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**ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA (ESCWA)**

## **Conceptual and Methodological Challenges in Measuring Social Justice in the Arab Region – Options for a Research Agenda**

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## **Forward**

This working paper has been prepared upon request of ESCWA's management in light of the declaration arising from the Ministerial Session that took place in Tunis on September 18, 2014. The paper is composed of two chapters. The first chapter summarizes key concepts and issues related to the study of socio-economic aspects of Social Justice (SJ) by starting from a broader literature review. The second chapter focuses on key methodological aspects to bear in mind when analyzing a wider concept of justice although starting from its socio-economic analysis.

This working paper aims primarily to provide food for thoughts and show some key conceptual and methodological challenges rather than a proposed internally consistent and ordered set of concepts and methods since both will have to arise from the internal technical and philosophical discussion once the ESCWA team starts developing a research agenda.

Finally, the annex reports opinion surveys conducted in Arab countries on issues considered of relevance to this topic.

## Chapter I

### Social Justice: Concepts and Policy Options

#### Literature Review

This section will provide an overview to the literature review on social justice (SJ). It starts with a broader review in order to put concepts in perspective.

In Western philosophy, Aristotle is regarded as the first author to distinguish between justice and equity. He found that courts enact justice according to law - that is, by applying general rules that give an equitable solution in the majority of cases. In some cases, however, the results are inequitable. Equity then rectifies law in so far as the law is defective on account of its generality. His conception of distributive justice anticipates the principles of equity and merit. The Romans commonly utilized the concept of equity by distinguishing between *ius strictum* (strict law) and *ius aequum* (equity), with the latter used to interpret the law and to complement it. Equity prevailed in instances of conflict between the two. The distinction between justice and equity is also found in Islamic law, in which the former is referred to as *adala*, the latter as *insaf*, and in Jewish law, with the distinction between *din* and *tsedek*.

Marx has probably inspired most modern SJ movements against economic inequality although he was himself suspicious of the term justice because considered of inherent bourgeois meaning and was also skeptical of universalistic concepts that would transcend specific social and historical contexts such as those of Kant and Hegel. Following the revolutions that shook Europe in the mid-1800s, SJ became a rallying cry for progressive thinkers and political activists. Proudhon, notably, identified justice with SJ, and SJ with respect for human dignity. However, the concept of SJ appears to have been embraced by liberals at least as much as by socialists.

At the contemporary world scale, international human rights law is rooted in a commitment to protect the “equal and inalienable rights of all members of the human family,” which itself is considered to be the “foundation of freedom, justice and peace in the world.” Indeed, there are three areas of priority with regard to equality and equity highlighted in the Charter of the United Nations, the Universal Declaration of Human Rights, and the International Covenants on Human Rights, and in subsequent texts adopted by the General Assembly, notably the Copenhagen Declaration and Program of Action and the United Nations Millennium Declaration. They are the following:

- *Equality of rights*, primarily implying the elimination of all forms of discrimination and respect for the fundamental freedoms and civil and political rights of all individuals
- *Equality of opportunities*, which requires stable social, economic, cultural and political conditions that enable all individuals to fulfil their potential and contribute to the economy and to society
- *Equity in living conditions* for all individuals. This concept is understood to reflect a contextually determined “acceptable” range of inequalities in income, wealth and other aspects of life in society.

Frequently referred to in the Copenhagen Declaration and Program of Action adopted by the World Summit for Social Development in 1995, SJ was scarcely mentioned five years later in the United

Nations Millennium Declaration. Indeed, more recently, SJ has moved to the top of the agenda of many OECD countries, after the global crisis. Within the UN, DESA has even coined a definition of SJ as follows: “Social justice may be broadly understood as the fair and compassionate distribution of the fruits of economic growth...” (DESA, 2006)<sup>2</sup>, with the caveat that this process must assure that “growth is sustainable, that the integrity of the natural environment is respected, that the use of non-renewable resources is rationalized, and that future generations are able to enjoy a beautiful and hospitable earth”. This definition is consistent with the post-2015 and SDGs international debate<sup>3</sup>, which puts a large emphasis on the concepts of inclusive and sustainable growth and development, which are in substance close to the concept of SJ<sup>4</sup>. According to DESA, *economic justice*, defined as the existence of opportunities for meaningful work and employment and the dispensation of fair rewards for the productive activities of individuals, is an aspect of social justice, and is treated as one integral concept in order to avoid to “legitimize the dichotomization of the economic and social spheres” (DESA, pg. 14).

In addition, DESA (2006) identified six areas of distributive inequality corresponding to situations that require correction in order to progress towards SJ. Listed roughly in descending order in terms of their relative importance and in ascending order in terms of how difficult they are to measure, the highlighted areas of inequality are as follows:

- Inequalities in the distribution of income
- Inequalities in the distribution of assets
- Inequalities in the distribution of opportunities for work and remunerated employment
- Inequalities in the distribution of access to knowledge
- Inequalities in the distribution of health services, social security and the provision of a safe environment
- Inequalities in the distribution of opportunities for civic and political participation.

The Commission on the Measurement of Economic Performance and Social Progress chaired by Stiglitz, identified 8 dimensions of what was called ‘well-being’: material living standards (income, consumption and wealth), health, education, personal activities including work (an interesting de-emphasis on labour only), political voice and governance, social connection and relationships, environment (present and future conditions), and insecurity (both economic and physical). Many of these are similar to those encountered in the literature theorizing and frameworks of social exclusion. Although the Commission’s work was directed towards alternative indicators to the GDP,

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<sup>2</sup> DESA’s report writes: “In its work”... “the United Nations has essentially from the beginning separated the human rights domain from the economic and social domains, with activities in the latter two having been almost exclusively focused on development. Issues relating to the distributive and redistributive effects of social and economic policies—issues of justice—have therefore been addressed separately from issues of rights, including those inscribed in the International Covenant on Economic, Social and Cultural Rights. The unfortunate consequences of this dissociation must be acknowledged”... “the fact is that the explicit commitment to social justice has seriously deteriorated; over the past decade, the expression has practically disappeared from the international lexicon and likely from the official language of most countries. The position will be taken here that the United Nations must work to try to restore the integrity and appeal of social justice, interpreted in the contemporary context as distributive justice.” (DESA, pg. 13).

<sup>3</sup> Open Working Group on SDGs (OWG), High-Level Panel of Eminent Persons on the Post-2015 Development Agenda (HLP), UN Task Team on the Post-2015 Development Agenda (UNTT), UN Technical Support Team on SDGs (UNTST), Sustainable Development Solutions Network SDSN), High-Level Political Forum on Sustainable Development (HLPF).

<sup>4</sup> Most of SDGs have an in-built concern for inequality. However, SDGs 10 and 16 are of particular interest to this effect.

it did not conclude with any fixed set of measures but relied upon argument for why alternative types of measures would be needed.

The justification for such a research agenda is due to the fact that differences in life chances across nationality, race, gender, and social groups strike many Arabs as fundamentally unfair (see annex). They are also likely to lead to wasted human potential and thus to missed development opportunities. Marrero and Rodriguez (2010), using panel data for the U.S., find that income inequality due to effort enhances income growth, while the part of income inequality which is accounted for by circumstances correlates negatively with growth. Inequity has been shown to be strongly correlated worldwide with poor physical health, poor mental health, drug abuse, violence and a disintegration of community life (Wilkinson and Pickett, 2009). Work in developing contexts has reinforced the evidence that high horizontal inequalities (between ethnic, socio-economic groups, classes or castes) can contribute to insecurity, crime and violence, social disintegration, and as societies become more polarised conflict is more likely (Stewart, 2001; Vandemoortele, 2009).

According to experiments in behavioral (dictator and ultimatum) games, people regularly display a willingness to engage in two specific forms of behavior: *altruistic rewarding*, a propensity to reward others for cooperative, norm-abiding behavior, and *altruistic punishment*, a propensity to impose sanctions on others when they violate norms (Fehr and Fischbacher, 2003). However, to add more complexity, “fair-minded” people can behave selfishly, and “self-interested” people can behave fairly as behaviors depend on the rules applied in the game. In games where competitive pressures are introduced, mimicking a competitive market, players tend to quickly converge toward a Nash equilibrium. In other settings, however - such as the Repeated Public Good Game with Punishment - even a small number of altruistic players can sustain a cooperative equilibrium (Fehr and Gächter, 2000). These findings have been interpreted to suggest that a sizable fraction of human beings in most societies care not only about their own individual opportunities and outcomes but also about fairness. Indeed, Alesina, Di Tella, and MacCulloch (2004) find that “individuals have a lower tendency to report themselves happy when inequality is high, even after controlling for individual income and a large set of personal characteristics...”. This implies that rational choice theory might be too reductionist due to “bounded rationality” (Simon, 1957), limitations in human judgment and decision making (Kahneman et al., 1982), and “empathy-altruism” (Batson, 1990). From SJ derive three categories of social dilemmas that pit self-interest against collective interest: the prisoner’s dilemma, the public goods dilemma, and the resource dilemma. A solid theory of SJ should be able to maximize collective (vis-à-vis individual) rationality while able to address these dilemmas.

Some studies found that there is a (non-linear) correlation between income and political attitude. It seems that income and education may be determinant factors so that in certain countries individuals with high and low levels of both tend to be leftists while individuals with intermediate levels tend to be rightists (Goldthorpe, 2012). Alesina and Angeletos (2005), using data from the World Value Survey, find that fairness perceptions are associated with the individuals' political orientation: when people believe that effort is the main determinant of economic advantage, redistribution and taxes tend to be low, whereas in societies where people think of birth and connections as the main determinants of economic success, taxes and redistribution tend to be higher. Egan (2014) shows that increases in inequality of opportunity are significantly associated with Republican control of the presidency, and that Americans raised in states with bigger governments and more progressive taxation systems enjoy greater equality of opportunity over the life span.

The distribution of resources and opportunities depends on the initial allocation of resources (Rawls’ initial condition) and by the rules regulating their allocation and distribution. Egan (2014) finds that aspects of individuals’ circumstances for which they cannot be held accountable - including their

religious, ethnic and citizenship backgrounds, their parents' education levels and occupational status, and where they lived as children - explain roughly half of overall inequality in Americans' present-day socioeconomic status. Using this measure, he shows that the contribution of inequality of opportunity to overall inequality has increased sharply over the past decade. A separate but related point is made by the social identity literature in social psychology (see Haslam 2001) and epidemiology (see Marmot 2004), which suggests that individual behavior and performance are heavily conditioned by group identity (for example, caste, gender, occupation); by whether those groups are seen as subordinate to others. Dominant groups or elites, in turn, can behave in two ways: in a predatory way or through rent seeking associated with more or less populist social and economic policies.

Economists usually are not at ease with normative terms such as justice. However, they have long tried to deal with such issues with mixed results. Some have shown that there may be various short-run, policy-level tradeoffs between equity and efficiency. The point is that the (often implicit) cost-benefit calculus that policymakers use to assess the merits of various policies too often ignores the long-term, hard-to-measure but real benefits of economic justice. The view that inequality may negatively affect rate and quality of long-term growth dates back to Kaldor (1956) and got further elaborated in the 1990s. Indeed, there should be enough evidence to make a case that SJ does not only aim to improve equity but can help combine the latter with efficiency and better quality and pro-poor growth. Greater equity is thus doubly good for poverty reduction: through potential beneficial effects on aggregate long-run development and through greater opportunities for poorer groups within any society.

To summarize, while the vast majority of people may value SJ for its own intrinsic value, some policy makers and few elites may value SJ more for its instrumental role in reducing absolute poverty and inter-group tensions as the growth elasticity of poverty reduction tend to be higher in more equal countries.

A summary of the key findings from the literature review is reported as per the table below, highlighting potential gaps in current literature and implications for further research.

Table 1. Different theories of SJ

	Main goal	Concerns with distribution/equity	Critiques	Empirical test
<i>Utilitarianism</i>				
Smith, Bentham, John Stuart Mill	Greatest happiness (or utility) to the greatest number of people	X (rights and freedom)	–How to measure utility or happiness? –Too reductionist	
Nozick, Hayek	Liberalism	X (legitimacy of the process)	–Too reductionist –Does not consider market failures	
<i>Libertarian fairness/welfare</i>				
Rawls	Equity of allocation of primary goods as a constraint to	√ (liberty, equal opportunity, and difference – maximin -	–What people find just and fair depends on their prior (context-specific) sense of justice (circular argument)	

	inequality (under a veil of ignorance)	principles)	<ul style="list-style-type: none"> <li>–Arbitrary order of the distributive principles</li> <li>–conservative approach to human rights as prerequisites to justice</li> <li>–some people (i.e. handicapped, etc.) have special needs</li> <li>–applicable to Western societies characterized by “moderate scarcity” and not in societies affected by “acute scarcity”</li> <li>–gender disregarded</li> <li>–family superficially treated</li> </ul>	
Miller	Context-based equity	√ (needs, desert, equality)	<ul style="list-style-type: none"> <li>–arbitrary prioritization of equity principles</li> <li>–how to agree on the concept in a specific context?</li> </ul>	
Sen, Nussbaum	Equality in capabilities and achievement of essential functionings (cross-culturally applicable)	√ (capability set)	<ul style="list-style-type: none"> <li>–No minimum threshold applied to political systems (is democracy better than autocracy?)</li> <li>–How to compare different preferred capabilities among people?</li> <li>–How to measure “sufficient” functionings?</li> <li>–Assumes that ALL people ALWAYS know what is best for themselves</li> </ul>	
Dworkin, Arneson, Cohen, Roemer	Reward of efforts and initial circumstances are compensated for	√ (compensation against initial circumstances)	–Difficult to disentangle and measure initial conditions, genetic asset, merit, discriminatory practices, geography	
Atkinson and Stiglitz	Expansion of the opportunity frontier	√	–Difficult to operationalize in comprehensive concepts of inequality	√ (limited)
<i>Egalitarianism</i>				
Burke, Deutsch	Distribution based on needs and equality	√	–What about individual differences (merit, motivation, skills)?	
<i>Relative deprivation</i>				



Davies	People's grievance is what matters (no universal definition of equality or equity)	√	–How to anticipate grievance?	
Runciman	Collective action against relative deprivation	√ (individual deprivation-group deprivation)	–Relative deprivation often not sufficient for collective action if not combined with a diffuse sense of injustice	√ (limited)
<i>Feminists</i>				
Okin	Equality between men and women in families and society	√	–Potential overlap between equality and justice	

### Some Key Principles of Social Justice

From the above cursory literature review, it derives that the most frequently used putative principles of SJ are equality, equity, opportunity, merit, need, liberty, dignity, respect, legality, and legitimacy.

