Jhonatan Clausen*, Silvana Vargas† and Nicolas Barrantes*

Abstract

This article analyses the design process of official multidimensional poverty measures in Colombia, Chile, El Salvador and Mexico, and discusses the extent to which such processes have been able to reflect the priorities of people living in poverty. We argue that although these countries have faced limitations in conducting a "pure participatory-driven" strategy, they have advanced towards measuring poverty in a way that better reflects what disadvantaged people consider to be an impoverished life. We propose guidelines to continue improving the design of official multidimensional poverty measures and make them more open to information on what people value and more sensitive to public reasoning.

Keywords: Multidimensional poverty, capability approach, social policy, Latin America.

Resumen

Este artículo analiza los procesos de diseño de medidas oficiales de pobreza multidimensional en Colombia, Chile, El Salvador y México, y discute en qué medida dichos procesos han sido capaces de reflejar las prioridades de las personas en situación de pobreza. Sostenemos que, si bien dichos países han enfrentado limitaciones para implementar "estrategias participativas puras", han progresado hacia una medición de pobreza que refleja mejor lo que las personas en situación de desventaja consideran una vida empobrecida. Además, proponemos elementos para mejorar el diseño de dichas medidas y hacerlas más abiertas a lo que las personas valoran y más sensibles al razonamiento público.

Palabras clave: Pobreza multidimensional, enfoque de las capacidades, política social, América Latina.

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I. Introduction

The establishment of the first United Nations Sustainable Development Goal (SDG), to end poverty in all its forms, represents a significant accomplishment for the multidimensional poverty approaches, which advocate for a broadened framework to understand and reduce human deprivations. Although there is a growing consensus that poverty is multidimensional (Atkinson 2003), the debate regarding the appropriate methods both to identify its dimensions and develop sound multidimensional poverty measurements remains ongoing. This has repercussions for the way in which the poverty reduction SDG will be translated into targets and indicators. Without giving a homogeneous definition of multidimensional poverty, SDG target 1.2 aims to "reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions" (UN 2015, 12). In consequence, it is now the responsibility of each country to define the multiple forms of poverty that need to be tackled in order to accomplish the SDG poverty reduction goal.

The Latin American region (LA) has been particularly receptive to the adoption of multidimensional poverty measures as part of the process of implementing SDG target 1.2. To date, countries such as Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico and Panama have already selected dimensions, determined indicators of deprivation, and estimated official multidimensional poverty indexes (MPIs) based on different strategies (Zavaleta 2017; Zavaleta, Moreno, and Santos 2018).

Encouraging each country to discuss and define the set of deprivations to be considered as socially intolerable could provide a unique opportunity to place poverty reduction priorities and actions at the centre of public reasoning. However, despite its potential, it is important to acknowledge that the SDG framework does not automatically guarantee that decisions on poverty measurement and social policy design will be sensitive to the values and priorities of people in poverty. On the one hand, the policy process of defining the different forms of poverty and their measures could be implemented without any explicit reference to the values of people living in disadvantage; but on the other, even if this discussion is extended to the sphere of public scrutiny, the public reasoning process could fail to reflect the priorities of the people living in poverty, especially in a context of significant inequality and power imbalance (Deneulin and Clausen 2018).

This article has two main objectives. The first is to discuss the extent to which the decision-making process behind the development of official multidimensional poverty measurement systems in LA has been able to include the priorities of people living in poverty. In particular, this article focuses on four countries in the region that have employed highly heterogeneous decision-making processes: Colombia, Chile, Mexico, and El Salvador. Based on this analysis, the second objective is to provide guidelines for more inclusive processes for designing both multidimensional poverty measurement systems and multidimensional poverty reduction strategies.

The text is organised as follows: Section II presents a brief overview of the methodological approaches in the literature regarding the steps for developing a multidimensional poverty measure and points to some practical limitations to implementing such measures in a policy-making context. Section III describes and critically analyses the processes behind the design and implementation of official national multidimensional poverty measurement systems in Colombia, Chile, El Salvador, and Mexico. Section IV proposes some guidelines to increase the inclusiveness of the official multidimensional poverty systems in LA. Finally, Section V discusses the main findings of the research and concludes.

II. Multidimensional poverty: Methodological possibilities and practical limitations

Developing an official multidimensional poverty measure is a process with a range of normative components. As such, it requires making a minimum set of decisions: selecting dimensions, determining indicators to reflect such dimensions, setting a deprivation criterion for each indicator, and deciding whether or not to combine dimensions and indicators into a single index. Additionally, if the decision made is to develop a single multidimensional poverty index, it is also necessary to set weights for each dimension/indicator and to provide a criterion to identify when a person is considered to live in multidimensional poverty. Since most LA countries that have implemented official multidimensional poverty measurement systems have adopted synthetic measures –instead of a "dashboard" of separated dimensional indicators–in this section we will focus on three sets of decisions: selecting dimensions, assigning dimensional weights, and establishing multidimensional poverty thresholds.

