# **GALLUP**<sup>®</sup>

## Collecting Household Income Globally: Number and Handling of Missing Values

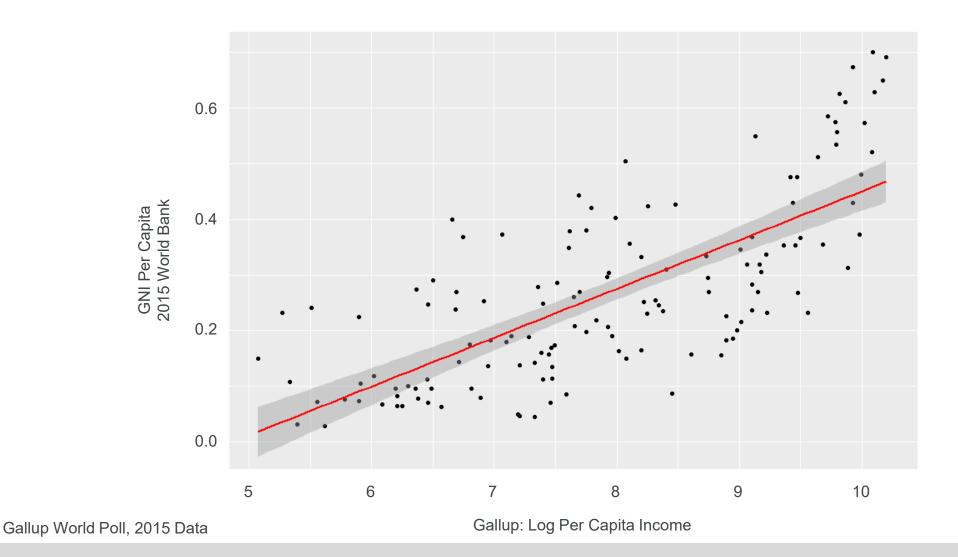
Anita Pugliese, Ken Kluch, Dato Tsabutashvili Gallup

3MC Conference Chicago, July 2016

#### Gallup World Poll

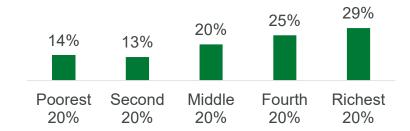
- Annual measurement of world adult population since 2005
- 120 to 150 countries per year
- Nationally representative, probability samples of 15+ population
- Typical N=1000 per measurement
  - Larger sample sizes for China, India, Russia
- Topics include: Wellbeing, Law and Order, Food and Shelter, Governance, Institutions and Infrastructure, Health, Economics, Jobs/employment, Community Attachment, Civic Engagement, Social Networks, Environment, Migration & Remittances.

#### Country Level Income Correlated With GNI Per Capita

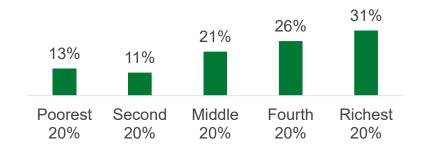


### Within Country, Higher Income Quintiles are Better Off Example Egypt

Higher income MORE likely to be thriving

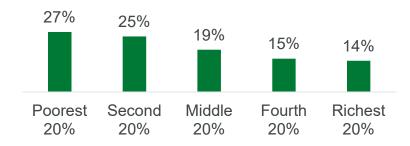


...and to be 'living comfortably on present income'

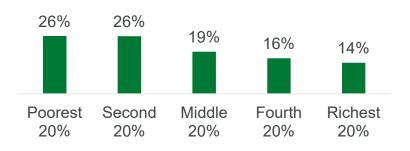


Gallup World Poll, 2015 Data

Higher Income LESS likely to be struggling for food



...and to be 'finding it difficult on present income'



