

## Complementary health cover changes at retirement time Analysis of retirees' switching behaviour

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On retirement, many complementary health insurance contract holders change provider: this is indeed the case for 51% of compulsory group contract holders, 39% of voluntary group contract holders and 23% of individual contract holders.

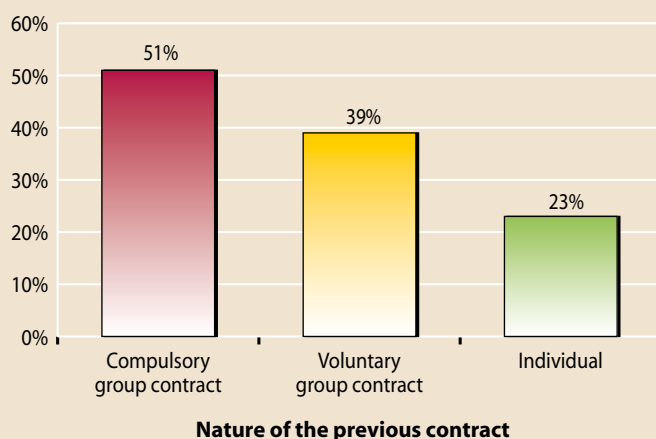
The higher mobility rates observed among group contract holders – especially those with a compulsory contract – can be confirmed after controlling for other characteristics that may explain this greater mobility, in particular their health status. This reflects the impact of the increase in group contract premiums for recently retired people, an increase that is primarily due to the loss of both group pricing and the employer's contribution. Their greater mobility may also mean that cover designed for a group of employees does not meet retirees' health care needs.

Mobility also depends on the type of health insurance provider managing the contract before retirement: People covered by commercial insurance companies change more frequently than those with contracts managed by mutuelles or provident institutions.

A previous study on the mobility of contract holders shows that changes in complementary health cover occur significantly more often on retirement (Grignon and Sitta, 2003). Our current study examines this fact and provides an analysis of the retirees' behaviour on the complementary health insurance market.

So, we focus on the group contract holders' situation. Although they can frequently keep their contracts on retirement, they can no longer benefit from the attached favourable pricing conditions. On the one hand, they lose the employer contribution to the premium, which averages 50% of the purchase price (Couffinhal *et al.*, 2004a). And, on the other hand, as pricing becomes individual, they also lose the benefit of group pricing, which is generally advantageous for older people and families. Losing both the aforementioned pricing conditions brings about increases in prices despite the Évin law of 31 December 1989 which controls and regulates increases in premiums for recently-retired compulsory group contracts holders (See box p. 2 on regulation of group contracts). Therefore, employees may have to consider changing complementary health cover at retirement time. More precisely, they may change contract from the same provider or choose another provider.

Proportion of contract holders who changed complementary health cover provider on retirement depending on the nature of their previous contract



**Interpretation:** On retirement, 51% of those holding a compulsory group policy changed complementary health contract provider.

Source : IRDES, ESPS 1994-2004

# BACKGROUND...

Although health insurance providers that manage group contracts must offer contracts with capped prices to employees who retire (Evin law 1989), an increase in premiums may be difficult to bear just when the income is reduced. This study provides new information by examining mobility rates in complementary health cover on retirement depending on the contract held at that moment.

We investigate the mobility of contract holders through their changes in provider<sup>1</sup>. These changes are initially examined according to the nature of the contract (compulsory, voluntary or individual) held just before retirement. As the nature of the contract is closely linked to the type of health insurance provider (private insurance company, mutuelle or provident institution), mobility is therefore also examined in relation to the type of provider. Finally, we highlight the actual effects of the nature of the contract by using a modelling approach that isolates other factors which may influence health cover mobility, such as income or health status. The sample group comprises 910 retired people who responded to the French Health, Health Care and Insurance survey (ESPS) and whose behaviour can be observed before and after retirement, *i.e.* at a four-year interval on average (See data source box on p. 5).

## Mobility rates vary greatly depending on the contract held at the end of the period of employment

In our sample, almost 22% of individuals benefit from a compulsory group contract, 25% from a voluntary group contract and 49% from an individual contract<sup>2</sup>.

On retirement, changes in provider are more frequent for group contract holders, and more particularly for those with a compulsory contract: this represents 51% of compulsory group contract holders, 39% of voluntary group contract holders and 23% of individual contract holders.

