

# Rethinking the links between Human Relationships and Economic Efficiency using local micro institutions: an application to the case of two emerging countries

Camille Baulant

► **To cite this version:**

Camille Baulant. Rethinking the links between Human Relationships and Economic Efficiency using local micro institutions: an application to the case of two emerging countries. AFEE at 2017 annual ASSA Meeting, Jan 2017, Chicago, United States. pp.14. hal-02528851

**HAL Id: hal-02528851**

**<https://hal.univ-angers.fr/hal-02528851>**

Submitted on 2 Apr 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# **Rethinking the links between Human Relationships and Economic Efficiency using local micro institutions: an application to the case of two emerging countries<sup>(1)</sup>**

**Camille Baulant**

[camille.baulant@gmail.com; [camille.baulant@univ-angers.fr](mailto:camille.baulant@univ-angers.fr)]

**December, 10<sup>th</sup>**

*Camille Baulant is a university professor in Economics at the University of Angers, and director of a Master Degree in Competitive Intelligence and Competitive Strategies GRANEM Laboratory (France).*

<sup>(1)</sup> I express gratitude to Gemma Davies, Researcher Assistant at the Granem Laboratory of the University of Angers, for helping me improve the English of this paper.

**Abstract:** (244 words) Emerging countries around the world have been growing fast over the last thirty years, with most of these countries basing their economic development on a state capitalism. Within these countries there is a concentration of wealth for a few people. This fact confirms the analysis of Veblen (1898) who shows the gap between the vested interest of the rich and the unsatisfied needs of the poorest. The world happiness report (Helliwell and al, 2016) also shows for the emerging countries a gap between the world rank in economic growth and in well-being. The paper proposes a new paradigm of development for two emerging countries, Brazil and South Africa, by putting human development in the center of the economic development and by using different approaches in economics and psychology. The analysis enlarges the theories of Shapiro and Stiglitz in “efficiency wages” (1984) into the complexity approach (Le Moigne, 1995). This approach combines the results in positive psychology (Kahneman, 2011) with the role of local institutions for improving the economic development of emerging countries (Deaton, 2016). The first section studies definitions of economic and human wealth. The second section analyzes for the two countries the gap between the standard of living ranking and the well-being ranking in order to present meso happiness indexes able to link the micro and macro levels of human wealth. The last section studies how the local institutions may create in these countries dynamic links for efficiently acting in a world economy.

**Keywords:** Economic Wealth, Gross Domestic Product (G.D.P.), Happiness Index, Human Wealth, Local Institution, New Industrialized Countries (N.I.C.).

**JEL Classification Code:** I32, I39, F63.

**Words count:** 2,804 words.

Emerging countries around the world have been growing fast over the last thirty years, with most of these countries basing their economic development on a state capitalism which involves national institutions. Within these countries there is still a concentration of wealth for a few people. The paper proposes a new paradigm of development for two emerging countries,

Brazil and South Africa, by putting the human development in the center of the economic development and by using different approaches in economics and psychology. The first question is to know if the macro economic growth has induced a rise in the micro level of people's lives in these countries. The second question is to ask if national institutions allow a better link between economic growth and happiness. The theoretical analysis enlarges the theories of "efficiency wages" (Shapiro and Stiglitz, 1984) into the complexity approach. This approach combines the last results in positive psychology with the role of local institutions for improving the economic development of emerging countries.

The first section studies definitions of economic and human wealth. The second section analyzes for Brazil and South Africa, the gap between the standard of living ranking and the well-being ranking in order to propose meso happiness indexes able to link the micro and macro levels of human wealth. The last section studies how the local institutions, based on a network organization, may create dynamic links in these countries for efficiently acting in a world economy.

### *Economic and human wealth*

The high economic growth of emerging countries has not induced a rising well-being among these countries (Easterlin, 1974). The works of Thorstein Veblen (1898) already shows the gap between the vested interest of the rich and the unsatisfied needs of the poorest. Veblen's theories may be used to analyze the results of the annual world happiness report (Helliwell and al, 2016) showing, for the emerging countries, a gap between the world rank in economic growth and in well-being. It is important to study common people's standard of living in emerging countries by focusing on the links between the market and the institutional regulation. Institutions play a role for inducing development within each country. The question is whether empathic behavior is more efficient than egoistic behavior. With the

contributions of the complexity approach (Atlan, 1979, Morin, 1981, Koestler, 1988), it is possible to study the relationships between opposing factors in order to build development strategies (Le Moigne, 1995). New institutions can today counter the vested interests of the market economy. The study takes the GDP per head to analyze the economic wealth and the well-being indexes to capture the human wealth. In developing a multi-disciplinary approach (institutional approach, behavioral economy and positive psychology), it is possible to re-think the link between the economic growth and the rise in life satisfaction without forgetting the weight of the path dependencies and the role of institutions (Hodgson, 2006, Kirdina, 2014, Rutherford, 2009).