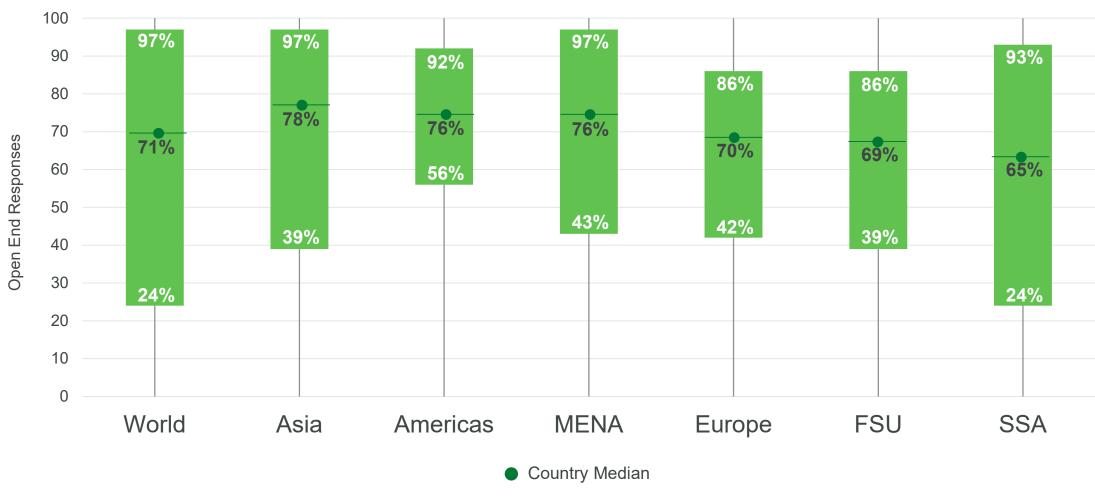
#### **Measuring Income**

- What is your total MONTHLY household income in (local currency), before taxes? Please include income from wages and salaries, remittances from family members living elsewhere, farming, and all other sources.
- (If dk or refused, ask:)
  Would you say your total MONTHLY household income is \_\_\_\_\_\_:
  (Interviewer: Read the income categories below until respondent selects the one that best describes their household.)
  - 0 (None/No household income)
  - 1 XX currency or less
  - 2 XX XX currency
  - 3 XX XX currency
  - 98 (Don't know)
  - 99 (Refused)

#### Gallup World Poll: 2015 data

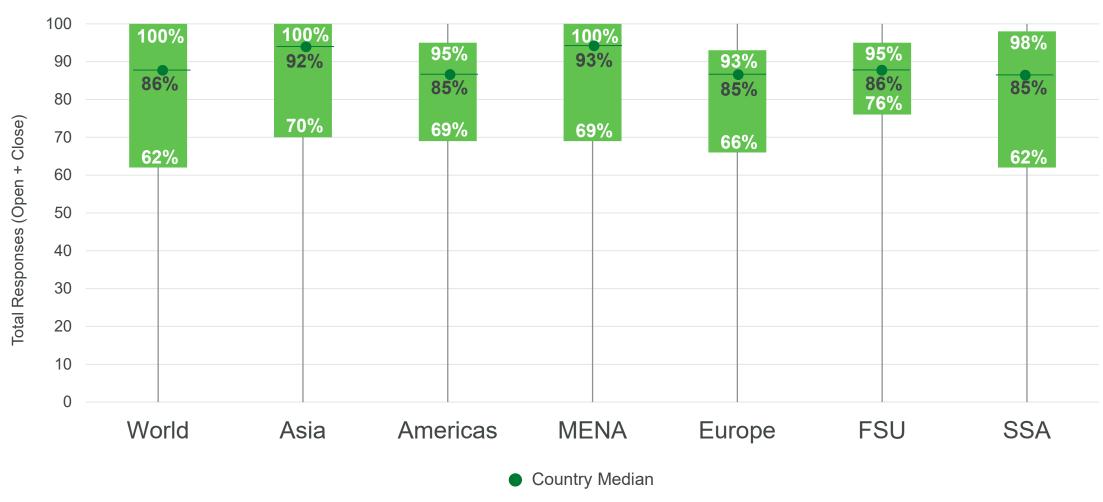
- 146,232 Total Interviews Worldwide
- 103,964 Provided Income Figure (71%)
- 22,002 Provided Income Range (15%)
- 20,266 Missing Income (14%)

