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Policies for Happiness in the Global Village

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Abstract: This article employs three different measures of life satisfaction viewed as proxy for social utility, in order to test for the possible non-linear interactions between the quality of public governance, as reflected by the World Bank indicators, and globalization, as captured by the KOF index, for a dataset of 99 countries for a time span between 2001 and 2010. We conclude that efficient and trustworthy public policies may enhance life satisfaction. Moreover, there may occur a synergy effect between 'good' governance and globalization (especially for those components describing social globalization), while there is no substitute for the failure of public policies, in terms of human development and growth (with the effects on human development being substantially more important than those corresponding to the increase in national wealth).

Keywords: *life satisfaction, public governance, Worldwide Governance Indicators, KOF index of globalization*
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1. Introduction

We are living in a global village. In a certain sense, we are all neighbours. Not only due to the development of the way we travel nowadays, but more importantly due to the

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spreading of ideas, beliefs, opinions and habits, unprecedented in the history of mankind. In each corner of this village, we have mayors and "wise men councils". They make decisions affecting our daily life on a global scale. The traditional literature of public decision making processes does not fully highlight the mechanisms of their effects, since it is generally placed in the background of the state nations. But such background conceals the current interactions between the quality of local public policies, globalization and citizens' happiness. We bear in mind a story illustrating such interactions. A 12-years boy has his first piano concert on the stage of a prestigious national Opera House, with tremendous success. For his performance, he receives a prize of about 100 Euros. Consequently, he becomes one of the most promising young performers of his country, having the opportunity to perform on major European stages and to win an international competition by playing along others the difficult *Konzert Rondo KV 386* by Mozart. After a year, he receives a notification from the fiscal authority informing him that he is due to pay an income tax of around 3 Euros for "incomes from intellectual property rights". The boy receives a monthly stipend of merit of roughly 6 Euros per month, but no money has been received two months previous to the notification. The mother accepts to pay the tax, but argues that the problem is not the amount, but the attitude of the state, which does not encourage performance. The case goes public and gains a lot of sympathy for the boy and his family. However, the fiscal authority argues that it has to observe the application of law and there are no exceptions for the due tax even for a precocious musical talent. Thus, what can we learn from this true story? Beyond the controversial issues related to taxation mechanisms and principles, two simple facts may be discerned. Firstly, it is the objective fact that the boy had the opportunity to benefit from social globalization (i.e. "the spread of ideas, information, images and people" – Dreher, 2006: 1092) since he had the opportunity to perform in a cultural centre from abroad. Secondly, it is the subjective perception that the application of the regulatory framework in this case is somehow "too much". The objective opportunity created by globalization made him (in this case) happy. The subjective evaluation of a dimension of public policies made him unhappy. In other words, there was a "trade-off" in this boy's utility function between a "positive" externality represented by a globalization component and a "negative" constrain of the fiscal national policy. In other words, this story reveals an intriguing puzzle: is there any coherent set of interactions between "good governance", globalization and citizens' life satisfaction? And if the answer is affirmative, what types of mechanisms are driving such interactions?

Currently, there is an extended body of literature dealing with the so-called "subjective well-being". This concept is complex and reflects a wide set of factors, ranging from objective physiological and medical criteria (Fujita and Diener, 2005), age (Siedlecki et al., 2008), cognitive and emotional components (Diener et al., 1991; Diener et al., 1997; Diener et al., 2006) to life-ability (the capacity of an individual to cope with life's problems - Veenhoven, 2009), living conditions (livability of the environment - idem), education, income, employment status, gender and marital status (Frey and Stutzer, 2000, 2002; Di Tella et al., 2001; Kahnemann and Krueger, 2006; Di Tella and MacCulloch, 2006). This subjective assessment of well-being depends on economic and societal factors, such as the characteristics of cultural paradigm, state of human development, respect of human rights, political stability, economic freedom, distribution

of income, and the structural and institutional aspects of labour market (Inglehart and Klingemann, 2000; Veenhoven, 2000;Helliwell and Putnam, 2004; Radcliffe, 2005; Saribas, 2010).

In the respective literature, there should be made a careful distinction between two approaches. The first refers to the "objective" conditions of well-being; the second addresses the life satisfaction itself. The environmental factors contribute to the external framework, which can enhance or inhibit an individual's internal perception in regard to her/his life quality. Still, the existence of the corresponding factors does not automatically guarantee a positive evaluation of life. As Veenhoven (2009)argues, one can live in excellent circumstances, but still be unhappy, because of the inability to "reap the chances" offered by such an environment. This first analytical approach debates over the issues of economic growth and economic development, unemployment and jobs condition, social capital, trustworthiness and community support networks, cultural and behavioural norms, religion and democratic stance.

The second line of argumentation is developed around the self-evaluation of "life quality" (the degree in which an individual perceives the set of life's experiences as being positive as a whole). This view roots in the well-known idea of Bentham accordingly to which *Nature has placed mankind under the governance of two sovereign masters, pain and pleasure*[with a modern description of this "balance of pain and pleasure" in the version of Kahnemann's (2000) "objective happiness"]. At least two different perspectives can be identified here: 1) a long-run memory based perspective - considering that the current evaluation of life's quality is a construct founded on a set of experiences accumulated in time and, respectively, 2) a short-run memory based perspective - emphasising the valence (good or bad) and intensity (mild to extreme) of current affective or hedonistic experiences (Kahnemann, 2000). Our standpoint is that the human personality is a mix of "core" elements - shaped by the accumulation of experienced events and reactions to these events (the "personal history") - as well as "volatile" components - correlated to the current situation (the "moods"). Thus, the evaluation of "life satisfaction" at a certain moment in time will reflect both the perception about "life as it was" as well as the perception about "life as it is". One important consequence consists in that the sequence in which moment-utilities are experienced does not necessarily affect the total utility. However, such separability of the utility associated with life events and conjunctures can be violated in certain circumstances. In other words, we consider that the affect theory - which sees happiness as an (almost) continuous auto-referential mental process **-** is more plausible that the set-point theory **-** that considers the evaluation of happiness as a stable attitude towards life. Still, this does not exclude the possibility of long-run stability of happiness auto-evaluation especially in caeteris paribus conditions (if there are no major changes in the "micro" and "macro" determinants of happiness).

Hence, the "environmental factors" cannot be excluded from the list of current self-assessment of satisfaction with life. And one of the most important of these factors is the quality of public policies. As Ott (2010: 353) argues: [...] *technically good governance is a universal condition for happiness, and not just a western ideology. Democratic quality adds substantially to the positive effects of technical quality once technical quality has reached some minimal level.*

There are at least two arguments for postulating the existence of a significant impact of the quality of governance on life satisfaction. The first argument is related to an indirect impact through the nation's wealth. Better governance can sustain an increase in wealth which in turn contributes to higher levels of life satisfaction. The second argument accounts for the fact that an improvement in the quality of the public governance may lead to an improvement in the societal environment, since *governments can provide for additional conditions, like safety, healthcare and a minimal level of social equality and justice* (Ott, 2010: 354). Of course, as Helliwell and Huang (2008: 595) remark *Defining and evaluating "good government" requires some heroic assumptions*. Intuitively, "good governance" is associated with an increase in social welfare, sustainable growth-oriented public policies, a better status of democratic accountability, the promotion of social justice (with an inter-generational solidarity sound system), a stable social and political environment, economic freedom and freedom of speech and press, encouragement of civil society, openness, low levels of corruption, rule of law and effectiveness of law enforcement mechanisms, efficient bureaucracy and a good quality of public institutions. Nevertheless, such list of conditions for "good governance" cannot be an exhaustive one. Hence, we follow the approach proposed by Helliwell and Huang (2008). We consider three different measures of life satisfaction that will be used as a proxy for the utility and we evaluate against this proxy different dimensions of governance.

The third piece of the puzzle is the link between globalization and governance. As Kahler and Lake (2004) show, at least three dimensions of governance - centralization, democratic accountability and convergence- have been affected by global economic integration. Firstly, the *efficiency-based* models postulate that governance responds to shifting costs and benefits of economic integration (Alesina and Spolaore, 1997; Spolaore et al., 2000; Spolaore and Wacziarg, 2005). Such argument may be resumed as follows: *In general, being part of the same country implies sharing jointly-supplied public goods and policies in ways that cannot always satisfy everybody's preferences. This induces a trade-off between economies of scale and heterogeneity of preferences* (Spolaore, 2008: 4).

Secondly, the globalization may stimulate a transfer of authority and attributions from national public authorities to supranational entities or private bodies (companies, international professional structures or NGOs). Hence, these authorities are more likely to allow improved monitoring and control procedures and mechanisms, enhancing their accountability in front not only of their own citizens but of such entitiesas well.

Thirdly, international markets and real and financial flows drive national policies to become more similar in structure or goals. Investors and companies require stable, predictable and quite similar economic environments (in terms of regulations, rule of law, low levels of corruption and quality of institutions). They may exercise their bargaining capacity by threatening with an exit from the national jurisdictions if their "environmental requests" are not fulfilled.

Last but not least, globalization may directly affect the assessment of life satisfaction at national levels. For instance, as Graham (2005: 49-50) argues, one effect of globalization is *the increasing flow of information about the living standards of others, both within and beyond country borders, which can result in changing reference norms and increased frustration with relative income differences*. This effect is not limited to the perception of

inequalities, since the globalization of information allows citizens to compare the livability of their life, as a whole, with that of other nation citizens. Also, not all the individuals are able to grasp the benefits of free trade and capital markets. Furthermore, globalization may influence through "cultural contamination mechanisms" the local religious and ethical ideas which in turn are related to the views on life satisfaction (Uchida and Ogihara, 2012). Globalization supports the transnational networks which facilitate achieving local goals (Lin, 2002), influence the quality of education and, consequently, the development of human capital (Suárez-Orozco and Qin-Hilliard, 2004), affect the perception of space and of "social time" (Karsten, 2013)and change the structure of civil society (together with the diversification of the elites and new levels of micro and macro social mobility) (Romero, 2001).

