Health Insurance Choice, Moral Hazard and Adverse Selection:
A Study of the Chilean Case Using Panel Data

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Abstract

Using panel data from Chile's National Socio Economic Characterization Survey 1996-2001-2006, this article examines health insurance choice and its dynamics. The article takes advantage of the panel data to examine the dynamics and determinants of insurance change. Evidence indicates that private insurance is losing customers to the public sector. Two analyses are undertaken in the article using logistic regressions. For each of the three years studied, the paper looks at insurance choice and its determinants. Income seems to be highly important in determining the choice, as well as age, education, gender, geographical location and health shocks. Evidence of moral hazard and adverse selection was found in the longitudinal and cross sectional analysis. The results of this research are aligned with most of the previous investigations done on Chile's health insurance system and advance previous knowledge on the topic by including the dynamism that panel data permits.

Introduction

Since the enactment of the 1981 Decree Number 3 the Chilean health system has changed dramatically, turning into a mixed system of public and private healthcare options. Since the early 1920's, workers have been mandated to contribute part of their income to the national health system via mandatory worker insurance. Initially, healthcare was provided through a network of public hospitals and centrally administrated public health providers. However, during the Pinochet government (1973-1990), healthcare was dramatically reformed to favor the development of a private health sector in order to improve efficiency in health delivery and grant individual choice. Competition among providers was expected to improve the overall performance of the system.

The health reform created new institutions called "Instituciones de Salud Privada" (ISA-PRES), private health institutions capable of providing health insurance and health care. Decree number 3 permitted workers the choice of whether to make the mandatory health insurance contributions directly to the government insurance called "Fondo de Salud Pública" (FONASA) or the newly created ISAPRES.

The mandatory contribution for health insurance equals 7% of taxable income with a cap of approximately USD$190 a month. This contribution can be utilized to acquire insurance through FONASA, which entitles individuals to get health care from public hospitals and public health providers at different co-pay levels, depending exclusively on their income. Co-pays in the public sector range from 0% to 50% of a subsidized public set price on health care service. Individuals' insured by FONASA can also receive health services from private providers but at a much higher cost, since the reimbursement cap is based on government set prices. Workers can purchase health insurance from ISAPRES with their 7% of mandatory contribution, in parallel to FONASA affiliation; however, ISAPRES differs from FONASA by offering a wider range of insurance plans with different prices and benefits. Prices charged by ISAPRES are determined by individual risk factors and desired benefits. Individuals can purchase health insurance by paying above the mandatory 7% on taxable income if desired, thus acquiring greater benefits.

The idea behind the mixed system and the creation of ISAPRES was to promote choices, within a mandated requirement for insurance. In this system, individuals can move their resources from the public to the private system as well as within the private insurance market. ISAPRES contracts are lifetime agreements; however, individuals can opt out once every year or when they change jobs. In principle, ISAPRES can only terminate contracts if the worker does not comply with payments. Nevertheless, there is evidence on ISAPRES raising the cost of insurance plans in order to discourage riskier customers from enrolling in their plans.

This mixed system provides for an interesting setting to study individual choice for health insurance as well as for exploring the existence of common economic problems of insurance such as adverse selection and moral hazard. Moral hazard can be understood as a change in an agent's risk-taking behavior after being insured. Moral hazard arises when agents do not face the complete cost (complete social cost) of their actions when insured, and insurance

companies bear a portion or all of the cost. Therefore, being insured could change behavior and create deadweight losses. In the case of health insurance, moral hazard is considered a special case of information asymmetry: agents know more about their own behavior and health service demand than insurance companies. This asymmetry creates incentive to behave inappropriately and take advantage of the insurance. In the health insurance setting, the moral hazard problem can be seen as an abuse of the system or a post-contractual opportunism. Individuals use more health services when insured than when not insured, basically because the price after insurance is lower than the marginal benefit to them. In other words, given that insurance companies bear the costs of different health services, individuals covered by insurance have the incentive to overconsume health service, (given that they do not pay the full cost of the services). In his influential paper on health economics Mark Pauly[1] develops the theoretical framework behind the moral hazard problem in health insurance. His paper displays the social losses product of overconsumption of health services due to lower prices faced by insured individuals. The article acknowledges the fact that demanding more health services is not a "moral perfidy, but a rational economic behavior."[2]

On the other hand, adverse selection is a pre-contractual information asymmetry; individuals have more information about their health status and therefore also on their expected healthcare costs and risks. Willingness to pay for insurance increases with risk and expected healthcare costs, both of which are only privately known. If insurance companies cannot discriminate price according to risk and expected costs, they will price according to their average cost, incentivizing high cost and riskier individuals to acquire insurance, and leaving out those individuals with lower risk and lower costs.

