Introduction

The State of Development

In September 2010, the Summit on the Millennium Development Goals (MDGs) - the high-level plenary meeting of the General Assembly - will take place to review the implementation of the MDGs and to identify areas of action to achieve them by 2015. Although some progress in terms of fighting poverty and hunger, improving health and education and other aspects of the MDGs has been achieved, progress has been uneven. In 2005, there were still 1.4 billion people living on less than $1.25 a day and further progress has been reversed or delayed due to the world economic crisis (United Nations, 2009). The number of people suffering from hunger rose to 1.02 billion in 2009, 129 million children were underweight and 195 million under the age of 5 were stunted (United Nations, 2010). Progress towards achieving universal primary education in developing countries has been noticeable, though there are still more than 10% of children of primary school age that are not enrolled (United Nations, 2010). Under-five mortality declined from 93 per 1,000 live births in 1990 to 67 per 1,000 live births in 2007, which is still short of the goal of reducing child mortality by two thirds between 1990 and 2015 (United Nations, 2009).

A look at the overall performance on these or other indicators neglects large disparities due to income itself, urban-rural differences and other inequalities related to gender, language, ethnicity or disability. Social exclusion and a lack of participation have been diagnosed as the main drivers of group-based disparities and represent a further dimension of poverty (United Nations, 2009, 2010). This is mainly reflected in MDG 3, “Promote gender equality and empower women”. However, progress regarding gender equality remains low. In 2007, out of 171 countries only 53 had achieved gender parity in primary and secondary education. The gender gap in secondary schooling is even more severe and particularly evident in Sub-Saharan Africa, where the girls’ to boys’ enrolment ratio is only 79% in 2007. Moreover, gender gaps persist on the labor market and in the political arena. For example, only 18% of the parliamentary seats were held by women in January 2009 (United Nations, 2009, 2010).
The picture given here shows that there still remains much to be done and makes clear that actions have to be identified in the multiple dimensions of development to accelerate progress towards achieving the MDGs. Such a multidimensional view towards development constitutes the basis of this work. It is inspired by Sen’s notion of development as freedom or expansion of capabilities (e.g. Sen, 1999b, 2003). Sen’s capability approach is based on the two concepts of functionings and capabilities. Functionings are the "doings and beings" of a person, her actions and the status that she values and enjoys, like being healthy, being educated, achieving self-respect or participating in social life. Capabilities refer to different combinations of functionings a person is able to achieve, covering the notion of freedom to choose the kind of life one would like. With his approach, Sen inspired the emergence of the pluralist and integrative conception of “human development” and its operationalization in the Human Development Index of the United Nations Development Program (UNDP). It is not only income but also health and education among other factors that enable people to live the life they value.

Sen leaves the question of what are valuable achievements and freedoms wide open and does not make explicit a list of fundamental universal capabilities (Nussbaum, 2003; Gaspers and van Staveren, 2003). However, he highlights the importance of public deliberation, participatory processes and political freedoms for social choice and the constitution of values and development goals, as in such a context people are able to advance their own case and act as agents of the development process.

Political Institutions and Human Development

Sen’s discussion about valuable capabilities and the formation of these values centers on social interactions and draws attention to institutions in general. North (2001, p. 97) defines institutions as “the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints [...] and formal rules [...].” Institutions are the rules of the game. They create order, reduce uncertainty and affect the prosperity of a nation by reducing transaction costs and regulating contract enforcement and property rights protection. A very important feature is the distributional effect of institutions (World Bank, 2005). In particular, institutions distribute power in a society and therefore they affect the capabilities of people to choose between different ways of living. Sen (1999b) emphasizes democratic political institutions that create the environment for social choice and value formation where all people can actively and equally participate in an open deliberation process. Therefore, besides the intrinsic value of democracy, democratic institutions help to produce responsive policies and to hold politicians and bureaucrats accountable. It is the purpose of the Essay 1 to investigate whether Sen’s argument withstands empirical evidence and to an-
answer the question of which political system is the best for obtaining a high level of human development measured with the non-income dimensions education and health.

