



# Global AgeWatch Index 2015

*Methodology update*

# Introduction

The Global AgeWatch Index has three main objectives:

- It aims to measure and improve the quality of life and wellbeing of older people.
- It aims to highlight successes and shortcomings of strategic responses to population ageing challenges across the globe.
- It aims to stimulate demand for and supply of sufficient age- and sex-disaggregated data as necessary to generate evidence for policymaking on older people.

The indicators chosen for the Index have a number of important features:

- They provide a view of the current generation of older people.
- They are all outcome indicators. They are neither process indicators (such as legislations, for example, to protect specific rights in older age) nor input indicators that measure efforts to deliver a desired outcome (such as social protection expenditures).
- Most of them are absolute-level indicators, measuring quality of life and wellbeing of older people that is not relative to the rest of the society.
- They use data from publicly available international databases (including the International Labour Organization, World Bank and World Health Organization).

The methodology used to construct the Global AgeWatch Index is the same as that used for the Human Development Index (HDI) of the United Nations Development Programme (UNDP). The selection, development and use of multi-perspective quantitative indicators is also inspired by the Active Ageing Index of the European Commission and the United Nations Economic Commission for Europe (UNECE). The Global AgeWatch Index will continue to evolve with the help and advice from international experts and the availability of additional, better data nationally and internationally.

The 2015 Global AgeWatch Index has been constructed using the same methodology as for the inaugural 2013 Index, apart from changes to some of the data sources where these were considered essential. In some cases, changes to data sources also necessitated a change in the definition of the indicator.

A detailed description of the methodology can be found in *Global AgeWatch Index 2013: Purpose, methodology and results*, the methodology paper prepared by Professor Asghar Zaidi, Centre for Research on Ageing, University of Southampton. This update describes the objectives, definitions and data sources used for each indicator in the 2015 Index. It also explains the changes since 2014. It should be read in conjunction with the 2013 methodology paper. Full details of the methodology are also available on the Global AgeWatch website at **www.globalagewatch.org**

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**\$ 1. Income security**  
*Using indicators of income security*

**1.1 Pension income coverage**

**Objective** This indicator measures the existence and coverage of the pension system in a country.

**Definition** This indicator is defined as the proportion of people aged 65 or over in receipt of a pension, which is calculated in different ways according to the availability of data. Where figures exist for the proportion of people aged 65 or over receiving a pension, this data is used. Where figures only exist for the proportion of people receiving a pension at a lower age of eligibility (such as 60), it is assumed that this data would be the same for the population aged 65 and over.

Pension income coverage is calculated by comparing administrative data with age-disaggregated population figures, apart from some Latin American countries where coverage figures are derived from household surveys. The choice of whether to use administrative or household data was made on the basis of a number of criteria such as how recent the data was, and which figures best represented the coverage of the pension system as a whole.

**Data source** Main sources:  
 International Labour Organization, Table 21 Old age effective coverage: Proportion of elderly (above statutory pensionable age receiving an old age pension (latest available year), 2014, [www.social-protection.org/gimi/gess/ShowTheme.action?th.themeId=10](http://www.social-protection.org/gimi/gess/ShowTheme.action?th.themeId=10) (23 February 2014)  
 World Bank, Social Protection and Labor, Pensions, Performance: Beneficiaries Coverage Q4 2013, [www.worldbank.org/en/topic/socialprotectionlabor/brief/pensions-data](http://www.worldbank.org/en/topic/socialprotectionlabor/brief/pensions-data)

**Data source** Other sources:  
*continued*  
 HelpAge International, Social Pensions Database, 2014, [www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database](http://www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database) (22 August 2014)  
 Latin American countries except Mexico: Rafael Rofman and Maria Laura Oliveri, *Pension Coverage in Latin America: Trends and determinants*, Washington DC, World Bank, 2012  
 Cyprus: Office for the High Commissioner for Human Rights, *Cyprus response to the questionnaire on social protection of older persons addressed to governments by the independent expert on the question of human rights and extreme poverty*, 2010, [www.ohchr.org/Documents/Issues/EPoverty/older/Cyprus.pdf](http://www.ohchr.org/Documents/Issues/EPoverty/older/Cyprus.pdf)  
 Japan: Noriyuki Takayama, 'Pension Coverage in Japan' in Robert Holzmann, David A Robalino, and Noriyuki Takayama (eds), *Closing the Coverage Gap: The role of social pensions and other retirement income transfers*, Washington DC, World Bank, 2009  
 Mexico: Larry Willmore, *Towards universal pension coverage in Mexico*, London, HelpAge International, 2014  
 Serbia: Statistical Office of the Republic of Serbia, <http://popis2011.stat.rs/?lang=en> Accessed: 2 June 2014

**1.2 Poverty rate in old age**

**Objective** This indicator measures the poverty of older people, using the relative poverty definition.

**Definition** Proportion of people aged 60-plus living in households where the equivalised income/consumption is below the poverty line threshold of 50 per cent of the national equivalised median income/consumption (equivalising factor is the square root of household size).

