Global Poverty Monitoring Technical Note 1

April 2018 PovcalNet Update

What's New

Aziz Atamanov, Joao Pedro Azevedo, R. Andres Castaneda Aguilar, Shaohua Chen, Paul A. Corral Rodas, Reno Dewina, Carolina Diaz-Bonilla, Dean M. Jolliffe, Christoph Lakner, Kihoon Lee, Daniel Gerszon Mahler, Jose Montes, Rose Mungai, Minh C. Nguyen, Espen Beer Prydz, Prem Sangraula, Kinnon Scott, Ayago Esmubancha Wambile, Judy Yang and Qinghua Zhao

April 2018
(Updated November 2019*)

Abstract

The April 2018 update to PovcalNet involves several changes to the data underlying the global poverty estimates. Some welfare aggregates have been changed for improved harmonization, some surveys have been dropped due to data quality concerns, and some of the CPI and national accounts input data have been revised. This document details the content of and reasoning behind the changes made. In addition to the changes listed here, 97 new country-years have been added. This brings the total number of surveys to 1577.

All authors are with the World Bank. Corresponding authors: Joao Pedro Azevedo (jazevedo@worldbank.org) and Christoph Lakner (clakner@worldbank.org). This Note has been cleared by Francisco H. G. Ferreira.

*November 2019 update:
- Section 2.1.4 on Chile has been removed. The previous version of the document stated that Chile had been moved from SEDLAC-02 to SEDLAC-03. In fact, we continue to use SEDLAC-02 for Chile until further checks are carried out.

Contents

1. Introduction

The April 2018 global poverty update from the World Bank contains revisions to the global and regional estimates from 1981 to 2013, originally released in October 2016 and revised in October 2017. The World Bank's next major update of global and regional poverty estimates is scheduled for October 2018, where we plan to release global poverty estimates for the reference year 2015. This will coincide with the launch of the next Poverty and Shared Prosperity report.

The April 2018 update includes new surveys that we have received and processed, as well as several changes to the existing data. Some changes reflect improvements in the welfare aggregate based on new harmonization efforts and more available information. Other changes involve corrections of minor errors in the construction of the welfare aggregate. When relevant, we have also updated some of the auxiliary data, such as the CPIs, as part of the regular updating cycle. Finally, we have dropped a few surveys from the database based on data quality concerns or the unavailability of sufficient documentation. This document outlines the changes made to the underlying data by country, and explains the reasons why these changes have been made.

Our main objectives with this note are twofold. First, we would like to document any changes that can affect the World Bank's reported global poverty numbers. Second, over time, these notes can gradually inform how we can better align ex-ante and ex-post data collection and welfare derivation efforts led by national and international agencies interested in stronger international comparability. Our understanding is that internationally comparable statistics should not replace national definitions, but can play a valuable role when national agencies are interested in cross-country comparisons and benchmarking.

The intended audience of this technical note covers all PovcalNet users, including national statistical offices and other government agencies responsible for poverty monitoring and the Sustainable Development Goals, as well as the broader research community.

Table 1 details the impact of the updates on global poverty in 2013. The global $1.90 headcount ratio increases from 10.7% to 10.9% with the new data, and the number of poor increases from 769 million to 783 million people. This change *at the global level* is primarily driven by new surveys from South Asia and Sub-Saharan Africa. Particularly, new surveys in Bangladesh and Ethiopia each add more than 7 million poor people compared to the previous estimate, which was based on extrapolations and interpolations of older surveys.

Some regions have also undergone substantial changes for the *regional* headcount ratios that are less noticeable at the global level. In the Middle East and North Africa, the headcount ratio increases from 2.3% to 2.7%, and the number of poor from 8.3 million to 9.6 million. This is driven by revised growth rates for Syria in recent years (see section 4). In Europe and Central Asia, the headcount ratio decreases from 2.2% to 1.6% and the number of poor from 10.4 million to 7.7 million. This is primarily driven by changes for Tajikistan and Uzbekistan, where poverty has been revised downward. In Tajikistan, this is caused by replacing with surveys of greater comparability (see section 5.6), and in Uzbekistan by a new CPI series (see section 3).

