

# Unmet Basic Needs and the Consensual Method

## The case of Argentina and the City of Buenos Aires

**Contemporary theories and methods for measuring multidimensional poverty**  
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## Experience in the development of a multidimensional poverty measure for Argentina

1. Analysis of a multidimensional poverty indicator developed from the information available in periodic household surveys.
2. Development of a multidimensional poverty measure for the City of Buenos Aires based on the consensual approach, through a specific survey.

- A multidimensional measure should be methodologically robust.
- The measure should:
  - i) consistently identify the poor;
  - (ii) measure poverty and not another concept;
  - (iii) have an adequate number of relevant dimensions.

In order to evaluate these requirements, different tests should be carried out to test aspects such as validity (the dimensions and indicators selected are correlated with causes or consequences of poverty) and reliability (how well they measure a common factor – poverty-).

- This assessment is based on the idea that poverty is a latent variable, which cannot be measured directly, but must be done through indicators of deprivation that account for the poverty situation.

## Objective:

**Design a multidimensional measure of poverty for Argentina based on available information from surveys of existing households.**

**Discuss advantages and limitations.**

- Initially, a group of variables was selected that are interpreted as manifestations of poverty.
- No variables were considered that refer to probable causes or consequences of poverty.

**Data from two surveys were used for the year 2015**

- *National Survey of Social Protection and Social Security-ENAPROSS II - MTEySS*
- *Permanent Household Survey-EPH – INDEC*

*Indicators were defined at the level of individuals*

# Selected Variables and thresholds

| Deprivation indicators   | Unit                     | Short name | Initial set<br>ENAPROSS | Final set<br>ENAPROSS | Initial set<br>EPH | Final set<br>EPH | Alternative<br>set EPH |
|--|--------------------------|------------|-------------------------|-----------------------|--------------------|------------------|------------------------|
| <b>Housing</b>   |                          |            |                         |                       |                    |                  |                        |
| Inadequate house (room in pension/<br>hotel, not constructed for<br>habitational purposes)                         | All household<br>members | house_1    | x                       |                       | x                  |                  |                        |
| Water outside the house  | All household<br>members | house_2    | x                       | x                     | x                  | x                | x                      |
| Inferior quality of housing materials<br>(resistant materials with no isolation<br>or non-resistant materials) (I) | All household<br>members | house_3    | x                       | x                     | x                  | x                |                        |
| Inferior quality of housing materials<br>(non-resistant materials) (II)  | All household<br>members | house_32   |                         |                       |                    |                  | x                      |
| More than three persons per room   | All household<br>members | rooms_2    | x                       | x                     | x                  | x                | x                      |
| Separate room for cooking  | All household<br>members | kitchen_1  | x                       | x                     | x                  |                  |                        |
| Insecure tenure (no permit)  | All household<br>members | tenure     | x                       | x                     | x                  | x                | x                      |
| <b>Sanitation facilities</b>   |                          |            |                         |                       |                    |                  |                        |
| Shared toilet facility (with<br>households not living in the same<br>house)  | All household<br>members | sanit_11   | x                       |                       | x                  |                  |                        |
| Toilet facility with no septic tank  | All household<br>members | sanit_3    | x                       | x                     | x                  | x                | x                      |
| Toilet facility with no flush  | All household<br>members | sanit_4    | x                       | x                     | x                  | x                | x                      |

# Selected Variables and thresholds (cont.)

| Deprivation indicators  | Unit                  | Short name | Initial set ENAPROSS | Final set ENAPROSS | Initial set EPH | Final set EPH | Alternative set EPH |
|---|-----------------------|------------|----------------------|--------------------|-----------------|---------------|---------------------|
| <b>Health</b>   |                       |            |                      |                    |                 |               |                     |
| Did not go to the doctor/ hospital because of lack of money or went to the doctor/ hospital but did not receive attention | Individual            | health_1   | x                    |                    |                 |               |                     |
| Did not buy medicines / make studies because of lack of money or did not receive attention                                | Individual            | health_2   | x                    |                    |                 |               |                     |
| Did not go to the doctor/ buy medicines because of economic problems  | All household members | xhealth_3  | x                    | x                  |                 |               |                     |
| <b>Education</b>  |                       |            |                      |                    |                 |               |                     |
| Children from 4 to 17 years that do not attend school   | Individual            | education  | x                    |                    | x               |               |                     |
| School backwardness   | Individual            | educ_back  | x                    |                    | x               |               |                     |
| <b>Environment</b>  |                       |            |                      |                    |                 |               |                     |
| Shanty town or near garbage dump  | All household         | environ    |                      |                    | x               |               |                     |

# Validity test: correlation (odds ratio) with low income and monetary poverty

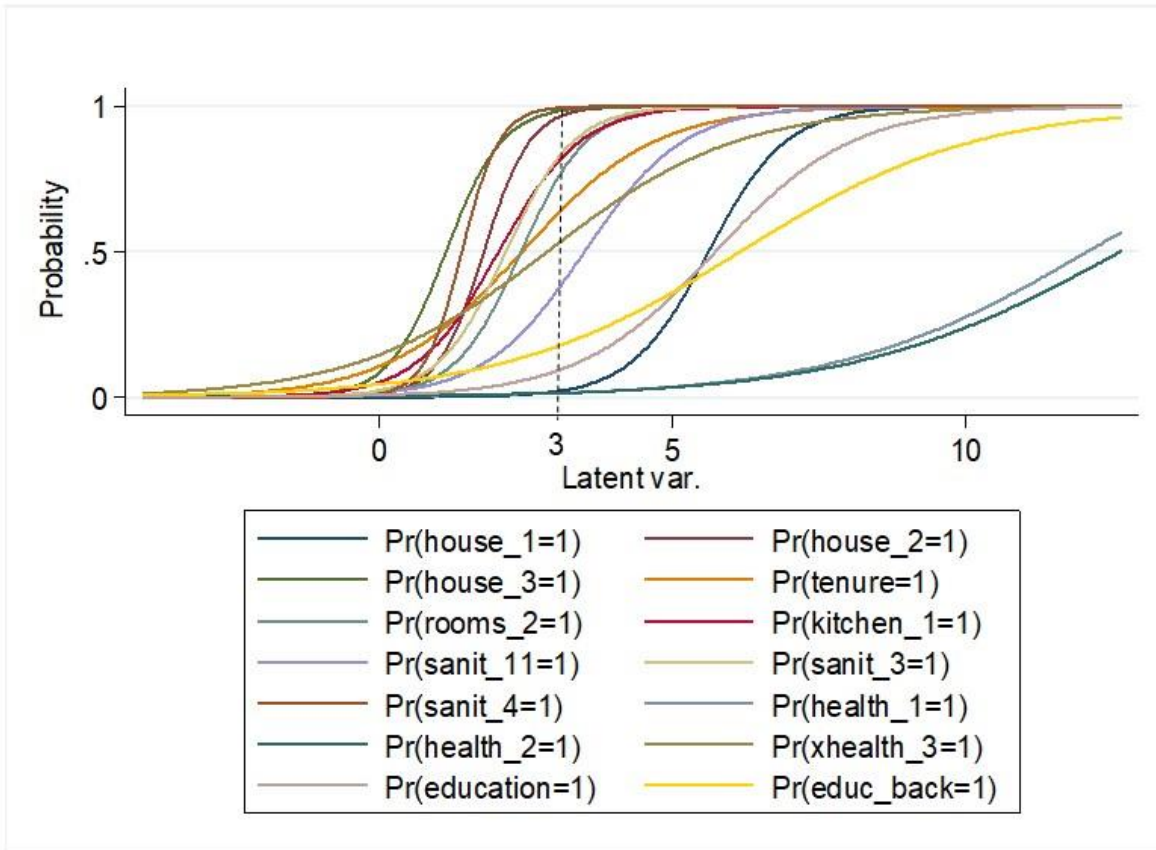
| Variables | Low income |          | Income poverty |          | Test result |
|-----------|------------|----------|----------------|----------|-------------|
| house_1   | -0.706     | (0.559)  | 0.549          | (0.450)  | fail        |
| house_2   | 1.325***   | (0.0500) | 1.272***       | (0.0495) | pass        |
| house_3   | 1.372***   | (0.0333) | 1.246***       | (0.0330) | pass        |
| tenure    | 0.843***   | (0.0378) | 0.836***       | (0.0379) | pass        |
| rooms_2   | 1.658***   | (0.0665) | 1.631***       | (0.0653) | pass        |
| kitchen_1 | 0.925***   | (0.0417) | 0.912***       | (0.0417) | pass        |
| sanit_11  | 0.730***   | (0.0703) | 0.751***       | (0.0703) | pass        |
| sanit_3   | 1.159***   | (0.0526) | 1.037***       | (0.0520) | pass        |
| sanit_4   | 1.429***   | (0.0421) | 1.488***       | (0.0421) | pass        |
| health_1  | 1.074***   | (0.205)  | 0.935***       | (0.202)  | pass        |
| health_2  | 0.277      | (0.195)  | 0.421**        | (0.194)  | fail        |
| xhealth_3 | 0.884***   | (0.0347) | 0.815***       | (0.0348) | pass        |
| education | 1.258***   | (0.130)  | 1.260***       | (0.129)  | pass        |
| educ_back | 1.068***   | (0.0590) | 1.103***       | (0.0589) | pass        |