**Data source** World Bank, The Atlas of Social Protection: Indicators of Resilience and Equity (unpublished data)<sup>a</sup> <http://datatopics.worldbank.org/aspire>  
 Year: Latest available  
 OECD, Statistics, Social Protection and Well-being, Income Distribution and Poverty, Poverty rate after taxes and transfers, Poverty line 50% of median<sup>b</sup> <http://stats.oecd.org/Index.aspx?QueryId=47991>  
 Accessed: 19 February 2015  
 Year: 2012 or latest available  
 Eurostat, At-risk-of-poverty rate by poverty threshold, age and sex (source: SILC [ilc\_li02])<sup>c,d</sup>  
 Accessed: 20 February 2015  
 Year: 2013

### 1.3 Relative welfare of older people

Objective	This indicator measures the income/consumption situation of older people in relation to the rest of the population.
Definition	Average income/consumption of people aged 60-plus as a proportion of average income/consumption for the rest of society.
Data source	World Bank, The Atlas of Social Protection: Indicators of Resilience and Equity (unpublished data) <sup>a</sup> <a href="http://datatopics.worldbank.org/aspire">http://datatopics.worldbank.org/aspire</a> Year: Latest available  Eurostat: Relative median income ratio (60+) (source: SILC [ilc_pns2]) <sup>c</sup> Accessed: 20 February 2015 Year: 2013 or latest available  OECD, <i>Pensions at a Glance 2013: OECD and G20 Indicators</i> , OECD Publishing, 2013, Table 5.1, p.163 <sup>e</sup> <a href="http://dx.doi.org/10.1787/pension_glance-2013-en">http://dx.doi.org/10.1787/pension_glance-2013-en</a>  Data for this indicator is missing for Indonesia and South Africa.

a. World Bank data was used for Afghanistan, Albania, Argentina, Armenia, Bangladesh, Belarus, Bolivia, Brazil, Bulgaria, Cambodia, Chile, Colombia, Costa Rica, Croatia, Dominican Republic, Ecuador, El Salvador, Georgia, Ghana, Guatemala, Honduras, Hungary, India, Iraq, Jordan, Kyrgyzstan, Lao PDR, Lithuania, Malawi, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Nepal, Nicaragua, Nigeria, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Romania, Rwanda, Serbia, Slovakia, Sri Lanka, Tajikistan, Thailand, Turkey, Ukraine, Uruguay, Venezuela, Vietnam, West Bank and Gaza, Mozambique, Tanzania, Uganda and Zambia.

b. OECD data was used for Australia, Canada, Israel, Japan, New Zealand, South Korea and United States.

c. Eurostat data was used for Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

### 1.4 GNI per capita

Objective	In 2015 indicator GDP per capita was replaced with GNI per capita. GDP is the monetary value of goods and services produced in a country irrespective of how much is retained in the country. This last distinction is critical in today's globalised world. GNI expresses the income accrued to residents of a country, including international flows such as remittances and aid, and excluding income generated in the country but retained abroad. Thus GNI is a more accurate measure of a country's economic wealth. Just like GDP, GNI per capita is a proxy for standard of living of people within a country. It aims to provide comparisons across countries. Therefore, it is not a conceptual change but a technical improvement. The use of the gross national income (GNI) per capita indicator implies that all citizens, old and young, would benefit equally from increased economic production in a country.
Definition	GNI per capita is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad and divided by the number of people in the country. GNI per capita was converted to international dollars using purchasing power parity rates (PPP). PPP are in constant 2011 international dollars.
Data source	World Bank <a href="http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD">http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD</a> Accessed: 18 February 2015 Year: 2012  Except Argentina: GNI per capita data for Argentina and the West Bank and Gaza was taken from UNDP, Human Development Report 2013, <i>The Rise of the South: Human progress in a diverse world</i> , 2013, Table 6, p.162, <a href="https://data.undp.org/dataset/GDP-per-capita-2005-PPP-NAVJ-MDA7">https://data.undp.org/dataset/GDP-per-capita-2005-PPP-NAVJ-MDA7</a> Accessed: 1 May 2014

d. Russia and China: Data was taken from the CSIS Global Aging Preparedness Index, <http://csis.org/publication/global-aging-preparedness-index>, 2nd edition

