Achieving Sustainable Development:  
An Integral Approach to an Economic Perspective

by

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Abstract

Sustainable development is an outcome of more than economic processes. It is an outcome of economic, social, and political processes that interact with and reinforce each other in ways that hinder or facilitate its achievement. To reach sustainable development, opportunities need to be generated, good initiatives at all levels facilitated, and stability ensured. This requires actions at local, national, and international levels. How can priorities be decided in practice? What framework is needed to ensure economic growth and an effective distribution of wealth that generates equality of opportunities? This paper suggests that to accomplish sustainable development, it is not enough to review the way economic development has been researched and conducted. An integral approach to economic development is needed, i.e., an approach that seeks to strengthen the civil and social institutions required for it. This, in turn, necessitates an integrated view of the person in society and, consequently, a focus on the economic agent’s decision process acknowledging him/her in a holistic manner and in his/her social dimension.
Achieving Sustainable Development:  
An Integral Approach to an Economic Perspective  
Maria Sophia Aguirre*

I. Introduction

International Economists today know that good policies alone will not ensure economic development; effective civil and social institutions are required—indeed, they provide the most fruitful context for sustainable development.1 Sustainable development is an outcome of more than economic processes. It is an outcome of economic, social, and political processes that interact with and reinforce each other in ways that hinder or facilitate its achievement. To reach it, opportunities need to be generated, good initiatives at all levels facilitated, and stability ensured. This requires a better understanding of the socio-economic dynamics underpinning economic development as well as actions at local, national, and international levels.

At the center of these dynamics is the human person, the economic agent, who generates and is served by the economic activity. It is a fact of experience that the human person exists, lives, and acts together with others, i.e. that human beings have a social nature. In cooperating freely with others, a person also shares in the responsibility and the outcomes of those actions while, at the same time, he/she shapes his/her own way of living and direction in life. In this manner, the person determines himself/herself in such a way that through his/her interpersonal interactions, the person contributes towards or jeopardizes his/her personal development and that of others.2 The interpersonal interactions’ impact on the economic agent and on society underline the importance of incorporating these aspects of human behavior when analyzing economic activity, as it suggests a connection with the production or destruction of human, social, and moral capital as well as with efficiency and productivity in the economic activity.

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2 For a more complete analysis of this human interaction or participation in economic development see Woytyla (1969) and Mcintosh (2001).
Yet, often they are absent from economic analysis, which instead assumes an economic agent who is a self-interested utility maximizing individual.

How are and can priorities be decided in practice? What framework is needed to ensure economic growth and an effective distribution of wealth that generates equality of opportunities for the individual and societies? The present paper suggests that to accomplish sustainable development, the way economic development has been researched and conducted thus far is not sufficient. An integral approach to economic development is also needed, i.e., an approach that seeks to strengthen the civil and social institutions required for it. This, in turn, necessitates an integrated view of the person in society and, consequently, a focus on the economic agent’s decision process acknowledging the person in his/her integral dimension and in his/her social dimension.

Development economics studies the causes and effects of poverty and low income in countries around the world. It also studies the causes and effects of the slowdown of progress in some countries. Based on its findings, it seeks to improve policy design in such a way that individuals, regions, and countries can achieve greater economic prosperity. Functioning social institutions such as the family, the local community, the rule of law, the domestic security infrastructure, and public institutions, are absolutely essential in order for development programs and policies to achieve their objectives. In practice, however, these institutions are often inadequate to meet the demands of development. Many problems of development result from barriers to the introduction of new technology, violation of property rights, and the distortion of prices due to protectionist policies. Furthermore, these institutions and disruptive policies are in place not due to ignorance on the part of policy makers, but rather for them to remain in power, to enrich themselves, or protect interest groups. Successful development initiatives, then, must identify the institutions that are relevant to the development effort, determine the improvements needed within those institutions, and then strengthen those institutions so that they are able to perform the tasks required for development.

International organizations and nongovernmental organizations (NGOs) now realize the importance of implementing systems that not only ensure more effective management of development but also measure the impact of their development efforts in the broader
macroeconomic context as well as on the immediate recipients. Such is the goal of the Human Development Report, which ranks the well-being of countries not only based on their Growth Domestic Product (GDP) but also looks at health and education. It is also the case with the Millennium Development Goals (MDGs) which seeks to encourage improvement in several aspects of developing countries.