The first set of decisions is related to selecting the dimensions of poverty. Even though there is no consensus about how researchers should decide on the relevant dimensions (Grusky and Kanbur 2006), in the literature on the capability approach and multidimensional poverty it has become standard practice to reference the list of criteria identified by Alkire (2007a) and re-adjusted in Alkire et al. (2015). According to the latter, apart from the criterion of feasibility with regard to data availability, there are at least three main approaches to selecting poverty dimensions: ongoing participatory and deliberative exercises in which the participants identify and discuss the elements that constitute a "good life" or "wellbeing"; enduring consensus expressed in international agreements such as the Universal Declaration of Human Rights, the SDG agenda, the constitutional framework of each country, or their national development plans; and assumptions based on theories of justice or conceptual frameworks of wellbeing and the human good.

A second set of decisions to be made concerns the definition of dimensional weights. As is the case with the selection of dimensions, there is an ongoing academic debate regarding this issue. Decancq and Lugo (2008) provide a broad overview of different approaches to setting weights, which includes the following: giving equal weight to each dimension, either because all of them are considered to have the same

importance or because there is no information that would justify a different set of weights; assigning weights according to normative choices based on case-study or survey information on how people value or rank each dimension compared to others; and setting weights following a number of "data-driven" approaches.

Finally, a third set of decisions involves setting a multidimensional poverty threshold or cut-off to identify who is considered to live in multidimensional poverty. On the one hand, the so-called union approach entails identifying a person as multidimensionally poor if she is deprived in at least one indicator; whereas on the other, the intersection approach considers a person as multidimensionally poor if she is deprived across all the included indicators. However, both the union and the intersection approaches correspond to extreme positions that could lead to misleading results. While the former poses a risk of overestimating poverty due to potential measurement errors contained in the surveys, the latter could underestimate poverty levels by setting a threshold that might be relevant only for a very small section of the population. In practice, most policy applications have situated the poverty threshold in an intermediate position between these two extremes.

Considering the multiple theoretical and academic possibilities reviewed, how can the capability approach help to design official multidimensional poverty systems? One of the key features of a capability-based framework is the emphasis it gives to the role of public reasoning as a guide for decision-making processes regarding social issues (Deneulin and Clausen 2018). Therefore, a first and straightforward answer to this question could be to take to the public deliberation sphere the multiple decisions that designing a multidimensional poverty measure involves.

The capability approach literature has extensively highlighted the way in which democratic deliberation could shed light on the dimension-choosing process. For instance, Drèze and Sen (2013) claim that this reasoning process helps spheres of public action to understand and address deprivations in dimensions that people value. Similarly, Deneulin (2005) points out that given the vast range of valuable dimensions, public reasoning "plays a crucial role in specifying and choosing the capabilities that are worthwhile to be promoted" (2005: 1). Moreover, democratic processes could be useful not only in selecting dimensions, but also in informing and legitimising normative decisions on dimensional weights, the trade-offs between different capabilities and functionings, among others (Robeyns 2003; Crocker and Robeyns 2009).

Despite being theoretically appealing, it remains unclear how public reasoning can specifically inform real-life policy challenges such as designing an official multidimensional poverty system. Based on our review, it could be argued that the best way to proceed would be to choose dimensions based on participatory deliberative processes, assigning weights based on information on how people rank these dimensions, and setting a poverty threshold that reflects the societal view of what constitutes an intolerable situation of deprivation. However, these ways of proceeding are not without limitations and criticisms.

From a policy-making perspective, it seems unfeasible for lower-middle-income countries to conduct costly large-scale participatory exercises on a regular basis. Therefore, a commonly applied alternative is to carry out qualitative research using small samples that, although useful and informative, are not necessarily representative of the general population. Moreover, even if it were possible to collect information at a large-scale, authors such as Alkire (2007a) have warned about the possibility of under-representing the voices of the most disadvantaged when such discussions are dominated by local elites, and about introducing distortions when researchers aggregate the information, especially in the presence of conflicting opinions.

Large-scale participatory exercises such as "Voices of the Poor" (Narayan et al. 2000) are normally referred to as authoritative sources of information. Nevertheless, there is still debate on whether certain kinds of analysis based on participatory data can be sensitive to multiple and heterogeneous views of "wellbeing" and its constituent dimensions among different groups (White and Pettit 2007). In addition, relying on survey information on how people rank dimensions does not seem a feasible alternative either, since such data is mostly scarce in the region. Besides, it is unclear whether it would be possible to collect high-quality information regarding such a complex judgment, given the logistical limitations of a survey.