The starting point of the study is the Diener's analysis (1984) concerning the two main approaches of happiness (**Table 1**). The first happiness approach is defended by the early philosophers on happiness such as Aristotle, Bodin, Montaigne, or Spinoza. Today, this global approach is completed by the works of actual philosophers (Comte-Sponville, 2009, Lenoir, 2013) and of positive psychologists (Langer, 1989, Seligman, 1998). In this approach, individuals reach what Aristotle named «Eudaimonia» which presents three different dimensions: “pleasure”, “meaning”, and “concrete action” to reach happiness<sup>1</sup>. The second happiness approach began with the micro-economy which analyzes the individual choices founded on the concept of marginal utility of the agents. The work of the first micro economists, such as Bentham, has been prolonged by the behavioral economists (Clark, Fleche, Senik, 2016) and the neuroscientists specialized in brain activity (Kringelbach and Helen Phillips, 2014). For these authors, the macro-economic approach of happiness does not belong to the scientific field and may only be studied in the philosophical field. At first glance, the two conceptions of happiness seem opposed. However, they may be linked through the action of individuals when they inter-act with each other for building their happiness.

The original point of this work is to keep these two approaches alive. In table 1, a meso level of happiness may be built as the inter-connections between the individual's well-being and the collective efficiency. Using the main results of the behavioral economy (Kahneman, 2011) and the positive psychology (André, 2009, Lyubomirsky, 2008), the analysis of interactions between different individuals in a meso level may conduct them to a better happiness and efficiency<sup>2</sup>. At this level, reaching the three Aristotle happiness components (pleasure, meaning, and acting) necessitates ~~to~~ following a multidisciplinary approach where the philosophical approach<sup>3</sup> is still useful for individuals acting with more ethics and wisdom (Aberrante, 2016). The meso level of happiness may be thus defined as a feeling of mindfulness that each person may obtain when they build their strategy. Continuing to use the results of the positive psychology (Goleman, 2014), happiness may be reached when individuals accept the memory of their past, accept to fill their lives at their present time and want to project themselves toward their future. Happiness may finally be defined as a pleasure that individuals feel (emotion) when they act (action) in order to reach their potential happiness (what they plan to live) (Achor, 2010; Ben Sahar, 2011). This meso approach of happiness may have important implications for public development policies. The goal of public policies is to help individuals reach happiness by providing a better wealth repartition able to induce more human and monetary development (Layard, 2006). With this approach, it is moreover possible to rethink the role of the institutions<sup>4</sup> through helping individuals ~~to~~ reach happiness and efficiency using “nudges” (Thaler and Sunstein, 2010, Dolan, 2014).

*Is the increase in economic wealth rising their human wealth?*

This section analyzes different measures of the economic and human wealth in two emerging countries. As macro happiness is linked to the ethical principles of each individual, economists (Balassa, 1963, Kravis and Lipsey, 1982) use the GDP per head in PPP dollars<sup>5</sup> as a proxy of an

increasing happiness even, if it is of course not the best indicator<sup>6</sup>. Since forty years, the economic growth of the New Industrialized Countries (N.I.C.) has particularly risen<sup>7</sup>. Among the N.I.C., the choice of Brazil and South Africa<sup>8</sup> has been made because these countries have begun their development by using state industrial policies (Furtado, 1976, Prebish, 1950) for inducing technological learning, scale economies and virtuous productivity circles (Cypher, 2015). The rise of the real GDP in PPP dollar of the two countries created an increase in their standard of living, mainly from 1960 to 1990 (**Figure 1**). After 1990, living standards have slowly increased in these countries.