As a consequence, concerns have been raised with regard to traditional measures of development. One of the reasons for such concerns has been the metrics typically used to measure and analyze the progress made in advancing the development agenda. For example, an organization that implements a job training program will typically measure the participants’ improvement in specific skills or in income. In addition, however, the organization should also measure the resulting impact on the participants’ families, communities, and cultures as well as on a more complete definition of quality of life. Furthermore, in measuring the impact of development efforts, it is not only actual income but the use of that income that matters in terms of fundamental human development. An integral approach to development can contribute towards the improvement of these measurements as well.

The study is organized as follows. In section II some empirical evidence in support of the need for an integral sustainable development approach is presented. The section that follows reviews recent developments in the literature in view of the integral approach proposed. Section IV offers conclusions and a proposal for future research.

II. Empirical Evidence in Support of Integral Sustainable Development

Significant portions of the population in developing countries live in poverty. The economic choices of the population, and more specifically of the poor, are constrained by their market environment and by the lack of shared infrastructure. As a consequence, they often lack

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3 The European Commission (EC), has recently embarked on the “GDP and Beyond initiative” based on a successful series of conferences aimed at improving measures of progress, wealth, and well-being. Last year the EC published a roadmap and it is expected to report on the implementation and outcomes of the key actions put forward by 2012 at the latest. The initiative’s intention is to complement GDP with environmental and social indicators relevant to the challenges of today. The Organization for Economic Cooperation and Development (OECD) is also developing a Global Project trying to assess society’s progress. Its goals were approved in 2007 in the Istanbul Declaration, which urges “statistical offices, public and private organizations, and academic experts to work alongside representatives of their communities to produce high-quality, facts-based information that can be used by all of society to form a shared view of societal well-being and its evolution over time.”

4 See Deaton (2010a) and Rodrick (2010).
income and assets to attain basic needs: food, shelter, clothing, and acceptable levels of education and health. They lack as well access to human assets, natural assets, infrastructure or physical assets, as well as access to financial structures such as savings or credit. In addition, they often lack aging security, as they have no access to sound social security systems. In fact, in most developing countries, the social security system is provided by the extended family. The extended family is becoming smaller however, and this is taking place at a faster pace than the aging population experienced by developing countries. The speed of aging in the population has significantly declined in the past three decades in developing countries. These conditions make the poor in developing countries highly vulnerable to adverse shocks, as they are less able to cope with them.

Table 1 presents an overview of the environmental, primary health, welfare, and living conditions in low-income countries as compared to developed countries. Two characteristics are clearly shown: 1) developing countries’ populations live under much worse conditions than developed countries and 2) the type of access available to the different services, for the most part, is of better quality in developed countries. When telephone and cellular access is considered, one can see a trend towards the expansion of cellular phones over telephone landlines. Developing countries are moving directly into wireless services, which, in turn allows them to access the Internet without the need for large infrastructure. This implies access to a wealth of information that before was banned or nor available for a large part of the population in these countries. Yet, while these means can provide access to information, education, and potential markets and, in doing so, open new opportunities for economic growth, a sustainable infrastructure that reaches all the population is required. This is not the case in most developing countries.

Income inequality has been attributed in these countries to several factors. These include political instability, lack of access to lines of credit, to fixed assets, to means of production, and to education. It has also been attributed to lack of access to appropriate health services. This is especially problematic for the low income population, as typically they have no access to private

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5 For a review of the institutional and economic situation of the poor in developing countries see Banerjee and Duflo (2007).
6 For example, it took France 115 years for the reverse of the population pyramid to take place while is only taking Colombia 20 years. See Aguirre (2006b)
sector health insurance. For the most part, the family social network is the only access to extra income, thus when they have health problems, as Banerjee and Duflo (2007) point out, their “insurance often means eating less or taking their children out of the school.”