As we show in the next section, official multidimensional poverty measures in the region have been designed using eclectic approaches that reflect combinations of some of the aforementioned criteria. This also includes choosing dimensions in reference to previous applications, as well as dialogue with "experts": academics, mid-level policy makers, and representatives of international development organizations. But even though such processes have, in some cases, been partially informed by small participatory exercises, it would not be accurate to claim that they have been developed based on a "participatory-driven" approach.

Having acknowledged this, it is important to emphasise that conducting a "pure" participatory process is not necessarily the only option to reflect both the public reasoning process and what constitutes the priorities of people in poverty. Given both the limitations of participatory approaches and the challenges for public reasoning in highly unequal Latin American societies, conducting an "ideal" deliberative process to identify and reduce multidimensional poverty seems unfeasible. Thus, instead of considering participation as a binary category, a much more fertile and realistic perspective would be to recognize that the design of a multidimensional poverty measure could reflect different degrees of deliberation and participation which, in turn, could be reached using multiple approaches. The analysis presented in the next section adopts this non-binary perspective. Therefore, we explore each system according to its potential to improve and broaden the way poverty is understood and measured while acknowledging the practical impossibility of providing a "pure" representation thereof.

III. Official national multidimensional poverty measurement systems in LA

The normative claim of the capability approach is that public reasoning represents the most relevant source of information to guide normative decisions when assessing multidimensional poverty (Alkire 2002; 2007a). In practice, given a range of conceptual, operational, and institutional constraints, governments have followed highly heterogeneous strategies to include such kind of information as part of the multidimensional poverty measure design process. LA countries have been particularly receptive to the adoption of multidimensional measures based on the Alkire-Foster method (Alkire and Foster 2011). The Multidimensional Poverty Peer Network (MPPN) reports on its website that nine out of the fifteen countries that have adopted MPIs in the world to date are from LA: Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico and Panama. This policy trend seems to be associated with the efforts made by the Oxford Poverty and Human Development Initiative (OPHI) and the MPPN, as well as to the widespread tradition among LA countries of estimating unsatisfied basic needs (UBN) indicators (Alkire et al. 2015). However, even though most of these countries have adopted national MPIs based on the same estimation method, their implementation processes have been highly diverse.

In this section, we analyse this heterogeneity focusing on four LA countries: Colombia, Chile, Mexico, and El Salvador. Zavaleta (2017) states that governments, among other actors in these countries, use different sources of information to make normative decisions regarding multidimensional poverty measurement. Therefore, we explore different mechanisms implemented, as well as some institutional changes related to national poverty reduction strategies in these countries. Our analysis is based on an in-depth review of official government documents. We acknowledge that these sources of information may be limited since they do not necessarily reflect all the relevant aspects behind the decision-making processes. However, since our interest is focused on exploring the extent to which the official multidimensional poverty systems are open to public reasoning and reflect the priorities of people living in deprivation, we have decided to delimit our sources of information to documents that are available to the general public.

Colombia

The multidimensional poverty system implementation process in Colombia has been extensively documented by Angulo, Díaz, and Pardo (2011) and Angulo (2016). In 2011, the Colombian government launched both an official MPI and a new income poverty measure. The MPI was developed by a committee of experts from the National Planning Department (NPD) which is the public institution in charge of targeting, monitoring and evaluating social policies in the country. The design process of the MPI was carried out following the policy priorities included in Colombia's National Development Plan (NDP) which was also developed by the NPD. (Angulo, Díaz, and Pardo 2011). The committee worked together with a group of experts and policy makers from other national ministries, as well as with researchers from OPHI who provided technical advice (Angulo 2016).

Table 1. Sources of information used for selecting poverty dimensions by country

Country	Participatory exercises	Enduring consensus	Theories and frameworks	Review of other indexes	Experts' dialogue	Data
Colombia	"Voices of the Poor in Colombia" (Arboleda, Petesch, and Blackburn 2004)	- Constitution of Colombia - NPD social policy priorities - Sectorial policy priorities - Millennium Development Goals	Not explicitly mentioned	- Other indicators (e.g. HDI, ECLAC Index of Social Cohesion, World Bank Human Opportunity Index) Previous indexes in Colombia (UBN, Living Conditions Index, Social Expenditure Targeting Index).	Yes	- Living Standards Measurement Surveys - National Administrative Department of Statistics
Chile ^b	"Voices of Poverty" (FSP 2010)	Not explicitly mentioned	Not explicitly mentioned	Not explicitly mentioned	Yes	- National Socioeconomic Characterization Survey - Ministry of Social Development
Mexico ^c	Not explicitly mentioned	- Constitution of Mexico - General Law on Social Development	- Economic welfare approach - Human rights approach - Territorial approach	Not explicitly mentioned	Yes	- National Household Income and Expenditure Survey - National Institute of Statistics and Geography
EI Salvador ^d	"Poverty in El Salvador: From the view of its protagonists" (UNDP 2014)	- Law on Development and Social Protection - Five-year Development Plan	- Human rights approach - Human development and capabilities approach - Buen vivir	Official MPIs of Mexico, Chile and Colombia; Global MPI (UNDP and OPHI)	Yes	- Multi-Purpose Household Survey - General Directorate of Statistics and Censuses - Ministry of Economy

 ^a Source: Angulo, Díaz, and Pardo (2011)
 ^b Source: Comisión para la Medición de la Pobreza (2014)
 ^c Source: CONEVAL (2010)
 ^d Source: STPP and MINEC- DIGESTYC (2015).