Standard errors in parentheses

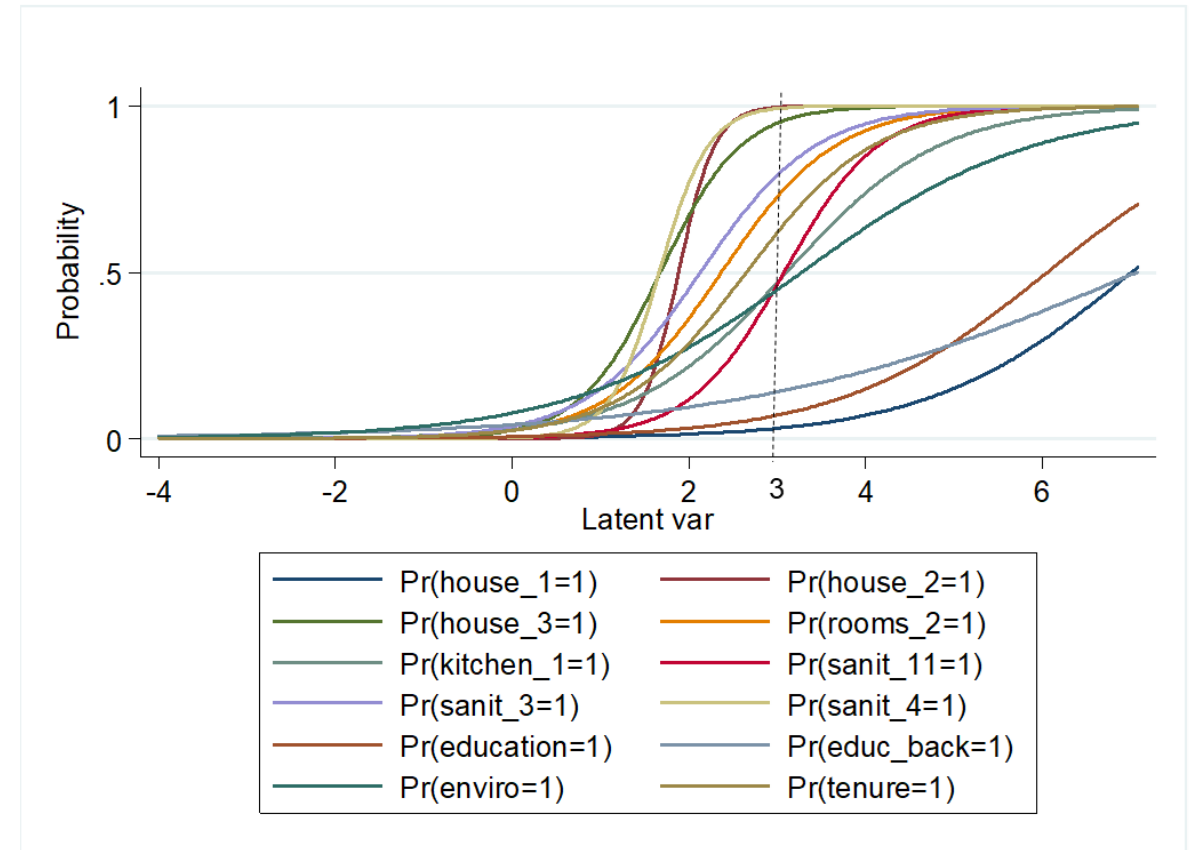
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: calculations based on data from the ENAPROSS-MTEySS

# Characteristic curves of the items – Initial sets



Fuente: cálculos en base a datos de ENAPROSS-MTEySS



Fuente: cálculos en base a datos de EPH-INDEC

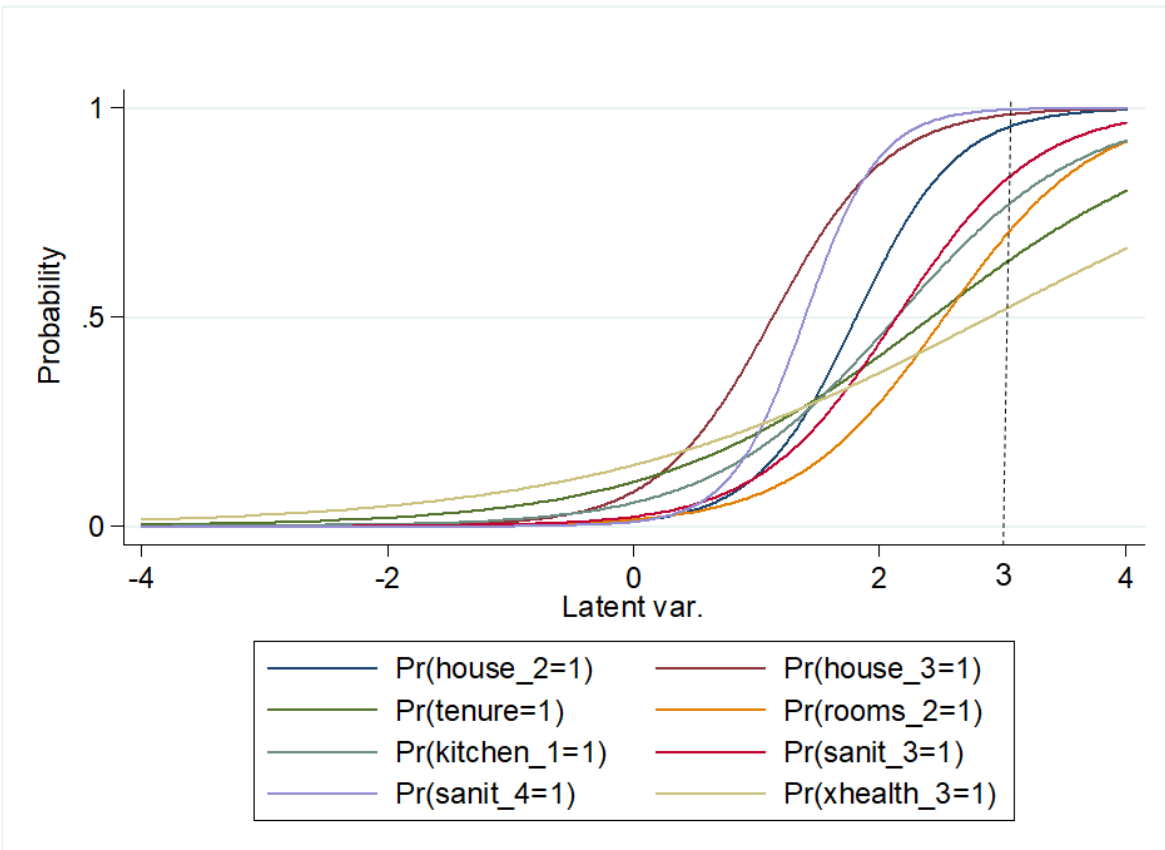
$\alpha = 0,58$

$\alpha = 0,59$

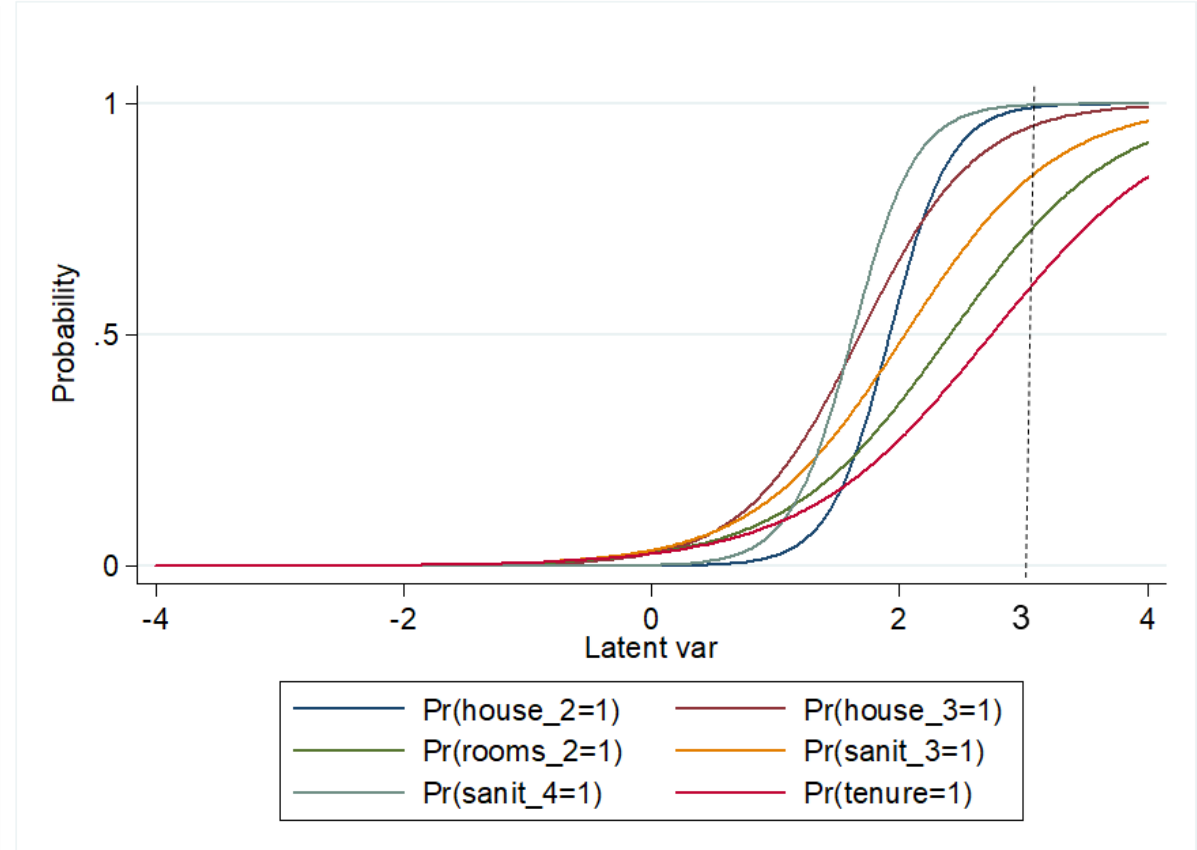
The test fails if: the slope of the curve is flat  
the severity parameter is  $> 3$



