

## **Measuring cross-country differences in social cohesion**

Christopher Garroway and Johannes Jütting

Draft, January 2011

Preliminary version (not to be cited)

### **Abstract**

This paper presents a new and comprehensive framework to measure cross-country differences in social cohesion around the world. Making use of a new data set offering subjective well being data for a wide range of variables related to social cohesion, we identify three key dimensions that are crucial to measure to assess social cohesion in a society: social exclusion, social capital and social mobility. Applying this framework to 150 countries, interesting regional patterns emerge. Most astonishing is the low level of social cohesion along all three dimensions in Eastern Europe, while in other regions, such as select countries in Africa, perceived cohesiveness is higher than purely looking at income gaps would suggest. The paper concludes with a call for combining traditional and subjective well being measures to assess the different dimensions of social cohesion as a necessary prerequisite for effective policy formulation and implementation aiming to improve the cohesiveness of a society.

## 1) Introduction

Violent protests by youth in Tunisia and Algeria against persistent high unemployment and the unresolved cleavage between “red shirt” protesters and government supporters in Thailand are topical examples that social cohesion – “the glue that holds society together” is seriously challenged in a world that is moving slowly out of the greatest economic contraction it has experienced in nearly a century. While, in general, poor countries have been less affected by the economic and financial turmoil of the last two years than observers initially feared, the poor still have borne much of the brunt by paying higher prices for consumption goods, earning lower wages for their work and becoming more vulnerable.

Surprisingly, discontent is not only rife in poor countries but also in the emerging countries that contributed to and benefited most over the last economic boom. These countries have been at the vanguard of the current global economic reconfiguration, which has been shifting wealth towards the east and south. Certainly, as documented in the OECD’s *Perspectives on Global Development: Shifting Wealth* report (OECD, 2010b), the ascendancy of emerging country economies has largely meant good news on the social front, lifting some half a billion people out of poverty over the last two decades. But while one might assume that high growth translates through better living standards into higher life satisfaction and greater happiness, emerging evidence shows that this is far from being the case. In fact life satisfaction between 2006 and 2009 dropped even in regions with high growth rates such as Asia and the Pacific (ILO, 2010).

Selected country examples suggest even more strongly that rising incomes alone do not translate into improvements in social cohesion: food riots in Mozambique, protesting strikers in Chinese factories demanding higher wages, and Maoist guerrillas organizing indigenous people and other groups who have not shared in the economic boom in India. All these examples suggest that social cohesion can be a serious challenge regardless if a society is experiencing the uptick in developing country growth that has taken place over the last decade. It is thus perhaps not surprising that there is an increasing demand to measure the various dimensions of social cohesion and its evolution over time.

Measuring social cohesion, however, is a daunting task. There is no commonly accepted definition of social cohesion and in public policy debates, as well as research, various approaches are used ranging from a more normative concept – “...set of positive externalities accruing from social capital ...” (IADB 2006) to a positive description of what social cohesion does: it “... has the capacity to ensure the well-being of all its members...” (Council of Europe 2006). Given the different definitions, obviously different measures have been used to accommodate them.

The main contribution of the present paper is to explore new cross-country datasets which facilitate a better understanding of how social cohesion manifests itself as the glue that holds societies together. These data help draw attention to further research that should be done into the possible trade-offs which may link the various dimensions of social cohesion and how best to measure them. The outline of the paper is as follows: following the introduction, section 2 presents a new framework based on three components of social cohesion: social exclusion, social capital and social mobility; section 3 examines cross country data available from both objective and subjective sources to measure these three components; section 4 discusses some of the regional variation observed along the three dimensions and points to interesting avenues for further research; and section 5 concludes.

## 2) Measuring social cohesion: a framework

Social cohesion is a relatively new concept in the social sciences literature: it first emerged in the mid-1990s when Canadian Heritage put social cohesion at the centre of its 1996 *Canadian Identity, Culture and Values: Building a Cohesive Society* publication to identify "pressure points that are likely to arise in Canadian society by the year 2005 as a result of economic, demographic and social trends"; also in the same period the European Commission launched its first *Cohesion report* on the progress made towards achieving economic and social cohesion and on the manner in which various means provided have contributed to its realisation.

Defining social cohesion is difficult as it embraces an extended range of values, norms and beliefs which evolve through time and vary according to space and level of analysis, making cross-country comparison rather challenging. No widely-agreed description of social cohesion has emerged in the literature so far – looking both at academic research and policy analysis (see Prizzon, 2011).

However, we can identify some common elements among them (see Table 1). First, social cohesion is usually considered a broad concept, covering several dimensions at once, equally weighted. Typically, each definition includes two or more of the following attributes: sense of belonging and active participation, trust, income equality, equality of opportunities, lack of real obstacles to social mobility, well-being and social inclusion. Second, the notion of social cohesion is often associated to the narrower concept of *social capital*. As reflected in the definition by Narayan (1999), social capital represents a necessary but not a sufficient condition for a society to be cohesive: social capital refers to a group of individuals while social cohesion is a holistic approach extended at the level of the entire society. Third, the challenges of defining social cohesion are often bypassed by focusing on the conditions when social cohesion is undermined, or when a society is not sufficiently *cohesive*. Examples are both the dimensions of income inequality and social exclusion. Fourth, social cohesion often reflects a process rather a condition itself (Jenson, 1998, p.1) both a means and an end.

Table 2 presents recent studies on the measurement of social cohesion done either by international organisations such as ECLAC or the Council of Europe or by individual researchers. Given the variety of definitions of social cohesion it is no surprise that the studies use very different measures. Much of the work by policy-oriented organisations have attempted to capture social cohesion's complexity with a broad spectrum of indicators. In contrast, most of the more quantitative empirical cross-country work focuses only on one factor basically driven by data availability; e.g. Easterly *et al.* (2006) proxy social cohesion focusing on measures of ethnic fragmentation, and Balamoune-Lutz (2009) quantifies social cohesion in terms of ethnic tensions.

Table 2 shows that some key variables are common and recurrent in the way *social cohesion* has been measured so far. First, income inequality – expressed by the Gini coefficient – is often considered an essential element in measuring and monitoring the evolution of *social cohesion* together with deprivation measures – such as the poverty gap – particularly in the case of Latin American and the Caribbean countries. Second, the level of cohesiveness in a society depends on the participation of its members to the productive economy, where the unemployment rate, another often used variable in assessing social exclusion, serves as a thermometer monitoring levels of life satisfaction and the risk of civil tensions. Third, well-being measures – such as life expectancy at birth and literacy rates – reflect both characteristics of a *cohesive society* – in terms of inclusiveness and equality of opportunities - as well as instruments - to support a larger and full participation in the civil and political society. Fourth, measures of *social cohesion* generally include some proxies for social capital, in particular group membership and

**Table 1: Select definitions of Social Cohesion**

<b>Authors</b>	<b>Definition of social cohesion</b>	<b>Countries</b>
IBD (2006)	<b>Social cohesion</b> is the set of positive externalities accruing from social capital, in addition to the sum of factors promoting equity in the distribution of opportunities among individuals (p. 3) .	Latin America and the Caribbean
ECLAC (2007)	<b>Social cohesion</b> may be defined as the dialectical relationship between instituted social inclusion and exclusion mechanisms and responses, perceptions and attitudes of citizens toward the way these mechanisms operate (p.18).	Latin America and the Caribbean
Council of Europe (2008)	<b>Social cohesion</b> is the capacity of a society to ensure the well-being of all its members, minimising disparities and avoiding marginalisation.	European Union
OECD (2009)	<b>Social cohesion</b> has both positive and negative dimensions. On the positive side, it includes people's participation into community life and their attitudes to others. On the negative side, lack of social cohesion may be revealed by a variety of pathologies such as suicides, risky behaviours or crime (p. 15).	OECD countries
Jenson (2010)	Literature review, no original definition provided.	n.a.
Berger-Schmitt (2002)	<b>Social cohesion</b> is composed of two main components: (1) inequality and (2) social capital.	n.a.
Easterly et al. (2006)	<b>Social cohesion</b> as the nature and extent of social and economic divisions within society.	Developing countries
Baliamoune-Lutz (2009)	<b>Social cohesion</b> as a synonymous for social capital.	Developed and developing countries

Source: Authors

inter-personal trust. Finally, the studies presented in Table 1 and 2 focussing on Latin American and Caribbean countries also reckon that inter-generational social mobility is an essential dimension of *social cohesion*.

Figure 1 summarizes the key features of social cohesion, which can be thought of as a triangle composed of three different dimensions: social exclusion, an outcome variable measuring the shortfalls in meeting societal standards (either perceived or real); social capital combining measures of trust (interpersonal and societal) with various forms of civic engagement; social mobility measuring the degree to which people believe or are capable of changing their position in their society. The triangle form of the framework suggests that while each of the three dimensions is important in itself and needs to be rigorously measured – which is already a challenge as we have seen in particular with social capital – measurement of social cohesion in societies requires looking at all three dimension simultaneously.

