Inclusive Economy Indicators

Framework & Indicator Recommendations

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TABLE OF CONTENTS

INTRODUCTION	3
EVOLUTION OF CONCEPTUAL FRAMEWORKS	4
An Emerging Framework: Inclusive Economies	6
EXISTING EFFORTS TO MEASURE INCLUSIVE ECONOMIES	8
Theories of Change	8
Process of Indicator Development	9
Indicators of Outcome versus Process	10
INCLUSIVE ECONOMY: INDICATOR RECOMMENDATIONS	12
Integrated Framework: 5 Broad Characteristics, 15 Sub-categories, 57 Indicators	12
EQUITABLE	14
A. Upward Mobility for More People	14
B. Inequality is declining	15
C. Equal access to public goods and ecosystem services	16
PARTICIPATORY	18
D. People are able to access and participate in markets as workers, consumers, and business owners	18
E. Market transparency and information symmetry	19
F. Widespread technology infrastructure for the betterment of all	19
GROWING	20
G. Increasing good job and work opportunity	20
H. Improving material well-being	21
I. Economic transformation for the betterment of all	22
SUSTAINABLE	22
J. Social and economic well-being is increasingly sustained over time	22
K. Greater investments in environmental health and reduced natural resource usage	23
L. Decision-making processes incorporate long-term costs	24
STABLE	25
M. Public and private confidence in the future and ability to predict outcome of economic decisions	25
N. Members of society are able to invest in their future	25
O. Economic resilience to shocks and stresses	26
MEASURING INCLUSIVITY, PROMOTING CONVERSATIONS	28
CONCLUSION	30
REFERENCES	32
APPENDIX A: RECOMMENDED INDICATORS	34
APPENDIX B: INDICATOR INITIATIVES	46

INTRODUCTION

As part of its overall mission of promoting the well-being of humanity throughout the world, The Rockefeller Foundation has supported a specific goal of advancing *inclusive economies*. The framing of this goal is deliberate: the word inclusive stresses the need to overcome disadvantage while the choice of economies instead of growth suggests the need to consider all dimensions of economic life. Building on this multi-dimensional starting point, The Rockefeller Foundation defines an inclusive economy as one in which there is expanded opportunity for more broadly shared prosperity, especially for those facing the greatest barriers to advancing their well-being. In developing this understanding, the Foundation argues that inclusive economies have five broad characteristics: they are equitable, participatory, growing, sustainable and stable.

In an effort to advance the conceptualization of inclusive economies, our team¹ investigated methods for actually measuring inclusive economies along the five dimensions initially developed by The Rockefeller Foundation. Overall our work involved analyzing the landscape of existing approaches to measuring inclusive economies, with a two-fold perspective. First, we examined the actual indicators being used to measure inclusive economies and the conceptual frameworks that underpin these approaches. Second, we evaluated the processes by which the measurement efforts were developed and how they are being used to effectuate change. This process dimension is critical, since we have found in our work that it is important not just what we know about economies, but who we know it with and how that knowledge is developed and applied (Benner & Pastor, 2015).

This report provides a summary of our research and recommendations for indicators to measure inclusive economies. We begin by reviewing the evolution of the concept of an inclusive economy, which emerges from earlier interest in pro-poor growth and inclusive growth. This is followed by a review of existing indicator initiatives around the globe that attempt to measure inclusive economies and related concepts. The bulk of the report then provides our specific recommendations for indicators. We close by discussing some of the broader issues that emerged from this research and related discussions with key stakeholders, particularly about the role of indicators shaping conversations, as well as actually measuring progress.

A few caveats are in order. First, this is not an effort to actually gather data on inclusive economies but rather to frame how it might be done and to suggest specific indicators. While other researchers, including a team at the Brookings Institution, provide some proof of concept in a specific case (metros in the U.S.)²; our effort is more proof of theory and practicality. Second, while the indicators are meant to apply at multiple levels, a particular constraint here was to make sure they were applicable across national boundaries. Finally, other researchers have rightly written long books on the meaning of equitable development (and other terms that parallel what we mean by inclusive economies); given the scale of this initial research project, our goal is to instead offer a memo which is short but, we hope, as inclusive as the economies we seek to help create and measure.

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See https://www.brookings.edu/blog/the-avenue/2016/05/12/measuring-inclusive-economies-in-metropolitan-america/

EVOLUTION OF CONCEPTUAL FRAMEWORKS

In recent years, there has been a growing recognition that increasing inequality is a significant threat to sustained economic growth. The idea that equity is good for the economy, however, used to be controversial. Indeed, conventional thinking tells us that there is a tradeoff between the two; intervening in the market might be appropriate for promoting social goals, according to this thinking, but there is an inevitable loss of efficiency (Okun, 1975). In the last decade or so, however, research has emerged from universities, think tanks, and even the International Monetary Fund and financial institutions like Standard and Poor's showing that inequality actually *hinders* growth (A. G. Berg & Ostry, 2011; Eberts, Erickcek, & Kleinhenz, 2006; Irwin, 2014). So how did this shift in thinking come about, and what was the path to getting there?

In the decades following World War II, what we now think of as "conventional" thinking about the relationship between equity and growth was established. In 1955, economist Simon Kuznets led the advancement of the idea that some level of inequality, at least initially, is necessary for economic growth--which, once triggered, follows a natural cycle of wealth accumulation at the top that eventually *trickles down* to lift up the poor. Using what we now call the "Kuznets curve"--which plots inequality related to stages of economic development on an inverted "U"--he theorized that in early stages of development, both per capita income and income inequality rise as certain sectors of the economy and population benefit from new forms of economic growth. At a certain point, however, inequality decreases as the benefits of this economic take-off are spread more broadly. From this, Kuznets and many others concluded that initial inequality is both a natural byproduct of growth as well as a necessary factor to *spur* growth.

For decades, this trade-off and trickle-down theory was considered conventional thinking. Beginning in the last few decades, researchers have challenged the idea of the Kuznet's curve both theoretically and empirically, with some noting that there is an almost complete lack of evidence to support the idea of the Kuznet curve (Piketty, 2014). As Kanbur (2000) explains in his review of post-war literature on income distribution and development, the large body of empirical evaluations testing the relationship between income distribution and income level does not validate Kuznets' hypothesis. In fact, in the post-war era, researchers found that in many developing countries, increasing inequality and poverty indeed accompanied growth, but the predicted "turning point" never came. In addition, Rafael Ranieri and Raquel Almeida Ramos' literature review highlights evidence examining developments in Hong Kong, Singapore, South Korea, and Taiwan during the 1970s, 80s, and 90s, debunking the idea that society must sacrifice equity for growth--as well as the idea that wealth will trickle down naturally from the rich to the poor over the course of increased development (Ranieri & Almeida Ramos, 2013).

From the critique of the trade-offs and trickle-down theory came two related schools of thought-one is called pro-poor growth, which focuses on lifting the poor out of poverty, while the other is called inclusive growth. The pro-poor growth perspective suggests that growth alone will not benefit the poor, so strategies to increase growth need to intentionally focus on reducing poverty³. But while researchers agree on the basic concept, there is little consensus on a standard definition of pro-poor growth or how to measure it. As Ranieri and Almeida Ramos point out, the crux of the debate is "what benefitting the poor means" (Ranieri & Almeida Ramos, 2013, p. 5).

Three definitions of pro-poor growth rise out of the vast body of research: First, researchers

In some ways, this perspective emerged as a reaction to the experiences of the macroeconomic structural readjustments of the 1980s and 1990s in the developing world; undertaken in the name of restoring fiscal balance and economic efficiency (as well as insuring repayment of debt to international financiers), the distributional damage was simply too large to ignore and led to consideration of new social welfare policies as well as more equitable growth strategies (Williamson, 1990, 2003).

like Ravallion and Chen define and measure growth as pro-poor if it improves the condition of the poor in absolute terms--and they develop a measure based on per capita income growth of people below the poverty line to measure it (Ravallion & Chen, 2001). Using their definition, it is possible to develop absolute estimates of pro-poor growth that are independent of income growth rates at the top of the income distribution. In other words, incomes at the top of the income distribution could be rising faster than at the bottom, but a country could still have high levels of pro-poor growth if incomes at the bottom were rising fast also.

A second definition, spearheaded by researchers like Kakwani and Pernia, argue that growth is pro-poor if the income of the poor increases faster than that of the wealthy--meaning that relative income inequality goes down (Kakwani & Pernia, 2000). To accompany this definition, Kakwani and Pernia developed the pro-poor index, which tells us the distribution of growth benefits among the rich and the poor and non-poor--although it does not factor in the level of the actual growth rate.

A third conceptualization of pro-poor growth tries to extend the understanding of growth beyond income measures, including both absolute and relative achievement in a variety of other important non-income indicators of well-being. Grosse et al., for example, develop a non-income growth incidence curve and demonstrate its use by measuring progress in education, health, nutrition, and a composite welfare index metric, using data from Bolivia as a proof of concept (Grosse, Harttgen, & Klasen, 2008).