# Characteristic curves of the items – final sets



Source: calculations based on DATA FROM ENAPROSS-MTEySS



Source: calculations based on EPH-INDEC data

$\alpha = 0,64$

$\alpha = 0,65$

The test fails if: the slope of the curve is flat  
the severity parameter is  $> 3$

# Conclusions of the exercise

- The indicators of the initial selection appear to be valid items to be included in a multidimensional measure: only two out of thirteen are not correlated with low income and monetary poverty in one of the databases.
- All proposed indicator sets fail the Cronbach test. Variables that did not pass the confidence test (Item Response Theory) were excluded.
- The indicators that were appropriate from these tests are very similar to those included in the NBI approach.
- Although the health dimension potentially adds valuable information, the available information on this topic does not provide adequate indicators to be included in a multidimensional measure.
- 

**The development of a multidimensional measure of poverty is a possible and desirable goal. However, the public information currently available seems to be very restrictive as an adequate source for the construction of a multidimensional measure covering different areas of social interest.**

**A crucial point is the discussion of the conceptual framework of the measure, both in terms of the general definition of poverty and for the identification of the relevant dimensions. The indicators to be included in such a measure should emerge from this discussion and not as a result of the availability of information.**

## Objectives

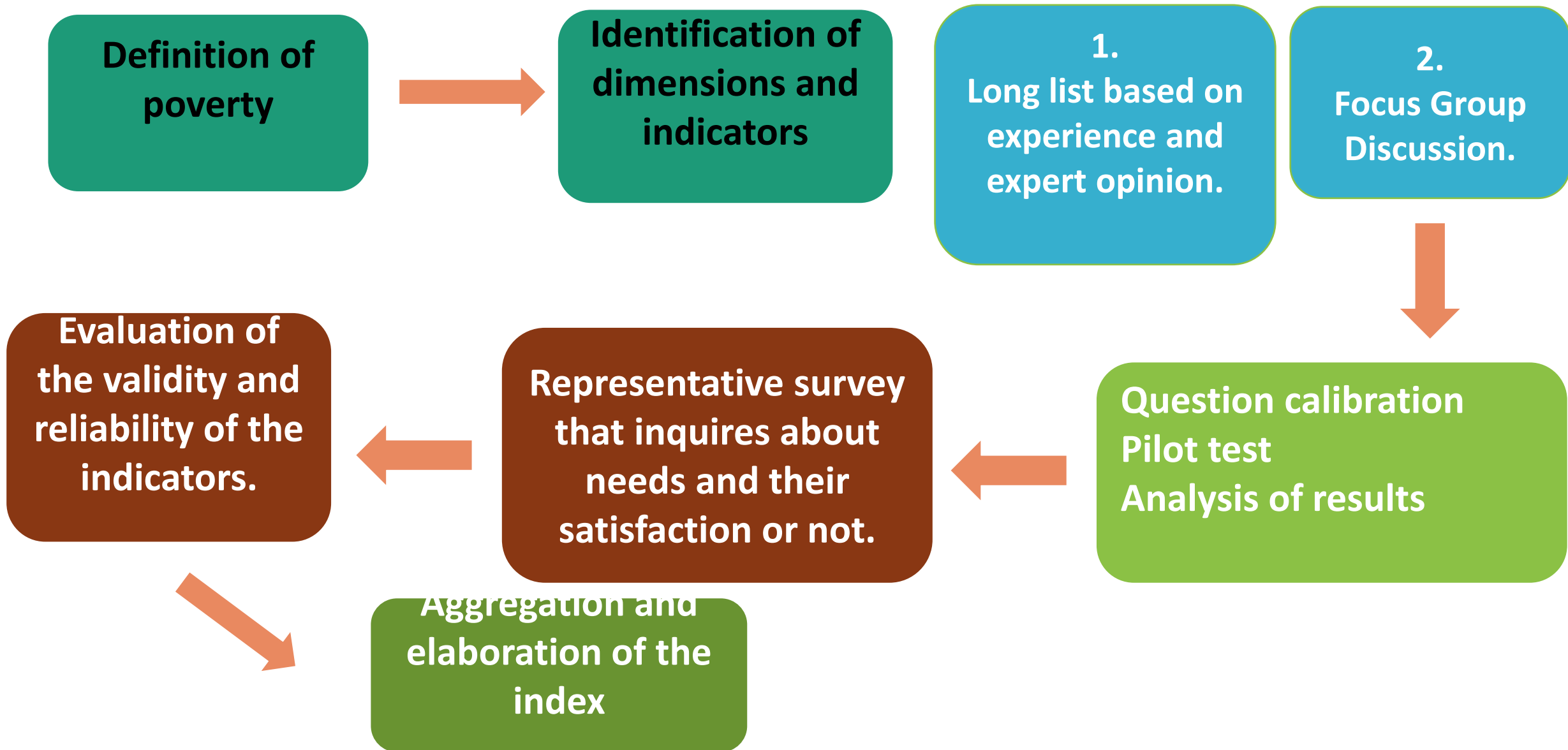
Achieve a multidimensional poverty measure for the City of Buenos Aires based on a solid conceptual basis and with valid and reliable indicators.

Develop a questionnaire that could be implemented as a module in an existing household survey.

Test the questionnaire in a pilot test.

**Joint work of the General Directorate of Statistics and Censuses of the City, the University of Bristol and the National University of General Sarmiento**

# Project stages



# Project stages

**Definition of  
poverty**



**Identification of  
dimensions and  
indicators**

**1.  
Long list based on  
experience and  
expert opinion.**

# Household items

Tener en el interior de la vivienda pisos de material (por ejemplo: mosaico, baldosa, madera o cerámica)

Tener en la vivienda techo de: baldosa o losa; cubierta asfáltica o membrana; pizarra, teja o chapa (con revestimiento interior o cielorraso)

## **Poder reparar goteras del techo**

Poder mantener la vivienda calefaccionada en invierno

Poder mantener la vivienda fresca en verano

Tener agua corriente dentro de la vivienda

## **Tener agua caliente para el baño y la cocina**

Disponer de algunos de los siguientes combustibles para cocinar: gas de red, garrafa o energía eléctrica

## **Tener luz (electricidad) con una conexión legal (no estar "colgado")**

Tener conexión a internet en la casa

## **Tener una heladera que permita preservar los alimentos**

Poder reemplazar o reparar muebles o aparatos rotos o dañados/ poder realizar pequeñas reparaciones en la vivienda

**Irse de vacaciones fuera de la ciudad de Buenos Aires al menos una semana al año**

# Items of adults and children

## Adultas/os y niñas/os

Hacer al menos dos comidas al día

Comer la cantidad de alimentos que piensa que debe comer

Tener una alimentación variada y balanceada

**Tener frazadas suficientes para el invierno**

**Tener ropa adecuada y suficiente para todas las estaciones del año**

**Poder reemplazar el calzado y la ropa de los miembros del hogar que se hayan estropeado por otros en buen estado**

Poder comprar ropa en el "shopping"

Poder cambiar el auto cada 5 años

**Poder tomar transporte público (colectivo, tren, subte, premetro)**

Poder tomar un taxi o remise en caso de necesidad (urgencia)

**Disponer de atención o cuidados adecuados para los/las niños/as, adulto/as mayores y personas con necesidades especiales**

**Ser atendido por un médico cuando está enfermo/a.**

**Obtener los remedios recetados por el médico cuando esta enfermo/a.**

**Realizar los estudios (ej. radiografía, análisis de sangre) o tratamientos solicitados por el medico.**

**Realizar los tratamientos dentales (caries, prótesis) cuando son necesarios.**

# Items of children

**Tener suficientes ambientes (excluye baño/ cocina/ pasillos) para que los/las niños/as y adultos/as duerman separados**

**Tener una cama para cada niño/a o adolescente.**

**Disponer de un lugar adecuado en la vivienda para que niños/as y adolescentes puedan hacer los deberes.**

Llevar a niños/as de hasta 12 años a realizarse controles médicos anuales (aunque estén sanos).