Table 1: Poverty estimates for reference year 2013: Comparison of October 2017 and April 2018 versions

Region	Survey coverage (%)		$1.90: headcount ratio (%)		$1.90: number of poor (mil)		$3.20: headcount ratio (%)		$3.20: number of poor (mil)		$5.50: headcount ratio (%)		$5.50: number of poor (mil)	
	Oct 2017	Apr 2018	Oct 2017	Apr 2018	Oct 2017	Apr 2018	Oct 2017	Apr 2018	Oct 2017	Apr 2018	Oct 2017	Apr 2018	Oct 2017	Apr 2018
East Asia and Pacific	96.5	97.7	3.7	3.6	73.9	73.2	17.6	17.6	354	352	42.6	42.5	855	853
Europe and Central Asia	90.7	90.7	2.2	1.6	10.4	7.7	6.8	5.8	32.8	27.7	14.9	14.1	72.1	67.8
Latin America and the Caribbean	91.7	91.6	4.9	4.5	30.1	27.8	11.6	11.3	71.0	69.5	27.3	27.1	167	166
Middle East and North Africa	78.0	77.7	2.3	2.7	8.3	9.6	13.1	14.5	47.1	52.0	40.8	42.7	146	153
South Asia	98.3	98.1	14.7	15.1	249	257	52.0	52.6	883	894	83.2	83.5	1414	1418
Sub-Saharan Africa	49.6	69.1	41.0	42.3	390	401	66.5	67.5	633	639	85.0	85.2	809	807
Other High-Income Economies	68.9	76.1	0.6	0.6	6.5	6.4	0.9	0.9	9.7	9.5	1.5	1.5	15.9	15.9
World Total	84.9	88.8	10.7	10.9	769	783	28.3	28.6	2031	2044	48.4	48.7	3479	3481

2. Changes to welfare aggregates

2.1 Update from SEDLAC-02 to SEDLAC-03

The PovcalNet data for Latin America and the Caribbean are taken from the Socio-Economic Database for Latin America and the Caribbean (SEDLAC). SEDLAC has been developed by the Center for Distributional, Labor and Social Studies (CEDLAS) of the Universidad Nacional de La Plata in Argentina, in partnership with World Bank's Poverty and Equity Group's Latin America team. A process of methodological and technical revisions to the SEDLAC project started in 2015, to address several issues presented by users during the preceding five years. Additional changes were made to better align the SEDLAC data with the household survey harmonized by the World Bank for other regions. These revisions of the welfare aggregate represent a move from version 02 of the SEDLAC project, to version 03.

The main methodological changes in SEDLAC-03 that directly affect welfare measurement, such as estimates of poverty and inequality, are as follows:

1. Modifications were made to the imputation of rent for owner-occupiers in Argentina, Brazil, Ecuador, and Honduras. These surveys lack estimates of implicit rent by the national statistical office (NSO), or a self-reported rent question. The previous methodology applied a premium of 10 percent of total income to home owners, which was found to be imprecise and to have significant distributional implications. The new methodology uses a hedonic model to impute rent in these four countries.[1]
2. The following modifications to the imputation of implicit rent were applied to all surveys:
    a. Rent has been imputed in older surveys that lacked self-reported rent, using the share of self-reported rent by decile in the closest survey with this information.
    b. Rent imputations have been extended to households in usufruct, ceded dwellings, and possession without documentation.
    c. Dwellings provided free-of-charge by employers have been changed to in-kind labor income instead of rent.
    d. The methodology to treat missing values on self-reported rent has been standardized across all household surveys.
3. The variable for secondary household members has been updated in some countries. Secondary household members tend to be domestic employees and tenants. When questionnaires include ambiguous categories, SEDLAC follows the national convention for defining household members.

Other country-specific changes are listed below.