The study of the human wealth in these emerging countries is founded on the results of the Gallup Healthways Well-Being Index<sup>9</sup> published in (Helliwel and Sach, 2016). This report computes data on subjective well-being polls by taking into account emotions that individuals have in their daily experiments like enjoyment, happiness, anger, sadness, stress, or worry. (Csikszentmihalyi, 2006). Most of the happiness studies<sup>10</sup> analyze what Daniel Kahneman and Angus Deaton (2010) call “experienced happiness”. However, the Gallup Index measures emotional well-being and life satisfaction. The Life Satisfaction Index computes what the individuals think about their happiness when they compare their well-being feelings on a scale of 0 to 10. In this evaluation, participants compare their well-being to that of the others participants.

**Table 2** compares the world ranks for Brazil and South Africa in terms of their standard of living in PPP dollars and their well-being Index. To link the subjective well-being to the macro standard of life, François Perroux and Amartya Sen both study the individual’s decision within a structuralism approach by stressing the role of institutions in giving structural guides. The double movement of the rise in the standard of life and the inclusion of the poorest population in the results of the economic growth reveals what François Perroux (1981) calls the

“third way”. Agents are still defined by their marginal utility but in a concrete historical environment with specific culture and traditions. The decisions making process thus involves a juridical and institutional environment within which each individual makes decisions. Meso happiness indexes may be interpreted as a result from the microeconomic well-being of people and the macroeconomic infrastructures of countries leading to higher wellness, standard of living, health, freedom, securities, education, etc. Amartya Sen (1999), who studies inequalities in developing countries, has largely influenced the Human Development Index (H.D.I.). In his theory of « capability », Amartya Sen demonstrates how people may positively choose their destiny when the social conditions of employment, wage, price, and the fight against inequalities are already united.

The **table 2 and 3** present two meso happiness indexes: the H.D.I.<sup>11</sup> from the United Nations Development Program (U.N.D.P.) and the Social Index built by M Porter (2016). For the Brazil, the ranking of the two happiness indexes (respectively 42<sup>th</sup> and 75<sup>th</sup> rank) are between the subjective well-being index (17<sup>th</sup>) and the macro GDP per head index (85<sup>th</sup>). In this country, the well-being index reaches 6.952 (on a scale of 1 to 10) and the real GDP per head reaches PPP \$ 15,043. Well-being in Brazil is one of the highest of the emerging countries, just after Costa Rica, and even higher than most of advanced countries such as Belgium, Ireland, Luxembourg, United Kingdom, and France. With the same conditions in infrastructures in education and in health, Brazilian people always feel happier<sup>12</sup> than other emerging countries. In Brazil, having basic knowledge, a good environment, and wellness seems therefore more important than the rise of economic wealth (Ateca-Amestov, Cortes-Agular, Mori-Egido, 2014, Helliwell, 2003). In South Africa, the Social Index (63<sup>rd</sup>) is higher than the real GDP per head (94<sup>th</sup>) because of the development of freedom, rights, and tolerance. However, the Social Index of this country is higher than the subjective well-being Index. South Africa’s well-being (4.459)

is lower than her real GDP per head (PPP \$ 12,563) and is one of the lowest of the emerging countries, close to India's (4.404) and even lower than some developing countries as Ethiopia, Cameroon, Bangladesh, Zambia, Nigeria, Tunisia, and Pakistan. With a similar Social Index, the question is to understand why the South African population feels unhappy, despite progress in technology, freedom, and human rights. One of the answers may be found by the low level of wellness, environment and basic needs not being met. In these conditions, the HDI of South Africa is as low as (116<sup>th</sup>) on the subjective well-being index.

### *New institutions to increase human wealth in Brazil and South Africa*

The last section presents some experiments of network organizations, inducing dynamic circles and external economies, which were made in South Africa and Brazil. By promoting human networks and local institutions, new development policies may improve happiness and economic efficiency within emerging countries (Duflo, 2010, Ostrom, 2009). The meso networks are intermediary levels able to link an internal organization based on confidence to an external openness based on the world market (**Figure 3**). In thinking global and producing local, meso networks induce an economic development where each person may improve their well-being, by producing goods by themselves in order to survive (**Baulant, 2015**). Local cooperatives are well adapted to join the cooperation behaviors with the competition behaviors. Meso institutions create, moreover, links between different actors which lead to rising efficiency and happiness for the whole area. The meso institutions, as Non-Governmental Organizations (N.G.O.) or micro credit associations, therefore bring people together and link them to the consumers on the world markets who are prepared to buy fair trade products with high prices.