In addition to these efforts to measure pro-poor growth, a second school of thought emerged focused on inclusive growth. There are many similarities between pro-poor and inclusive growth (Ali & Son, 2007), and indeed the first use of the term inclusive in relation to growth occurred in Kakwani and Pernia's (2000) description of pro-poor growth. Inclusive growth, however, goes beyond pro-poor growth in several ways. First, it goes beyond simply measuring growth to asserting that inequality is bad for things like political stability and social cohesion; this suggests that the focus must not solely be on the conditions of the poor, but on the relative conditions of both the poor and the better-off sectors of society (Aoyagi & Ganelli, 2015). Second, it stresses that all members of society should both be able to contribute to economic growth and reap the benefits as well (Lanchovichina & Lundstrom, 2009). This is a departure from pro-poor growth which focuses specifically on benefits for the poor, and so inclusive growth also examines progress in overcoming other factors for disadvantage, such as race, gender, and region (Klasen, 2010). Third, at least some variants of inclusive growth consider process as well as outcomes (de Mello & Dutz, 2012). On the one hand, this opens up the realm of consideration to the political and social aspects noted above. On the other hand, this makes measurement more challenging: in the pro-poor growth perspective, one can simply count up gains at the bottom (and weigh them in one of the three ways highlighted above) but in the inclusive growth perspective whether those gains are achieved through authoritarian dictate or democratic dispensation very different processes—actually matters.

For those authors studying inclusive growth from an outcomes-focus, the emphasis is on the core concept that growth should benefit all members of society. This is generally indicated by declining income inequality, but can also span to non-income measures of well-being for disadvantaged groups such as educational attainment and health care access (Thorat & Dubey, 2013). Specific indicators from this stream of inclusive growth literature often focus on growth in the gross domestic product coupled with significant poverty or income inequality reduction (Habito, 2009). In contrast, those authors more concerned with process argue that growth is driven from the input of many people, including those groups that are historically disadvantaged, and thus inclusive growth involves the creation of opportunities and access to greater participation in the economy (Ali & Zhuang, 2007). Oftentimes the focus is on creating more productive and sustainable employment opportunities and making sure that people

from all groups can attain the skills and training needed for these employment opportunities (Lanchovichina & Lundstrom, 2009). A particularly interesting metric for measuring inclusive growth under this type of framework was Ali and Son's development of the idea of the social opportunity function which measures the distribution of opportunities across the population, with a particular focus on education and health opportunities (Ali & Son, 2007).

Overall, definitions of inclusive growth coming from process-focused frameworks are generally more comprehensive than those on the outcomes-focused side and depart more from propoor growth theory, which have very outcomes-focused frameworks. Across researchers, the emphasis on participation and contribution from all groups takes on many forms, oftentimes spanning outside of traditional notions of economic participation. Lanchovichina and Lundstrom (2009), for example, also incorporate opportunities for investment, and Klasen (2010) delves more into non-income dimensions of well-being like education, health, nutrition, and social integration.

Finally, no review of the literature would be complete without mentioning that the debate has now shifted so dramatically that it is not simply researchers making normative arguments that growth *should* benefit the poor or be more inclusive; a set of researchers have both theorized and empirically investigated the proposition that equity could and actually does lead to more sustainable economic growth, at least in some contexts (Benner & Pastor, 2015; A. Berg, Ostry, & Zettelmeyer, 2012; Birdsall, Torre, & Menezes, 2008; Bowles, 2012; Frank, 2012; Stiglitz, 2012). This perspective is still somewhat nascent but seems to be making headway in the field; this paper, however, does not seek to review the evidence on whether inclusivity hurts or helps growth but rather to focus on how inclusive economies have been defined and measured.

AN EMERGING FRAMEWORK: INCLUSIVE ECONOMIES

While the conceptual frameworks of pro-poor growth and inclusive growth are each supported by years of theoretical and empirical studies, the concept of "inclusive economies" is nascent-at least in the world of academia. The Rockefeller Foundation defines inclusive economies as those that "expand opportunities for more broadly shared prosperity, especially for those facing the greatest barriers to advancing their well-being" and identifies five critical characteristics: equitable, participatory, growing, sustainable, and stable.

The inclusive economies framework certainly builds on the ideas of pro-poor and inclusive growth, but it also draws on other fields like feminist economics, ecological economics, political economy, and theories of social well-being and economic development, all of which emphasize aspects of economies that are poorly captured in more traditional metrics of economic progress. One strong strand of academic research critiques the Gross Domestic Product (GDP) as a measure of progress, arguing that it lacks valuation of women's unpaid labor and of the environment and thus drives decisions with unintended but terrible consequences in terms of environmental destruction and decline in human well-being (Waring, 1990). These perspectives were operationalized in an indicator effort in the form of the *Genuine Progress Indicator*, which was developed in the early 1990s by Clifford Cobb, Ted Halstead and Jonathan Rowe at Redefining Progress in San Francisco (Cobb, Halstead, & Rowe, 1995). They developed an empirical method for adjusting Gross Domestic Product to account for the value (and loss of value) of unpaid labor, and subtracted the costs of environmental destruction and the consumption of non-renewable resources.

Meanwhile, ecological economics has broadened the realm of what counts by insisting that environmental disamenities are not priced into economic metrics and so what looks like progress could simply be planetary damage. One strand of ecological economics, spearheaded

by James Boyce in the 1990s, relates even more directly: it has produced research largely rebuking an environmental version of Kuznets curve, one which argued that increasing development brings environment protection after the initial stages of development first gobble up natural resources in ways that treat the earth as a "sink" (Boyce, 1994, 2013). Instead, as Cushing et al. find in their literature review, evidence suggests that inequality is bad for both the economy and the environment--as inequality of all kinds (e.g., income, political, racial) erodes social cohesion and so a willingness to cooperate to protect common resources (Cushing, Morello-Frosch, Wander, & Pastor, 2015).

Lastly, an influential and central contribution to the knowledge base on social well-being and economic development is Amartya Sen's Capability Approach. First articulated in the 1980's, the Capability Approach theory paved way to a more holistic view of economic development. The basic premise focused on the moral significance of an individual's capability to live a good life by achieving a combination of desired functionings—a set of valuable beings and doings—that can also be important in shaping involvement in society or feelings of security (Sen, 1992). Sen argued for the fundamental importance of the "freedom to choose" among a bundle of available beings and doings, and thus the "freedom to promote objectives we have reasons to value" (Sen, 1988, p. 16, 1992, p. xi).

This is a profound insight—but one that is not always easy to measure. There are two prominent indices of well-being, however, that do try to capture at least the capabilities side of the equation: one developed by the UNDP—The Human Development Index (HDI)—and the other by the UNDP and the Oxford Poverty & Human Development Initiative—the Multidimensional Poverty Index (MPI). Both indices attempt to depart from traditional monetary measures of well-being by integrating important considerations of social and human development. They capture an overall picture of economic development using prominent metrics on health, education, and a person's quality of life. The MPI takes this a step further by giving greater emphasis to those suffering from extreme deprivation when measuring a country's progress.

When trying to understand the evolution of development theory--particularly in relation to addressing inequality--it would be easy to conclude that the concept of pro-poor growth led to inclusive growth, which in turn has led to inclusive economies. But, the conceptual evolution is not so linear. While pro-poor growth appeared in the academic literature before inclusive growth, they were indeed being developed and pursued simultaneously, and in relation to one another, while inclusive growth merges multiple streams of conceptual development.

Given both the ongoing evolution of multiple frames and the wide variety of variables each considers, it is perhaps not surprising that we found little consensus on definitions of these frameworks, much less how to measure them. Moreover, when it comes to 'inclusive economies', we found few studies that actually use this term, and the ones that use this term are not nearly as comprehensive as the concept developed by the Rockefeller Foundation. By providing a clear and comprehensive definition of inclusive economies, the Rockefeller Foundation is clearly helping move forward our conceptual frameworks for understanding inclusion and the economy.

EXISTING EFFORTS TO MEASURE INCLUSIVE ECONOMIES

In order to provide a set of recommendations on how to measure the extent to which economies are inclusive, in addition to reviewing academic efforts to measure inclusive economies, we also conducted a broad review of existing indicator efforts operating in the field. Complementing our review of the academic literature, we examined more than 30 major indicator initiatives around the globe that are trying to measure economic progress in various ways. These initiatives ranged from global efforts, such as the new *Sustainable Development Goals (SDG)* developed by the United Nations, to regional initiatives, such as the Asian Development Bank's *Framework of Inclusive Growth Indicators*, the European Union's *Europe 2020 Initiative*, and the Economic Commission for Africa's African *Social Development Index*, to national initiatives, such as Bhutan's *Gross National Happiness Index*, to sub-national ones, like the Fund for Our Economic Future analysis of metropolitan regions in the United States.

While most of the initiatives we examined use government sources for their data, some are developed by non-governmental organizations, for example the European Anti-Poverty Network and PolicyLink, or are rooted in academic institutions, as is the case of the International Institute for Social Studies in Rotterdam, or the Global Cities Institute at University of Toronto. In addition, while most of the initiatives we examined were focused on measuring economic progress at a national scale, we also reviewed initiatives focused on sub-national analysis; these included the World Council on City Data and the Regional Opportunity Index from UC Davis. In all cases, we looked at the potential for national indicators to be disaggregated to allow for sub-national analysis and analysis of specific population groups.

The overall goals were to better understand how these initiatives are conceptualizing economic progress and inclusivity, and to identify specific indicators that could be included in an inclusive economies measurement framework. Summaries of the specific initiatives examined can be found in Appendix B, but here we discuss key lessons that emerged from this review relating to three broad areas: theories of change; processes of indicator development; and indicators of outcomes versus processes.