2.1.1 Argentina
1. Income aggregates already created by the NSO were disregarded and recreated from the component incomes. The NSO had included non-current income sources, like labor bonuses, in its aggregate.
2. Regarding non-labor income, bonuses for pensions were correctly converted to monthly values, retroactive income for pensions was excluded from the welfare aggregate as it is not current income, and a small modification was made to "other incomes" to distinguish between casual and current incomes.

---

[1] The methodology for the hedonic model is documented in a background note written by the World Bank's Poverty and Equity Group's Latin America team and CEDLAS (forthcoming, draft available upon request). The hedonic model uses a quantile regression which takes into account that housing characteristics may be valued differently along the distribution (also see Balcázar et al., 2017).

3. The new hedonic model using quantile regression (QR) for imputing rent was used instead of the 10 percent premium discussed above.

2.1.2 Bolivia
1. Individual labor income earned during the last month for individuals who were unemployed during the last week is corrected. In particular, the type of employment and the source of income were made consistent.
2. Two Conditional Cash Transfers (Bono Juana Azurduy and Bono Juancito Pinto) are now included in the non-labor income component. Remittances in-kind from abroad are now correctly converted to monthly values.
3. The 10 percent premium to account for imputed rent was replaced by the self-reported value in the surveys. Additionally, the group of households for which rent was imputed increased by adding those whose dwellings were ceded. Finally, a coding error in homeownership was fixed in the 2000, 2001, and 2002 surveys.

2.1.3 Brazil
1. The new hedonic model using QR for imputing rent was used instead of the 10 percent premium discussed above.
2. Additionally, the group of households for which rent was imputed increased by adding those whose dwellings were ceded.

2.1.4 Colombia
1. All four quarters of data are now included in SEDLAC-03, given the availability of a longer series of annual microdata (from 2008 to the present). Previously, only the third quarter of the survey was used to maintain comparability with surveys pre-2008 where complete data were only available for that quarter. To take advantage of the improved representativeness of the most recent surveys, comparability over time of the Colombian series is now broken in 2008.
2. Price adjustments by department (Spanish *departamentos*) were incorporated using the methodology by the NSO to create spatial price indices.
3. Incomes received during the last 12 months as severance pay are now excluded from the welfare aggregate as they are considered casual income.
4. The group of households for which rent was imputed was expanded to include households living in ceded dwelling.

2.1.5 Costa Rica
1. Individual labor income now includes income earned last month by individuals who were unemployed during the last week. Previously, these labor incomes were excluded.
2. For the 2001-2009 period, household rent is imputed using the new hedonic model, whereas for 2010 onwards the self-reported value is used instead. The self-reported question was only added to the survey in 2010.

2.1.6 Dominican Republic
1. In the conversion to monthly values, individual labor income earned weekly is now multiplied by 4.33 rather than by 4.3. Labor income received every two weeks is now multiplied by 2.165 rather than by 2.
2. The following sources of income were excluded from the income aggregate: severance pay, inheritance, gambling income, and sporadic income from accident or life insurance policies by foreign insurance companies.
3. The definition of secondary household members has been corrected.

2.1.7 Ecuador

1. Individual labor income now includes income earned last month by individuals who were unemployed during the last week. Previously, these labor incomes were excluded.
2. The new hedonic model using QR for imputing rent was used instead of the 10 percent premium discussed above.

2.1.8 Guatemala

1. An error in the temporal price deflation was fixed in the 2006 survey.
2. In the 2014 survey, non-labor income is now assigned to the corresponding individual, rather than to the head of household.

2.1.9 Haiti (income)

1. The disaggregation of labor incomes was improved. Income aggregates already created by the NSO were disregarded and recreated from the component incomes.

2.1.10 Honduras

1. In-kind labor income was added in the 2001, 2002, and 2003 surveys.
2. Non-labor income outliers are no longer eliminated.
3. Individual labor income now includes income earned last month by individuals who were unemployed during the last week. Previously, these labor incomes were excluded.
4. Since 2009, non-labor income now includes discounts for some goods and services given to the elderly.
5. The new hedonic model using QR for imputing rent was used instead of the 10 percent premium discussed above.