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The measure that was finally introduced by the NPD includes five dimensions which were selected by the committee following a multi-criteria approach based on different sources of information. These include participatory exercises, official documents that reflect enduring consensus, review of other official poverty measures, and data availability (see Table 1). Specifically, the five chosen dimensions were: household education conditions, childhood and youth conditions, employment, health, and public domestic utilities and housing conditions (see Table 2). Then, these five dimensions were operationalised using 15 indicators that were estimated using data from the Living Standards Measurement Survey (LSMS). All these indicators were used to estimate an MPI following the Alkire-Foster method.

The decision made by the committee was to give equal weight (20%) to each dimension relying on "expert consensus", while the poverty threshold was set at 1/3 of the weighted deprivation. This latter decision was justified based on the fact that the average number of deprivations experienced by the households included in the LSMS who self-identified as living in poverty were 5.2 deprivations out of 15. This approach to set multidimensional poverty thresholds based on statistical information about subjective poverty contrast with some of the other case studies included in this article in which the criteria used to justify the choice of the poverty threshold is less clear.

Table 2. Poverty dimensions selected by country

Colombia ^a	Chile ^b	Mexico ^c	El Salvador ^d
Household education conditions	Education	Economic welfare	Education
Childhood and youth conditions (includes education, health, nutrition and child labour)	Health	Education	Housing conditions
Employment	Employment and social protection	Health	Employment and social protection
Health	Housing and environment	Social protection	Health, basic utilities and food security
Basic domestic utilities and housing conditions	Networks and social cohesion	Access to food	Habitat quality (includes public spaces for recreation, crime, security, and environmental damages and risks)
		Housing quality and spaces	
		Basic domestic utilities	

^a Source: Angulo, Díaz, and Pardo (2011)

Despite the breadth of information included in the decision-making process described above, there is some evidence to suggest that the chosen dimensions did not include the whole range of dimensions relevant to people in poverty in Colombia. For instance, participatory research conducted by Arboleda, Petesch, and Blackburn (2004) published by the World Bank showed that violence and insecurity were important deprivations for

^b Source: MDS (2016)

^c Source: CONEVAL (2010)

^d Source: STPP and MINEC- DIGESTYC (2015)

people living in poverty in Colombia. However, this dimension was not included in the original Colombian MPI released on 2011 nor in the MPI estimations for 2017 (DANE 2017) and it is not clear whether such dimensions will be incorporated into the MPI in the future. Inasmuch as the LSMS do include questions on insecurity and violence since at least 1997 (DANE 2018), excluding this information from the MPI could illustrate a situation in which the "voices of the poor" were only partially "heard".

From a public policy perspective, the Colombian MPI has had an important role in shaping governmental poverty reduction strategies. Its contribution to national social policy could be summarised in the following four aspects: (i) the MPI is one of the four strategic indicators of the Poverty and Inequality Dashboard used by the National Roundtable to Reduce Poverty and Inequality to monitor public policy and programme achievements; (ii) the MPI is used for geographical targeting the conditional cash transfer programme Más Familias en Acción, as well as for assessing and implementing regional development plans; (iii) the MPI is used as a "graduation" criterion in Unidos, a safety net aimed to overcome extreme poverty; (iv) the indicators that compose the MPI are used to identify the most recurrent patterns of deprivation that people in poverty experience, in order to inform the actions of the Department for Social Prosperity (DPS), which is the public institution in charge of designing and implementing social policies in Colombia (Angulo 2016).

Chile

In 2015 the Chilean Ministry of Social Development released an official MPI, along with a new monetary poverty measure. The MPI was intended to address poverty from a broader perspective and reflects deprivations in multiple aspects of wellbeing beyond consumption (Comisión para la Medición de la Pobreza 2014; MDS 2015). An expert committee appointed by President Piñera was in charge of developing a first design proposal for the MPI. The proposal was the result of technical work and debate among the members of the committee and other external participants such as politicians from different political parties, policy makers, members of NGOs, Chilean scholars, and international specialists including OPHI researchers (Comisión para la Medición de la Pobreza 2014).