Table 1
Environmental, Welfare and Health Conditions: Low vs. High Income Countries

<table>
<thead>
<tr>
<th>Indicator</th>
<th>% Access (Low/High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>House Connection: water</td>
<td>89/99</td>
</tr>
<tr>
<td>House Connection: sewerage</td>
<td>63/99</td>
</tr>
<tr>
<td>House Connection: electricity (rural-urban)</td>
<td>50-62 / 100</td>
</tr>
<tr>
<td>Water Consumption (liters per person) (rural-urban)</td>
<td>259 / 600</td>
</tr>
<tr>
<td>Access to Improve water (rural-urban)</td>
<td>92-63 / 100</td>
</tr>
<tr>
<td>Solid waste disposal: landfill or incinerated or dump, recycled, etc.</td>
<td>85-36/100</td>
</tr>
<tr>
<td>Access to Affordable Essential Drugs (rural-urban)</td>
<td>85-90/ 91</td>
</tr>
<tr>
<td>Immunization</td>
<td>99/100</td>
</tr>
<tr>
<td>Infant mortality (per 1000)</td>
<td>20/6</td>
</tr>
<tr>
<td>Life Expectancy</td>
<td>71/85</td>
</tr>
<tr>
<td>Public Expenditures on Health (%GDP)</td>
<td>2.3 / 6.2</td>
</tr>
<tr>
<td>Paved Road</td>
<td>87/94</td>
</tr>
<tr>
<td>Phone lines(per 1000)</td>
<td>9.58/597</td>
</tr>
<tr>
<td>Cellular phones subscriptions (per 1000)</td>
<td>55.25/ 605</td>
</tr>
<tr>
<td>Literacy</td>
<td>88.7/100</td>
</tr>
</tbody>
</table>


Healthier workers are physically and mentally more energetic and robust, consequently they are more productive. On the other hand, illness and disability reduce wages substantially, with a negative effect on income as a high proportion of the work force is engaged in manual labor. This further accentuates poverty and inequality as well as economic growth.

The main health risks and causes of death for men and women in developing countries are presented in Figure 1.

**Figure 1**

**Leading Causes of Death among Women and Man in Developing Countries**

Compared with other causes of death, infectious diseases among adults are significantly higher in developing countries. Although most of the population has access to affordable essential drugs as well as immunization, other areas of health services are still scarcely provided, especially in rural areas. Furthermore, the amounts allocated to treat and/or cure some of the diseases are not proportional to their demand and the approach taken to prevent them does not take into account the social dimension of the person. This hampers growth.

For example, Tuberculosis (TB) kills almost 2 million people a year and reports 9.9 million new cases a year. 75% of TB infections and deaths occur in the 15-54 year age group, which is the most productive group. 20%-30% of income is lost due to TB but the funding allocated to it in 2010 was $4.2 billion, significantly lower than HIV/AIDS. Similarly, Malaria causes 300-500 million new cases a year and kills over 1.7 million people. The cost of malaria to African countries is 1.3% of GDP per year and the productivity of the workers is reduced by
60%. Direct and indirect costs of malaria in terms of overall GDP, is equivalent to a loss of $100 billion annually in sub-Saharan Africa. The funding for Malaria increased in 2009 reaching $1.4 billion. Yet, the moneys allocated to Malaria are still significantly lower than the amounts allocated to HIV/AIDS.

AIDS places sixth among the leading causes of death yet total funding for 2009-2010 was $9.5 billion. HIV/AIDS causes about 2 million deaths in developing countries and it has about 2.7 million new cases a year. Although the disease has devastating consequences in the lives of those infected by it and in their families, the economic impact is significantly lower than the one caused by Malaria or TB. Furthermore, the principle modes of transmission are sexual promiscuity and drug use, thus could be prevented by changes in such behavior. This is not the case for Malaria or TB, although the spread of the latter has been increasingly connected to HIV/AIDS.

For the most part, public health allocation of funds for prevention and treatment has failed to engage the personal responsibility and to emphasize the consequence of one’s actions to the social environment of the individuals it seeks to help. This has been especially evident in the case of HIV/AIDS. The typical prevention programs, so called “safe sex”, rather than fostering a responsible use of one’s sexuality presents a message of “play with your sexuality but be careful.”

To empower an individual with a healthy life requires fostering in each person the exercise of his/her responsibility so to choose a way of living that is not self-destructive. Health prevention efforts, rather than focusing on the consequence of self-destructive actions, need to focus on the causes of them so to avoid them altogether. Only then the prevention campaigns will actually be effective. In order to achieve this, prevention campaigns need to engage culture, legislation, education, etc. with an approach that sees the person in a holistic manner and as a social being not as selfish individual. This requires a perspective that encourages social responsible behavior on the part of individuals. In fact, this is the way in which, decades ago, immunization efforts were undertaken and an important reason for its success (See Table 1.)