Two local experiments, producing red tea in the poor area of South Africa and giving a basic income in the poor area of Brazil, are both based on the functioning of meso networks and



institutions. In South Africa, the “Bushmen” (colored people and people of mixed race) used to cultivate in Nieuwoudville (at the North West of the Cap) a specific red tea called “rooibos”. Heiveld is a cooperative, created in 1999 for helping Bushmen to produce and export rooibos on external markets (Kings, 2015). First, Heiveld decided to help people survive, improve conditions for women and propose a sustainable production method. With the rising demand of rooibos, for its anti-oxidant and anti-age virtues, by the occidental countries, its production had however led to the destruction of the environment. Secondly, Heiveld therefore decided to produce the red tea organically in order to respect the environment and prevent the local population from becoming climate refugees. Despite the richest organic diversity in South Africa, her national institutions prefer to cultivate GMO tea, as it necessitates less cost and less work for the local people, but with higher returns on investment for the farmers and the tea factories. Heiveld’s action of keeping farmers independent from the global national institutions of South Africa, plays here a meso cooperative role.

In the case of the Brazil, an experiment of giving the poor a basic income<sup>13</sup> was carried out in a village called Quatinga Velho in the state of São Paulo from October 2008 to October 2014 (Brancaaglione and Augusto, 2015). As for the red tea, it was an evolutionary process. The NGO Recivitas decided to give a basic income of 30 reais per person to 100 people in this small village. The results of this experiment have created positive and progressive results. First, the universal income was paid directly to participants each month. The managers of ReCivitas also gave books, toys, discussion to people. With this basic income, people bought food, clothes and medicines. After a few months, the people also bought materials to do small home improvement projects. After a year, people opened small shops and became micro entrepreneurships by opening restaurants in their own kitchens. After two years, a microcredit system emerged and was managed by people living in this village on the basis of a direct

democracy. This universal income experiment allowed people to face life's problems (diseases, death,...) by themselves. The fact that the universal income was given each month also helped people to organize themselves: by saving to buy expensive goods and asking for a micro credit to buy equipment. This basic income allowed a slow evolution toward emancipation and economic and social independencies. Unfortunately, the basic income of 30 RS experiment ended due to the rise of the inflation rate between 2008 and 2014. However, ReCivitas would like to create a permanent fund where each person around the world could invest in this project and help with its sustainability. These local experiments in South Africa and in Brazil show how meso institutions may improve links between basic needs, capacity to project in the future and wellness in order to create a more autonomous development. Meso institutions play a role in the interaction between different people (farmers, cooperatives, associations, local plants, and NGO) to reach virtuous circles in development. All the different partnerships in these programs are real "stake holders", because these projects require time, money, tacit knowledge, informal agreement and human relationships, the role of meso institutions is important to create positive external economies and stay independent from the external investors. In creating an internal growth by producing local goods or services<sup>14</sup>, it is possible to auto-finance other development projects. All these local experiments may not be generalizable to other places or countries which have other cultures, habits, economic and social systems.

### *Concluding notes*

This study analyzes different levels to reach more happiness and more wealth in Brazil and South Africa. The standard of life shows the global trajectory of each country instead of, as the well-being index does, revealing how people feel happy in these countries. The meso happiness indexes and the local experiments show how development policies may conciliate economic and human wealth with specific institutions and culture which prevail at each level. The results

of the Social Index for Brazil, intermediary between the well-being index and the GDP per head index, shows that the happiness feeling may be the result of the high social infrastructures in education and the environment. In South Africa, high infrastructures in education and NICT (high Social Index) did not induce a feeling of well-being. In both cases, individuals' feelings seem dependent on the strength of institutions and values that are supported by each society (law, social norms, habits...) (Rodrick, 2011). On this point, the experiments carried out in South Africa (with the organic red tea production) and in Brazil (with the basic income) indicate how local institutions permit a more autonomous development by linking people's income to their capacity to project themselves into the future and to feel happiness at the present time. By promoting the use of human networks, original development policies happiness and economic efficiency may be improved in emerging countries.

#### Footnotes-to-be

<sup>1</sup> For Frederic Lenoir (2013:8), the concept of Eudaimonia links chance and destiny to rational and voluntary approach of the individuals.

<sup>2</sup> Today, experiments of neuro-scientists test the decision making of individuals by using big data computing progresses. Despite of only stressing the numerous biases in decision making of individuals, the paper wants using results in neuroscience to help people increase by themselves happiness.