Several studies have been produced looking at the determinants of health insurance choice in Chile and elsewhere, and some of them have also addressed the issues of moral hazard and adverse selection in the system. However, most previous studies have conducted research on health insurance choice by looking at cross sectional data, leaving out the dynamics of choice. This study uses the Panel Socio Economic Characterization Survey for Chile for 1996-2001-2006 (Panel CASEN) in order to analyze what factors determine an individual's likelihood of changing from a public to a private insurance provider and vice versa, as well as to examine the existence of moral hazard and adverse selection in this mixed healthcare system. The article will be divided into six sections. The following section will discuss the relevant literature examined, the third will explain the data and provide some descriptive statistics, and the fourth will explain briefly the methodology and models. The fifth and final sections will present results and conclude, respectively.

Literature Review

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1 Mark Pauly, "The Economics of Moral Hazard: Comments," *American Economic Review 58*(1968).
2 Pauly, 535.

Regarding theory-based research on health insurance choice, Aday and Anderson,[3] proposed a framework to analyze access to health care by including a broad set of variables ranging from health policy to individual characteristics, health system characteristics, service utilization, and consumer satisfaction. The paper explored the complexities of health care access and the relationships between policy design and access. They stressed the importance of studying and analyzing all variables involved in the process, in order to fully understand the dynamics and problems of health care access and delivery.

Cameron et al. proposed a microeconomic model for health insurance choice and utilization of health care services. Using data from the Australian Health Survey (1997-1978), they were able to conclude that individual health status has a greater impact on the demand for health care services than on the choice of insurance *type*, and income shows a higher relation to insurance choice than to health care service use. They also find evidence of moral hazard, because the use of health services increases when an individual is covered by insurance and increases when the insurance is more generous in terms of coverage.

Cameron and Trivedi,[4] based on the theoretical framework in their previous paper,[5] take advantage of Australian data and the changes in health insurance national policies and investigate the determinants of health insurance enrollment in two different settings in Australia. They first study the decision of getting extra coverage from 1977-1978 (using the 1977-78 Health Survey). Because basic health insurance in Australia was mandatory; they were able to look at the determinants of incremental coverage. The second period studied was March 1983 (using the March 1983 Health Insurance Survey), after mandatory insurance was abolished. The article found evidence that income is a significant determinant of incremental insurance as well as having insurance in the second period. Premium prices play an important role during the first period, mostly for the middle-income families. Health risk factors appeared to be insignificant in determining insurance choice in both periods, showing evidence *against* adverse selection. They did, however, find that sex and age were significant determinants of insurance coverage and insurance choice in both periods.

There are fewer studies that analyze the Chilean health system specifically, and those that do exist generally rely upon data from the cross section National Socio Economic Characterization Survey (CASEN) for the 1990s. Using the CASEN survey for 1990 and 1994, Sapelli and Torche explored the individual variables that determine the choice between private and public health insurance.[6] Their paper focused on individuals that are mandated by law to acquire such insurance (dependent workers and retirees). Using a logistic regression, the authors conclude that income has a positive impact on choosing private insurance over the public one, as do age, proximity to private healthcare facilities, and health status. In terms of adverse selection, the article finds evidence of adverse selection towards private insurance

3 Lu Ann Aday and Ronald Andersen, "A Framework for the Study of Access to Medical Care," *Health Service Research* (1974): 208-220.
4 Colin Cameron and Pravin Trivedi, "The Role of Income and Health Risk in Choice of Health Insurance: Evidence from Australia," *Journal of Public Economics 45*(1991): 1-28.
5 Cameron et al.
6 Claudio Sapelli and Arístides Torche, "El Seguro de Salud: Determinantes de la Elección Entre Seguro Público y Privado, 1990 -1994," *Cuadernos de Economía 106*(1998): 383-406.

on health private information and adverse selection against the public insurance on public health information; however, the adverse selection towards the private insurance disappears in the second period studies.