There are in fact examples that challenge Sen’s claim. Present-day Singapore, an autocracy, is a high income country with a high life expectancy at birth of 80 years and a high literacy rate of 94%.\(^1\) The development path of his own country inspired Singapore’s former President, Lee Kuan Yew, to put forward the famous Lee hypothesis according to which authoritarian rule is more efficient than democratic government and therefore beneficial to economic development (and thus to human development as well) (Sen, 1999a). Also, relatively poor Cuba has managed to achieve a very high life expectancy rate at birth of 79 years and an adult literacy rate of almost 100%\(^2\). On the other hand, the democratic country of India, for example, has a life expectancy at birth of only 63 years and a literacy rate of 66%\(^3\).

Sen (1999a, p. 6) calls this “sporadic empiricism” and this is certainly true. Nevertheless, controversies put forward in the theoretical literature do uphold the question about the power of democracy. First, there is a controversy concerning the contradictory effects of property rights protection and redistribution in democratic societies on growth and well-being (e.g. Mohtadi and Roe, 2003; Alesina and Rodrik, 1994; Baum and Lake, 2003). Secondly, the causal direction is not clear: is democracy a cause or a consequence of the development process (e.g. Lipset, 1959; Persson and Tabellini, 2007a; Glaeser et al., 2007)? Thirdly, there is a debate as to which conditions are necessary for democracy to have a positive effect on human development (e.g. Keefer and Khemani, 2005). Empirical studies do not provide a coherent answer to these questions and they have their limitations (e.g. Lake and Baum, 2001; Baum and Lake, 2003; Navia and Zweifel, 2003; Franco et al., 2004; Besley and Kudamatsu, 2006; Tsai, 2006; Safaei, 2006; Ross, 2006). They are either restricted to only one non-income dimension of human development or to a cross-sectional analysis leaving out developments over time. Furthermore, they do not sufficiently account for possible conditions influencing democracy’s performance.

Acknowledging these shortcomings, Essay 1, which is based on joint work with Sebastian Vollmer, extends the existing literature in several ways. First, the essay emphasizes the redistributive effects of democracy and complements Sen’s theoretical argument using the well-known median voter theory to illustrate why democracy should outperform autocracy with respect to health and education (Meltzer and Richard, 1981). A second contribution


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consists in identifying conditions (income inequality, the level of economic development, education and ethnic fractionalization) that are assumed to affect democracy’s performance. Using a panel analysis over a time span of 30 years, the relationship between political institutions, life expectancy at birth and the literacy rate is tested and interaction effects are included to account for factors that affect the functioning of democracy.

The main finding is a robust positive and significant association between democracy and the indicators of human development, even if one controls for factors like the level of economic development. Although causality is difficult to establish, besides its intrinsic value, democracy seems to be instrumental to achieving better health and education. However, the interaction effects between democracy and the presumed conditions of functioning turn out to be insignificant or not robust.

The Role of Social Institutions related to Gender Inequality

As pointed out in North’s definition there are different types of institutions that together determine the extent of capability expansion or deprivation. At the level below those institutions that are mainly concerned with property rights protection, redistribution and contract enforcement in a political system, there are informal social institutions (Williamson, 2000). These are often taken for granted, shape people’s identity and provide role models that help people to behave appropriately in daily life without putting efficiency at the forefront (Hall and Taylor, 1996; Peters, 2005). Some of these institutions lead to capability deprivation in the form of social exclusion. Sen’s capability approach has been criticized for his view of independence, autonomy and individualism, which fails to highlight social relations (e.g. Nussbaum, 2003; Gaspers and van Staveren, 2003). However, he identifies social exclusion as a constitutive part of capability deprivation as well as a cause of capability deprivation in other dimensions (Sen, 2000b).

The implantation of the “right” formal institutions, e.g. democratic ones, to a country does not guarantee the “right” track towards development, as formal institutions interact with informal ones. Development outcomes then depend on the strength of both formal and informal institutions (Williamson, 2009). Relationships are either complementary or substitutive. Although a formal democratic system may open the space for public discussion, deliberation might be at risk because a deeply rooted power structure and elite domination hinder the participation of all citizens (Gaspers and van Staveren, 2003). The relevance of this issue becomes obvious if social exclusion mechanisms in formally democratic countries are considered. For example, informal institutions that back up social exclusion mechanisms might

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Gaspers and van Staveren (2003) and Nussbaum (2003) criticize Sen’s account because his notion of social justice is underelaborated as it is left to social choice. Moreover, he does not explicitly deal with the problem
hinder the extension of the franchise. Racial discrimination against African Americans in the form of ‘informal’ violence and intimidation or disenfranchising laws restricted the use of the formal right to vote for black people for a long time until finally in 1965 the Voting Rights Act was passed to counteract at least to some extent those discriminatory practices. Another example is Switzerland, where women gained the right to vote in 1971. Including social institutions in the study of development could therefore be a valuable effort.