The dimensions included in the first MPI proposal were chosen by the committee following three "normative considerations". First, they should reflect constitutive elements of wellbeing. Second, they should not be subjective dimensions of wellbeing, since information on these dimensions could be affected by individual preferences on matters that are not necessarily targeted by public policy. Third, they should reflect aspects of quality of life that do not directly depend on market consumption (Comisión para la Medición de la Pobreza 2014). Apart from the aforementioned normative considerations, the committee justified the dimensions included in the MPI making reference to participatory studies such as "Voices of poverty" (FPS 2010), international expert opinions on poverty measurement (Rio Group 2006), and data availability (see Table 1). In total, this first MPI proposal included five equally weighed (20%) dimensions: education, health, employment and social protection, housing, and environment and networks. Thereafter, the committee's proposal was revised by the Interinstitutional Technical Roundtable composed of the Ministry of Social Development and the National Institute of Statistics, and advised by the Economic Commission for Latin America and the Caribbean (ECLAC) (MDS 2015). The official MPI estimated following the Alkire-Foster method was launched to the public in 2015 including only the

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first four dimensions selected by the committee. All these four dimensions were given equal weight (25%) and were operationalised using 12 indicators estimated using data from the National Socioeconomic Characterization Survey. While the expert committee first recommended setting a poverty threshold of 1/3, the released version of the MPI set a threshold of 25% because this was found easier to communicate to the general public.

In 2016, the Chilean MPI was redesigned. This second version included a fifth dimension of "networks and social cohesion" (see Table 2) which resembles the dimension of "environment and networks" included in the first proposal of the expert committee. Also, the housing dimension was modified to reflect information on "housing and environment". This new MPI is composed of 15 indicators and exhibits a new weight structure which assigns equal weights to the four original dimensions (22.5%), whereas the weight given to the "networks and social cohesion" dimension is 10% in order to preserve the stability of the poverty estimates. The poverty threshold was also modified and set at 22.5% (MDS 2016).

The Chilean MPI represents an interesting case since it was the first official multidimensional poverty indicator that included information on deprivations related to lack of social connectedness. Although this dimension usually emerges as a domain valued by people in poverty in participatory studies, it is usually absent from official household surveys and, in consequence, from poverty measures (Zavaleta, Samuel, and Mills 2014). Nevertheless, the measurement design process in Chile also shows tensions between the expert's opinion and the views of people living in poverty. For example, even though the participatory study of "Voices of poverty" (FPS 2010) showed that deprivations in psychological wellbeing were of relevance to the population living in poverty in Chile, the committee did not include them in the MPI given the aforementioned normative considerations.

The role of the official MPI on national poverty reduction policies in Chile is threefold (MDS 2017). First, the indicators included in the MPI have also been incorporated into a "wellbeing matrix" used by the Ministry of Social Development to monitor the policy achievements of the Subsistema de Seguridades y Oportunidades, which is a component of the Chilean Intersectoral Social Protection System. Second, the information provided by the MPI estimates allows the government to identify groups of the population that need to be given with preferential access to social policies. Third, information on multidimensional poverty is used to inform the policy design of social interventions targeted to specific territories at the subnational level.

Mexico

In 2004 the Mexican Congress passed the General Law of Social Development (GLSD), which aims to guarantee the full exercise of the constitutional social rights of all Mexicans (Diario Oficial de la Federación 2004). This law created the National Council for the Evaluation of Social Development Policy (CONEVAL) which is the institution in charge of both monitoring social development policies and measuring poverty across multiple dimensions and indicators in the country. As a result, Mexico became the first country in the world to adopt an official multidimensional poverty measure, which was launched by the government in 2010 (CONEVAL 2010; 2018).

The design of the official measure was the responsibility of an expert committee appointed by CONEVAL. This commission developed a set of five conceptual and

methodological proposals for the official multidimensional poverty measurement. Such proposals were discussed in a number of national and international seminars with participants from other governmental and private institutions, as well as with academics and international organizations including OPHI and ECLAC. The final design was significantly influenced by the GLSD and the selected dimensions were justified making reference to the Mexican Constitution as well as other widely accepted conceptual frameworks such as the human rights approach (CONEVAL 2010) (see Table 1). Specifically, CONEVAL opted for a multidimensional poverty perspective with two main evaluative spaces. First, the space of economic welfare, operationalized through an indicator of income poverty. Second, the non-monetary social rights space including six dimensions: education, health, social protection, access to food, housing quality and spaces, and basic domestic utilities (see Table 2). The official poverty estimates use data from the National Household Income and Expenditure Survey which contains information on monetary and non-monetary indicators. Unlike most countries in the region, the multidimensional poverty headcount in Mexico is not explicitly based on the identification and aggregation method of Alkire and Foster. According to the official measure, a person is considered to live in multidimensional poverty if she is deprived in income poverty and suffers deprivation in at least one non-monetary indicator. Besides, CONEVAL estimates an MPI following the Alkire-Foster method using only the non-monetary indicators related to the domain of social rights. However, this latter measure is basically aimed to reflect the intensity of multidimensional poverty but not primarily the poverty incidence (CONEVAL 2018).

