How Will Employer-Mandated Complementary Health Insurance Impact Insurance Coverage in France?

A simulation based on the 2012 Health, Health Care and Insurance survey (ESPS)

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In France, access to health care is highly dependent on whether or not individuals possess complementary health insurance (CHI), which in 2012 was not the case for 5% of the population. Access to a quality complementary health insurance policy for all thus became a core factor in the national health strategy set out by the government in 2013. The first measure, negotiated within the framework of the National Interprofessional Agreement (NIA) of January 2013, will compulsorily mandate employer to provide sponsored contracts to all private sector employees on January 1st 2016, and improve coverage portability of this coverage to unemployed former employees for up to 12 months following termination of their work contract.

This article aims to provide an *ex ante* evaluation of the expected impact of NIA on coverage rates in France and to discuss its implications in terms of health inequalities. Based on the 2012 Health, Health care and Insurance survey (ESPS), we simulate the proportion of individuals that would remain uninsured after NIA in the general population and within the private employees, taking into account the waiver clause exempting some of them to subscribe to the employer-sponsored CHI. Non-coverage is studied according to individual characteristics such as health status, socio-economic status and time and risk preferences.

In France, despite the major role played by the Statutory Health Insurance scheme in financing health expenditures (76% on average in 2013; Zaidman and Roussel, 2014), access to health care is highly dependent on whether or not individuals possess complementary health insurance (CHI) and its quality in terms of coverage level (Buchmueller *et al.*, 2004; Dourgnon *et al.*, 2012; Jusot, 2013). Several schemes have been set up by the government to

facilitate low income populations' access to CHI [Universal Complementary Health Insurance (*Couverture maladie universelle complémentaire*, CMU-C) in 2000, Assistance in Financing CHI (*Aide à l'acquisition d'une complémentaire santé*, ACS) in 2005] and also initiatives to support the development of employer-provided CHI (tax and social contribution exemptions introduced in 1985). Even if the percentage of individuals without CHI coverage has considerably decreased since the 1980s

(Perronnin *et al.*, 2011), 5% of the population were still not covered by CHI in 2012. Indeed, 6% of the French population on the lowest incomes benefitted from free CHI coverage through the CMU-C, 53% from private and individually subscribed CHI and 35% from employer-sponsored CHI [either directly or through a household member's employer (Célant *et al.*, 2014)]. It is for this reason that the generalisation of access to complementary health insurance became a

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The implementation of NIA

In January 2013, the National Inter-professional Agreement (NIA, *Accord national interprofessionnel*) proposed two articles concerning employer-sponsored complementary health insurance in exchange for greater flexibility on the labour market. First, it concerns mandatoring employer to provide sponsored CHI to all private sector employees; in other words it introduces compulsory group CHI financed at a minimum of 50% by the employer. Secondly, it consists in generalising and extending coverage portability rights; in other words it enables former employees entitled to unemployment benefits to freely benefit from their former employer's CHI plan for a maximum period of twelve months.

This agreement, voted on June 14th 2013, should enter into force on January 1st 2016. The insurance plan should additionally meet minimum coverage requirements: the totality of co-payments on consultations, medications reimbursed at 65%, acts and services reimbursable by the statutory National Health Insurance scheme; the daily hospital co-payment without duration limits; dental care at a minimum 125% of the approved rate and finally optical fees by two year

periods at a fixed euro rate of a minimum 100 euros for simple corrections. Furthermore, the new definition of "responsible" insurance contracts impose reimbursement ceilings at 125% for fees in excess of agreed tariffs charged by doctors not having signed the access to care contract and reimbursement ceilings for optical care.

Several waiver clauses authorise certain employees not to adhere to the employer-sponsored CHI plan; employees already covered by a private contract at the time the group contract is introduced but only until expiry of the said contract, employees already covered by a spouse's employer-provided contract, CMU-C and ACS beneficiaries, employees and apprentices with an employment contract of less than 12 months and without justification of alternative coverage, and finally part-time employees and apprentices for whom the financial contribution to the employer-provided contract would represent over 10% of their gross wage. Finally, employees working in the company at the time a contract set up on the employer's unilateral decision will also have the possibility of not adhering to the scheme.

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core factor of National Health Strategy set out by the government on September 23rd 2013 alongside the overall aim of reducing social health inequalities (Touraine, 2014). The first measure, negotiated within the framework of the National Interprofessional Agreement (NIA, *Accord national interprofessionnel*) of January 2013, consists in mandating employers to provide to all private sector employees a sponsored CHI to all private sector employees on January 1st 2016, which is called the generalization of employer-provided CHI, and to improve the portability of this coverage for unemployed former employees for up to 12 months after termination of their work contract (Insert 1).

The question can, however, be raised concerning this measure's capacity to effectively generalise CHI coverage in France and reduce inequalities regarding access to CHI when it *de facto* excludes individuals not present on the labour market, for the majority low income individuals or those in poor health. Moreover, the private sector employee population is already largely covered, 64% benefitting from employer-provided CHI (Célant *et al.*, 2014) which offers better coverage levels for a lesser cost than private insurance contracts, due in particular to employer subsidy (Garnero and Le Palud, 2014). Finally, several French studies have shown that income was a determinant factor in the decision to subscribe or not to private CHI (Buchmueller and Couffinhal, 2004; Jusot *et al.*, 2012), health status having a relatively modest impact. The primary reason for non-cov-

