

Social Vulnerability, Beyond Poverty

The poverty indicator is unable to explain the whole phenomenon. There are still families which are excluded from development and it is highly probable that they will be poor in the future. It is important to look beyond poverty, since the variables that explain the income level of a household change constantly, and a vulnerability indicator incorporates the dynamic concept of the factors that influence poverty.

In the following months, Mideplan (Ministry of Planning) shall publish the results of the Casen¹ Survey 2009, which will reveal how many poor people there are currently in our country. Meanwhile, the last official number for poverty is from 2006 and shows that 13.7%² of the households are poor, which is equivalent to two millions two hundred thousand persons. Ten years ago, the poverty rate was 23.2%, that is, from 1996 to 2006, poverty has decreased by approximately 10%.

Even if these figures show that many households are not poor any more, when you investigate the actual conditions of the neediest households, you may still observe that poverty is around the corner. A poor family tends to show lower education levels, the head of the household is likely to have an unqualified job, and runs a higher risk when economic crisis occur.

The poverty indicator is unable to explain the whole phenomenon. There are still families which are excluded from development and it is highly probable that they will be poor in the future. It is important to look beyond poverty, since the variables that explain the income level of a household change constantly, and a vulnerability indicator incorporates the dynamic concept of the factors that influence poverty.

Both the variables' dynamic and the households' risk may be observed in the income variability of the households, in the uncertainty of the macro-economic environments, in the lack of coverage mechanism (such as

¹ Socio-economic characterization of households.

² The poverty rate is calculated as the proportion of individuals who have an income per capita whose value is below the poverty line. In 2006, the poverty line was 47,099 Chilean pesos for the urban area and 31,756 Chilean pesos for the rural area.

insurances or savings) for the households with less income and the high debt level of the households.³

Additionally, it is observed that in crisis situations, the households' well-being of the poor is seriously affected and their uncertainty feeling increases. People seek to avoid risk. The problem here is not only to have few things, but the fear to lose it all. All this implies that the heads of the household make decisions that are likely to perpetuate poverty with regard to employment, savings, education and nutrition, among other things. This may sentence future generations to poverty, especially if they are asked to leave school to go to work or if they lack an adequate nutrition.

We propose, therefore, to create a vulnerability indicator that considers the variables' dynamic and incorporate these new dimensions. This indicator must show not only which are the poorest households, but also determine which households are most likely to be poor. The idea is to change the social objectives, with the aim of preventing poverty and reducing the vulnerability of the households.

Vulnerability is defined as the loss of well-being in the household caused by risk, and generally this risk is due to the income variability. Vulnerability is a problem by itself and must be handled, because it may affect people's well-being and inhibit behaviors that reduce the probability of becoming poor. For example, to prefer jobs of greater stability, but with a low income.

The socio-economic vulnerability can be measured with the methodology proposed by Chaudhuri, Jalan & Suryahadi (2002)⁴ denominated vulnerability as expected poverty (VEP). This methodology determines the probability of the household's income to fall below the poverty line.

In this manner, the vulnerability level depends on the characteristics of the head of the household, such as education level, age, proportion of working members, proportion of children, and proportion of elderly people per household, among other characteristics. These data allow investigating the source of the risk to which a household is exposed.

As for our country, according to the data of the Casen Survey Report 1996, 2001 and 2006, we observe that vulnerability is due to precarious jobs of

³ Fuenzalida y Ruiz-Tagle (2008, in Households Financial Vulnerability and Financial Stability) show that 61% of the Chilean households present some type of debt.

⁴ Chaudhuri, S., J. Jalan and A. Suryahadi (2002), "Assessing Household Vulnerability to Poverty from Cross-sectional Data: A Methodology and Estimates from Indonesia". Columbia University. Department of Economics, Discussion Paper Series #0102-52, New York.

the heads of the household, to the lack of education they had, and it is also present when the heads of the household are not married.

As for job precariousness, in Table Nr 1 we observe that the average vulnerability of a household whose head of the household has a non-qualified employment⁵ is 34.5%. Instead, the households whose head of the household has a qualified employment have an average vulnerability of 26.7%. With regard to the qualified employments, workers declare to have a work contract which may indicate that they are more stable employments. It should be noted that when the head of a household changes from a precarious job to a non-precarious one, the household's vulnerability reduces almost 8%. Additionally, self-employed workers and unpaid family members have an average vulnerability of 33.8% and 32.4%, respectively.

On the other hand, the household group showing the lowest vulnerability level is the one whose head of the household is classified as employer or boss. These households have a vulnerability of 19.1%. Meanwhile, the households whose heads of the household are unemployed have the highest average vulnerability level, which accounts for 35.8%.