Mobility rates vary also greatly depending on the type of health insurance provider which covered the individual before

retirement. 25% of retirees covered by a *mutuelles* before retirement have changed provider *versus* 43% for provident institutions and 55% for commercial insurance companies.

The lower mobility rate observed among insured retirees who were previously covered by a *mutuelle* is consistent with the results quoted above. Indeed, *mutuelles* realize a large share of their activity on the individual contract market (75% of their turnover)<sup>4</sup> and individual contract holders are those who change provider the least on retirement.

## Changes induced by the nature of the contract: an illustration of the pricing effect

### More frequent changes among group contracts holders...

All things being equal, the probability of changing provider is significantly

higher for group contracts holders than for individual contract holders: 13 percent points higher for retired people previously covered by a voluntary group contract and 21 percent points higher for those previously covered by a compulsory contract (*cf.* table p. 4). This mobility rate, which is significantly higher for group contract holders, reflects the effect of post-retirement increases in group contract premiums (See box above).

This result, which we expected, is in line with American studies (Buchmueller and Ohri, 2006) which show that, all things being equal, the

<sup>4</sup> High council for the future of health insurance, February 2005.

## Compulsory group contracts and the Évin law (1989)

Compulsory group contracts are financially advantageous to employees as they benefit from:

- a group pricing imposed on insurance providers by Social security legislation. This is more favourable to older employees, since it is calculated on the basis of the average risk for the group. Furthermore, group pricing includes management and marketing costs; the clientele being captive, these costs are less than those for individual contracts,
- a financial contribution from the employer.

Representing an average of 50% of the total premium (Couffinal *et al.*, 2004a), this contribution is required by law so that employers can benefit from tax and welfare exemptions;

- tax and welfare exemptions for the remaining premium.

On retirement, compulsory group contract holders generally lose all these advantageous conditions. They are *de facto* obliged to meet the cost of a considerable increase in their premium. The Évin law of 31 December 1989 obliges

health insurance providers to propose 'post-retirement' contracts with equivalent level of cover to the group contract. It also caps at 50% increases caused by a loss of group pricing. Nevertheless, the increased premium paid by the retiree may ultimately be 200% higher or more\*, because of the loss of the employer's contribution.

\* We are presuming, in this example, that the employer's contribution is 50% and that the increase caused by the loss of group pricing is also 50%. This represents the maximum authorised by the Evin law

<sup>1</sup> It is not possible to distinguish changes in contracts from the same provider as part in the French Health, Health care and Insurance survey.

<sup>2</sup> In 4% of cases, the subscription mode is not known.

<sup>3</sup> *Mutuelles*, which doctrine is based on the principle of solidarity, are non-profit providers that make little use of risk-rating strategies.

**Theoretical effects of the price increases**

Recently retired people have to meet the cost of a brutal hike in the price of their complementary health insurance. As for any consumer product, the effect of a change in price on the consumer's individual choice can be theoretically broken down into a substitution effect and an income effect.

Regardless of any changes in budget constraints, the substitution effect conveys an adjustment of the levels of cover according to anticipated health care needs. As a matter of fact, group contracts generally pro-

vide a relatively high level of cover for individual care needs and contract holders may wish to adjust their cover when they retire. In addition, they may have to trade-off the "complementary health insurance" product, which has become relatively more expensive, against all other consumer products. Thus, they may wish to re-balance their consumption by favouring leisure, for example.

The **income effect** is directly linked to the retirees' budgetary constraints. This effect conveys the obligation to acknowledge

a tightening in their budget which leads them to generally reduce consumption of goods and services, and specifically their demand for complementary health insurance.

These two effects do not impact equally individuals' well-being. The substitution effect is neutral since individuals reallocate their resources in order to preserve their well-being. On the other hand, the income effect leads to a rationing in global consumption, and therefore probably in insurance, which certainly

has a negative impact on the level of well-being. Although we are not able to determine the respective weight of each of these effects according to the nature of a group contract (voluntary or compulsory), we assume that the substitution effect is more significant in the case of a compulsory contract as employees have not chosen the level of their cover. In this study, we examine the global pricing effect on insurance cover which is the sum of the two effects.

probability that individuals keep their group contract falls by 0.7 percent point with every 10 dollar increase in the premium.

