

Housing Deficit in Chile: Figures Revealed by CASEN Survey 2011

Estimates indicate that housing requests have increased in relation to 2009, based on the measurements of the Ministry of Social Development's methodology and those of Libertad & Desarrollo. This deficit could be explained by the effect of the past earthquake, since the number of people living as *allegados*¹ increase for the families living in the regions most impacted by the catastrophe.

At the end of September, the government published the updated housing deficit based on the CASEN Survey 2011, which grew 17.8%, from 420,587 to 495,304 between 2009 and 2011, and the required homes increased by 74,717. The increase is localized mainly in the regions affected by the earthquake of February 2010 (27F).

This study shows the evolution of the indicators concerning structural condition, sanitation, people living as *allegados* and overcrowding. According to our estimates, the deficit increases by 48,575 homes in these years. This growth is partially explained by the destruction of houses as a result of the earthquake and seaquake, which entailed crowding situations (*allegados*) in homes and households.

Table 1 shows that between 2009 and 2011, the growth of households and units was approximately 6%, while the population growth was 2%. The downward trend in the households' size continues, and in 2011 the average number of people per household was 3.41. It also shows that households in houses and apartments have increased. It is important to highlight that last year there were more households living in precarious homes, which were delivered during the post-earthquake emergency stage.

Table 1

| HOUSING INDICATORS, 1992-2011 | | | | | | |
|-------------------------------|------------------|-------------|----------------------------|------------------------------|---|--|
| Year | Nr of households | Nr of units | Population Nr of people | Average people per household | Households in houses or apartments ¹ | Households in precarious houses ² |
| 1992 | 3,387,757 | 4,052,797 | 13,458,623 | 3.94 | 3,115,361 | 213,165 |
| 2000 | 3,901,612 | 4,792,094 | 15,112,659 | 3.85 | 3,752,752 | 133,446 |
| 2009 | 4,485,490 | 5,650,849 | 16,607,007 | 3.54 | 4,629,345 | 28,434 |
| 2011 | 4,966,890 | 5,977,815 | 16,962,515 | 3.41 | 4,898,171 | 52,813 |

Source L&D with CASEN Survey

¹House or house in a *cité* (rows of houses that extend down narrow alleyways), house in a condominium and apartment in a building.

²Mediagua or mejora, rancho, hut (ruca or choza) or other type (mobile, tent, etc.)

Housing Indicators Evolution

Table 2 shows the evolution of the housing indicators for sanitation (access to drinking water) and structural condition (damage in walls). The structural condition indicator corresponds to the homes' wall damage and the sanitation indicator to the access to drinking water. In case of presenting wall damage, it is considered necessary to replace the house, instead, when the home presents sanitation problems, it can be solved by applying some other type of mechanism enabling the access to drinking water.

Table 2

| HOUSING INDICATORS FOR STRUCTURAL CONDITION AND SANITATION (ABSOLUTE VALUES AND % OF TOTAL HOUSEHOLDS) | | | | |
|---|-----------|-----------|-----------|-----------|
| | 1992 | 2000 | 2009 | 2011 |
| Structural condition | 245,150 | 156,623 | 377,448 | 371,937 |
| | 7.24% | 4.01% | 8.06% | 7.49% |
| Sanitation | 225,547 | 188,436 | 99,376 | 117,477 |
| | 6.66% | 4.83% | 2.12% | 2.37% |
| Both | 91,967 | 60,457 | 40,394 | 39,587 |
| | 2.71% | 1.55% | 0.86% | 0.80% |
| TOTAL | 562,664 | 405,516 | 517,218 | 529,001 |
| | 16.61% | 10.39% | 11.04% | 10.65% |
| Total Households | 3,387,757 | 3,901,612 | 4,685,490 | 4,966,890 |

Source: L&D with CASEN Survey

We observe that in 2009, households with structural problems account for 7.49% and they slightly decrease compared with 2009. However, the households with sanitation problems increase in this period, and in the last measurement they amount to 2.37%.

Homes with structural problems are concentrated in the urban zones, while homes with sanitation problems, in rural areas. In general, households with both problems also concentrate in urban zones. Approximately 80% of the homes showing this kind of deficiencies are located in the most vulnerable 60% of the population.

Another indicator which is followed over time is the situation of the external and internal allegados in the households. External can be subdivided in building site allegados and home allegados. Site allegados is when several homes stand in a same site and home allegados is when several households share a home. The situation of site allegados is not part of the housing deficit, since it recognizes other type of phenomenon that can be solved with policies such as land densification and/or enabling the subdivision of the lands. It is necessary to mention that in 2011, the CASEN Survey did not pose 2 questions that are needed to calculate the situation of external allegadosi, and which were replaced by other questions collecting similar data.