In real-life policymaking, a number of trade-offs are likely to be required between various competing goals that probably cannot all be equally attained. Hence, economic equity can be traded off with some other principles that often play a role in development policy. Indeed, it is worth noting that no principle is “more objective” than the other, and there is no theoretical or instrumental justification for holding one sort of value above others outside specific contexts and the realm of cultural relativism. Some of the critical principles to bear in mind are:

- Aggregative principles: they require that goods be distributed to maximise the average level of some particular property, such as wellbeing. For example, utilitarianism states that a decision is valuable to the extent that it maximises overall “utility” (or wellbeing) for all people. The key value judgment involved in aggregative principles lies in the choice of the goal to “maximize” as the central most valuable asset. Based on this principle, growth requires maximising overall GDP and efficiency is about maximising some goal with respect to a fixed input. Efficiency also brings along with it a prioritisation of the goal of preserving scarce resources above other aims or values (such as preserving human dignity)
- Distributive principles: Equity, on the other hand, is not concerned primarily with what the final distribution of some good is. Rather, it operates at a higher argumentative level, requiring that goods be distributed according to principles that respect people’s common human condition and entitlements. This involves looking at the nature of the goods and certain features of the people between whom they are being distributed. For example, an equitable principle would impose that health care should be provided according to how much health care each person needs
- Rights: they constitute minimum entitlements or permissions which impose constraints on others. In one sense, they are quite different from the aggregative and distributive principles, focusing largely on forbidding or requiring certain actions of others or allowing actions of the individual. However, in more distributive terms they can be thought of as minimum thresholds that must be met by the right holder.

However, from experimental methods, it derives that people are often ambivalent towards justice-related questions. According to Soltan (1987), this is probably because of two reasons: i) people tend to confuse the very broad concept of justice with other broad concepts such as utility, personal liberty, or other values; ii) people may refer to several ideas of justice that cannot easily be captured in simple (often binary) questions. In addition, it may well be that there are multiple concepts of SJ depending on the particular “sphere” of analysis (Walzer, 1983) like family, work, local community, society, etc., where more emphasis may be placed on a need-, opportunity- or merit-based approach depending on the specific sphere.

Therefore, the challenge is to provide an internally coherent but pluralistic theory of SJ where a merit-based competitive market is combined with a need-based welfare state. A methodology attempting to quantify SJ should take these principles into account. The challenge is how to create a hierarchy of them that is reflected in a weighting system also bearing in mind local contexts and contingencies.

### **The Economic Perspective of SJ**

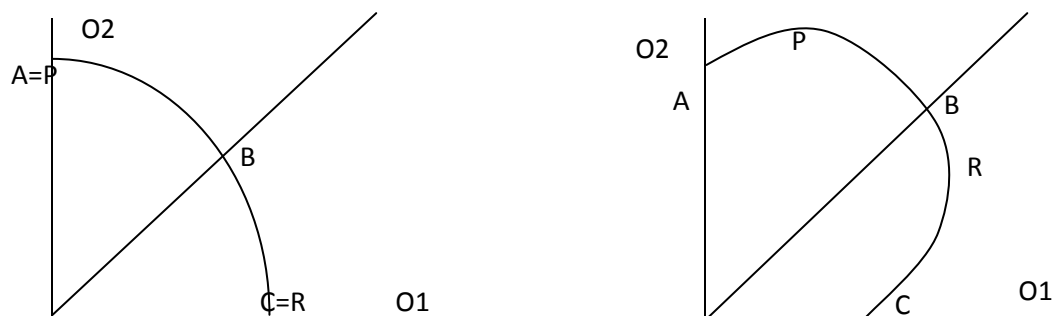
This section builds on the work done by Sen and Atkinson and Stiglitz and investigates the possibility of creating a capability frontier. Let’s imagine that a society is composed of mainly two groups (groups 1 and 2) and that the axes of a diagram measure the opportunity levels of each respective group. Opportunity sets are obviously multidimensional, but if the various dimensions can be conflated into a measurable “opportunity index,” we can create the curved frontier AC which represents the “opportunity possibility frontier” for this society. It reflects the maximum opportunity that groups 1 and 2 can obtain, given the available resources and technology. The fact that it does not monotonically decline from A to C incorporates the fact that when group 1 individuals have limited opportunities relative to group 2, group 2 people can also benefit from an expansion in group 1 opportunity sets, and vice versa. Over some ranges, improvements in the opportunity sets of the “poorest” types can be Pareto-improving (i.e. it can benefit everyone). Hence, there is scope for efficient, growth-promoting redistribution. Eventually, however, tradeoffs set in. Between points P and R, if society is on the opportunity possibility frontier, any improvement in group 1 sets must imply a reduction in group 2 sets, and vice-versa. Points P, R, and B are translations to this “opportunity space” of the welfare concepts associated with Bentham and Rawls.

If this society wished to maximize the sum of total opportunity, it should aim for point B. If, instead, it wanted to maximize the opportunity set of the “poorest” group, it should aim for point R. Each of these points can be defended by logical arguments, under different degrees of aversion to inequalities in opportunity.

What a SJ research agenda in the Arab region could try to do is as follows:

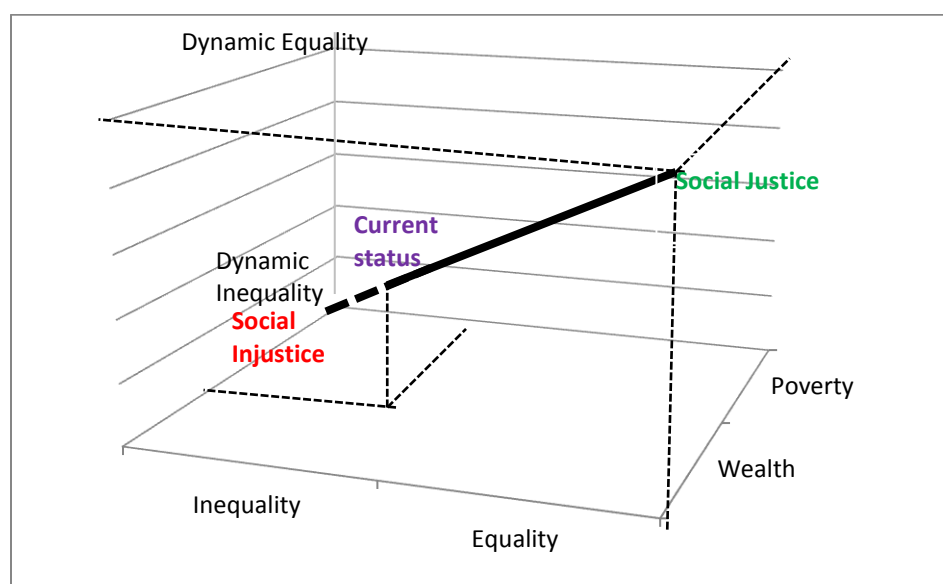
- Describe the inequalities in opportunity actually observed in Arab societies (at inner points of the frontier)
- Investigate whether some of those disparities (which in this diagram favor group 2) might actually be preventing the society from enjoying higher aggregate opportunities (and welfare, on another space)
- Suggest possible policy and institutional approaches that might help move Arab societies from inner points to whichever point they consider equitable on the frontier.

Figure 1. Types of Opportunity Possibility Frontiers



Conceptually, for the purpose of this paper, a society's capability frontier could become a tridimensional space where on the three axes are reported the aggregate level of welfare, the current distributional level, and the intergenerational measures, respectively (see figure below).

Figure 2. Expanded concept of opportunity possibility frontier



## Social Injustice in the Arab Region

### a) *Origins of Social Injustice*

A comparison of the early institutions and of the long-term development paths of European colonies in North and South America shows that the abundance of unskilled labor prevalent in the South American colonies - where either native Americans or imported African slaves were available in large numbers - combined with the technology of mining and large plantation agriculture to provide the economic base for elitist and extractive societies, in which land ownership and political power were highly concentrated. In North America, by contrast, similar attempts to introduce hierarchical structures were foiled by the scarcity of labor - except where agro-climatic conditions

made slavery economically feasible, such as in the southern region of the United States. Competition for free labor in the northern areas of North America led to the development of less unequal land ownership patterns, a faster expansion of the franchise, and rapid increases in literacy and basic education.

Estimates show that reductions in money metric poverty using better poverty lines than the US \$1.25 - regression adjusted national poverty lines – are paramount, since poverty in the Arab countries reaches 20% of the population.<sup>5</sup> The Arab region is also the only developing region where poverty has remained roughly constant since the 1990s, despite an average annual per capita income growth of around 2%.<sup>6</sup> The latter observation may lead us to put the concept of pro-poor growth (as an integrated economic analysis) quite at the centre of attention for the Arab countries.

Besides providing descriptive evidence of key selected indicators, this section of the report will proceed with an analysis of the most common market failures of productive factors in the Arab region, notably in markets for human capital, land, and finance. This is critical because investment resources do not tend to flow where returns are potentially highest due to market distortions that often derive from political choices that are rooted in institutions suffering from neo-patrimonialism and elite capture.

Here institutional aspects should be particularly emphasized as one of the factors behind the Tunisian and Egyptian revolutions of 2010-2011 was the lack of opportunities for economic empowerment. Tunisia, Egypt, Libya and Yemen were all suffering a consistently deteriorating quality of political institutions, both in relative terms (as compared to other countries) as well as in absolute terms (within a country through time), adding to the evidence that political and social exclusion fueled the Arab uprisings.<sup>7</sup>

#### *b) Situation at National and Sub-national Scale*

Based on the methodology options adopted, two children born in two provinces of selected Arab countries will suffer from predetermined conditions that will make a determinant difference for the types of lives they are going to live. The same can be shown for children from different socio-economic background. Geographic and socio-economic determinants should be studied for female children, adult men and women, and senior men and women to show how these conditions affect people throughout their life cycle.

#### *c) Situation at the Regional and International Scale*

A similar analysis can be done at the regional scale between randomly selected people in different Arab countries and comparing the key indicators built in the methodological section. Social injustice seems to suffer from the same phenomena as “inequality traps” across space and time (and generations). Indeed, social injustice is not just an issue at the national level but also at the global scale as countries are often marginalized by the current global economic governance. Therefore, the above-mentioned concerns should be tackled both at the national and international level. At the regional and global level, inequality is composed of two types: i) within-country inequality, ii)

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<sup>5</sup> Prasad, N. and Abu-Ismaïl, K. (2014). On the Relevance of the post-2015 Development Agenda for the Arab Uprisings. Omran. Arab Center for Research and Policy Studies. Forthcoming

<sup>6</sup> UNDP (2011). Towards more Sensible Poverty Measurement. A background Paper to the UNDP Arab Development Challenges Report, prepared by Abu-Ismaïl K., Ramadan R. and Abou Taleb G.

<sup>7</sup> Abu-Ismaïl, K., Kuncic, A., Prasad, N., Sarangi, N. (2014). National Ownership, Regional Targets, Global Goals: Towards an Arab Post-2015 Development Agenda. Working Paper Series. Economic and Social Commission for Western Asia (ESCWA).

between-country inequality. It will be interesting to see how these two components have affected regional inequality and inequality between Arab countries and selected international benchmarks.

A large body of literature has explored the relationship between trade openness and inequality but has not reached a consensus. For example, Dollar and Kraay (2002, 2004) find no effect of trade openness on inequality, but Lundberg and Squire (2003) do find such an effect. Ravallion (2001) and Milanovic (2002) report that at low incomes openness may be inequality-increasing, but that this effect reverses at higher incomes.

In particular, Arab developing country producers face obstacles in selling agricultural products, manufactured goods, and services in developed countries. Patent protection restricts access to innovations (particularly drugs) for poor countries, while new research is strongly oriented to the diseases of richer societies. Rich-country investors often get better deals in debt crises. In most cases, more equitable rules would bring benefits to developed and Arab developing country citizens.

Some of the many inequities lie in the functioning of global markets for labor, goods, ideas, and capital. Unskilled workers from Arab developing countries, who could earn higher returns in rich countries, face great hurdles in migrating. Benefits vary across markets and countries, with those from greater legal migration likely to be greatest (and to accrue directly to migrants) and those from trade likely to accrue mostly to middle-income rather than the least developed countries.

There is no clear reason why the principle of moral equality should respect national boundaries: people share a common humanity regardless of their nationality, and country of birth seems quite clearly to be one of these ‘irrelevant factors’ that should not affect a person’s life chances. A principle of international equity could be drawn from this, which would set out priorities for global distributive justice. Many argue that this is the central idea behind aid (at least in theory, if it were effective), framing development as solidarity and redistribution (Therien, 2002).

However, suggesting that global equity could be a goal aspired to by the international community is, if not radical, far from commonly agreed. The opposing position in the theoretical debates on international justice is known as ‘particularism’, which emphasises that, while nations may have responsibilities to treat their own citizens as equals, their interaction with other nations should be guided first and foremost by informed self-interest. Attempted justifications of this principle tend to focus on the clear lines of accountability and authority within national borders, and the extent to which the state’s legitimacy relates to its primary sphere of influence (Blake, 2005). The emphasis placed in recent decades on the quality of national policies and national institutions, especially by IFIs, suggests that particularism may be the prevailing current in the development community, whereas international equity is currently considered too daring (Cling et al., 2005).

Green (2008) argues that the institutions of global governance can help the fight against inequality in eight ways:

- Managing the global economy with rules on trade and investment;
- Coordinating systemically important countries (e.g. the G20) to manage the functioning of international markets;
- Redistributing wealth, technology and knowledge through aid or other mechanisms;
- Averting environmental or health threats through agreements such as the Kyoto Protocol on Climate Change and institutions such as the World Health Organization (WHO);
- Avoiding war and limiting abuses during war by providing a forum for negotiations;
- Preventing powerful countries or corporations from harming weaker or poorer ones;

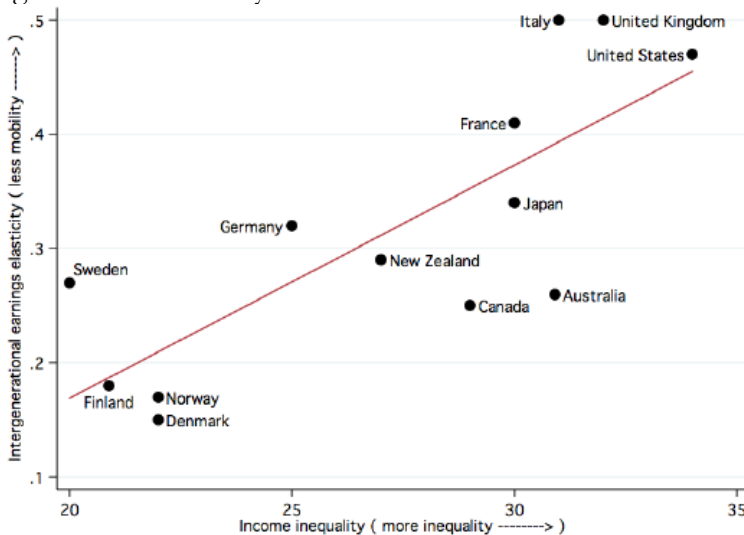
- Providing a safety net for the most vulnerable when disaster strikes and states are unwilling or unable to cope.