On the one hand, this pricing effect demonstrates that retired people do not have sufficient resources to keep their previous cover and, on the other hand, that the previous contract

becomes less attractive when compared to the wide range of individual contracts available on the market (See box p. 3). The first assumption involves a negative effect on the contract holders' well-being since it translates into a rationing of cover, while the second is neutral since it is simply a question of adjusting the level of cover to the individual's needs.

**... in particular when the contract is compulsory**

Among group contract holders, those covered by a compulsory contract change provider more frequently than those covered by a voluntary contract<sup>5</sup>. This result cannot only be explained by pricing effects. Indeed, unlike compulsory contracts, employers are not legally obliged to contribute to voluntary contract premiums but they do finance on average 49% of voluntary contracts versus 52% of compulsory contracts (Couffinhall *et al.*, 2004a). Moreover, insurers providing voluntary contracts are not legally obliged to apply group pricing. Nonetheless, it appears that almost all providers operate on group pricing, since only 4% of them adjust their pricing for individual risk (Couffinhall *et al.*, 2004a).

Less frequent changes among voluntary contract holders can therefore probably be ascribed to the freedom of choice

**Distribution of the health contracts held by recently retired individuals according to the type of provider managing their contract before and after retirement**

		After retirement				Total (n = 910)
		Private insurance company (n = 140)	Provident institution (n = 128)	Mutuelle (n = 626)	Not covered (n = 16)	
Before retirement	Private insurance company (n = 177)	68% of which: Another provider: 33 The same provider: 67	13%	18%	1%*	100%
	Provident institution (n = 124)	5% *	73% of which: Another provider: 22 The same provider: 78	18%	4%*	100%
	Mutuelle (n = 609)	2%*	2%*	94% of which: Another provider: 20 The same provider: 80	2%*	100%

\* : A low number of employees (< 20 people)

Source : IRDES, ESPS 1994-2004

**Interpretation:** Among the insurees covered by a private insurance company before retirement, 18% choose a mutuelle after retirement. Regarding the people covered by a private insurance company before and after retirement, 33% changed provider when they retired.

5 The difference in mobility between compulsory insured and voluntary insured is not significant. Nevertheless, given its extent (an 8 percent point difference) and the lack of statistical force, we have chosen to comment on this result.

6 Liaisons sociales magazine (May 2006), La prévoyance collective à l'heure des économies.

offered by these contracts. In effect, people benefiting from a voluntary contract can take out their company cover or any contract available on the individual cover market. Their final decision represents a rational choice of the cover that suits best their personal needs with regards to the cost of the cover.

People covered by a compulsory contract do not have this option. Therefore, even though the average level of cover for compulsory contracts is high, it does not necessarily suit the health care needs of retired people who may prefer a higher level of cover for hospital care and a lower level for optical or maternity care<sup>6</sup>.

**Greater mobility from holders of contracts taken out with commercial insurance companies**

All things being equal, the probability that retired people previously covered by a commercial insurance companies change complementary cover on retirement is 26 percent points higher than for those covered by a *mutuelle* (table p. 4). This phenomenon expresses two types of behaviour:

- frequent changes to other types of providers, which may reflect the fact that contract holders anticipate premiums less favourable over time, due to a closer link between price and risk<sup>7</sup> in commercial insurance companies
- a greater mobility between commercial insurance companies resulting from a broader range of coverage offered by this type of provider, and which may illustrate a greater competition (Martin-Houssart *et al.*, 2005).



METHOD

**An analysis with «all things being equal»**

Changing complementary cover can be modelized into a probability unit that explains, all things being equal, the probability of changing provider.

To isolate the average effect of the nature of the contract (compulsory, voluntary or individual), we controlled for characteristics that may influence mobility. These factors are those which may have a direct or indirect influence on the demand for insurance, like variations in the level of income (taking account of the cost of living), mandatory health insurance scheme, level of education, average retirement age, retirement date, type of provider (private insurance company, *mutuelle* or provident institution), respondent's assessment of reimbursements of specialist consultations, exemption from public co-payment and maximum vital risk linked to the declared illnesses. Other indicators of the contract holder's health status have also been tested but are not in the model, as maximum disability among the illnesses declared and the health score.