THEORIES OF CHANGE

While indicators can simply be measures—more versus less benefits for the poor, for example—some indicator initiatives are explicitly embedded in a theory of change in which indicators are chosen because they relate to clear understandings of how a more inclusive society can be created. Other efforts are not so explicit in their link to theory. Nonetheless, there are implicit theories that can be discerned in their choice of indicators (as will be the case with the indicators framework proposed in this report), and thus it is important to think carefully about the relationship between indicators and theories of change.

Perhaps one of the clearest examples of an initiative with an explicit theory of change built into an inclusive economies indicator framework is the work by the Asian Development Bank. In its initiative Framework of Inclusive Growth Indicators 2014: Key Indicators for Asia and the Pacific, it focuses on only two simple outcome measures, reduction of poverty and inequality, both of which are assessed using monetary and non-monetary indicators. To achieve these outcomes, they concentrate on indicators in three pillars—economic growth, social inclusion, and social safety nets-- underpinned by indicators that measure a foundation of good governance and efficient institutions.

Regardless of whether one concurs that these are the fundamental elements for achieving a healthy economy, the benefit of articulating indicators within this model is that it gives greater focus to the complex nature of the various social, economic, governmental and institutional processes that are involved in delivering social change. It provokes conversations by airing out assumptions and establishing a collaborative approach to defining desired outcomes. This way, it first identifies the impacts that one must arrive at for social change to happen, and then works backwards to establish the necessary steps needed for attaining those outcomes. Once this pathway is clearly developed, specific interventions can be executed to push for social change and inclusive growth (and, of course, measured).

An alternative, and more common approach, is that exemplified by the Europe 2020 initiative, or the OECD Initiative on Inclusive Growth. These initiatives emphasize the role of indicators within thematic areas. Rather than working from goal to outcome, indicators are clustered into broad categories, such as employment, education, poverty, health, civic engagement, etc. These frameworks end at the indicator level, where quantitative metrics are defined to facilitate monitoring of each dimension. The specific mechanisms or processes that might result in these different outcomes are not clearly identified.

There are some good reasons why simple indicators, without clearly identified processes of theories of change associated with them, can be useful. It can facilitate discussion across multiple constituencies about the factors that might be leading to those conditions. It can lead to new hypotheses about causal connections between different outcomes. It might surface important issues that might not emerge in a more directed approach. At the same time, it is important to recognize that all indicators have implicit theories of change embedded within them. For example, whether an indicator of poverty is an absolute indicator (e.g., less than \$1.50 a day) or a relative indicator (e.g., less than half the median income), represents very different understandings of the importance of social relations in shaping experiences of poverty.

As the famous saying goes, what gets measured matters, while what matters is not always measured. While that is generally true—think about how hard it is to measure quality of life and so people often settle on income as a proxy—there is a particular issue in this context of theories of change relating to power and processes of marginalization. Suppose, for example, that one believed that one of the biggest impediments to actually attaining an inclusive economy was the concentration of wealth and power in the hands of a few. Then simply measuring rising incomes for the poor would lift up a goal without a strategy; failing to also capture the wealth of the top income earners would, in its absence, convey an alternative theory of change (in which perhaps a mal distribution of income is just the unfortunate result of technological changes and global challenges played out in well-functioning market systems).

A full theory of change does not need to be determined; the point being made is more simple: that it is important to always think about indicators in the context of theories of change, and whether or not that theory of change is explicitly (or implicitly) embedded in the indicator framework.

PROCESS OF INDICATOR DEVELOPMENT

How does one develop an understanding of the relationship between indicators of inclusiveness and the processes that create inclusiveness? The initiatives reviewed in this report not only had quite different indicators, but also had varied stakeholders involved in developing those indicators, and also seemed to use the indicators in different ways. While we did not conduct detailed research on the process of indicator development, it was still readily apparent that there is a wide diversity of indicator initiatives with very different constituencies involved in them. One database of indicator initiatives identified more than 250 community indicator

initiatives in the U.S. alone⁴! The general picture is that of volumes of scattered information being put forth by a variety of different organizations, with little consensus on what is most important to measure, and highly uneven efforts to integrate approaches.

Lack of integration or consensus is not necessarily a bad thing. Conditions obviously vary across cities and countries, and what may be important to measure could differ dramatically across these contexts. Thus, having different indicators that fit those specific contexts could be highly appropriate. Furthermore, even when there is an interest in collaborating in developing common indicators across different places, the data challenges are substantial. For example, the Integrating Expertise in Inclusive Growth (InGRID) initiative in the European Union is spending significant resources trying to develop a truly comparable Integrated Poverty and Living Conditions Indicator System (IPOLIS) within the European Union, which doesn't yet exist despite the very substantial resources put in to harmonize data across the EU through the European Statistical system⁵. Similarly, the World Council of City Data is an effort to harmonize city-gathered data on city services and quality of life across the globe, using an ISO-Certified process to ensure validity and comparability of the data. The standard includes 100 core and supporting indicators that cities must report on, and a certified process of gathering that data. While more than 250 cities worldwide have been involved in testing the international standard, as of May 2016 less than 40 had achieved certification, indicating the challenges embedded in truly harmonizing data.

Ultimately, though, if we are to achieve more inclusive economies, we must develop some shared metrics for tracking them and a shared understanding of what is being measured. Thus, in our research we paid particular attention to indicator initiatives that clearly showed a broad, participatory methodology of development, and in which there were strong indicators of widespread acceptance.

The most significant example of this is the *Sustainable Development Goals (SDGs)*. Launched into action in 2015 following culmination of the Millennium Development Goals (MDG), the SDG agenda outlines a series of goals and targets covering a broad range of sustainable development outcomes to be achieved by 2030. What makes this initiative distinct in its approach is that it calls for collective action by all members of society--government agencies, not for profits, and the general public---as well as by all countries, rich or poor, to promote prosperity for all. This is not an immodest goal; the effort seeks to become the hallmark initiative behind inclusive social well-being and economic development.

The SDG process involved a step by step methodology that resulted in 17 goals and 169 targets, with data available currently to develop over 100 indicators measuring progress towards these targets. Overall, the main objective is to promote universal awareness and to mobilize worldwide participation to end all forms of deprivation, eliminate inequalities and protect the planet. The entire process of developing these goals, targets, and indicators has clearly sparked conversations globally about how to achieve these goals, while also developing a standardized data infrastructure for comparisons across countries and over time.

INDICATORS OF OUTCOME VERSUS PROCESS

One central issue that emerged in our review of the indicator initiative landscape was the recognition that indicators could be developed to measure either outcomes or processes. Initiatives that did not have an explicit agreed upon theory of change tend to focus on indicators as outcomes. Thus, for example, the Sustainable Development Goals are conceptualized as

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http://www.communityindicators.net/projects

⁵ See https://inclusivegrowth.be/ and https://inclusivegrowth.be/downloads/output/d20-1-ipolis-concept-paper.pdf

having distinct targets, and associated indicators are simply measurements of a country's success in reaching those targets or outcomes. In developing our recommendations, emphasis was given towards recommending indicators that are best understood as outcomes, rather than measures of the processes that might create more inclusive economies.

While we believe that outcome indicators can make analysis more tractable, it is important to note that distinguishing between process and outcome indicators is not always easy, particularly since outcomes in one arena are often inputs to other processes. One particularly illustrative example of this is the African Social Development Index, which follows a life-cycle approach in measuring social development. An indicator of outcomes in early childhood, such as the prevalence of malnutrition, is an important predictor of outcomes in more formative years, such as youth literacy rates. This in turn becomes an important indicator of outcomes in labor market attachment, measured for example by unemployment rates and household income levels⁶.

Ultimately what is needed is a more robust analytical framework that considers both drivers and outcomes of an inclusive economy. Economies that are continuously evolving to become more inclusive in their outcomes, come about through changes in processes that enable for these transformations to happen and for outcomes to be measured. These outcomes themselves then generate more processes to facilitate further positive shifts within an economy. In this way both the process and the outcome become a virtuous cycle towards economic inclusivity (or a vicious cycle towards greater exclusion). Thus, while our focus is on measuring outcomes of inclusive development, it is equally important to keep in mind the relevance of indicators that capture the processes involved in delivering (or hindering) inclusive economies.

INCLUSIVE ECONOMY: INDICATOR RECOMMENDATIONS

INTEGRATED FRAMEWORK: 5 BROAD CHARACTERISTICS, 15 SUB-CATEGORIES, 57 INDICATORS

FOLUTABLE

The recommendations for inclusive economic indicators put forth in this report begin from a framework developed by the Rockefeller Foundation that describes five broad characteristics of an inclusive economy: equitable, participatory, growing, sustainable and stable. From this starting point, we draw out three sub-categories for each of the five broad characteristics, adding further definition to the existing framework (see Figure 1). While recognizing that there are cross-cutting issues along the five core thematic areas, the sub-categories help identify critical factors within each theme that contribute to the attainment of an inclusive economy, as well as provide a specific context for categorizing measurable indicators. Using this framework, we make recommendations for 49 core indicators, as well as suggest 8 additional indicators which are ideal indicators to use, but for which there is not adequate data available in enough countries to allow for them to be recommended as core indicators.