#### *d) Social Justice Across Time*

Social injustices tend to reproduce themselves over time and across generations thereby stifling intergenerational mobility. Indeed, research has shown that until the age of 2, children from all socioeconomic groups have similar cognitive capabilities. The situation drastically appears to change by the age of 5 to the detriment of the lowest income groups.

In addition, there seems to be a correlation with inequality at one point in time and earnings mobility across the generations, a relationship that has been called “The Great Gatsby Curve”<sup>8</sup> (Corak, 2013) as per the figure below.

Fig. The Great Gatsby Curve



Source: Corak, 2013.

### **Sector Analysis and Economic Policy Options**

This section analyzes country experiences in setting up socio-economic institutions and policies that have been proven able to contribute to a level playing field whereby all members of a society have similar chances to become economically productive. Policy options should be analyzed in different areas that might be critical to the realization of SJ, such as education, taxation, social protection, justice system, land distribution, infrastructure, financial markets, and production markets as well as

<sup>8</sup> This term points at the vicious circle based on which socioeconomic status influences a child's health and aptitudes in the early years, which in turn influences early cognitive and social development, and readiness to learn. These outcomes and the family circumstances of children, as well as the quality of neighborhoods and schools, influence success in primary school, which feeds into success in high school and college. Parents with more human capital not only have a higher capacity to invest in the education of their children by virtue of their higher incomes, but also the incentives to do so are greater. Family resources and connections affect access to good schools and jobs, and the degree of inequality in labor markets determines both the resources parents have and ultimately the return to the education children receive. This entire process then shapes earnings in adulthood.

through various stages of people's life cycle including early childhood, schooling stage, working age, and retirement age. The impact of past and current macroeconomic policies implemented in the Arab region on the economic aspects of justice need also to be analyzed. In this regards, a review of the use of Zakat – one of Islam's five pillars of faith – in addressing the poor in various Arab countries could be conducted.

As a general principle, expenditure and services should be disproportionately allocated towards disadvantaged groups or regions. So for example, greater resources for health care should be directed towards areas where there is a greater need for them - e.g. regions with high poverty levels or a higher rate of morbidity (Bambas and Casas, 2001)). This implies to deal with non-linearities in the funding of access to services: for example, it may be relatively cheap to reach 90% coverage of the population with health services, but then very costly to meet the health needs of the final 10%, who may be placed in particularly remote areas or may need tailored services to meet specific socio-cultural needs.

Another crucial area for action is the empowerment of those who suffer from power imbalances. This involves both a political aspect, supporting voice and collective action of the disadvantaged people against domination, exploitation and marginalization, as well as a personal aspect, referring to the agency and consciousness of individuals, emphasizing the importance of increasing awareness of rights, and building skills and ability to control resources (Luttrell, 2007).

In the literature on the evaluation of policy instruments it has become quite standard to refer to the so-called 3E criteria – effectiveness, efficiency and equity (Angelsen, 2008). From what reported so far, we find it useful to also incorporate the wider issue of legitimacy, including the processes of decision making (process legitimacy) and their potential outcomes (outcome legitimacy).

To this effect, sectorial analysis could be conducted in the following key socio-economic sectors<sup>9</sup>:

- Macroeconomic Policy: Macroeconomic stability is a public good as there is a well-established association with long-term growth. High inflation and macroeconomic crises can be particularly harmful to the poor, who tend to be disproportionately affected by these types of shocks. However, mechanisms for crisis resolution may tend to be inequitable due to their unequal impacts across society. For example, low barriers to labor exit combined with the lack of adequate automatic stabilizers could particularly affect the low-skilled workers when adverse shocks occur.
- Trade: The standard trade theory such as Stolper-Samuelson theorem, as one of the most important corollaries of the Heckscher–Ohlin (HO) model, predicts that openness will benefit a country's relatively abundant factor, since trade specialization will favor sectors intensive in the abundant factor. Being Arab developing countries relatively abundant in unskilled labor and having a comparative advantage in this production factor, international trade should increase the demand for the unskilled workers and their wages. This would improve the relative compensation of unskilled workers in developing countries. In fact, since it is likely that the new technologies are more skill intensive in relation to those in use domestically before trade liberalization, trade should boost the demand for skilled labor and an increase in wage differentials, leading to higher wage and income dispersion. Empirical evidence is in line with the theoretical considerations that the effect on income distribution appears to be determined to some extent by a country's level of development and the

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<sup>9</sup> The following section reports part of the discussion that can be found more extensively in the "World Development Report 2006: Equity and Development".

technologies available. Exposure to international competition may further affect income distribution through inducing changes in institutions. For instance, the role of trade unions could diminish substantially because the mobility of capital limits the bargaining power of union workers vis-à-vis capital. Increasingly mobile capital and labor have limited the ability of governments to levy taxes and compensate losers in the process economic integration. To the extent that capital is more mobile than labor, the incidence of taxes to finance safety nets for those affected by globalization is shifted to labor. Moreover, the situation in most Arab countries is now more characterized by high rate of unemployment among skilled workers. Accordingly, trade should be directly linked to transformation and diversification strategies able to generate more value added (employment of skilled workers) through building regional value chains and connectivity to global value chains. Policies and strategies adopted to address the issues of income inequality have to be formulated under these constraints. A key question to be addressed in the context of future studies should be: how trade could improve income distribution in the Arab region and which trade agreements or reforms would be advisable to this effect?

- Tax policy: the expansion of voice across many countries in the twentieth century, together with higher incomes and administrative capacity, led to higher government spending and taxation (Lindert, 2004). Conversely, high inequality in the distribution of political power and wealth may be detrimental to a government's tax effort. The low tax revenues in many Arab countries may reflect the unwillingness of the wealthiest segment of the population to pay more in taxes to provide public services to the other segments, because the national elites can procure private substitutes for publicly-provided services.
- Financial sector: the access to financial services and their cost are unequally distributed throughout the Arab region. Many small firms and households complain that the financial services they need are not provided, and that financial institutions require collateral before issuing loans, which poorer borrowers typically lack. Moreover, poorer groups can only seek small loans and, hence, are forced to borrow frequently and repay in small installments, making serving their debts disproportionately costly.
- Private sector: In many Arab countries, a small number of wealthy families or groups exert a stiff control over the corporate sector, notably through cross-shareholdings, which often goes beyond the share of capital that these groups nominally own. They are typically part of or intertwined to political elites through economic or political interests or simply family connections. Barriers to entrepreneurial activity are indeed generally more insurmountable in more corrupt and more unequal countries. Studies start to show that countries with more self-made billionaires tend to grow faster, whereas those with more hereditary billionaires or with greater family control over the businesses sector grow more slowly, suggesting that there might be huge social costs associated to dynastic family control over an economy (Morck and Yeung, 2004). Moreover, privatization programs should be carefully analyzed. When properly implemented, privatization could solve patronage problems and lead to greater efficiency and widespread opportunity to doing business. However, all too often, efficiency gains are shared between government and few private operators leading to the consolidation of private monopolies or oligopolies. As a result, the benefits of privatization could be perceived by the rest of the society to go into a few powerful groups while its losses to be broadly socialized across the economy. The ultimate risk is that premature or ill-designed liberalization processes may lead to social grievances, thereby undercutting support for the very reforms that were initially deemed critical for equity and growth.



- Land market: economic elites may have an interest in the discretionary protection of property rights, because they may gain more when security of property depends on their connections and wealth. Making the functioning of land markets transparent and providing greater security of land tenure for poorer groups are preconditions for SJ. Despite their difficult implementation, land reforms that redistribute part of the stock to the poorer farmers can help in circumstances where land inequalities are extreme and the institutional capacity allows for an equitable and effective redistribution. Finally, land tax can be a useful policy if they are able to encourage redistribution by progressively taxing large or underused assets.
- Labor market: Government interventions to achieve greater equity in labor markets are amongst the most frequent, but often raise efficiency costs that may end up contradicting the original intent. This is an area in which tradeoffs are most apparent between protection of more vulnerable workers (whose main objective is equity) and flexibility (whose main objective is growth). For example, excessive protection of formal sector insiders can lead to crowding out jobs in the formal sector, pushing surplus labor into either informal employment or unemployment. This problem is particularly acute in the Arab developing countries, because labor market regulations and standards typically apply primarily to public employees, leaving the majority of the workforce uncovered. Employment protection, such as maternity protection or accident insurance, can make strong contributions to protecting the wellbeing of mothers and children in vulnerable periods (Shepherd, 2004). Another example is ensuring decent working conditions, which aims to weaken the effects of workers' socioeconomic position on their health (WHO, 2008). In many Arab developing countries, a great deal of employment is in the informal sector, so extending labour standards and social protection to the informal economy is a pressing need. .
- Education: Actions to equalize opportunities in formal education need to ensure that all children acquire at least a basic level of skills necessary to participate in society and in today's global economy. Even in Arab middle-income countries, most children completing basic education lack an adequate level of achievement, as measured by internationally comparable test scores (PISA or TMISS) (Hashemi and Intini, 2015). Greater access to schooling needs to be complemented by supply-side policies (to raise the overall education quality) and demand-side policies (to neutralize the risk that parents may underinvest in the education of their children due to their high discount rate in favor of today's need for an additional source of income in the household, despite being very low).
- Health and Early Childhood Development: in a range of areas of service provision in early stages of childhood, such as immunization, water and sanitation, and child care, the benefits tend to spill over across society and time. Indeed, because differences in cognitive development start to widen from a very early age, early childhood development programs can be central to SJ. Based on the evidence recently gathered in the Arab region, investing in early childhood can have large impacts on children's health and learning capacity and can bring important lifelong economic returns, often greater than other forms of investments that occur at later stages of a person's life (Krafft and El-Kogali, 2015; Hlasny and Intini, 2015).
- Social protection: Social protection systems shape SJ by providing people with safety nets that can fit their specific needs in different stages of their lives. Safety nets typically target three groups: the working poor, people who are unable to work, and special vulnerable groups. When such a system is effectively in place, each household that falls below some predetermined threshold of living standards due to a negative shock would qualify for state support. In the Arab region, the poor, with the lowest capacity to manage shocks, generally

are the least well covered by safety nets. In addition, in most of these countries many among the middle class risk falling into poverty. Finally, Governmental policies in the region are still inadequate as they are still very much focused on quasi-universal commodity subsidies, entailing waste of resources, leakages, and inefficiencies that may potentially feed into further inequality deriving from an overall regressive impact on different socio-economic groups. Broader social protection systems can help prevent today's inequalities from becoming entrenched and leading to tomorrow's inequities.

## Chapter II

### Research Design and Methodological Framework

#### Introduction: Building from Other Experiences

Since SJ is composed of at least two key components, namely inequality of opportunities and absolute deprivation, any potential measurement methodology needs to focus on these critical aspects. Measuring absolute deprivation is fairly straightforward, provided that data are available. As we will see hereunder, measuring inequality of opportunity is harder. In this case, the proposed methodology should be able to decompose inequality into one part that can be statistically attributed to predetermined circumstances such as family background and one part that can be statistically attributed to an individual's level of effort. The complexity of measurement derives from the fact that both components are very difficult to be measured with some acceptable level of precision. Returning to the first component, predetermined circumstances not only affect the endowment an individual starts with - including physical wealth, social capital, access to public services, etc. - but also how one is treated by institutions and other social groups with which s/he interacts along his/her life. Being treated with bias at school, at work, by the police or a tribunal has long-term effects on an individual's capabilities and functionings. Hence, initial endowment and impartial treatment by state and society need to be included in any measurement effort, despite its difficulty.

Besides measuring unequal endowments and treatments, one would also need to measure how to remedy to unequal conditions and opportunities. This can be done by building a measurement method that aims to measure the capacity of an individual or a group of agency/collective action.

Below is a list of key concepts and related methodological issues to bear in mind while developing the research methodology:

- Poverty: it has been considered as the lack of a minimum income necessary to fulfill basic human needs (Masters & Wickstrom, 2004; Saunders, et al., 2008). This subjective notion of 'fulfilling needs' led to development of national poverty lines calculated by the World Bank using consumption of a standardized package of goods and services adjusted for different countries' purchasing power parity. These methodologies have been revised several times, leading to a lively debate over their accuracy and added value from a policy perspective (Ravallion, et al. 2008; Deaton, 2010). Poverty lines are used in two principal ways: to calculate incidence (headcount ratio) and depth (income gap ratio which measures the mean distance of incomes of poor households from the poverty line; or the poverty gap ratio, which measures the amount of income needed to lift poor households to the poverty line, as a proportion of the poverty line). Sen's capability approach – and the related HDI and Multidimensional Poverty Index (MPI) - is argued as being a more comprehensive effort to include other aspects of poverty that are non-monetary while building a bridge between absolute and relative concepts of poverty.
- Relative Deprivation: as highlighted in Townsend's seminal work (1979), objective - when individuals or groups lack in the resources/services that most people have; normative - when individuals or groups lack in what is commonly regarded as normal amount of resources/services that people should be entitled to; and subjective - when some individuals or groups perceive themselves as lacking substantially compared to others). Hence, according to Townsend, there are important conceptual differences between relative deprivation and poverty. For example, a person may be poor in terms of income but not deprived in terms of access to critical services such as housing, healthcare, or education,

because these may be subsidized and fairly provided to the whole population. Conversely, a person could experience relative deprivation in many dimensions while not being poor. This is often the case for certain minority groups or women in certain societies (Saunders et al. 2007).

- Social exclusion: it has been broadly defined as socio-political processes that prevent groups and individuals from participating in the normative activities of society (Power & Wilson, 2000). Both poverty and deprivation are components of social exclusion but social exclusion goes beyond these. According to Berger-Schmitt and Noll (2000), poverty can be both a cause and a consequence of social exclusion, but poverty is only one possible cause or consequence. In fact, one can be not poor and still experience social exclusion, as has been the case with many marginalized individuals or groups around the world. Social exclusion, although being close to Townsend's relative deprivation, differs in terms of a relatively higher emphasis that is placed on non-material aspects such as prejudice and discrimination. Indeed, Bhalla and Lapeyre (2004) identify three main forms of exclusion: economic (primarily based on employment and income), social (the relationships that derive mainly from employment), and political (reduced rights for individuals or groups).

From the concept of social exclusion we can start deriving some key components of justice that may be considered when one attempts to measure it through the utilization of key indicators. Here are reported its synthetic components:

- lack of material resources (food, shelter, clothing and other normatively defined social necessities)
- lack of income to acquire such necessities (generated through employment or government subsidies and transfers)
- lack of access to formal labour markets (to provide adequacy and security of income, as well as access to social relations)
- lack of access to adequate and affordable housing (extending beyond basic shelter to incorporate aspects of overcrowding, disrepair, insecure tenancy)
- lack of access to educational and health care opportunities (to improve access to formal labour markets and reduced barriers to broader forms of social participation)
- socially conditioned and structured forms of discrimination (which reduces access to formal labour markets, educational and health care opportunities and broader forms of social participation)
- lack of power or voice to influence the policy choices of governments influencing all of the above conditions (which extends to lack of political freedoms or human rights)

Efforts have been made in several jurisdictions (notably the UK, the European Union and Australia) to develop frameworks and accompanying indicators to operationalize social exclusion (Cantillon, 2001; Atkinson, et al., 2002). The multi-dimensional nature of social exclusion is widely recognized in such works, with various efforts to model social exclusion by looking at how resources, services and information are allocated in society through private (such as market), public (public payments and services), voluntary (collective action), family and friends (reciprocal, cultural and other non-market) and other social processes.