At the same time, the majority of maternal deaths are due to poor access to health care (1.9% of female death). In the case of children the leading cause of death are neonatal causes. Diarrhea is the fifth leading cause of death and only 58% of children with diarrhea receive

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8 The typical sex-education programs now disseminated in many schools are a clear example of this. See Aguirre (2005).
rehydration therapy, when such a treatment can prevent up to 95% of the deaths among children from diarrheal diseases. In addition, on average, 20% of children are undernourished. This percentage is highly correlated with low levels of education and income and it is indicative of the lack of access to health services among different population groups.9

The positive correlation between human capital and economic growth, infrastructure and economic growth, healthy institutions and economic development, as well as health and income per capita, are well-known relations in international economic development. These correlations are commonly thought to reflect a causal link running from human capital and infrastructure to economic growth, from healthy institutions to economic development, and from income to health. Recent economic analyses, however, indicate that human capital is essential to both the development of healthy institutions (social capital) and for infrastructure and technology to allow economic development. Furthermore, empirical evidence also indicates that health status (as measured by life expectancy) is a significant predictor of subsequent economic growth as it contributes to human capital growth.10 There is a difference of almost 30 years between developed countries and developing countries, however (See Figure 2).

In recent years, a renewed campaign for large financial aid intervention has been advanced, once again, as a means to significantly reduced poverty as if the latter would be rooted in technical issue that could be solved simply with funding. The view seeks to find administrative solutions to poverty rather than addressing its real causes. This approach does not seem to be on line with the extensive literature in economics and political science, however, as the latter indicate social issues as the cause of poverty -poor quality of institutions, inconsistent and misguided policies, the exclusion of the poor from trading networks, high transaction costs in markets, and ineffectual aid donors.

Easterly (2006, p.100) identifies at least three major classes of problems in this top-to-bottom approach to aid: 1) while plans are decreed at the top, they need to be implemented at the bottom. This requires the design of principal–agent contracts to give good incentives for aid agency officials and government civil servants to do the interventions right and get results for the poor. This problem is particularly severe in foreign aid, when the actions at the bottom are often unobservable to the administrators at the top. 2) Administrators at the top often do not have

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9 Core Health Indicators, June 2009 (WHO)
10 Bloom (2004) and for a more extensive list of citations see WHO (1999b).
enough information about the realities at the bottom to design the right interventions in the right place and at the right time. This problem is particularly severe in foreign aid, which gets little or no feedback from the voiceless poor. 3) Multiple goals and multiple agents weaken incentives for agents to deliver on goals. Yet, more often than not, incentives are not in place to ensure the international administrators and government civil servants deliver and implement the foreign aid interventions agreed upon. Decades of field experience among development practitioners suggests that implementation is very difficult and incentives can be very much askew. As a consequence, government drugs often disappear before reaching the patients, aid funds are misappropriated, services are poorly delivered, bribes are demanded by service providers, etc.

By contrast, what seems to be more effective is for foreign aid to find particular initiatives that have a track record of effectiveness, fund them, and promote their growth. Banerjee and He (2004), based on empirical evidence suggest piecemeal approaches to aid as a more successful alternative. Some of these observable effective initiatives include subsidies to families for education and health inputs for their children, class size reduction, remedial teaching, uniforms and textbooks, school vouchers, distribution of drugs and nutritional...
supplements, vaccination, HIV prevention, STD management, indoor spraying for Malaria, provision of bednets, distribution of fertilizers, and clean water initiatives.

This empirical evidence regarding aid is of interest when considered through the prism of an integral approach to development. It illustrates the importance of an interpersonal approach, an approach, in this case, where the recipients of aid are not only assisted by pre-determined economic models, agendas and services, but rather they are engaged to participate in finding solutions and opportunities at local and regional levels that respond to the real circumstances and needs.\(^{11}\) Perhaps this is one of the reasons why microcredit programs directed to incentive savings have been, for the most part, effective in helping raise those who live on less than $1 a day -the poor of the poor-.\(^{12}\)

This evidence is also relevant when considering the relation found between poverty reduction and family structure as well as between family structure and wealth, savings and investment. The latter is especially relevant because they are important elements of economic development and progress, albeit not exclusive. What this evidence indicate is that the family, the most basic form of institution in the economy, is relevant to the process of production within the economy not only because it is directly related to the production of human, social, and moral capital but also because of its impact on the efficiency of economic activity. In other words, the family facilitates an integral approach to development.