**Marginal effect of individual and socio-economic characteristics on the probability of changing complementary cover on retirement**

	Marginal effect	Significance
Probability of changing complementary cover for the referent individual	31%	
Reference: individual contract		
Compulsory group contract	21	***
Voluntary group contract	13	***
Unknown	12	ns
Reference: covered by a <i>mutuelle</i>		
Previous complementary cover provider: Private insurance company	26	***
Previous complementary cover provider: Provident institution	6	ns
Reference: Retirement age - before the age of 59		
Retirement age - after the age of 59	3	ns
Reference: No higher education		
Higher education	-10	**
Level of education unknown	6	ns
Reference: No vital risk		
Low vital risk	-5	ns
High vital risk	-10	*
Vital risk unknown	-8	ns
Reference: No exemption from public co-payment		
Exemption from public co-payment	1	ns
Reference: Mandatory public scheme		
Other scheme	-13	***
Reference: Poor opinion of specialist care reimbursements		
Fair opinion of specialist care reimbursements	3	ns
Good opinion of specialist care reimbursements	-3	ns
Opinion of specialist care reimbursements unknown	2	ns
Reference: No variation in income		
A negative variation in income	3	ns
A positive variation in income	4	ns
Variation in income unknown	-3	ns

\* : significance above 10%      \*\* : significance above 5%      \*\*\* : significance above 1%  
 ns : no significance difference      \*\*\*\*: Cf note 5 in box method.

**Interpretation:** The probability that a group contract holder will change complementary cover on retirement is 21% higher for a compulsory group contract holder than for an individual contract holders.

Source: IRDES, ESPS, 1994-2004

<sup>7</sup> Mutuelles claim to share risks, i.e. to spread risks between contract holders.

**A marginal influence of other characteristics, in particular health status and income**

Exemption from public co-payment, which concerns mainly individuals medically covered for a long term illness, has no significant effect. Disability and health score have also been tested as indicators of health status (See box sources p. 5). However, they have no

respective measurable effect. In fact, only the level of vital risk before retirement has a significant impact: individuals with a high vital risk have a lower probability (-10 percent points) of changing complementary cover than individuals with no vital risk. Health status therefore has a fairly low influence on changes in complementary cover. Although these results are interesting they are not very robust. So health status has

a fairly low influence on changes in complementary cover.

We have also noted that, all things being equal, individuals who have experienced an income reduction on retirement do not change health insurance provider more frequently, suggesting that income may not play a significant role. This non-intuitive result may be caused



**SOURCES**

**A longitudinal analysis based on the 1994 to 2004 French Health, Health Care and Insurance surveys**

**ESPS survey**

Our study uses the data from the French Health, Health Care and Insurance survey (ESPS) carried out with individuals covered by one of the three major health insurance schemes (funds for, respectively, salaried workers, self-employed, and agricultural workers and farmers). This survey collects data on health status, health care needs, individual and socio-economic characteristics, mandatory health insurance and complementary health cover. Carried out yearly between 1988 and 1997, this survey became bi-annual in 1998 and regularly collects data from the same households at four year intervals.

**Sample**

Our sample is surveyed according to 3 observation cycles (see diagram). Cycle A corresponds to individuals surveyed between 1994 and 1997, cycle B to those surveyed in 1998 or

2000 and cycle C to those surveyed in 2002 or 2004. We have selected individuals appearing in at least 2 observation cycles and whose status has changed from 'active' to 'retired'. Thus, we can compare their complementary health cover before and after retirement (with a four-year interval or more rarely with an eight-year interval). For simplicity reasons, our study describes changes in complementary health cover on retirement.

We have selected individuals who, before retiring, were not just covered but who were indeed contract holders. We did so because we have presumed that the decision to change was theirs.

Because of difficulties in identifying providers, we have only included the individuals covered by a single primary contract.

The final sample comprises 910 individuals. The average retirement age is 59. Almost 22% (i.e. 201 people) benefit from a compulsory group

contract, 25% (i.e. 226 people) from a voluntary group contract and 49% (i.e. 448 people) from an individual contract. For 4% of individuals, the subscription mode is not known. The public sector employees' contracts taken out through mutuelles have been reclassified as individual covers since the State, as an employer, does not contribute to premiums.

**Description of the indicators related to complementary cover and health status**

The nature of the contract indicates whether it is compulsory, voluntary or individual, as declared by the respondents.

The type of provider indicates whether the complementary health cover

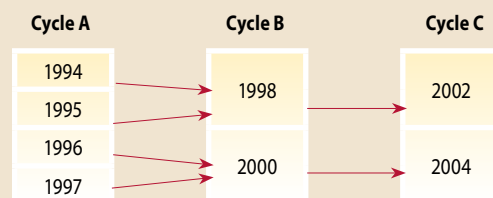
provider is a *mutuelle*, a private insurance company or a provident institution.