In addition, indicators should be able to measure the critical processes of exclusion. Indeed, Carr and Chen (2004) argue that these processes can be considered in three ways: as exclusion from *what* (land, housing, other productive assets, credit, secure jobs, productive work, income worker

benefits), exclusion by *how* (market transactions, policies, social norms) and exclusion by *whom* (dominant players and institutions).

## Methodological Challenges

This section provides a potential direction for the research. Different measures of socio-economic welfare such as income, consumption, or wealth can yield different assessments of inequality and SJ. General justice-related overviews in key socio-economic areas include achievements, enablers and challenges towards justice (e.g. political changes, major policy changes, food crisis, global economic crisis, climate change, etc). Of particular importance will be to assess not only differences in critical services in terms of quantity and coverage but also difference in quality of such services.

The economic and statistical literature measuring equality and fairness is fairly vast. Indexes of within-country inequality that can comparatively be used are the Atkinson, Kolm, Gini, Generalized Entropy, and Theil indexes as well as 90<sup>th</sup>/10<sup>th</sup> percentile ratio, the mean log deviation, and variance in order to measure both absolute and relative income (or consumption) inequality. Moreover, many of this statistical methods can also be used beyond strict economic measures and be expanded in the wider social field. Given the reductionist approach of measuring inequality, more comprehensive and multi-dimensional composite indexes have been proposed that may be able to reflect the fact that socio-economic injustice can manifest in at least three ways: breadth (large population affected on one or a few dimensions), concentration (geographic areas affected by multiple dimensions) and depth (extent of individuals or groups affected by multiple dimensions).

Table 2. Pros and Cons of Different Inequality Measurements

	Pros	Cons
Atkinson	useful in determining which end of the distribution contributed most to the observed inequality	Discretionality in setting the "inequality aversion parameter" $\epsilon$
GE	Special case of the Atkinson's index	Discretionality in setting the parameters
Gini	useful in giving an overall view of the observed inequality intuitive	Non sensitive to inter-class distributions and non-decomposable
MLD	Useful for log-normal distributions	Discretionality in setting the parameters
Theil	measures the "distance" the population is away from the "ideal" egalitarian state	Discretionality in setting the parameters Not intuitive

Variance, SD, CoV	Easy to calculate and intuitive	Influenced by extreme values
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*i) Measuring Inequality of Opportunity*

The literature has pointed out that the idea of equality of opportunity embodies two basic principles - the compensation principle, which demands that inequalities due to circumstances be eliminated, and the reward principle, which is concerned about how to reward efforts amongst individuals with same circumstances. Regarding the compensation principle, an important methodological issue has to do with whether we want to take an ex-ante or rather an ex-post approach to compensation. The ex-post approach looks at each individual's actual outcome and is concerned with outcome differences amongst individuals with the same characteristics and different circumstances. This approach is very demanding on the data since we need to observe relevant variables. The ex-ante approach, instead, focuses on prospects, so there is equality of opportunity if all individuals face the same set of opportunities (or sets that are equally valued), regardless of their circumstances. One empirical advantage of the ex-ante approach is that efforts need not be identified, since outcome prospects are usually measured by some measure of centrality of the distribution of the outcome amongst individuals with identical circumstances. Using the framework in Fleurbaey and Peragine (2011), it can be shown that the ex-ante and ex-post approach may often be incompatible.

Empirical research found that there is little consensus about the most important circumstance variables - different circumstances account for the largest share of income or consumption inequality in regions with different economic conditions and degree of economic development. Bjorklund et al. (2011), using the largest set of circumstances of all studies to date, find IQ to be the most influential circumstance for Sweden. Bourguignon et al. (2007), however, find parental education to be the most influential circumstance for Brazil, whereas, for Nepal, Salvi (2007) concludes that family background has little effect and instead infrastructure and ethnicity are the most influential circumstances.

The recent literature contains at least three different approaches to the measurement of inequality of opportunity. Bourguignon, Ferreira, and Menéndez (2007) estimate a linear model of advantage (earnings) as a function of circumstances and efforts, and use it to simulate counterfactual distributions where the effect of circumstances is suppressed. By comparing the actual earnings distribution with different counterfactuals, they decompose overall earnings inequality in Brazil into a component due to five observed circumstance variables - race, mother's schooling, father's schooling, region of birth, and father's occupation - and a residual. The circumstance (or inequality of opportunity) component is further decomposed into a direct and an indirect effect that operates through the influence of circumstances on the choice of efforts. A second approach to decomposing overall inequality into an opportunity component and an "ethically acceptable" component is to rely on standard between-group inequality decompositions. Following this method, Checchi and Peragine (2010) show that if groups are defined by circumstance characteristics - based on Roemer's approach - then the between-group component can be interpreted as an "ex-ante" measure of inequality of opportunity. Finally, a third approach, associated with Lefranc et al. (2008), relies on stochastic comparisons of distributions conditional on types for assessing whether inequality of opportunity is present in a society. These authors also propose a Gini of Opportunities index for the scalar measurement of inequality of opportunity.

*ii) Measuring Capabilities*

Turning to Sen's capability approach, here is a short formalization of his concepts. The achieved functionings vector  $b_i$  of individual  $i$  can be written as:

$$(1) \ b_i = f_i(c(x_i))$$

where  $x_i$  is the vector of commodities possessed by person  $i$ ,  $c(.)$  is the (individual specific) function converting the commodity vector into a vector of objective characteristics and  $f_i(.)$  is a personal utilization function of  $i$  reflecting one pattern of use, among others, that  $i$  can actually make. The well-being of person  $i$  can then be seen as the valuation of the vector of functionings  $b_i$ :

$$(2) \ v_i = v_i(f_i(c(x_i)))$$

The interpretation of  $v_i(.)$  is crucial. If we introduce the possibility of interindividual differences and therefore keep the subscript,  $v_i(.)$  is formally similar to a utility function, since it can also be seen as the representation of an ordering of commodity bundles  $x_i$ . Following Sen's emphasis on individual freedom, the person can choose the utilization function  $f_i(.)$  from an individual-specific set  $F_i$ . If we moreover assume that his choice of commodity vectors is restricted to his "entitlements"  $X_i$ , we can represent his real freedom by the set of feasible functioning vectors

$$(3) \ Q_i(X_i) = [b_i \mid b_i = f_i(c(x_i)), \text{ for some } f_i \in F_i \text{ and for some } x_i \in X_i]$$

$Q_i$  can then be called the "capabilities" of person  $i$ .<sup>10</sup> The specific application will depend on the exact content given to the functionings or capabilities themselves, which remains very open as many of the earlier empirical studies were only loosely connected to the theoretical framework and only recently has empirical work sought to operationalise directly some of the key distinctive parts of the approach. Furthermore, different lists of functionings and capabilities have been proposed and this has made it difficult for researchers to settle on a particular set of dimensions with which to measure welfare or deprivation. In any case, more work is needed to bridge the gap between the theory and the empirical applications. More specifically, it is striking that there is almost no empirical research using a full explanatory model, which specifies the relationship between achieved functionings and capabilities and explores how achievements are influenced by psychological characteristics and by features of the external and social environment. However, recent empirical work is more promising and has shown that conventional survey methods can be useful for assessing the extent of a person's capability set. Initially, this work focused on achievements in a small number of life domains (Anand and van Hees, 2006). Subsequently, a range of standard household surveys were examined and it appears that some of the secondary datasets widely used by social scientists may in fact contain information on what people can do, what they have access to, as well as on the degree and source of the constraints they face.

To sum up, consensus seems to be within reach when one remains at the level of abstract formulations, but soon crumbles when one turns to more specific applications. A priori defined lists of capabilities are useful, because they provoke debate and discussion, but they do not seem to offer a solid foundation for scientific analysis. Amartya Sen is the exponent of the alternative approach, in which the definition of the list of capabilities is deliberately left open, and has to be settled in a democratic process through public reasoning (Sen, 2004). This dynamic process creates room for participation of the people concerned – on its own already a crucial capability.

### iii) Use of Indexes

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<sup>10</sup> Sen is quite explicit about the importance of the move from functionings to capabilities. The typical example is the comparison between two individuals who both are undernourished. For the first individual, the undernourishment is the result of his material deprivation. The second individual is wealthy, but freely decides to fast for religious reasons. While their achievements in terms of the nutritional functioning are identical, their situations are not equivalent from a capability point of view.

A large number of empirical applications limit themselves to a mere description of functionings vectors following a recent upsurge in the methodological literature on multidimensional inequality and poverty measurements. There are also some examples in which one overall index value is constructed. Klasen (2000), for example, calculates a deprivation index as the average score of all individual components. A similar method has been followed in the well known Human Development Index (HDI), which computes the well-being of a country as the result of the (transformed) scores on three development dimensions (log GDP per capita, education, life expectancy).<sup>11</sup> Other approaches in the literature have derived the weights on the basis of alternative statistical techniques like principal components analysis (e.g. Klasen, 2000), output distance functions (Lovell et al., 1994; Ramos and Silber, 2005), or the Borda count (Dasgupta and Weale, 1992; Qizilbash, 1997). Recently, the fuzzy sets methodology<sup>12</sup> has become rather popular (see, e.g. Chiappero Martinetti, 2000; Lelli, 2001). An interesting procedure, which is not restricted to the fuzzy methodology, is the use of frequency-based weights to construct the overall index (see also Desai and Shah, 1988). This captures the idea that the lower the proportion of people with a certain deprivation, the larger the weight assigned to that specific deprivation should be. Once one has calculated an index of the living standard, one can use it to calculate “equivalent incomes”, i.e. the income that persons with different characteristics need to reach a given level of living standard. These equivalent incomes can then be confronted with poverty lines. They can also be compared with the equivalence scales as calculated with traditional economic methods. However, recent papers which have pursued the idea of “functioning equivalence scales” (Zaidi and Burchardt, 2005; Lelli, 2005) have not solved the indexing problem.

Composite indexes trying to measure different aspects of SJ have been increasingly used over the last two decades. One of the most known is the Social Justice Index (SJI) compiled by Bertelsmann-Stiftung for the European Union member states. The index, which tries to follow Sen’s approach, aims to overcome simply market-driven principles, procedural justice as well as distributional justice principles. It is composed of six dimensions - poverty, education, labor market, social cohesion, health, and intergenerational justice – underlying around 40 indicators based on standardized quantitative and qualitative data from surveys and experts opinions, respectively (see figure below). According to Merkel and Giebler (2009), the first three dimensions of poverty prevention, equitable education, and labor market access carry the most conceptual value, which is why they are each weighted (arbitrarily) more heavily in creating the index, with poverty measures weighted most. In addition to the weighted Social Justice Index, a non-weighted ranking was created in which the six dimensions were treated equally. The difference between the two methods appears to be marginal.

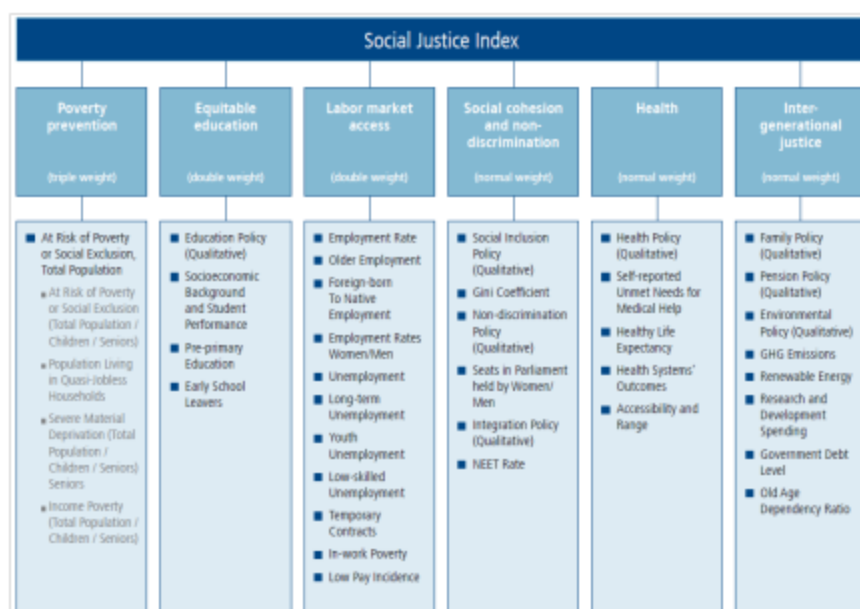
Figure 4. Dimensions and indicators of the SJI

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<sup>11</sup> HDI has undergone various revisions in its methodology. The old measure of HDI that had been in place until 2010 took a linear average of the three dimensions, which satisfies monotonicity, anonymity, and normalization axioms. Such an explicit weighting procedure had the advantage of being transparent and open for discussion. Of course, its weaknesses then became immediately clear given that the use of a simple sum implied perfect substitutability between the different dimensions, which strongly contradicted the proclaimed philosophy of the HDI itself. The current geometric mean approach additionally satisfies the axioms of uniformity, which penalizes unbalanced or skewed development across dimensions.

<sup>12</sup> Based on this methodology, individuals who have a score below a lower threshold or above an upper threshold are classified as being deprived or nondeprived respectively.