2.1.11 Mexico (income)

1. Labor income now includes the following sources of income: vocational salary and bonuses converted to monthly values.
2. Non-labor income now includes monetary donations from other households.

2.1.12 Nicaragua

1. Individual labor income now includes income earned last month by individuals who were unemployed during the last week. Previously, these labor incomes were excluded.
2. Temporal price deflators were modified to improve comparability of incomes captured during different months of the year.

2.1.13 Panama

1. Labor income now includes agricultural incomes and incomes for the thirteenth month.
2. In the 2000 survey, labor income of self-employed and employers in the agricultural sector is now included.
3. In the 2011 survey, private scholarships are now included as part of non-labor income.

2.1.14 Paraguay

1. The glass of milk provided to children in public schools is now included as an in-kind transfer. This information is not available in the 2002 survey.
2. Revised sampling weights released by the NSO were included in the 2000-2015 period. It has not yet been possible to make this revision for surveys prior to 2000.

2.1.15 Peru

1. An error in the estimation of imputed rent has been fixed.

2. Income aggregates already created by the NSO were disregarded and recreated from the component incomes.

2.1.16 Uruguay
1. The treatment and identification of employment by income (e.g., wage, self-employed, employer) and employments types have been improved.
2. Labor income now includes bonuses converted to monthly values and vocational salary.
3. Public transfers that depend on household composition are now treated properly.
4. Redundancy pay and other extraordinary income is now excluded from non-labor income, while "other current incomes" are included.

2.2 Other changes to welfare aggregates

2.2.1 Armenia
Coding errors have been corrected in the harmonization of the welfare aggregate for 2006, 2009, 2011 and 2014.

2.2.2 EU-SILC
All historical EU-SILC data have been updated to data release 09/2017. The updates for each country-year are documented on the Eurostat website [CIRCABC → Eurostat → EU-SILC → Library → data_dissemination → udb_user_database].

2.2.3 Georgia
The methodology to estimate international poverty in Georgia has been revised following a collaboration between the NSO and the World Bank, in particular regarding food consumption. The revised methodology adds information on food produced at the household from a section of the questionnaire that was not used before. The regular food questionnaire collects information on food arriving to the household during seven days, which may miss information on food stored at the household that is consumed during this period. Therefore, the new methodology is more accurate for households that rely heavily on food produced at the household.

As a result of these changes, Georgia's poverty headcount ratio at $3.2/day (2011 PPP) decreases substantially, from 25.6 percent to 17.1 percent in 2016. The trend in poverty over time is consistent before and after the changes. Neighboring Armenia, with a similar GDP per capita, still reports a lower poverty rate (13.5 percent in 2015). Inequality also decreases -- the Gini decreases from 39 to 36.5 points in 2016, although Georgia's ranking among countries in the region remains broadly similar.

2.2.4 Kazakhstan
The harmonization from 2001 to 2015 has been updated on several dimensions such as regional deflators, sampling weights, and rent. The implications for poverty estimates are minor.

2.2.5 Mexico (consumption)
The consumption aggregate from the Mexico Household Income and Expenditure Survey (ENlGH) has been harmonized. In all years, we now report "total current expenditure," which is the sum of "current monetary expenditure" and "current non-monetary expenditure."

In 2008, the Mexican National Institute of Statistics and Geography (INEGI) applied the recommendations issued at the 17th International Conference of Labour Statisticians and the Canberra Group Report to ENIGH. This implied a change in the income and expenditure classifications. From 2008 onwards, only

"current monetary expenditure" is available -- neither "total current expenditure" nor "current non-monetary expenditure" are reported. For surveys from 2008, we construct "current non-monetary expenditure" by adding the five variables below:

- autonomous consumption
- estimated implicit rent
- compensation in-kind
- transfer in-kind from relatives
- transfer in-kind from public institution

To this we add "current monetary expenditure" to arrive at a variable which is comparable to the "total current expenditure" variable reported until 2008. This methodology entails a minor break in the Mexican consumption series at 2008.