erage is the cost of insurance premiums (Célant *et al.*, 2014). Even if government's stated aim is to extend quality CHI coverage to the entire French population, mandating employers to provide CHI to their employees risks widening the inequalities gap regarding cost and quality of coverage levels already observed, taking into account employer participation and the probable modification of premiums likely to result from a reinforcement in private and group CHI market segmentation.
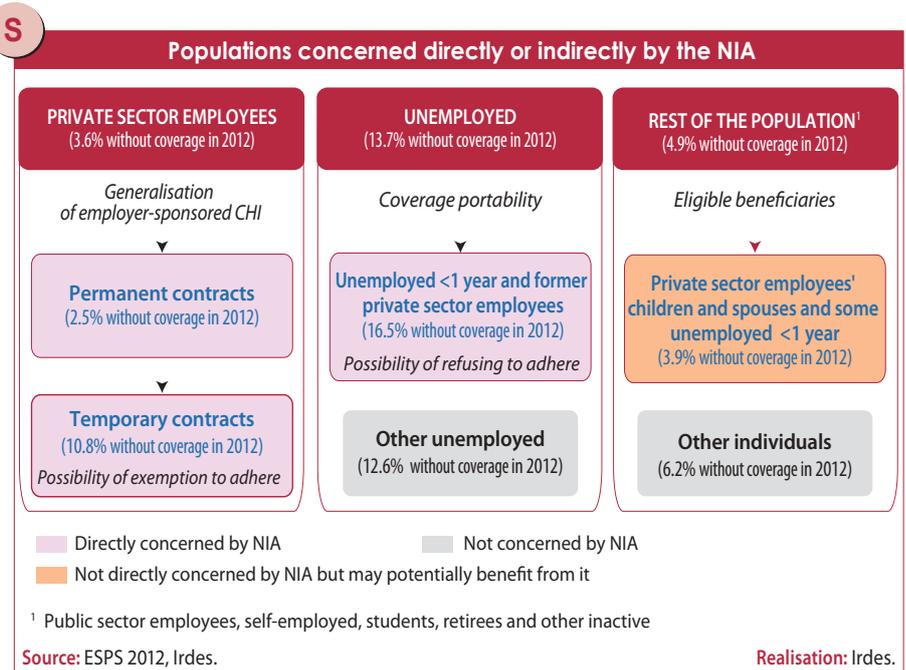
The employer-mandated CHI also raises the question of voluntary non-coverage. This scheme could present an advantage for employees only if the employer's participation is sufficiently high so as not to reduce employees' disposable income after health insurance expenditure and if non-coverage is not voluntary chosen according to health needs and preferences. Indeed, 12% of non-covered individuals justify their choice by the fact that they do not wish to be insured or do not need insurance and 17% by the fact that they benefit from 100% coverage through the National Health Insurance scheme because they suffer from a long-term chronic illness (*Affectation de longue durée*, ALD) or disability (Célant *et al.*, 2014). Some studies have also highlighted the role played by risk preferences on insurance decisions, individuals least averse to risk preferring little or no insurance coverage (Doiron *et al.*, 2008). Finally, subscribing to an insurance policy corresponds to a means of investing in one's health, comparable to preventive health implying immediate costs for uncertain future benefits. In this respect, one could suppose that individuals with a preference for the present would prefer not to be covered.

An *ex ante* evaluation of NIA based on a simulation of CHI status

This article attempts to provide an *ex ante* evaluation of the NIA scheme by studying the expected effects of the "generalization" of employer-provided complementary health insurance and of the "coverage

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Populations concerned directly or indirectly by the NIA

PRIVATE SECTOR EMPLOYEES (3.6% without coverage in 2012)	UNEMPLOYED (13.7% without coverage in 2012)	REST OF THE POPULATION[1] (4.9% without coverage in 2012)
Generalisation of employer-sponsored CHI	*Coverage portability*	*Eligible beneficiaries*
Permanent contracts (2.5% without coverage in 2012)	**Unemployed <1 year and former private sector employees** (16.5% without coverage in 2012) *Possibility of refusing to adhere*	**Private sector employees' children and spouses and some unemployed <1 year** (3.9% without coverage in 2012)
Temporary contracts (10.8% without coverage in 2012) *Possibility of exemption to adhere*	**Other unemployed** (12.6% without coverage in 2012)	**Other individuals** (6.2% without coverage in 2012)

■ Directly concerned by NIA   ■ Not concerned by NIA
■ Not directly concerned by NIA but may potentially benefit from it

[1] Public sector employees, self-employed, students, retirees and other inactive

Source: ESPS 2012, Irdes.   **Realisation:** Irdes.

portability" (Insert 1) on the health insurance coverage in France. It more specifically involves studying to what extent the scheme will reduce inequalities regarding CHI coverage and improve access to CHI among individuals subject to involuntary non-coverage or on the contrary constrain individuals for whom non-coverage is a choice. Inequalities of non-coverage prior to the introduction of NIA are first studied using the 2012 Health, Health Care and Insurance survey (ESPS) (Sources insert). The proportion of individuals remaining without CHI after the introduction of NIA is then simulated in the general population and the private sector employee population according to three law enforcement scenarios and taking into account three assumptions on employees' exemptions. The impact of NIA on inequalities in CHI coverage is then analysed by comparing the way in which the rate of non-coverage evolves according to health status, socio-economic status, and time and risk preferences.

The CHI coverage that the ESPS 2012 sample could be faced after the introduction of NIA is simulated according to family and employment status as observed in 2012, and under the assumption that all other individual characteristics remain unchanged. In accordance with the literature (Albouy et Crépon, 2007; Buchmueller *et al.*, 2011), the hypothesis according to which changes with regard to CHI status are exogenous implies that the introduction of NIA will have no impact on labour

supply and/or demand and will, in addition, be credible in the short term.