South Africa: LIS Inequality and Poverty Key Figures, Relative poverty rates – elderly (50%), 2010 [www.lisdatacenter.org/lis-ikf-webapp/app/search-ikf-figures](http://www.lisdatacenter.org/lis-ikf-webapp/app/search-ikf-figures), (22 May 2014)

Indonesia: The lack of data on relative poverty made us use a less comparable poverty rate indicator for Indonesia. The poverty rate used for Indonesia is derived on the basis of an absolute poverty line which restricts the international comparability of the Index for Indonesia. The absolute poverty rate indicator for Indonesia is drawn from 'Social assistance needs of poor and vulnerable older people in Indonesia', report prepared by HelpAge International and the Demographic Institute, Faculty of Economics at the University of Indonesia, September 2012, Table 21, p.77

e. OECD: Australia, Canada, Israel, Japan, Republic of Korea, New Zealand and United States.



## 2. Health status

### Using direct indicators of personal health

#### 2.1 Life expectancy at 60

Objective	This indicator measures how many years a person aged 60 can expect to live.
Definition	The average number of years that a person aged 60 can expect to live, if they pass through life exposed to the sex- and age-specific death rates prevailing at the time they are aged 60, for a specific year, in a given country.
Data source	WHO, Global Health Observatory Data Repository <a href="http://apps.who.int/gho/data/node.main.688?lang=en">http://apps.who.int/gho/data/node.main.688?lang=en</a> Accessed: 2 June 2014 Year: 2012  Except West Bank and Gaza: Data for West Bank and Gaza Life expectancy at 60 is taken from Profiles of Ageing 2013, UNDESA. <a href="http://www.un.org/en/development/desa/population/publications/dataset/urban/profilesOfAgeing2013.shtml">http://www.un.org/en/development/desa/population/publications/dataset/urban/profilesOfAgeing2013.shtml</a> Accessed: 22 May 2014

#### 2.2 Healthy life expectancy at 60

Objective	Healthy life expectancy at 60 measures how many years a person of 60 can expect to live in good physical health.
Definition	The average number of years that a person aged 60 can expect to live in “full health” by taking into account years lived in less than full health due to disease and/or injury.
Data source	Global Burden of Disease Study 2010, The Institute for Health Metrics and Evaluation <a href="http://ghdx.healthmetricsandevaluation.org/record/global-burden-disease-study-2010-gbd-2010-healthy-life-expectancy-1990-2010">http://ghdx.healthmetricsandevaluation.org/record/global-burden-disease-study-2010-gbd-2010-healthy-life-expectancy-1990-2010</a> Accessed: 11 April 2013 Year: 2010

#### 2.3 Relative psychological wellbeing

Objective	Psychological wellbeing is a critical factor in measuring the quality of life in later life. This indicator measures self-assessed mental wellbeing and supplements the healthy life expectancy indicator which relies on physical health only.
Definition	Proportion of people over 50 who answered “yes” to the question: “Do you feel your life has an important purpose or meaning?” Expressed as the percentage of people aged 50-plus who answered “yes” to this question divided by the percentage of people aged 35-49 who answered “yes”.
Data source	Gallup WorldView <a href="https://worldview.gallup.com">https://worldview.gallup.com</a> Accessed: 10 April 2013 Year: 2011 or latest available  Data for this indicator is missing for China, Iceland, Iraq, Luxembourg, Malta and Mauritius.