Evidence across sciences indicates that the best environment for the healthy development of a person is for that person to live within a family that is functional, i.e., with his/her biological or adoptive mother and father in a stable marriage.\(^{13}\) The academic and social performance of a child is very closely related to the structure of the family in which he lives and this is important for the quality of human and social capital. The psychological stability and health of a child and his/her parents is closely related to healthy families and this is important for worker’s productivity and government finances. Social science research also shows that the breakdown of the family is a symptom of a sick and weak society.\(^{14}\)

\(^{11}\) One can think of the numerous stabilization plans exercises in Latin America and Africa during the 1980s and 1990s.


\(^{13}\) For a further development of this argument as well as a review of these findings see Fukuyama (1999) and Aguirre(2006).

\(^{14}\) Aguirre (2007),
Conversely, there is evidence that the breakdown of the family and low levels of family interactions have negative effects. Figure 3 presents the poverty levels of women, children, and families by family structure and race for the U.S. Similar outcomes can be found in other countries (Aguirre and Thompson 2010).

**Figure 3**

*Percentage of Families, Women and Children who are in poverty by Family Structure and Ethnicity, 2008*

In all cases, poverty is significantly reduced when the household structure corresponds to marriage as opposed to single parenting. Typically, the effect of poverty is more severe for women and children as it is typically the woman who remains with the children in the case of marriage dissolution or single parenting.

Across countries, marriage has historically been viewed as a source of financial security, especially for women and children. Its importance, however, goes beyond individual financial securities as it also affects the growth process. In developed countries, evidence has been found that indicates the holding of wealth and income as well as its opposite, poverty, are closely connected to family structures, even after controlling for other household characteristics. The knowledge of whether this is the case in developing countries is of interest for several reasons:
1) savings are needed for investment, 2) in developing countries there is a large portion of the population who lives in poverty, 3) access to wealth facilitates social mobility, 4) family structure is relevant in the determination of human and social capital, both of which are essential for development, 5) developing countries cannot afford the cost that developed countries today face due to the breakdown of the family, and 6) for policy design purposes.

An econometric analysis comparing four countries in America, two developed and two underdeveloped, finds support for the relevance of family structure in wealth determination and poverty reduction in households (Aguirre 2008). The study compares the US (a developed market economy), Canada (a developed social market economy), Guatemala (a Central America developing country where 60% of the population lives in poverty, and where the average education level is 3rd grade. In addition, relative to its GDP and trade Guatemala is the largest country receiving remittances), and Chile (a developing South American country, which has been relatively successful in its development efforts.) In all cases and after controlling for all other household characteristics, we find that the single most significant characteristic in determining the level of wealth, savings, and house ownership as well as lowest level of poverty is family structure. Figures 4-7 depicts some of this evidence.

**Figure 4**

*Household Income Net Wealth Worth in USA by Education Level and Family Structure*

Sources: Aguirre (2008)
In the US, for example, evidence seems to suggest that education contributes towards wealth accumulation but the impact of “marriage” is far more significant (Figure 4.) The same pattern is found in Figure 5 for the case of wealth and housing, often an important source of credit and therefore of social dynamism within a society.

**Figure 5**

*Household Income Net Wealth Worth in Canada by Family Structure*

Sources: Aguirre (2008)

The same trend is found both in Chile (Figure 6) and Guatemala (Figure 7). Chile’s households with married couples more than double the level of wealth *vis a vis* co-habiting and single-parent households. In the case of Guatemala, house ownership and savings were used as proxies for wealth.

**III. Recent Developments in Development Economic Research and Policy**

Sachs (2005) advocated large increases in aid to finance a package he considered would end world poverty. These recommendations were remarkably similar to those put forward in the 1950s and 1960s by those researching and designing economic development policies.\(^\text{15}\) Today, as

\(^{15}\) Some of these initiatives and studies include the substitution polices suggested by Prebisch (1959) and Singer (1964) as well as Rosenstein-Rodan’s (1943) “Big Push” framework.
then, this reliability on large aid overlooks the unsolvable information and incentive problems faced by large-scale planning exercises. A more promising approach, as proposed among others
by Banerjee (2007) and by Easterly (2006), seems to be the design of incentives for aid recipients to design and implement piecemeal interventions that deliver effective and large benefits for the poor relative to costs. After years of relying strictly on theory and some general empirical aggregated evidence for policy, many development economists abandoned these approaches to research and policy as simplistic. They realized that economic development is a complicated interplay of imperfect markets, politics, social norms, institutions, and government policies, social services, and microeconomic interventions. Development Economists realize today that new research approaches need to be devised if sustainable development is to be achieved. Nevertheless, “the idea of an aid-financed takeoff into growth has maintained its appeal among [some] members of the development policy community”, more noticeably United Nations and European Union development related efforts.¹⁶