Our contribution to these distinctive streams of literature is a threefold approach. We propose a model suggesting how life satisfaction, the quality of public policies and globalization may be viewed in a single framework. Secondly, we consider the possible non-linear connections between these variables and we empirically evaluate them in a cross-sectional approach for a set of 99 countries for a time span between 2001 and 2010. Thirdly, we estimate the "shadow prices" of public policies and globalization in terms of other explanatory variables.

2. The model

We depict the effects induced by the changes in the quality of public policies and by the increase in the globalization level, in terms of a political game between public bodies and society. In each moment *t* the public authorities propose a set of public policies fully observable by citizens and with effects that can be accurately estimated by the respective citizens. More specifically, we assume that the individual utility function is ordinal observable, and that the utilities are interpersonally comparable. That is, if two individuals *A* and *B* feel the same personal utility, $U^A{}_t = U^B{}_t$ holds. Hence, the model can be described by considering the utility function for a "median citizen".

The representation of the utility function must fulfil several conditions. Firstly, it should account for the possible nonlinearities in the effects of public policies and globalization on social utility. Indeed, it is less plausible that the impact of these variables is linearly translated onto utility. For instance, one may argue that an increase in the extension of public rules, norms and regulations might initially inhibit the economic and social dynamics up till a certain threshold. Above such threshold, the positive effects of better quality public policies may prevail. Similarly, an exposure of the society and economy to exogenous shocks through an increased openness may initially exert a negative impact. Only after the integration in the international economic, politic and social trends reaches a certain level, the benefits of globalization may occur.

Secondly, the utility function should deal with the potential manifestation of the "Easterlin Paradox" in our dataset. Accordingly to the "Easterlin Paradox", a nation's economic growth does not lead to a greater happiness for the typical citizen. In Easterlin et al. (2011) words: *Simply stated, the happiness-income paradox is this: at a point in time*

both among and within nations happiness varies directly with income, but over time happiness does not increase when a country's income increases.

However, other studies (Diener et al., 1991; Diener et al., 1995; Diener et al., 1997; Diener et al., 2006;Hagerty and Veenhoven, 2003; Stevenson and Wolfers, 2008; Inglehart et al. 2008; Bok, 2009) argue that in fact there is a positive and close relationship between income and happiness. As Bok (2009: 11) presents: "With only a few exceptions, wealthier countries have happier population than poorer nations". Or, in Inglehart et al. (2008: 264) broader perspective: *Since 1981, economic development, democratization, and increasing social tolerance have increased the extent to which people perceive that they have free choice, which in turn has led to higher levels of happiness around the world, as the human development model suggests*.

The debate concerns various aspects of the paradox: a) the long versus short-run approach; b) the distinction between happiness and life satisfaction or c) the measures of happiness (Easterlin et al., 2011).

On a theoretical ground, the paradox may emerge if life satisfaction depends on *inter pares* comparisons. If the reference individuals are citizens of the same nation and the income distribution is similar, then the "relative deprivation" will be close for the rich and poor countries. However, if life satisfaction depends more on affective experience and less on cognitive comparison, then the growth processes are less able to influence life satisfaction, because the innate "needs" are more important than the social acquired "wants" (Veenhoven,2009b).

Another possible manner to look at the mechanisms leading to life satisfaction is to distinguish between its determinants from the societal environment and, respectively, the ones dealing with the perception of individuals about the quality of their lives.

The first set of factors implies economic, social, political, cultural and ecological variables which are able to provide the means for a "good life" on the global societal level (the "welfare approach"). The second type of factors is related to an analysis of well-being at individual level, by looking at personal fulfilment, mental and physical health, community, family and friends, support mechanisms, capacity to cope with the current problems, the sense of belonging and inner life-chances (the "life satisfaction approach").

A useful framework to reconcile these two directions may be provided by the dynamic equilibrium model developed by Headey and Wearing (1992), which combines the effects of core personality characteristics with adaption processes. Individuals may temporarily deviate from their baseline personality under the impact of various exogenous events, but overtime they tend to restore this baseline. Thus, the current perceptions on well-being may deviate from its long-run tendency during the adaption to past experiences. However, the individuals will adjust to socio-economic shocks from their collective environment, by seeking to restore their balance as established by their personality and the attempt for self-expression and self-fulfilment. Also, on long-run, individuals' set point may shift as a consequence of substantial changes in their life conditions. Since the economic growth may involve some objective and psychological costs due to the associated changes in the nature and content of the work relationships and the stresses of competition as well as shifts in life style (Schorr, 1993, 1999), we argue that there may be a non-linear connection between growth and happiness. At

initial stages of growth, the happiness may decline, while on long-run after growth reaches a certain threshold, there might be a restore of happiness toward its set point.
Thirdly, other determinants of life satisfaction should be incorporated and their potential non-linear effects should be explicitly considered.
This utility function is depicted as:

$$U_t : -\alpha_1 p_t + \alpha_2 p_t^{\,2} - \beta_1 g_t + \beta_2 g_t^{\,2} - \gamma_1 x_t + \gamma_2 x_t^{\,2} - \omega_1 y_t + \omega_2 y_t^{\,2} + \varepsilon^{U}{}_t \quad (1)$$

Here p is an indicator of the quality of public policies, g captures various dimensions of globalization, y are the incomes and X is a matrix of other determinants of life satisfaction.
In a globalized world, there might appear a substitution effect between the national policies and the externalities from international markets and political actors. Hence, the effects of the national policies on growth may be described as:

$$y_t = ap_t + bg_t + cx_t + \varepsilon_t^{\,y} \quad (2)$$

Substituting (2) in (1) yield to:

$$U_t : -\alpha_1 p_t + \alpha_2 p_t^{\,2} - \beta_1 g_t + \beta_2 g_t^{\,2} - \gamma_1 x_t + \gamma_2 x_t^{\,2} -$$
$$-\omega_1 \left(ap_t + bg_t + cx_t\right) + \omega_2 \left(ap_t + bg_t + cx_t\right)^2 + \varepsilon_t \quad (3)$$

Taking into account the maximization condition $\frac{\partial U}{\partial p} = 0$, the optimal level for the quality of public policies, $p^*{}_t$, will be:

$$p^*{}_t = \frac{\left[\omega_1 + \frac{\alpha_1}{a} - 2\omega_2 \left(bg_t + cx_t\right)\right]}{2\left(\frac{\alpha_2}{a} + \omega_2 a\right)} \quad (4)$$

According to relation (4), the optimal level of the quality of public policies for an open society will depend on the satisfaction with life corresponding elasticity as well as on the implied elasticity in respect to income and the parameters of the income function.
Relation (4) suggests that the median citizen is willing to accept a lower quality of public policies, if compensated by a higher level of globalization. If, instead of individual effects of public policies and globalization on life satisfaction, a single synergic term $p_t g_t$ is considered then:

$$U_t : \delta_1 p_t g_t - \gamma_1 x_t + \gamma_2 x_t^{\,2} - \omega_1 y_t + \omega_2 y_t^{\,2} + \varepsilon^{U}{}_t$$
$$y_t = ap_t g_t + cx_t + \varepsilon_t^{\,y} \quad (5)$$

Deriving in respect to the synergic term $p_t g_t$ and imposing the maximization condition $\frac{\partial U}{\partial pg} = 0$ will lead to:

$$p^*{}_t g^*{}_t = \frac{1}{2\omega_2 a}\left[\omega_1 - \left(\frac{\delta_1}{a} + 2\omega_2 b\right) g_t - 2\omega_2 c x_t\right] \quad (6)$$

In other words, the representative citizen might accept a "sacrifice" in terms of other determinants of social income, if this is compensated by an improvement in both public policies and globalization.
Resuming, the model highlights the existence of non-zero substitution elasticity between the quality of public policies and globalization as distinctive determinants of life satisfaction as well as non-zero substitution elasticity between their synergic effect and other determinants of life satisfaction. In the following sections, we provide a methodology to estimate such substitution elasticities.

3. Variables

In order to capture the happiness status of each nation, we involve three distinct measures: an average subjective appreciation of life-as-a-whole, a measure of hedonic level of affect and a subjective / objective measure reflected by the so-called *Happy Planet Index*. The first two measures are provided by World Database of Happiness (Veenhoven, 2009, 2012, 2013a, 2013b). The first one is a single question measure of type: „All things considered, how satisfied or dissatisfied are you with your life as-a-whole these days" with the rating scales ranging from 0 to 10. The second one is a self-report on 14 questions related to various feelings and emotional reactions that had been recently experimented (enjoyment, physical pain, worry, sadness, stress, anger, depression, love, feeling rested, smiling or laughing, learning something interesting, feeling proud, feeling treated with respect). Such questions can be used for measuring hedonic level in aggregates, such as nations, since individual variations balance out in large samples.
Happy Planet Index is a composite measure of happiness which includes a self-assessment of the experienced well-being together with two objective measures of well-being: life expectancy and an estimation of the amount of land required to sustain a country's consumption patterns.
The involvement of such measures allows us to account for the relevant difference between life satisfaction as a whole and, respectively, a short-run balance of affects. As Helliwell *et al.* (2012: 13) argues there are at least three main distinctions between various measures of happiness used in literature: 1) the distinction between experienced and remembered well-being; 2) the distinction between current and remembered well-being and, respectively, 3) the distinction between evaluations and emotional reports on life satisfaction. Such distinctions may be involved in the estimation of cross-country variations in the happiness status. But how valid is a country-specific measure of happiness? Indeed, if the assessment of happiness is a purely personality-based process, then there could be no identifiable trend differences among countries (or, intra-country social groups' specific differences). However, if happiness is conditioned by human interactions as well, than the social context can be also an explanation for the fact that "social changes can cause sustained trends in well-being far beyond those explicable by conventional economic measures" (Helliwell et al., 2012: 20). An individual is connected to others in a complex web of social interactions and is, at least partially, self-defined by such interactions. As a consequence, the fact that the self-assessment of well-being is carried out in a given social environment and

influenced by it can be viewed as an argument to postulate the existence of country-specific trends in happiness.