#### Percent Providing Income Figure



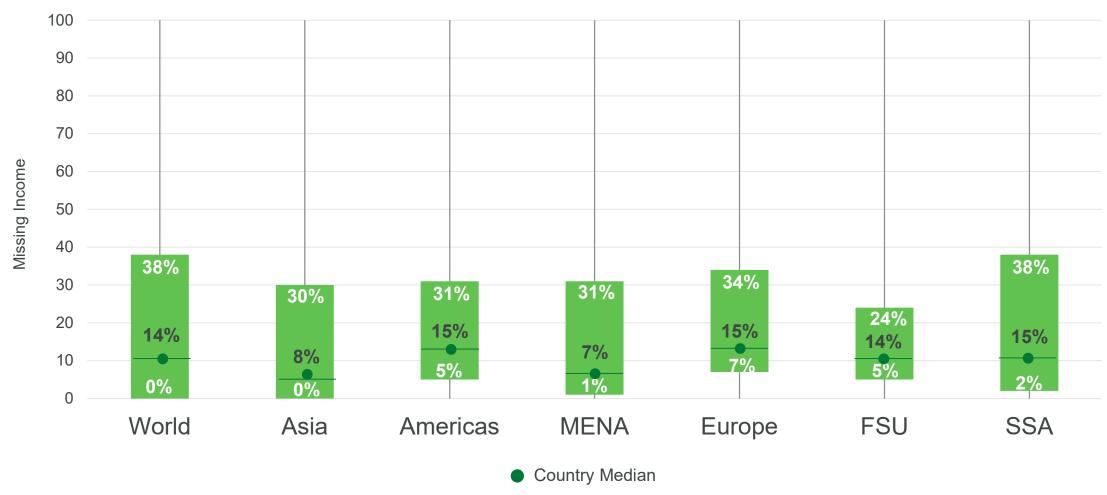


#### Percent Providing Income Figure or Income Range



Gallup World Poll, 2015 Data

#### Percent Missing Income



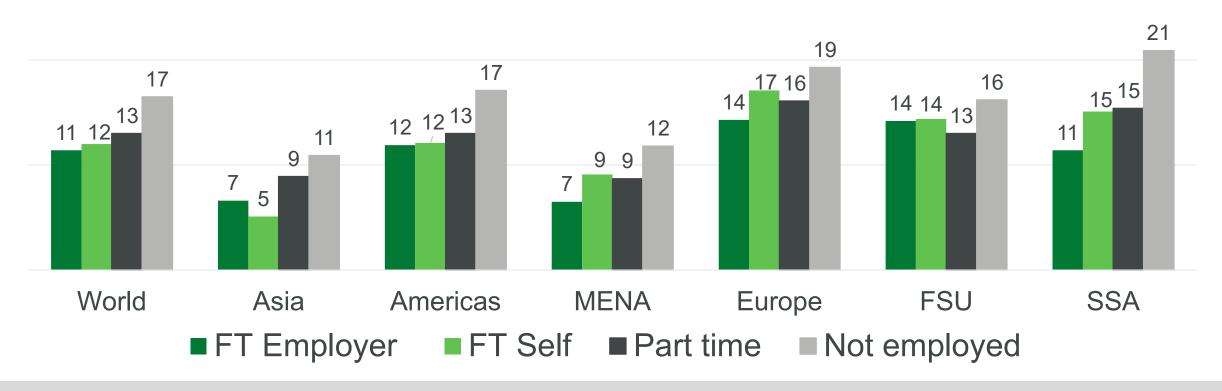
Gallup World Poll, 2015 Data

#### Why Missing on Income?

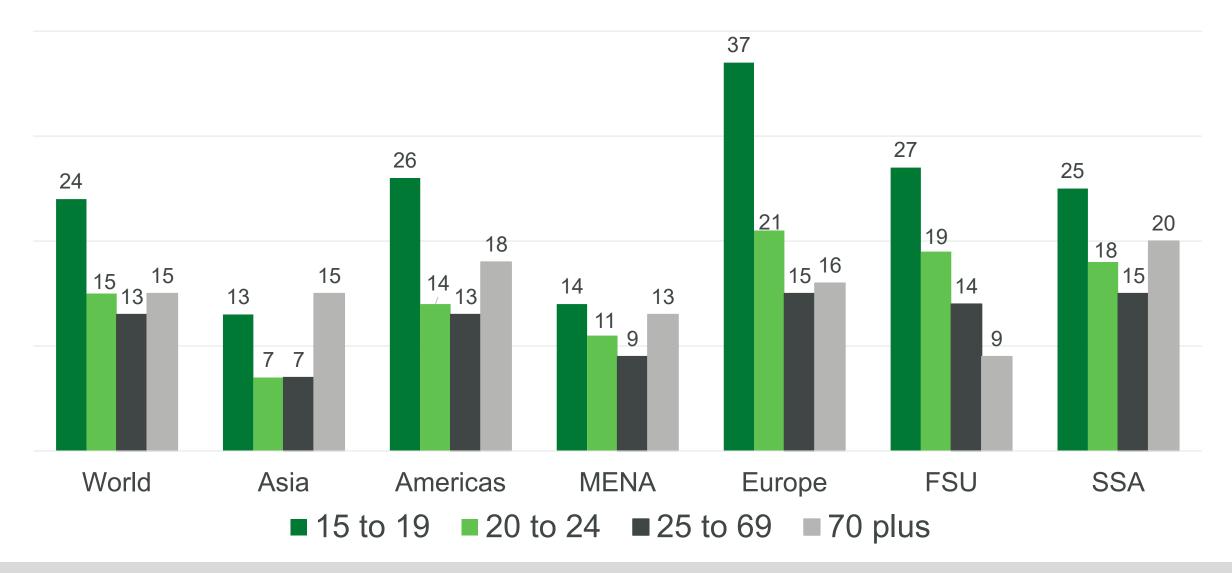
- Not Informed about income:
  - Not working
  - Not responsible for hh finances
  - Unconventional hhs, multiple adults living together
  - In some cultures, gender