A Unward mobility for all

INCLUSIVE ECONOMY Expand opportunities for more broadly shared prosperity, especially for those facing the greatest barriers to advancing their well-being.	EQUITABLE	A. Upward mobility for all.
		B. Reduction of inequality.
		C. Equal access to public goods and ecosystem services.
	PARTICIPATORY	D. People are able to access and participate in markets as workers, consumers, and business owners.
		E. Market transparency and information symmetry.
		F. Widespread technology infrastructure for the betterment of all.
	GROWING	G. Increasing good job and work opportunity
		H. Improving material well-being.
		I. Economic transformation for the betterment of all.
	SUSTAINABLE	J. Social and economic well-being is increasingly sustained over time.
		K. Greater investments in environmental health and reduced natural resource usage.
		L. Decision-making processes incorporate long-term costs.
	STABLE	M. Public and private confidence in the future and ability to predict outcome of economic decisions.
		N. Members of society are able to invest in their future.
		O. Economic resilience to shocks and stresses.

Before we discuss the specific indicator recommendations, we'd like to emphasize a few key points:

First, the five broad characteristics should be understood as an integrated whole, rather than independent dimensions. Patterns of inclusiveness or exclusion in one dimension can reinforce or undermine inclusiveness in another dimension. More equitable economies, for example, can also contribute to more participatory economies in a virtuous cycle. Or vicious cycles could emerge, for example, if less stable economies reinforce inequities based on differential capacities to deal with the instability. Thus, while we identify specific indicators as being rooted within particular dimensions and sub-categories, they should be seen as being inter-related and having relevance for potentially more than one dimension.

A second point we should emphasize is that all indicators are imperfect. Almost by definition, indicators are simply indirect markers of complex phenomenon. But indicators are also limited by the availability of data and data collection processes. For example, it would be ideal to have an indicator of individuals' changes in income earnings over a life-time as that would allow us to truly assess the extent to which an economy can enable income mobility from lower to higher income classes, a dimension clearly as important as any static definition of inequality. Unfortunately, data is only available in a few countries and requires highly developed longitudinal data systems. Keeping these considerations in mind, the goal is to find indicators for which data is actually available with substantial international coverage, and where the data is gathered by reliable government, private sector, or non-profit organizations.

Third, although the primary focus of our recommendations is on national level indicators, we also tried to select indicators that would be relevant across multiple contexts (e.g., developed and developing countries), scales (e.g., national and city), and regions (e.g., urban and rural). In some cases, we are aware that some data sources allow for sub-national analysis, and we indicate in the appendix which specific indicators can be disaggregated at sub-national scales. In other cases, data is not currently available beyond a few countries but could be expanded overtime. In using these indicators to measure sub-national economies, it is important to be aware of potential synergies or contradictions. Relatively poor and relatively rich cities, for example, could exist in the same country and aggregate measures could result in ranking countries as equitable, even though at the city-level there are stark differences in measures of persistent inequalities⁷. Thus, considering sub-national analysis in the overall picture proves incredibly important, and where possible, we include both relative and absolute indicators to help account for this dynamic.

Fourth, we try to emphasize in our selection of indicators what might be considered outcome measures, rather than process indicators. The distinction between process and outcome, as discussed above, is not always clear, since in many ways outcomes in one dimension (say, improved educational attainment) can be an important input to another process (such as higher incomes) and vice versa. Furthermore, process indicators can be valuable, especially when they are linked with an explicit theory of change. Nonetheless, please be aware that the main purpose of this report is to measure outcomes of an inclusive economy as opposed to the various processes that enable building inclusive economies. Thus, while keeping in mind that there are important feedback loops and synergies between both types of indicators, our recommendations are focused on measures that monitor outcomes.

For a classic example of this, consider the analysis by Ash and Fetter (2004) on environmental inequality by race in the U.S. While they find the usual strong pattern of inequity in toxic exposures between Blacks and whites, they find no such pattern for Latinos and whites at a national level. However, this is because Latinos are concentrated in certain metros; once they redo the analysis using metropolitan controls, there is inequality within metros, something washed out by national aggregation.

Finally, many of the recommended indicators can be disaggregated by different population groups, such as gender, race, and age. Where possible, it is valuable to use these disaggregated measures for greater insight. For example, one of the recommended indicators is intergenerational educational mobility, measured by the percentage of population with higher educational attainment than their parents. Disaggregating this by gender and where possible race can help give valuable insights into the dynamics behind historically disadvantaged or marginalized populations, and highlight pockets of the population that continue to face the greatest barriers to inclusion and development. In some instances below, the measures we call for are explicitly disaggregated (for example, we suggest a gender inequality index); in other cases, we note below a general indicator that can and should be disaggregated by relevant social groupings.

With these factors in mind, we now turn to a more detailed description of the five broad dimensions of inclusive economies, the sub-dimensions we developed, and our recommended indicators.

EQUITABLE

Definition: "More opportunities are available to enable upward mobility for more people. All segments of society, especially the poor or socially disadvantaged groups, are able to take advantage of these opportunities. Inequality is declining, rather than increasing. People have equal access to a more solid economic foundation, including equal access to adequate public goods, services, and infrastructure, such as public transit, education, clean air and water."

From the definition of equitable economies above, developed by the Rockefeller Foundation, we identified three key sub-dimensions where specific indicators are measurable: upward mobility for more people; inequality is declining; and equal access to public goods, services and infrastructure. We examine each in turn.

A. Upward Mobility for More People

Upward mobility is an important dimension of equitable opportunity. That all members of society can prosper despite the conditions they are born into is a central feature of an inclusive economy. Ideally, in an equitable society all individuals can access a bundle of opportunities that will allow them to freely choose their "destination" as adults despite their social class of origin. However, we often observe that mobility greatly depends on a person's starting point, where those who are poor or from socially disadvantaged backgrounds face the greatest barriers to attaining a higher socioeconomic status. Closing the opportunity gap is therefore necessary to enable inclusion for all. There are two main types of social mobility: inter-generational mobility, which refers to the change in economic status between parents and their children, and intragenerational mobility, which measures the chance for upward mobility within an individual's own lifetime. There are a growing number of studies that are able to measure changes in income levels across generations using individual tax data in rich countries (Corak, 2006; d'Addio, 2007), which have now been incorporated into readily available OECD data. Indicators have also been put forward by the UK's Department for Work and Pension to estimate the income progression of individuals during their lifetime. Although its application is limited, and data is only available for the UK, it provides a starting point for other initiatives to follow.

A1. PERCENTAGE OF POPULATION WITH HIGHER EDUCATIONAL ATTAINMENT THAN THEIR PARENTS

This indicator of upward mobility in education measures the ability of children from disadvantaged backgrounds to attain a higher level of education than their parents. The indicator can be used to measure inequality in education opportunities, as well as reveal progress in social mobility by capturing improvements in educational outcomes for disadvantaged populations.

A2. INTERGENERATIONAL INCOME MOBILITY

Since direct longitudinal data on earnings mobility is not widely available, this indicator provides a measure of the influence of parental background on individual earnings. It is a measure of earnings elasticity, showing the extent to which sons' earnings levels reflect those of their fathers, with a lower value indicating less persistence of earnings across generations and thus higher intergenerational earnings mobility. Our data source for this indicator (OECD) has data at the moment for only 12 countries, and getting adequate data for a large number of countries would be difficult. But the cross-sectional nature of the estimates suggests that it would be relatively easier to gather for other countries than longitudinal data.

Apart from our two core indicators in this area, we also suggest two additional indicators to consider.

A3I (IDEAL). PROPORTION OF THE LOWEST EARNING 25 TO 30 YEAR OLDS THAT EXPERIENCE WAGE PROGRESSION 10 YEARS LATER

This indicator directly measures income mobility within a single person's lifetime, rather than across generation. The goal is to introduce a measure that captures whether a person at the bottom earning quintile can experience wage progression 10 years later, thus gauging the ability for disadvantaged people to move up the income ladder. We suggest this as an 'ideal indicator' because we think it is a particularly good measure of equity, but very few countries in the world gather data to effectively measure this in a consistent way.

A4C (CONSIDERED). EARLY CHILDHOOD EDUCATION

This indicator measures the percentage of children 36-59 months old that participate in early childhood educational programs. This indicator recognizes that access to early education can significantly influence individuals' future economic outcomes. We did not include this as a core recommended indicator since it can be considered more a measure of input into future economic inclusion, rather than an outcome indicator, but suggest it be considered because of its importance in shaping future economic opportunity.

B. Inequality is declining

Economists have long argued that some level of inequality is needed to propel growth, yet recent evidence not only discredits this theory of growth, inevitably reducing inequality, but also stresses that inequality can in fact have corrosive effects on sustainable economic growth, human development and social mobility. As income inequality rises, more people are pushed into poverty, which in turn increases the incidence of social ills long associated with high levels of poverty such as poor health, low productivity, lack of education, and political and economic instability. In this section we attempt to measure inequality using various income and social indicators. Two important measures are added which evaluate the extent of income level disparities between the highest and lowest quintiles of the distribution, as well as overall relative poverty. An additional indicator is also recommended to highlight the sharp rise in income concentration at the top. Last but not least, we recommend a gender-focused indicator, which captures one of the most significant inequality issues still faced today—the persistent discrimination against women.

B1. RATIO OF INCOME/CONSUMPTION OF THE HIGHEST QUINTILE TO LOWEST QUINTILE

This indicator compares the distribution of income or consumption (depending on available data) between the highest and lowest quintiles of a population—thus highlighting the extent of inequality between income classes.

B2. PERCENTAGE OF HOUSEHOLDS WITH INCOMES BELOW 50% OF MEDIAN INCOME

This is a relative measure of poverty that estimates how far individuals are from the median standard of living as defined by a country. This is a good indicator of the extent of social exclusion associated with poverty.