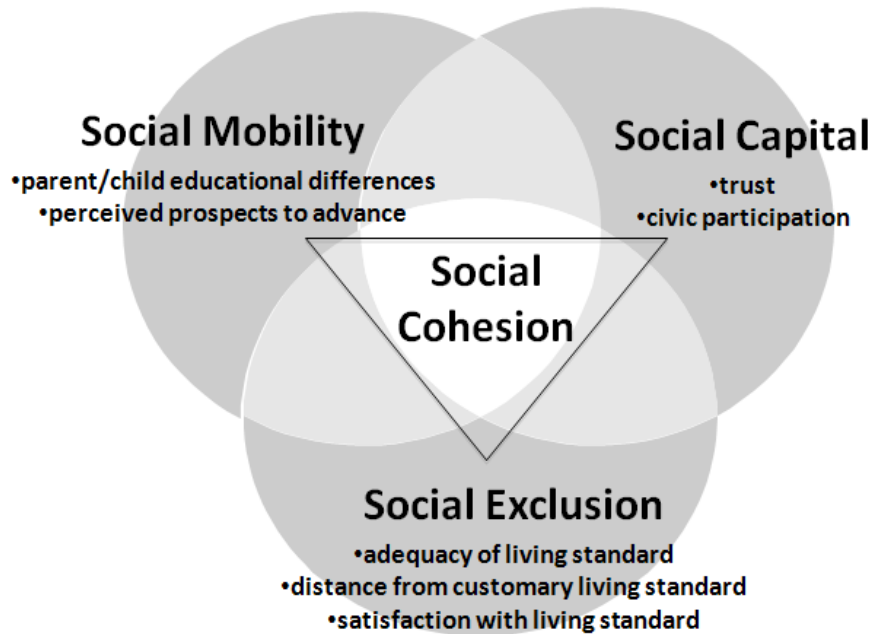
**Table 2: Social cohesion – Measurement dimensions**

Authors	IDB (2006)	ECLAC (2007)	Council of Europe (2008)	OECD (2009)	Jenson (2010)	Berger-Schmitt (2002)	Easterly <i>et al.</i> (2006)	Baliarmoune-Lutz (2009)
<b><u>Social exclusion</u></b>								
<i>Inequality</i>								
- Income	■				■		■	
- Equal opportunities						■		
- Regional						■		
<i>Deprivation</i>								
- Poverty	■				■			
<i>Participation in labour force</i>								
- Employment		■			■			
<i>Social protection</i>								
- Pension		■						
- Housing		■						
<i>Well-being</i>								
- Health		■			■			
- Education	■	■			■			
- Life satisfaction				■				
<i>Multiculturalism/Ethnicity</i>		■			■		■	
<i>Access to technology</i>		■			■		■	
<i>Violence</i>				■				
<b><u>Social capital</u></b>								
<i>Effective institutions</i>	■				■			
<i>Participation</i>	■				■	■		
<i>Trust</i>	■				■		■	
<b><u>Social mobility</u></b>								

Source: Authors. Note: A blue cell indicates that the dimension has been measured by the contribution

In this paper we do not attempt to discuss how the individual components of social cohesion can be best measured as this decision is very much driven by data availability as well as in how far different dimensions correlate to each other. As we show in the following analysis, measuring social cohesion across countries along these three dimensions will help us better understand the types of cross-country variation that exists internationally, detect trade-offs that policy makers might face and help to detect underlying causal relations.

**Figure 1: The triangle of social cohesion**



*Source: Authors*

### **3) Empirical evidence for international comparisons of social cohesion**

In this section we report some results using international data sources to measure social exclusion, social capital and social mobility. Section 3.1 looks at measures of social exclusion using different measures of poverty. Section 3.2 focuses on measuring trust and civic participation to capture notions of social capital. Section 3.1 addresses social mobility by looking at the intergenerational differences in educational attainment and societal perceptions about one's ability to improve one's own social position.

#### **3.1) Social Exclusion**

Like social cohesion as a whole, social exclusion itself is a multifaceted phenomenon that can take on numerous shapes and forms both within and across countries. Atkinson and Marlier (2010) define social exclusion as the "involuntary exclusion of individuals and groups from society's political, economic, and societal processes, which prevents their full participation in the society in which they live." At the same time, they define poverty as the absence of economic resources which is the major cause of social exclusion. Of course, social exclusion manifests itself through more than mere economic resources, as multidimensional approaches to poverty measurement demonstrate, including the Millennium Development Goal indicators and the recently released Multidimensional Poverty Index used by UNDP. Nonetheless, from a purely measurement perspective income and consumption poverty headcounts have appealing properties and are some of the most widely used measures of social exclusion used in international comparisons.

While many of the prior studies of social cohesion have focused on income inequality measures to capture the degree of social exclusion in a society, we choose instead to focus specifically on the lower

end of the income distribution by looking at poverty. While income inequality may be an important consideration for social cohesion in individual countries, the fact that poverty remains an important problem in so many countries prompts us to consider it as the most important consideration for considering social exclusion differences between countries. While countries may differ significantly in their preferences towards redistribution to address inequality at the upper end of the income distribution, most countries profess some form of poverty alleviation as a stated aim of government policy.

A focus on income and consumption poverty can actually be quite encompassing once various poverty measures, which differ in the nature of the living standard used as a benchmark, are compared. Specifically we can look at poverty in both absolute and relative terms, and compare these levels to subjective perceptions of national living standards, as well as national poverty headcounts.

In this section, we measure social exclusion in terms of poverty captured by four basic indicators:

- an international absolute poverty measure based on a minimum living standard,
- an international relative measure based on economic distance from a customary living standard,
- a subjective measure based on individual's own satisfaction with their living standards,
- and individual national poverty measures, which are typically absolute in poorer countries and relative in richer ones.

Poverty comparisons between developing countries typically focuses on absolute poverty lines, using an international standard, such as the World Bank's dollar-a-day (1.25 USD PPP per day) to represent the minimum standard of living associated with a basket of goods or the quantity of income needed to purchase them. Typically this fixed, absolute standard only varies according to price differences across time and between countries. At its simplest it can be thought of as a minimum subsistence living standard, below which individuals are unable to survive. For hundreds of millions of people around the world, exclusion to this level of basic subsistence is a reality. The most widely used measure of international poverty, the World Bank's dollar-a-day poverty line, attempts to quantify this subsistence-level in purchasing power parity terms based on the average of the national poverty lines used in the poorest countries of the world (Ravallion, Chen and Sangraula, 2009). Most national poverty lines in poor countries themselves are defined by national authorities through some attempt to quantify either the cost of basic needs in that society or through a calculation of the minimum caloric intake needed to survive in that society (Haughton and Khandker, 2009).

Relative poverty lines, in contrast, are most widely used in international poverty comparisons between industrialised countries, such as those undertaken by Eurostat or by OECD. These measures do not fix the poverty standard at a set basket of goods or level of income, but instead define that basket or level in terms of a given societies mean or median consumption or income. Relative poverty lines differ between countries and across time by more than simply price differences, as they are directly related to either the mean or median living standard of each country being compared. Poverty in these countries is more than simply the inability to maintain a subsistence living standard, but actually constitutes a form of economic distance from the standards of the society in question. (Foster, 1998) In that sense, individuals who are deemed relatively poor in any two countries do not necessarily share similar living standards in purchasing power parity, but do share similar distance from the customary living standard of their respective societies. In some ways, this relates the notion of poverty more closely to the degree of unequal distribution of welfare in a given society. However, unlike inequality measures such as the Gini coefficient, Theil index, or Mean Logarithmic Deviation, relative poverty focuses exclusively on the lower end of the income distribution only.

Subjective poverty is a less commonly used measure in international comparisons but has been measured fruitfully in various country studies. Generally, socially subjective poverty can be calculated in one of two ways using subjective data. One method is to define a socially subjective poverty line using survey responses for a nationally representative sample to the so-called Minimum Income Question “How much income (or consumption) do you need to get by?”. These responses are then regressed against actual income to estimate a linear equation relating perceptions of the minimum acceptable living standard to actual living standards. Solving this equation for the living standard at which the actual living standard equals the predicted minimum living standard will result in an estimate of the socially subjective poverty line against which actual living standards for all members of the sample can be compared in order to determine the socially subjective poverty headcount. (Haughton and Khandker [2009], Ravallion [2010]) An alternative approach, which we adopt in this paper, does not directly permit the estimation of a socially subjective poverty line, but estimates the socially subjective poverty headcount by taking the share of the population who respond negatively to the question: “ Are you satisfied with your living standard?” A variant of this question has been asked as part of the Gallup World Poll, providing valuable new internationally comparable evidence on individuals subjective perceptions of their own living standards.

National poverty lines can also be used to understand the role in which poverty plays in social cohesion since they constitute a valuable indicator of how individual country’s political and administrative systems define and measure poverty in their own countries. Crucially they provide insight into national policy making concerns about what constitutes a socially acceptable living standard in a given country. National poverty lines can be either defined in an absolute or relative manner, although typically developing countries tend to use absolute poverty lines, while industrialized countries tend to employ relative lines. For this reason, and also due to differences in policy practice and political discourse on poverty issues in different countries, national poverty lines are the least useful for international comparisons, however when compared with other internationally comparable poverty headcounts, they may provide additional context about the appropriateness of an internationally-defined poverty line for the specific country in question.

To get a snapshot of social exclusion across countries we look at a relevant international poverty headcount, a socially subjective poverty headcount, and a national poverty headcount for each country we are interested in. For our purposes, we consider the World Bank’s absolute dollar-a-day poverty line to only be a relevant measure of social exclusion in societies where a sizable portion of the population experiences everyday life on living standard below this minimum level. For all other countries we look at a relative poverty headcount based on 50% of the median living standard. In both cases, we compare either the absolute or relative headcounts to a subjective poverty measure and the national poverty headcount, where available. The subjective poverty measure is based on the share of people reported to be dissatisfied with their current living standard. While this subjective poverty headcount is not ideal, it is available in comparable terms for a wide number of countries and provides an insightful benchmark to judge the adequacy of the international and/or national poverty headcounts for each country.