To describe the various dimensions of governance quality, we employ the framework that is proposed by Kaufman et al. (2010) as reported by the World Bank's *Worldwide Governance Indicators* (WGI). The WGI data represent proxies for the various dimensions of governance quality and are computed in accordance with the updated methodology of Kaufman et al. (2010). These proxies are a) the selection, surveillance and replacement of government; b) the formulation and implementation of sound policies; and c) respect for institutions that govern economic and social interactions. Thus, the six variables refer to the following concepts: (i) government effectiveness; (ii) regulatory quality; (iii) the rule of law; (iv) voice and accountability; (v) political stability and the absence of violence/terrorism; and (vi) the control of corruption. The first two variables listed above can be regarded as directly reflective of the quality of a nation's policies. The next three variables from the list are associated to the political and social institutional framework of a nation. Corruption is a complex phenomenon with various political, social and cultural determinants; however, in the long run, this variable is more closely related to the effectiveness of public institutions and to the efficiency of a nation's relevant legal mechanisms than to some pro-cycle anticorruption policies. As a consequence, we regard the control of corruption as an "institutional" variable. Furthermore, among the institutional dimensions that are examined in this study, variables can be categorised into metrics that reflect a) the quality of democratic institutions, that is, the design of institutions and mechanisms that seek to ensure political stability and the accountability of public authorities (the variable measuring voice and accountability and the variable measuring political stability and the absence of violence/terrorism); and b) the quality of law enforcement (the variables measuring rule of law and the control of corruption). This distinction provides a better description of the transmission channels for the impact of institutions on economic output.

Several criticisms have arisen in recent years with respect to the procedures that are described above. For example, Arndt and Oman (2006: 61) argue that the aforementioned indicators are not reliable as they *[...] cannot reliably be used for monitoring changes in levels of governance over time, whether globally, in individual countries, or among specific groups of countries*. Langbein and Knack (2010) test both measurement and causal models of Worldwide Governance Indicators claim that these indicators fail to distinguish between the causal, measurement and mixed models, which measure the same broad concept. Thomas (2010: 40) argues that *The indicators Regulatory Quality and Government Effectiveness are not associated with established theoretical literatures, and the authors do not explain how in theory they should be related to observables*. As a consequence, the content validity of these indicators may be questionable since the object of the measurement is notrigorously defined. For the Rule of Law indicator, it is debatable that this should include crime levels or contract enforcement, but to omit other aspects such as equality under the law, the protection of citizen aspirations of dignity and the accessibility of justice as the Worldwide Governance Indicators does. Finally, it is not clear if the indicator "Voice and Accountability" should be related to political freedom or rather to the capability of the citizens to "change, rather than escape from, an objectionable state of affairs" as in Hirschman's (1970: 30) definition.

Another criticism of the aforementioned approach relates to the existence of a "halo effect". This argument asserts that the WGI data are overly influenced by the recent economic performance and/or the level of development of a country (see, for instance, Kurtz and Shrank, 2007). However, as noted by Kaufman et al. (2007), the empirical evidence underlying this is not substantial; moreover, the assumptions that this type of effect exists imply a "hidden hypothesis", namely, the existence of a "short-run" memory that determines the social subjects' evaluations and decisions. However, even in a framework of "bounded rationality"- that involves imperfect information and a decision-making mechanism that is not completely rational - it is difficult to sustain this hypothesis. As Anderlini et al. (2010: 574) comment, *Social memory is embodied in a society's vicarious beliefs about the past. These beliefs are shaped by both intergenerational communication and the imperfect physical evidence from the past*. Consequently, social subjects' evaluations of cyclical social processes, such as governance, will necessarily incorporate components that reflect persistent, long-run memory; thus, the "halo effect" is conceptually inconsistent.

Despite the arguments of the aforementioned critics, we contend that there are several advantages to using the Worldwide Governance Indicators data. Firstly, as mentioned above, these data describe and evaluate governance by addressing both institutional and policy-related issues. Secondly, the available dataset is quite large, allowing for certain dynamics in governance patterns to be captured. Thirdly, Kaufmann et al. (2003) reveal that the ideological bias of the WGI data may be rather small relative to the biases of other metrics, such as the Heritage Foundation's measures of economic freedom. Still, at this point, we agree that the underlying constructs are rather vaguely defined and are not clearly related to a consistent conceptual framework. Fourthly, from analyses of changes in WGI scores, empirical evidence exists to support the claims that these aggregate indicators are not distorted by statistical issues (Kaufman et al. 2002). With respect to these listed considerations, WGI data provide superior performance relative to other available indicators of governance (for a detailed analysis of the drawbacks of various indicators, see Mimicopoulos and Kyj, 2007).

In the interpretation of the results, it is important to remind the fact that „the WGI project is based exclusively on subjective or perceptions-based measures of governance, take from surveys of households and firms as well as expert assessments produced by various organizations" (Kaufman et al., 2010: 18). Hence, there might be sharp differences between *de jure* and *de facto* measures for individual cases. But from our perspective, this is a strong point in the favour of the WGI involvement since one can argue that the self-assessment of well-being is more likely to be influenced not only by the *de facto* status of public policies, but rather by their perception-based evaluations.

For the purpose of describing the status of globalization, we involve the *KOF Index of Globalization* (Dreher, 2006, Dreher et al., 2008). This index measures three main dimensions of globalization: economic, social and political. Also there are sub-indices referring to: actual economic flows, economic restrictions, and data on information flows, on personal contact and on cultural proximity. The economic globalization is captured by current real and financial international flows as well as the status of restrictions on trade and capital. The political globalization is depicted as „political engagement" dealing with variables such as the number of embassies in a country, the number of international organizations to which the country is a member, the number of

treaties signed between two or more states since 1945, and the number of UN peace missions a country participated in. The social globalization covers personal contacts, information flows and the cultural proximity.

From our point of view, the most debatable definition is the one for the cultural proximity which is described as the „domination of American cultural products" (Dreher, 2006). It is doubtful that the „number of McDonald's restaurants located in a country" may really capture the whole complexity of the cultural globalization. And the same argument applies for the number of Ikea per country. Still, the traded books proxy may be viewed as being more related to the cross-borders flows of ideas and believes.

As Featherstone (1995:6) explains, two opposite points of view may be identified: *Heterogeneous cultures become incorporated and integrated into a dominant culture which eventually covers the whole world. The second image points to the compression of cultures. Things formerly held apart are now brought into contact and juxtaposition*. If the culture implies a certain approach of the fundamental issues, the search for the "ultimate meaning that offers goals and motivations" (Wang, 2007: 84), as well as a system of shared values and a network of social relationships (Featherstone, 1996) then the homogenization thesis does not stand (at least in its „strong" sense). In the global era, there is a web of interactions in which the cultural paradigms are influenced in a dynamic and fluid way. The postmodernist framework is far from being universal and homogenous phenomena. Hence, the image of the culture promoted by the KOF index appears to be a „reductionist" one and fails to describe the cultures' contamination and identity enhancement processes that emerge in the globalization wave. Of course, it may be argued that there is a global market for cultural products. And among these products, the Hollywood style ones are among the most marketable. Still, as Dreher et al. (2008: 11) notes: *At the local level, globalisation has not led just to what some commentators argue to be an "Americanisation" of traditional cultures. It has also increased interpersonal international cultural exchanges via migration, tourism and exchange studentships. Many homogeneous societies have been transformed into multicultural communities in which people from different cultural backgrounds and ethnicities live together.*

Thus, an equilibrate critics of the KOF proposed measure of cultural globalization may consist in the idea that this measure capture *some* but not *all* of the involved aspects.

As control variables, we involve the following: income per capita, Human Development Index, urban population and age dependency ratio.

As is mentioned in Section 2, the effects of income are considered in a non-linear fashion describing a potential "U-shape" effect of the increase in societal wealth on social life satisfaction. Even if the use of income per capita as a growth proxy can be seen as a controversial choice, it is motivated by our long-run approach of growth being measured in terms of "output stock" and not of "resource flows". Additionally, we attempt to account for the large discrepancies in the dataset, which include both poorly and highly developed countries. As Cypher and Dietz (2009: 56) find *using income per capita as a surrogate for development is most reliable both for the highest-income nations and for the lowest-income, least developed nations […]. For the seventy-two lower-middle and upper-middle income countries in the studies, however, the level of income per capita turned out to be an unreliable indicator for the level of human development*. They conclude that *considering both the level and relative position of a country using GNI per capita or GDP*

per capita [...] and the HDI scores is, perhaps, the most prudent way to evaluate the level of development (Cypher and Dietz, 2009). Nonetheless, we are not viewing growth and human development as perfectly overlapping concepts, because the latter indicates both how income is obtained and distributed. In other words, human development cannot be achieved if a small fraction of the population concentrates and controls the distributional mechanisms - not even in countries with higher income. Given that our focus is on "growth" processes and not on "development", we are using as an explanatory variable the real GNI per capita, computed based on purchasing power parity by the World Bank database. Equally important, we are seeking to prevent the critics formulated in Easterlin and Angelescu (2009) according to which: *time series studies [...] confuse a short-term positive association between the growth of happiness and income, arising from fluctuations in macroeconomic conditions, with the long/term relationship, which is nil.*

Furthermore, we consider the effects of an overall human development and we involve the Human Development Index as a proxy for this variable. Leigh and Wolfers (2006) in a response to Blanchflower and Oswald (2005) compare happiness in Australia with the Human Development Index and find a significant positive association of subjective well-being and human development. Such findings may reflect the pursuit of the „post-materialist happiness" as the societies are shifting from materialistic extrinsic concerns to the post-materialist valorisation of the personal autonomy and self-fulfilment related intrinsic values.

Urbanization is a key component of the modernization. In this hypostasis, the accompanying shifts in values and mentalities may lead to an increase in the level of happiness over-compassing the disadvantages of large human agglomerations (Veenhoven and Berg, 2013).

Finally, some international evidences (Eichhorn, 2012) suggest that, in societies with a predominance of secular-rational values, there might appear a positive interaction effect with personal age, meaning that the negative direct effect is partially mitigated by such values.