Sapelli and Vial, using 1996 CASEN data, examined the presence of adverse selection and moral hazard in the Chilean health insurance system by analyzing dependent and independent workers' choice of insurance and utilization of health services.[7] To analyze self-selection, they examined the relationship between health insurance choice and observable and unobservable characteristics. Looking into moral hazard or over utilization of health services, they compare the utilization of health services between both types of insurances (private and public). Using count models with selection bias corrections and negative binomial models, they were able to assess moral hazard and adverse selection for their sample. In terms of their health insurance selection model, they find that the probability of acquiring health insurance (both private and public) increases with income, number of young children in the household, household size, education, and age of the head of household. In terms of doctor visits, they increase in number with worsening health status and older age. Gender only affects doctor visits among those who have private insurance. Income did not play a significant role on doctor visits, and neither did living in a rural area. Their results show the existence of adverse selection for independent workers as well as for dependent workers against public insurance; however, the design of private insurance (allowing risk adjustments) prevents from adverse selection. Nevertheless, overutilization appears to be present in both insurance schemes. This article lacks a randomized experiment or a quasi-experimental design that could help understand the differences on health services use, which makes their results less credible.

Sanhueza and Ruiz-Tagle also studied the determinants of choosing private insurance by using the CASEN 1996 data set.[8] By estimating simultaneous equations, they calculate the probability of buying private insurance in a dual system. They find that the probability of having private health insurance increases with income as well as with the proximity of private providers. They also find a negative relationship between the age of the household head, a constructed health risk index, the percentage of females in the household, and the probability of having private insurance. Contrary to Sapelli and Vial, they show evidence that poorer health increases the probability of having private insurance, which provides evidence of adverse selection toward private insurance. Regarding moral hazard, the article finds a positive and significant correlation between the demand for health services and the probability of having private insurance, thus implying some evidence of moral hazard in the private sector.[9] The article is unable to look at changes and compare decisions across time since it relies solely upon cross section data from 1996.

By using an updated dataset and the additional time variability that a panel survey provides, this article is able to expand upon the existing literature on health insurance choice

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7   Claudio Sapelli and Bernardita Vial, "Self-Selection and Moral Hazard in Chilean Health Insurance," *Journal of Health Economics 22*(2003): 459-476.
8   Ricardo Sanhueza and Jaime Ruiz-Tagle, "Choosing Health Insurance in a Dual Health Care System: The Chilean Case," *Journal of Applied Economics 5*(2002): 157-184.
9   Sapelli and Vial.

and the information asymmetry problems happening in the Chilean health insurance system. Since the survey is able to follow individuals over time, this study can model participants' choice and examine some of the characteristics that determine why people change from ISAPRES to FONASA or the other way around. The analysis of these dynamics could provide valuable information regarding adverse selection and moral hazard in the health insurance system in Chile.

Data

Since 1985, the Chilean government has collected extensive data on household and individual socioeconomic characteristics by conducting the National Socio Economic Characterization Survey ("Encuesta de Caracterización Socioeconómica Nacional," better known as CASEN). Reliable national and regional representative surveys have been conducted in 1985, 1987, 1990, 1992, 1994, 1996, 1998, 2000, 2003, 2006 and 2009, in order to assess socioeconomic conditions and gauge social policies.

Most social science studies on Chile rely on these data sets because they are content rich and nationally representative. Nevertheless, cross sectional data such as the CASEN surveys do not permit researchers to investigate micro-level changes and certain socioeconomic dynamics such as poverty and vulnerability. This dynamism was what triggered interest in the Ministry of Planning (Mideplan) to undertake the first and only large National Socio Economic Characterization Survey Panel. The panel CASEN was not conceived as a panel on its first wave, but it turned into panel data in 2001 when Mideplan decided to re-survey a random sample of the 1996 cross section CASEN. After 5 years, 5,209 households from 4 regions (III, VII, VIII and the Metropolitan Region) were followed and re-interviewed, creating the first nationally-representative panel for Chile. Then, after 5 years, the third wave took place in 2006, creating the 10-year CASEN Panel 1996-2001-2006.

One of the traditional problems with panel data is attrition. Nevertheless, the parties responsible for the survey paid careful attention to this issue, (i.e. Ministry of Planning, Observatorio Social at Universidad Alberto Hurtado, and Fundación para la Superación de la Pobreza). Graph 1 shows the attrition in the survey.