Three scenarios were envisaged. The first evaluated the impact of the "generalization" of employer-provided CHI / or the impact of employer-mandated CHI to all private sector employees, (the only population directly concerned by compulsory CHI within the framework of NIA), on noncoverage rates in France (scenario (1)). The second scenario took also into account former employees entitled to unemployment benefits[1] able to continue benefitting from their employer-provided CHI within the framework of coverage portability for a maximum of twelve months after termination of their work contract (scenario (1+2)). A situation in which all the unemployed refused to adhere to the scheme would thus correspond to scenario (1). Even if the NIA does not apply to the dependents/family of employees and former unemployed, a third scenario integrated spouses and children aged under 26 years old, students and Active Solidarity Fund beneficiaries (*Revenu de solidarité active*, RSA), given that the majority of group contracts include them (Perronnin *et al.*, 2012) [scenarios (1+2+3)]. Here again, a situation in which only eligible beneficiaries (and not their family) would accept affiliation to the scheme would correspond to scenarios (1+2).

To study the impact of the employer-mandated CHI and coverage portability on non-coverage rates, we first made the hypothesis that the non-coverage rate would *de facto* drop to 0% among all the populations

directly or indirectly concerned by the NIA. Secondly, we took into account the conditions of waiver potentially exempting certain employees from adhering to the scheme (Insert 1).

CMU-C and ACS beneficiaries and employees already covered by their spouse's employer-provided CHI have no incidence on coverage rates as their choice only affects type of CHI coverage. In addition, given the cost of group premiums (Garnero and Le Palud, 2014), employee contributions are unlikely to represent more than 10% of gross revenue (Pierre and Jusot, 2015). However, employees with a work contract of less than twelve months are more likely to request exemption due to the financial contribution and transaction fees incurred by a change in CHI. If ESPS data do not allow the precise distinction between work contracts of less than twelve months, they provide information on some work contract characteristics used to define three hypotheses: the first assuming that no employee or unemployed former employee concerned by the introduction of the NIA would refuse to adhere to the employer-provided CHI scheme, the second assuming that all employees on temporary work contracts of less than six months would refuse to adhere, and a third assuming that all employees on temporary work contracts (fixed-term contracts of less than 6 months, apprentices, irregular workers, temporary workers and seasonal workers) would refuse to adhere to the scheme (Diagram).

SOURCE

The 2012 Health, Health Care and Insurance survey (*Enquête santé et protection sociale*, ESPS), conducted among the general population collects data on individuals' health status, socio-economic characteristics and complementary health insurance status. This information, collected for all the members of a respondent's household concern beneficiaries of the three main Statutory Health Insurance regimes (*Caisse nationale d'assurance maladie des travailleurs salariés*, CNAMTS/*Régime social des indépendants*, RSI/*Mutualité sociale agricole*, MSA), that is to say, 22,980 individuals.

Variables and indicators

The interest variable retained to analyse the generalisation of employer-sponsored CHI was the fact of being covered or not by a complementary health insurance policy, whatever an individual's age and means of obtention.

Risk level is determined by age, gender and health status, measured by perceived health and chronic illness indicators; the first determined by the response to the following

question: How is your state of health in general? "Very good; Good; Fairly good; Poor; Very poor". The second corresponds to the response to the question: Do you suffer from a long-term chronic illness or health problem? "Yes; No; I don't know". We also retained the fact of being reimbursed at 100% by the Social Security for a long-term illness (*Affectation de longue durée*, ALD).

Individuals' socio-demographic status was measured by their employment status (employed, unemployed, retired, student, housewife or househusband, other inactive), the type of employment for those actively employed (self-employed, private sector, public sector) and household revenue per consumption unit. A social vulnerability indicator enabling the identification of individuals having experienced episodes of financial difficulty or social isolation during the course of their lives together with an indicator regarding the fact of not having material assistance in the case of financial difficulties were also used together with two questions regarding individuals' time and risk preferences providing possible explanations for voluntary non-coverage (for further details, *see* Pierre and Jusot, 2015).

In 2012, the oldest, youngest, sickest and most precarious were more frequently without CHI coverage

According to ESPS, in 2012, 95% of individuals in the sample were covered by CHI: 53% by individual CHI, 35% by employer-provided CHI and 6% CMU-C beneficiaries.

The rate of non-coverage, on average 5% of the population, was higher among

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[1] Are regarded as concerned with NIA the unemployed of less than one year pertaining to households stating to profit from allowances unemployment.

individuals aged over 80 and those aged between 18 to 30 years old [respectively 6.8% and 8% *versus* 4.9% among the 31-40 to year olds, for example (Pierre and Jusot, 2015, table A-1.2)]. Individuals having self-reported poor health were also more frequently uninsured (9.9% *versus* 4.6% among those with a very good self-perceived health status), and low income individuals (14.1% *versus* 3.6% among the wealthiest). The same applied to the socially vulnerable and individuals unable to benefit from material assistance from family or friends in the event of financial difficulties (respectively 9% and 7.1% *versus* 3.6% and 4.1%). Also, for the first time using French data, the results show that non-coverage is also related to individual time and risk preferences. Individuals with the least aversion to risk with a higher preference for the present were more frequently without CHI coverage (respectively 8.1% and 7.3% *versus* 4.4% and 4.2%).

The rate of non-coverage was also very high among the unemployed (13.7%), housewives and househusbands (8.9%) and other economically inactive individuals (11.6%). The employed population, directly concerned by the employer-mandated CHI, were on the contrary those with the lowest non-coverage rate (3.6%). Among the employed population, the categories directly concerned by the NIA were in an intermediary position with a non-coverage rate of 3.6% on average (Pierre and Jusot, 2015, table A-1.3): respectively 4.4% among those employed by a private individual and 3.5% of other private sector employees, the non-coverage rate being of only 2.6% among public sector and state employees, and 6.7% among the self-employed (Graphs 1.1 and 1.2).