B3. WEALTH SHARE OF TOP 1%

Wealth inequality is indicated by estimating the share of wealth owned by the top 1% in a society. The aim in including this indicator is to draw attention to the enormous accumulation of wealth at the very top of societies that has taken place in the last three decades. Recent advances in data collection (specifically, the World Wealth and Income Database) are making these data series, once considered impossible to obtain and harmonize, available in ways that are reliable both in terms of historical and cross-sectional comparison.

B4. GENDER INEQUALITY INDEX (GII)

Lastly, we include an indicator for gender inequality. Unequal treatment and discrimination against women and girls around the world still remains a major obstacle to human development. To measure progress in addressing this challenge, we suggest a composite index developed by the United Nations Development Programme that captures three significant dimensions of the gender gap. First, inadequate access to reproductive health services, measured by the maternal mortality ratio and adolescent birth rates. The second is a measure of empowerment, defined as the proportion of parliament seats occupied by women, as well as the proportion of adult females aged 25 years and older with at least some secondary schooling. The third examines equity in economic status and participation, expressed by the labor force participation rate of females of working age.

C. Equal access to public goods and ecosystem services

Effective and equitable provision of public goods and ecosystem services is a key determinant of prosperity and quality of life. Access to safe drinking water, adequate sanitation, infrastructure, health care, and education are considered core universal human development indicators and are specifically targeted by the Sustainable Development Goals as direct components of wellbeing and inputs into inclusive development. Every year millions of adults and children across the globe die from diseases associated with poor water quality and sanitation, making access to clean fresh water and basic hygiene services essential for combating poverty and destitution. Ensuring healthy lives has also been at the forefront of all sustainable development agendas. Although significant progress has been made over the years in terms of life expectancy, many more efforts are needed to fully combat the incidence of communicable and non-communicable diseases around the world, especially among the most vulnerable population groups. Access to quality education also plays a crucial role in ensuring inclusive and sustainable prosperity for all, where major progress is still needed to guarantee equality in primary education between girls and boys and that all children have access to basic literacy skills. Lastly, adequate access to infrastructure services such as electricity and transportation is not only central to human development but also recognized as a key driver of innovation, productivity, and market participation and thus economic growth.

C1. PROPORTION OF POPULATION USING SAFELY MANAGED SANITATION SERVICES, INCLUDING A HAND-WASHING FACILITY WITH SOAP AND WATER

This measures access to improved sanitation, defined as the proportion of a population with a private sanitary facility for proper human waste disposal within the dwelling or nearby.

C2. PROPORTION OF POPULATION USING AN IMPROVED DRINKING WATER SOURCE

Our recommended indicator for access to water measures the proportion of a population with access to an improved drinking water source within the dwelling or located at a suitable distance from the person's residence.

Improvements of both adequate drinking water and sanitation are fundamental measures of health and social inclusion. When disaggregated by race, gender and socioeconomic criteria, they also provide evidence of inequities among various marginalized groups.

C3. SHARE OF HOUSEHOLDS WITH ELECTRICITY OR OTHER MODERN ENERGY SERVICES

This indicator monitors progress towards the equitable distribution of modern electricity, which itself contributes to reducing deprivation and poverty and increasing economic development.

C4. PRIMARY COMPLETION RATE

This indicator estimates the number of children of school age who complete primary education, which is technically measured as the ratio of the total number of students enrolled in the final year of primary education over the total population of the theoretical entrance age for the last grade of primary. Universal primary education is an international goal highlighted by the SDGs, and a critical metric of inclusive and equitable access to basic education and learning opportunities.

To monitor the availability, accessibility and quality of health services we recommend two related health indicators.

C5. INFANT AND UNDER-5 MORTALITY RATE

The first indicator measures the number of infants dying before reaching one year of age, per thousand live births in a given year. This measure is a good indicator of poverty and deprivation and of lack of inclusion of the most vulnerable members of society. The second indicator is a measure of the probability per thousand that a newborn baby will die before reaching age five. Many factors are explained by this indicator including lack of food security, poor access to health services, and unsafe living conditions, among others. This is one factor where additional disaggregation would be especially useful; for example, the infant mortality rate of children of Black mothers in the U.S. is more than twice the rate for children of non-Hispanic white mothers, and an aggregate measure would miss this profound disparity.

In addition to the core indicators, we also suggest two additional important indicators regarding equity in access to goods and services that are worth considering.

C6C (CONSIDERED). PROPORTION OF POPULATION THAT HAS CONVENIENT ACCESS TO PUBLIC TRANSPORT

This indicator is currently available at the city-level for some cities. The indicator is a key measure of infrastructure development, equitable access to transport, and of market participation by all, though it is more important for urban populations than rural.

C7C (CONSIDERED). RATING ON LEVEL OF WOMEN'S SOCIAL RIGHTS

This index measures 12 basic rights specifically for women, which include: right to equal inheritance, right to enter marriage equal with men, right to travel abroad, right to obtain a passport, right to confer citizenship to children or a husband, right to initiate a divorce, right to property in marriage, right to social and cultural participation in communities, right to education, freedom to choose residence, freedom from female genital mutilation, and freedom from forced sterilization. These basic human rights, while not direct measures of inclusive economy outcomes, are important measures of gender equity in society.

We should note that some of these measures, such as access to safely managed sanitation services, will show relatively little variation between advanced capitalist nations (although there may be variation by race and geography in those places) and so may be a bit more relevant to considering the situation of the developing world. On the other hand, some measures above may offer more differentiation in the developed or advanced economies.

PARTICIPATORY

Definition: "People are able to participate fully in economic life and have greater say over their future. People are able to access and participate in markets as workers, consumers, and business owners. Transparency around and common knowledge of rules and norms allow people to start a business, find a job, or engage in markets. Technology is more widely distributed, and promotes greater individual and community well-being."

From the description of participatory economies above, we identified three key sub-dimensions where specific indicators are measurable: access to markets for all workers, consumers and business owners; market transparency and common knowledge of rules and norms; and widespread technology infrastructure for the betterment of all. We examine each in turn.

D. People are able to access and participate in markets as workers, consumers, and business owners

Promoting equal participation in markets is fundamental to advancing inclusive economies. Broad access to labor markets is critical for most people to create decent livelihoods, while access to product and service markets as business owners provides greater opportunities for innovation and economic growth. Access to markets as consumers provides an important dimension of social well-being. That all citizens, despite gender or social position are able to fully participate in their country's economic activities not only benefits the individuals themselves, but also has broader social and economic impacts. This also suggests the importance of disaggregating our recommended indicators by sub-populations wherever possible. To fully capture the dynamics of markets, it is also important to track informal as well as formal economic activity.

D1. LABOR FORCE PARTICIPATION RATE (OF WORKING AGE POPULATION)

Participation of workers is measured by estimating the number of people that supply labor for the production of goods and services in an economy during a specific period of time. The indicator reveals the number of individuals in the population that can work and are economically active.

D2. SHARE OF INFORMAL EMPLOYMENT

This indicator captures worker participation in the informal market. Informal employment comprises individuals who, in their main or secondary jobs, are own-account workers, employers and members of producers' cooperatives employed in their own informal sector enterprises. There are two potentially contradictory interpretations that can be derived from this indicator. On the one hand, this indicator measures lack of access to a formal economy, and thus exclusion from labor protections and benefits associated with formal markets. On the other hand, access to informal employment could be viewed as a step up from no employment and research has shown that, under certain conditions, informal employment can provide significant opportunities for economic advancement. Thus, this indicator should be used with caution, but given how important the informal economy is in many countries of the world, it is important to have a direct measure of informal employment.

D3. HOUSEHOLD FINAL CONSUMPTION EXPENDITURE PER CAPITA (CONSTANT 2005 US\$)

Consumer participation is explained by private consumption per capita in constant prices. This widely used indicator measures household consumption expenditure by estimating the market value of all goods and services, including durable products, purchased by households.

D4. NEW BUSINESS DENSITY (NEW REGISTRATIONS PER 1,000 PEOPLE AGES 15-64)

This indicator estimates the level and ease of business ownership, and it is measured by the number of new business registrations per thousand people of working age.

E. Market transparency and information symmetry

It is often asserted that market transparency can be beneficial both in attracting greater investments and in helping avoid economic downturns. Common knowledge of the rules and norms by which an economy functions helps individuals make informed decisions as workers, consumers and business owners. Corruption and information asymmetry, on the other hand, severely debilitates economic development. It can lead to reduced foreign investment, capital outflows, long-term civil conflicts, poor provision of public goods and weak infrastructure, all of which are highly correlated with under-development and poverty. In this section we recommend indicators that monitor progress towards market transparency and information symmetry by assessing the ease by which businesses operate in an economy as well as absolute levels of corruption within governmental agencies.

E1. EASE OF DOING BUSINESS (EODB) DISTANCE TO FRONTIER

This indicator is a measure of ease of doing business in an economy. This comprehensive index is based on 36 indicators for 10 thematic business areas defined by the World Bank. It measures ease of starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvencies. This index not only assesses the level of regulatory performance of a country, it also considers progress towards stronger protections of property and contract rights.

E2. VOICE AND ACCOUNTABILITY INDICATOR

The second indicator is a qualitative measure of the extent to which a country's citizens are able to be active participants of their government's election, as well as are able to express themselves freely, associate, and have free media. The benefit of this indicator is twofold. First, it calls out the presence of civic activism and freedom to speak openly without fear of retribution or oppression. Second, through measures of accountability, it also captures social empowerment and scrutiny against public institutions and governmental agencies.