### 3. Capability

#### Using education and employment as a proxy for personal capability

##### 3.1 Labour market engagement of older people (employment rate)

Objective	This indicator measures older people's access to the labour market (both formal and informal employment) and therefore their ability to supplement pension income with wages, and their access to work-related support networks. Thus, employment rate is used as a proxy for the economic empowerment of older people.
Definition	Proportion of the population aged 55-64 that are employed.
Data source	ILO Employment-to-population ratio by sex and age, <a href="http://www.ilo.org/ilostat/faces/home/statisticaldata/data_by_subject?_adf.ctrl-state=110lx1px7r_420&amp;_afLoop=2593264645623189">www.ilo.org/ilostat/faces/home/statisticaldata/data_by_subject?_adf.ctrl-state=110lx1px7r_420&amp;_afLoop=2593264645623189</a> Accessed: 17 February 2015 Year: 2013 or latest available  ILO Key Indicators of the Labour Market, Labour force participation rate <sup>g</sup> <a href="http://www.ilo.org/empelm/what/WCMS_114240/lang--en/index.htm">www.ilo.org/empelm/what/WCMS_114240/lang--en/index.htm</a> Accessed: 17 February 2015 Year: 2013

<sup>g</sup>. Due to lack of age-disaggregated data on employment, the Labour Force Participation (LFP) rate was used instead for the following countries: Afghanistan, China, India, Jordan, Lao PDR, Malawi, Nepal, Nigeria, Pakistan, Rwanda, Iraq and Nicaragua. The standardisation of the indicators made it possible for the scale differences between employment rate and the LFP not to affect the comparison.

##### 3.2 Educational attainment of older people

Objective	Key competencies in the form of knowledge, skills and attitudes improve quality of life in older age. Education is a proxy for lifelong accumulation of skills and competencies that shows the social and human capital potential inherent in older people.
Definition	Proportion of the population aged 60-plus with secondary or higher education.
Data source	Barro, Robert and Jong-Wha Lee, 'A New Data Set of Educational Attainment in the World, 1950-2010' in <i>Journal of Development Economics</i> , 104, pp.184-198 Version 2.0 <a href="http://barrolee.com">http://barrolee.com</a> Accessed: 16 February 2015 Year: 2010  Except Belarus, Georgia, Montenegro, Nigeria, West Bank and Gaza: Educational attainment for Belarus, Georgia, Montenegro, Nigeria, West Bank and Gaza was calculated from UN data, Population 15 years of age and over, by educational attainment, age and sex, <a href="http://data.un.org/">http://data.un.org/</a> Accessed 16 February 2015 Year: latest available



## 4. Enabling environment<sup>h</sup>

### Using indicators of enabling features of communities in which older people live, prioritised by older people themselves

4.1 Social connections	
Objective	This indicator measures the support available from relatives or friends.
Definition	Percentage of people aged 50-plus who responded “yes” to the survey question: “If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?”
Data source	Gallup Analytics <a href="https://analytics.gallup.com">https://analytics.gallup.com</a> Accessed: 22 May 2013 Year: 2013 or latest available

4.3 Civic freedom	
Objective	This indicator measures how much control older people feel they have over their life.
Definition	Percentage of people aged 50-plus who provided a positive response to the survey question: “In this country, are you satisfied or dissatisfied with your freedom to choose what you do with your life?”
Data source	Gallup Analytics <a href="https://analytics.gallup.com">https://analytics.gallup.com</a> Accessed: 22 May 2014 Year: 2013 or latest available

4.2 Physical safety	
Objective	This indicator measures how safe people feel in their neighbourhood.
Definition	Percentage of people aged 50-plus who responded “yes” to the survey question: “Do you feel safe walking alone at night in the city or area where you live?”
Data source	Gallup Analytics <a href="https://analytics.gallup.com">https://analytics.gallup.com</a> Accessed: 22 May 2014 Year: 2013 or latest available

4.4 Access to public transport	
Objective	This indicator measures access to and quality of public transport which is key to older people’s quality of life, enabling them to access services (such as healthcare and shops) and friends and family.
Definition	Percentage of people aged 50-plus who provided a positive response to the survey question: “In the city or area where you live, are you satisfied or dissatisfied with the public transportation systems?”
Data source	Gallup Analytics <a href="https://analytics.gallup.com">https://analytics.gallup.com</a> Accessed: 22 May 2014 Year: 2013 or latest available

**h.** Gallup published 2014 data for the indicators of the enabling environment domain. When compared with 2013 data, it became apparent that there were large changes in some countries. We do not expect or are able to explain large changes in subjective data in one year. Therefore, it was decided not to update the enabling environment to avoid introduction of short-term volatility in the domain.

In future we will review Gallup data again and if it is clear that large changes are part of the trend, the data will be updated. Leaving longer time periods before updating this domain will capture genuine change and reduce subjective volatility. It was decided not to make a methodological change at this time but await a review of the Index methodology.

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