Among the employees, the youngest, poorest and those on temporary work contracts were more frequently without coverage in 2012

For private sector employees, as in the general population, the rate of CHI coverage extremely varied according to age, health status, work contract, working time and socio-economic characteristics (Pierre and Jusot, 2015, table A-1.3).

Young employees were more frequently uninsured in 2012: 12.5% among the under 20 age group, 6.5% among the 21 to 25 year olds, 3.7% among the 26 to 30 year olds and almost 3% among employees aged between 30 and 60 years old (Graph 2). Employees self-reporting poor or very poor health were also frequently without coverage: 8.3% *versus* 4% among those self-reporting very good health. In accordance with the results of the Company Supplementary Social Protection survey (*Protection sociale complémentaire d'entreprise*, PSCE) conducted in 2009, according to which lower income employees less frequently benefitted from employer-sponsored CHI (Perronnin *et al*, 2012a, 2012b), the rate of non-coverage was also higher among temporary employees: 17% of employees on fixed-term contracts of less than 6 months, 10.8% of employees on temporary contracts and 14.8% of seasonal and intermittent workers against 2.4% among employees on permanent work contracts. The rate of non-coverage was also high among employees subject to involuntary part-time work (7.1% *versus* 2.4% and 3.3% among voluntary part-

time and full-time employees) and among the poorest employees [11.2% among those whose income per consumption unit (CU) was less than 650€ *versus* 1.9% among those with the highest income per CU (Graph 3)]. Employees identified as socially vulnerable and those reporting being unable to benefit from material assistance in the event of financial difficulties were also more likely to be uninsured (6.7% and 5.1% respectively).

Finally, part of the differences in employee CHI coverage also appears to have been chosen since the rate of non-coverage was higher among those less averse to risk and more oriented toward the present: 7.8% of employees with a preference for the present against 2.8% of those with a preference for the future, and 8.8% of risk-seekers against 2.7% of risk-averse employees.
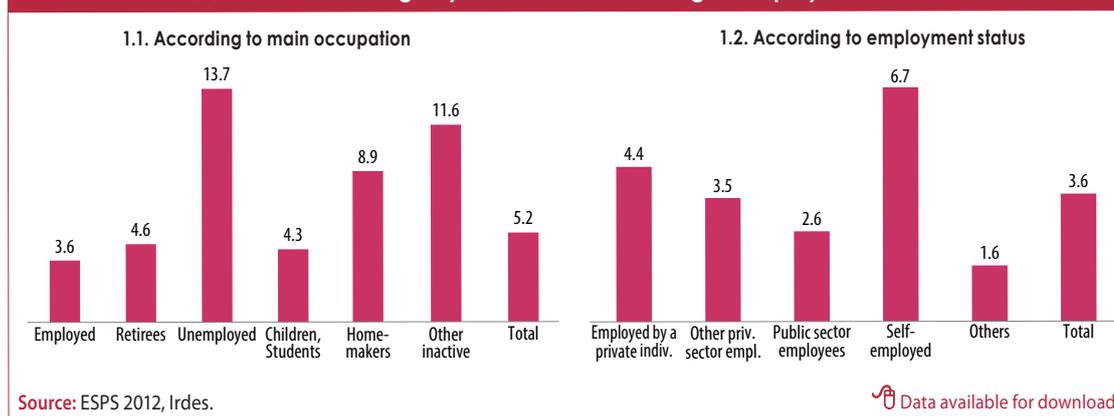
The effects of NIA on the non-coverage of employees sensitive to the possibility of exemption, especially among young and irregular workers

Under the hypothesis that all private sector employees will adhere to the scheme, the rate of non-coverage would drop to 0% within this population. The generalisation of employer-sponsored CHI would *de facto* disappear inequalities of access to CHI among private sector employees. It would also reduce differences in coverage that exist between employees according to time and risk preferences.

On the contrary, under the hypothesis that all employees with a fixed-term work contract would refuse to adhere to the employer-sponsored CHI plan (Pierre and Jusot, 2015, table A-1.3), the rate of non-coverage would remain significantly non-zero and establish itself at 1.4% (*versus* 3.6% in 2012). Under this hypothesis, 40% of employees currently

G1

Rate of non-coverage by CHI in 1012 according to employment status

1.1. According to main occupation

Employed	Retirees	Unemployed	Children, Students	Home-makers	Other inactive	Total
3.6	4.6	13.7	4.3	8.9	11.6	5.2

1.2. According to employment status

Employed by a private indiv.	Other priv. sector empl.	Public sector employees	Self-employed	Others	Total
4.4	3.5	2.6	6.7	1.6	3.6

Source: ESPS 2012, Irdes.

Data available for download

without CHI would remain without coverage. It is the youngest employees aged under 20 that would mostly remain without coverage: their rate of non coverage would decrease from 12.5% in 2012 to 8.1%, but this difference does not reach the significance level (12.5%).

G2

Rate of non-coverage by CHI according to age among private sector employees

Rate observerd in 2012

Rates simulated after introduction of NIA according to the hypothesis that adherence to the scheme would be refused by:

Employees on fixed contracts of less than 6 months

All employees on temporary contracts

5% confidence intervals estimated by the bootstrap method (Pierre et Jusot, 2015).
Source: ESPS 2012, Irdes.
Data available for download

The same applies for employees subject to involuntary part-time work (5.2% would remain without coverage under this hypothesis *versus* 7.1% in 2012) and the poorest employees (5.3% would remain without coverage *versus* 11.2% in 2012, Graph 3). The results are more moderate under the hypothesis according to which only employees on fixed-term contracts of less than six months would refuse to adhere to the scheme. For example, 2.9% of young employees aged under 20 would remain without coverage with a quasi-significant reduction in relation to 2012 (Graph 2).