4. Estimation strategy

We develop our estimation strategy in several steps. As a preliminary analysis, we run individual regressions with the components of the WGI grouped in four dimensions: 1) quality of public policies (*Government Effectiveness* and *Regulatory Quality* as explanatory variables); 2) quality of institutions and democratic status (including *Voice and Accountability* and *Control of Corruption*); 3) quality of the regulatory framework (variable *Rule of Law*) and, respectively, quality of political mechanisms (variable *Political Stability and the Absence of Violence/Terrorism*) as well as an overall index of governance indicators together with the KOF Index of Globalization components and the other control variables. The overall index of governance is estimated in the *factor analysis* framework. The so-called *Principal Components Analysis* (PCA) is a method for explaining the covariant relationships amongst a number of observed variables in terms of a much smaller number of unobserved variables that are named *principal components*. More exactly, PCA includes correlated variables with the purpose of reducing the numbers of variables and explaining the same amount of variance with fewer variables.

A principal component is a linear combination of weighted observed variables. The number of components extracted is equal to the number of observed variables in the analysis. The first principal component identified accounts for most of the variance in data. Principal components are uncorrelated and orthogonal. Communality is the variance of observed variables accounted for by a common factor. Communality is more relevant to other methods such as *Exploratory Factor Analysis* (EFA) (Child, 1990) than to PCA (Hatcher, 1994). However, if communalities are large enough, the results from the EFA and PCA could be quite similar.

The main argument in involving PCA for the construction of the overall index of governance is the potential significant correlation among the component variables. And PCA is designed to be used in cases in which variables are highly correlated.

Based on the outcomes of this stage, we further estimate a model which includes the overall index of governance as well as the overall KOF index. As estimation method, we involve a *Generalized Linear Model* (GLM) (with *Generalized Estimating Equations* methodology - GEE - Liang and Zeger, 1986). This methodology provides consistent estimates of the parameters and of their variances under mild assumptions about the corresponding time dependence. The GLM models are a large class of statistical models for relating responses to linear combinations of predictor variables. The linear predictor is a function of the mean parameter μ via a *link* function, $g(\mu)$ which can be can be any monotonic, differentiable function. While for the normal linear model, *g* is an identity, GLM allows the involvement of link functions other than the identity. Moreover, in the GLM frame are included stochastic components following distributions other than the normal. Supplementary, in order to have a baseline for comparison purposes, we also consider OLS estimates of the coefficients.

We derive from the empirical parameters of such model the relative shadow prices of governance quality.These shadow prices are inferred from the effects of globalization, human development, the degree of urban development and age dependency. These prices are simply estimated as $(\alpha_1 + 2\alpha_2)/(\gamma_1 + 2\gamma_2)$ and, respectively, $(\beta_1 + 2\beta_2)/(\gamma_1 + 2\gamma_2)$. Thus, the citizens are willing to give up such fraction of the involved variables, in order to maintain a constant level of their life satisfaction.

There are several studies aiming to estimate the monetary value for the determinants of life satisfaction such as airport noise (van Praag and Baarsma, 2005), air quality (Luechinger, 2009) or health (Powdthavee and van den Berg, 2011). However, we do not estimate the governance and globalization in monetary terms, but instead in terms of other underlying factors. Hence, these shadow prices may be viewed as an estimation of citizens' willingness to accept lower levels of other life satisfaction determinants if these are compensated by better public policies.

Additionally, we turn to the case in which there are no individual effects induced by governance and globalization. Instead, a single synergic effect of these two variables is considered. In such case, its relative shadow price is $(\delta_1)/(\gamma_1 + 2\gamma_2)$.

In this approach, we explicitly include in the utility function the quality of governance and the levels of globalization instead of analysing them as events. Also, we account for non-linearity (decreasing marginal utility) of other life satisfaction determinants when computing their values for governance and globalization.

5. International data

The data for average subjective appreciation of life-as-a-whole and for hedonic level of affect are provided by World Database of Happiness (Veenhoven, 2009, 2012, 2013a, 2013b). This is an archive of research findings on subjective enjoyment of life and includes 963 measures of happiness, mostly single survey questions varying in wording and response scale. The considered measures reflect items that concern happiness in the sense of "subjective appreciation of life-as-a-whole", as assessed in surveys by direct questions and passed the validity test for inclusion in the World Database of Happiness. The *Happy Planet Index* (HPI) is an index of human well-being and environmental impact that was introduced by the New Economics Foundation (NEF) in July 2006. The index is weighted to give progressively higher scores to nations with lower ecological footprints.
The Worldwide Governance Indicators are a compilation of the perceptions of a very diverse group of surveys and other cross-country assessments of governance as these are reported by World Bank. The WGI cover over 200 countries and territories starting from 1996.The data from various sources (surveys of firms and households, as well as the subjective assessments of a variety of commercial business information providers, non-governmental organizations, and some public sector bodies) are combined into six aggregate governance indicators by using an *Unobserved Components* model (UCM). Almost all the data sources are available annually and only few of them updated only once every two or three years.
The control variables are collected from World Development Indicators database provided by World Bank. Details on each of these variables are reported in Data Appendix.
For obtaining smoother estimations, all the involved variables are computed as 10 years averages of all available data between 2001 and 2010. Also, in order to align the distribution of the data as close as possible to a normal distribution, all the explanatory variables X are normalized to a standard score Z by subtracting their mean μ and dividing the outcome to their standard deviation σ: $Z = \frac{X - \mu}{\sigma}$. Hence their units will also be those of a standard normal random variable, i.e. with zero mean, unit standard deviation, and ranging approximately from -2.5to 2.5.
The dataset included 99 countries both developed and developing for 2001-2010 (Albania, Algeria, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bolivia, Brazil, Bulgaria, Burkina Faso, Cambodia, Cameroon, Canada, Chad, Chile, Colombia, Costa Rica, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Georgia, Germany, Ghana, Greece, Guatemala, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Kenya, Kuwait, Kyrgyz Republic, Latvia, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Mali, Malta, Mexico, Moldova, Mozambique, Namibia, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Pakistan, Panama, Paraguay, Peru,Philippines, Poland,Portugal, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Syria, Tajikistan, Tanzania, Thailand,

Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Kingdom, United States, Uruguay, Uzbekistan, Venezuela, Zambia and Zimbabwe).
The main statistics are reported in Table 1.

[Insert Table 1 about here]

The non-normal values of the distribution parameters and the standard deviations of the life satisfaction variables suggest important cross-section heterogeneity of data.Such heterogeneity may reflect the existence of a set point in the positive range perhaps "because humans are predisposed to feel predominantly pleasant affect if nothing bad is happening" (Diener, 2000: 38).

6. Results

The outcomes of the individual regressions with the components of the WGI grouped in the mentioned dimensions are reported in Table 2.

[Insert Table 2 about here]

At a first glance, one can notice that the „U-shape" impact of policies' variables on life satisfaction can be clearly highlighted regardless the involved measure of life satisfaction (with the possible notable exception of *Regulatory Quality* and *Voice and Accountability* variables which appears to be linked in a linear fashion to all estimators of life satisfaction). The results for the *Control of Corruption* variable are rather ambiguous with no clear effect, while *Rule of Law* and, respectively, Political *Stability and Absence of Violence/Terrorism* appear to exercise a relative lower influence on life satisfaction. The smallest impact corresponds to the one for *Government Effectiveness* and this variable does not appear to be statistical significant at any conventional levels of significance in GLM estimations. All the other variables of governance are statistically significant at least at 10%.
In greater details, due the choice of units for governance indicators, which implies that the standard deviation of the cross-country data is equal to one, the coefficients for the dimensions of governance can be interpreted as the increase in the estimators of life satisfaction by $\left[\left(e^{\alpha_1}-1\right)+\left(e^{\alpha_2}-1\right)\right]*100$ percentages that are caused by a change of one standard deviation in the levels of these dimensions. Thus, these estimates imply in the case of OLS estimates for "Satisfaction with Life" from World Database of Happiness that if each of these indicators is improved by one standard deviation, a "net" (i.e. estimated by taking into account both α_1 and α_2) increase in an rangebetween approximately 13.93-fold (in the case of the *Regulatory Quality* variable) and-0.03-fold (in the case of the *Control of Corruption* variable) in satisfaction with life will occur. For the *Global Governance* indicator, this impact is approximately 6.57-fold. For the GLM estimates, the amplitude of the impact is usually significantly lower and it range between 1.43-fold (in the case of the *Regulatory Quality* variable) and -0.19-fold (in the case of the *Control of Corruption* variable), while for the *Global Governance* indicator it reach an amplitude of 0.14-fold.
If the dependent variable is the *14-item Yesterday's Affect Balance* variable, the GLM estimates reflects higher amplitude for the impact of one standard deviation in the governance variables. In this case, such impact range between 4.03-fold for *Regulatory*