Que niños/as entre 3 y 5 años asistan al jardín.

Que niños/as entre 15 y 17 años asistan a la escuela.

**Que niños/as que asisten a la escuela tengan los útiles requeridos.**

**Que niños/as que asisten a la escuela tengan acceso en su casa a algún dispositivo electrónico (computadora/ tablet - excl. teléfono) para estudiar (no para jugar).**

Que niños/as y adolescentes puedan ser socios de un club para practicar deportes u otras actividades de esparcimiento.

# Adult items

Poder obtener métodos anticonceptivos.

**Gastar una pequeña cantidad de dinero en usted mismo/a (no en su familia) cada semana.**

**Incluye solo gastos en bienes y servicios personales (comidas fuera del hogar, golosinas, dulces).**

**Poder invitar a amigos y/o familiares a comer o tomar algo al menos una vez al mes (incluye gastos compartidos, excl. ser invitado sin gastar).**



# Project stages

**Definition of  
poverty**



**Identification of  
dimensions and  
indicators**

**1.  
Long list based on  
experience and  
expert opinion.**

**2.  
Discussion in  
focus groups.**

# Identification of dimensions and indicators

Based on experiences in other countries, a long list of items to be tested was drawn up.

## **Focus groups**

Three focus groups were carried out with inhabitants of the CABA belonging to three socioeconomic levels (defined on the basis of family income, educational level, occupational situation and commune).

It was sought that there was representation by age, gender, occupational situation, household conformation.

Each of the items was discussed in the three groups and a classification was obtained according to whether they were considered necessary, desirable or luxurious.

**Necessary:** everyone should be able to buy or access in the City.

**Desirable:** most people should be able to shop or access in the City, but they are not essential.

**Luxurious:** unnecessary to live with dignity, expensive, exclusive.

**Activities and goods or services that were considered necessary by 70% or more of the members of each group were considered needs.**

# Project stages

**Definition of poverty**



**Identification of dimensions and indicators**

**1.  
Long list based on experience and expert opinion.**

**2.  
Focus Group Discussion.**



**Question calibration  
Pilot test  
Analysis of results**

# Dimensions and indicators

From the work with the focus groups, 33 indicators were identified and grouped into 6 tentative dimensions:

**Nutrition:** skip meals, little variety of foods and eat less than I had thought

**Housing:** flooring material, durable roof material, leak repair, running water, hot water, cooking fuel, electricity and internet (childhood: sufficient environments, having a bed for each child and place to do homework),

**Personal/durable property:** refrigerator, blankets for the winter, suitable clothing all year round and replace damaged clothes and footwear.

**Health:** assistance/care, medical care, medicines, medical treatments, dental treatment and contraceptives (childhood: medical control)

**Social:** personal expenses, vacations, inviting family/friends and transportation

**Education (childhood):** kindergarten attendance, adolescent school attendance, school supplies and study devices (pc, tablet).

# Pilot test

A questionnaire was designed for the realization of a pilot test on 250 cases, together with the questionnaire of the Annual Household Survey (EAH-DGEyC) and was surveyed during the third quarter of 2019.

The questionnaire was applied to a household member (analysis unit).

**A continuación le voy a leer una lista de productos (cosas) y actividades y le voy a pedir que me diga si usted considera que para cualquier persona es necesario poder tenerlas o hacerlas para vivir dignamente en la Ciudad de Buenos Aires.**

**Recuerde que estas preguntas NO refieren a lo que USTED considera necesario personalmente, sino a lo que usted cree que todas las personas deberían tener y hacer.**

**Luego, le voy a preguntar acerca de su situación en particular.**

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**PM1** ¿Considera que para vivir dignamente en la Ciudad de Buenos Aires es necesario, para cualquier persona, ...

...tener en el interior de la vivienda pisos de material (mosaico, baldosa, cemento, madera o cerámica)?

Sí ..... 1  
No ..... 2

**PM2** Este hogar, ¿tiene en el interior de la vivienda pisos de material?

Sí ..... 1 → **Pase a PM 4**  
No ..... 2

**PM3** ¿No lo tiene... (G-S)

por falta de recursos? ..... 1  
por otras razones? ..... 2  
Especifique [ \_\_\_\_\_ ]

# Pilot test (cont.)

## Questions with special format

| <i>Para todos los hogares</i>  |  |
|--|--|
| <b>PM73</b> ¿Considera que para vivir dignamente en la Ciudad de Buenos Aires es necesario ...       |  |
| ... que adolescentes de 15 a 17 años<br>asistan a la escuela?  | Sí ..... 1<br>No ..... 2   |
| <i>Filtro 6: sólo para hogares donde viven personas de 15 a 17 años. Resto pasa a pregunta PM 76</i> |  |
| <b>PM74</b> Los/as adolescentes de 15 a 17 años de<br>este hogar, ¿asisten a la escuela? (G-S)       | Sí, todos ..... 1 → <i>Pase a PM 76</i><br>Sólo algunos ..... 2<br>No, ninguno ..... 3 |
| <b>PM75</b> ¿No asisten ... (G-S)  | por falta de recursos? ..... 1<br>por otras razones? ..... 2<br>Especifique   _____    |

# Analysis of the pilot test

**The instrument designed was suitable for application to a representative survey.**

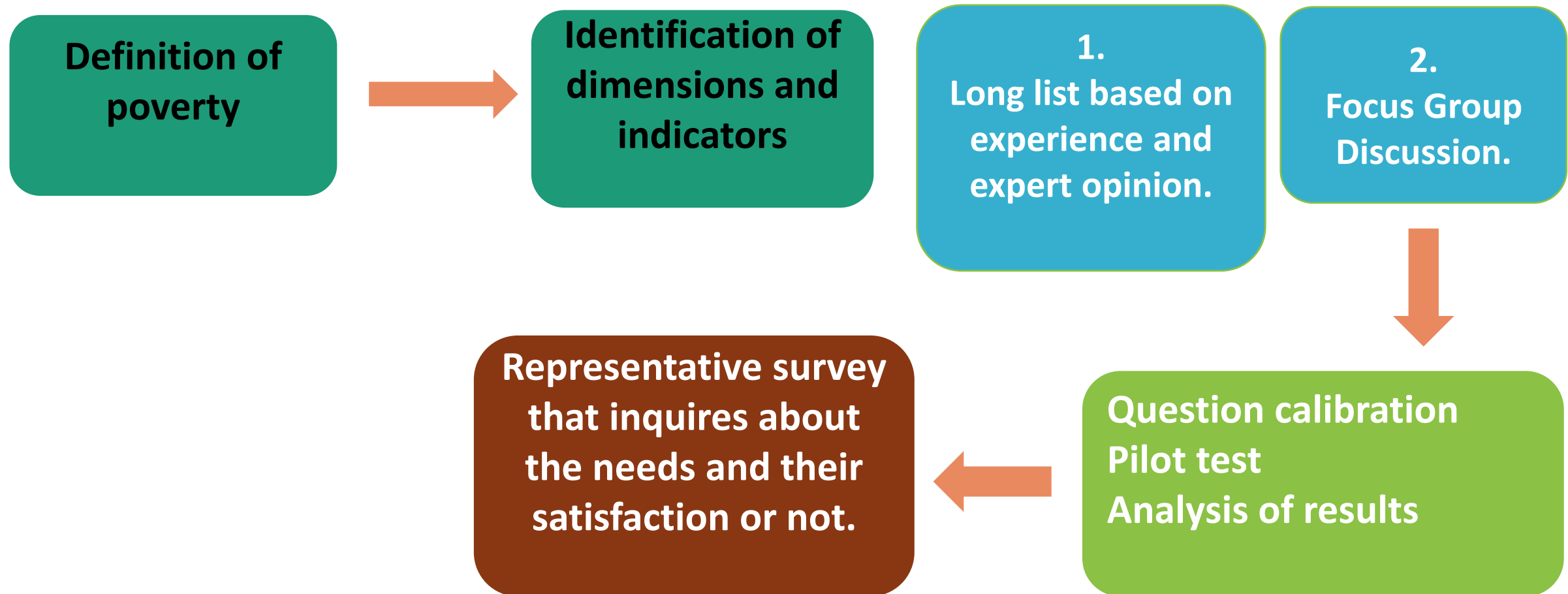
Most of the indicators passed the validity and confidence tests to which they were subjected.

From the pilot test, the questions corresponding to problematic indicators (for example, medical check-up of children) were adjusted.

Others were left thinking that in the future they may be relevant (internet).