Modest effect of NIA on the rate of non-coverage within the general population

Assuming that the rate of non-coverage would be zero among all the populations concerned by the introduction of NIA, the results show that the generalisation of employer-sponsored CHI and the extension of coverage portability would reduce the rate of non-coverage within the population as a whole significantly but moderately. This rate would drop from 5% to 4% following the generalisation of employer-sponsored CHI to all private sector employees, the only population concerned by obligatory insurance coverage (scenario 1), to 3.7% under the addi-

tional hypothesis that all former employees unemployed for less than a year would accept coverage portability (scenario 1+2) and up to 2.7% under the hypothesis that their dependents would also benefit from employer-sponsored CHI (scenario (1+2+3)). Finally, among all the individuals without CHI coverage in 2012, 80% would remain without coverage after the scheme's introduction, and 74.5% according to the scenario including coverage portability. Only scenario (1+2+3) would considerably reduce the number of individuals without CHI coverage, even if over half of those without CHI in 2012 would remain without coverage after the introduction of NIA.

After taking into account potential exemptions from the scheme, the non-coverage rate would increase comparatively in the three scenarios: + 0.4 points under the hypothesis that all employees on temporary work contracts refused to adhere and 0.2 points if employees on fixed term contracts of less than six months refused to adhere. The percentage of individuals remaining without CHI coverage is thus estimated at 4.4% according to scenario 1, 4.1% accord-
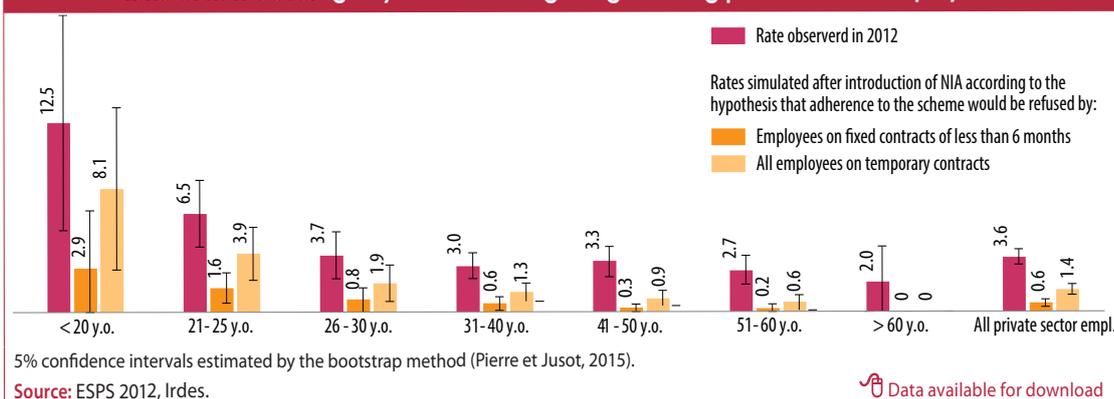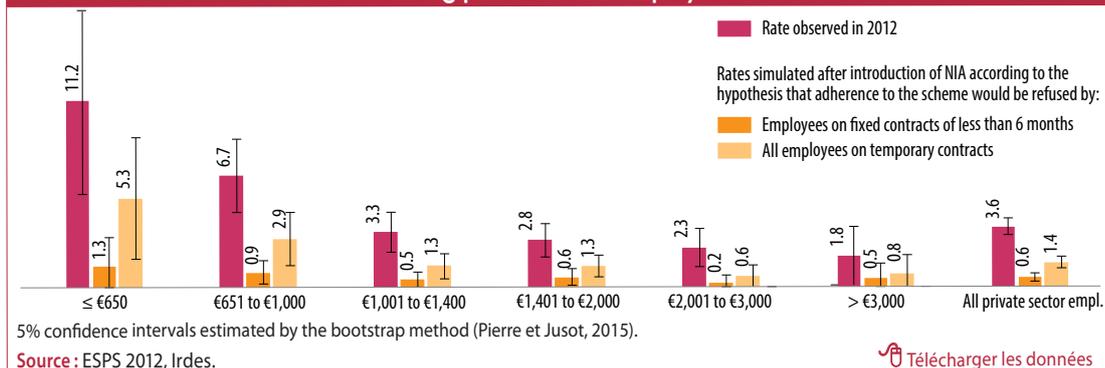
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Rate of non-coverage observed in 2012 and simulated according to the different scenarios and under the hypothesis of refusal to adhere

Rate observed in 2012		
5.0% [4.7;5.3]		
Simulated rate following introduction of NIA		
Scénario (1)	Scénario (1+2)	Scénario (1+2+3)
Hypothesis: no exemptions		
4.0% [3.7;4.3]	3.7% [3.4;4.0]	2.7% [2.4;2.9]
Hypothesis: exemption for all fixed contracts of les than 6 months		
4.2% [3.9;4.5]	3.9% [3.6;4.2]	2.9% [2.6;3.1]
Hypothesis: exemption for all temporary contracts		
4.4% [4.1;4.7]	4.1% [3.8;4.4]	3.1% [2.8;3.3]

(1): Taking into account private sector employees only.

(1+2): Additionally taking into account short-term unemployed former employees.