The cross-country data sources used are the most recently available dollar-a-day poverty figures from the World Bank, which we choose to report only for countries where absolute poverty exceeds 5% of the population. A new cross-country database calculated by the OECD Development Centre is used to provide figures on relative poverty headcounts in countries where dollar-a-day poverty has dropped below 5%. This new data has been calculated based on the most recent grouped distributional data for each country stored in the World Bank’s PovcalNet database. The most recent national poverty headcounts are

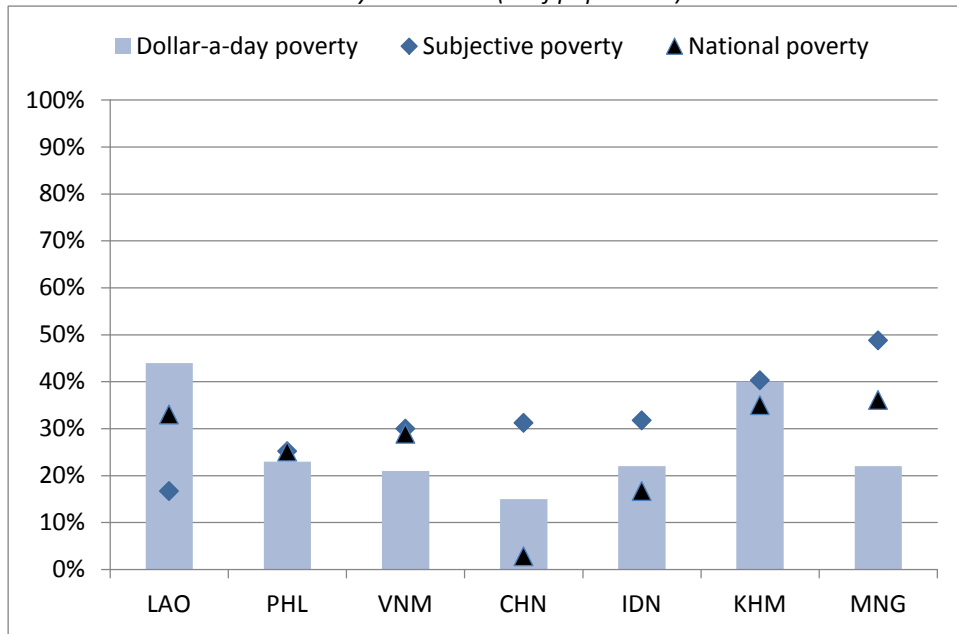


reported from the World Bank's World Development Indicators, and the subjective poverty measure is drawn from the most recently available wave of the Gallup World Poll.

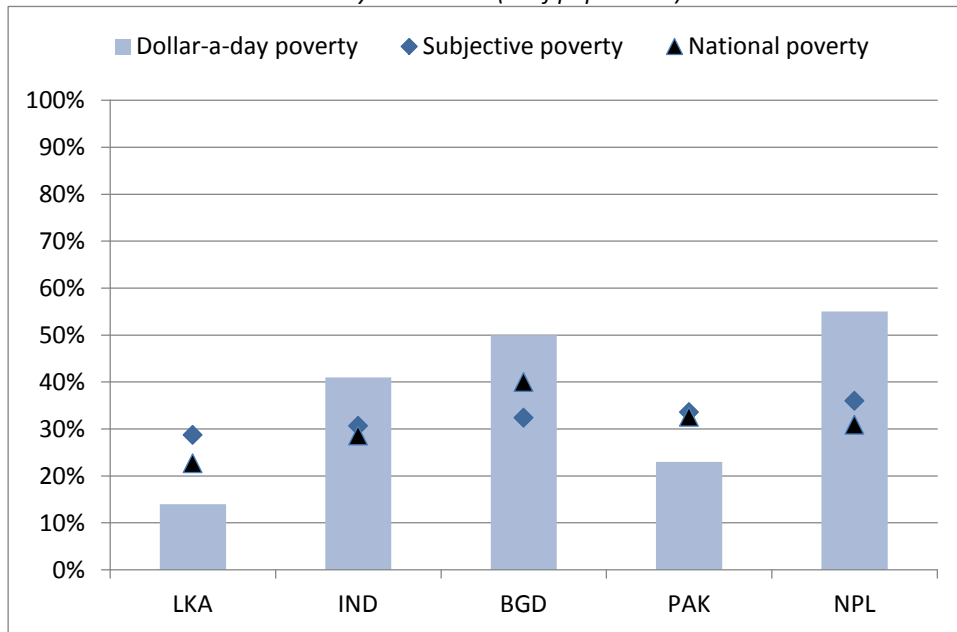
Figure 2 shows the headcount ratios for dollar-a-day poverty, subjective poverty, and national poverty for East Asian countries and South Asian countries where the number of dollar-a-day poor exceeds 5% of the population. In most cases, there are marked difference between all three headcount ratios. In the East Asian case the subjective poverty headcount tends to be higher than the international dollar-a-day headcounts, while in South Asia the subjective headcount tends to be lower. Interestingly, however the national poverty headcount is quite close to the subjective poverty headcount in a number countries, such as Phillipines, Viet Nam, Cambodia, India, Pakistan, and Nepal, where the two measures differ by 5 percentage points or less.

Despite the differences between the three measures of poverty in the Asian countries highlighted in Figures 2a and 2b, there a few cases in which there is wide disagreement among the figures about the share of the population that can be considered socially excluded in each country. Mongolia shows the widest variation among these group of countries where almost half the population reports they are dissatisfied with the living standard, over one-third are poor according to the national poverty line, and just over one-fifth are classified as poor by the dollar-a-day absolute standard. China also has a wide dispersion of values, however it is well-known that the national poverty line reported in the World Bank database is a particularly low value, and may not be considered to be a sufficient measure of poverty in the country. (Ravallion and Chen [2007], Chen and Ravallion [2008])

**Figure 2a: East Asia**  
*Poverty headcount (% of population)*



**Figure 2b: South Asia**  
*Poverty headcount (% of population)*



Source: World Bank (2009), Author's calculations based on data from the most recently available year from Gallup World Poll

Figure 3a for Latin America, and Figure 3b for Eastern Europe and Central Asia show countries where dollar-a-day poverty is still a concern for at least 5% of the population. In contrast to the Asian case, where there was no wild divergence among the various measures of social exclusion, the national and subjective measures differ much more markedly than observed in Figure 2a and 2b.

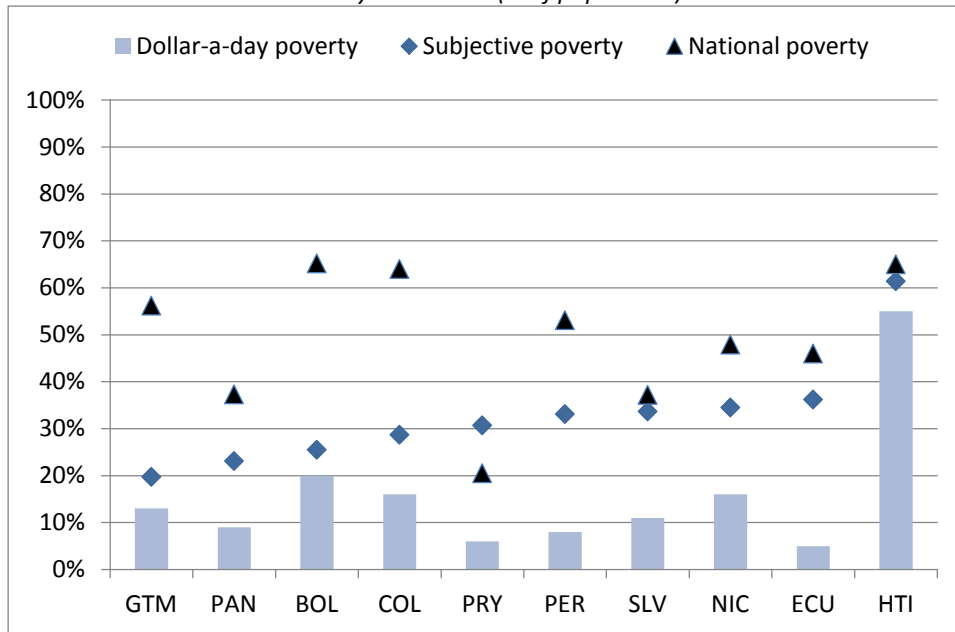
For the Latin American countries in Figure 3a, the majority show the highest poverty headcounts when measured using the national poverty lines. Dollar-a-day poverty is less important for these Latin American countries, and the subjective measures tend to capture a share of the population somewhere between the national poverty headcount and the dollar-a-day poverty headcount in size. El Salvador and Haiti are interesting examples where subjective evaluations of social exclusion are quite close to the national poverty headcounts.

In Figure 3b, the Eastern European and Central Asian countries with sizable populations still living on less than a dollar-a-day (from only 8% of the population in Moldova to 46% of the population in Uzbekistan) also show wide differences between the various poverty measures in each country. In most of the countries, the subjective headcount is indeed closer to the national headcount, also implying that dollar-a-day poverty is not a sufficient measure of social exclusion in these countries.