  - Younger individuals not informed about income of adults in the hh
- Unable to estimate income:
  - Irregular income
  - Unofficial employment
  - Confusion about what is included in income
  - In some area (eg SSA), may be less numerate (higher family size, irregular income, need to add up)
- Do not want to disclose income
  - Safety
  - Afraid of authorities
  - Sensitive, private information
  - May not want to reveal very low or very high income



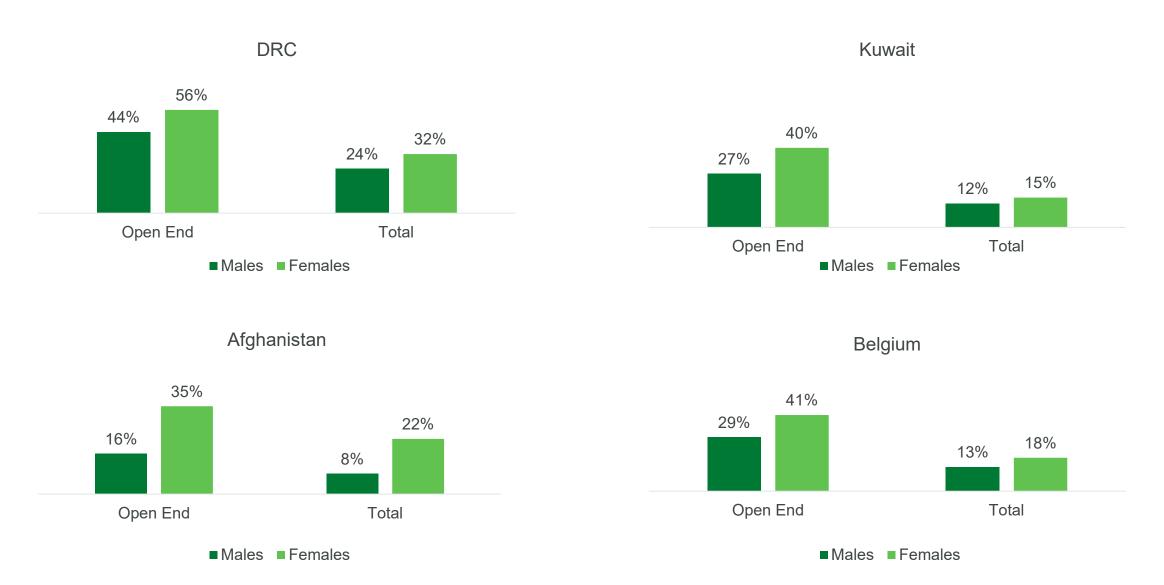
#### Respondents Not Employed: More Likely to have Missing Incomes