(1+2+3): Additionally taking into account eligible beneficiaries and short-term unemployed.
The rates presented between brackets correspond to 5% confidence intervals.

Source: ESPS 2012, Irdes.
Data available for download
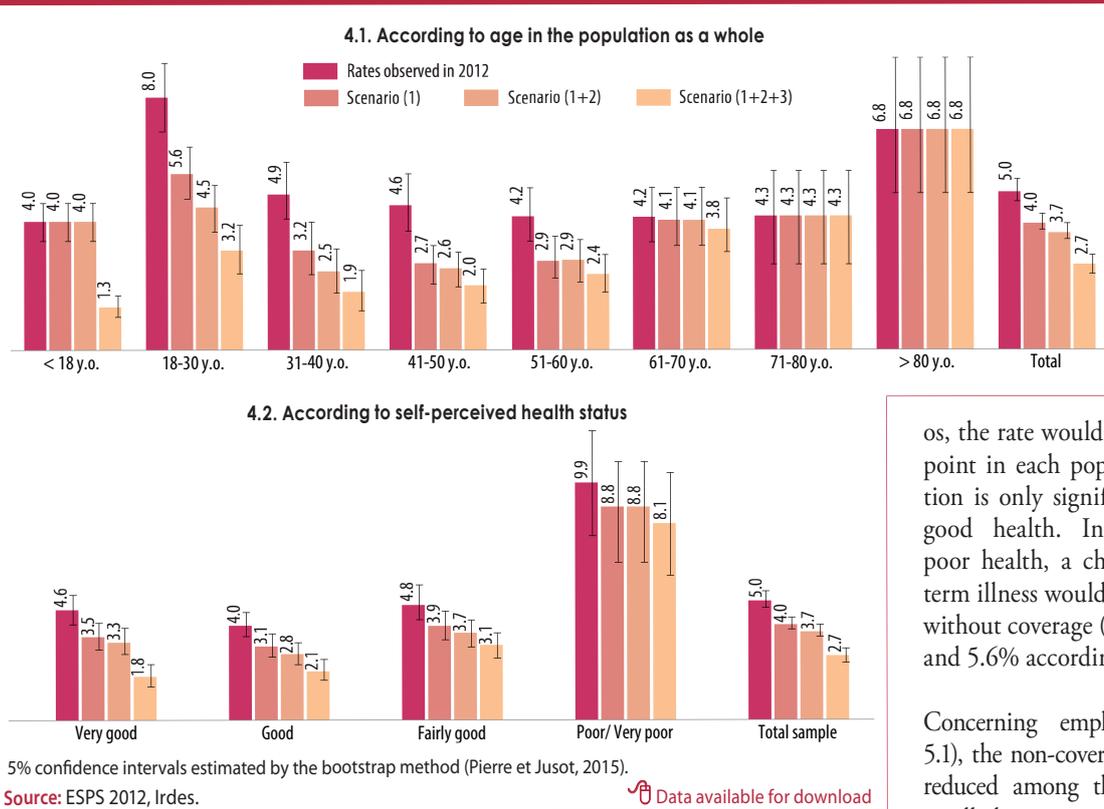
G3

Rate of non-coverage according to revenue per consumption unit (CU) among private sector employees

Rate observed in 2012

Rates simulated after introduction of NIA according to the hypothesis that adherence to the scheme would be refused by:

Employees on fixed contracts of less than 6 months

All employees on temporary contracts

5% confidence intervals estimated by the bootstrap method (Pierre et Jusot, 2015).
Source : ESPS 2012, Irdes.
Télécharger les données

G4

Rate of non-coverage in the general population according to age and health status after the generalisation of NIA

4.1. According to age in the population as a whole

Legend: Rates observed in 2012 — Scenario (1) — Scenario (1+2) — Scenario (1+2+3)

< 18 y.o. — 18-30 y.o. — 31-40 y.o. — 41-50 y.o. — 51-60 y.o. — 61-70 y.o. — 71-80 y.o. — > 80 y.o. — Total

4.2. According to self-perceived health status

Very good — Good — Fairly good — Poor/ Very poor — Total sample

5% confidence intervals estimated by the bootstrap method (Pierre and Jusot, 2015).

Source: ESPS 2012, Irdes.

⌐Ṳ Data available for download

among individuals in good or poor health, whether measured by self-perceived health status (Graph 4.2), the fact of being registered on the long-term illness scheme (ALD) or by the fact of suffering from a chronic illness. According to the first two scenarios, the rate would drop considerably by -1 point in each population, but this reduction is only significant for individuals in good health. Individuals self-reporting poor health, a chronic illness or a long-term illness would remain for the majority without coverage (respectively 8.8%, 4.6% and 5.6% according to scenario (1+2)).

Concerning employment status (Graph 5.1), the non-coverage rate would be clearly reduced among the employed population in all the scenarios. It would also decrease among the unemployed according to scenario (1+2) but would nevertheless remain high (8.9%). Similarly, the rate of non-coverage would continue to decline strongly with income level whatever the scenario retained (Graph 5.2). In scenario (1+2), the proportion

ing to scenario (1+2) and at 3.1% according to scenario (1+2+3) [Table].

Inequalities in CHI coverage that would remain as high after the introduction of NIA

Under the hypothesis that no employee would refuse to adhere to the employer-sponsored CHI plan introduced within the framework of NIA, the rate of

non-coverage would drop significantly among all individuals of working age, and more particularly those aged between 18-30 years old: the rate of non-coverage for this age group would drop from 8% in 2012 to 5.6% according to scenario (1) and to 4.5% according to scenario (1+2) [Graph 4.1]. However, the older population would more often remain without coverage (6.8% according to scenarios (1) and (1+2) for those aged over 80).