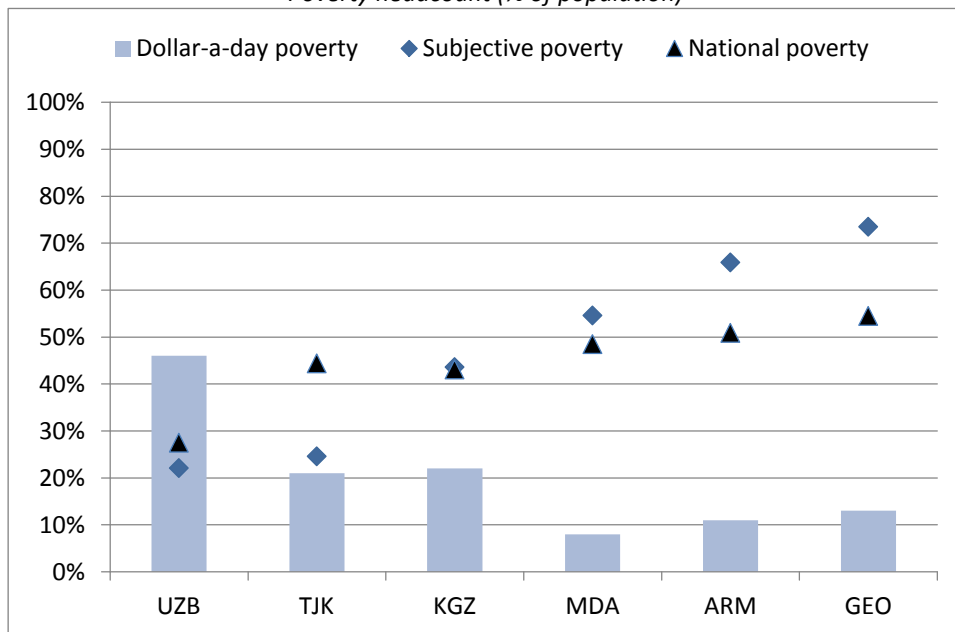
The Sub-Saharan African countries shown in Figure 4 have some of the most interesting, and perhaps puzzling variation among the three different poverty measures. In these countries, it is not unsurprising that the dollar-a-day headcounts are close in many cases to the national poverty headcounts. This is due undoubtedly to the fact that the dollar-a-day poverty line itself was designed as a global standard for absolute poverty based on the national poverty lines used in the poorest countries, many of which are in Sub-Saharan Africa (Ravallion, Chen, Sangraula, 2009). Thus in Ethiopia, Ghana, Senegal, Zambia, Cameroon and Madagascar the dollar-a-day poverty headcount is virtually identical to that of the national poverty headcounts for each country.

What is perhaps most interesting about Figure 4, however is the wide variation with respect to the subjective poverty headcount based on the number of Gallup World Poll survey respondents who voiced dissatisfaction with their living standard. On the one hand, there are a number of countries, such as Togo, Cote d'Ivoire, Sierra Leone, Benin, Kenya, DRC, Comoros, Congo Brazzaville, Burkina Faso, Cameroon, Senegal, South Africa and Ghana where the share of the population dissatisfied is well-above the national poverty line and the international dollar-a-day poverty line. At the same time, however there are also a number of countries, such as Malawi, Angola, Niger, Chad, Mozambique, Liberia, Zambia, Rwanda, and Tanzania, where the share of the population is dissatisfied with the living standard is well-below the dollar-a-day poverty line or the national line, where available.

**Figure 3a: Latin America**  
*Poverty headcount (% of population)*



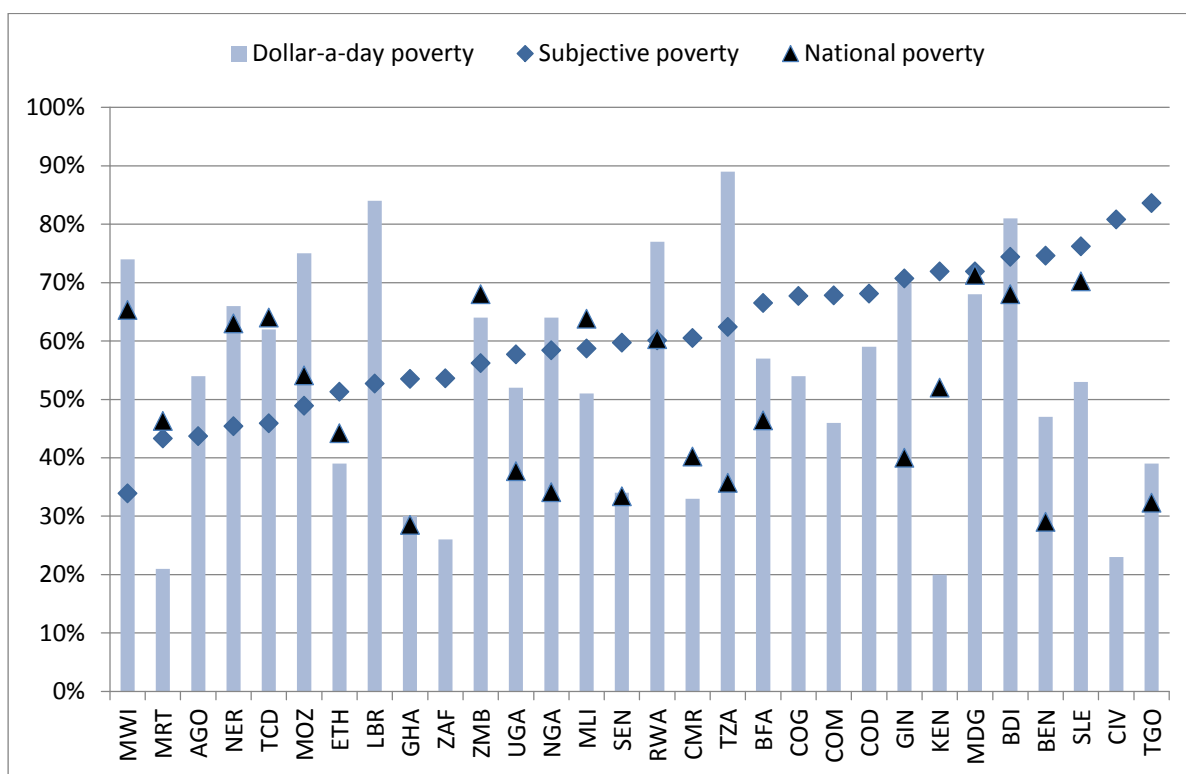
**Figure 3b: Eastern Europe and Central Asia**  
*Poverty headcount (% of population)*



Source: World Bank (2009), Author's calculations based on data from the most recently available year from Gallup World Poll

This raises many interesting questions for future research. First and foremost, where subjective dissatisfaction with the living standard is higher than the traditional (mostly absolute) poverty headcount, it may be the case that traditional measures of social exclusion and poverty, particularly in very poor countries, are merely a lowest common denominator, aptly suited for a resource-constrained international aid community, yet insufficient for national policy making needs. Subjective dissatisfaction with living standards among people who may not be absolutely poor (nor relatively poor either, as median or mean incomes in these countries are still quite low in most cases) raises the question about how to address these individuals' concerns may be, particularly towards the goal of fostering greater social cohesion. It also may be important to ask what point of reference individual respondents to the subjective questionnaire might be basing their comparisons on. It may be the case that individuals dissatisfaction with their living standard is less because they are poor in the manner defined by their national standards, but because they live in poor countries, and not in a bubble. It is quite understandable that even fairly well-off individuals in poor countries may be dissatisfied with their living standards, if they do not have the same opportunities or luxuries available in countries that are more well-off. The question is whether such concerns should be the concern of development policy or not. Clearly, from the point of view of concern for social cohesion this may indeed be the case.

**Figure 4: Sub-Saharan Africa**  
*Poverty headcount (% of population)*



Source: World Bank (2009), Author's calculations based on data from the most recently available year from Gallup World Poll

Relative poverty is not often associated with low incomes or consumption in developing countries, typically because if the mean or median levels of income or consumption are low, than absolute poverty can be seen to be of more critical concern. (World Bank, 1990) Absolute poverty such as that embodied by the dollar-a-day lines and many national lines in developing countries is taken to be of a higher priority than relative poverty, particularly if the absolute line is taken to represent some level of minimum subsistence. Only once individuals are capable of daily survival do policy concerns tend to shift towards a focus on individuals integration into the broader society, as a whole. This lexicographic ordering of priorities, or “hierarchy of capabilities” as some authors have called it (Atkinson and Bourguignon, 2001) is often viewed as a pragmatic way to address normative issues of social exclusion in a globally inclusive manner.

Nonetheless, in recent decades, many developing countries have come quite a long way in reducing the shares of their population who live on less than the absolute dollar-a-day subsistence level. This has been particularly thanks to high growth in many of these countries, which have helped raise average living standards. Many of these countries retain however a large number of individuals who are not fully enjoying the benefits of their countries’ high growth to the same extent as the upper quartiles of the income distribution. (OECD, 2010b)

While one could try to measure the exclusion of this type in terms of an increasingly unequal income distribution, measured by typical inequality measures such as the Gini coefficient, the Mean log deviation, or the Theil index, from a development perspective it may in fact be more interesting to look at this phenomenon in the context of movement across a specific part of the income distribution, below the median or mean. The individuals who enjoy living standards at these levels can be easily understood to lack many of the capabilities to participate in the customary activities of their society as a whole, particularly in a rapidly industrializing developing country context. For this reason, we will focus our attention on relative poverty, based on an arbitrarily chosen poverty line set at 50% of the median living standard in each country. This allows individuals incomes or consumption to be judged against the customary standard of their respective countries defined by the median. One is judged poor in this context when living standards become sufficiently distant from this customary standard as defined by the relative line.