This is particularly evident if one considers that despite considerable progress in recent decades, gender inequality in the manifold dimensions of well-being remains pervasive in many countries of the world. Essays 2, 3 and 4 are dedicated to the roots of these inequalities and their heterogeneity across space and time. They center on social institutions related to gender inequality that frame gender-relevant meanings, shape gender roles and become guiding principles in everyday life. Influencing the distribution of power between men and women in the private sphere of the family, in the economic sphere, and in public life, they constrain the opportunities of women and their ability to become agents of development (Sen, 1999b).

Essay 2, which is the result of joint work with Boris Branisa and Stephan Klasen, focuses on the measurement of social institutions related to gender inequality. Existing measures are outcome-focused, measuring gender inequality in well-being and agency (Klasen, 2006, 2007), e.g. the Gender-Related Development Index (GDI) and the Gender Empowerment Measure (GEM) (United Nations Development Programme, 1995) or the Global Gender Gap Index from the World Economic Forum (Lopez-Claros and Zahidi, 2005). Other measures like the Women’s Social Rights index (WOSOC) of the CIRI Human Rights Data Project could be partially used as a proxy for the institutional basis of gender inequality. However, it also covers outcomes of institutions and, coming from a human rights perspective, it neglects informal institutions and does not differentiate between what happens within the family and what happens in public and social life.

Given this lack of measures, Essay 2 proposes several composite indices measuring social institutions related to gender inequality that can be used to compare the societal situation of women in over 100 non-OECD countries and allow the identification of problematic countries and dimensions of social institutions that deserve attention by policy makers and need to be scrutinized in detail. These are the Social Institutions and Gender Index (SIGI) as a multidimensional measure of deprivation of women, and its five subindices each measuring...

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6 Information is available on the webpage of the project http://ciri.binghamton.edu/(date of access: April 16, 2010).
one dimension of social institutions related to gender inequality (Family code, Civil liberties, Physical integrity, Son preference and Ownership rights). The one-dimensional subindices are built out of variables of the OECD Gender, Institutions and Development database using the method of polychoric PCA to extract the common information of the variables corresponding to a subindex (Kolenikov and Angeles, 2009). The formula of the SIGI is inspired by the Foster-Greer-Thorbecke poverty measures (Foster et al., 1984), which offers a reasonable way to capture the multidimensional deprivation of women caused by social institutions. It has the advantage of penalizing high inequality in each dimension and of allowing for only partial compensation between dimensions.

It is widely accepted that gender inequalities not only harm the affected women but come at a cost for the whole society, leading to ill-health, low human capital, bad governance and lower economic growth (e.g. World Bank, 2001; Klasen, 2002). Due to the scarcity of cross-country level data only a few studies investigate the development impact of gender-relevant social institutions (e.g. Morrisson and Jütting, 2005; Jütting et al., 2008). Applying the newly proposed social institutions indicators, Essay 3, which is based on joint work with Boris Branisa and Stephan Klasen, investigates at the cross-country level their explanatory value for development outcomes (female secondary schooling, fertility rates, child mortality and governance in the form of rule of law and voice and accountability). Based on bargaining household models (e.g. Manser and Brown, 1980; McElroy and Horney, 1981; Lundberg and Pollak, 1993), models considering the costs and returns of children (e.g. Becker, 1981; King and Hill, 1993; Hill and King, 1995) as well as contributions from several disciplines on governance and democracy, we derive hypotheses on the impact of social institutions related to gender inequality. The findings from the regression analysis show that social institutions matter even if one controls for religion, political system, geography and the level of economic development; higher inequality in social institutions is associated with worse development outcomes not only for the affected women but also the whole society.

Essay 4, which was produced in collaboration with Boris Branisa, elaborates more on the linkage between social institutions related to gender inequality and governance, contributing to a separate branch of research on gender and corruption. Former research efforts showed that there is a negative statistical association between representation of women in political and economic life and corruption in a society (Swamy et al., 2001; Dollar et al., 2001). Some explanations trace this back to differences in behavior between men and women, some take a historical perspective stating that women are newcomers to the system and therefore behave less corruptly than men (Goetz, 2007) and others mention the possible omitted variable.