As part of the design process of the official measure, the committee decided to include a dimension of "social cohesion". Nevertheless, it was not included in the poverty identification strategy at the individual level arguing that there is not consensus on whether it represents a constitutive dimension of wellbeing. Hence, CONEVAL decided to assess this dimension not at the individual but at the territorial level.

Mexico was a global pioneer in implementing an official multidimensional poverty measurement system. As we have shown, its approach to justifying the set of normative decisions that were made regarding the poverty measure relied heavily on consensus reflected in legal frameworks. However, the explicit references to other forms of public discussion or bottom-up participation are mostly scarce. Nevertheless, despite its potential limitations, the Mexican multidimensional poverty measure has had a significant influence on the National Strategy of Inclusion (SEDESOL 2016), which aims to organize social policy so as to guarantee the constitutional social rights of all Mexicans. For example, governmental social interventions are organised around the poverty domains set by the official measure. Moreover, multidimensional poverty estimates are used for targeting social programmes and monitoring social policy achievements.

El Salvador

The official Salvadorian MPI was released by the Technical and Planning Secretariat of the Presidency (TPSP) in 2015. The first MPI proposal was developed by the Multidimensional Poverty Advisory Board, a group of national experts on poverty affairs. Thereafter, the proposal was revised by the Technical Advice Authority, a commission composed not only of academics but also representatives of governmental institutions, opinion leaders, and think-tanks researchers. (STPP and MINEC-DIGESTYC 2015) Besides, the whole process was closely advised by United Nations Development Program (UNDP).

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The dimensions included in the MPI designed by the Multidimensional Poverty Advisory Board and ratified by the Technical and Planning Secretariat were justified following a broad approach. A first source of justification was the Law on Development and Social Protection which was unanimously approved by Congress (Asamblea Legislativa de El Salvador 2014). Based on the human rights, capability, and *buen vivir*¹ approaches, this law redefines poverty and stipulates that it should be measured taking into account at least the following dimensions: income, access to food, education, health, employment, social protection, housing, and basic services. The Secretariat also took into account other sources of information, such as participatory exercises with people living in poverty, documents that reflect enduring consensus, theoretical approaches and frameworks, review of other official MPIs, dialogue with experts, and data availability (see Table 1). As a result, the official measure includes five dimensions: education, housing conditions, employment and social protection, health, basic services and food security, and habitat quality (see Table 2).

In particular, the dimension selection process was focused on the perspective of the disadvantaged groups through a participatory field exercise (UNDP 2014). This involved conducting 23 focus groups in different regions of El Salvador in which participants were asked open-ended questions on what poverty meant to them, the dimensions that comprise poverty and the strategies they apply to overcome it. This fieldwork was carried out by the UNDP and the NGO Techo, with the support of the Technical and Planning Secretariat (Moreno 2016). The data from the fieldwork research was explored using discourse analysis. Insecurity, overcrowding, lack of public spaces for leisure, unemployment or precarious work, lack of access to health services, and educational deficiencies emerged as relevant deprivations for population living in poverty. Using this information, a team of the Technical and Planning Secretariat and the National Institute of Statistics and UNDP, with advice from OPHI, designed a number of questions to be included in a national household survey. Based on this survey, the team proposed a set of 48 indicators from which 20 were finally used to operationalize the five aforementioned dimensions. The MPI was estimated using the Alkire-Foster method. Since all the five dimensions were related to social rights, the Multidimensional Poverty Advisory Board decided to set equal dimensional weights (20%), whereas the multidimensional poverty threshold was set at 35% in line with international standards (STPP and MINEC-DIGESTYC 2015) although the official multidimensional reports poverty also shows estimates using higher poverty thresholds.

The design process of the Salvadoran MPI emerges as a remarkable case study since it took advantage of a wide range of sources of information. Even though the discussion was framed by government priorities established by the Law on Development and Social Protection and the dimensions set forth in the Five-year National Development Plan, the process was open to other source of information that provided relevant insights for the final design of the MPI. For instance, based on the results from the participatory exercise both the Multidimensional Poverty Advisory Board and the Technical and Planning Secretariat agreed to include the quality of habitat as an additional novel domain which

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¹ "Buen vivir denotes, organizes, and constructs a system of knowledge and living based on the communion of humans and nature and on the spatial-temporal-harmonious totality of existence" (Walsh 2010, 18). This approach arose in Latin American countries and its "early formulations (...) emerged in reaction to classical development strategies, either due to its negative social or environmental impacts, or the debatable economic effects" (Gudynas 2011, 442).

was operationalized through a set of indicators related to absence of public spaces, incidence of crime, climate of insecurity, and exposure to environmental risks and damages (STPP and MINEC-DIGESTYC 2015). This last element corresponds to an interesting innovation in poverty measurement in the region.