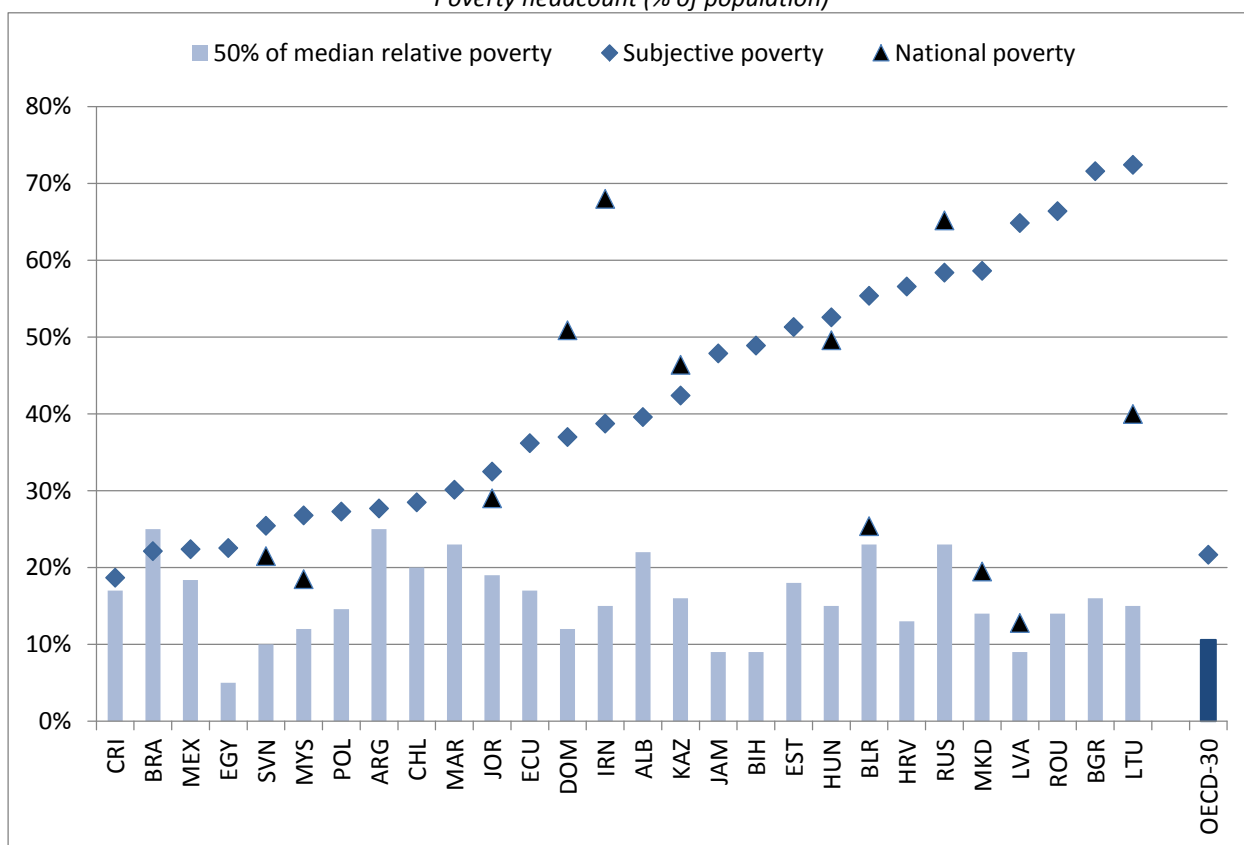
Using an international relative poverty line based on 50% of the national median living standard for countries where absolute dollar-a-day poverty is less than 5%, a number of interesting facts about the nature of social exclusion in developing countries emerge. Figure 5 compares the relative poverty headcounts for a broad spectrum of countries with the subjective poverty headcounts and the national headcounts. The most striking observation is the wide divergence between levels of relative poverty with the subjective poverty headcount and the national poverty headcount, where available, in a number of countries, particularly in Central and Eastern Europe.

In 13 Central and Eastern European countries (Albania, Kazakhstan, Bosnia Herzegovina, Estonia, Hungary, Belarus, Croatia, Russia, FYR Macedonia, Latvia, Romania, Bulgaria and Lithuania) the divergence between the relative poverty headcount and the subjective poverty headcount is at least two fold. For example, while only 19% of Albanians have a living standard below 50% of the median, 40% are dissatisfied with their living standard. 22% of Lithuanians have a living standard below half of the median, yet 72% are dissatisfied with their living standard. Interestingly, for three of the seven countries in Figure 5 where national poverty headcounts are available from the World Bank dataset, the subjective poverty headcount is closer to the national headcount than the internationally comparable relative headcount.

Dissatisfaction with the living standard and the national poverty headcounts for Central and Eastern European countries are consistent with previous research into subjective well-being measurement that indicate that countries which experienced the transition from planned economies to market economies over the last two decades experience lower than predicted levels of subjective well-being. (Inglehart, et al., 2008)

Another interesting observation based on Figure 5 concerns the fact that aside from the Central and Eastern European countries displayed, a diverse group of countries from Latin America, North Africa, the Middle East, and South East Asia all experience levels of relative poverty that are reasonably close to the subjective measures, similarly to the levels of dispersion seen in the poorer East Asia and South Asia countries shown in Figures 2a and 2b respectively. In this way, it can be understood that the concern with lexicographic ordering of concerns about absolute over relative poverty may indeed make sense when considering social exclusion across countries of very different levels of development. In these cases, relative poverty measures are more salient for more developed economies, while absolute poverty measures are more salient for poorer countries, in terms of providing a multifaceted assessment of social exclusion that encompasses subjective measures and national standards.

**Figure 5: Developing countries where relative poverty is more important than absolute poverty**  
*Poverty headcount (% of population)*



Source: World Bank (2009), OECD(2009), Author's calculations based on data from the most recently available year from PovcalNet and Gallup World Poll

While due to space restrictions we have not reported the measures of relative poverty for many industrialised countries, particularly as the World Bank distributional data used to make the calculations shown here focus almost exclusively on developing countries, data from OECD (2009) confirm that the range of relative poverty observed in the OECD area is similar to that shown in Figure 5. The OECD average for relative poverty measured as the share living below 50% of the median living standard is approximately 10% of the population, while the the average share of the population dissatisfied with the living standard is close to 22% of the population. In the mid-2000s at the time when the data used for the OECD report *Growing Unequal?* were collected, the lowest level of relative poverty in the OECD area was in Denmark with approximately 5% of the population below 50% of the median living standard, while Mexico has the highest share of relative poverty in the OECD at 18%<sup>2</sup>. According to the Gallup data, Luxembourg has the lowest levels of subjective poverty in the OECD area with less than 5% of the population dissatisfied with the living standard while Estonia has the highest amount, with more than 50% of the population dissatisfied.

### 3.2 Social capital

Efforts to measure social capital across countries have encountered many of the same types of challenges encountered by researchers trying to measure institutional quality, business climate, or other qualitative phenomenon that do not lend themselves to an easily quantifiable theoretical model. Proxies have been employed in many attempts, and often these proxies are combined into composite indicators or other indexes in an attempt to reduce dimensionality and facilitate cross-country and temporal comparisons.

Cross-country sources on social capital are much less developed than the research on cross-country measurement of social exclusion. Nonetheless the availability of new and interesting datasets are improving the quantity and quality of sources available. In particular, the growth and development of cross-country sets of subjective data are facilitating attempts to quantify notions of social capital in useful ways. As evidenced by its name, ideally social capital would be measurable as some type of stock value, that accumulates over time and that can depreciate as well, but which can be used productively to advance development outcomes.

The cross-country collection of subjective data has provided new comparable sources of data on how individuals feel that they belong to a group and how they perceive their relationships and obligations towards others. Without hoping to be exhaustive we present data on two critical aspects of what we might conceive of as social capital, trust among the members of a society and civic participation of individuals in the groups across the different levels of the society. For each of these aspect we use two proxies, in order to capture different forms of trust and civic participation at different levels of societal organization. To look at societal trust we examine the most recently collected data available from the World Values Survey, which asks individuals whether they consider people in their society mostly trustworthy, or rather, whether “you can’t be too careful”. We measure interpersonal trust through recently available data collected by the Gallup World Poll, which provides data on whether people have someone in their life they can count on to help them in times of need or distress. To measure civic participation across societies, we look at both the share of the population who reported volunteering, according to the Gallup World Poll, and at the share of the population who voted in the most recent legislative elections, according to data collected by the International Institute for Democracy and Electoral Assistance (IDEA).

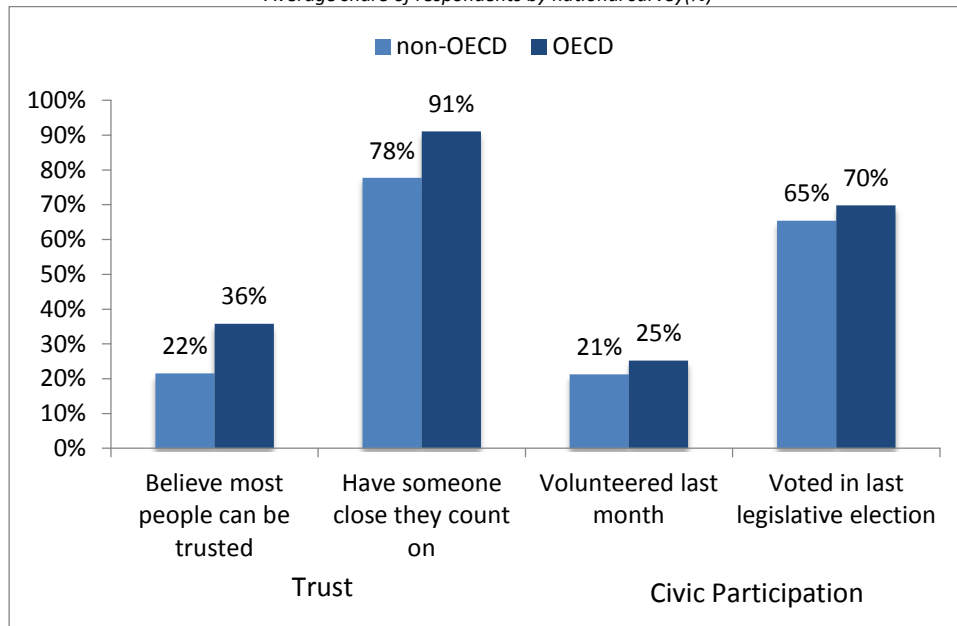
---

<sup>2</sup> Chile was not an OECD member country at the time of the OECD (2009) survey, however recent calculations (Garroway and de Laiglesia, forthcoming) using the distributional data contained in the PovcalNet database indicate approximately 20% of the Chilean population lived on less than half of median income in 2006.