7See Morrisson and Jütting (2005); Jütting et al. (2008)
of liberal democracy which might affect both the level of representation and corruption in a society (Sung, 2003). Swamy et al. (2001) proposed another omitted variable, “the level of discrimination against women”, which we try to capture using the subindex Civil liberties. The findings of a cross-sectional regression analysis controlling for democracy and representation of women in politics and economic life suggest that corruption is higher in countries where social institutions deprive women of their freedom to participate in social and economic life. In such contexts it might therefore not be sufficient to push democratic reforms and to increase the participation of women in order to reduce corruption.

Indigenous Origin and Health Inequality in Bolivia

Recognizing the pervasiveness of gender inequality in the world, MDG 3 is dedicated exclusively to the situation of women. With respect to other groups, the MDGs are less clear. However, background documents and global initiatives draw attention to indigenous people as they are overrepresented among the world’s poor at about 15% and suffer more from marginalization, poverty and problems in health and education than the non-indigenous population (Hall et al., 2006; Stephens et al., 2006; United Nations, 2010). As a response to these problems the General Assembly of the United Nations proclaimed the Second International Decade of the World’s Indigenous People, which started in 2005.

Essay 5, a result of a joint project with Elena Gross, focuses on the situation of indigenous people in Bolivia and demonstrates that ethnic origin is a decisive factor for child health and reaching MDG 4, “Reduce child mortality”. From a first point of view, it seems that this is a settled fact and a further study seems to be unnecessary. However, most of the studies stating differences between indigenous and non-indigenous people are based on descriptive and bivariate evidence (e.g. UDAPE and OPS, 2004; Pozo et al., 2006; PAHO, 2007). Although social exclusion and institutional mechanisms are relevant factors for racial differences in well-being, this view might not be sufficient to design policy interventions. It falls short of considering other factors which might be related to both ethnic origin and health, like poverty, urban-rural differences, geographical location and other household related characteristics - linkages that can be observed for Bolivia. Even if multivariate analyses are conducted, there are shortcomings (e.g. Larrea and Freire, 2002; Morales et al., 2004; Mayer-Foulkes and Larrea, 2005). The first is to neglect the heterogeneity of health inequality over different health outcomes. The second is related to the usage of the indigenous dummy, which masks heterogeneity within the group of native people - if one bears in mind that there are over 30 distinct indigenous groups living in Bolivia. Our study investigates several indicators on childhood diseases and vaccinations, taking the former shortcomings into consideration. The main lesson is that ethnic origin matters. However, one should go beyond indigenous origin,
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Quechua, Aymara, etc. and look for factors that capture particularly characteristics of the mother like health knowledge of the mother or mother’s education that might be related to the heterogeneity in health outcomes over different ethnic groups. A hypothesis, which arises from Essay 5 and would need further investigation is that these characteristics of the mother might be intermittent variables between ethnic origin and health outcomes. However, this should be investigated additionally to putting efforts into analyzing institutional mechanisms that might lead to deprivation of these groups.

To summarize: the five essays of this dissertation contribute to the understanding of the linkages between institutions, inequality and development and emphasize the role of group-based disparities related to gender and ethnicity within this triangle. They confirm the fact that institutions matter and that they influence not only the level of development but also inequality in development outcomes. The essays also show that talking about institutions in general is less useful if policy implications should be drawn. Instead one should distinguish between political and social institutions and differentiate within these types of institutions. Moreover, this dissertation contributes to a discussion about the mechanisms that relate different types of institutions with development outcomes and it highlights factors, which might influence the functioning of these mechanisms by interacting with institutions in the production of development outcomes or which might be intermittent. Concerning democracy no robust pattern about interacting factors in the production of development outcomes has been found. With regards to social institutions a first step towards identifying possible mechanisms is taken and relationships are investigated. Furthermore, learning processes or policies, which change incentive structures are considered as possibilities to change these institutions. Concerning differences in health outcomes across ethnic groups in Bolivia it can be argued that these differences are due to latent institutions that distribute power across ethnic lines. However, it is shown that variables like mother’s education or health knowledge let the effect of ethnic origin vanish and further investigations could focus on their role as intermittent variables having the potential to counteract the effect of institutions.