"Classic" NBI Do Not Provide Much Information

# Project stages





# Survey

- Based on the results of the pilot test, 31 items were investigated.
  - 
  - A Multidimensional Poverty module was designed and surveyed together with the 2019 Annual Household Survey.
  - 
  - The Annual Household Survey of the City of Buenos Aires is conducted in the fourth quarters of each year and has a sample of 9,570 homes.
  - 
  - It is representative of the population of the City, which amounts to 3 million inhabitants.
  - 
  - Broad thematic coverage: housing and habitat, demographic characteristics, employment, income, health, education.
  - 
  - It usually incorporates thematic modules.
  -
- The module was answered by one person per household, who reported the information concerning all the members.**

# Items that were investigated

|    |   |
|----|---|
| 1  | saltearse una comida porque no había suficientes recursos para obtener los alimentos  |
| 2  | privarse de comer variado por falta de recursos   |
| 3  | comió menos de lo que pensaba que debía comer por falta de recursos   |
| 4  | pisos de material (mosaico, baldosa, cemento, madera o cerámica)  |
| 5  | techo de chapa de metal o fibrocemento con revestimiento interior o cielorraso; o techo de baldosa o losa; cubierta asfáltica o membrana; pizarra o teja              |
| 6  | poder reparar goteras en el techo de la vivienda  |
| 7  | disponer en el hogar de suficientes ambientes (sin contar baño/s, cocina/s, pasillo/s) para que los/as niños/as o adolescentes duerman separados de los/as adultos/as |
| 8  | disponer en el hogar de una cama para cada niño/a o adolescente   |
| 9  | tener agua corriente caliente para el baño y la cocina  |
| 10 | tener luz (electricidad) con una conexión legal   |
| 11 | tener conexión a internet en la vivienda  |
| 12 | tener en la vivienda una heladera para conservar los alimentos  |
| 13 | tener frazadas suficientes para el invierno   |
| 14 | tener ropa adecuada y suficiente para todas las estaciones del año  |
| 15 | poder reemplazar el calzado y la ropa de los miembros del hogar que se hayan deteriorado por otros en buen estado   |

Nutrition

Housing & Services

Home Equipment

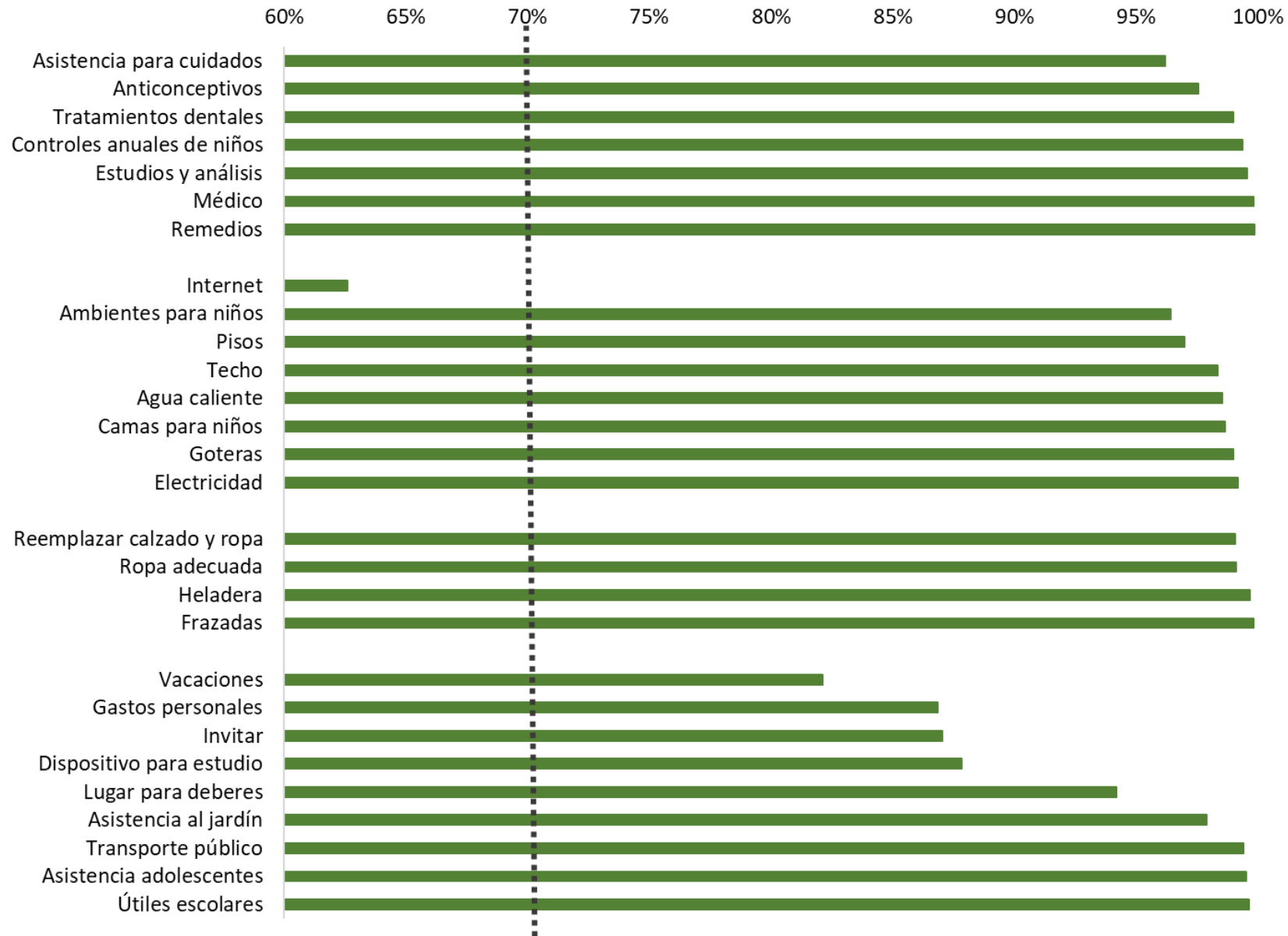
# Items that were investigated (cont.)

|    |   |
|----|---|
| 16 | disponer de apoyo o asistencia en las tareas de cuidado   |
| 17 | poder ser atendido/a por un médico cuando está enfermo/a?   |
| 18 | poder obtener los remedios recetados por el médico cuando está enfermo/a  |
| 19 | poder realizar los estudios (radiografías, análisis de sangre, etc.) o tratamientos solicitados por el médico   |
| 20 | poder realizar los tratamientos dentales (caries, prótesis, etc.) cuando son necesarios   |
| 21 | poder acceder a métodos anticonceptivos   |
| 22 | poder tomar transporte público (colectivo, tren, subte, premetro)   |
| 23 | poder gastar una pequeña cantidad de dinero para sí mismo/a (no en su familia) cada semana? Incluye sólo gastos personales (comidas fuera del hogar, golosinas, entradas al cine, etc.) |
| 24 | poder irse de vacaciones fuera de la Ciudad de Buenos Aires al menos una semana al año  |
| 25 | poder invitar a la casa a familiares o amigos a comer, o tomar algo, al menos una vez al mes  |
| 26 | disponer de un lugar adecuado en la vivienda para que niños/as y adolescentes puedan hacer los deberes  |
| 27 | poder llevar a niños/as de hasta 12 años a realizarse controles médicos anuales (aunque estén sanos)  |
| 28 | que niños/as de 3 a 5 años asistan al jardín  |
| 29 | que adolescentes de 15 a 17 años asistan a la escuela   |
| 30 | que niños/as y adolescentes que asisten a la escuela tengan los útiles requeridos   |
| 31 | que niños/as y adolescentes que asisten a la escuela tengan acceso en su casa a una computadora, notebook o tablet para estudiar (no para jugar)  |