Another approach has been lately developed: the measurement of children's access to basic services. Following Roemer's work on equality of opportunity, the World Bank has built the so-called Human Opportunity Index (HOI) for children, whereby opportunities are a narrow subset of overall inequality measures (see figure below) and refer to access to basic services such as education, health and infrastructure that are instrumental to maximize their potential. HOI measures how far a society is from universal provision of basic services together with the extent to which those services are unevenly distributed by measuring how much those without coverage are concentrated in homogeneous groups according to some clear socio-economic criteria that may influence a child's opportunities. HOI is simple and straightforward and pretty much consistent with MDGs approach as it is composed of 5 key indicators: access to clean water, sanitation, and electricity, completing 6<sup>th</sup> grade on time, and attending school until age 14. The analysis is focused on children rather than adults in order to reduce to the maximum extent possible the level of effort and skills in measuring access to opportunities. The HOI is defined as:

$HOI = C (1 - D)$  or, equivalently:  $HOI = C - P$ , where:  $P = C \cdot D$ ,  $C$  is the average coverage,  $D$  is the Dissimilarity Index, formally defined as:

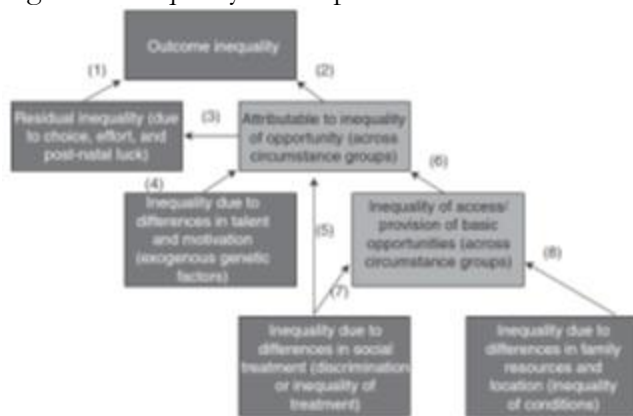
$D = \frac{1}{2C} \sum_{i=1}^n W_i |C - \hat{p}_i|$ , where  $\hat{p}_i$  is the predicted coverage rate of individual  $i$  and is obtained from a logit model using the circumstances as independent variables.  $C$  is the average coverage rate in the population and hence is used as a weight. The HOI has a number of attractive features because is sensitive to:

- the overall coverage: when the coverage for all groups increases by factor  $k$  the HOI increases by the same factor;
- Pareto improvements: when the coverage for one group increases without decreasing the coverage rates of other groups, the HOI increases; and,
- redistribution of opportunities: when the coverage rate of a vulnerable group increases for a constant overall coverage rate there is decrease in inequality and an increase in the HOI.

HOI could be augmented with variables that could capture the quality of services such as average duration of electricity services, quality of education and health services. A point of strength compared to SJI is that rather than using arbitrary weighting, the team uses the Shapley

decomposition method which measures how much each factor contributes to inequality of opportunity.

Figure 5. Inequality decomposition



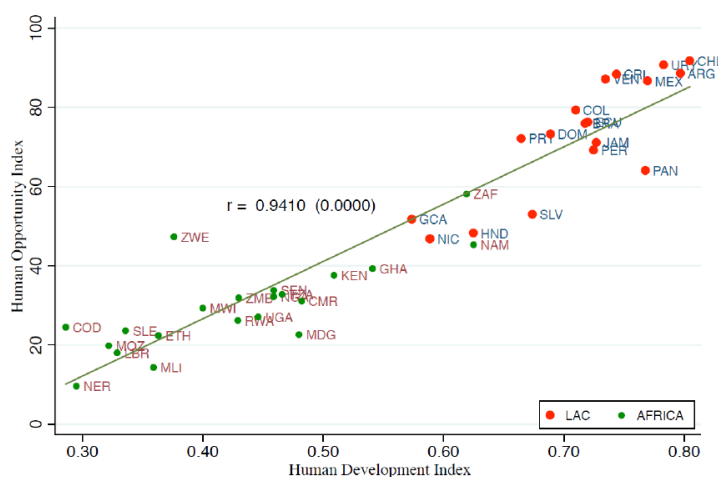
A shortfall of the HOI is that despite being parsimonious in the number of variables used, it heavily relies on ad hoc household surveys that are able to capture this kind of information. The table below reports surveys conducted in the last decade by type and by country based on published results, as far as the author of this paper is aware of.

Table 3. Surveys conducted by type and country in the period 2005-2014

Country	Income or Expenditure Surveys	Health/Demographic Surveys
Algeria		√
Bahrain		√
Comoros		√
Djibouti		√
Egypt	√	√
Iraq	√	√
Jordan	√	√
KSA		√
Kuwait		√
Lebanon		
Libya		√
Morocco		√
Oman		√
Palestine	√	√
Qatar		√
Somalia		√
Sudan	√	√
Syria		√
Tunisia	√	√
UAE	√	√
Yemen	√	√

However, HOI does not seem to explain much more than the usual development indicators. Indeed, based on the available African and the Latin American sub-sample, the correlation between the HOI and GNI per capita is very high 0.89 (p-value: 0.0005). Even more striking is the correlation with the UNDP's HDI, which is even higher (at 0.94 as per the figure below) despite not having variables (except one) in common. This implies that the penalty for inequality of opportunity (1-D) accounts for a much smaller share of the variance in the HOI than mean coverage. It would be interesting to test if the same observations would apply to the Arab countries.

Figure 6. Correlation between HOI and HDI



Source: Brunori, Ferreira, and Peragine.

Many open questions still remain. From the very beginning the most popular applications have been at the macrolevel, the best known being the HDI. But, the popular short-cut of working with country aggregates is apparently not very sensible, if we are ultimately interested in the well-being (or deprivation) of the individual persons. Since this seems indeed the dominant concern in the capabilities approach, the conclusion should be that we cannot avoid the task of collecting adequate data at the individual level.

#### iv) *Use of Perception Surveys*

The Arab uprisings have shown that despite remarkable achievements measured by the most commonly used development indicators, Arabs' deep dissatisfactions were completely disregarded to the point of catching analysts and scholars by surprise. People's aspirations and perceptions towards opportunities and justice are difficult to measure and monitor. Indeed, even if the overall economic trends are encouraging, it could well be the case that the combined effect of deterioration in the quality of public services and environmental degradation, sudden changes in people's values, and worsening of corruption practices may combine with one another to the point of worsening the overall well-being of a person and her perception of social justice. Hence, these subjective indicators are very useful due to their complementarity vis-à-vis the more traditional socio-economic indicators. However, perceptions are inherently volatile and highly susceptible to influence from exogenous shocks, cultural patterns, the media, opinion leaders, and even from the general feeling of the public, that do not necessarily reflect the objective experience on the ground of a given person in the specific field that one would like to measure. Despite, potential measurement challenges, perception polls are nowadays crucial to understand people's views and experiences in their socio-economic lives. The Arab region has hosted various perception surveys conducted by the most

established institutions in this field such as Gallup, World Value Survey, Zogby, and Arab Barometer. The table below reports the countries covered by each survey on periodic basis. The annex reports the survey results of Gallup World Poll for the region in key aspects that are related to the perception of SJ.

Table 4. Latest perception surveys and number of approximate observations by country

Country	Sample size WVS	Sample size AB	Gallup Polls (circa)
Algeria	1,200	1,220	1,002
Bahrain			1,004
Comoros			1,000
Djibouti			1,000
Egypt	1,523	1,196	1,000
Iraq	1,200	1,210	1,003
Jordan	1,200	1,795	1,000
KSA			1,017
Kuwait	1,303	1,021	1,000
Lebanon	1,200	1,200	1,000
Libya	2,131	1,247	1,002
Morocco	1,200	1,200	998
Oman			1,000
Palestine	1,000	1,200	1,000
Qatar			1,000
Somalia			1,000
Sudan		1,200	1,000
Syria			1,022
Tunisia	1,205	1,199	1,000
UAE			1,005
Yemen	1,000	1,200	1,000

v) *Income and expenditure distributions*

It has been well documented that values in the uppermost tail of income or expenditure distributions can significantly influence estimates of inequality (Cowell and Victoria-Feser, 1996a; Cowell and Flachaire, 2007). The fact that the density of top incomes and expenditures has been rising and the fact that they are difficult to capture precisely in household surveys can lead to great sampling uncertainty and even inconsistency of inequality estimates even in large micro datasets. Richer households may under or over-report their expenditures, and in some national surveys data on the upper tail are censored on purpose in public dissemination files by statistical agencies. Some national statistical agencies top-code or “rank-proximity swap” expenditure aggregates or individual expenditure components to comply with privacy norms (Burkhauser *et al.* 2009, 2010, 2011, 2012). The widely used method for dealing with top expenditures is to replace actual top observations with values predicted under theoretical distributions. Two alternative distributions are considered -

Pareto distribution of type I and generalized beta distribution of type II (GB2) - in recognition of their use in existing literature as good approximations to true population distributions across countries and years (Hlasny and Verme, 2015; Hlasny and Intini, 2015). Predicted values from these distributions are believed not to be subject to measurement errors or data censoring. However, another thread of literature has flourished more recently thanks to the work of Alvaredo, Atkinson, Piketty, and Saez, who have used national accounts in order to avoid the typical errors associated with the use of household surveys in identifying top expenditure or income concentration. These studies have generated the World Top Income database. Using these data sources, Alvaredo and Piketty (2014) find that the share of total income accruing to the top decile in the Middle East is around 55%, one of the highest of the entire world. However, national accounts suffer from data quality problems as well and should not be used acritically.

#### *vi) Measuring Intergenerational Equity*

In Economic literature intergenerational equity has two dimensions. The first is related to equity between persons in the intergenerational transmission of economic status while the second is related to the equity in the intergenerational division of aggregate resources, considering all members of each generation as a group.

As to the former, intergenerational mobility is measured by the association between parents' and children's socioeconomic standing. Socioeconomic standing is captured by different measures – the most common are social class, occupational status, individual earnings and family income. Sociological analysis of mobility relies on occupations, collapsed into highly aggregated classes or ranked into a one-dimensional status hierarchy. Occupational status is a weighted average of the mean level of earnings and education of detailed occupations. Occupational status has important advantages as a measure of economic standing. Collecting information about occupations is relatively easy and faces much less issues in terms of recall, reliability, refusal, and stability than measures of earnings of income. Furthermore, information about parents can be reported retrospectively by adult children, circumventing the need for long panels. Measures of status subsume all sources of socioeconomic advantage into a single scale. Classes are instead categorical groupings based on specific occupational assets that determine life chances as expressed in outcomes such as income, health and wealth and which are differentially affected by economic and institutional factors such as technological change, and labor market and welfare policy. The study of earnings mobility evaluates the intergenerational association by means of a linear regression of the log-transformed measure of parents' and children's earnings. The log transformation addresses the severe right-skew of earnings distributions. Given the double-log formulation, the regression coefficient is an elasticity which captures, approximately, the average percent change in children's earnings associated with a one percent change in parental earnings.

Equity among generation's cohorts seeks to ensure equal cost sharing across different generations. This means that the government services received by each generation throughout its lifetime (pension, health and education services etc..) match in some way the amount of taxes that generation has paid. Any public expenditure which incurs debt or delays its repayment is effectively "an obligation passed from one generation of taxpayers to the next". To measure all these intergenerational interactions and tradeoffs the quantitative economic literature proposes two economic methods to measure intergenerational justice:

- generational accounting: a method used to determine the effects of different policy by age groups (and potentially other attributes such as gender) for the present and future generations.
- overlapping generation (OLG) models: OLG models are helpful instruments to analyze the distributional effects of long term-oriented strategies. OLG models consider an age structure, in which several individuals of different generations live at a given point in time. Every individual is assumed to follow a life cycle from birth to death with its income depending on age. The assumed life cycle income (and saving) allows to analyze the influence of the age structure on total savings and to assess the economic problems of aging.

Data from long panels are rare in the Arab region and questions about family background of individuals are not always asked in surveys. Moreover, information about dimensions such as incomes or earnings is not easily remembered by individuals. The scarcity of intergenerational data is particularly striking in (Arab) developing countries and in fact studies on intergenerational mobility in the developing world remain few. Even when the data exist, differences in methodologies and data often limit the scope for comparisons across countries.

Finally, turning to the environment and sustainable development considerations in general, indicators will need to be selected under the principles of justice in order to assess the level of environmental justice of a specific country or local community based on criteria related to sources of stress, potential exposure to stress, environmental vulnerabilities. For the purpose of the study it would be interesting to combine Environmental indicators with Climate change indicators and Natural resources indicators.

The Millennium Challenge Corporation (MCC) grouped a list of Natural Resource Management Indicators developed by international agencies and research centers. Among the 120 indicators, some focus on the “justice” dimension as the Human Environment Index (UNEP)<sup>13</sup>, Public Access to Industrial Pollution Information (WRI)<sup>14</sup>, Public Participation in Environmental Impact assessments (WRI)<sup>15</sup>, "Equitable Access to Water for Agriculture" Indicator (IFAD)<sup>16</sup>, Effectiveness of policy, implementation, and enforcement for freshwater resources (World Bank)<sup>17</sup>.

A list of environmental justice indicators for the Arab Region has not been developed yet.

## Way Forward

ESCWA should adopt a systematic approach to the selection of SJ indicators. This involves:

1. a critical review of theoretical frameworks and their feasibility in developing measuring approaches of different aspects of justice
2. assessing lessons from the experiences of the application of other approaches at both national and international levels
3. a justifiable selection of a limited set of categories along with relevant indicators, and
4. examining categories and indicators in terms of their robustness and applicability in the regional context.

Moreover, indicators should take into consideration based on the following principles:

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<sup>13</sup> <http://www.stat.psu.edu/~gpp/pdfs/TR2001-1203.pdf>

<sup>14</sup> <http://www.accessinitiative.org/publications.html>

<sup>15</sup> <http://www.accessinitiative.org/publications.html>

<sup>16</sup> <http://www.adb.org/Documents/Conference/Multilateral-Dev/multilateral-dev-pba.pdf>

<sup>17</sup> <http://www.gefweb.org/Replenishment/RAF%20Note%20for%20discussion%20FINAL.pdf>

- relevance
- clarity and unambiguity
- robustness and statistically validation
- responsiveness to effective policy without manipulation
- comparability across countries
- consistency with international standards
- timeliness.

The methodological approach to the research agenda should attempt to balance between having too many indicators that may reduce precision, and too few indicators that may create a risk of omitting important issues or lack of variability between groups or over time. To this effect, other studies (Marlier et al, 2009) have used a two- or three- tier approach to the utilization of indicators distinguishing between: i) primary (or lead) indicators made by a synthetic set of critical indicators that are able to cover all key dimensions of justice; ii) secondary indicators complementing and expanding the information contained in the primary indicators by describing in greater detail other dimensions or depth of the problem; iii) a selected set of critical statistics that are not easily encapsulated in specific dimensions but that can serve the overall analytical consistency and to identify key correlations and causality. For instance, income inequality and inequality of opportunity reveal interrelated but distinct stories. Some countries show relative income equality and low inequality of opportunity for children (table 5). Other countries with high income inequality today might have less inequality in the future because equitable access to basic opportunities is improving as a result of long-standing pro-active government policies (although the current levels in these countries are very different). Other countries might still be trapped in a situation of high income inequality and very unequal opportunities for children.