Quality variable and, respectively, -0.30-fold for the *Control of Corruption* variable, while for the *Global Governance* indicator this impact is around 0.85-fold.
Interestingly, if the dependent variable is *Happy Planet Index*, the net impact of the governance variables is clearly lower, being placed between 2.72-fold for *Regulatory Quality* variable and, respectively, -0.22-fold for the *Control of Corruption* variable. For the *Global Governance* indicator this impact is around 0.24-fold.
Overall, these results are depicting a pattern of the impact exercised by the variables defining the quality of public governance, which is consistent and relatively robust in respect to various measures of life satisfaction. The most powerful explanatory variables appear to be the ones related to *Regulatory Quality* and *Voice and Accountability*. A better regulatory framework i. e. a greater ability of the government to formulate and implement sound policies and regulations which protect and support the development of economic freedom as well as freedom of expression, freedom of association and a free media will sustain an increase in life satisfaction, regardless if it is measured on long or short run. However, it appears that there is less room for the effects of the quality of civil service and the quality of policy formulation and implementation. Also, the effects of *Political Stability and Absence of Violence/Terrorism* appear to be less substantial for the countries in our dataset. The most peculiar result is the one associated with the low impact for *Control of Corruption* variable. One possible explanation may consist in that, in our data sample, less than 46% of the countries show some improvements in the control of both petty and large corruption for the span between 2001 and 2010, while for the rest of the countries there is a decline in the perceived effectiveness of the anti-corruption policies or virtually no improvement in these policies. More exactly, the cross-countries average of this variable was decline between 2010 and 2010 for our dataset with around 14%.
Globally, the most sensitive estimator of life satisfaction to the status of public governance is the hedonic level of affect, while a subjective / objective measure such *Happy Planet Index* seems to be less impacted.
From the components of KOF index, the largest impact is exercised by *Social Globalization* dimension ranging between lowest levels of 0.69-fold, if the dependent variable is "Satisfaction with Life" and highest levels of 2.65-fold if the dependent variable is the *affect balance*. If the *Economic Globalization* is considered, this induces a negative effect on life satisfaction, in almost all the models, and, in most cases, does not display a statistical significance. Of course, one may argue that the impact of economic globalization is, in fact, "shadowed" by the consequences of globalization for local economic growth and economic freedom. Still, if this point of view holds, then it implies that there is no *direct* impact of economic globalization onlife satisfaction and what it matters are actually its effects on national economic systems. Of course, this is far from being a non-controversial (or, in our view, even consistent) argument. The fact is that countries which rank highly on economic globalization such as Singapore, Luxembourg, Netherlands, Belgium or Estonia, also rank on medium or lower position in respect tolife satisfaction, regardless of how it is measured.
From the control variables, the largest effects are the ones induced by the *Human Development Index*. This variable is statistical significant at 1% in all estimations and both coefficients for level and quadratic values are positive. Clearly, a long and healthy life, a better education and a decent standard of living contribute substantially to life

satisfaction. It is important to note that the effects of human development are substantially more important that the ones corresponding to the increase in national wealth. Also, the results suggest that the "Easterlin Paradox" might be the outcome of neglecting the non-linearity of the involved transmission channels, since there is a robust "U-shape" preserved between various estimations. The effects of urban population and age dependency ratio are similar to other findings in literature and they provide additional information on the mechanisms of self-assessment of well-being.

Based on these preliminary findings, we further estimate an "all in one" model with an overall index on governance constructed with the PCA methodology. This index is statistical significant at 1% (5%) in all estimations and its impact on life satisfaction ranges in GLM frame between 0.07-fold and 0.23-fold. For the OLS estimates, this impact is substantially larger.

[Insert Table 3 about here]

Since none of the quadratic values of the KOF index are now statistically significant, while all the models provide positive and statistically significant at 1% estimates for the levels of this index, it appears that the impact of the overall index of globalization is absorbed on short-run regardless what measure of life satisfaction is involved. Once again, the maximum sensitivity to governance and globalization is displayed by the hedonic level of affect.

From the explanatory variables, the human development remains the most powerful one, while the short and long run effects of age dependency tend to cancel each other. The urban population is positively associated with life satisfaction in levels as well as in squares values, implying that urbanization acts both on short and long run, while age dependency exercises an "U-shape" impact.

By accounting these results, we derive the relative shadow prices for quality of governance in terms of the other involved variables (Table 4).

[Insert Table 4 about here]

The highest shadow price corresponds to the degree of urbanization. Citizens are willing to accept a relative lower fraction - between 0.29 and 0.89 from the degree of urbanization, if this is compensated by better public policies. The lowest shadow price corresponds to human development: citizens accept a relative worst level of human development - only for a fraction between 0.07 and 0.10,if they are able to benefit from efficient governance, a stable and democratic social and political environment and a good accountability of public decisions. The shadow prices in monetary expression are all negative, as citizens estimate the impact of public policies primary in terms of their living standards. Public policies that negatively affect the incomes on long-run are penalized by citizens' discontent (they might accept short-run reductions in incomes, if such reductions are perceived as being justified in a given economic context). The amplitude of this effect is higher if the life satisfaction is measured as the hedonic level of affect.

The relative shadow prices of globalization are significantly more substantial than the ones for policies (Table 5). The most important of these prices corresponds to the global index of governance: citizens are willing to pay between 2.51 and 5.38 times in terms of national policies' quality in order to benefit from international openness and opportunities. However, they are less willing to sacrifice the level of human development for the sake of globalization. If the price of globalization is assessed in

terms of income, the citizens of the countries included in the dataset are even less enthusiastic to pay than they are for better policies.

Supplementary, we consider the case in which, instead of individual effects, there is a single synergy effect of policies and globalization on life satisfaction (Table 6).

[Insert Table 6 about here]

In such case, the combined effect is positive and statistically significant in relation with life satisfaction in all estimations. In GLM estimates, this combined effect ranges between 0.15-fold and 0.26-fold, while for OLS estimates it appears to be substantially larger.

The relative importance of the control variables remains unchanged with human development playing again the most important role.

As expected, the relative shadow prices of the combined effect are smaller in comparison with the corresponding prices of individual effects. Citizens accept to pay between 0.04 and 0.07 from the level of human development that they currently enjoy and, respectively, between 0.23 and 0.33 from the urbanization levels, in order to benefit both from better public policies and higher degree of openness. However, they penalize almost four times less a reduction in their income, if they benefit from the combined effect.

7. Conclusions

Nowadays, public decisions are adopted in a world shaped by the wave of globalization. This meta-process generates various factors with a simulative / inhibitor impact for the results of these decisions. We propose a framework for the joint effects of public decisions' quality and globalization on life satisfaction. We follow the approach proposed by Helliwell and Huang (2008) according to which life satisfaction provides a measure of utility broad enough to encompass most relevant aspects to evaluating the quality of public governance. We extend this idea by considering that life satisfaction is also a good proxy for the effects of globalization on citizens' daily life. Based on this, we propose a model to describe the combined effects of public governance and globalization in an integrated utility function. We test this model for an extended set of countries and use the empirical parameters to evaluate the relative shadow prices of governance and globalization mainly in non-monetary terms. Our conclusions remain robust even if we control for income, human development, urbanization and age dependency.

From the descriptors of the good governance, the quality of the regulatory framework and the political dimensions are playing a great role. The efficiency and the trustworthiness of the architecture of policies and regulations contribute significantly to achieving higher levels of life satisfaction. As for the control of corruption, this appears to contribute less, perhaps because in general no substantial improvement was recorded during the analysis span. Hence, it seems that there is a hierarchy of preferences for different aspects of governance with the prevalence of those aspects directly linked to the formulation and implementation of sound policies and the associated liberties protecting the civil society.

For the components of globalization, we did not find significant evidences for an effect of economic globalization on life satisfaction. However, such evidences clearly support a

positive impact of social globalization on citizens' utility. Since social globalization pertains to human interaction within changing cultural paradigms, it appears that the effects of globalization on family, religion, work and education are of paramount importance.

We also find that the most sensitive estimator of life satisfaction both to governance and globalization is the hedonic level of affect, while a partial "objective" measure such as *Happy Planet Index* is less affected by these. For the overall self-assessment of life satisfaction, the amplitude of effects is average. Thus, it might be concluded that "good" governance and globalization are able to exercise substantial short-run effects as well as some long-run effects. Also, there appears to be a synergy effect between quality of governance and globalization which is robust across different measures of life satisfaction.

Based on these outcomes, we estimate the relative shadow prices. In our estimations, these prices are considerably larger for globalization than for national policies. According to the values of these prices, there might be a trade-off between the local governance and international factors impacting various aspects of life, as well as between governance and globalization and urban infrastructure. But there is little room for such trade-off with human development and, at least on long-run, no willingness of the citizens to pay the price of bad policies in terms of income.

From the control variables, human development seems to encompass the largest set of life satisfaction ground factors. There seems to not be any substitute for a sustainable human development. Also, the results show that the effects of ageing can be partially alleviated by "good" governance and a high level of globalization.

What can we learn from these findings? Some preliminary conclusions can be drawn. Firstly, policies that promote a sound private sector development, a social environment with a strong civil society and high degree of freedom of expression, freedom of association, and a free media, a pro-human development effectiveness, good norms and regulations, and pertinent political accountability mechanisms can enhance the satisfaction with life. Secondly, there may occur a synergy effect between "good" governance and globalization and especially for those components which are related to individual free movements, information flows and the cultural openness. Thirdly, it appears that a high level of globalization might compensate, up till a certain threshold, a lower quality of national policies. Fourthly, there are no substitutes for the performances of these policies in terms of human development and growth.

What is next? The outcome of our analysis suggests that a proper model for the interactions between public governance and life satisfaction should include, in an explicit manner, in the utility function various components of globalization. However, a realist way to do this will require a sounder theoretical framework as well as more disaggregated data in order to capture the involved dynamics.

Table 1. Main statistics of data

	Government Effectiveness	*Regulatory Quality*	*Voice and Accountability*	*Control of Corruption*	*Rule of Law*	*Political Stability and Absence of Violence / Terrorism*	*Satisfaction with Life*	*Happy Planet Index*	*14-item Yesterday's Affect Balance*	*Economic Globalization*	*Social Globalization*	*Political Globalization*
Mean	0.28	0.32	0.24	0.19	0.16	-0.01	6.14	27.39	43.96	0.00	0.07	0.04
Median	0.02	0.20	0.07	-0.16	-0.05	0.06	6.26	26.76	43.00	-0.01	0.28	-0.18
Maximum	2.22	1.85	1.64	2.46	1.94	1.56	8.49	48.17	66.00	1.98	1.39	1.69
Minimum	-1.47	-2.02	-1.63	-1.45	-1.70	-1.95	2.45	10.05	19.00	-2.29	-2.13	-1.76
Standard Deviation	1.02	0.92	0.91	1.10	1.05	0.91	1.37	7.74	11.35	1.01	0.94	1.00
Skewness	0.40	0.04	-0.08	0.64	0.30	-0.27	-0.44	0.13	-0.12	0.04	-0.52	0.05
Kurtosis	1.85	2.04	1.89	2.17	1.82	2.09	2.51	2.62	2.08	2.13	2.26	1.69
Jarque-Bera	7.90	3.74	5.06	9.41	6.99	4.44	4.10	0.87	3.57	3.02	6.57	6.95
Probability	0.02	0.15	0.08	0.01	0.03	0.11	0.13	0.65	0.17	0.22	0.04	0.03

