.6                        | 147.1                     |                                  |
| Denmark              |  |        | 33,518                 | 0.8                      | 81                             |      |      |          | 5.29       | 101.5                                  | N.A.                |  | 93.0                        | N.A.                       | 27.9                      |                                  |
| United Kingdom       |  |        | 32,538                 | 0.8                      | 80                             |      |      |          | 5.45       | 105.4                                  | 226.3               |  | 87.0                        | 1.8                        | 90.2                      |                                  |
| Germany              |  |        | 35,431                 | 3.1                      | 90                             |      |      |          | 5.48       | 106.2                                  | 174.9               |  | 84.0                        | 2.8                        | 166.2                     |                                  |
| France               |  |        | 30,277                 | 1.7                      | 93                             |      |      |          | 5.11       | 104.1                                  | 240.0               |  | 83.0                        | 2.2                        | 157.7                     |                                  |
| Italy                |  |        | 26,158                 | 0.4                      | 72                             |      |      |          | 4.46       | 100.4                                  | 59.8                |  | 58.0                        | 1.3                        | 303.4                     |                                  |
| Spain                |  |        | 25,947                 | 0.4                      | 76                             |      |      |          | 4.60       | 109.1                                  | 23.0                |  | 72.0                        | 1.4                        | 60.2                      |                                  |
| Portugal             |  |        | 19,907                 | -1.7                     | 42                             |      |      |          | 4.40       | 109.6                                  | 5.7                 |  | 64.0                        | 1.7                        | 13.1                      |                                  |
| Greece               |  |        | 20,511                 | -6.9                     | 50                             |      |      |          | 3.86       | 100.2                                  | 6.1                 |  | 56.0                        | 0.6                        | 42.2                      |                                  |
| Austria              |  |        | 36,438                 | 2.7                      | 86                             |      |      |          | 5.22       | 108.7                                  | 92.6                |  | 81.0                        | 2.7                        | 134.6                     |                                  |
| Netherlands          |  |        | 37,282                 | 1.1                      | 96                             |      |      |          | 5.50       | 104.0                                  | 320.8               |  | 93.0                        | 1.6                        | 117.6                     |                                  |
| Belgium              |  |        | 33,429                 | 1.8                      | 98                             |      |      |          | 5.21       | 100.7                                  | 232.1               |  | 82.0                        | 2.0                        | 49.7                      |                                  |
| Ireland              |  |        | 28,671                 | 1.4                      | 90                             |      |      |          | 4.91       | 120.3                                  | 574.2               |  | 79.0                        | 1.8                        | 54.4                      |                                  |
| <i>EU-15 avg.</i>    | HIGH   | High   | 30,626                 | 0.9                      | 80                             |      |      | High     | 5.04       | 105.6                                  | 240.9               | High   | 79.8                        | 2.2                        | 109.7                     |                                  |
| <b>ASIA</b>          |  |        |                        |                          |                                |      |      |          |            |  |                     |  |                             |                            |                           |                                  |
| China                | MEDIUM   | Medium | 7945                   | 9.2                      | N.A.                           |      |      | Medium   | 4.83       | N.A.                                   | 0.6                 | Medium   | 42.3                        | 1.5                        | 100.7                     |                                  |
| <b>LATIN AMERICA</b> |  |        |                        |                          |                                |      |      |          |            |  |                     |  |                             |                            |                           |                                  |
| Chile                | MEDIUM   | Medium | 14,987                 | 5.9                      | 27                             |      |      | Medium   | 4.65       | 116.9                                  | 3.7                 | Low  | 61.4                        | 0.4                        | 59.6                      |                                  |
| Costa Rica           | MEDIUM   | Medium | 10,863                 | 4.2                      | N.A.                           |      |      | Low      | 4.34       | N.A.                                   | 0.9                 | Medium   | 47.5                        | 0.4                        | 9.7                       |                                  |
| <b>AFRICA</b>        |  |        |                        |                          |                                |      |      |          |            |  |                     |  |                             |                            |                           |                                  |
| South Africa         | LOW  | Low    | 9594                   | 3.1                      | N.A.                           |      |      | Low      | 4.37       | N.A.                                   | 1.3                 | Low  | 41.0                        | 0.9                        | 105.3                     |                                  |
| Very high            |  |        | 40,000                 | 3.5                      | 90                             |      |      | High     | 5.25       | 106.0                                  | 400.0               |  | 80.0                        | 2.5                        | 200.0                     |                                  |
| High                 |  |        | 30,000                 | 2.5                      | 70                             |      |      | Medium   | 4.75       | 104.0                                  | 275.0               |  | 65.0                        | 2.0                        | 150.0                     |                                  |
| Medium               |  |        | 20,000                 | 1.5                      | 50                             |      |      | Low      | 4.25       | 102.0                                  | 150.0               |  | 50.0                        | 1.5                        | 100.0                     |                                  |