Table 5. Categorization of countries based on income inequality and HOI

Level of HOI	Level of income inequality	
	Low income inequality	High income inequality
Low HOI	Atypical <i>Country a</i>	Inequality trap <i>Country b</i>
High HOI	Relatively equal <i>Country c</i>	In transition <i>Country d</i>

Finally, although most conceptual models of justice, deprivation and social exclusion have adopted multiple dimensions and indicators, they have tended to overlook the heterogeneity of the populations in terms of gender, age, ethnicity, and culture, and the complexity of using current indicators in developing public policies. For example, material deprivation indicators have not adequately differentiated across populations. Similarly, current inclusion approaches are not culturally sensitive enough to address the needs of ethnic minority children living in poverty. Hence, ESCWA should review the capacity and appropriateness of most commonly used categories and indicators in the Arab context and propose to consider the following dimensions while developing indicators:

- Life-cycle: Indicators should not only capture current conditions of exclusion and inclusion but should reflect life-cycle transitions and consider the potential risks of inequality and exclusion that may affect in future,
- Gender and equity dimension: Adopting an equity or gender lens would provide a new way of examining the determinants of exclusion, including attention to issues of powerlessness and voicelessness; economic vulnerability; and, diminished life experiences,

- c. Cultural (or identity-based) diversity: Not only will understandings of justice, inequality and social inclusion vary between cultural groups (though processes of exclusion may be similar), cultural identities may lead to intentional forms of exclusion from dominant cultural norms or expectations,
- d. Context: analyze differences in understanding the meaning of exclusion and inclusion - and opportunities to address them - across socio-economic and political contexts.



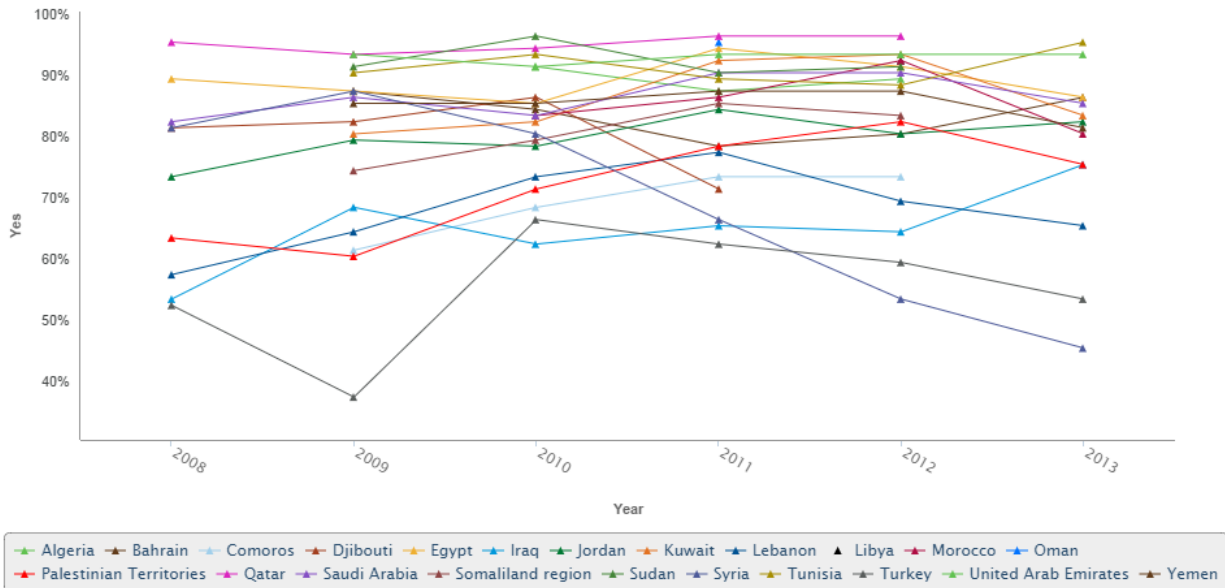
## Annex

### Arab Opinions on Justice-related Issues (source: Gallup)

#### Work Hard, Get Ahead

Can people in this country get ahead by working hard, or not?

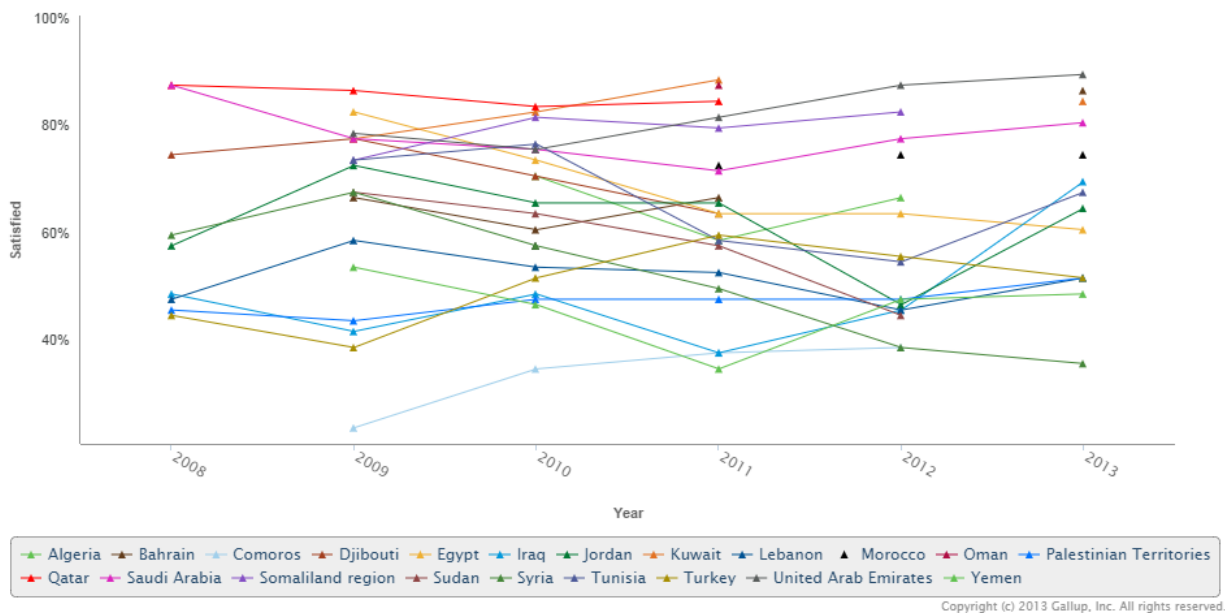
Selected Demographics: Aggregate



#### Standard of Living

Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?

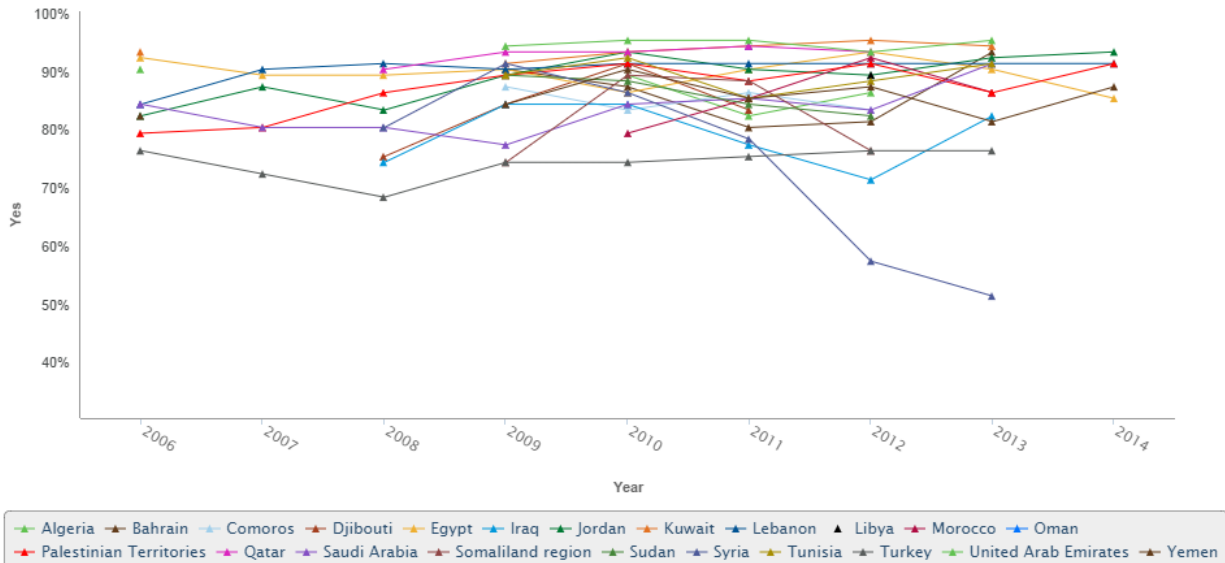
Selected Demographics: Aggregate



## Treated With Respect

Now, please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt. Were you treated with respect all day yesterday?

Selected Demographics: Aggregate

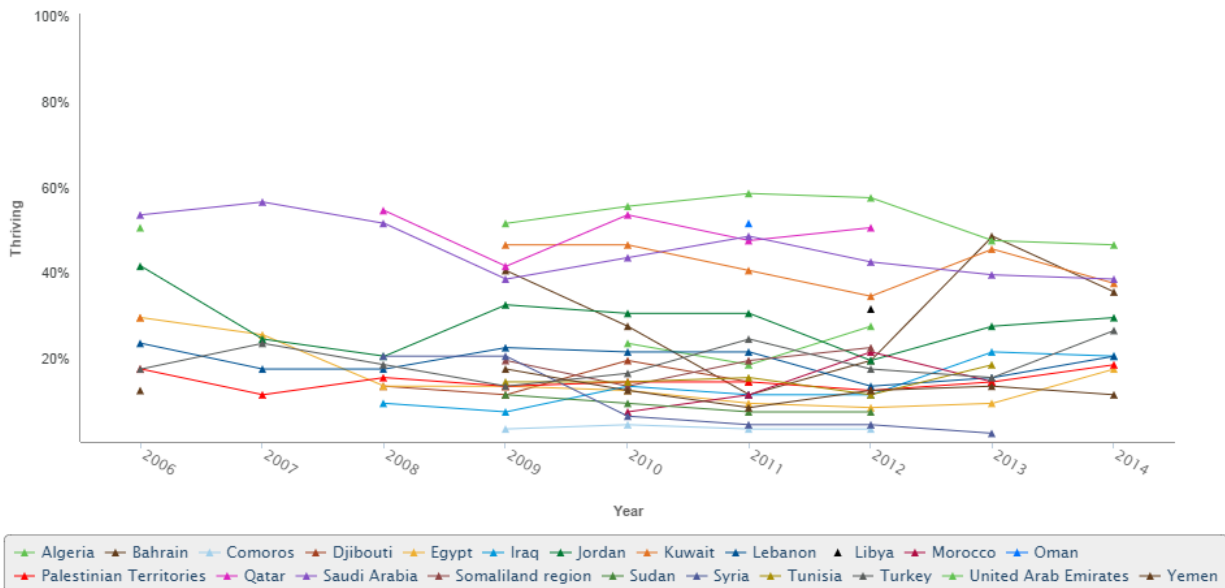


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## Life Evaluation Index

The Life Evaluation Index measures respondents' perceptions of where they stand now and in the future.

Selected Demographics: Aggregate

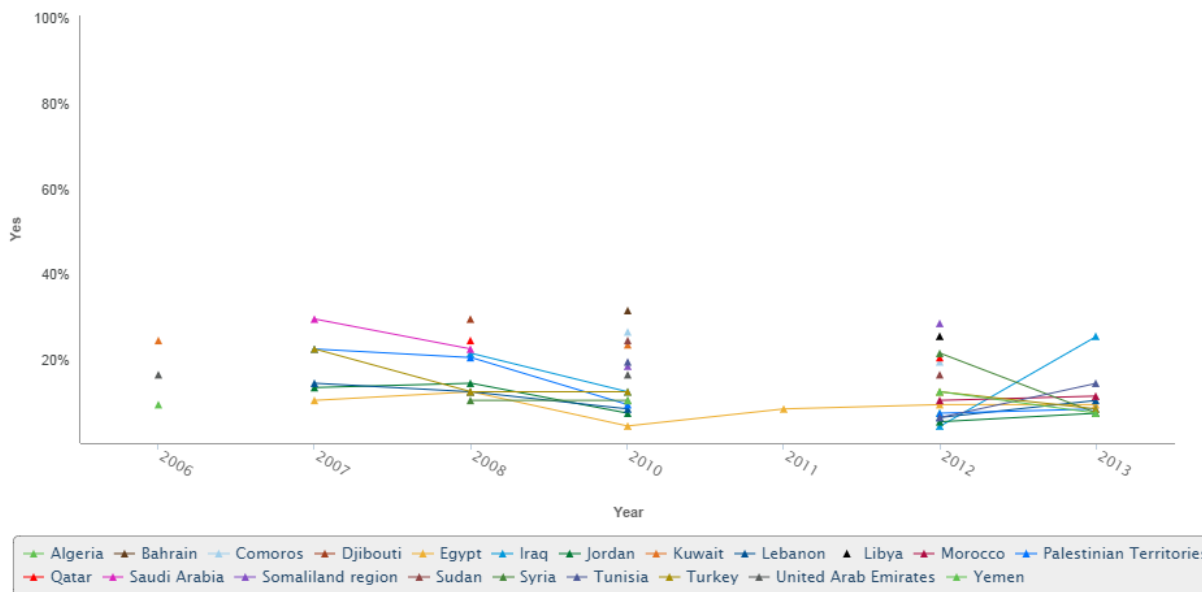


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## Voiced Opinion to Official

Have you done any of the following in the past month? How about voiced your opinion to a public official?

Selected Demographics: Aggregate

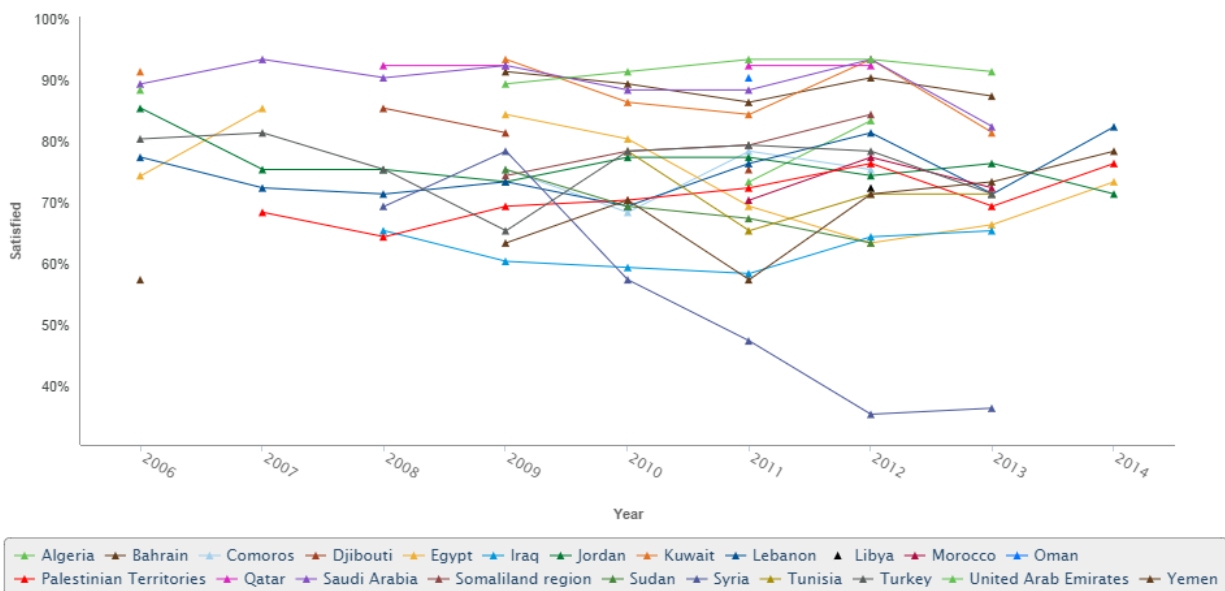


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## Overall City Satisfaction

Are you satisfied or dissatisfied with the city or area where you live?