Table 2. Governance and happiness

A. *Dependent:Satisfaction with Life from World Database of Happiness*

	OLS estimates					GLM estimates				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Worldwide Governance Indicators										
Government Effectiveness	-1.51* (0.80)					-0.38 (0.25)				
Government Effectiveness squares	0.61* (0.31)					0.13 (0.12)				
Regulatory Quality	2.64*** (0.83)					0.77*** (0.24)				
Regulatory Quality squares	0.65 (0.41)					0.24* (0.13)				
Voice and Accountability		1.75*** (0.38)					0.46*** (0.13)			
Voice and Accountability squares		0.92*** (0.31)					0.32*** (0.11)			
Control of Corruption		-1.31*** (0.46)					-0.36** (0.16)			
Control of Corruption squares		0.53*** (0.16)					0.11 (0.07)			
Rule of Law			0.45 (0.42)					0.16 (0.14)		
Rule of Law squares			0.97*** (0.20)					0.29*** (0.08)		
Political Stability and Absence of Violence/Terrorism				0.64 (0.39)					0.19 (0.13)	
Political Stability and Absence of Violence/Terrorism squares				0.67*** (0.25)					0.18** (0.09)	
Global Governance Indicator					0.37* (0.21)					0.09 (0.07)

Global Governance Indicator squares					0.19*** (0.04)					0.05*** (0.02)
KOF Index of Globalization										
Economic Globalization	-0.57 (0.35)	-0.17 (0.38)	0.02 (0.38)	-0.11 (0.36)	-0.11 (0.40)	-0.14 (0.11)	-0.01 (0.10)	0.03 (0.11)	-0.01 (0.12)	0.00 (0.12)
Economic Globalization squares	-0.34* (0.20)	-0.19 (0.22)	-0.21 (0.23)	-0.24 (0.24)	-0.27 (0.24)	-0.09 (0.07)	-0.04 (0.06)	-0.04 (0.06)	-0.05 (0.07)	-0.05 (0.07)
Social Globalization	1.88*** (0.59)	2.23*** (0.49)	2.04*** (0.56)	2.08*** (0.54)	2.12*** (0.56)	0.50*** (0.16)	0.62*** (0.15)	0.60*** (0.16)	0.61*** (0.18)	0.61*** (0.17)
Social Globalization squares	0.05 (0.37)	0.18 (0.33)	0.24 (0.39)	0.52 (0.35)	0.30 (0.37)	0.04 (0.12)	0.06 (0.11)	0.05 (0.12)	0.16 (0.13)	0.08 (0.13)
PoliticalGlobalization	0.49* (0.27)	0.36 (0.24)	0.54** (0.26)	0.65** (0.27)		0.13 (0.08)	0.12 (0.08)	0.17** (0.08)	0.21** (0.09)	0.17* (0.09)
Political Globalization squares	0.51** (0.22)	0.37* (0.22)	0.44* (0.23)	0.65** (0.25)		0.15** (0.07)	0.12* (0.07)	0.16** (0.07)	0.22*** (0.08)	0.18** (0.08)
Control variables										
GNI per capita	-5.76*** (0.55)	-5.17*** (0.63)	-6.07*** (0.60)	-5.75*** (0.55)	-6.21*** (0.61)	-1.80*** (0.16)	-1.59*** (0.18)	-1.89*** (0.18)	-1.82*** (0.17)	-1.90*** (0.19)
GNI per capita squares	1.61*** (0.16)	1.39*** (0.20)	1.62*** (0.20)	1.69*** (0.22)	1.68*** (0.20)	0.049*** (0.06)	0.43*** (0.07)	0.50*** (0.07)	0.55*** (0.07)	0.52*** (0.17)
Human Development Index	2.70*** (0.46)	2.75*** (0.46)	3.02*** (0.48)	3.33*** (0.44)	3.10*** (0.48)	0.74*** (0.12)	0.77*** (0.14)	0.81*** (0.15)	0.91*** (0.15)	0.87*** (0.15)
Human Development Index squares	0.82*** (0.21)	0.76*** (0.21)	0.89*** (0.23)	1.12*** (0.21)	0.93*** (0.23)	0.23*** (0.07)	0.24*** (0.07)	0.27*** (0.08)	0.33*** (0.08)	0.30*** (0.08)
Urban population (% of total)	0.67** (0.33)	0.78** (0.30)	0.62* (0.35)	0.77** (0.34)	0.69** (0.34)	0.17* (0.09)	0.21** (0.09)	0.15* (0.09)	0.21** (0.10)	0.18* (0.10)
Urban population (% of total) squares	0.43** (0.17)	0.62*** (0.17)	0.52*** (0.16)	0.52*** (0.19)	0.55*** (0.17)	0.13** (0.06)	0.19*** (0.06)	0.15** (0.07)	0.15** (0.07)	0.16** (0.07)
Age dependency ratio, old (% of working-age population)	-1.75*** (3.28)	-2.10*** (0.33)	-1.70*** (0.36)	-1.66*** (0.39)	-1.76*** (0.38)	-0.47*** (0.11)	-0.57*** (0.11)	-0.48*** (0.11)	-0.45*** (0.13)	-0.49*** (0.12)
Age dependency ratio, old (% of working-age	1.22***	1.22***	1.33***	1.12***	1.31***	0.36***	0.35***	0.38***	0.31***	0.37***

population) squares	(0.18)	(0.20)	(0.21)	(0.21)	(0.21)	(0.08)	(0.08)	(0.08)	(0.09)	(0.08)
R-squared	0.96	0.96	0.95	0.94	0.95					
F-test	162.58 (p=0.00)	177.65 (p=0.00)	150.65 (p=0.00)	141.01 (p=0.00)	145.12 (p=0.00)					
(1/degrees of freedom) Deviance						0.18	0.18	0.21	0.23	0.22
(1/degrees of freedom) Pearson						0.25	0.24	0.28	0.32	0.31
(Log) likelihood						-274.47	-274.66	-275.67	-276.71	-276.17
Number of observations	96	96	96	96	96	96	96	96	96	96

B. *Dependent:14-item Yesterday's Affect Balance from World Database of Happiness*

	OLS estimates					**GLM estimates**				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
Worldwide Governance Indicators										
Government Effectiveness	-8.84 (6.49)					-0.59 (0.66)				
Government Effectiveness squares	6.70** (2.56)					0.24 (0.34)				
Regulatory Quality	19.41*** (6.36)					1.55** (0.67)				
Regulatory Quality squares	3.77 (3.14)					0.58 (0.37)				
Voice and Accountability		19.04*** (3.26)					1.10*** (0.32)			
Voice and Accountability squares		4.35** (2.00)					0.73*** (0.26)			
Control of Corruption		-9.90** (3.79)					-0.72* (0.39)			
Control of Corruption squares		6.08*** (1.17)					0.19 (0.17)			
Rule of Law			6.10 (3.83)					0.49 (0.33)		
Rule of Law squares			8.56***					0.69***		

			(1.84)					(0.22)		
Political Stability and Absence of Violence/Terrorism				7.77** (3.51)					0.52* (0.28)	
Political Stability and Absence of Violence/Terrorism squares				4.18* (2.37)					0.34 (0.21)	
Global Governance Indicator					5.73*** (1.78)					0.27 (0.18)
Global Governance Indicator squares					1.62*** (0.35)					0.10** (0.05)
KOF Index of Globalization										
Economic Globalization	-4.18 (3.04)	-3.16 (3.05)	0.15 (3.15)	-0.85 (3.18)	-2.39 (3.35)	-0.34 (0.29)	-0.10 (0.24)	0.01 (0.25)	-0.04 (0.27)	-0.04 (0.30)
Economic Globalization squares	-2.32 (1.82)	-0.78 (1.77)	-1.62 (2.03)	-1.56 (2.13)	-2.24 (2.09)	-0.18 (0.18)	-0.06 (0.14)	-0.06 (0.15)	-0.09 (0.16)	-0.08 (0.17)
Social Globalization	10.54** (4.52)	14.73*** (3.61)	11.65*** (4.22)	11.79*** (4.47)	12.64*** (4.25)	0.98** (0.39)	1.23*** (0.35)	1.20*** (0.37)	1.22*** (0.42)	1.21*** (0.42)
Social Globalization squares	0.24 (3.16)	0.97 (2.60)	2.23 (3.47)	4.69 (3.16)	2.73 (3.23)	0.25 (0.32)	0.21 (0.27)	0.17 (0.29)	0.39 (0.30)	0.26 (0.33)
PoliticalGlobalization	3.71 (2.32)	2.29 (1.83)	4.19* (2.19)	6.16*** (2.25)	3.65* (2.10)	0.16 (0.23)	0.23 (0.21)	0.34 (0.21)	0.44* (0.23)	0.33 (0.24)
Political Globalization squares	1.11 (1.89)	1.10 (1.69)	0.56 (1.87)	2.76 (2.00)	1.23 (1.92)	0.23 (0.19)	0.22 (0.18)	0.28 (0.18)	0.39* (0.20)	0.34 (0.21)
Control variables										
GNI per capita	-40.02*** (4.48)	-35.93*** (4.60)	-42.68*** (4.37)	-40.11*** (4.40)	-45.92*** (4.55)	-3.95*** (0.41)	-3.45*** (0.42)	-4.10*** (0.42)	-4.08*** (0.42)	-4.19*** (0.48)
GNI per capita squares	11.12*** (1.31)	9.46*** (1.38)	11.25*** (1.49)	12.24*** (1.78)	12.20*** (1.50)	1.06*** (0.20)	0.99*** (0.20)	1.11*** (0.21)	1.39*** (0.22)	1.25*** (0.24)
Human Development Index	15.24*** (3.56)	14.81*** (3.50)	17.32*** (3.83)	21.19*** (3.80)	17.55*** (3.56)	1.38*** (0.37)	1.42*** (0.32)	1.50*** (0.33)	1.73*** (0.34)	1.67*** (0.36)
Human Development Index squares	6.22*** (1.64)	5.57*** (1.54)	6.39*** (1.85)	8.65*** (1.69)	6.63*** (1.68)	0.51*** (0.20)	0.53*** (0.17)	0.61*** (0.18)	0.75*** (0.18)	0.68*** (0.20)
Urban population (% of total)	2.27	3.13	2.26	3.58	2.94	0.25	0.33	0.21	0.38*	0.28