Yet, in spite of much advance in the technical aspects of economic research and financial aid, the problem of poverty and underdevelopment remains very much present around the world. Some economists blame this failure on theories of economic development suggested by advisors and implemented by policy makers without taking into consideration the particularities of different countries at specifics points in time.¹⁷ Another possible explanation, which has not been as extensively explored, is that the understanding of the economic decision making process in mainstream economic theory is incomplete as it fails to capture the social nature of the economic agent.¹⁸ Perhaps the problem is really a combination of these two.

Today, consensus seems to have been reached on the merit of drawing from all branches of economics as well as from other sciences such as sociology, psychology, political science, and medicine among others when studying the processes of development. Several alternatives have been put forward in the past decade to fill the gaps encountered in the field, especially in the area of understanding microeconomic mechanisms and the role of institutions in finding solutions for

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¹⁶ For example, Sachs (2006) states that “Each low-income country should have the benefit of a united and effective UN country team, which coordinates in one place the work of the UN specialized agencies, the IMF, and the World Bank. In each country, the UN country team should be led by a single UN resident coordinator, who reports to the United Nations Development Program, who in turn reports to the UN secretary-general” (p. 285). The approach is one that suggests that aid agency officials and national government leaders should do planning from the center to make everything happen. See Easterly (2006). Also see Easterly (2003) for a summary of the evidence provided by decades of research on aid and growth, which indicates a failure to generate evidence for this prediction.

¹⁷ See for example Rodrick (2010).

¹⁸ See for example Aguirre (2006a and 2010) and Mueller (2010).
more accurate and comprehensive measurement techniques of variables, and in measuring the efficacy and impact of development efforts.

Hasumann et al (2005) in an attempt to overcome the problems caused by the use of pre-conceived models for specific approaches to development as the ones experienced by Latin America in the 1980s and 1990s developed a new framework for diagnosis. This framework aims at helping policymakers identify binding constraints and prioritize policy reforms in multilateral agencies and bilateral donors in order to assist decision-makers in choosing the right economic model and remedy in specific circumstances. This approach is experimental in nature, emphasizing experimentation as a strategy for discovering “what works along with monitoring and evaluation to learn which experiments work and which fail. It tends to look for selective, relatively narrowly targeted reforms. … [It looks] for policy innovations that provide a shortcut around local second-best or political complications.”19 Such has been the approach taken by the Chinese government.20

Similarly, Deaton (2010b) suggests that in the efforts to advance the field of economic development, specific mechanisms need to be studied. He notes that it is not enough to know whether a given approach works. Why it works is more relevant. He thus proposes an approach to research which investigates, tests, and modifies mechanisms that can be potentially widely applied, allowing in this manner the “integration of disparate findings … [comprising] progressive empirical research strategy.”21 The inspiration for this positivist approach is the hypothetic-deductive method of Cartwright (2007). It is an approach where “mechanisms are proposed, key predictions derived and tested [through randomized mechanisms], and if falsified, the mechanisms are rejected or modified. If predictions of the mechanisms are confirmed, if they are sufficiently specific, and if they are hard to explain in other ways,”22 the mechanisms are accepted until it is undermined by new evidence. In this framework, there is not the possibility of confirmation; falsification is the only way to learn. “Sometimes the falsification can be repaired by changing supplementary assumptions and sometimes they involved long steps backwards where the model is abandoned; and often there is disagreement about which is the

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20 For more details on the Chinese approach to development see Heilmann (2008).
21 Deaton (2010a), p. 3.
correct response. But the end result is an accumulation of useful knowledge and understanding." To be useful, this approach requires cross-fertilization between theory and empirical work as well as taking into account historical evidence, institutions, and measurements which, as previously mentioned, often fall short or are misused. Under this approach, studies in important aspects of economic growth such as the behavior of savings and its relation to growth, the dynamics of commodity prices and food distribution have been undertaken and new insights have been found to help explain aspects of the behavior of these variables in developing countries at the microeconomic level.