The vital risk corresponds to the probability of death. It is calculated on the 6-level scale ranging from "no vital risk" to "a definite poor prognosis" (meaning an 80% probability of death within five years).

Disability is based on the existence of chronic illnesses resulting in a permanent handicap. The 8-level scale ranges from "no impairment" to "permanently bed-ridden".

The health score is the respondents' self-assessment of their health status on a scale ranging from 0 (very poor health) to 10 (excellent health), it is asked to all the respondents who agreed to answer questions relating to their health status.

**Diagram of the observation cycles of the ESPS survey used in this study**





FURTHER INFORMATION

- Buchmueller T.-C., Ohri S. (2006), Health Insurance Take-up by the Near Elderly. *NBER Working Paper* (11951).
  - Couffinal A., Grandfils N., Grignon M. et Rochereau T. (2004a), Enquête sur la protection sociale complémentaire d'entreprise en France. *Rapport IRDES* (1540).
  - Grignon M. et Sitta R. (2003), Qui change de complémentaire santé et pourquoi? Une étude longitudinale à partir de l'enquête ESPS 1988-98. *Questions d'économie de la santé* (64).
  - *Liaisons sociales magazine* (mai 2006), La prévoyance collective à l'heure des économies.
  - Martin-Houssart G., Rattier M.O. et Raynaud D. (2005), Les contrats offerts en 2002 par les organismes d'assurance maladie complémentaire. *Études et Résultats* (402).
- **Voir aussi**
- Couffinal A. et Perronnin M. (2004b), Accès à la couverture complémentaire maladie en France : une comparaison des niveaux de remboursement- Enquêtes ESPS 2000 et 2002. *Questions d'économie de la santé* (80).
  - Franck R.-G., Lamiraud K. (2006), *Choice, Price Competition and Complexity in Markets for Health Insurance*. <http://www.hec.unil.ch/deep/evenements/Brownbag-papers/2005-06/Frank-mai06.pdf>



*Individuals initially covered by a group contract change provider more frequently, all*

*the more when these contracts are compulsory. Since the nature of the contract reflects the pricing effect, our results confirm that price increases greatly influence the demand for complementary insurance.*

*Furthermore, analyses show that the type of provider managing the contract before retirement also plays a role in terms of mobility: individuals initially covered by a private insurance company change provider more frequently than those covered by a mutuelle.*

*Compared to the effects of the nature of the contract and type of insurance provider, the influence of individual characteristics is more marginal.*

*Finally, this study reveals high mobility rates for complementary health contract holders, however these rates are probably underestimated since this mobility does not include possible contract changes within the same provider.*

*At the general population level, complementary insurance changes occur more specifically at times of major life changes, in particular changes in socio-economic status. Our study targets one of them: retirement. It would also be interesting to investigate mobility during temporary interruptions in activity such as periods of unemployment or when people get their first job after completing their studies.*

by the approximate and irregular surveying method of income which led to the creation of increasingly broader income brackets over time. We have observed that the most highly educated people have a lower probability of changing provider. This result is in line with those obtained among the general population (Grignon and Sitta, 2003)<sup>8</sup>.

Individuals who do not depend on the salaried workers' fund have a lower probability of changing provider on retirement (- 13 percent points). This concerns particularly self-employed people, agricultural workers and farmers. For self-employed people, this result may be explained by the reimbursement conditions of their own specific scheme. At the time of the survey, the majority of the people covered by this scheme had larger public copayments than people covered by the main scheme<sup>9</sup>. Because of this, their complementary

insurance covered higher outstanding amounts. Therefore, we can suppose that they pay closer attention to their complementary cover and change provider less at retirement time.

<sup>8</sup> This result does not demonstrate the effect of social level on solvency. In fact, this result remains unchanged when we take account of the mean level of income before retirement.

<sup>9</sup> In 2002, reimbursement rates of the fund for self-employed people were brought into line with those of the main public fund and the fund for agricultural workers. Our sample includes individuals who retired between 1994 and 2004. Our explanation therefore relates to all individuals who retired before 2002. Their behaviours are compared to those who are dependent on the public scheme and who have a complementary individual cover.