E3. CONTROL OF CORRUPTION INDICATOR

This indicator examines explicit forms of corruption. It measures the extent to which government power is exercised for private gain. It includes both petty and grand forms of corruption, and measures narrow control of state functions by elites and private agents.

F. Widespread technology infrastructure for the betterment of all

Technology is a key driver of development. It underpins economic advances, improvements in health and educational systems, and development of infrastructure. New innovations are also altering the way people live, learn, connect, communicate and transact across the globe. Although in recent decades advances in technologies have been pervasive, the same cannot be said about its widespread diffusion. Not only are there places in the world where access to basic technology is non-existent, there is also presence of a technological divide between gender and age groups even in place where technology is in wide-spread use. For economies to be inclusive, this gap needs to be addressed by ensuring that all members of society have access to affordable and modern technologies. Keeping in consideration the importance of information technology as a means to disseminate knowledge, in this sub-category we focus on indicators that measure access to communication technologies.

F1. MOBILE CELLULAR TELEPHONE SUBSCRIBERS PER 100 POPULATION

This indicator measures mobile phone access. It is estimated by dividing the number of people with cellular subscriptions by the total population and multiplying that by 100. This international indicator is widely used to measure the extent of telecommunication development in a country. It is a direct measure of participation for access to cellular service provides those in remote areas access to information and improves exchange of knowledge among people. It is also an indirect measure of infrastructure development, economic growth and safety.

F2. PERCENTAGE OF HOUSEHOLDS WITH INTERNET

This indicator captures internet access. The internet is considered the most powerful tool for access and dissemination of knowledge and education. The indicator is an estimate of the number of internet users in a population. In some locations, as in the U.S., this could be disaggregated by race as well as by type of access (e.g., broadband versus slower connections).

GROWING

Definition: "An economy is increasingly producing enough goods and services to enable broad gains in well-being and greater opportunity. Good job and work opportunities are growing, and incomes are increasing, especially for the poor. Economic systems are transforming for the betterment of all, including and especially poor and excluded communities. Economic growth and transformation is not only captured by aggregate economic output measures (such as GDP), but must include and be measured by other outcomes that capture overall well-being."

The last sentence in the definition of a growing economy is important to stress: usually, growth gets measured simply in terms of GDP or income whereas growth here is seen as improving well-being in a multi-dimensional framework. From the description of growing economies above, we identified three key sub-dimensions where specific indicators are measurable: increasing good job and work opportunity; improvements in material well-being; and economic transformation for the betterment of all.

G. Increasing good job and work opportunity

Job growth is often considered perhaps the most important single metric in traditional measures of economic health. Employment provides valuable income for workers—indeed for most people the primary source of income—and is typically reflective of greater production and consumption of goods and services. Measuring and defining good work opportunities requires greater attention not just to total employment, but also changes in income levels particularly for those at the bottom of the income distribution.

G1. EMPLOYMENT-TO-POPULATION RATIO (OF WORKING AGE POPULATION)

Expansion in employment is measured by the ratio of the working age population that is actually employed to the total population. This indicator is a proxy for access to employment and also performs better than standard unemployment rates in capturing the experience of discouraged workers who may have dropped out of the labor force. This is a measure that would also be especially important to disaggregate by gender in order to better diagnose concerns (for example, a moderate employment-to-population ratio may actually include a very high male and a relatively low female rate, in which case the central policy challenge is gender equality rather than job creation per se).

G2. GROWTH RATE OF AVERAGE PER CAPITA INCOME PPP \$

The second recommended indicator is a measure of GDP growth per capita, adjusted for purchasing power. GDP growth is generally considered a positive sign of economic development and poverty alleviation.

G3. PROPORTION OF POPULATION BELOW \$1.25 (PPP) PER DAY:

Our third indicator is an absolute measure of income poverty. This indicator captures the number of people in a population still living in poverty despite economic growth. It provides information on progress towards absolute poverty reduction. The \$1.25 threshold is most relevant for developing economies, but one could consider higher cut-offs for developed economies.

H. Improving material well-being

The income provided by jobs is only one dimension of economic growth and well-being. It is also important to assess the extent to which a growing economy is resulting in improved material well-being in other basic necessities of life, such as food, shelter and basic health. Improvements in these dimensions of material well-being might be achieved through a variety of different public, private or community mechanisms, and thus are not fully captured in income measurements alone. Thus, in addition to basic income, we recommend indicators that capture progress in food security, living conditions and life longevity as well.

H1. GDP PER CAPITA, PPP \$

This indicator captures potential absolute income in a population, measured in per capita, purchasing power adjusted terms. This easily available indicator provides an indication of overall material well-being of a society, though it should be noted that it measures total output per person, and thus doesn't address distributional issues or directly measures income.

H2. PROPORTION OF POPULATION ABOVE MINIMUM LEVEL OF DIETARY ENERGY CONSUMPTION

Food security is defined as the percentage of the population below a minimal level of dietary energy consumption. This indicator measures prevalence of undernourishment in a population. Long-term food insecurity can severely impair human health and social welfare, as well as have lasting negative effects on the growth and stability of an economy.

H3. DURABLE STRUCTURES (SLUM POPULATION AS PERCENTAGE OF URBAN)

Inadequate shelter and overcrowding are also signs of poverty. Housing adequacy is thus measured using an indicator of the proportion of the urban population living in slums, informal settlements, and/or in non-durable structures. A house is considered durable if it is built in a non-hazardous area, has a structure that can resist extreme weather conditions, and protects dwellers from rain, heat, cold and humidity. Slum areas usually contain a high number of non-durable structures and residents often experience high mortality and morbidity rates.

H4. LIFE EXPECTANCY AT BIRTH

Life longevity is explained by the average number of years that a newborn infant could live if current patterns of mortality were to stay the same throughout the person's life. Apart from being a direct measure of mortality and overall health, improvements in life expectancy are also an indirect measure of economic growth and well-being.

I. Economic transformation for the betterment of all

This sub-category aims to measure the potential for economies to shift from lower to higher productive activities through greater productivity, knowledge creation and technological advancements. While this kind of economic transformation alone isn't fully sufficient to result in improved welfare for all, it is an invaluable process for increasing the material resources of the economy that can be harnessed for the betterment of all. Thus, the recommended measures here focus on indicators of high labor productivity and high value-added components of the economy.

II. LABOR PRODUCTIVITY (GDP PER HOUR WORKED)

Labor productivity is measured as total GDP per hour worked. Driving forces behind this indicator include capital accumulation, improvements in organization, development of physical and institutional infrastructure, generation of new technologies, as well as improved health conditions and education, which are all indicative of an economy making progress in ways that can benefit all.

We also suggest the use of indicators that capture accumulation of human capital and innovation, as well as economic advances towards production of goods and services with high R&D intensity.

12. RESEARCH AND DEVELOPMENT EXPENDITURE (% OF GDP)

This indicator is a measure of public and private spending on innovative work undertaken to increase knowledge of humanity, culture and society, to expand technological development, as well as enlarge R&D capabilities. This indicator is an indirect measure of innovation within a domestic market.

13. HIGH-TECHNOLOGY EXPORTS (% OF MANUFACTURED EXPORTS)

This indicator captures the technological intensity of a country's exports. It alludes to a country's global position as a driver of innovation. The general idea is to capture the extent to which a country or economy is engaged in leading sectors; the exact meaning of that may change over time but for the near-term future the share of high-tech exports is a useful measure.

SUSTAINABLE

Definition: "Economic and social wealth is sustained over time, thus maintaining inter-generational well-being. In the case of natural capital, inclusive economies preserve or restore nature's ability to produce the ecosystem goods and services that contribute to human well-being, with decision-making incorporating the long-term costs and benefits and not merely the short-term gains of using our full asset base."

From the description of sustainable economies, we identified three key sub-dimensions where specific indicators are measurable: social and economic well-being is increasingly sustained over time; greater investments in environmental health and reductions in natural resource use; and decision-making processes incorporate long-term costs. We examine each in turn.

J. Social and economic well-being is increasingly sustained over time

When we hear the word sustainable we tend to think about the future. How would society look like 10, 20 years from now? We interpret this sub-category precisely in those terms and measure improvements in well-being throughout generations. We assume that 20 years is a good measure of a new generation, and thus assess the 20 year change of three crucial components of well-being, namely, food security, living conditions and health. All three dimensions are defined as in section H.

J1. 20 YEAR CHANGE IN PROPORTION OF POPULATION ABOVE MINIMUM LEVEL OF DIETARY ENERGY CONSUMPTION

Food security is defined as the percentage of the population below a minimal level of dietary energy consumption. This indicator measures prevalence of undernourishment in a population.

J2. 20 YEAR CHANGE IN DURABLE STRUCTURES (SLUM POPULATION AS PERCENTAGE OF URBAN)

Inadequate shelter and overcrowding are also signs of poverty. We suggest measuring adequacy of housing by using an indicator of the proportion of the urban population living in slums, informal settlements, and/or in non-durable structures.

J3. 20 YEAR CHANGE IN LIFE EXPECTANCY AT BIRTH

Life longevity is explained by the average number of years that a newborn infant could live if current patterns of mortality were to stay the same throughout the person's life. Apart from being a direct measure of mortality and overall health, improvements in life expectancy are also an indirect measure of economic growth and well-being.