On the other hand, the situation of internal allegados is when there are several family units within a household. Not all units mentioned here are used in the housing deficit estimates; families that are economically independent are not considered except for unipersonal households.

Table 3

| INTERNAL AND EXTERNAL ALLEGADOS (% OF TOTAL HOUSEHOLDS OR UNITS) | | | | | |
|---|---------|-------------------|-------------------|-------------------|------------------|
| Type of allegados | | 1992 | 2000 | 2009 | 2011 |
| External (Households) | In site | 337,291 9.96% | 221,556 5.68% | 216,596 4.62% | 118,190 2.38% |
| | In home | 212,077 6.26% | 63,216 1.62% | 102,784 2.19% | 172,647 3.48% |
| Internal (Unit) | | 581,461 14.35% | 822,220 17.16% | 941,377 16.66% | 990,415 16.57 |
| TOTAL (external + internal) | | 1,130,829 | 1,106,992 | 1,260,757 | 1,281,252 |

Source: L&D with CASEN Survey

Table 3 shows that site allegados decrease since the last measurement; instead, home allegados increase in the same way as internal allegados. In the case of internal allegados, 14.4% correspond to unipersonal units of allegados; 30.3% to couples with or without children; 54.2% to single parents

and 1.0% to other type of units. Single parents are the main components of this type of allegados; furthermore, 91% of these cases correspond to women, and this is the type of unit which increased the most since the last measurement (54.2%). Currently, there are 537,200 units with single-parent allegados.

Another evaluated variable is the overcrowding indicator. A home without overcrowding is when there are less than 2.5 people per bedroom on average; medium overcrowding, when there are between 2.5 and 5 people per bedroom on average; and critical overcrowding, when the average exceeds 5 people.

Table 4 shows that the evolution for this indicator has been highly positive. In the last measurement, only 0.53% of the households have a critical overcrowding level and 8.4%, a medium level.

Table 4

| OVERCROWDING EVOLUTION IN HOUSEHOLDS (% OF TOTAL HOUSEHOLDS) | | | | |
|---|---------------------|---------------------|---------------------|---------------------|
| | 1992 | 2000 | 2009 | 2011 |
| Low | 2,397,040 70.76% | 3,216,340 82.44% | 4,172,175 89.04% | 4,496,091 90.52% |
| Medium | 701,025 20.69% | 572,290 14.67% | 423,190 9.03% | 417,256 8.40% |
| High or critical | 155,633 4.59% | 44,506 1.14% | 39,438 0.84% | 26,230 0.53% |
| Households w/o exclusive-use bedroom | 134,059 3.96% | 68,476 1.76% | 50,687 1.08% | 27,313 0.55% |
| TOTAL | 3,387,757 | 3,901,612 | 4,685,490 | 4,966,890 |

Source: L&D with CASEN Survey

Social-interest Housing Requests

In order to estimate the housing requests, a series of assumptions are used which seek to determine the need for a home.ⁱⁱ These requests are classified into homes and home extension. Home requests are for homes which are in bad conditions, households who share homes with another household, and economically independent units of allegados. As we already mentioned for the latter, families that cannot economically support themselves (20% of the population with lowest resources) and unipersonal units are not considered.

Concerning the extension requests, the number of main households with medium and high overcrowding levels is determined. Within this group, secondary units that were already considered in the home requests are excluded.

This analysis is made for the most vulnerable 60% of the population, corresponding to the population defined as a priority by the housing policy. This is known as social-interest housing requests.

Table 5 shows a decrease for homes that should be replaced due to their bad condition; instead, households sharing homes with other households grow from 74,889 to 124,783 between 2009 and 2011, while the economically independent units of allegados increase from 301,787 to 324,367 in the same period. Therefore, housing request increase by 48,575.

Meanwhile, the extension requests decrease from 316,329 to 287,172 between 2009 and 2011. Thus, the extension requests were reduced by 29,157.