<sup>3</sup> For Idriss Aberrante (2016), using big data and neurosciences without philosophy analysis creates a risk of a dangerous gap between sciences and consciousness. He proposes that everybody learn the use of the multiple parts of the brain in order to follow their own choices.

<sup>4</sup> The meso level is difficult to define because it is the result of interactions between individuals. For this reason, different authors (Sen, 1999, Deaton, 2016, Duflo, 2010) talk of "micro-institutions".

<sup>5</sup> The use of PPP rates (Kravis, IB, Heston, AW, Summers, R, 1982) permits spatial comparisons of standards of living between countries. The GDP in PPP dollars is computed by using the same international prices for all the countries.

<sup>6</sup> GDP is not a good indicator of economic wealth because it only computes the market value of goods and services. Public goods and services are evaluated at their output costs. Moreover, the negative (destroying environment) or positive (innovation) external effects are not integrated in the GDP.

<sup>7</sup> In 2016, the G.D.P. of the N.I.C. represent 44% of the world GDP in PPP dollars (instead of 24% in 1960) and their exports rise from 11% in 1967 to 30% of the world exports in 2014 (CEPII, 2016).

<sup>8</sup> Brazil and South Africa also belong to the "B.R.IC.S.". The increase of the real standard of living in Russia was important between 1960 and 1990, contrary to China and India where their standards of living were still inferior to PPP \$ 1,500 in 1990.

<sup>9</sup> The choice to select an accurate happiness index is difficult (Attali, 2013, Stiglitz, Sen, and Fitoussi, 2008) because, after several years and decades, where economists used to talk about competitiveness indexes, for a few years, every organism proposes a different happiness index: Gallup, Social Index, Good Country Prosperity Index, Better Life Index, Good Country, Happy Planet...

<sup>10</sup> One of the biggest defaults of most of the happiness indexes is that nobody knows which weights were used in their calculation. It is for example surprising to discover in the "Happy Planet Index" (from the New Economics Foundation) that Iraq, a country in war, is happier than a country like United Kingdom.

<sup>11</sup> Since 1990, the H.D.I. proposed by The U.N.D.P. takes into account three components: the real GDP per head, the education level and life expectation. Since 2010, the IHDI is computed and gives a measure of inequalities. For the two countries, this index is lower than the HDI (0,557 instead of 0,755 in Brazil, 0,428 instead of 0,666 in South Africa).

<sup>12</sup> Well-being in Latin America (in Brazil in particular) is higher than other emerging countries. Several factors, such as holistic vision, religion, the place of human relation, the respect of nature, and the short time horizon may explain this high level (Ateca-Amestov, Cortes-Agular, Mori-Egido, 2014).

<sup>13</sup> The universal income experiment in Brazil finds its foundations with the introduction of such basic income in the Brazilian Constitution and was then applied in the experiment of Bolsa Familia program.

<sup>14</sup> Analyzing the other in vivo experiments (Sen, 1999, Duflo, 2010, Ostrom, 2013, Deaton, 2016) will usefully complete the quantitative measures of economic and human wealth analyzed in this paper.