| Low                  |  |        | 10,000                 | 0.5                      | 30                             |      |      | Very low | 3.75       | 100.0                                  | 25.0                |  | 35.0                        | 1.0                        | 50.0                      |                                  |
| Source:              |  |        | UNDP (2013)            | WB (2012)                | OECD (2013)                    |      |      |          | WEF (2013) | OECD (2013)                            | WB (2012)           |  | ITU (2013)                  | WB (2012)                  | WIFO (2012)               |                                  |

|  | 1. HEALTH     |                                  | 2. EDUCATION  |                             | 3. SOCIAL        |                                    | Youth unemployment (% of 15-24yrs) |             |           |
|--|---------------|----------------------------------|---------------|-----------------------------|------------------|------------------------------------|------------------------------------|-------------|-----------|
|  | overall score | Life expectancy (years at birth) | overall score | Expected years of education | overall score    | Income inequality (Atkinson Index) |                                    |             |           |
| <b>HUMAN DEVELOPMENT OVERALL SCORE</b> |               |                                  |               |                             |                  |                                    |                                    |             |           |
|  | 2012          | 2010                             | 2012          | 2010-11                     | 2000             | 2011                               | 2012                               | 2011        |           |
|  | 78.7          | 21                               | 7.2           | 16.8                        | 496              | 1305                               | 24.1                               | 6.6         |           |
| <b>NORTH AMERICA</b>                   |               |                                  |               |                             |                  |                                    |                                    |             |           |
| United States                          | High          |                                  | 7.2           | Very high                   |                  |                                    | 24.1                               | 6.6         |           |
| <b>EUROPE</b>                          |               |                                  |               |                             |                  |                                    |                                    |             |           |
| Finland                                | Very high     | 5                                | 7.4           | Very high                   | 16.9             | 544                                | 11.3                               | 3.9         |           |
| Sweden                                 |               | 4                                | 7.5           |                             | 16.0             | 495                                | 11.2                               | 3.3         |           |
| Denmark                                |               | 12                               | 7.8           |                             | 16.8             | 499                                | 11.0                               | 4.4         |           |
| United Kingdom                         |               | 7                                | 7.0           |                             | 15.3             | 500                                | 16.9                               | 4.8         |           |
| Germany                                |               | 7                                | 6.7           |                             | 19.7             | 524                                | 14.5                               | 4.0         |           |
| France                                 |               | 8                                | 6.8           |                             | 16.1             | 497                                | 13.3                               | 4.2         |           |
| Italy                                  |               | 4                                | 6.4           |                             | 16.2             | 486                                | 18.1                               | 3.9         |           |
| Spain                                  |               | 6                                | 6.2           |                             | 16.4             | 434                                | 19.7                               | 4.1         |           |
| Portugal                               |               | 8                                | 7.9           |                             | 16.0             | 490                                | 20.8                               | 4.9         |           |
| Greece                                 |               | 3                                | 5.8           |                             | 16.3             | 473                                | 18.1                               | 4.4         |           |
| Austria                                |               | 4                                | 7.3           |                             | 15.3             | 487                                | 12.7                               | 4.2         |           |
| Netherlands                            |               | 6                                | 7.5           |                             | 16.9             | 519                                | 12.3                               | 4.3         |           |
| Belgium                                |               | 8                                | 6.9           |                             | 16.4             | 509                                | 11.9                               | 4.4         |           |
| Ireland                                |               | 6                                | 7.3           |                             | 18.3             | 457                                | 13.8                               | 4.3         |           |
| EU-15 avg.                             | High          | 6.8                              | 6.8           | High                        | 16.6             | 500                                | 14.7                               | 4.3         |           |
| <b>ASIA</b>                            |               |                                  |               |                             |                  |                                    |                                    |             |           |
| China                                  | Medium        | 37                               | 4.7           | High                        | 11.7             | 577                                | 29.5                               | 13.5        |           |
| <b>LATIN AMERICA</b>                   |               |                                  |               |                             |                  |                                    |                                    |             |           |
| Chile                                  | Medium        | 25                               | 6.6           | Medium                      | 14.7             | 439                                | 34.1                               | 6.6         |           |