Table 5

| SOCIAL-INTEREST REQUESTS FOR NEW HOMES AND EXTENSIONS | | | | |
|--|---------|---------|---------|---------|
| | 1992 | 2000 | 2009 | 2011 |
| Replacement of homes in bad condition (1) | 259,954 | 184,579 | 332,625 | 308,726 |
| Households sharing home w/ another household (2) | 156,191 | 47,212 | 74,889 | 124,783 |
| Economically independent units of allegados (3) | 186,275 | 270,363 | 301,787 | 324,367 |
| Couples with or without children | 95,299 | 137,824 | 139,153 | 145,086 |
| Low overcrowding | 59,174 | 98,891 | 96,821 | 112,345 |
| Medium and critical overcrowding | 36,125 | 38,933 | 42,332 | 32,741 |
| Single parents | 90,976 | 132,539 | 162,634 | 179,281 |
| Low overcrowding | 57,401 | 98,964 | 133,566 | 145,257 |
| Medium and critical overcrowding | 33,575 | 33,575 | 29,068 | 34,024 |
| Total housing requests (1)+(2)+(3) | 602,420 | 502,154 | 709,301 | 757,876 |
| Main households with overcrowding (4) | 710,342 | 586,210 | 386,138 | 347,333 |
| Medium | 551,481 | 516,545 | 339,544 | 321,026 |
| High | 158,861 | 69,665 | 46,594 | 26,307 |
| Secondary units in overcrowded households requesting an independent home (5) | 70,668 | 78,531 | 69,809 | 60,161 |
| Total home extension requests (4) – (5) | 639,674 | 507,679 | 316,329 | 287,172 |

Source: L&D with CASEN Survey

As shown in Table 6, the deficit increase is observed mainly in the regions of Maule (15,679), La Araucanía (12,750), Valparaiso (8,837) and Metropolitana (8,074). These regions were part of the territory affected by the 27F earthquake.

Table 6

VARIATION OF SOCIAL-INTEREST REQUESTS FOR NEW HOMES
BY REGIONS

| Region | 2009 | 2011 | Variation |
|---------------------------|---------|---------|-----------|
| I Tarapacá | 13,765 | 11,892 | -1,873 |
| II Antofagasta | 25,422 | 23,082 | -2,340 |
| III Atacama | 13,608 | 13,350 | -258 |
| IV Coquimbo | 30,155 | 31,654 | 1,499 |
| V Valparaiso | 76,048 | 84,885 | 8,837 |
| VI O'Higgins | 36,288 | 33,942 | -2,346 |
| VII Maule | 41,210 | 56,889 | 15,679 |
| VIII Biobío | 100,660 | 109,055 | 8,395 |
| IX La Araucanía | 47,747 | 60,497 | 12,750 |
| X Los Lagos | 36,390 | 31,076 | -5,314 |
| XI Aysén | 2,671 | 3,654 | 983 |
| XII Magallanes | 2,407 | 4,298 | 1,891 |
| XIII Región Metropolitana | 260,096 | 268,170 | 8,074 |
| XIV Los Rios | 16,390 | 16,938 | 548 |
| XV Arica y Parinacota | 6,444 | 8,494 | 2,050 |
| Total | 709,301 | 757,876 | 48,575 |

Source: L&D with CASEN Survey

Conclusion

This study shows different housing indicators, which are partly used to assess the effectiveness and scope of the housing policy. We observe that structural condition and overcrowding indexes show a positive evolution, while indicators for sanitation and allegados worsen in relation to their last measurement.

It is estimated that housing requests increase by 48,575 since 2009, due to the allegados phenomenon in the families. This is partly due to the impact of the past earthquake, as this situation is observed in the regions most affected by the catastrophe.

In brief...

CHILEAN HOUSING DEFICIT IN FIGURES:

- According to the government, the housing deficit increases by 74,717 and according to our estimates, by 48,575.
- Indicators for structural condition and overcrowding have a positive evolution, while indicators for sanitation and *allegados* worsen according to their last measurement.
- The housing deficit increase is mainly due to the *allegados* phenomenon in the families; this increase is observed in the regions most affected by the earthquake.

ⁱ CASEN Survey 2011 does no longer ask which is the site's main home or whether it is the main household of the home. In order to obtain the closest possible approximation of the information, it uses, in the case of the main home in the site "v4" in 2009, the question asking if any of the household's members is responsible for the building site. Then, in the question concerning the home of the main household of the home "v21" in 2009, it uses the "household" variable giving the correlative number of the household. In CASEN Survey 2009, approximately 90% of the homes classified with 1 in the "household" variable correspond to the household declaring to be the home's main household.

ⁱⁱ See more details in "*Déficit habitacional se mantiene la tendencia al alza*". Libertad & Desarrollo. Serie Informe Económico 216, June 2011.