K. Greater investments in environmental health and reduced natural resource usage

Human and economic development is ultimately dependent on the health and availability of our environmental resources. To measure progress towards improved environmental health and sustainable resource use we propose six indicators. All indicators are framed to capture the biggest sources of planetary-boundary stress today. These include energy usage from fossil fuels and renewables, water scarcity, air and water pollution, carbon emissions and biodiversity degradation.

K1. ENERGY INTENSITY (TPES/GDP PPP)

This first indicator monitors the intensity of energy use. It is calculated as units of energy per unit of GDP. Energy is an important factor in economic development, for it provides vital services that improve social welfare. However, high energy use is also associated with unsustainable practices, for it can create major pressures on the environment, by both depleting resources and increasing pollution. Thus, a measure of energy intensity provides a valuable measure of the balance between economic output and energy use.

K2. PROPORTION OF TOTAL WATER RESOURCES USED (%)

The second indicator is a measure of water usage. Calculated as the total annual volume of groundwater and surface water withdrawn from its sources for human use. This indicator is a proxy for water scarcity, and shows the extent to which this important resource is being depleted to meet a country's water demands.

K3. PROPORTION OF WASTEWATER SAFELY TREATED

The third indicator is one of two indicators developed in the SDGs for achieving improved water quality. It is defined as the proportion of total wastewater generated through both household (sewage and fecal sludge) and economic activities that is safely treated. While data sources on fecal waste flows, safe disposal and treatment remain scarce, efforts to generate this data are being scaled up and sufficient data exists to make global and regional estimates by 2018.

K4. CO2 EMISSIONS (KG PER PPP \$ OF GDP)

The fourth indicator is a measure of CO2 emissions in relation to economic output. Carbon dioxide (CO2) is the primary greenhouse gas emitted through human activities, and one of the main culprits behind global warming. The use of a ratio in this instance is meant to capture environmental efficiencies, not simply aggregate output.

K5. ANNUAL MEAN LEVELS OF FINE PARTICULATE MATTER (E.G. PM2.5 AND PM10) IN CITIES (POPULATION WEIGHTED)

The fifth indicator is a proxy for outdoor air pollution in cities. Air quality is represented by the annual mean concentration of particular matter smaller than 10 or 2.5 microns.

K6. THE NATURAL RESOURCE PROTECTION INDICATOR (NRPI)

The last recommended indicator is a proxy for natural resource management and conservation. The indicator assesses whether a country conserves at least 10% of all of its biomes (e.g., deserts, forests, grasslands, aquatic, and tundra). It captures government efforts to ensure habitat preservation and biodiversity protection. It is a weighted average percentage of biomes under protected status.

In addition to the six core indicators an extra indicator is suggested.

K7C (CONSIDERED). SHARE OF RENEWABLES IN TOTAL PRIMARY ENERGY SUPPLY (%)

This measures final energy consumption derived from renewable resources. This indicator is proposed as a supplementary measure to K1. This is also a measure that captures a leading sector; to the extent that the planet is headed in the direction of addressing global warming, those countries that develop renewables first will likely have an innovation edge in developing and marketing products and processes to the world market, hence contributing to long-term economic growth.

L. Decision-making processes incorporate long-term costs

Sustainable practices look at generating benefits for present and future populations. A good criterion for ensuring that development strategies are sound is to not only consider short-term gains but also account for potential long-term risks and impacts. Rarely is this a simple exercise of balancing costs and benefits, for there are human and environmental costs that are challenging to measure, let alone weigh. In this section we focus on trying to capture the tradeoff between human needs and environmental preservation. We propose an indicator that measures the level of material intensity in an economy—how much of our ecosystem's resources are being used to meet the levels of consumption and production of an economy.

L1. RESOURCE PRODUCTIVITY: RATIO OF GDP TO DOMESTIC MATERIAL CONSUMPTION (DMC)

This indicator captures positive shifts in consumption and production towards more sustainable practices. It is measured as the ratio of GDP to domestic material consumption (using purchasing power standards for proper comparison). The indicator allows policy makers to measure the extent of the decoupling of economic growth from natural resource usage, in order to assess environmental degradation that results from primary production, material processing, manufacturing and waste disposal. If an economy is reducing its material intensity, this implies that natural resources are being used more efficiently, either through recycling, or through shifts in behavioral patterns towards consumption and production of "greener" goods and services.

STABLE

Definition: "Individuals, communities, businesses and governments have a sufficient degree of confidence in the future and an increased ability to predict the outcome of their economic decisions. Individuals, households, communities and enterprises are secure enough to invest in their future. Economic systems are increasingly resilient to shocks and stresses, especially to disruptions with a disproportionate impact on poor or vulnerable communities."

From the description of stable economies above, we identified three key sub-dimensions where specific indicators are measurable: public and private confidence in the future and ability to predict outcome of economic decisions; members of society are able to invest in their future; and economic resilience to shocks and stresses. We examine each in turn.

M. Public and private confidence in the future and ability to predict outcome of economic decisions

A healthy economy relies on human judgment just as much as it does on other drivers of development. When confidence in the current and future economy is trending upwards, individuals in society are more likely to consume and invest more, thus accelerating economic growth. Conversely, economies that are highly unpredictable can deter public and private confidence in the future, leading to lower investment and stagnating progress. With this in mind, we define this section in terms of two important factors of economic stability that shape public and private confidence: GDP volatility, and the quality and soundness of policies and regulations.

M1. STANDARD DEVIATION OF YEAR-TO-YEAR CHANGE IN GDP, PREVIOUS 20 YEARS

GDP volatility captures the level of macroeconomic instability of a country. Instability can have precarious effects on long-term economic development and well-being by hindering consumption, investments and productivity, as well as contributing to social, political and institutional unrest. This in turn diminishes individuals' confidence in the economy and thus growth. To measure this phenomenon we recommend a commonly used measure of GDP volatility, i.e., the standard deviation of the year-to-year change in GDP, focusing on the previous 20 years.

M2. REGULATORY QUALITY INDICATOR

Similarly, to monitor progress towards increased quality of policies and regulations, we recommend a composite indicator developed by the World Bank, which measures the ability of policy makers to articulate and implement sound policies and regulations that enable and encourage private sector development.

N. Members of society are able to invest in their future

In addition to current well-being, equally important is one's perception of the feasibility of long-term future goals. Thus, a stable economy must be able to provide its citizens accessible opportunities to invest in their future, and appropriate protection for the most vulnerable populations from unexpected risks. The recommended indicators in this section capture just that—the level of financial readiness, contract security and internal stability of an economy.

N1. PERCENTAGE OF POPULATION USING BANKING SERVICES

This is the first of three indicators designed to measure the availability of financial systems that facilitate current and future investments in the economy. This indicator denotes the percentage of the population that reports having a bank account at a bank or another type of financial institution, thus measuring access to financial services, particularly savings.

N2. PERCENTAGE OF POPULATION AGED 15+ WHO HAVE BORROWED FROM A FINANCIAL INSTITUTION

The second indicator estimates the percentage of respondents who report having borrowed money from a financial institution in the past 12 months. This indicator is an important measure of access to formal credit, enabling investment for future activities.

N3. MICROINSURANCE COVERAGE RATIO

The third indicator monitors the number of people actively insured through microinsurance from an entire targeted population. Microinsurance is a vital mechanism that protects people living in severe poverty against financial stress. It targets populations that live below the poverty line, thus measures protection against risk for the extremely poor. It is also an indirect measure of lack of appropriate government sponsored social protection programs against shocks and stresses for the poor, and it is occasionally viewed as an indicator of opportunity to provide financial services to the low-income markets at a profit. Estimates of the microinsurance coverage ratio are currently available for more than 50 countries from the MicroInsurance Centre.

N4. CPIA PROPERTY RIGHTS AND RULE-BASED GOVERNANCE RATING (1=LOW TO 6=HIGH)

This indicator monitors the extent to which contracts and property rights are protected. One of the most fundamental requirements for sound economic and financial systems, in both the developed and developing world, is having well-defined rules and regulations around protection of contract and property rights. Without them, destructive competition arises, as does the emergence of abusive powers and monopoly markets. We suggest an indicator that assesses whether legal systems and proper governance structures are in place to ensure that property and contract rights are respected and fully enforced. This indicator is based on a rating system, where 0 is the lowest score, and 6 signifies a high degree of property right protection.

Apart from the core indicators above, we also emphasize the important role domestic security plays in driving future investments.

N5C (CONSIDERED). LEVEL OF INTERNAL CONFLICT, INTERNATIONAL COUNTRY RISK GUIDE RATING

Domestic security is captured by another rating indicator that assesses the level of political violence in a country, and its influence on governance. The highest rating denotes countries where there is no presence of armed or civil opposition against their government, and the state does not indulge in violence against its own citizens. The lowest score, on the other hand, embodies countries regularly afflicted by civil war, terrorism and/or political violence.

O. Economic resilience to shocks and stresses

Strengthening the capacity of our economies to absorb and overcome severe shocks is a key policy priority for economic stability. Policies must be geared to address vulnerabilities early on, mitigate the impact of shocks and stresses, and speed recovery periods in order to reduce their long-term impacts and economic costs. We recommend indicators that measure the level of domestic preparedness to both endogenous and exogenous stresses for pre- and post-shock periods. Two critical components are highlighted: social protection programs and economic diversification.