Graph 1: Interviewed People in Each Wave

Graph 1: Interviewed People in Each Wave

Year	Original sample	New members
1996	20.942	
2001	15.038	3.819
2006	10.287	4.281
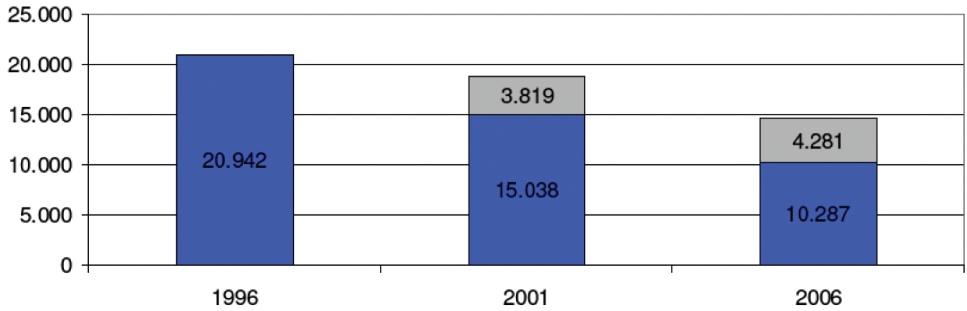
Source: Bendezú et al. 2007

Graph 1 shows how the sample lost individuals over time. The darker area represents members of the original sample, and the light gray represents new members added. Since the survey is based on households as well as individuals over a period of 10 years, new members of families already present in the survey have become part of the sample.

The total attrition for the 1996-2001 period is 28.1%, and attrition is 50.9% for the 1996-2006 period. Event though this attrition rate may seem high for a 10 year, 3 wave panel data set, it is an expected and acceptable rate. Acknowledging this issue, Mideplan paid special attention to the constriction of the weights provided in the survey in order to maintain representativeness.[10] Research for this study will make use of the 10,287 individuals surveyed in the three waves of the panel; this way, I will be able to assess changes over time, as related to my variables of interest.

Descriptive Statistics

Table 1 shows the percentages of individuals covered by each type of insurance for each wave of the survey. As seen here, there is a declining trend on private insurance holdings: in 1996, 37 percent of the people were covered by private insurance, but after 10 years, that coverage had declined to 20 percent. It appears that private insurance is losing prevalence among the Chilean people.

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10 For a complete discussion on Panel CASEN attrition and quality of data, see: Luis Bendezú, et al., "La Encuesta Panel CASEN: Metodología y Calidad de los Datos Versión 1.0," *Observatorio Social Universidad Alberto Hurtado* (2007).

Table 3 indicates the distribution of health insurance by income quintile. Not surprisingly, poorer people are most often covered by FONASA, and wealthier people choose ISAPRES as their health insurance provider. Interestingly, this table also shows some of the dynamics of health insurance choice. Over the span of the decade covered by the survey, there has been a decline in private insurance in all quintiles, including a significant decline in the Vth quintile.

Table 3: Distribution of Health Care Insurance by Income Quintile (in Percentages)

Income Quintile	1996		2001		2006	
	ISAPRES	FONASA	ISAPRES	FONASA	ISAPRES	FONASA
I	13.1	86.9	7.4	92.6	5.5	94.5
II	17.1	82.3	10.1	89.9	5.0	95.0
III	25.1	74.9	14.3	85.7	8.7	91.3
IV	27.7	72.3	18.3	81.7	13.5	86.5
V	43.3	56.6	34.4	65.6	30.3	69.7

Source: Author's elaboration from Panel CASEN 1996-2001-2006

In order to understand why these changes occurred, the next section will explain the methodology used to estimate insurance choice and the determinants of insurance dynamics.

Methodology

In order to assess insurance choice, I will estimate a logistic regression on the dichotomous variable *health insurance*, that is, 0 if the individual chooses private insurance and 1 if the choice benefits the public insurance. These logistic regressions will be computed for each year separately. Then, taking advantage of the panel data, I will analyze transition matrixes and look for variables that determine changes between insurance providers. Making use of the panel data set, I will be able to estimate a longitudinal logistic regression model with fixed effects to better understand the determinants of choice. This will also enable me to look for evidence of adverse selection and moral hazard by including variables on health status, negative health shocks, and health monthly expenditures. Following the literature on poverty dynamics and vulnerability,[11] by looking at the transition matrixes, I will be able to determine who changes insurance providers and then estimate the variables that influence the changing decision.