Health & Care

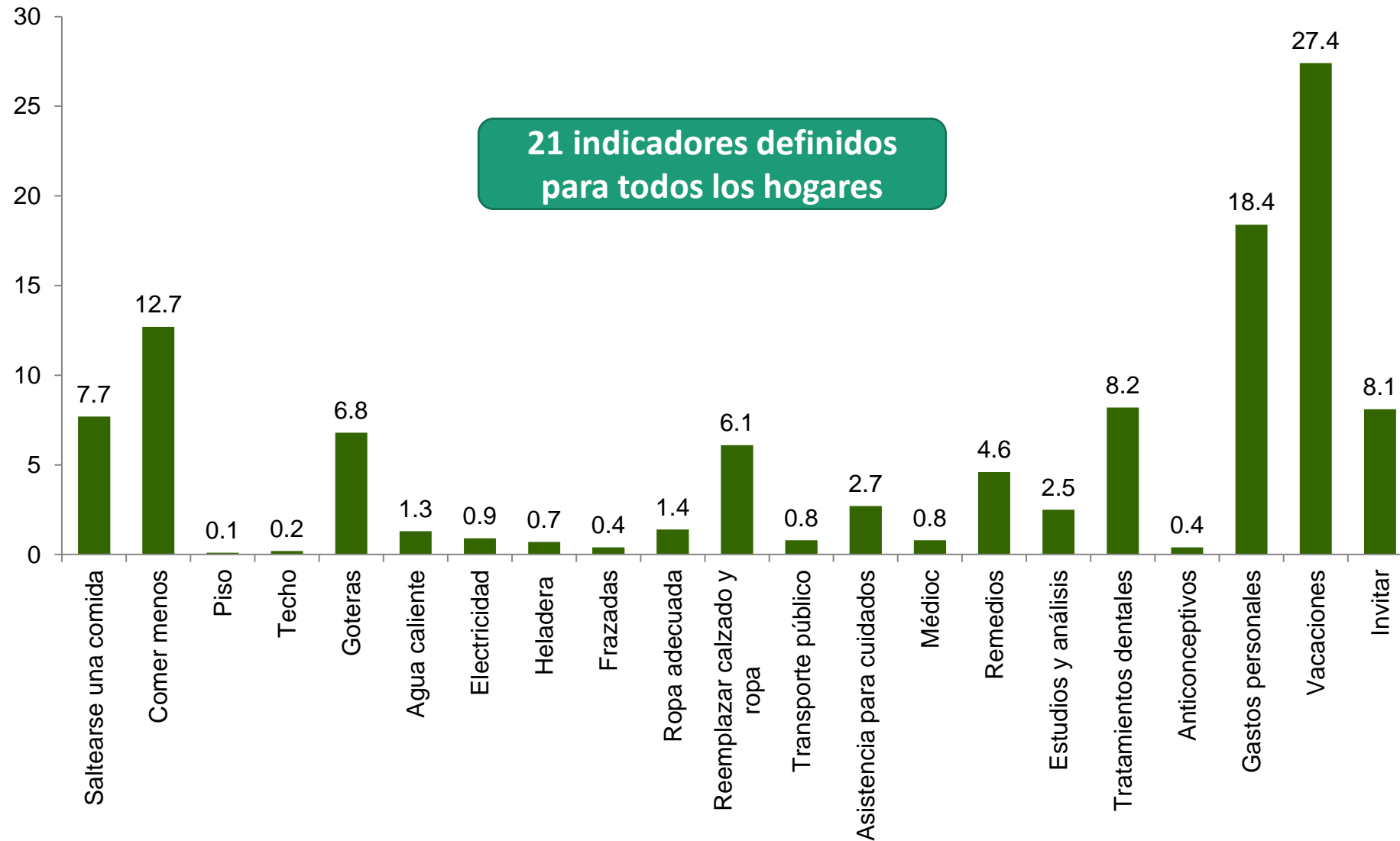
Social Deprivation  
and Education

# Analysis of results: perception of needs

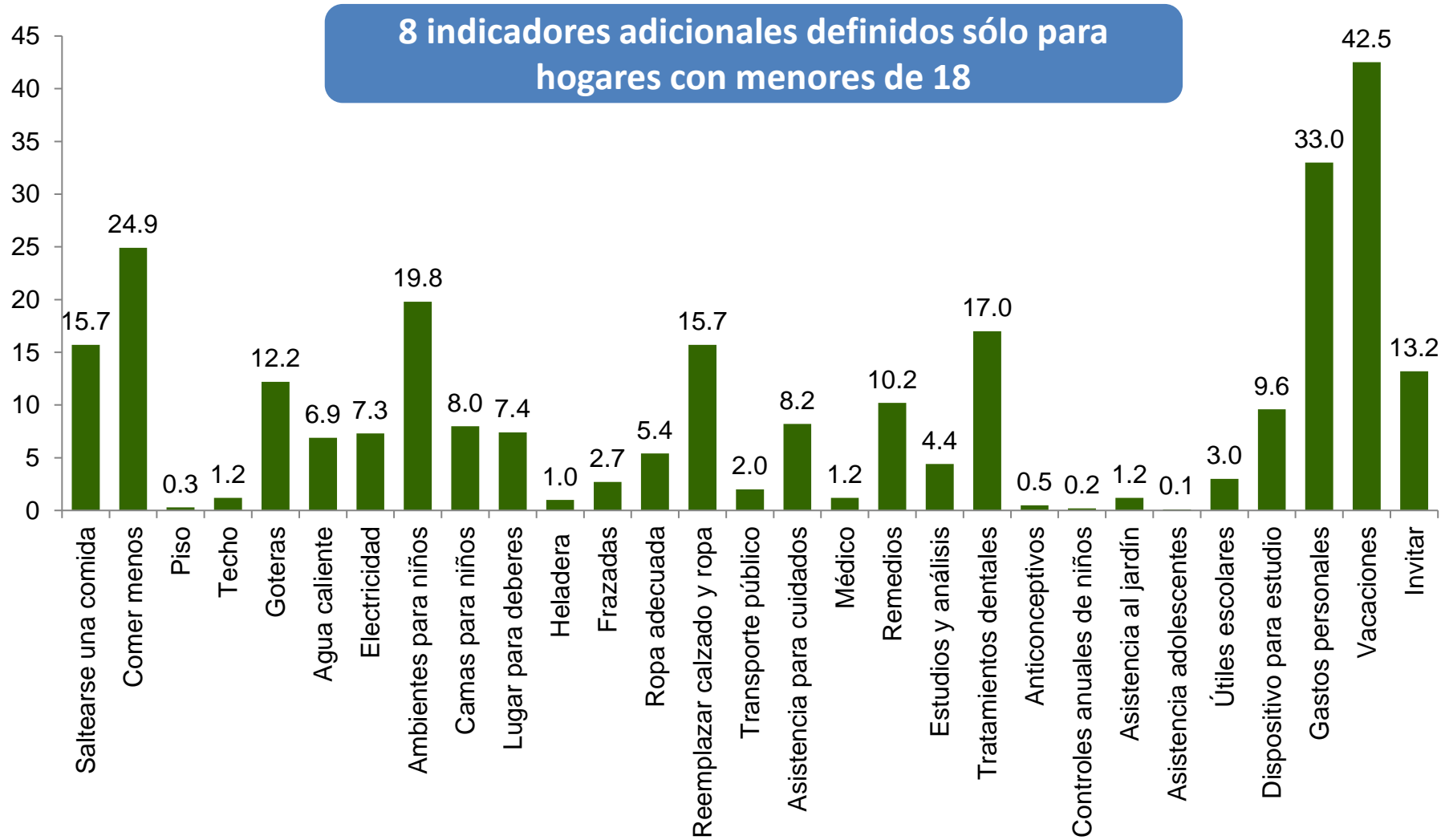


**Difference  
according to  
income level in  
the case of the  
Internet**

# Households with deficiencies: without children under 18 years of age



# Households with deficiencies: with children under 18 years of age



# Validity test

## Correlation

For an indicator to be considered valid, it must measure the phenomenon for whose evaluation it was designed, and not something else. The validity of the indicators was evaluated based on the relationship between each of them and poverty-related indicators:

- Belonging to the first quintile of households' per capita income
- Situation of monetary poverty

# Validity test

| Indicador                 | Significativo            |                   | Indicador                  | Significativo            |                   |
|---------------------------|--------------------------|-------------------|----------------------------|--------------------------|-------------------|
|                           | 1er. quintil de ingresos | Pobreza monetaria |                            | 1er. quintil de ingresos | Pobreza monetaria |
| Saltearse una comida      | Sí                       | Sí                | Estudios y análisis        | Sí                       | Sí                |
| Comer menos               | Sí                       | Sí                | Tratamientos dentales      | Sí                       | Sí                |
| Pisos                     | No                       | No                | Anticonceptivos            | Sí                       | Sí                |
| Techo                     | Sí                       | Sí                | Gastos personales          | Sí                       | Sí                |
| Goteras                   | Sí                       | Sí                | Vacaciones                 | Sí                       | Sí                |
| Agua caliente             | Sí                       | Sí                | Invitar                    | Sí                       | Sí                |
| Electricidad              | No                       | No                | Ambientes para niños       | Sí                       | Sí                |
| Heladera                  | Sí                       | Sí                | Camas para niños           | Sí                       | Sí                |
| Frazadas                  | Sí                       | Sí                | Lugar para deberes         | Sí                       | Sí                |
| Ropa adecuada             | Sí                       | Sí                | Controles anuales de niños | No                       | No                |
| Reemplazar calzado y ropa | Sí                       | Sí                | Asistencia al jardín       | Sí                       | No                |
| Transporte público        | Sí                       | Sí                | Asistencia adolescentes    | No                       | No                |
| Asistencia para cuidados  | Sí                       | Sí                | Útiles escolares           | Sí                       | Sí                |
| Médico                    | Sí                       | Sí                | Dispositivo para estudio   | Sí                       | Sí                |
| Remedios                  | Sí                       | Sí                |                            |                          |                   |



# Global Confidence Test

## Cronbach's Alpha and Omega

It evaluates the reliability of the set of indicators to measure a phenomenon that is not directly observable (in this case, poverty).

Provides information about the set of indicators as a whole. It is usually considered that alpha ( $\alpha$ ) values less than 0.7 imply that the group of indicators does not reliably measure a given phenomenon. In the case of omega ( $\omega$ ) it is desirable that the values are greater than 0.65.