O1. GOVERNMENT EXPENDITURE ON SOCIAL SECURITY AND WELFARE AS A PERCENTAGE OF TOTAL GOVERNMENT EXPENDITURE

The first suggested indicator is a measure of government expenditure in social security and welfare. It comprises monetary and non-monetary benefits offered to members of society whom are sick, fully or partially disabled, of old age, survivors of war or trauma, or unemployed, among others.

02. SOCIAL PROTECTION AND LABOR RATING

The second recommendation is a rating indicator that monitors government policies in social programs and in the labor market. It assesses protection of citizens from becoming poor. It estimates availability of programs that assist the poor in better managing further risks, and measures access to minimal levels of welfare for all members of society.

O3. HERFINDAHL-HIRSCHMAN (EXPORT) PRODUCT CONCENTRATION INDEX

The third indicator is a measure of export diversification. Evidence shows that countries that are concentrated in very few products and markets are likely to be more susceptible to global and trade shocks. The composite index lies between 0 and 1, where 0 denotes greater diversification and 1 represents full concentration.

Two additional indicators are suggested in addition to the core indicators.

O4C (CONSIDERED). FDI VERSUS FPI, BOTH AS A % OF GDP

Countries that are highly reliant on foreign portfolio investment (FPI) are less stable than those that are reliant on foreign direct investment (FDI). FPI (for example, money in stock markets) can be easily withdrawn at the first signs of an economic downturn. FDI, by contrast, is "sticky"—it is hard to quickly move plants and equipment. One measurement problem is that both FDI and FPI are collected as flows in balance of payments data; however, one could likely develop estimates by accumulating flows over time, with norming as a percentage of GDP allowing for better comparison.

O5I (IDEAL). RESPONSE TIME FOR EMERGENCY RESPONSE SERVICES FROM INITIAL CALL

This is an ideal indicator which assesses the timeliness of emergency response services. This indicator, currently available at the city level, estimates the time it takes to respond to an emergency from the time of the initial call, and is an immediate measure of the speed at which help is available to people in the case of an emergency.

MEASURING INCLUSIVITY, PROMOTING CONVERSATIONS

In developing a recommended list of core indicators, the primary goal was to identify specific indicators, with readily available data, that could be used to measure how well an economy is performing along the five broad characteristics of an inclusive economy as defined by the Rockefeller Foundation. Rather than creating new indicators, the focus was on finding existing indicators that are already being used by other prominent initiatives, and so there is sufficient existing data of reasonable quality that it could be used in a large number of countries.

For none of the recommended indicators is there universal coverage across all countries, and some indicators are currently available only in a moderate number of advanced economies. But sufficient data exists for all of the indicators so that this framework could be used to measure how a large number of countries are performing along all five dimensions. Furthermore, since data on many of the indicators are available at a sub-national level in many countries (see Appendix A for information on which indicators), this set of indicators could also be useful for assessing performance on these metrics for many cities or other sub-national geographies (e.g., rural areas versus urban areas).

This issue of scale is crucial because it is important to have metrics that can apply to nations, regions, and even projects. It might be an interesting goal, and in practice it would be difficult to achieve and operationalize. Moreover, it might not fully exploit data that can be collected at one level that might not be available at another level. Perhaps it may be more fruitful to think of a set of indicators that fit within the five broad characteristics of an inclusive economy—equitable, participatory, growing, sustainable and stable—but more or less unfold at different layers depending on the scale in mind.

As for moving forward, one possible next step coming out of this report could involve the development of an integrated database that builds from the indicator framework presented in this report, perhaps with some work toward the investigation of indicators at different scales as discussed above. Such a database could be used to help prioritize investments and shape strategies in a range of different initiative as well as drive policies at all scales. It could be promoted as an integrated and collaborative indicator database, and in turn be a powerful information resource for policy makers, researchers, activists and the general audience engaged in promoting equitable, participatory, growing, sustainable and stable economies.

In short, the database could be used not just as a measurement tool but as a conversation starter. Such conversation and knowledge sharing, particularly through the use of indicators, are key to creating regional norms that support achieving growth and equity (Benner & Pastor, 2015). Having a readily available and relatively parsimonious database organized by these five broad characteristics could help ground such conversations and focus attention on the multi-dimensional approach to promoting inclusive economies. It would certainly contribute to broader awareness of the definition of an inclusive economy, and help us all better understand the ability of different countries to achieve inclusivity along these five dimensions.

Putting together such a database would be a substantial endeavor. There are multiple sources of data, with different geographies of coverage, and the technical aspects of integrating them into a single database are complicated. Furthermore, the uneven coverage across different countries would limit cross-national comparisons to specific indicators, thus making comprehensive cross-national comparisons about a country's ability to achieve an inclusive economy difficult to make. Cross-national comparisons across individual indicators can still be

very useful, and most countries will have some indicators in all five broad characteristics. But given these limitations, the database might be most useful, at least initially, for tracking change over-time within countries. Whether it is used for cross-national comparisons, or tracking change over time within single countries, developing such a database will be most useful if it can be regularly updated, thus clearly representing a further investment of time and resources.

Will such an investment pay off? It will if it is not seen as an external evaluative tool but rather as a way to promote a new path forward for societies beginning to understand that leaving people behind is not healthy for either their politics or their economies. Seeing the database creation in the context of promoting conversation can also alleviate some pressure: having that second goal in mind implies that the database need not be perfect but rather can evolve over time. Indeed, the evolution itself may be critical: the review of existing indicator initiatives, along with previous research, suggests that the process by which indicator initiatives are developed can be at least as important as, if not more important than, the specific indicators that are selected. Thus, whether the next step is to go ahead in the short term with putting together an inclusive economies indicator database or to put that decision off to the near future, it is advised to use these recommended indicators to help inform conversations amongst stakeholders about measuring and achieving inclusive economies.

CONCLUSION

A sort of "new normal" is emerging in the world of economic and social policy. Where inclusivity was once confined to an afterthought—something to be considered after economic growth has been achieved—a wide range of academics, policy makers, and others have begun to believe that addressing the inclusion question is actually a fundamental starting point. To some extent, this new common sense has come about because growth, particularly in the developing world was not producing the desired results, leading some to argue for economic strategies that would deliberately favor the poor. To some extent, it has come about because the concurrence of worsening income distribution, and a sputtering economy have led others to conclude that addressing the widening gaps will actually generate growth.

Whatever one makes of the causes and timing of the shift in thinking, it does seem to be here to stay. But what the exact shape of a new economic theory will be—and how success will be judged—remains up for grabs. Into the fray has stepped the Rockefeller Foundation (among others), with the Foundation actually bringing a remarkably comprehensive and coherent framework for an inclusive economy, one that defines inclusive economies as those that "expand opportunities for more broadly shared prosperity, especially for those facing the greatest barriers to advancing their well-being" and one that identifies five critical characteristics—equitable, participatory, growing, sustainable, and stable—as being interwoven dimensions.

Solid frameworks, however, also require solid measurement. This report has tried to take the Rockefeller definition and explore how the various characteristics might be broken down into a set of viable indicators. To get there, we looked into a wide range of existing indicator projects and pulled what we thought were among the best, most accessible, and most consistent variables being measured. Our overall conclusion is simple: such a set of indicators is possible but it will require a significant amount of effort to pull together and sustain—and it will need to be developed with nuance such that measures actually mean the same thing across countries, such that disaggregation can allow us to capture systemic disadvantage, and such that indicators work across various scales of policy and action.

Our biggest takeaway, however, is that such indicator projects are not separable from the conversations that they are meant to start. Our review of international indicator projects suggest that those that work best are embedded in a theory of change: because they are intended to stir action, and so often have a set of constituencies and causal connections in mind—the process is as important as the product. Partly because of this, we think the rather innovative definition of inclusive economies developed by the Rockefeller process should be seen not simply as a way to measure but also as a way to popularize the concept (partly because viable measurements imparts the sense of viable goals).

In integrating indicators into such conversations about promoting inclusion, we would suggest that it's important to recognize that there are conceptually two quite different reasons why people might face barriers to advancing their well-being: they could be passively left out of economic opportunities (say, by a poor society that has few resources to accommodate physical disabilities), or they could be actively marginalized or exploited by more powerful interests in society (say, by racial discrimination such as under apartheid in South Africa). As a result, change to expand opportunity can take place through common ground reasoning (yes, we should overcome ableism) or, depending on the circumstance, through conflict and bargaining (as with the anti-apartheid movement).

Because of these dynamics, consideration of how opportunity is distributed in economies are necessarily linked to understanding and often overcoming inequalities in the distribution of

decision-making power. Of course, in some cases, the conversations we are suggesting can help key decision-makers understand both the value of, and tool for, achieving an equitable, participatory, growing, sustainable and stable economy. In others, indicator data can become a vehicle for an empowered citizenry to hold governments and institutions accountable. In either case, central to forging inclusive economies is not just markets that work to improve the overall well-being of a society but also the strength of an independent civil society.

In this sense, the sort of work the Rockefeller Foundation is developing is intended to promote not just a more inclusive economy but also a fully inclusive polity. It's also clear that any such effort has an implicit action component: indicator projects gauge forward motion but they also trigger it. That would be a good thing: the concept of inclusive economies the Rockefeller Foundation has developed has salience, is assessable, and is likely to create a very productive series of conversations and collaborations. We trust that this memo contribute to those tasks of assessment and discussion. Another sort of economy is possible—and, with the right research and data collection, it can be measured.

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