2.2.6 Mozambique

The welfare aggregate from the 1996 survey is no longer spatially deflated. This has generated moderate adjustments to the national poverty rates and a large adjustment to the Gini, which changes from 44.4 to 53.6.

2.2.7 Serbia

The following updates have been made to the harmonization of the welfare aggregate for 2004, 2005, 2006, 2007, 2008, 2009, 2010, and 2013:

1. Diary data are used for food consumption and recall data are used for non-food consumption.
2. Durable spending is no longer annualized.
3. For education spending, only 9 months are considered.
4. Rent and imputed rent are excluded from total consumption. Previously, total consumption included implicit rent in some years, which, aside from being a sub-optimal measure of rent, created an inconsistent time series.

2.2.8 Timor-Leste

In 2014 a new methodology to construct the welfare aggregate was adopted. The welfare aggregate in the 2007 survey has been revised such that it follows this new 2014 methodology. The revisions affected primarily the measurement of rent, as well as the spatial price adjustment. As a result of the changes in the welfare aggregate, the poverty headcount ratio in 2007 increases from 43.4% to 47.0% (at $1.9/day, 2011 PPP). World Bank (2016) explains the methodological changes between the two surveys in more detail.

2.2.9 West Bank and Gaza

There was a mistake in how spatial deflators were applied to welfare aggregates in 2004, 2010 and 2011 years by the World Bank team. The mistake was identified with the help of the Palestinian Central Bureau of Statistics and fixed in this update. The implications for the welfare aggregates are minimal.

3 Changes to CPI data

The baseline source of CPI data has been updated to IMF's International Financial Statistics (IFS) as of December 2017. The annual series is created by averaging the monthly IFS series. We continue to use alternative CPI data in countries where they were used previously. A detailed technical report, which fully accounts for the various CPI series used, will be published on the PovcalNet website.

3.1 Latin America and the Caribbean: Switch from ILO to IFS CPI data

In Latin America and the Caribbean, the baseline source of CPI data has been changed from ILO to the latest IFS data, consistent with the rest of the world. This has led to several substantial changes to the historical series, mostly in the 1980s and early 1990s.

3.2 Sub-Saharan Africa: Reweighting CPIs

In several African countries, the price data for the 2011 ICP round was collected in both 2011 and 2012. Therefore, in Mali, Mozambique, Rwanda, Tanzania and Uganda, a weighted average of the 2011 and 2012 CPI was previously used. New information from the African Development Bank suggests that only the 2011 prices were used for computing the PPPs, while the 2012 prices were collected for validation purposes. Therefore, the reweighting of CPIs has been removed for these five countries, which now simply use the annual IFS CPI series. These adjustments have caused minor revisions to the estimated poverty headcount ratios in these countries.

3.3 Changes to the survey year

In three cases, the survey year has been updated and the CPI changed accordingly. This concerns Fiji 2013.24 (previously 2013), Ghana 2012.8 (previously 2012) and Comoros 2013.5 (previously 2013).[2] In South Africa 2005 and 2010, the survey year reported in PovcalNet has changed (previously 2006 and 2011, respectively) but no changes in the CPI were necessary. In these two cases, the survey is from the earlier year (2005 and 2010), but the welfare aggregate is expressed in next year's prices (2006 and 2011).

---

[2] The decimal year notation is used when data are collected over two calendar years. The number before the decimal point refers to the first year of data collection, while the numbers after the decimal point show the proportion of data collected in the second year. For example, the Fiji survey (2013.24) was conducted in 2013 and 2014, with 24% of the data collected in 2014. For these countries, we use a weighted average of the annual CPI series, where the weights are based on the data collection. In the case of Fiji, we use a CPI that is the weighted average of the 2013 and 2014 CPIs, with weights of 76% and 24%, respectively.