The results then highlight a comparable reduction in the rate of non-coverage

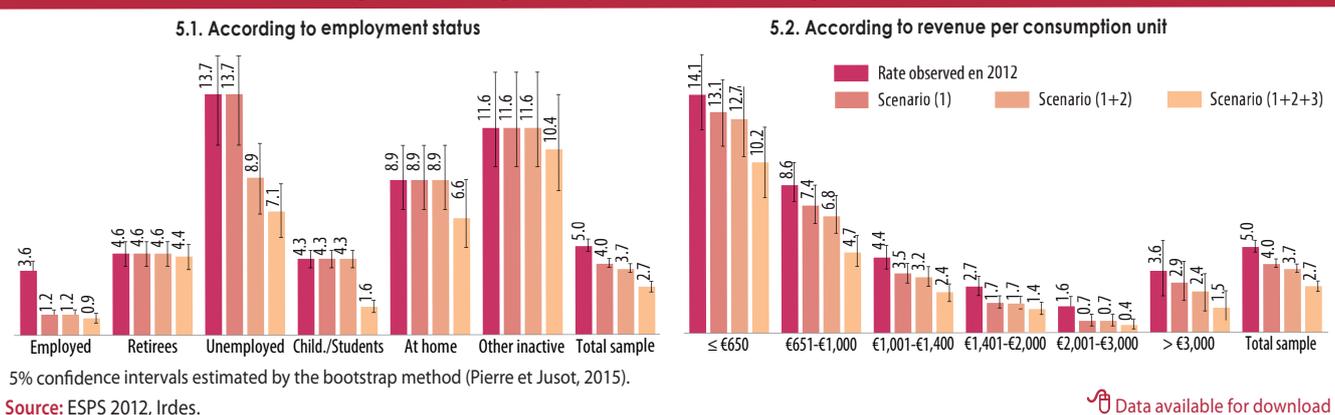**Headings for Graphs 4, 5 and 6**

Scenario (1): Taking into account only private sector employees.

Scenario (1+2): Additionally taking into account short-term unemployed former employees.

Scenario (1+2+3): Additionally taking into account eligible beneficiaries and short-term unemployed.

G5

Rate of non-coverage within the general population according to socio-economic characteristics

5.1. According to employment status

Employed — Retirees — Unemployed — Child./Students — At home — Other inactive — Total sample

5.2. According to revenue per consumption unit

Legend: Rate observed en 2012 — Scenario (1) — Scenario (1+2) — Scenario (1+2+3)

≤ €650 — €651-€1,000 — €1,001-€1,400 — €1,401-€2,000 — €2,001-€3,000 — > €3,000 — Total sample

5% confidence intervals estimated by the bootstrap method (Pierre and Jusot, 2015).

Source: ESPS 2012, Irdes.

⌐Ṳ Data available for download

of individuals without CHI would amount to 12.7% among the poorest (income per CU inferior to €650 per month), corresponding to a non-significant drop of 10%, *versus* 1.7% among those whose income per CU is situated between €1,401 and €2,000 (or -38%) and 0.7% among those with an income per CU
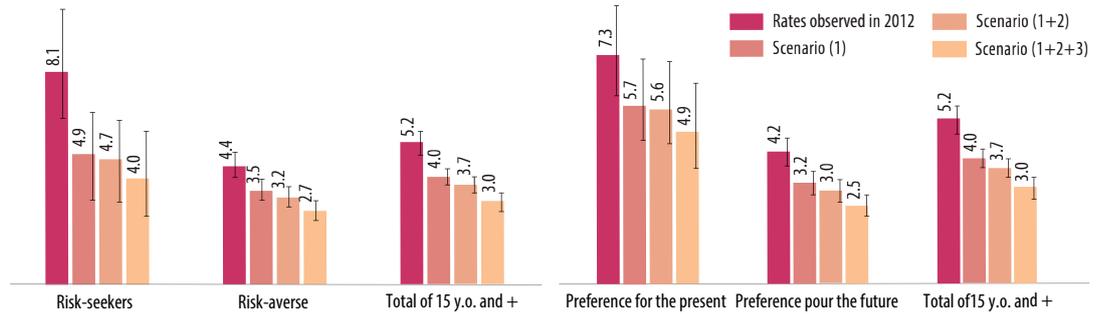

G6 Rate of non-coverage within the general population according to time and risk preferences

6.1. According to risk aversion (15 years old and +)

6.2. According to time preference (15 years old and +)

Rates observed in 2012 — Scenario (1+2)
Scenario (1) — Scenario (1+2+3)

5% confidence intervals estimated by the bootstrap method (Pierre et Jusot, 2015).
Source: ESPS 2012, Irdes.

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of between €2,001 and €3,000 (or -55%) [Graph 5.2]. Individuals having experienced episodes of isolation or economic hardships during their lifecourse would also remain for the most part without CHI coverage (6.8% according to scenario 1 and 6.3% according to scenario (1+2)), with, however, a significant reduction according to scenario (1+2) [Pierre and Jusot, 2015, table A-1.2]. The same applies for individuals declaring having no material support in case of financial difficulties, 5.7% according to scenario (1) and 5.3% according to scenario (1+2).

In terms of individual preferences, a decrease in the rate of non-coverage would be significant and important among risk-seekers for whom non-coverage is potentially chosen rather than constrained: -3.2 points according to scenario (1), a reduction of 39%, *versus* -0.9 points, or -21%, among the most risk averse (Graph 6.1). After the introduction of NIA, the rate of non-coverage would not be significantly different between the two populations. Individuals with a greater preference for the present would, however, remain more frequently without coverage (Graph 6.2).