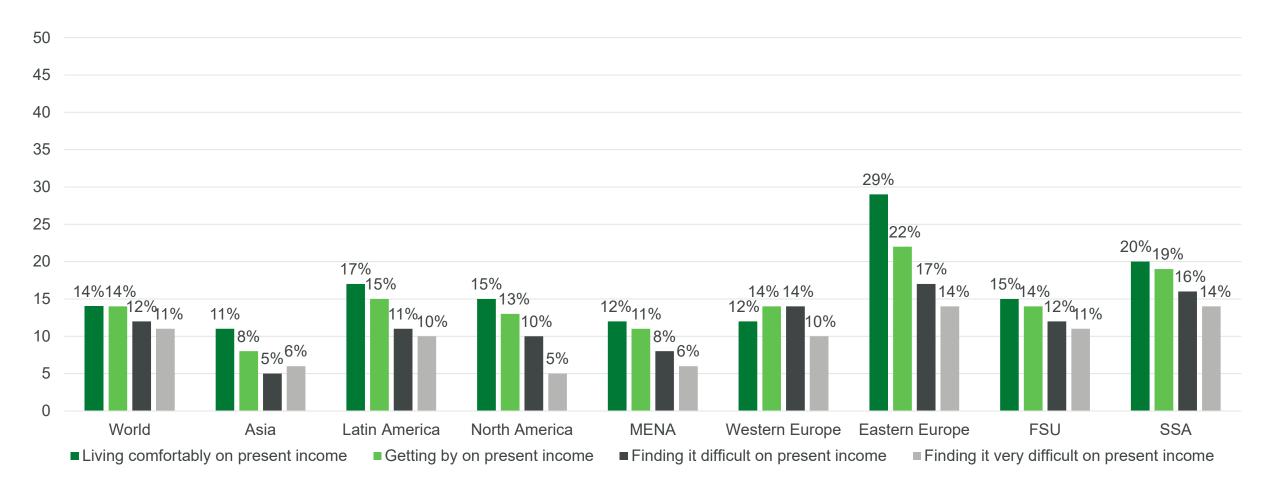
#### Respondents Under 25: More Likely to have Missing Income



#### In Some Countries, Females More Likely Missing Income



#### Respondents "Living Comfortably": Slightly More Likely to have Missing



#### Handling of Missing Values

- Open-ended answer use reported values
  - PLUS
- Closed-ended range hot deck imputation of value, restricting value to be within chosen range
  - PLUS
- Missing values hot deck imputation, no restriction of range
- Hot deck imputation IVs include hh level survey variables:
  - perception of standard of living measures, household does not have enough money for food
  - urban/rural (or pop size stratification)
  - hh size, landline phone, internet

#### Final Income Variables

- Annual Household Income in Local Currency
- Annual Household Income in International Dollars (ID)
- Household Income Per Capita Annual Income in Local Currency
- Household Income Per Capita Annual Income in International Dollars (ID)
- Per Capita Income Quintiles