| Costa Rica                             | Medium        | 40                               | 7.3           | Medium                      | 13.7             | N.A.                               | 37.9                               | 7.8         |           |
| <b>AFRICA</b>                          |               |                                  |               |                             |                  |                                    |                                    |             |           |
| South Africa                           | Low           | 300                              | 4.7           | Medium                      | 13.1             | N.A.                               | 63.1                               | 28.4        |           |
| Very high                              |               | 5                                | 8.0           |                             | 16.0             | 525                                | 12.5                               | 5.0         |           |
| High                                   |               | 15                               | 7.0           |                             | 14.5             | 475                                | 15.0                               | 10.0        |           |
| Medium                                 |               | 25                               | 6.0           |                             | 13.0             | 425                                | 17.5                               | 15.0        |           |
| Low                                    |               | 35                               | 5.0           |                             | 11.5             | 375                                | 20.0                               | 20.0        |           |
| Very low                               |               |                                  |               |                             |                  |                                    |                                    |             |           |
| Source:                                | UNDESA (2011) | UNDP (2013)                      | Gallup (2012) | UNESCO (2012)               | OECD PISA (2009) | Scopus (2013)                      | UNDP (2013)                        | UNDP (2013) | WB (2012) |

| CULTURAL DEVELOPMENT OVERALL SCORE |  | 1. LIFE overall score | Ecological footprint (CO <sub>2</sub> emissions) | Global Peace Index (GPI) | Trust of others in society (%) | 2. FREEDOM overall score | Freedom of press (Freedom House) | Creativity (GEM entrepreneur index) | Openness to others (% of foreign-born pop.) | 3. JUSTICE overall score | Rule of law (Freedom House) | Gender equality (% of women in parliament) | Foreign aid (% of GDP) |
|------------------------------------|--|-----------------------|--|--------------------------|--------------------------------|--------------------------|----------------------------------|-------------------------------------|---|--------------------------|-----------------------------|--|------------------------|
| <b>NORTH AMERICA</b>               |  | Low                   | 7.2  | 2.05                     | 37.0                           | Very high                | 18                               | 0.717                               | 13.5  | Medium                   | 1                           | 17.0                                       | 0.2                    |
| United States                      |  | Medium                | 6.2  | 1.35                     | 58.0                           | Medium                   | 10                               | 0.564                               | 4.2   | High                     | 1                           | 42.5                                       | 0.6                    |
| <b>EUROPE</b>                      |  | Medium                | 5.7  | 1.42                     | 55.0                           | Medium                   | 10                               | 0.685                               | 14.1  | High                     | 1                           | 44.7                                       | 1.0                    |
| Sweden                             |  | Medium                | 8.3  | 1.24                     | 60.0                           | Medium                   | 12                               | 0.763                               | 8.8   | High                     | 1                           | 39.1                                       | 0.9                    |
| Denmark                            |  | Medium                | 4.7  | 1.67                     | 35.0                           | Medium                   | 21                               | 0.561                               | 11.2  | High                     | 1                           | 22.1                                       | 0.6                    |
| United Kingdom                     |  | Medium                | 4.6  | 1.42                     | 31.0                           | Medium                   | 17                               | 0.544                               | 13.1  | High                     | 1                           | 32.4                                       | 0.4                    |
| Germany                            |  | Medium                | 4.9  | 1.71                     | 20.0                           | Medium                   | 24                               | 0.498                               | 10.7  | High                     | 1                           | 25.1                                       | 0.5                    |
| France                             |  | Medium                | 4.5  | 1.69                     | 20.0                           | Medium                   | 33                               | 0.407                               | 7.4   | High                     | 1.5                         | 20.7                                       | 0.2                    |
| Italy                              |  | Medium                | 4.7  | 1.55                     | 22.0                           | Medium                   | 24                               | 0.401                               | 15.2  | High                     | 1                           | 34.9                                       | N.A.                   |
| Spain                              |  | Medium                | 4.1  | 1.47                     | 27.0                           | Medium                   | 17                               | 0.350                               | 8.6   | High                     | 1                           | 28.7                                       | 0.3                    |
| Portugal                           |  | Medium                | 4.9  | 1.98                     | 16.0                           | Medium                   | 30                               | 0.318                               | 10.1  | High                     | 2                           | 21.0                                       | N.A.                   |
| Greece                             |  | Medium                | 5.3  | 1.33                     | 29.0                           | Medium                   | 21                               | 0.454                               | 15.6  | High                     | 1                           | 28.7                                       | 0.3                    |
| Austria                            |  | Medium                | 6.3  | 1.61                     | 46.0                           | Medium                   | 12                               | 0.615                               | 10.5  | High                     | 1                           | 37.8                                       | 0.8                    |