Banerjee and Duflo (2009) complement this approach with a proposal for field experimentation as the basis for understanding of economic issues relevant to poor people and countries. This manner of conducting research “by enabling the researcher to precisely control the variation in the data, allows the estimation of parameters and testing of hypothesis that would be very difficult to implement with observational data.” By fostering interaction between empirical findings in the literature and theoretical models and predictions, a deeper understanding of economic realities as occurring in the developing world is reached. Work in this area has provided significant advances in the understanding of imperfections and inefficiencies in developing and underdeveloped countries’ credit markets. It has also been helpful in the area of education.

The diagnostic approach and the randomized approach to understanding mechanisms are very similar. In both cases the process has three components: 1) the identification of variables that hamper economic development; 2) the generation of solutions to solve these problems; 3) finding ways to test the effects of the propose solution. Both approaches have their limitations but they can complement each other. The diagnostic approach can provide important information to microeconomic randomized efforts regarding what to test and on what to focus, and on the implementation and development of follow up tools to monitor the impact of policy.

23 Ibid.
25 Banerjee and Duflo (2010), p. 62
Furthermore, both can be fruitful by feeding into and being fed by the findings of field experimentation work.

The aspirations of a person are typically generated and influenced by the experiences of others in the individual’s social milieu. A research agenda in economic development should not ignore these components of human behavior since they affect a plethora of relevant economic outcomes. Among these are: the decision to migrate, the rate of savings, the patterns of consumption, the fertility rate, the approach to marriage and children, technology adoption, the respect for the rule of law, work ethic, the choice of ethnic and religious identity, etc. Thus, the understanding of how this interpersonal aspect influences the economic agent decision process, and of how it leads a person to cooperate or not with others, is very relevant to the understanding of institutions and economic activity as well as their interplay in the economic development process.\(^\text{29}\) In most cases, the previously mentioned approaches have failed to address some relevant aspects of human behavior, more specifically the interpersonal reality of human decisions.\(^\text{30}\)

How could this interpersonal dimension of economic activity be identified and incorporated into economic theory an empirical analysis? One way is through its incorporation in the economic decision process. This implies the modification of the most basic assumption present in mainstream economic theory and analysis, i.e., the conceptualization of the economic agent as a selfish utility maximizer. In order to capture a much richer understanding of human behavior, the conceptualization of the economic agent as a social rational animal is proposed. Along these lines, Mueller (2010) and Aguirre (2010) provide two possible alternatives. Specifically, Aguirre (2010) proposed the incorporation of an economy of scale feature in the budget constraint which would captures efficiency gains/losses as a consequence of the economic agent acting together with others and for/against others. Efficiency in the allocation of goods, therefore, calls for the consideration of others’ needs in the maximization decision process of the economic agent. Using as an experiment the most basic institutional level we have in society, the family, the proposed modified model of economic maximization is able to

\(^{29}\) For example, Duflo (2006) and Ray (2010) suggest that it is unclear whether the constant exposure to economic hardships is conducive to a greater commitment to the betterment of the region and/or country where individual live or to discouragement.

\(^{30}\) Some exceptions that come to mind include Feigenberg \textit{et al} (2009) and Karlan (2005 and 2007) among others.
replicate the empirical evidence regarding the economic benefits of marriage and the negative effects of divorce. The modification is also able to provide a theoretical framework to explain why empirical evidence is found across countries indicating that family structure is a significant factor in determining wealth, savings, human and social capital across countries, some observed patterns in the allocation of remittances, and the poverty alleviation effect of marriage in very low income level households.\(^3\)

Mueller’s (2010) proposed model expounds upon Becker’s theories of utility and the decision process of allocation of time and wealth within the family by proposing what he describes as a *human approach to economic behavior*. At the heart of his proposal is the distinction between the ranking of scarce goods as means – the utility function- and the ranking of persons as ends – a distribution function- when describing the process of economic choices. According to Mueller, Becker’s economic approach fails to recognize that people have preferences both for things and for people, and leaves out the consideration of persons as ends. Becker, in Mueller’s view, reduces all human behavior to a maximization of utility, and then reduces utility to a satisfaction of basic pleasures that are identical for all persons and unchanging over time. Mueller claims that what is missing in the mainstream economic theory of consumption –and therefore also in Becker- is a theory of distribution. He notes that Becker solves this problem by assuming that the final objects of choice are identified with basic commodities included in the utility function. These commodities include both persons and objects: tastes for these final goods are assumed to be constant over time. Thus, any change in behavior, is justified by changes in prices or income and from a point of view of production, by an improvement on human capital within the household, and it is solely based on utility.