The variables included in the econometric models are: the log of per capita income, age, gender, and two-parent household; ratio of employed individuals to total number of people living in the household; number of employed individuals in the household; employment status of the head of household; a dummy to control for urban and rural areas; health shock ex-

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11 See: José Ramón Zubizarreta, "Dinámica de la Pobreza: El Caso de Chile 1996-2001," *Memoria para optar al título de Ingeniero Civil de Industrias, con Diploma en Ingeniería Matemática Pontificia Universidad Católica de Chile* (2005); Christopher Neilson et al., "The Dynamics of Poverty in Chile." *Journal of Latin-American Studies 40*(2008): 251–273.; and Rodrigo Castro, and María Elena Arzola, "Determinantes de la Movilidad de la Pobreza en Chile (1996-2006)," *Instituto Libertad y Desarrollo, Serie Informe Social 112*(2008).

perience; and monthly health expenditures. The inclusion of variables on health shocks and health expenditures provides evidence on the existence of adverse selection as well as moral hazard. If adverse selection were occurring, experiencing a health shock would improve the probability of changing from private to public insurance. Also, if monthly expenditures increase I would expect the probability of change from private to public insurance to increase as well, in order support the moral hazard hypothesis.

Results

Table 4 shows the transition matrices: here we can see the percentages of change from FONASA to ISAPRES (and vice versa) as well as the percentage of people staying with their previous insurance provider. The matrixes show changes from 1996 to 2001, and 2001 to 2006. 44 percent of those insured by ISAPRES in 1996 changed to FONASA in 2001, and only 10 percent made the opposite switch. For the period of 2001-2006, the results are similar: 46 percent of ISAPRES insurance holders changed to FONASA, and only 8 percent changed from FONASA to ISAPRES. Table 5 provides an overall view of individual change. From 1996 to 2001, almost 80 percent of the people did not change insurance providers (stayers), 14 percent changed from private insurance to public, and 6 percent switched from public to private insurance. For the period of 2001-2006, the numbers are similar, with 84 percent of respondents as stayers, 6 percent as public-to-private changers, and 10 percent as private-to-public transfers.

Table 4: Transition Matrices for 1996-2001 and 2001-2006

Transition Matrix I (1996-2001)			
		2001	
		ISAPRES	FONASA
1996	**ISAPRES**	55.9	44.1
	FONASA	10.1	89.6

Transition Matrix II (2001-2006)			
		2006	
		ISAPRES	FONASA
2001	**ISAPRES**	54.4	45.6
	FONASA	7.8	92.2

Source: Author's elaboration from Panel CASEN 1996-2001-2006

Table 5: Insurance Dynamics, by Percentage of People in Each State

Insurance Dynamics		
	1996-2001	**2001-2006**
Stayer	79.9	84.4
Pub-Priv change	5.8	5.8
Priv-Pub change	14.3	9.8

Source: Author's elaboration from Panel CASEN 1996-2001-2006

Regarding the insurance choice model, Tables 6 and 7 provide the logistic regression results. Following the literature on health insurance choice, I estimated the probability of choosing public insurance, first separately for each year. Then, using the longitudinal logit regression, I was able to estimate the decision to change from public to private and from private to public insurance, combining all available years and relevant variables. The results of the first logit estimations for each year are presented in Table 6, and the longitudinal results are presented in Table 7.

Table 6: Logit Regression on Health Insurance Choice for Each Year of the Study

VARIABLES	Health Insurance Choice 1996 (1 Fonasa, 0 Isapre)	Health Insurance Choice 2001 (1 Fonasa, 0 Isapre)	Health Insurance Choice 2006 (1 Fonasa, 0 Isapre)
Log per capita income	-0.72***	-0.80***	-0.97***
	(0.05)	(0.05)	(0.07)
Age	0.02***	0.01***	0.01***
	(0.002)	(0.002)	(0.002)
Years of education	-0.06***	-0.09***	-0.11***
	(0.01)	(0.01)	(0.01)
Gender (male=1)	0.18***	0.37***	0.30***
	(0.05)	(0.06)	(0.07)
Two-parent household	0.17**	-0.03	0.05
	(0.08)	(0.08)	(0.09)
# Employed to household size ratio	-0.19	-0.29	0.42**
	(0.19)	(0.20)	(0.21)
# Employed in the household	-0.06	-0.02	-0.06
	(0.05)	(0.06)	(0.05)
Education of the household head (years)	-0.08***	-0.09***	-0.07***
	(0.01)	(0.01)	(0.01)
Household head unemployed (1 yes, 0 no)	0.16*	-0.15	0.02
	(0.09)	(0.09)	(0.106)
Urban-Rural (urban=1, rural=0)	-0.35***	-0.32***	-0.07
	(0.09)	(0.10)	(0.12)
Experienced a health shock within the past 5 years (2001)		0.25**	-0.03
		(0.11)	(0.13)
Experienced a health shock within the past 5 years (2006)			0.46***
			(0.11)
Constant	9.53***	11.51***	13.77***
	(0.46)	(0.53)	(0.76)
Observations	8,720	9,131	8,011