	(2.84)	(2.46)	(2.86)	(2.88)	(2.82)	(0.21)	(0.21)	(0.22)	(0.22)	(0.24)
Urban population (% of total) squares	2.09 (1.51)	3.00** (1.28)	2.76* (1.40)	3.32** (1.59)	2.81* (1.44)	0.20 (0.18)	0.37** (0.17)	0.23 (0.18)	0.29* (0.18)	0.26 (0.19)
Age dependency ratio, old (% of working-age population)	- 14.25*** (3.03)	- 18.03*** (2.94)	- 14.02*** (3.18)	- 14.45*** (3.75)	- 15.22*** (3.17)	- 0.95*** (0.28)	- 1.16*** (0.26)	- 1.01*** (0.27)	- 0.89*** (0.31)	- 1.00*** (0.31)
Age dependency ratio, old (% of working-age population) squares	10.09*** (1.86)	9.92*** (1.69)	10.93*** (1.98)	9.08*** (2.22)	10.87*** (1.86)	0.75*** (0.21)	0.69*** (0.17)	0.80*** (0.19)	0.60*** (0.21)	0.73*** (0.21)
R-squared	0.94	0.95	0.93	0.92	0.93					
F-test	110.55 (p=0.00)	179.09 (p=0.00)	112.39 (p=0.00)	93.88 (p=0.00)	118.89 (p=0.00)					
(1/degrees of freedom) Deviance						0.77 1.76	0.79 1.40	0.88 1.61	1.01 1.77	0.96 2.01
(1/degrees of freedom) Pearson										
(Log) likelihood						-485.79	-486.63	-490.80	-495.97	-494.22
Number of observations	96	96	96	96	96	96	96	96	96	96

C. Dependent:Happy Planet Index

	OLS estimates					**GLM estimates**				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
Worldwide Governance Indicators										
Government Effectiveness	-3.14 (4.25)					-0.40 (0.46)				
Government Effectiveness squares	2.31 (1.52)					0.17 (0.23)				
Regulatory Quality	7.98** (3.86)					1.11** (0.46)				
Regulatory Quality squares	4.08** (1.65)					0.52** (0.25)				
Voice and Accountability		6.72*** (1.94)					0.75*** (0.26)			
Voice and Accountability squares		1.14					0.50**			

		(1.49)					(0.21)			
Control of Corruption		-4.78* (2.62)					-0.56* (0.32)			
Control of Corruption squares		3.63*** (0.95)					0.19 (0.13)			
Rule of Law			0.98 (1.86)					0.31 (0.26)		
Rule of Law squares			5.53*** (0.85)					0.56*** (0.16)		
Political Stability and Absence of Violence/Terrorism				0.53 (2.03)					0.27 (0.22)	
Political Stability and Absence of Violence/Terrorism squares				3.35*** (1.25)					0.33** (0.17)	
Global Governance Indicator					1.19 (1.07)					0.14 (0.13)
Global Governance Indicator squares					0.96*** (0.21)					0.09** (0.04)
KOF Index of Globalization										
Economic Globalization	-2.36 (1.53)	-1.28 (1.54)	0.15 (1.57)	-0.16 (1.55)	-0.37 (1.76)	-0.29 (0.21)	-0.08 (0.20)	0.01 (0.20)	-0.02 (0.22)	-0.01 (0.22)
Economic Globalization squares	-2.46** (0.96)	-1.05 (0.98)	-1.58 (0.98)	-1.54 (1.10)	-1.86* (1.08)	-0.17 (0.13)	-0.06 (0.11)	-0.07 (0.11)	-0.10 (0.13)	-0.08 (0.13)
Social Globalization	4.83* (2.86)	7.26*** (2.39)	5.99** (2.50)	6.32** (2.50)	6.26** (2.58)	0.82*** (0.29)	1.00*** (0.28)	0.99*** (0.28)	0.98*** (0.32)	0.99*** (0.31)
Social Globalization squares	0.06 (1.71)	0.03 (1.55)	0.29 (1.56)	2.03 (1.57)	0.83 (1.58)	0.16 (0.23)	0.16 (0.21)	0.12 (0.22)	0.32 (0.23)	0.19 (0.24)
Political Globalization	2.47* (1.36)	2.38* (1.22)	3.03** (1.26)	2.93** (1.33)	2.85** (1.33)	0.20 (0.17)	0.22 (0.16)	0.31** (0.16)	0.36** (0.17)	0.32* (0.17)
Political Globalization squares	2.17** (1.00)	2.43** (1.01)	1.87* (1.01)	2.79** (1.10)	2.13** (1.06)	0.27** (0.14)	0.26* (0.14)	0.30** (0.13)	0.39*** (0.15)	0.33** (0.15)
Control variables										
GNI per capita	-30.38***	-28.41***	-30.47***	-28.73***	-31.14***	-3.63***	-3.26***	-3.73***	-3.61***	-3.72***

	(2.83)	(2.97)	(2.68)	(2.69)	(2.83)	(0.29)	(0.33)	(0.32)	(0.31)	(0.36)
GNI per capita squares	7.98*** (0.76)	7.26*** (0.82)	7.56*** (0.77)	8.08*** (1.00)	8.00*** (0.82)	0.95*** (0.13)	0.88*** (0.14)	0.95*** (0.14)	1.12*** (0.16)	1.03*** (0.16)
Human Development Index	18.64*** (2.27)	19.66*** (2.16)	20.14*** (2.28)	21.68*** (2.07)	20.64*** (2.51)	1.59*** (0.27)	1.71*** (0.26)	1.73*** (0.26)	1.88*** (0.27)	1.86*** (0.27)
Human Development Index squares	4.16*** (1.08)	4.87*** (1.02)	4.67*** (1.09)	6.16*** (0.96)	5.03*** (1.16)	0.47*** (0.14)	0.53*** (0.13)	0.55*** (0.13)	0.68*** (0.13)	0.62*** (0.14)
Urban population (% of total)	0.20 (1.43)	0.64 (1.40)	-0.15 (1.37)	0.88 (1.44)	0.47 (1.48)	0.17 (0.16)	0.24 (0.16)	0.14 (0.17)	0.26 (0.18)	0.20 (0.18)
Urban population (% of total) squares	1.56* (0.91)	1.76** (0.85)	1.91** (0.87)	1.62 (0.97)	1.99** (0.99)	0.20 (0.13)	0.30** (0.13)	0.23* (0.13)	0.24* (0.13)	0.26* (0.14)
Age dependency ratio, old (% of working-age population)	-8.84*** (1.75)	-10.00*** (1.67)	-8.71*** (1.84)	-7.87*** (2.01)	-8.85*** (1.99)	-0.84*** (0.21)	-0.97*** (0.21)	-0.87*** (0.21)	-0.72*** (0.23)	-0.85*** (0.23)
Age dependency ratio, old (% of working-age population) squares	5.76*** (1.00)	5.61*** (0.97)	6.08*** (0.98)	4.94*** (1.02)	5.87*** (1.04)	0.63*** (0.15)	0.59*** (0.14)	0.67*** (0.14)	0.51*** (0.16)	0.62*** (0.15)
R-squared	0.95	0.95	0.95	0.94	0.94					
F-test	160.43 (p=0.00)	129.79 (p=0.00)	133.83 (p=0.00)	91.05 (p=0.00)	111.49 (p=0.00)					
(1/degrees of freedom) Deviance						0.55	0.60	0.61	0.71	0.67
(1/degrees of freedom) Pearson						0.91	0.87	0.93	1.07	1.11
(Log) likelihood						-430.91	-432.92	-433.90	-437.93	-436.45
Number of observations	96	96	96	96	96	96	96	96	96	96

Notes: Standard errors in parentheses. Statistical significant at * p<0.10, ** p<0.05, *** p<0.01. In section „A", the dependent variable is the subjective self-assesment of life satisfaction as-a-whole (average values, on a 0-10 range) from *World Database of Happiness* (Veenhoven, 2013a). In section „B", the dependent variable is the hedonic level of affect (average values of a 14-item Yesterday's Affect Balance) from *World Database of Happiness* (Veenhoven, 2013b). In section „C", the dependent variable is *Happy Planet Index* which combines life expectancy, experienced well-being and Ecological Footprint.For GLM estimates: a) Distribution: *Gamma*; b) Link function: *Log*; c) Optimization method: *Maximum likelihood*; d) Standard errors: *Observed Information Matrix*.