**Figure 6: Social capital**

*Average share of respondents by national survey(%)*



*Source: Based on data from the most recently available year. Calculations based on the World Value Survey, the Gallup World Poll, and the International Institute for Democracy and Electoral Assistance*

Figure 6 shows the mean values among non-OECD and OECD member countries for measures of societal trust, interpersonal trust, volunteering, and voter turnout. It is striking to note that although OECD member countries have on average higher levels of social capital as measured by the four indicators, the differences are not enormous. Differences in average trust are more pronounced with levels of societal trust 14 percentage points higher on average in the OECD compared to elsewhere, while interpersonal trust levels are 13 points higher. Smaller differences exist between the two groups on the measures of civic participation, where the OECD has 4 percentage points more volunteering on average and 5 percentage points more voter turnout.

It is also interesting to note that across the globe, while trust measured according to our proxies manifests itself more widely in interpersonal relations rather than the societal level, civic participation seems to occur more widely through participation in political processes, like voting, rather than through grassroots activities, like volunteering. This latter result is not terribly surprising however as voting is a much less time-consuming activity than volunteering. It is also important to note that in some countries voting is a legal obligation, therefore high levels of voter turnout may not be a sufficient indicator of high levels of social cohesion, although low levels may suggest its absence. It will thus be important to see how these measures differ among various countries and reason to better understand how social capital contributes to social cohesion across the globe.

Table 3 reports the breakdown of the national averages for the trust and civic participation values using regional averages based on the United Nations regional classifications. This is useful in that UN classification divides the country into groups of similar numbers of countries, so that individual country averages contribute roughly equal weights to the regional averages shown. For three of the four indicators used, data for nearly 150 countries was available. The sample available for the World Values Survey is significantly smaller than the samples available for the other sources used in this paper with

**Table 3: Social capital proxied by societal trust, interpersonal trust and civic participation***Average share of respondents by national survey (%)*

	Trust		Participation	
	Believe most people can be trusted	Have someone they count on for help	Volunteered in the last month	Voted in legislative elections
Central Asia	--	85%	41%	83%
Eastern Asia	40%	83%	21%	63%
South-Eastern Asia	37%	81%	22%	83%
Western Asia	21%	80%	16%	63%
Southern Asia	17%	64%	22%	61%
Eastern Europe	22%	84%	17%	60%
Northern Europe	58%	91%	25%	69%
Southern Europe	21%	84%	12%	66%
Western Europe	39%	93%	29%	73%
Australia and New Zealand	49%	95%	40%	87%
Middle Africa	--	66%	27%	71%
Northern Africa	16%	81%	15%	52%
Southern Africa	19%	86%	19%	79%
Western Africa	14%	68%	25%	58%
Eastern Africa	14%	74%	20%	68%
Caribbean	4%	85%	29%	53%
Central America	16%	84%	23%	63%
Northern America	41%	94%	42%	54%
South America	15%	86%	20%	70%
Number of countries	55	150	149	142

*Source:* Based on data from the most recently available year. Author's calculations based on the World Value Survey, the Gallup World Poll, and International IDEA.

only 55 countries, yet the variation observed is equally interesting and diverse, particularly in terms of differences between regions of differing levels of development.

Among the countries with the highest levels of societal trust, a number of developing Eastern Asian and South Eastern Asian countries report a large share of the population believes most people can be trusted. This is in line with earlier research on trust in Asian countries (such as Fukuyama, 1995), although its implications for development are not entirely clear. Notably China, Viet Nam, Indonesia, and Thailand are among the countries where more than 40% of the population report that most people can be trusted. The highest levels of trust can be found in Northern Europe as Norway, Sweden and Finland have the three highest levels of trust in the WVS sample. Europe is also interesting in the sense that although

Northern Europe demonstrates extremely high levels of societal trust, Eastern and Southern Europe demonstrate significantly lower levels of trust. The continent with the the lowest levels of trust across the various sub-regions is Africa, however it is important to note that of the 53 African countries, only Rwanda, Ghana, Zambia, Morocco, Burkina Faso, Mali, Egypt, and South Africa are included in the WVS sample. Similarly, while the Caribbean shows the lowest level of societal trust overall at 4%, it is important to note that the only Carribbean country in the sample is Trinidad and Tobago, so the finding should not be taken to be representative of the region as a whole.

It may be the case that the societal trust data can shed light onto what past work in social capital has termed the *bridging* function of social capital in societies, through links between differing groups broadly across society, while the Gallup data on whether people have someone they can count on is more of a measure of interpersonal trust that captures what some have termed the *bonding* function of social capital, which is at the core of tightly knit groups like families, and clans. Capturing both bonding and bridging phenomena in trust measures would highlight the importance both of strong and weak ties between individuals in fostering social cohesion across a given society. (Narayan, 1996)

The levels of interpersonal trust reported in the second column of Table 3 show on the whole interpersonal trust is considerably higher than societal trust across countries. Except for Southern Asia, Eastern Africa, Middle Africa, and Western Africa, more than 80 % of Gallup respondents indicate they have someone they can count on to help the in times of need or distress. If we accept that the presence of individuals who someone can count on for help is an indicator of interpersonal trust, it is perhaps important that the lower levels exist in the poorest regions of the world. There are clearly links between average living standards and average capacity to help others in need. The question is whether the capacity of individuals to help others is a truly viable measure of interpersonal trust. Indeed one can imagine individuals who trust one another, but neither of which may be capable to help one another if neither has adequate means. In this way, there are clearly parallels to be drawn between social exclusion and social capital, if material well-being can serve as a lower bound on individuals capacity for interpersonal trust.

The third column of Table 3 reports the share of Gallup respondents who indicated they had volunteered in the last month. Volunteering is highest in Northern America, Australia and New Zealand, and in Central Asia. The variation across other regions is quite similar. Like the societal trust data, there are marked differences between the sub-regions of Europe, with again Northern Europe and Western Europe showing signicantly higher levels of volunteering in Eastern and Southern Europe, which shows the lowest levels of volunteering in the world.

Voter turnout is higher than volunteering across the board, perhaps due to lower effort involved and legal obligations, as mentioned above. Lowest levels of voter turnout for legislative elections is in Northern Africa, Western Africa, the Caribbean, and Northern America. Within Asia there is also wide dispersion as well between levels of voter turnout around 80% in Central Asia and Southeastern Asia, but closer to 60% in the rest of Asia.

### 3.3) Social mobility

We measure social mobility in two ways. The first looks at the correlation between parent's and children's educational attainment. The higher the correlation between parents and children's educational attainment, the lower the levels of social mobility. This measure has been developed thanks to household surveys, often literacy surveys, where respondents answer questions about their educational levels and

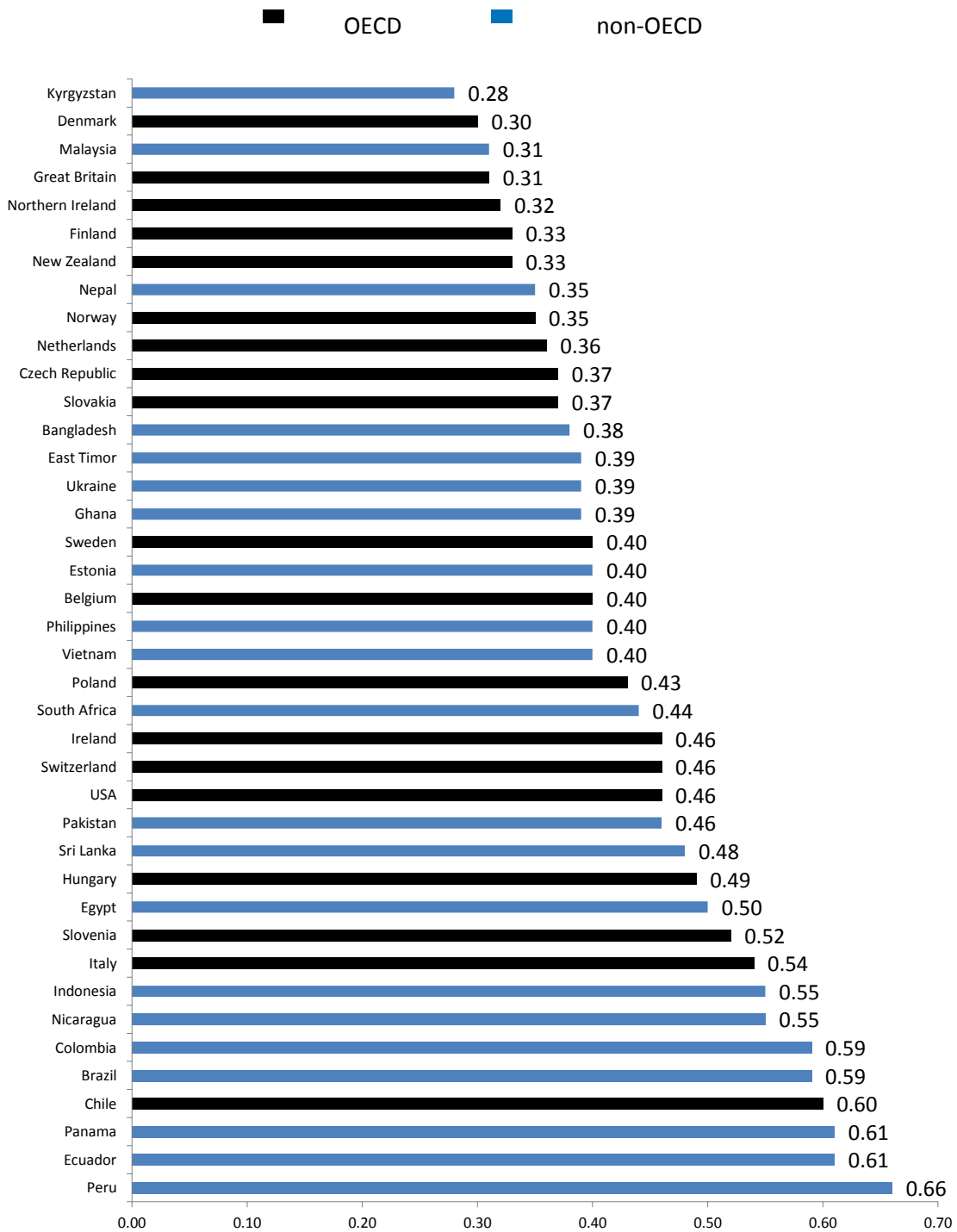
that of their parents. Hertz, et al., (2007) report differences in these correlations across countries for 40 economies. The most striking result, as shown by Figure 7, is that the lowest levels of social mobility of the 40 countries sampled is clearly in Latin American countries, such as Nicaragua, Colombia, Brazil, Chile, Panama, Ecuador, and Peru, where the correlation between parent and child educational attainment is between .55 and .66.