*Robust standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$*

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*Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1*

Table 7: Longitudinal Logistic Regression

VARIABLES	Change from Public to Private Insurance	Change from Private to Public Insurance
Log per capita Income	0.22***	0.02
	(0.08)	(0.0518)
Gender (male=1)	0.35***	0.30***
	(0.11)	(0.07)
Urban-Rural (urban=1, rural=0)	-0.23	0.43***
	(0.14)	(0.107)
Household size	0.11***	0.03
	(0.04)	(0.0289)
Years of education	0.08***	0.04***
	(0.01)	(0.01)
Age	-0.02***	-0.006**
	(0.004)	(0.003)
Experienced a health shock	-0.48***	0.21**
	(0.18)	(0.1)
Monthly health expenditure	0.06	0.16*
	(0.13)	(0.08)
Constant	-5.50***	-3.09***
	(0.76)	(0.51)
Observations	7,884	7,965
Number of idpersona	5,581	5,615

*Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1*

The results of the choice logit regressions provide evidence of adverse selection towards the public insurance: people who experienced a health shock in the previous five years have a higher probability of choosing FONASA over ISAPRES, in 2001 the coefficient estimated was 0.25, and for 2006 0.46, both statistically significant at 95 percent and 99 percent confidence levels, respectively. Regarding the other variables included in the regression, results were similar to those found by other authors, previously. Income plays an important role in determining insurance choice, since the larger the income, the lower the probability of choosing FONASA over the private insurance. This was evident in my model, since in all three regressions the sign was negative and the coefficient estimated was statistically significant. The older the person, the higher the probability of choosing public insurance. This evidence aligned with Table 2. Higher education levels also lower the probability of choosing FONASA, and males are more likely to choose FONASA over women. The variable of living in a two-parent household does not appear to be statistically significant in determining insurance choice, except in 1996, where it had a positive sign. Employment of the household head did

not predict choice in this model, and the ratio of employed people to household size was only significant and positive for 2006. However, the education of the household head did influence choice – the household heads with higher education levels had a lower probability of choosing public insurance for all three years. People living in urban areas were less likely to get public insurance for 1996 and 2001, but the coefficient estimated for 2006 was not statistically significant.

The results of the longitudinal logit model show the dynamics of health insurance change over the period of 1996, 2001, and 2006. As expected, income appears to be a significant determinant of the probability of changing from public to private insurance – the higher the income, the higher the probability of changing from FONASA to ISAPRES. Males have a higher probability of changing both from private to public and from public to private insurance. People living in urban areas are more likely to change from private to public insurance, but not the other way around. The coefficient for household size is positive and significant only for the probability of changing from the public to the private insurance scheme. Education also influences positively both changes, but the effect on the probability of changing from FONASA to ISAPRES is higher – 0.08 versus 0.04. Experiencing a health shock is associated with a higher probability of changing from private to public insurance, and it lowers the probability of changing the opposite direction. This result could be evidence of problems of moral hazard and adverse selection following a health shock, which would lead to the expectation of higher demand for health care, causing people to move from the private to the public sector. The other evidence supporting adverse selection and moral hazard toward FONASA is the variable of monthly health expenditure, which impacts positively the probability of changing from private to public sector but does not show a significant effect on the probability of changing from ISAPRES to FONASA.

Conclusions

Using panel data from Chile's National Socio Economic Characterization Survey 1996-2001-2006, this study examines health insurance choice and its dynamics over a ten year time period. Between 1996 and 2006, many people did change their insurance providers. Private insurance appears to be losing customers to the public sector.

The results of the logistic regressions for yearly choices display evidence on the determinants of insurance selection. Income seems to be highly important in determining the choice – higher income lowers the probability of choosing public health insurance. Also important in the choice model are age, education, gender, location (rural versus urban living situations), and the presence of health shocks. After analyzing the determinants of insurance change (the dynamic approach), I conclude that income, gender, education, age, health shocks, and monthly health expenditures have a significant impact on the decision of changing from private to public insurance providers. Evidence of moral hazard and adverse selection was found in the longitudinal and cross section analysis. The results of this research are aligned with most of the previous investigations done on Chile's health insurance system and advance the knowledge by including models that explain why people change insurance providers by making use of the dynamism that panel data permits.

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