**Survey results: Alpha > 0.82**

**Survey results: Omega = 0.96**

**Survey results: Omega H = 0.90**

# Confidence test of each item

## Item Response Theory (TRI)

It allows to test the reliability of each of the observed indicators, in relation to the measurement of the latent variable or the unobservable phenomenon (for example, poverty).

Two aspects of the indicator are evaluated: discrimination and severity.

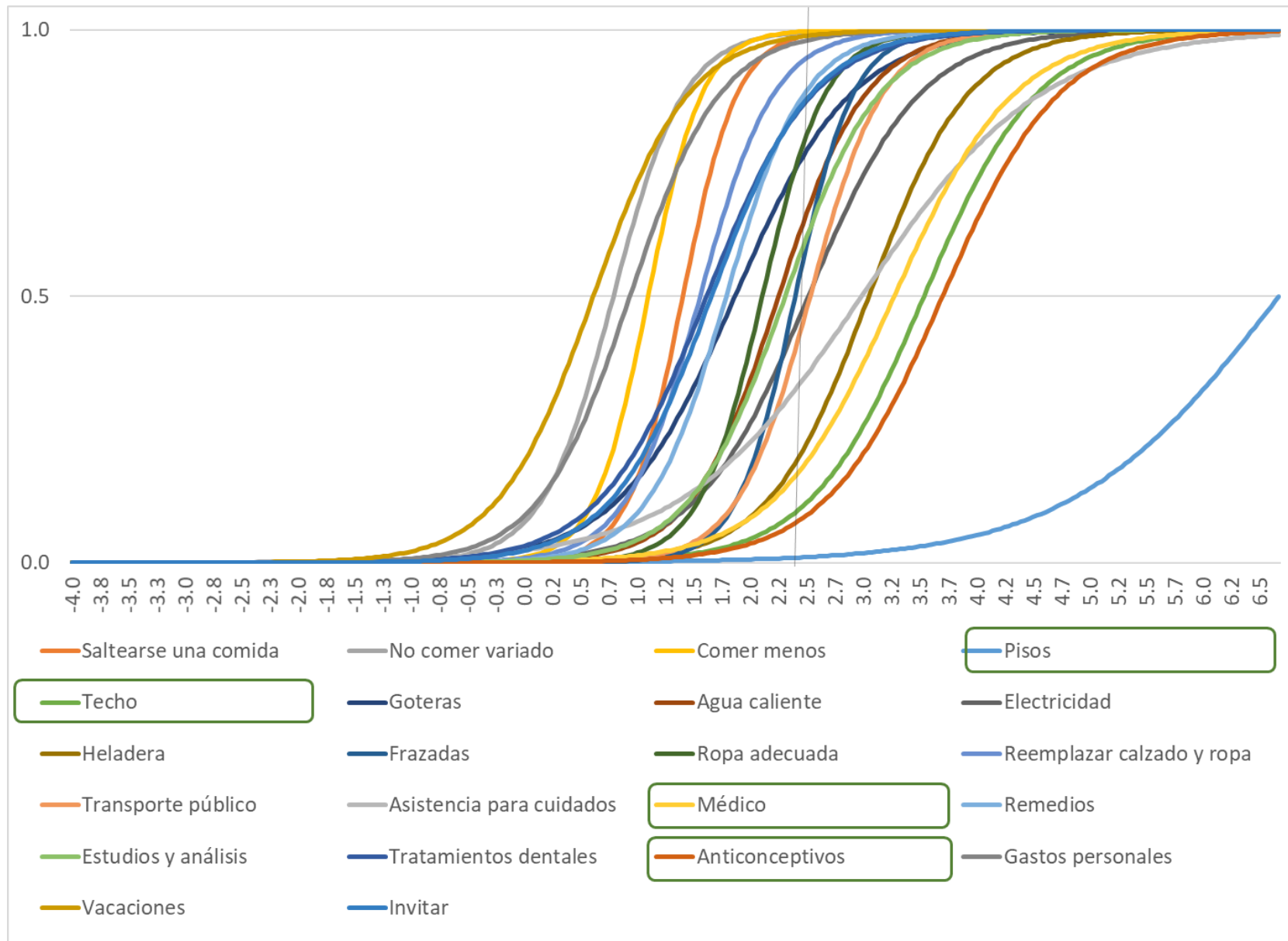
The **discrimination parameter** describes the speed with which the probability of success (or failure) changes for different values of the latent variable. In this case, how well each indicator discriminates between individuals with deprivation and without deprivation.

The **severity parameter** indicates how severe poverty must be for a person to show deprivation in each individual item. So, in the design of a composite measure it is desirable to include indicators with different levels of severity. Cut-off value  $> 3$ .

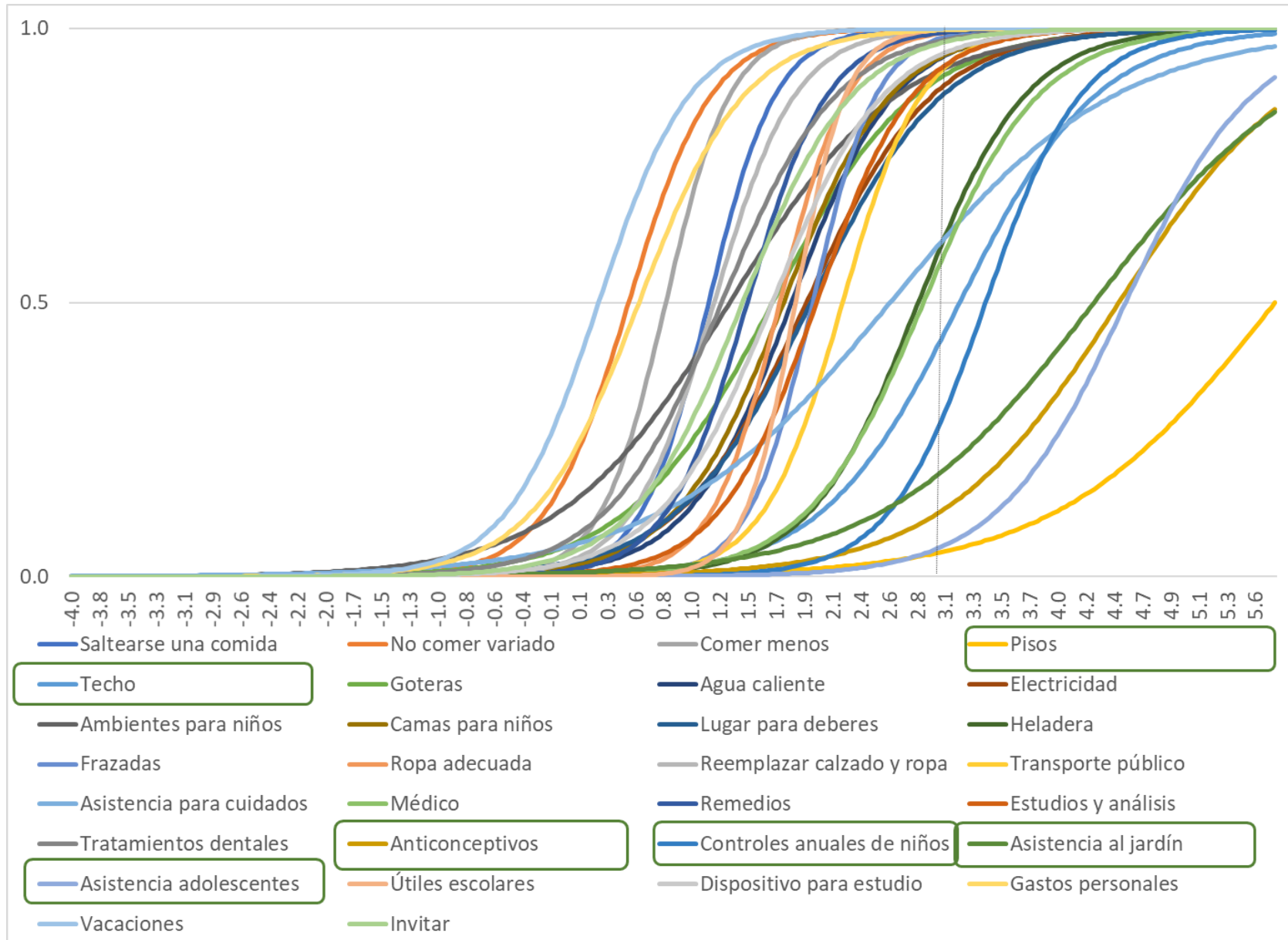
If the parameter is very high, the indicator is very severe and will only identify very poor individuals.

If the parameter is very low, the indicator is satisfied by most people, therefore it is not useful for the identification of individuals in poverty.