In contrast, countries with correlation coefficients of .33 or less include such industrialized countries as the United Kingdom, Denmark, and Finland, but notably also developing countries such as Kyrgyzstan and Malaysia. The important thing to remember when looking at correlation coefficients between parent and child educational attainment is that while higher values imply higher social mobility, higher social mobility is not seen as desirable in and of itself. Instead it is important to look at the role in which social mobility serves as a tradeoff between other dimensions of social cohesion, such as social capital and social exclusion. It is often argued that high levels of inequality, may be socially acceptable if individuals are capable of getting ahead or moving “up the social ladder” through their own actions and industriousness. (Benabou and Ok, 2001) Indeed it is striking to see that countries with low levels of inequality have high social mobility (such as Denmark and Finland), although countries like the UK have higher levels of inequality but equal social mobility.

At the same time, a low correlation coefficient between parents and child’s education doesn’t distinguish whether children have gained higher educational attainment than their parents, or experienced less. Indeed social mobility also implies that some individuals may see their living standards or social positions diminish, which if it were happening across the society as a whole may imply a decrease in social cohesion. In an effort to try and better understand the direction in which individuals social mobility may be headed, we also employ the Gallup World Poll data to measure individuals perceptions about their ability to improve their own lot within their society.

Globally, on average 74% of citizens in OECD member countries believe that hard work can help you get ahead, while more than 77% of citizens on average believe so in countries outside the OECD area, according to the Gallup data. This is not an enormous difference, but it belies quite a broad range of variation between individual country and regional experiences. Figure 8 shows the averages by region of the national share of Gallup World Poll respondents who reported believing that hard work can help them get ahead in their society.

**Figure 7: Correlation between parental and child education**  
*(average parent-child schooling correlation, ages 20-69)*



Source: Hertz, et. al, 2007 cited in OECD (2010)

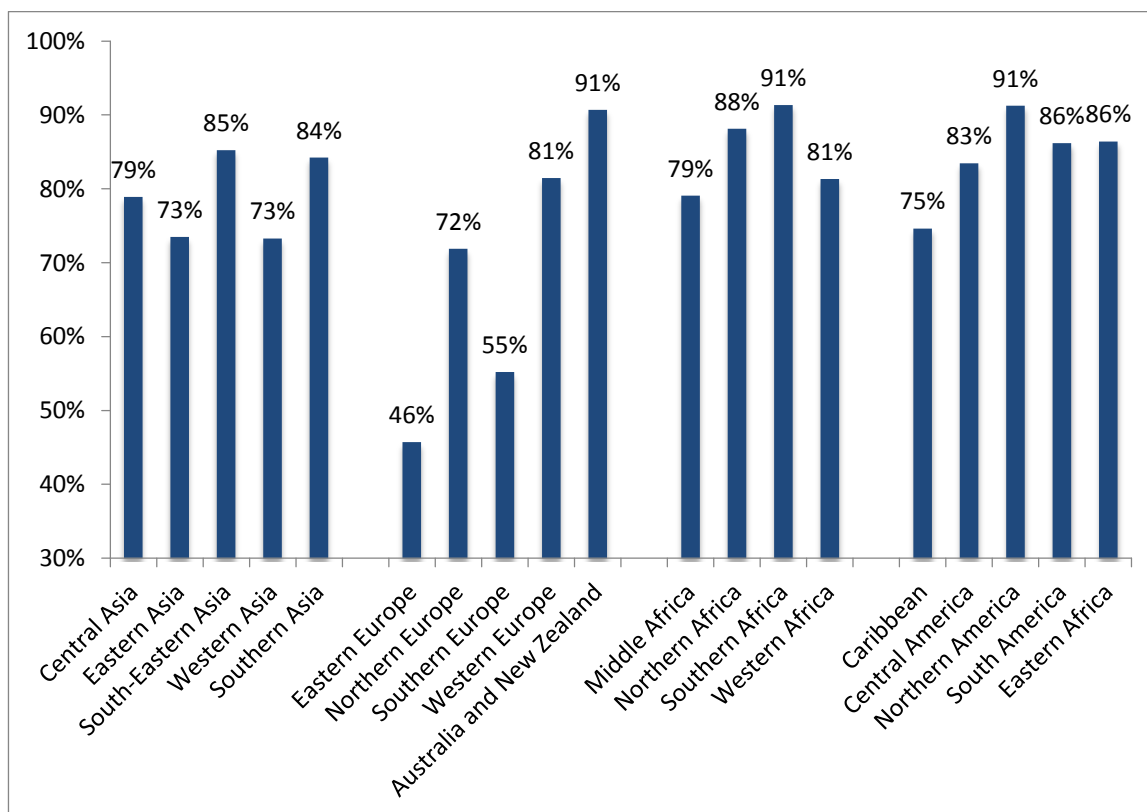
Taking a closer look at Figure 8 reveals that the slightly lower belief in social mobility in the OECD Is due to the influence of opinions in Southern and Eastern Europe, who post the lowest percentage of citizens who believe social mobility is a possibility in their countries. The strongest beliefs in social mobility come from regions with societies built on European settlement, North America, Australia and New Zealand, as well as Southern Africa.

#### 4) Patterns of regional social cohesion across the world

Does looking at social cohesion as a whole through the three-fold distinction between social exclusion, social capital, and social mobility help us understand the various social challenges facing many emerging countries in a more comprehensive way? While in depth analysis of the limited time series data available for the measures we have proposed, is beyond the scope of this paper, some of the anecdotal examples referred to in Section 1 suggest the answer is yes. India and Thailand are both countries which have experienced high growth and some success addressing extreme poverty (Thailand notably more so than India) over the last decade. Both countries have also implemented very ambitious social protection schemes and reforms. Yet, in both countries tensions are rising, notably through civic unrest and armed conflict. Notably, the subjective poverty data we have derived from the Gallup dataset indicates that in both countries, perceptions about individual living standards has worsened over the last 5 years. In 2006 roughly a fifth of Indians indicated they were dissatisfied with their living standards, the most recent data indicates that number has risen to nearly one-third. Between 2006 and 2008 the number of Thais who were dissatisfied with their living standard rose from approximately one-quarter to more than one-third of the population.

**Figure 8: Respondents who believe that hard work helps you get ahead**

*Average share of respondents in national surveys (%)*



Source: Author's calculations based on the Gallup World Poll

Other dimensions of social cohesion seem promising as well in order to help understand cross-country differences in how social change manifests itself. Recent protests in Tunisia caught many observers by surprise. Indeed, aside from longstanding issues related to the labor market, Tunisia has a relatively high level of development and high levels of satisfaction with the living standard. Interestingly enough, the share of the population that actively volunteers in Tunisia was relatively low in 2006, around 7%. This share of the population has been rising steadily however over the last five years, with the most recent figures indicating that nearly one-fifth of Tunisians now volunteers. Now while that alone cannot be taken to indicate that street protests were inevitable, it does suggest that given an external shock or grievance to mobilize society for social change, Tunisian society may have been more ready today than five years ago to organize and work together as a cohesive whole.

Beyond these suggestive examples, are there any cross-cutting patterns we can observe when we step back and look at the regional variation along the three dimensions of social cohesion? Certainly we can observe that along almost every dimension, Eastern Europe has lower levels of social cohesion than we might expect given their living standards. Satisfaction with living standard is very low, volunteering is very low, and voter turnout is moderate. Social mobility is perceived to be much lower than actual correlations between parent and child educational attainment suggest. These results are quite compatible with prior work on subjective well-being that have looked at the psychological effects of the post-Soviet economic transition on countries of Eastern Europe and the Commonwealth of Independent States (e.g., such as Inglehart, et al., 2008). A new result, however relates to volunteering in these countries; while Eastern Europe has some of the lowest levels of volunteering, Central Asia has some of the highest, with Turkmenistan, Uzbekistan, and Tajikistan have among the largest shares of their populations that volunteer. Exploring how this relatively high level of social capital can be utilized to enable improvements in the living standards of these mostly poor countries also seems a promising avenue for future research.