| Netherlands                        |  | Medium                | 7.1  | 1.38                     | 30.0                           | Medium                   | 11                               | 0.576                               | 13.7  | High                     | 1                           | 38.9                                       | 0.6                    |
| Belgium                            |  | Medium                | 6.2  | 1.33                     | 30.0                           | Medium                   | 16                               | 0.631                               | 19.6  | High                     | 1                           | 19.0                                       | 0.5                    |
| Ireland                            |  | Medium                | 5.5  | 1.51                     | 34.2                           | High                     | 18.4                             | 0.526                               | 11.6  | High                     | 1.1                         | 31.1                                       | 0.6                    |
| <i>EU-15 avg.</i>                  |  | Medium                |  |                          |                                |                          |                                  |                                     |   |                          |                             |  |                        |
| <b>ASIA</b>                        |  | Medium                | 2.1  | 2.06                     | 57.0                           | Very low                 | 85                               | 0.281                               | 0.1   | Low                      | B.5                         | 21.3                                       | 0.0                    |
| China                              |  | Medium                |  |                          |                                |                          |                                  |                                     |   |                          |                             |  |                        |
| <b>LATIN AMERICA</b>               |  | Medium                | 3.2  | 1.62                     | 15.0                           | Low                      | 31                               | 0.414                               | 1.9   | Medium                   | 1                           | 13.9                                       | -0.1                   |
| Chile                              |  | Medium                | 2.5  | 1.66                     | 14.0                           | High                     | 19                               | N.A.                                | 10.5  | Very high                | 1                           | 38.6                                       | -0.3                   |
| Costa Rica                         |  | High                  |  |                          |                                |                          |                                  |                                     |   |                          |                             |  |                        |
| <b>AFRICA</b>                      |  | Medium                | 2.6  | 2.32                     | 17.0                           | Low                      | 34                               | 0.277                               | 3.7   | High                     | 2                           | 41.1                                       | -0.3                   |
| South Africa                       |  | Medium                |  |                          |                                |                          |                                  |                                     |   |                          |                             |  |                        |
| Very high                          |  | High                  | 1.0  | 1.50                     | 60.0                           | Medium                   | 20                               | 0.650                               | 15.0  | High                     | 1.5                         | 45.0                                       | 0.9                    |
| High                               |  | Medium                | 2.0  | 2.00                     | 45.0                           | Medium                   | 30                               | 0.600                               | 11.0  | High                     | 2.5                         | 35.0                                       | 0.7                    |
| Medium                             |  | Low                   | 3.0  | 2.50                     | 30.0                           | Medium                   | 40                               | 0.550                               | 7.0   | High                     | 3.5                         | 25.0                                       | 0.5                    |
| Low                                |  | Very low              | 4.0  | 3.00                     | 15.0                           | Medium                   | 50                               | 0.500                               | 3.0   | High                     | 4.5                         | 15.0                                       | 0.3                    |
| Very low                           |  |                       |  |                          |                                |                          |                                  |                                     |   |                          |                             |  |                        |
| Source:                            |  |                       | GFN (2008)                                       | GPI (2013)               | Gallup (2012)                  |                          | FH (2013a)                       | GEM (2012)                          | UNDP (2013)                                 |                          | FH (2013b)                  | IPU (2012)                                 | UNDP (2013)            |



|                      | DIGNITY INDEX OVERALL SCORE | RANK |
|----------------------|-----------------------------|------|
| <b>NORTH AMERICA</b> |                             |      |
| United States        | HIGH                        | 3    |
| <b>EUROPE</b>        |                             |      |
| Finland              | HIGH                        | 2*   |
| Sweden               |                             |      |
| Denmark              |                             |      |
| United Kingdom       |                             |      |
| Germany              |                             |      |
| France               |                             |      |
| Italy                |                             |      |
| Spain                |                             |      |
| Portugal             |                             |      |
| Greece               |                             |      |
| Austria              |                             |      |
| Netherlands          |                             |      |
| Belgium              |                             |      |
| Ireland              |                             |      |
| <b>EU-15 average</b> | HIGH                        | 4    |
| <b>ASIA</b>          |                             |      |
| China                | MEDIUM                      | 7    |
| <b>LATIN AMERICA</b> |                             |      |
| Chile                | MEDIUM                      | 5    |
| Costa Rica           | MEDIUM                      | 6    |
| <b>AFRICA</b>        |                             |      |
| South Africa         | LOW                         | 8    |
| Very high            | 2.75                        |      |
| High                 | 2.25                        |      |
| Medium               | 1.75                        |      |
| Low                  | 1.25                        |      |
| Very low             |                             |      |

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