Instead, Mueller proposes that people express their preferences for individuals through their allocation of resources, and for things through their preferences for goods. In his view, it is the preference for individuals that determines distribution and where the interpersonal dimension of man is clearly manifested. This is the missing puzzle in the economic maximization decision process. He proposes that it is the relative significance of the self versus other persons –i.e., the interpersonal dimension present in the economic activity of human beings-, which is described in each person’s distribution function. The author proposes an alternative to Becker’s theory of the

\(^{31}\) See Aguirre (2006b and 2007).
economic application to altruism by proposing that love, in material terms, can be described as a gift or voluntary transfer payment not made in compensation for useful services rendered. The resources available and the relative importance of the recipient in the eyes of the distributor, Mueller argues, determine such transfer. These efforts to incorporate in a formal manner the interpersonal dimension of economic action provide an important, helpful and useful tool for the analysis of distribution and efficiency in economic development research.

The interpersonal approach can also be of assistance in the efforts to understand the role of institutions and human and moral capital in the economic process. It can help in explaining certain puzzles found in the development economics literature as well. A clear case in point is the evidence found in poor countries regarding the impact of widespread extended families on the reduction of life-cycle savings and the opposite evidence found, in more recent years, in some aging population countries such as China. More research in the area of interpersonal maximization and its effects on growth could significantly aid efforts seeking to achieve sustainable development.

IV. Conclusions

Economic development research and implementation has experience, especially in the past two decades, a significant transformation. New research avenues have been opened and these, in turn, have been shaped by and shaped development theory. In fact the diagnostic approach combined with field experimentation and efforts to understand the mechanisms of economic development have set a very fruitful agenda for both the understanding of the development reality and for ground efforts directed to achieving sustainable development.

It has also inspired thinking “outside the box” when engaging in foreign financial aid. Specifically, it has made clear that rather than a top-down approach to reducing poverty, a bottom-up piecemeal approach is more effective. Furthermore, through the exercise of field experimentation specific initiatives have been identified as effective in achieving economic development. These include, among others, subsidies to families for education and health inputs for their children, reducing class size, distribution of drugs and nutritional supplements, vaccination, indoor spraying for Malaria, and distribution of bednets.
One aspect regarding human behavior has been missing in these efforts. In this paper, it is suggested that the inclusion of this piece in a systematic manner, both at the theoretical and the empirical level, can significantly enrich the understanding and achievement of sustainable development by bringing an integral dimension. Specifically, it suggest the incorporation of the interpersonal dimension present in any economic decision process and activity carried out by an economic agent. It is a fact of experience that a person exists, lives, and acts together with others, i.e. that he/she has a social nature. In cooperating freely with others, a person shares in the responsibility and the outcomes of those actions while, at the same time, he/she shapes his/her own way of living and direction. Through these interpersonal interactions, a person determines himself/herself in such a way that he/she either contributes towards his/her personal development and that of others or he/she jeopardizes them.

Understanding the impacts of this interpersonal dimension on the economic agents’ decisions and in society, can provide important insights on some of the puzzles we find today in economic development. Similarly, it can help us in the understanding of the connections that exist between the most basic manifestation of this interpersonal reality - the family-, and the production or destruction of human, social, and moral capital. It can also assist in achieving a fuller understanding of the role of institutions in the economic process, as well as a better comprehension of the connection between the social dimension of the human person and efficiency and productivity in economic activity.

With regard to the role of foreign aid, the inclusion of an integral approach could facilitate the improvement in the introduction of incentives for aid agencies in areas such as evaluation, accountability, and feedback. Furthermore, it can help economic development professionals that carry out field work. Institutions are essential components of the economic growth process. Despite the importance of these institutions, development professionals working “on the ground” often fail to understand the critical role that institutional effectiveness plays in economic development. Furthermore, they typically lack the managerial proficiency to make those institutions more effective and the appropriate skills to undertake quantitative evaluation of programs. An integral approach to development can help identify the skills in management and economics required to design, implement, and evaluate more accurately programs that can effectively contribute to integral economic development.
V. Bibliography


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