From a public policy perspective, El Salvador recognises the importance of measuring both monetary and multidimensional poverty. (STPP and MINEC-DIGESTYC 2015). According to the Law on Development and Social Protection the MPI's major contribution is to "identify the strongest deprivations in the population and offer the necessary information for the design of concrete and effective policies that eradicate the causes of poverty and eliminate its patterns of intergenerational transmission" (Asamblea Legislativa de El Salvador 2014, 11, own translation). Moreover, according to the Protection and Social Inclusion Plan (STPP 2014) -which is part of the National Development Plan- the MPI is both a source of information for monitoring the effectiveness of public policies oriented to poverty eradication as well as an instrument for targeting social programs and designing new social policy interventions.

IV. Towards more inclusive multidimensional poverty measurement systems

Based on the four cases analysed above, in this section we propose three areas in which official multidimensional poverty systems could enhance their openness to public reasoning given the policy and logistical constraints that lower-middle-income countries in LA face. These areas correspond to: enriching the data sources used to estimate multidimensional poverty, developing complementary multidimensional poverty measures from a territorial perspective, and exploring synergies with the private sector.

Lack of relevant data is one of the limitations that governments face to design multidimensional poverty measures (Alkire 2007b). Even though most LA countries regularly conduct different kind of surveys that are representative at the national and subnational levels, the range of topics they cover tends to be limited. Enriching the range of topics covered by official national surveys can allow governments to include information on deprivations that are relevant to the people living in poverty but that are mostly absent from multidimensional poverty measures. Chile and El Salvador emerge here as interesting examples on how broadening the evaluative space can better reflect the priorities of people living in disadvantage. Moreover, the kind of information that might be included in this kind of surveys does not need to be limited to new dimensions but can include questions regarding how people rank the different dimensions of their wellbeing and whether they consider themselves to live in poverty. Such information can enlighten the process of setting dimensional weights and poverty thresholds, which corresponds to areas in which the official measures design is often accused of being arbitrary. Since including new modules in a survey can be expensive, participatory and local pilot studies could inform the selection of thematic areas in which data collection would need to be prioritized.

Consolidating territorial-based approaches to assessing local priorities could complement the poverty analysis at the national level. Besides, this approach can enhance the ongoing nature that participatory processes should exhibit (Alkire et al. 2015). The way in which a subnational territorial-based approach can contribute to poverty measurement and reduction is threefold: First, as we mentioned above, it could help to make visible deprivations that are particularly relevant for specific contexts –due to geographical,

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historical or cultural reasons- but that are often not included in poverty measurement at the national level. Second, setting multidimensional poverty reduction goals at the subnational level can provide incentives to local governments to target their policy interventions toward aspects that do not reflect national priorities yet represent important deprivations for local communities. Third, a territorial approach can contribute to making visible deprivations that are relevant for specific groups of the population that are normally "left behind" such as the elderly, the rural populations, the LGTB+ people, people with disabilities, among other potentially vulnerable groups.

The cases reviewed in this article show that the role of the private sector in the multidimensional poverty measurement design has been limited. However, the case of Costa Rica can provide promising insights on how the private sector can contribute to enriching the design process. In 2004 this country established an alliance between the government, OPHI and Asociación Horizonte Positivo (a group of 51 private companies) to design an official MPI (MPPN 2017). Besides, Costa Rica is the first country in which a Business MPI was launched. This latter measure was developed by OPHI and Asociación Horizonte Positivo as a tool for assessing the living conditions of private companies' employees and their families (see https://www.horizontepositivo.org/ipmesitiodeayuda/). The pragmatic outcome-based public-private collaborative strategy followed by Costa Rica allowed the government to align official MPI results with budget allocation-related decisions, as well as with a dashboard of indicators to monitor budget performance. Nevertheless, this represents a unique case that should be taken with caution since the discussion process that led to the MPI final design was mainly promoted and carried out by the private sector, senior policy makers and a group of academics (INEC 2015), while references to other broader ways of public participation and legitimation were mostly limited. Despite this potential shortcoming, the case of Costa Rica suggests that other LA countries might explore different schemes of multi-actor collaboration actively involving the private sector.

V. Discussion and concluding remarks

The SDGs agenda and its claim to recognise, measure, and reduce different forms of poverty have paved the way to mainstreaming the implementation of official national multidimensional poverty measurement systems in lower-middle-income countries. As part of this project and acknowledging the ongoing debate regarding specific elements of the design of multidimensional poverty measures, the UN has encouraged each country to define what they consider to be relevant forms of poverty. LA countries have been particularly receptive to this call, and many of them have designed and implemented official multidimensional poverty measures following different policy-making processes.