## References

- Aberkane, Idriss. *Libérer votre cerveau*. Paris, France: Edition Robert Laffont, 2016.
- Achor, Shawn. *The Happiness Advantage*. New-York, USA: Crow Business, 2010.
- André, Christophe. *Imparfait, libres et heureux*, Paris, France: Odile Jacob, Poches Psychologie [2006] 2009.
- Ateca-Amestov, Victoria, Alexandra Cortes-Agular and Ana I Mori-Egido. "Social interactions and life satisfaction: evidence from Latin America." *Journal of Happiness Studies* 15 (2014): 527-554.
- Atlan, Henri. *Entre le cristal et la fumée: Essai sur l'organisation du vivant*. Paris, France: Seuil, 1979.
- Attali, Jacques (groupe de réflexion présidé par). *Pour une économie positive*. Paris, France: Fayard, la Documentation Française, 2013.
- Balassa, Bela. "The Purchasing Power Parity Doctrine: a Reappraisal." *Journal of Political Economy*, December (1963): 584-596.
- Baulant, Camille. "The Role of Networks for Helping Firms and Countries Invent New Competitive Strategies Well Adapted to the World Knowledge Economy." *Journal of Economics Issues* 49, 2, (2015): 563-573.
- Ben-Sahar, Tal. *Being Happy*. New-York, USA: Mc Graw-Hill Education [2009] 2011.
- Brancaglione, Marcus and Augusto Bruna. «Revenu de base, exemple d'une expérimentation brésilienne.» *Interview*, 13 novembre 2015, <http://www.revenudebase.info/2015/11/13/exemple-experimentation-bresil/>
- C.E.P.I.I., "GDP data base." *C.E.P.I.I. Chelem Data Base*, December 2016. [https://chelem.bvdep.com/version-201634/cgi/template.dll?product=111&user=ipaddress&dummy\\_forcingloginisapi=1](https://chelem.bvdep.com/version-201634/cgi/template.dll?product=111&user=ipaddress&dummy_forcingloginisapi=1)
- Clark, Andrew, Sarah Flèche and Claudia Senik "Economic Growth Evens-Out Happiness: Evidence from Six Surveys." *Review of Income and Wealth* Vol. 62, (2016): 405-419.
- Compte-Sponville, André. *Le bonheur désespérément*. Paris, France: Plein Feux, Libro, [2000] 2009.
- Csikszentmihalyi, Mihaly. *Vivre: la psychologie du Bonheur*. Paris, France: Edition Poche Pocket, collection Evolution [2001] 2006.
- Cypher, James M. "Emerging Contradictions of Brazil's Neo-Developmentalism: Precarious Growth, Redistribution, and Deindustrialization." *Journal of Economics Issues* 49, 3 (2015): 616-648.
- Deaton, Angus. *La grande évasion : Santé, richesse et origine des inégalités*. Paris, France: PUF, [2015] 2016.
- Delmas-Marty, Mireille. *Aux quatre coins du monde, petit guide de navigation sur l'océan de la mondialisation*, Paris, France : le Seuil, 2016.
- Dolan, Paul. *Happiness by Design, change what you do, not how to think*, New-York, USA: Hudson Street Press, 2014.
- Diener, Ed. "Subjective Well-Being." *Psychological Bulletin* 95, 3 (1984): 542-575.
- Duflo, Esther. *Le développement humain. Lutter contre la pauvreté* (I). Paris: Le Seuil, collection La République des idées, 2010.
- Easterlin Richard "Does Economic Growth improve the Human Lot? *Nations and household in Economic Growth, essays in honor Moses Abramovitz*. New-York: Paul A. David and Melvin W. Reder editors, Academic Press, 1974.
- Furtado, Celso. *Théorie du développement économique*. Paris, France: PUF, 1976.
- Goleman, Daniel. *Attentif, concentré et libre. Focus the Hidden Driver of Excellence*. New-York: HarperCollins Publisher, Paris, France: Robert Laffont, Poche, [2013] 2014
- Helliwell John F., Richard Layard and Jeffrey Sachs. *World Happiness Report 2016*. Vol 1, Update, 2016.
- Helliwell John F. "How's life? Combining individual and national variables to explain subjective well-being." *Economic Modelling* 20 (2003): 331-360.