Table 3. Happiness, overall quality of public institutions and policies and globalization

	Dependent: *Satisfaction with life*		Dependent: *14-item Yesterday's Affect Balance*		Dependent: *Happy Planet Index*	
	OLS estimates	GLM estimates	OLS estimates	GLM estimates	OLS estimates	GLM estimates
Overall Index of Governance	0.11	0.01	3.95**	0.11	0.28	0.02
	(0.24)	(0.07)	(1.87)	(0.17)	(0.96)	(0.13)
*Overall Index of Governance*squares	0.21***	0.06***	1.54***	0.11**	1.01***	0.10**
	(0.05)	(0.02)	(0.37)	(0.05)	(0.21)	(0.04)
KOF Index of Globalization	1.81***	0.58***	11.03***	1.17***	7.00***	0.97***
	(0.42)	(0.15)	(3.06)	(0.35)	(1.96)	(0.26)
KOF Index of Globalization squares	0.22	0.06	1.26	0.14	-0.61	0.11
	(0.21)	(0.09)	(1.68)	(0.22)	(0.92)	(0.17)
Control variables						
GNI per capita	-5.63***	-1.76***	-40.58***	-3.99***	-29.29***	-3.58***
	(0.56)	(0.17)	(3.83)	(0.44)	(2.22)	(0.32)
GNI per capita squares	1.55***	0.50***	11.18***	1.39***	7.64***	1.13***
	(0.18)	(0.08)	(1.39)	(0.24)	(1.02)	(0.18)
Human Development Index	3.39***	0.91***	19.19***	1.62***	21.89***	1.83***
	(0.46)	(0.16)	(3.12)	(0.35)	(2.24)	(0.28)
Human Development Index squares	0.92***	0.28***	6.85***	0.64***	5.27***	0.58***
	(0.22)	(0.08)	(1.53)	(0.19)	(1.06)	(0.14)
Urban population (% of total)	0.78***	0.25**	2.62	0.46*	0.12	0.35*
	(0.32)	(0.10)	(2.45)	(0.24)	(1.38)	(0.19)
Urban population (% of total) squares	0.52***	0.18***	2.63*	0.37**	1.80**	0.34***
	(0.18)	(0.07)	(1.37)	(0.17)	(0.87)	(0.13)
Age dependency ratio, old (% of working-age population)	-1.53***	-0.40***	-14.89***	-0.75***	-8.28***	-0.65***
	(0.37)	(0.11)	(2.70)	(0.26)	(1.73)	(0.20)
Age dependency ratio, old (% of working-age population) squares	1.50***	0.43***	12.11***	0.84***	6.95***	0.73***
	(0.22)	(0.08)	(1.69)	(0.20)	(1.05)	(0.15)
R-squared	0.94		0.93		0.94	
F-test	157.31 (p=0.00)		158.44 (p=0.00)		124.08 (p=0.00)	
(1/degrees of freedom) Deviance		0.25		1.04		0.75
(1/degrees of freedom) Pearson		0.36		1.99		1.18
(Log) likelihood		-286.58				-454.96
Number of observations	99	99	98	98	99	99

Notes: Standard errors in parentheses. Statistical significant at * p<0.10, ** p<0.05, *** p<0.01. Same dependent variables and estimation methodologies as in Table 2.

Table 4. Relative shadow prices of governance' quality (non-multiplicative effects)

Estimated in terms of:	Dependent: *Satisfaction with life*		Dependent: *14-item Yesterday's Affect Balance*		Dependent: *Happy Planet Index*	
	OLS estimates	GLM estimates	OLS estimates	GLM estimates	OLS estimates	GLM estimates
Non-monetary variables						
KOF Index of Globalization	0.24	0.19	0.52	0.23	0.40	0.18
Human Development Index	0.10	0.09	0.21	0.11	0.07	0.07
Urban population (% of total)	0.29	0.21	0.89	0.28	0.62	0.21
Age dependency ratio, old (% of working-age population)	0.36	0.28	0.75	0.35	0.41	0.27
Monetary variables						
GNI per capita	-0.21	-0.17	-0.39	-0.27	-0.16	-0.17

Note: The estimates are based on the outcomes from Table 3

Table 5. Relative shadow prices of globalization (non-multiplicative effects)

Estimated in terms of:	Dependent: *Satisfaction with life*		Dependent: *14-item Yesterday's Affect Balance*		Dependent: *Happy Planet Index*	
	OLS estimates	GLM estimates	OLS estimates	GLM estimates	OLS estimates	GLM estimates
Non-monetary variables						
Overall Index of Governance	4.25	5.38	1.93	4.39	2.51	5.41
Human Development Index	0.43	0.48	0.41	0.50	0.18	0.40
Urban population (% of total)	1.24	1.15	1.72	1.21	1.55	1.16
Age dependency ratio, old (% of working-age population)	1.53	1.52	1.45	1.56	1.03	1.47
Monetary variables						
GNI per capita	-0.89	-0.92	-0.74	-1.20	-0.41	-0.90

Note: The estimates are based on the outcomes from Table 3

Table 6. Multiplicative effects of governance and globalization on happiness

	Dependent: *Satisfaction with life*		Dependent: *14-item Yesterday's Affect Balance*		Dependent: *Happy Planet Index*	
	OLS estimates	GLM estimates	OLS estimates	GLM estimates	OLS estimates	GLM estimates
*Overall Index of Governance * KOF Index of Globalization*	0.49*** (0.11)	0.14*** (0.04)	3.16*** (1.01)	0.23* (0.14)	1.62*** (0.46)	0.21** (0.09)
Control variables						
GNI per capita	-5.03*** (0.50)	-1.63*** (0.17)	-31.97*** (3.63)	-3.70*** (0.42)	-27.60*** (2.09)	-3.44*** (0.31)

GNI per capita squares	1.56***	0.54***	10.60***	1.54***	7.80***	1.27***
	(0.20)	(0.09)	(1.62)	(0.27)	(1.09)	(0.20)
Human Development Index	4.29***	1.19***	27.45***	2.25***	25.36***	2.29***
	(0.53)	(0.18)	(4.05)	(0.43)	(2.14)	(0.33)
Human Development Index squares	1.40***	0.42***	11.18***	0.97***	7.26***	0.80***
	(0.23)	(0.09)	(1.83)	(0.24)	(0.84)	(0.16)
Urban population (% of total)	1.23***	0.35***	5.62**	0.58**	2.34*	0.47**
	(0.35)	(0.11)	(2.61)	(0.26)	(1.36)	(0.20)
Urban population (% of total) squares	0.43**	0.13*	2.54*	0.21	1.26	0.24
	(0.19)	(0.07)	(1.42)	(0.19)	(0.86)	(0.14)
Age dependency ratio, old (% of working-age population)	-0.86**	-0.19	-9.12***	-0.29	-5.80***	-0.29
	(0.39)	(0.12)	(2.87)	(0.30)	(1.78)	(0.22)
Age dependency ratio, old (% of working-age population) squares	1.36***	0.42***	10.65***	0.90***	6.17***	0.73***
	(0.28)	(0.10)	(2.33)	(0.26)	(1.11)	(0.19)
R-squared	0.91		0.89		0.92	
F-test	134.22 (p=0.00)		103.42 (p=0.00)		115.79 (p=0.00)	
(1/degrees of freedom) Deviance		0.34		1.50		1.02
(1/degrees of freedom) Pearson		0.51		3.22		1.79
(Log) likelihood		-291.10		-532.10		-468.45
Number of observations	99	99	98	98	99	99

Notes: Standard errors in parentheses. Statistical significant at * p<0.10, ** p<0.05, *** p<0.01. Same dependent variables and estimation methodologies as in Table 2.

Table 7. Relative shadow prices of governance and globalization (multiplicative effects)

Estimated in terms of:	Dependent: *Satisfaction with life*		Dependent: *14-item Yesterday's Affect Balance*		Dependent: *Happy Planet Index*	
	OLS estimates	GLM estimates	OLS estimates	GLM estimates	OLS estimates	GLM estimates
Non-monetary variables						
Human Development Index	0.07	0.07	0.06	0.05	0.04	0.05
Urban population (% of total)	0.23	0.23	0.30	0.23	0.33	0.22
Age dependency ratio, old (% of working-age population)	0.26	0.22	0.26	0.15	0.25	0.18
Monetary variables						
GNI per capita	-0.26	-0.25	-0.29	-0.37	-0.14	-0.23

Note: The estimates are based on the outcomes from Table 6

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Data Appendix

Variable	***Description***	***Source***
Average happiness from *World Database of Happiness*	Proto-text: *Taking all things together, would you say you are?:- very happy; - quite happy; - not very happy; - not at all happy (very = 4 .....not at all = 1)*	Veenhoven, 2013a
Satisfaction with life from *World Database of Happiness*	Life-satisfaction is assessed by means of surveys in general population samples. Mean scores may be inflated in some countries due to under sampling of rural and illiterate population. The scores are based on responses to a question about satisfaction with life. The answers to which were rated on a numerical scale ranging from 'dissatisfied' to 'satisfied'. Rating scales ranged from 1 to 10 or from 0 to 10. Scores on this 1-10 scale were transformed linearly to range 0-10. Proto-text: *All things considered, how satisfied or dissatisfied are you with your life as-a-whole these days?10 very satisfied..0 not satisfied*	Veenhoven, 2013b
14-item Yesterday's Affect Balance *from World Database of Happiness*	Measure of **hedonic level of affect**. Based on the following questions" *Did you experience the following feelings during A LOT OF THE DAY yesterday? How about..* *A enjoyment?; B physical pain; C worry;D sadness; E stress;Fanger;Gdepression;H love* *Now please think about YESTERDAY, from the morning untill the end of the day. Think of where you were, what you were doing and how you felt.* *I Did you feel well rested yesterday?* *J Did you smile or laugh a lot yesterday?* *K Did you learn or do something interesting yesterday?* *L Would you like to have more days just like yesterday?* *M Were you proud of something you did yesterday?* *N Were you treated with respect all day yesterday?* *Rated: 1 yes;0 no- no answer, don't know* *Computation:* - *Average % positive affect = (A+H+I+J+K+L+M+N)/8* - *Average % negative affect = (B+C+D+E+F+G)/6* - *Affect Balance = Average % positive affect - Average % negative affect*	Veenhoven, 2013c
Happy Planet Index	The index uses global data on life expectancy, experienced well-being and Ecological Footprint:	New Economic Foundation , 2013

	Happy Planet Index=$\phi^* \frac{\left(\left(\text{Experienced well-being}+\alpha\right)^*\text{Life expectancy}\right)-\pi}{\left(\text{Ecological footprint}+\beta\right)}$ where: $\alpha = 2.93, \beta = 4.38, \pi = 73.35, \phi = 0.60$ *Experienced well-being* is assessed using a question called the 'Ladder of Life' from the Gallup World Poll: Present Life Evaluation (ladder scale) *Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?* *Life expectancy* is from 2011 UNDP Human Development Report *Ecological footprint* measures the amount of land required to sustain a country's consumption patterns. It includes the land required to provide the renewable resources people use (most importantly food and wood products), the area occupied by infrastructure, and the area required to absorb CO2 emissions. The data are from from the 2011 Edition of the Global Footprint Networks National Footprint accounts.	
Voice and accountability	Captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.	World Bank (2010b)
Political stability and absence of violence	Measures the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism.	World Bank (2010b)
Government effectiveness	Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Bank (2010b)
Regulatory quality	Captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.	World Bank (2010b)
Rule of law	Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.	World Bank (2010b)
Control of corruption	Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.	World Bank (2010b)