Identifying the extent to which such heterogeneous processes have actually reflected public reasoning and, in particular, the priorities of people living in deprivation, is not a mere formality. As we have discussed, it is important to acknowledge that conducting participatory processes is not the only way in which public deliberation can inform the design of an official multidimensional poverty measurement system. Just as Sen (2017) introduced the possibility of referring to "better" and "worse" public reasoning, we propose a non-binary approach to studying how policy design reflects public reasoning. Hence, instead of talking about systems that are capable or incapable of reflecting public reasoning, it would be better to recognise that different multidimensional measurement

designs could be permeated by different degrees of public reasoning through a range of mechanisms.

Many of the countries under analysis have heavily based their decision-making process on development plans or legislation –with greater or lesser degrees of public legitimacy—and most of them have relied on consultation processes with experts, academics, and multilateral organisations. Therefore, it seems reasonable to claim that most official multidimensional measurement designs have been developed in a "deliberative spirit" even if in some cases there have been limitations in designing effective mechanisms to explicitly include the voice of a broader range of population groups. Nevertheless, despite such limitations, it would not be accurate to consider such processes as blind to the priorities of the disadvantaged or as sets of decisions made behind closed doors.

The degree of openness to public reasoning in these systems can also be traced to some of their apparent shortcomings. From a methodological point of view, some of the measures developed could be considered as extremely unsophisticated since they do not include many of the richer procedures -proposed in the specialised literature and reviewed above- in setting dimensional weights or poverty thresholds. Considering the composition of many of the technical commissions in charge of the design process, it is difficult to believe that this outcome is due to a lack of technical capacity or knowledge of more sophisticated techniques. Rather, it seems that some governments have prioritised simple measures because they are easier to communicate to a broader audience. Examples include the use of equal dimensional weights and easy-to-interpret poverty thresholds as in the Chilean case. Although the potential trade-off between accuracy and communicability is still subject to debate, it is evident that establishing measures that are understandable to the general public helps to ensure that official multidimensional poverty systems are more open to public scrutiny. Nevertheless, it is also important to emphasise that this feature does not necessarily make these systems sensitive to the priorities of people living in deprivation, since understanding a poverty measure is a necessary but not a sufficient condition for modifying it.

Based on our analysis and discussion, it is evident that there are many arguments to support the claim that the process of designing and implementing multidimensional official national poverty measures inspired by the SDG agenda has been successful in partially reflecting some of the elements that disadvantaged people prioritise. This has been no more evident than in the broadening of the informational space beyond income considerations to include a core of basic non-monetary dimensions with which to understand and measure poverty. Despite the heterogeneity in the strategies followed and the lack of broad participatory exercises, the selected dimensions tend to be reasonably consistent with the available evidence regarding what people living in poverty in the region consider as important elements of their wellbeing. Moreover, Zavaleta (2017) shows there seems to be a core set of dimensions widely accepted in LA countries as constitutive of poverty and wellbeing (i.e., education, health, employment, social protection, housing conditions, and basic services) that match the findings of previous participatory studies at the international, regional or national levels (Narayan et al. 2000; UNDP 2016; Arboleda, Petesch, and Blackburn 2004; FSP 2010; UNDP 2014).

That said, it is also important to recognise that such processes have fallen short of including all available and relevant information about the priorities of people living in deprivation. For instance, even when security in Colombia, and psychological wellbeing in Chile, emerged as important dimensions in the participatory exercises, they were not

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included in the official measures. In particular, the Chilean case is an example of how the judgement of experts could collide with the "voice" of people living in poverty, since subjective and psychological dimensions were not included due to the normative considerations followed by the technical committees. Moreover, with the exception of the Colombian case, which relies on survey information to guide the setting of the poverty cut-off, most governments have not included information on the priorities of people living in poverty when defining dimensional weights and establishing a multidimensional poverty threshold.

Finally, a relevant question that emerges from this analysis is how to value the contribution of the SDGs to eradicating poverty, as understood from the perspective of impoverished people. Just as the capability approach provides us with the criteria to assess the potential for the SDGs to improve the way poverty is measured, it also gives us a normative framework to value the progress made on the implementation of this agenda. Following the non-idealistic view of social justice proposed by Sen (2009), it is clear that even though we are still a long way from perfectly reflecting all the priorities of people living in deprivation, the new SDG-inspired institutional framework is a powerful tool for reducing injustice and is an improvement on the previous income poverty framework. Therefore, given the core of non-market dimensions that this new and more comprehensive framework includes, it is clear that reducing poverty in LA will involve much more than increasing the income of people living in deprivation.

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