Selected Demographics: Aggregate

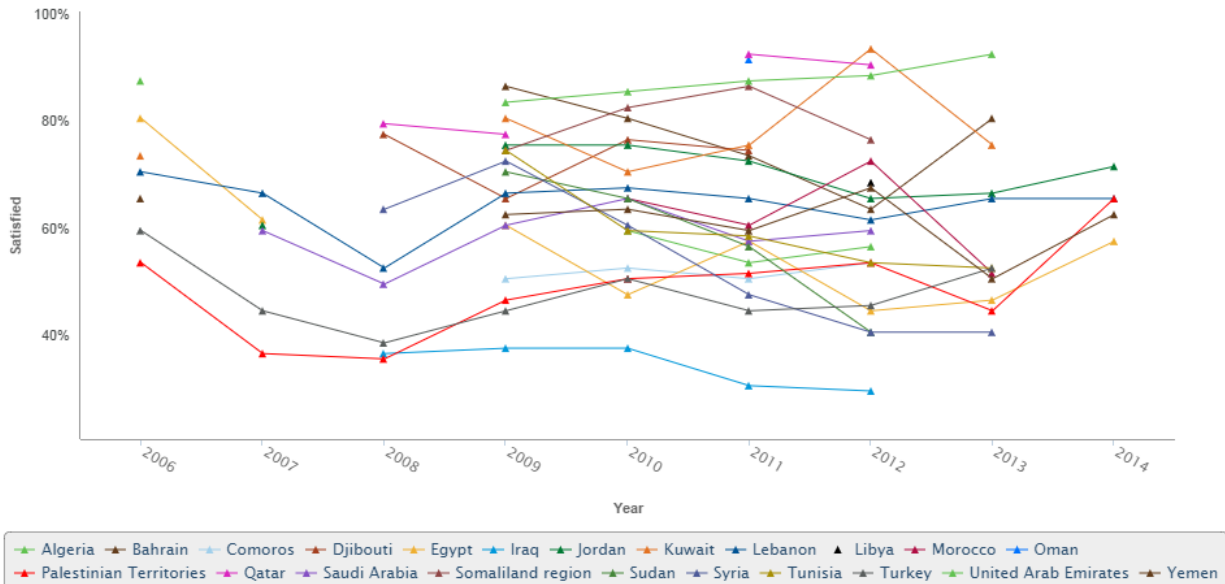


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## Freedom in Your Life

In this country, are you satisfied or dissatisfied with your freedom to choose what you do with your life?

Selected Demographics: Aggregate

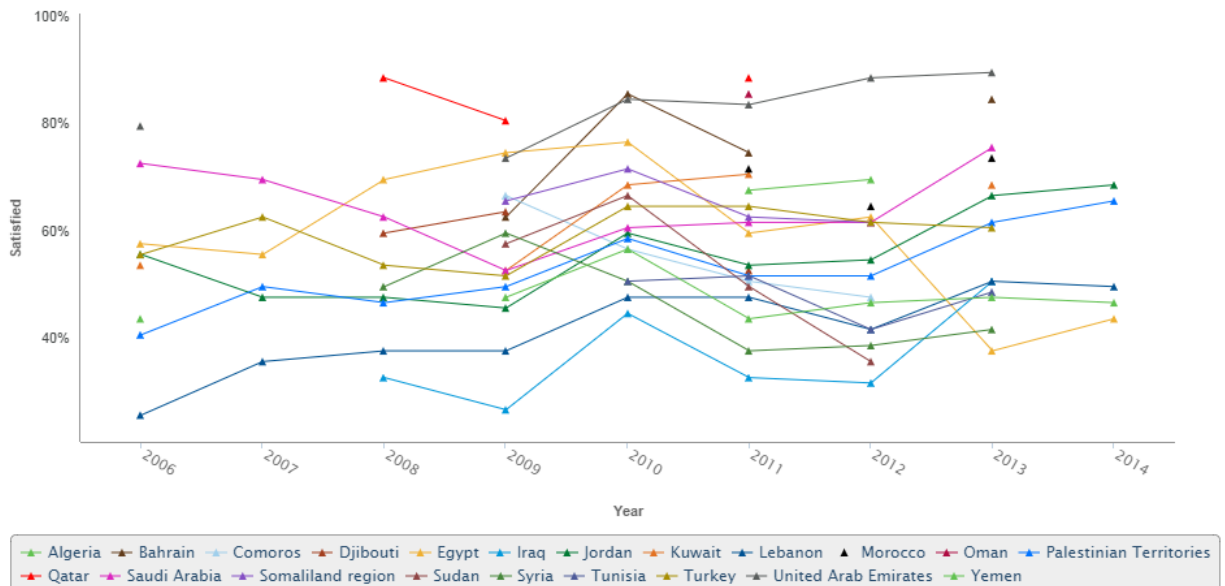


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## Quality of Water

In the city or area where you live, are you satisfied or dissatisfied with the quality of water?

Selected Demographics: Aggregate

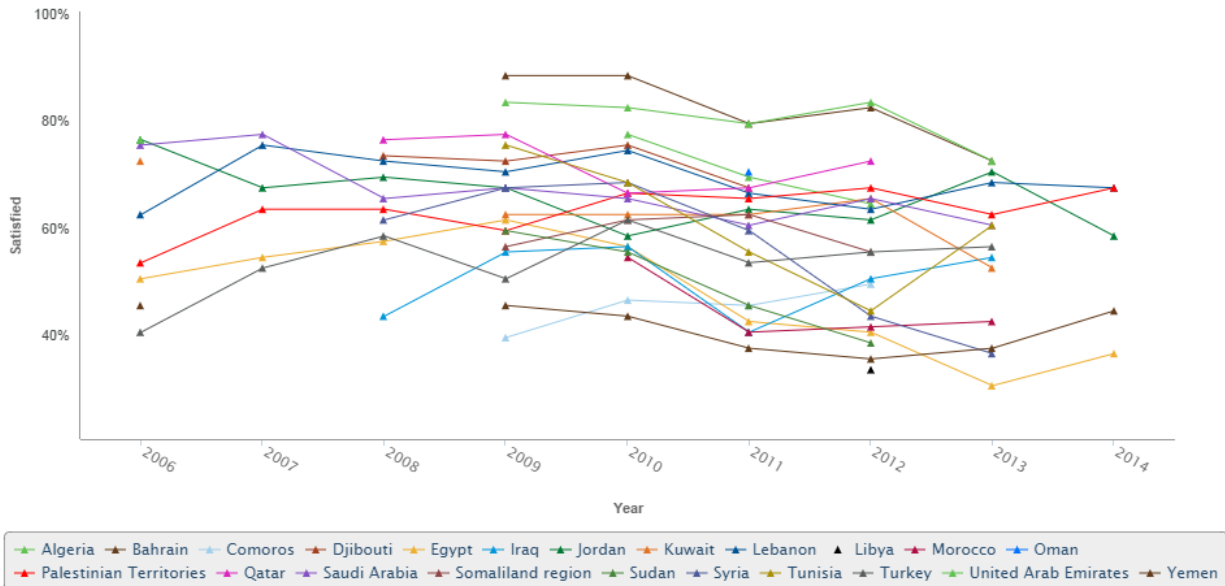


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## Educational System

In the city or area where you live, are you satisfied or dissatisfied with the educational system or the schools?

Selected Demographics: Aggregate

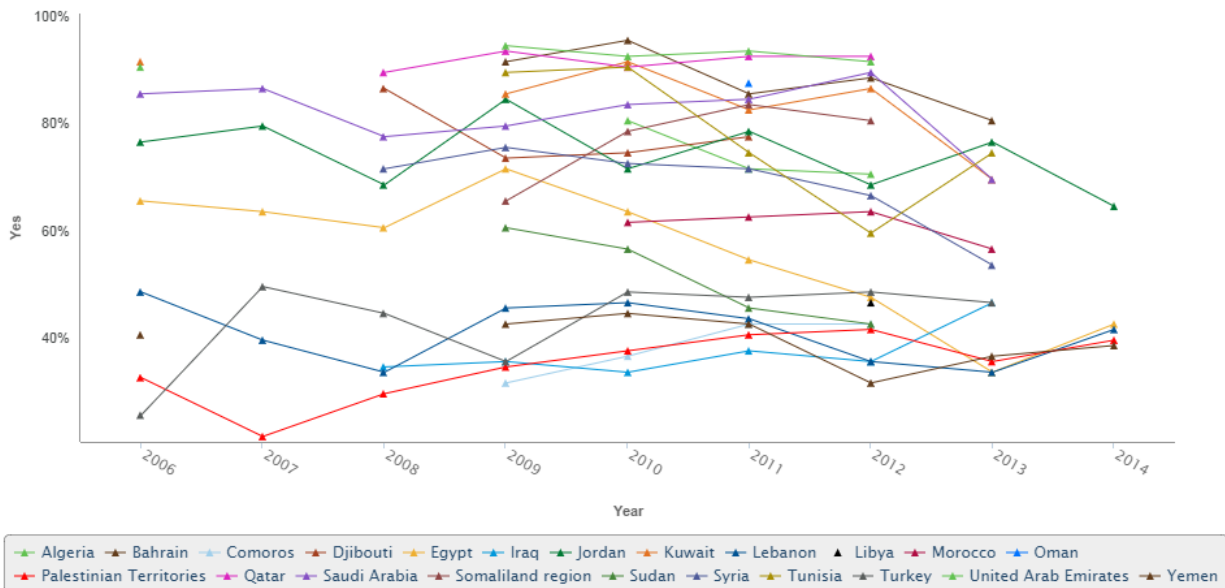


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## Children Learn and Grow

Do most children in this country have the opportunity to learn and grow every day?

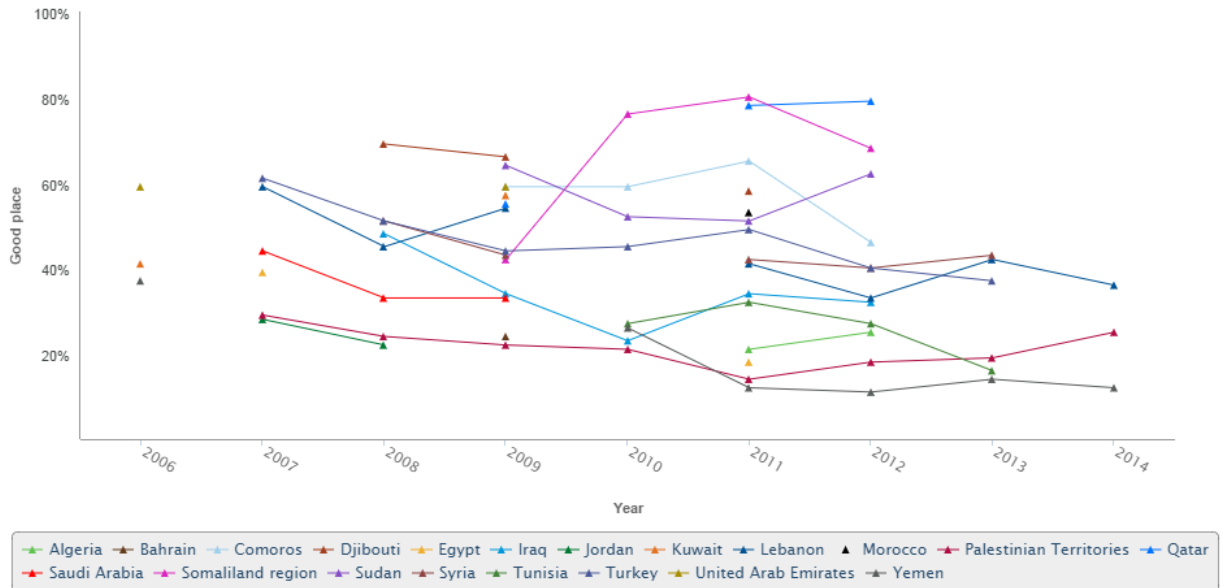
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## Racial/Ethnic Minorities

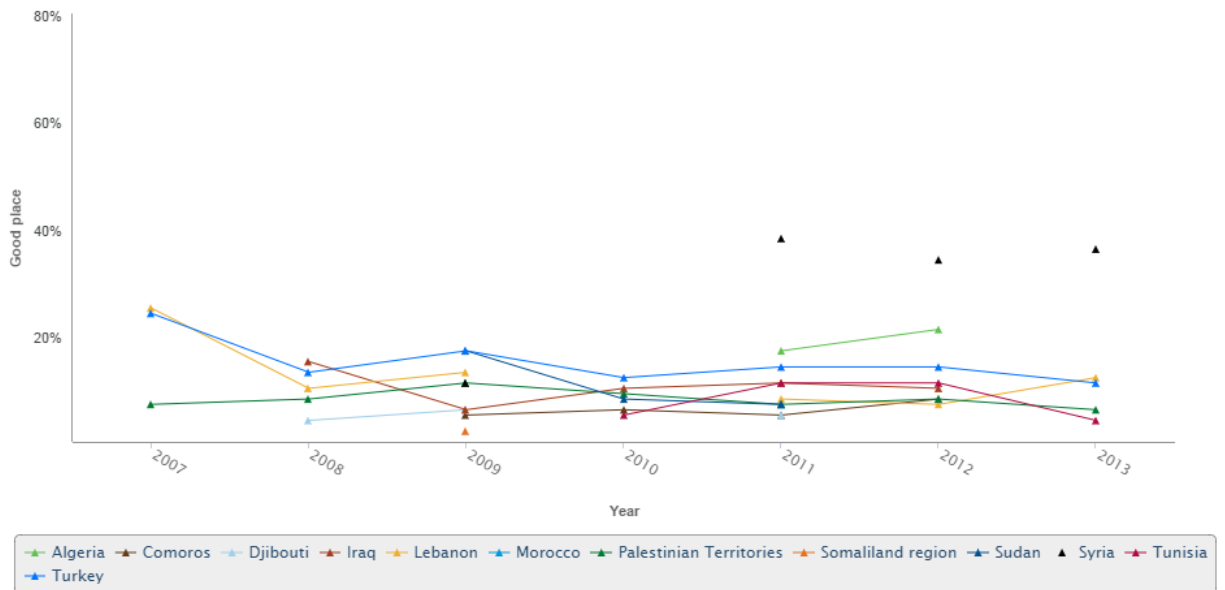
Is the city or area where you live a good place or not a good place to live for racial and ethnic minorities?  
Selected Demographics: Aggregate