After taking into account potential dependents (children and spouses, scenario (1+2+3)), the rate of non-coverage would decrease among those under 30 years old so that the older populations would be the only ones remaining without coverage (Graph 4.1). According to this scenario, the rate of non-coverage would also more decrease among individuals in very good self-perceived health (-2.8 points *versus* -1.3 points according to scenario (1+2)) than among those in poor health and those without a long-term illness (-2.6 points *ver-*

sus -1 point among those with a long-term illness) [Pierre and Jusot, 2015, table A-1.2]. In comparison with scenarios (1) and (1+2), this scenario also leads to a reduction in the non-coverage rate among the economically inactive (Graph 5.1) and a greater reduction among the poorest (Graph 5.2). However, these two sub-populations would in the majority remain without coverage.

Retaining the hypothesis of potential exemptions of employees on temporary work contracts does little to modify the characteristics of individuals without coverage after the introduction of NIA scheme (Pierre and Jusot, 2015, table A-1.5). However, as temporary contracts primarily concern young employees, the non-coverage rate among the 18-30 year old, that amounted to 8% in 2012, is estimated at 6.9% under scenario (1) *versus* 5.6% when it is assumed that all would adhere. The rate of non-coverage among risk-seekers also varies considerably: it is estimated at 4.9% in scenario (1) under the no-exemptions hypothesis and at 6.6% if

*C*ONTEXT

This *ex ante* evaluation of the National Inter-professional Agreement (NIA) on non-coverage falls within the framework of an overall evaluation of the scheme. It will be completed by an *ex post* evaluation that will also focus on the modification of insurance risk structures between the private and group complementary insurance markets, changes in coverage levels and the cost of premiums. The next edition of the Company Supplementary Social Protection survey (*Protection sociale complémentaire d'entreprise,* PSCE) that will be conducted in 2017 within the framework of a partnership between IRDES and DREES will provide insights into these different elements.

all employees on temporary work contracts refuse to adhere.

Discussion

This *ex ante* evaluation of the NIA scheme is based on several hypotheses, certain of which resulted in an over-estimation of the number of individuals that would obtain CHI coverage after the introduction of NIA. In terms of the working population, we assumed that the NIA would be effectively implemented by all private sector employers. Yet, some employers could delay setting up an employer-sponsored CHI plan. Furthermore, an eventual waiting time was not taken into consideration. We also assumed that no part-time employee would request exemption from the scheme due to financial contributions amounting to over 10% of gross wage or a unilateral decision on the part of the employer. The unemployed concerned by coverage portability are also overestimated in that it is impossible to identify the exact duration of portability rights, nor individuals ineligible for unemployment benefits if other members are also eligible to unemployment benefits in the household.

In addition, the simulations were obtained under the hypothesis that the generalisation of employer-sponsored CHI and the extension of portability coverage would have no impact on the labour market. However, even if the inelasticity of labour supply to company-sponsored CHI is commonly retained in the literature and is credible in the short term, a potential impact

of this scheme on labour supply and demand behaviours cannot be excluded. Furthermore, the increased labour costs related to employer participation and associated social contributions, could marginally affect wage levels and employer labour demands. It will thus be essential to monitor the *ex post* effects of the introduction of NIA on the dynamics of non-coverage reduction as well as market decisions regarding labour supply and demand.

This scheme will also modify the insurance risk structure between individual and employer-provided complementary health insurance markets (Franc and Pierre, 2015). The evolution of coverage levels and premiums also deserve monitoring both in the general population and the working population, as small companies do not have the same bargaining power or financial capacities than large firms that currently offer this type of CHI contract (Perronnin *et al.*, 2012b).

* * *

In conclusion, the results concerning the generalisation of employer-sponsored CHI show that the rate of non-coverage, at 5% in 2012, would remain at 4% after the introduction of NIA if all employees adhered to the scheme, and 3.7% if all short-term unemployed former employees accepted coverage portability. This rate of non-coverage could, however, drop to 2.7% if the generalisation of employer-sponsored CHI was extended to employees' dependents and the short-term unemployed. Under the hypothesis according to which all employees with a temporary work contract would refuse to adhere to the scheme, the rate of non-coverage would increase by 0.4 points according to all the scenarios envisaged.

Even if this scheme reduces inequalities of access to CHI and the quality of coverage levels among private sector employees (assuming that there are no effective exemptions), social inequalities in terms of CHI coverage would persist in France. Indeed, after the introduction of NIA, the over 70 year olds, the inactive, individuals in poor health and those on the lowest incomes per CU would in the majority remain without coverage. The possibility of exemption for employees on temporary work contracts also risks maintaining a high level of non-

coverage among the under 30 year olds and the poorest employees. Moreover, a complementary analysis of the determinants of the probability of being without CHI in an analysis "all other things being equal" has showed that income related inequalities of access to CHI would be maintained and that the relationship between the fact of being inactive or unemployed would be reinforced despite the fact that the unemployed are in part directly concerned by employer-sponsored CHI coverage portability (Pierre and Jusot, 2015). This can be explained by the restriction of coverage portability to short-term unemployed former employees benefitting from unemployment benefits.

Finally, the results show that the rate of non-coverage after the introduction of NIA would no longer be associated with a stronger preference for the present and a lesser aversion to risk, which suggests that the scheme could be interpreted as a constraint among those for whom non-coverage is voluntary.

In the end, these results indirectly underline the importance of the other schemes implemented to improve access to CHI among the poorest households, the efficiency of the CMU-C and ACS and the importance of raising eligibility thresholds ◆

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