Table Nr 1
Vulnerability by type of employment

		Population (% of the total population)	Vulnerability (Probability of being poor)
Type of employment Head of the household*	Unemployed	22.2%	35.8%
	Unpaid family member	0.1%	32.4%
	Self-employed worker	19.4%	33.8%
	Non-qualified employee(1)	12.0%	34.5%
	Qualified employee(2)	44.1%	26.7%
	Employer or boss	2.1%	19.1%
<p>*Heads of the household over 25 years old. (1) Non-qualified employees are workers who do not have a contract. (2) Qualified employees are employees who have a contract.</p> <p>Source: Casen Survey Report 1996, 2001, 2006</p>			

Table 2 shows what happens with vulnerability as the head of the household improves his/her education. The number in round brackets

⁵ A non-qualified employment is defined as an employment without work contract.

shows the proportion of the population they represent. We observe that most heads of the household over 25 years old maintain a 10-years education level. Likewise, approximately half of the heads of the household had finished primary school in 1996. The interesting point of this table is that it shows how vulnerability decreases as education increases. For example, if the head of a household goes from primary school in 1996 to secondary school in 2006, vulnerability descends from 34.1% to 27.9%. That is, vulnerability is reduced by 6%. Moreover, if the head of a household had finished primary school in 1996 and improves his/her level to higher education, the vulnerability of this group reduces to 22.9%.

Finally, the group who has the lowest vulnerability level is the one who has higher education in all periods. This group represents 10.2% of the heads of the household and has an average vulnerability of 17.9%. Likewise, the vulnerability of the heads of the household who have higher education in both periods is 16% less than for the heads of the households who have primary school in both periods.

Table Nr 2
Vulnerability by education

Average vulnerability of the heads of the household* (% Population)				
2006				
		Primary school	Secondary school	Higher education
	Primary school	34.1% (52.8%)	27.9% (4.9%)	22.9% (1.2%)
	Secondary school	-	35.7% (24.6%)	33.0% (6.3%)
1996	Higher education	-	-	18.0% (10.2%)
		-	-	
() Measures the proportion of the population they represent. *Heads of the household over 25 years old. Source: Casen Survey Report 1996, 2001, 2006				

With regard to the family, this methodology enables to demonstrate that the households where the heads of the household remained married between 1996 and 2006 are, on average, less vulnerable than the households that were not. Even if there are no causal results, Table 3 shows that the

households that were not married in that same period are 6% more vulnerable.

Table Nr 3
Vulnerability by marital status of the head of the household

Marital status Head of the household*	Vulnerability (Probability of being poor)	Proportion of the population (5)
Married 1996, 2001 and 2006	29.1%	18%
Not married 1996, 2001 and 2006	35.4%	23%
Others(1)	29.5%(2)	59%

*Heads of the household over 25 years old.
(1) Others: heads of the households who got married and then were not any more; who were not married and got married. All combinations.
(2) It is calculated as a weighted average of the vulnerability and the proportion of the population they represent.

Source: calculation based on Casen Survey Report 1996, 2001 and 2006.

Conclusions and proposals

It is necessary to look beyond poverty, because this indicator does not fully explain this phenomenon. Even though the poverty rate is increasingly less, there is still a group which is very exposed to poverty. Therefore, social programs should be designed which consider the issues concerning the households' vulnerability, and whose explicit purpose is to reduce it.

It is important to measure vulnerability, because it incorporates the risk within the variables that influence poverty. This enriches the analysis, simulates a dynamic environment and includes in the discussion other mechanisms to prevent and mitigate the effects of the risk sources.

The presented analysis lets us conclude that precarious employments, education and marital status of the head of the household influence the vulnerability level of the head of the household.

Therefore, in order to reduce the socio-economic vulnerability we should induce the heads of the household to make a place for themselves in non precarious employments. In order to achieve this, it is essential to support programs that improve people's capabilities. Thus, the proposal in the

sense that one of the components of the Ethical Family Income should be a training bonus seems sensible. This type of measures plays a key role for the heads of the household in order to obtain better jobs.

We also observe the importance of the education level of the head of the household in order to determine the vulnerability level of the household. It is shown that the most educated level has 16% less probabilities of being poor than a household whose head of the household has primary education. Once more, these results demonstrate that education is a crucial element, not only to defeat poverty, but also to reduce the vulnerability levels of the families.

In relation to the marital status, it is interesting to observe that marriage is a characteristic of the less vulnerable households and, in a certain way, it reaffirms the idea of relying on initiatives that seek to strengthen this institution.

Finally, the indicators presented here are intended to direct and have a repercussion on the social programs, by identifying the risk sources of the households and thus being able to work in order to mitigate these failures. The variables that affect the well-being are much more complex than just the income level. Therefore, in order to defeat poverty, it is essential to consider the vulnerability of the households.