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## Gay or Lesbian People

Is the city or area where you live a good place or not a good place to live for gay or lesbian people?  
Selected Demographics: Aggregate

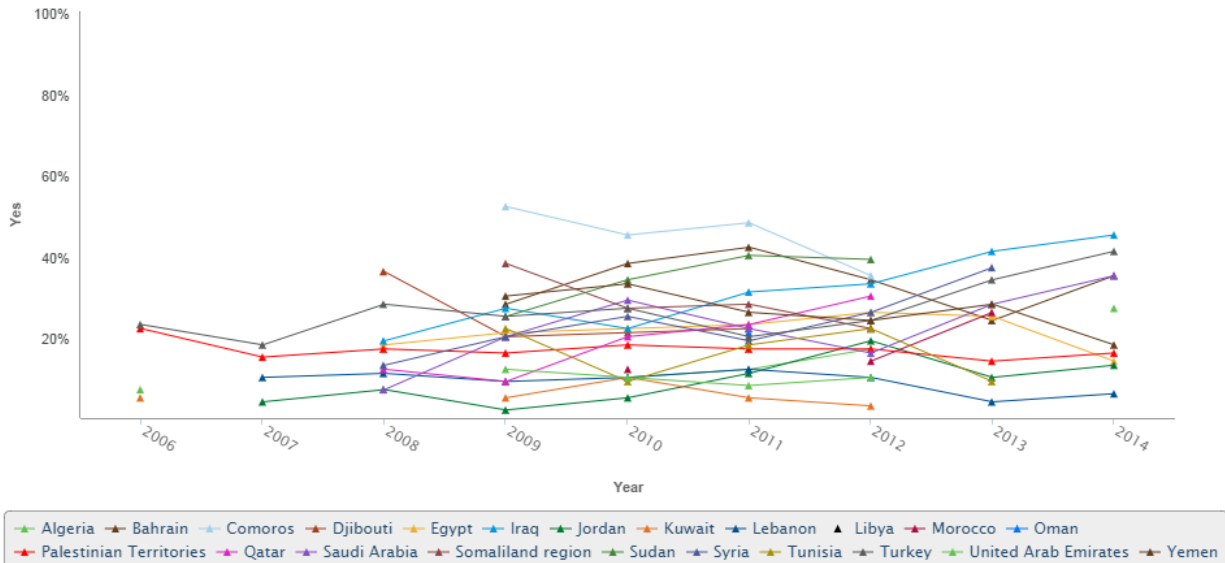


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### Not Enough Money: Shelter

Have there been times in the past 12 months when you did not have enough money to provide adequate shelter or housing for you and your family?

Selected Demographics: Aggregate

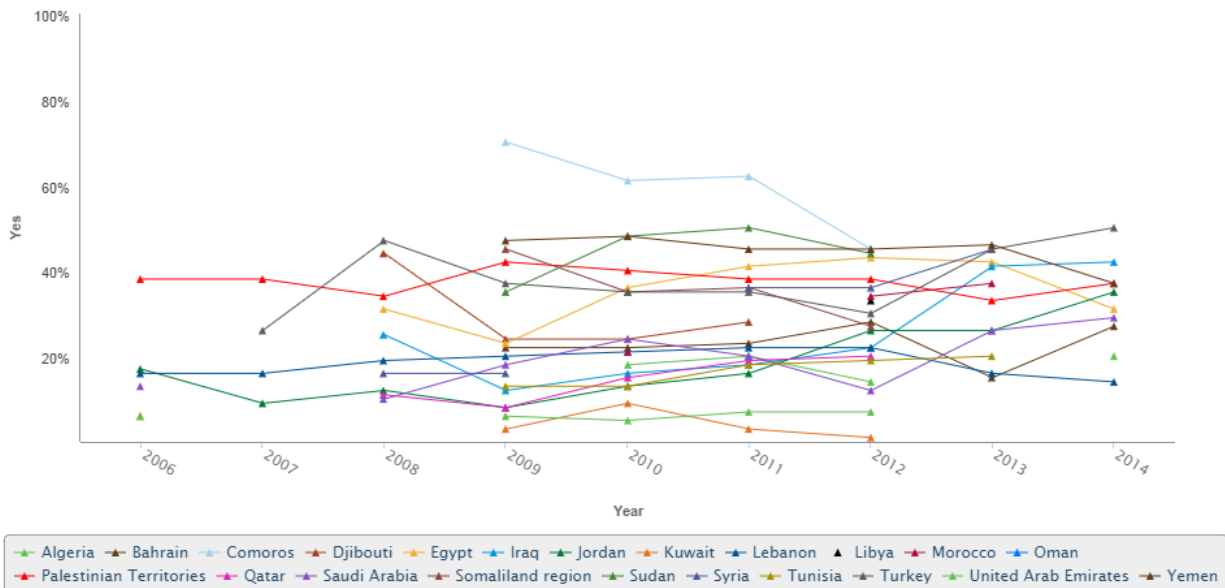


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### Not Enough Money: Food

Have there been times in the past 12 months when you did not have enough money to buy food that you or your family needed?

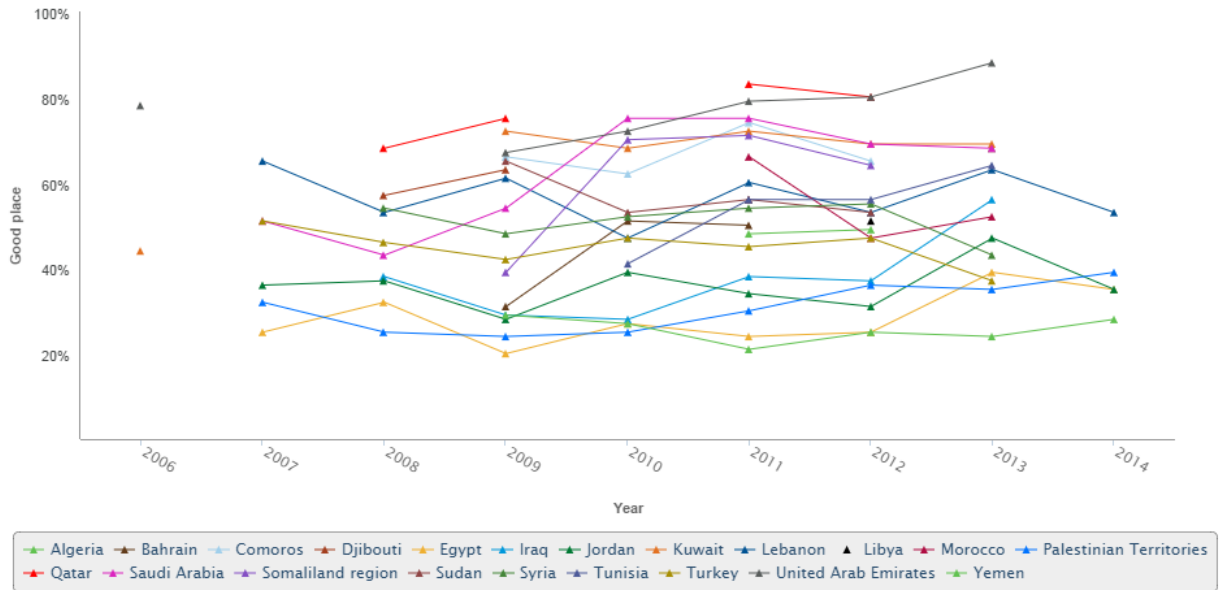
Selected Demographics: Aggregate



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## Immigrants

Is the city or area where you live a good place or not a good place to live for immigrants from other countries?  
Selected Demographics: Aggregate

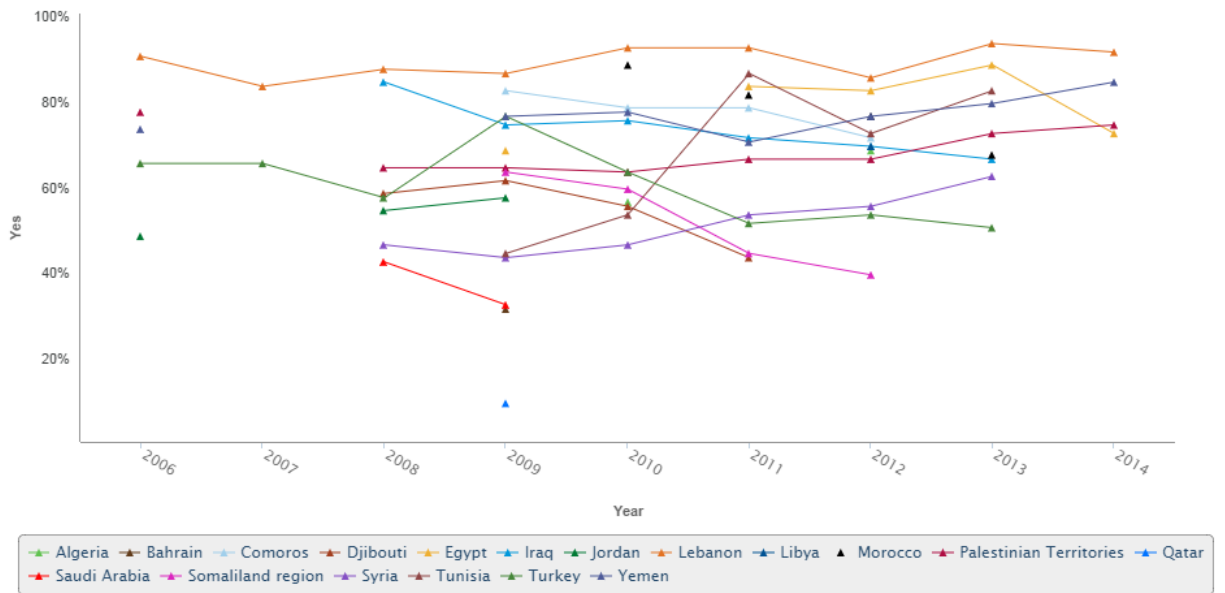


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## Corruption in Government

Is corruption widespread throughout the government in this country, or not?

Selected Demographics: Aggregate



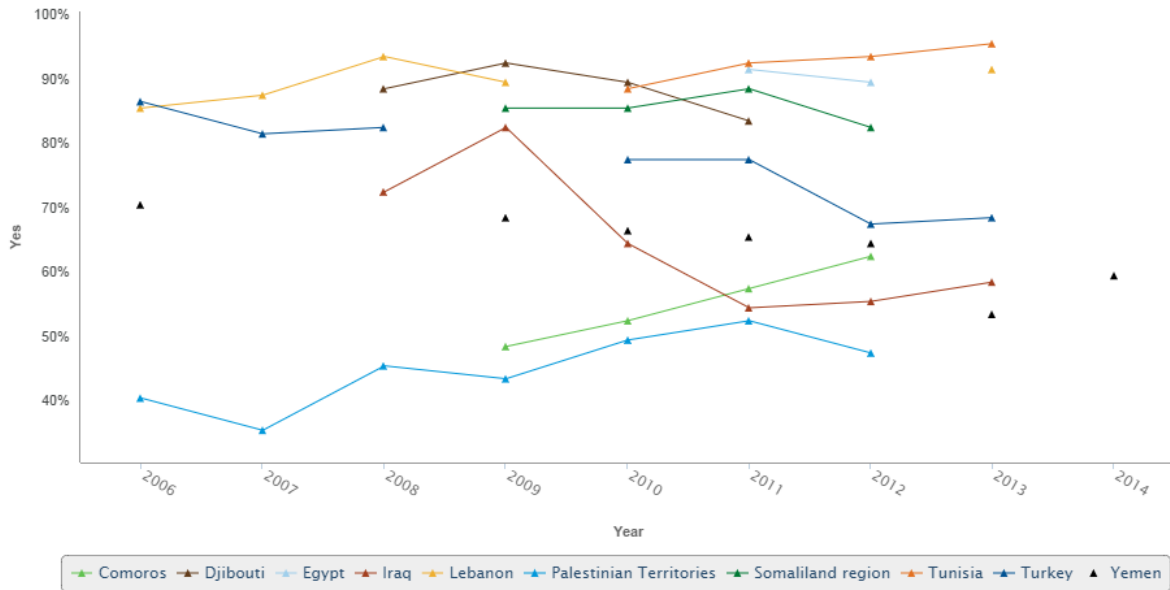
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## Confidence in Military

In this country, do you have confidence in each of the following, or not? How about the military?

Selected Demographics: Aggregate

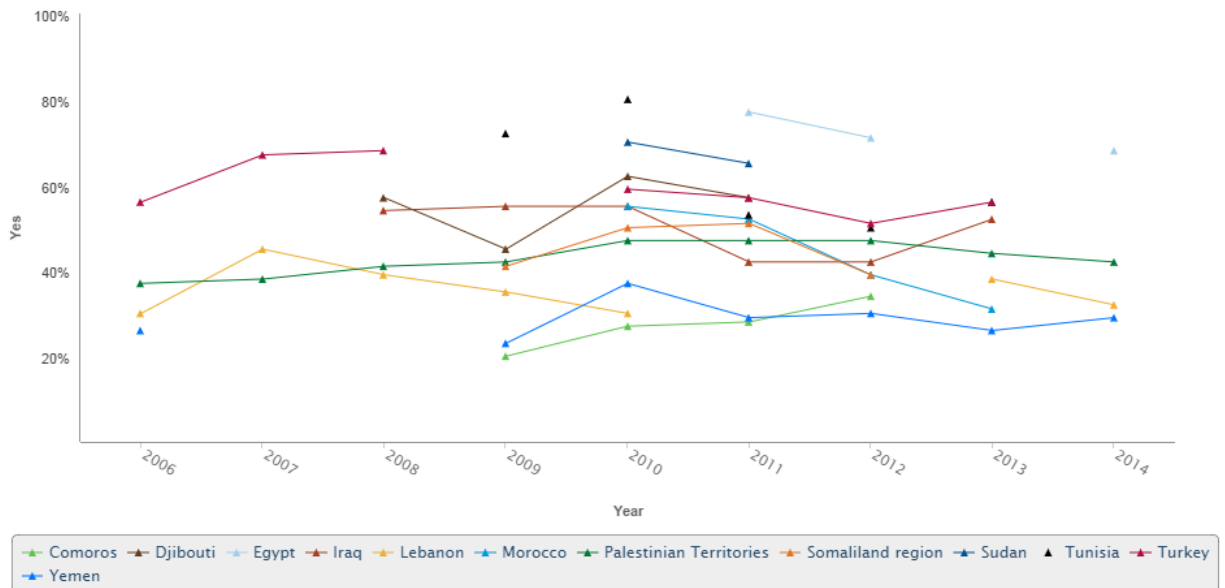


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## Confidence in Judicial System

In this country, do you have confidence in each of the following, or not? How about judicial system and courts?

Selected Demographics: Aggregate



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