Another interesting, perhaps related observation, is the sub-regional variation of both social mobility and social capital indicators within Europe as a whole. In particular, besides Eastern Europe, Southern Europe also features as having quite low levels of social capital and perceived social mobility. Northern Europe and Western Europe have much higher levels of social capital and social mobility. These differences suggest a diversity of policy challenges facing the European Union.

Another region of key interest is Africa. While material concerns are overriding in the poorest region, perceptions of living standards and levels of social capital, in particular, volunteering, differ markedly across African countries. This reminds us that too often in development discourse, Africa tends to be painted with a broad brush. Surely understanding the determinants of the difference in perceptions of living standards among populations is an important area for future work. Identifying the sources for higher than expected levels of social cohesion can help us identify opportunities to improve development assistance, and to strengthen national capacity in many African countries.

Latin America also presents a number of interesting questions, as well. Chief among these is whether the high levels of social exclusion observed in many Latin American countries is not perceived as such because of beliefs in social mobility. This is particularly interesting also given the fact that social mobility as indicated by the correlation between parent and child educational attainment is much lower than perceptions suggest. Further research into these relationship in Latin American countries could certainly lead to further insights.

Finally, it is important to recognize the limits of the cross-country approach. Cross country analysis can only go so far in allowing us to take a snapshot of social cohesion, globally, and point to areas that require further investigation. In particular, the complexity of how social exclusion, social capital, and social mobility interact over time and within particular countries surely requires country-specific analysis to identify trade-offs between the various dimensions of social cohesion. In particular, unbundling county level averages into cross-tabulations of the various variables is likely to yield further insights to aid such future work. Identifying the nature of the overlap between who is considered poor by national or international standards and who perceives themselves as poor is crucial. Furthermore, looking specifically at these individuals beliefs about trust, levels of civic engagement, perceptions about social mobility, and educational and demographic background could potentially illuminate our understanding of the nature of social cohesion in individual societies. This type of in-depth analysis requires good quality micro-datasets, and a strong commitment to research on social cohesion issues in specific countries. The availability of the Gallup data and the increasing importance of subjective data for policy making are important steps in the right direction, but certainly more needs to be done.

## **5) Conclusion**

Social cohesion is both a means and an end for improving well-being of citizens around the world. Despite visible economic and social progress in many developing countries, opinion polls suggest that many citizens are “unhappy” or “not satisfied” with their current life situation as the world moves out of the worst financial and economic crisis since a century. The recent examples of food riots in Mozambique, the toppling of the Tunisian government and social unrest in parts of China, India, Thailand and elsewhere suggest that the glue that holds society together – social cohesion – is at risk.

But what does social cohesion actually mean? Of which elements is it composed? How can we best measure it? While the existing literature has started to look into these questions more carefully since a decade, a comprehensive framework for measurement and analysis is so far missing. This paper proposes such a framework – the social cohesion triangle – combining three dimensions that have emerged from the empirical literature: social exclusion, trust and civic engagement as well as social mobility. All three contribute or reduce – in the case of social exclusion – the stock of cohesiveness in a society.

The paper applies this new framework to 150 countries making use of the availability of a new Gallup poll data set allowing to use self perception of citizens for key indicators. We find that while income and material well-being is crucial to reduce exclusion and thereby to enhance cohesiveness, it is by far not a sufficient condition. Citizens compare themselves to their peers, hence an absolute improvement in one’s own situation might not translate into greater satisfaction with living standards or more trust, both essential ingredients for social cohesion in a society. These results help to explain that while it is no surprise that in very poor countries the cohesiveness of a society is generally lower than in richer ones, many emerging countries face a particular challenge: as some parts of the population improve their living standards faster than others, increasing frustration and dissatisfaction can express itself in violent forms, putting social cohesion at risk. At the same time, if this change of living standards is accompanied by related changes in other dimensions of social cohesion, frustration and dissatisfaction can be channelled into effective social change.

The important point to drive home from our analysis is the need to look simultaneously at the three dimension to be able to assess the multi-dimensional nature of social cohesion. Which measure to use to proxy for the proposed dimensions in a cross-country framework warrants further research, but a combination of subjective and material well being indicators seems to be very promising. Understanding



which kinds of policies could help maintain growth while also ensuring that the large majority of the population has both real and perceived “buy-in” of the fruits of growth is one of the key research questions for the next decade.

To conclude, the topic of social cohesion will be centre stage at policy debates for years to come. Measuring its stock and changes over time is a huge challenge and this paper proposes one framework in which such kind of analysis can be embedded. Many questions remain though, most importantly how to deal with trade-offs between the different dimensions and how they can be best serve policy makers and implementation. At the end of the day, measuring social cohesion can help identify factors that contribute to it or reduce it and thereby shed light on policies and instruments that strengthen it. We are only beginning to take note of these.

## References

- ATKINSON, A. B. and F. BOURGUIGNON, (2001) "Poverty and Inclusion from a World Perspective" in *Governance, Equity and Global Markets*, H. de la Largentaye, P-A. Muet, J-F. Rischard and J. E. Stiglitz, (eds), Oxford University Press.
- ATKINSON, A.B. and E. MARLIER (2010), *Analysing and Measuring Social Inclusion in a Global Context*, Department of Economic and Social Affairs, United Nations, New York.
- BALIAMOUNE-LUTZ, M. (2009), *Institutions, trade, and social cohesion in fragile states: Implications for policy conditionality and aid allocation*, Journal of Policy Modelling, No. 31, pp. 877-890.
- BENABOU, R. and E.A. OK (2001), "Social Mobility and the Demand for Redistribution: The POUM Hypothesis" The Quarterly Journal of Economics, May.
- CHEN, S. and M. RAVALLION (2008) "China is poorer than we thought, but no less successful in the fight against poverty" Policy Research Working Paper 4621, May.
- COUNCIL OF EUROPE (2008). *Report of the High Level Task Force on Social Cohesion in the 21st century*.
- EASTERLY, W., J. RITZEN and M. WOOLCOCK (2006), "Social Cohesion, Institutions, and Growth", *Economics and Politics*, 18(2), pages 103-120.
- ECLAC. (2007). *Social Cohesion. Inclusion and a sense of belonging in Latin America and the Caribbean*. Santiago del Chile: ECLAC
- FOSTER, J.E. (1998) "Absolute versus Relative Poverty", *American Economic Review*, Vol. 88, No. 2, pp. 335-341.
- FUKUYAMA, F. (1995) *Trust: The Social Virtues and the Creation of Prosperity*. Free Press, New York.
- GALLUP (2010) World Poll. <http://www.gallup.com/>
- GARROWAY C. and J-R. de LAIGLESIA, (2011) "On the relevance of relative poverty in developing countries," OECD Development Centre Working Paper, forthcoming.
- HAUGHTON, J. and S. R. KHANDKER (2009) *Handbook on Poverty and Inequality*, The World Bank, Washington, DC.
- HERTZ, T., T. JAYASUNDERA, P. PIRAINO, S. SELCUK, N. SMITH, and A. VERASHCHAGINA (2007), "Intergenerational Economic Mobility around the World", *The B.E. Journal of Economic Analysis and Policy*, Vol.7, No. 2, pp. 1-45.
- IBD (2006). *Social Cohesion in Latin America and the Caribbean: Analysis, action and coordination*, Sustainable Development Department, Washington DC.
- ILO (2010) World of Work Report

INGLEHART, R., R. FOA, C. PETERSON, and C. WELZEL, (2008) "Development, freedom, and rising happiness: a global perspective," *Perspectives on Psychological Science*, 3(4), 264-285.

International IDEA (2010) <http://www.idea.int/>

JENSON, J. (1998). "Mapping social cohesion," Paper presented to the Policy Research Secretariat's Conference on 'Policy Research: Creating Linkages'. Ottawa.

JENSON, J. (2010). *Defining and measuring social cohesion*, UNRIS and Commonwealth Secretariat.

NARAYAN, D. (1996). *Bonds and Bridges: Social Capital And Poverty*.

OECD (2009a). *Growing Unequal*, OECD, Paris.

OECD (2009b), *Society at a glance*, OECD, Paris

OECD (2010a) *Latin American Economic Outlook 2011: How Middle Class is Latin America?* OECD Development Centre, Paris.

OECD (2010b) *Perspectives on Global Development 2010: Shifting Wealth*. OECD Development Centre, Paris.

PRIZZON, A. (2011). *Social cohesion and development: Where do we stand?* Background paper to Perspectives on Global Development 2011 – Social Cohesion, forthcoming.

RAVALLION, M. (2010) "Poverty Lines across the World", Policy Research Working Paper 5284, World Bank, Washington DC.

RAVALLION, M. and S. CHEN (2007) "China's (uneven) progress against poverty," *Journal of Development Economics*. Vol. 82, pp. 1-42.

RAVALLION, M., S. CHEN and P. SANGRAULA (2009) "Dollar-a-Day Revisited", *World Bank Economic Review*, Vol. 23, No. 2, pp. 163-84

WORLD BANK (1990) *World Development Report: Poverty*. Washington, DC.

WORLD BANK (2009) *World Development Indicators*. <http://data.worldbank.org/data-catalog>

WORLD BANK (2008) *PovcalNet: the on-line tool for poverty measurement* developed by the Development Research Group. <http://econ.worldbank.org/povcalnet>

WORLD VALUES SURVEY (2010) <http://www.worldvaluessurvey.org>