- Hodgson, Geoffrey M. "What Are Institutions?" *Journal of Economic Issues* 40, 1 (2006): 1-25.
- Kahneman, Daniel. *Thinking, fast and slow*. London, United-Kingdom: Penguin Books, 2011.
- Kahneman, Daniel and Angus Deaton. "High income improves evaluation of life but not emotional well-being." *PNAS Early Edition* (2010): 1-5.
- Kringelbach, Morten L. and Helen Phillips. *Emotion : pleasure and pain in the brain*. Oxford, UK: Oxford University Press, 2014.
- Kings, Siphon. "Rooibos farmers: Empowerment isn't our cup of tea." *Mail & Guardian's environment reporter* 06 Feb, 2015.  
<http://mg.co.za/article/2015-02-05-rooibos-farmers-empowerment-isnt-our-cup-of-tea>
- Kirdina, Svetlana. "Institutions and the Importance of Social Control in a Nation's Development." *Journal of Economics Issues* 48, 2 (2014): 309-322.
- Koestler, Arthur. *Génie et folie des l'homme, le cheval dans la locomotive (le paradoxe humain)*. Paris, France: Calman-Levy, 1988.
- Kravis, IB, Heston, AW, Summers, R. *World Products and Incomes International Comparisons of Real Gross Product*. Baltimore and London, USA and UK: the John Hopkins University Press, 1982.
- Langer, Ellen J. *Mindfulness*. Boston, MA: Addison Wesley, Reading, 1989.
- Layard, Richard. "Happiness and Public Policy: A Challenge to the Profession" *The Economic Journal*, 116 (March), C24–C33, Royal Economic Society, 2006, Published by Blackwell Publishing, 9600 Garsington Road, Oxford OX4 2DQ, UK and 350 Main Street, Malden, MA 02148, USA.
- Lenoir, Frédéric. *Du bonheur*. Paris, France: Fayard, Poche, 2013.
- Lyubomirsky, Sonja. *The How of Happiness: A Scientific Approach to Getting the Life You Want*. New-York, USA: Penguin Press, 2008.
- Le Moigne, Jean-Louis. *La modélisation des systèmes complexes*. Paris, France: Éd. Dunod. [1990] 1995.
- Morin, Edgar. *La méthode : la nature de la nature, tome 1*. Paris, France: Le Seuil [1977] 1981.
- Ostrom, Elinor. «A General Framework for Analyzing the Sustainability of Social-Ecological Systems», *Science*, 325(5939) (2009): 419-22.
- Perroux, François. *Pour une philosophie du nouveau développement*, Paris, France: Editon Aubier/Presses de l'Unesco, 1981.
- Prebisch, Raul. *Le développement économique de l'Amérique latine et ses principaux problèmes*, Nations Unies, reproduit dans *Economic Bulletin of Latin America*, n°7, February (1950): 1-22.
- Porter, Michael. *Competitive Advantage of Nations*. Harvard Business Review March-April 1990 Issue (1990): 73-91.
- Porter, Michael E. *Social Progress Indexes Data Base*, November 2016, <http://www.socialprogressimperative.org/countries/usa/>
- Rodrick, Dani. *The Globalization Paradox: Democracy and the Future of the World Economy*, Boston, USA: Hardcover, 2011.
- Rutherford, Malcolm. "Toward a History of American Institutional Economics." *Journal of Economics Issues* 43, 2 (2009): 309-318.
- Seligman, Martin E. P. *Learned Optimism: How to Change Your Mind and Your Life*. New York, USA: Knopf. Reprint edition, Penguin Books, reissue edition, Free Press [1990] 1998.
- Sen, Amartya. *Commodities and Capabilities*, Oxford, UK: Oxford University Press, India Paper Back, 1999.
- Senik, Claudia. *L'économie du bonheur*, Paris, France: le Seuil, la République des idées, 2014.
- Shapiro, Carl and Joseph E. Stiglitz. Equilibrium Unemployment as Worker Disciplines Devices. *The American Economic Review*, vol 74, 3, 1984, pp 433-444.
- Stiglitz, Joseph E., Sen, Amartya, and Jean-Paul Fitoussi. *Commission sur la mesure des performances économiques et du progrès social*. Paris, France: July 25, 2008.
- UNDP. *Human development Report, 2015*, <http://hdr.undp.org/en/2015-report>
- Thaler, Richard H. and Cass R. Sunstein. *Nudge, la méthode douce pour inspirer la bonne décision*. Paris, France: Editions Vuibert, Collection Pocket [2008] 2010.
- Veblen, Thorstein. "Why Is Economics Not an Evolutionary Sciences?" *Quarterly Journal of Economics* 12, 2 (1898): 373-397.

**Table 1: The three approaches of happiness**

Micro	Meso	Macro
Wilson, 1967	Goleman, 1990	Aristotle
Subjective well-being	Happiness	Eudaemonia
Individualism	Holon	Holism
Satisfaction	Co-building	Normative
Positive affects	Complexity approaches	Desirable virtues
Act happy	Be, think, and act happy	Think and be ethic
Ask people	Live with others	Read philosophers
Neurosciences	Cognitive sciences	Philosophy
Analyze of well-being	Build happiness	Think virtues

Source: Diener (1984), Goleman (2010)

**Table 2: Meso happiness indexes: HDI and Social index for the two countries**

	MICRO Gallup	MESO HDI	MESO Social Index	MACRO PPP \$ GDP/head
<b>Brazil</b> 207 h	6,952 (17 <sup>th</sup> )	0.755 (75 <sup>th</sup> )	70.89 (42 <sup>th</sup> )	15,043 (85 <sup>th</sup> )
<b>South Africa</b> 56 h	4,459 (116 <sup>th</sup> )	0.666 (116 <sup>th</sup> )	65.64 (63 <sup>th</sup> )	12,563 (94 <sup>th</sup> )