4 Changes to national accounts and population data

National accounts data (per capita GDP and per capita personal consumption expenditure) used in lining up survey estimates to the reference years that are used for reporting regional and global poverty estimates have been revised to the December 2017 version of the World Bank's World Development Indicators (WDI). Missing national accounts data from WDI have been supplemented with data from the UN Statistical Yearbook (40th and 43rd editions) and earlier editions of the IMF's IFS, especially for the 1980s and early 1990s. For Syria in recent years, national accounts estimates are taken from Gobat and Kostial (2016). Linear extrapolations of national accounts data are no longer used to fill missing years, and observations are instead set to missing if national accounts data are not available to align survey estimates. The methods and national accounts data used for lining up continue to be revised and improved. A detailed technical note to be published in October 2018 will offer a more detailed explanation and documentation.

The population data has likewise been updated to the December 2017 version of the WDI.

5 Removal of surveys

5.1 Eastern Europe and Central Asia

17 surveys in Eastern Europe and Central Asia covering the years 1987-1993 have been dropped due to concerns about data quality or uncertainty about the source of the CPIs.[3] The poverty estimates in these country-years relied on very coarse grouped data, often with only 5 bins. In terms of CPI data, no official data exist for these countries during these periods, and the various alternative sources yield very different results. Users interested in this time period can obtain the original data from Milanovic (1998).

5.2 Azerbaijan

The 2008 and 2011 data have been removed due to a withdrawal of data access permission by the NSO.

5.3 Germany

Due to data access issues, EU-SILC surveys have been dropped for Germany and replaced with LIS surveys.

5.4 Guatemala

The 2011 ENCOVI Survey has been removed due to concerns over data quality, and because the results appeared out of line with general trends. This is consistent with the NSO's approach, which has stopped using this survey round.

5.5 Macedonia

The 2009 and 2010 Macedonia Household Budget Survey (HBS) have been removed until a thorough quality assessment and, if appropriate, a revision of this survey has been conducted. The sample size of the survey decreased strongly since 2009. Furthermore, average consumption decreased and consumption-based poverty rose in 2009, while the economy expanded and labor market indicators continued to improve. This has raised concerns over the representativeness of the HBS data.

5.6 Tajikistan

The Household Budget Survey (HBS) for 2012, 2013, 2014 has been removed. There are three main reasons for this: 1) the HBS is not comparable with the 2007 and 2009 Tajikistan Living Standards Study (TLSS) surveys, 2) the HBS has important shortcomings in the sampling design, and 3) the statistical agency is in the process of rolling out an improved survey design that follows more closely the TLSS, which will replace the existing HBS for the purposes of monitoring poverty.

The TLSS surveys used a standard two-stage sampling design, incorporated household size measurements on the basis of a full household roster, and relied on a comprehensive recall-based questionnaire. In contrast, the HBS sample is a legacy panel of households that is not weighted, does not currently incorporate a reliable household roster, and uses a diary approach to collect consumption and expenditure information.

The shortcomings of the HBS sampling design include: 1) it is unconventional, structured in three stages (first selecting districts, then selecting PSUs within districts, and finally households within those districts) leading the sample to be concentrated in certain parts of the country and underrepresented in others, 2) the

---

[3] This concerns Belarus (1988), Czech Republic (1988), Estonia (1988), Kazakhstan (1988), Kyrgyz Republic (1988, 1993), Lithuania (1988), Latvia (1988), Moldova (1988, 1992), Russian Federation (1988), Slovak Republic (1988, 1992), Slovenia (1987), Turkmenistan (1988), Ukraine (1988), Uzbekistan (1988).

sample refreshment procedure is not documented, and with the panel design likely leads to non-random attrition that is unaccounted for, and 3) the survey lacks population weights.

The national statistical agency is in the process of rolling out a new version of the HBS that would incorporate many elements from the previous TLSS approach. In particular, if fully implemented, the new questionnaire would be recall-based, and the sample would be drawn following guidelines for a standard two-stage sample. Thus, the TLSS design is likely to be the more consistent and comparable approach going forward. Furthermore, the TLSS is more comparable with the Household Survey for the Purpose of Improvement, Targeting and Advancing the Formula of Indirect Estimates of Needs (HSITAFIEN).

6 Country-years added

97 new country-years have been added to PovcalNet. These surveys are all listed in Table 2 below. Malta is now included for the first time.