# Confidence test of each item



# Confidence test of each item (households with children under 18)



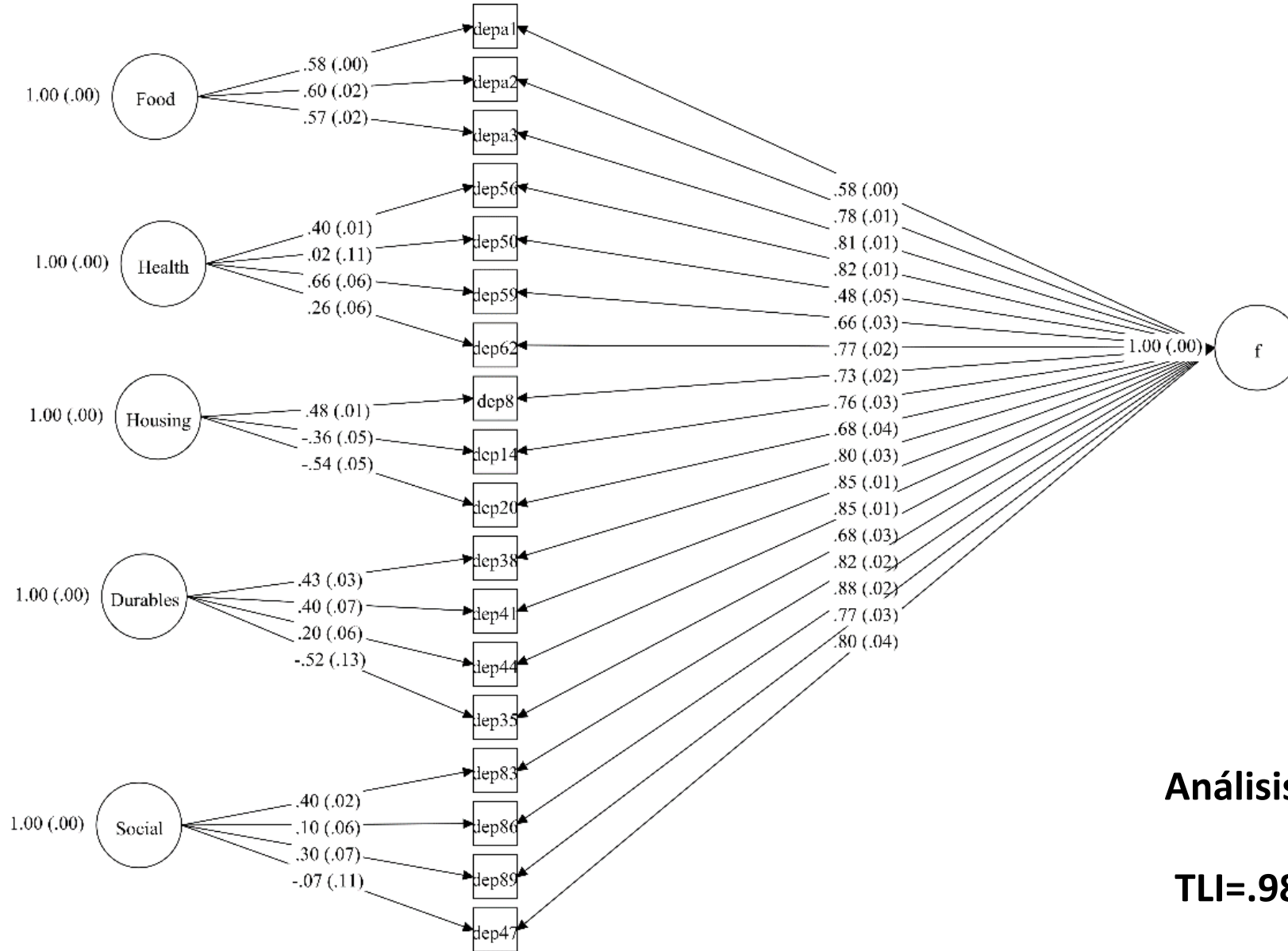
# Excluded indicators

| Indicadores excluidos   | Motivo de exclusión            |                                |
|---|--------------------------------|--------------------------------|
|   | Hogares sin menores de 18 años | Hogares con menores de 18 años |
| Pisos de material (mosaico, baldosa, cemento, madera o cerámica)  | Validez / Confiabilidad        | Confiabilidad                  |
| Techo de chapa de metal o fibrocemento con revestimiento interior o cielorraso; o techo de baldosa o losa; cubierta asfáltica o membrana; | Validez / Confiabilidad        | Confiabilidad                  |
| Poder ser atendido/a por un médico cuando está enfermo/a?   | Confiabilidad                  |                                |
| Poder acceder a métodos anticonceptivos   | Confiabilidad                  | Confiabilidad                  |
| Poder llevar a niños/as de hasta 12 años a realizarse controles médicos anuales (aunque estén sanos)                                      |                                | Validez / Confiabilidad        |
| Que niños/as de 3 a 5 años asistan al jardín  |                                | Validez / Confiabilidad        |
| Que adolescentes de 15 a 17 años asistan a la escuela   |                                | Validez / Confiabilidad        |
| Tener conexión a internet en la vivienda  | No consensual                  | No consensual                  |
| Privarse de comer variado   | Problemas de captación         | Problemas de captación         |

# Dimensions

| Hogares sin menores de 18 años   | Hogares con menores de 18 años  |
|--|---|
| <b>1. Alimentación (2 indicadores)</b><br>Saltearse comidas<br>Comer menos   | <b>1. Alimentación (2 indicadores)</b><br>Saltearse comidas<br>Comer menos  |
| <b>2. Salud y cuidados (4 indicadores)</b><br>Remedios<br>Estudios<br>Tratamientos dentales<br>Asistencia para cuidados    | <b>2. Salud y cuidados (5 indicadores)</b><br>Médico<br>Remedios<br>Estudios<br>Tratamientos dentales<br>Asistencia para cuidados   |
| <b>3. Vivienda y servicios (3 indicadores)</b><br>Goteras<br>Agua caliente<br>Electricidad                                 | <b>3. Vivienda y servicios (6 indicadores)</b><br>Goteras<br>Agua caliente<br>Electricidad<br>Ambientes separados<br>Camas para cada niño<br>Lugar para hacer los deberes |
| <b>4. Equipamiento del hogar (4 indicadores)</b><br>Heladera<br>Frazadas<br>Ropa adecuada<br>Reemplazar ropa               | <b>4. Equipamiento del hogar (4 indicadores)</b><br>Heladera<br>Frazadas<br>Ropa adecuada<br>Reemplazar ropa  |
| <b>5. Privación social y educación (4 indicadores)</b><br>Gastos personales<br>Vacaciones<br>Invitar<br>Transporte público | <b>5. Privación social y educación (6 indicadores)</b><br>Gastos personales<br>Vacaciones<br>Invitar<br>Transporte público<br>Útiles requeridos<br>Computadora            |

# Dimensions



**Análisis factorial confirmatorio**

**TLI=.98; CFI= .98; RMSEA<.005**

# Identification

## **Two-dimensional threshold**

- Households that suffer deprivation in at least two of the five dimensions are considered to be in a situation of poverty.
- This threshold ensures the multidimensional character of the indicator and statistically reduces false positives versus the alternative of using a one-dimensional threshold.

## **Relative thresholds in each dimension**

- A household was considered to suffer deprivation in one dimension if it has deprivation in at least 33 per cent of the indicators of that dimension.
- Relative thresholds were applied to determine deprivation in each dimension.
- This decision was made because the number of indicators that make up each dimension is variable.



# Incidence

Percentage of all households and households under 18 years of age by multidimensional poverty and income poverty condition. Autonomous City of Buenos Aires. Year 2019

Percentage of the total population and the population under 18 years of age by multidimensional poverty status and income poverty status. Autonomous City of Buenos Aires. Year 2019

| Condición de pobre multidimensional           | Condición de pobre por ingreso |                     |                        |
|---|--------------------------------|---------------------|------------------------|
|   | Total                          | Pobres por ingresos | No pobres por ingresos |
| <b>Total de los hogares</b>                   | <b>100,0</b>                   | <b>15,3</b>         | <b>84,7</b>            |
| Pobres multidimensionales                     | 15,3                           | 7,5                 | 7,9                    |
| Sin privación multidimensional                | 84,7                           | 7,9                 | 76,8                   |
| <b>Hogares con menores menores de 18 años</b> | <b>100,0</b>                   | <b>30,2</b>         | <b>69,8</b>            |
| Pobres multidimensionales                     | 25,7                           | 16,9                | 8,8                    |
| Sin privación multidimensional                | 74,3                           | 13,3                | 61                     |

| Condición de pobre multidimensional    | Condición de pobre por ingreso |                     |                        |
|--|--------------------------------|---------------------|------------------------|
|  | Total                          | Pobres por ingresos | No pobres por ingresos |
| <b>Población total</b>                 | <b>100,0</b>                   | <b>21,5</b>         | <b>78,5</b>            |
| Pobres multidimensionales              | 20,3                           | 11,9                | 8,4                    |
| Sin privación multidimensional         | 79,7                           | 9,6                 | 70,1                   |
| <b>Población de menores de 18 años</b> | <b>100,0</b>                   | <b>36,9</b>         | <b>63,1</b>            |
| Pobres multidimensionales              | 30,6                           | 22,2                | 8,3                    |
| Sin privación multidimensional         | 69,4                           | 14,6                | 54,8                   |

Fuente: Dirección General de Estadística y Censos (Ministerio de Hacienda y Finanzas GCBA). EAH 2019.