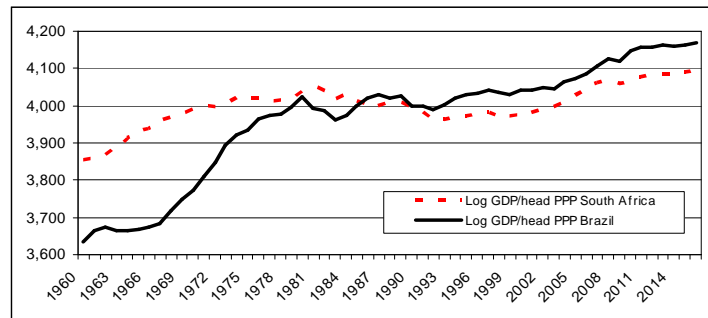
Source: Helliwell and Sach, 2016, PNUD, 2016, Porter, 2016  
<http://hdr.undp.org/en/content/human-development-index-hdi>

**Table 3: Decomposition of the Social Index for Brazil and South Africa**

	(1) Basic needs	(2) Opportunities	(3) Well-being
<b>Brazil</b> 70,89	75.9 -Nutrition: 66.66 -Water: 86.63 -Shelter: 72.49 -Safety: 67.81	61.55 -Rights: 65.43 -Freedom: 72.59 -Tolerance: 61.91 -Advanced education: 46.27	77.65 -Basic knowledge: 95.67 -NTIC: 76.87 -Wellness: 65.85 -Environment 72.19
<b>South Africa</b> 65,64	66.95 -Nutrition: 87.00 -Water: 72.96 -Shelter: 66.02 -Safety: 41.84	67.21 -Rights: 75.15 -Freedom: 75.73 -Tolerance: 6.40 -Advanced education: 53.14	68.23 -Basic knowledge: 85.62 -NTIC: 78.50 -Wellness: 45.63 -Environment 63.69

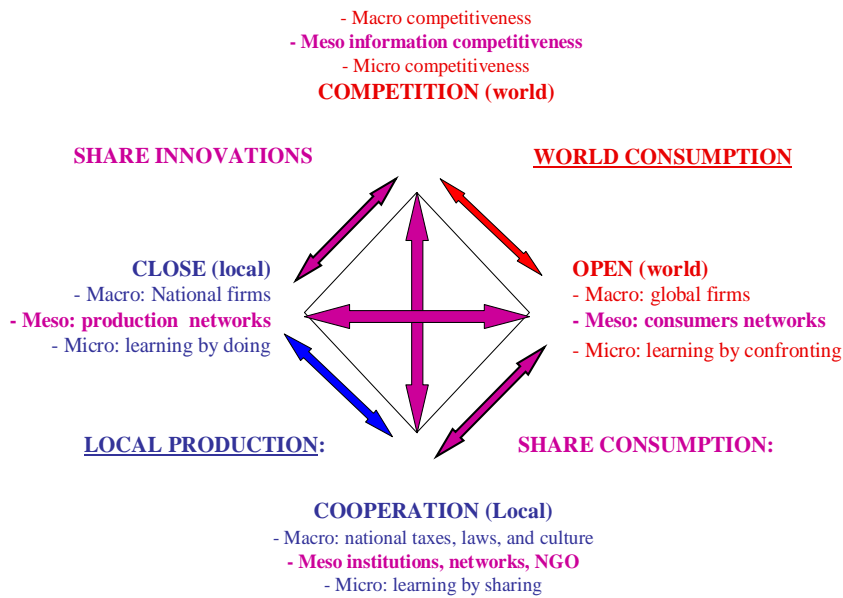
Source: Porter, November 2016, <http://www.socialprogressimperative.org/data/spi/countries/GIN>

Figure 1: Standard of living (GDP per head in PPP dollars) in Brazil and South Africa from 1960 to 2016 (in log scale)



Source: Chelem GDP data base, C.E.P.I.I., November, 2016

Figure 2: Sustainable development policies based on meso networks and institutions



Source: Porter, 1990, Baulant, 2015, Delmas-Marty, 2016