Table 2: New country-years added

Country	Survey name	Years
Argentina	EPHC-S2	2016
Armenia	ILCS	2016
Austria	EU-SILC	2003, 2015
Bangladesh	HIES	2016
Belarus	HHS	2016
Belgium	EU-SILC	2003, 2015
Bolivia	EH	2016
Bosnia and Herzegovina	HBS	2015
China	*grouped data*	2014
Colombia	GEIH	2016
Costa Rica	ENAHO	2016
Croatia	EU-SILC	2015
Cyprus	EU-SILC	2015
Czech Republic	EU-SILC	2015
Denmark	EU-SILC	2003, 2015
Dominican Republic	ENFT	2016
Ecuador	ENEMDU	2016
El Salvador	EHPM	2016
Estonia	EU-SILC	2015
Ethiopia	HICES	2015
Finland	EU-SILC	2003, 2015
France	EU-SILC	2003, 2009, 2015
Gambia, The	IHS	2010, 2015
Georgia	HIS	2016
Germany	LIS	1991, 1994, 2000, 2001, 2004, 2015
Greece	EU-SILC	2003, 2015
Honduras	EPHPM	2016
Hungary	EU-SILC	2015
Iceland	EU-SILC	2003
Ireland	EU-SILC	2003
Italy	EU-SILC	2003
Kosovo	HBS	2014, 2015
Kyrgyz Republic	KIHS	2016
Latvia	EU-SILC	2015
Lithuania	EU-SILC	2015
Luxembourg	EU-SILC	2003
Malta	EU-SILC	2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014
Mexico	ENIGH	2005, 2016
Moldova	HBS	2016
Mongolia	HSES	2016
Mozambique	IOF	2014
Netherlands	EU-SILC	2015
Norway	EU-SILC	2003, 2015

Panama	EH	2016
Paraguay	EPH	2016
Peru	ENAHO	2016
Poland	HBS	2015
Poland	EU-SILC	2015
Portugal	EU-SILC	2003, 2015
Romania	HBS	2016
Romania	EU-SILC	2015
Serbia	HBS	2015
Serbia	EU-SILC	2012, 2013, 2014, 2015
Slovak Republic	EU-SILC	2015
Slovenia	EU-SILC	2015
Spain	EU-SILC	2003, 2015
Sri Lanka	HIES	2016
Sweden	EU-SILC	2003, 2015
Switzerland	EU-SILC	2006, 2014
Timor-Leste	TLSLS	2014
Turkey	HICES	2015, 2016
Ukraine	HLCS	2016
United Kingdom	EU-SILC	2015
United States	LIS	2016
Uruguay	ECH	2016

7 References

Azevedo, J. P. (2013), From Noise to Signal: The Successful Turnaround of Poverty Measurement in Colombia, *World Bank - Economic Premise*, The World Bank, issue 117, pages 1-4, May.

Balcázar, C. F., Ceriani, L., Olivieri, S. and M. Ranzani (2017), Rent-Imputation for Welfare Measurement: A Review of Methodologies and Empirical Findings. *Review of Income and Wealth*, 63(4): 881-898.

Bourguignon, F. (2015), Appraising income inequality databases in Latin America. *Journal of Economic Inequality*, 13(4): 557–578.

Gobat, J. and K. Kostial (2016), Syria's Conflict Economy. *IMF Working Paper*, WP/16/123, June 2016.

Milanovic, B. (1998), *Income, Inequality, and Poverty during the Transition from Planned to Market Economy.* World Bank Regional and Sectoral Studies. Washington, DC: World Bank.

Ministerio de Desarrollo Social (2015), Observatorio Social, Nueva Metodología de Medición de la Pobreza por Ingresos y Multidimensional, Documento Metodológico 28

Leyva-Parra, G. (2005). El Ajuste del Ingreso de la ENIGH con la Contabilidad Nacional y la Medicion de la Pobreza en Mexico. In Miguel Székely (editor): *Números que Meven al Mundo: La Medición de Pobreza en México*.

World Bank (2016). Poverty in Timor-Leste 2014. World Bank, Washington, DC.