POVERTY ASSESSMENT
Social Protection Chapter
Background paper 4

Voluntary Pension System
Challenge of expanding coverage

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1. Introduction

Since 1947, the Vietnam Social Security has provided social insurance to public servants and armed forces personnel in Vietnam. In 1995, the Government merged the social insurance unit of the Ministry of Labour, Invalids and Social Affairs with that of the Vietnam General Confederation of Labor. At the same time the system became mandatory to the employees of the newly developing private sector. The consolidated system is publicly managed by the Vietnamese Social Security administration (VSS). VSS collects contributions and pay social insurance benefits (in case of sickness and sick leaves, maternity and family planning related leaves, work injury and professional disease, survivorship and to people that reached pension ages).

The mandatory coverage[2] of the private sector was first restricted to the enterprises with 10 or more employees. Since 2005, all the types of enterprises, whatever their size, have the obligation to register, to VSS, all their employees with a labor contract of 3 months or longer. In 2006, finally, the Social Insurance Law expanded the coverage of the pension system to the farmers and the self-employed on a voluntary base[3].

These policies are in line with the willingness of the government to implement universal social protection policies in Vietnam. Today coverage is very low. In 2006 only 16.2% of the employed (approximately 6.6 in a total of about 41.894 million[4]) were registered to the Vietnam Social Security. Will these policies lead to significant increases of coverage? This paper investigates this issue by reviewing the characteristics of employment in Vietnam. It concludes that the risk that social coverage remains limited

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[1] Comments and questions are welcomed at paulettecastel@gmail.com
[2] Since 200x, the poor are mandatory registered to health insurance and fully subsidized.
[3] Voluntary participation to health insurance started in 2005.
[4] VSS report 6.6 contributors in 2006 while according to the VHLSS 2006 the number of employed was approximately of 41.9 million.

for many years is high and, presents accordingly some policy options to augment Vietnam Social Security's chances to reach universal coverage in the future. The analysis is based on the data on employment, income and participation to social security obtained from the 2006 VHLSS.

2. Working age population under pension age

This section presents a classification of the working age population under standard pension age according to its status in relation to social security coverage in Vietnam. The working age population includes all the men and women 15 years and above and still under the standard retirement age of 55 for the women and 60 for the men[5]. The classification of the workers depends on their employment status and the corresponding income[6].

The social security system in Vietnam has two components: a mandatory system and a voluntary system. The mandatory system covers only the wage employed with labor contracts of 3 months and above. The voluntary system, recently created with the Social Security Law of 2006, covers all the other workers. The mandatory system includes a large range of programs (short-term benefits, compensation for work accident and professional disease, old-age pension and survivorship). The voluntary system consists only of a pension system with survivorship benefits. Both systems require a minimum contribution calculated on the minimum wage. The classification presented in Table 1 considers, consequently, whether a worker's individual income is higher or not than the minimum wage in the year (over 12 months).

According to these criteria, the working population is divided into 8 groups:

1. <u>The covered</u>: this group includes the employees that are registered to the mandatory pension system. It excludes the pensioners who eventually are employed but do not necessarily contribute to VSS. This group is usually associated to the formal sector. Box 1 explains the methodology used to infer the members of that group in the VHLSS 2006.
2. <u>The avoiders and the temporaries</u>: this group includes the employees who share the same characteristics that the covered (are employed in enterprises and earn wages higher than the minimum wage) but who are not registered to VSS. It, possibly, includes a large group of employees under short-term contracts that enterprises are not obliged to register.
3. <u>The household units' employees</u>: this group includes employees who also report wage earnings higher than the minimum wage but who work in households units. Most household units do not use formal legal labor contracts. Some are officially registered but they are not subject to the same stringent regulations than the

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[5] The labor code foresees that some women and some men keep contributing until the age of 60 and 65, respectively, and claim pension at that ages. There is, currently, no evidence that some workers used this opportunity in Vietnam. The study limits, accordingly, the working population to the standard retirement age included in the Social Security Law.

[6] In the main job

enterprises functioning under the business law. Their employees are consequently not registered to social security but they are less likely 'avoiders' or "temporaries".

4. The self-employed and the farmers: this group includes all the workers that could participate to the voluntary pension system since they earn an individual income higher or equal to the minimum wage (see Box 2). The group includes some low wage earners that could not participate on the basis of their wage in the mandatory system. The group is divided into 3 sub-groups: the self-employed that do not report any individual income from agriculture activities, the farmers that do not report any individual income from non-agriculture activity, and the remaining workers which individual income comes from agriculture and non-agriculture activities.

5. The low income earners: this group includes the workers that report individual earnings (wage and non wage combined) less than the minimum wage. Unless these workers are willing to contribute more than 16% of their income, they cannot afford to participate to the pension system.

6. The pensioners: this group includes the persons that report being beneficiaries of the mandatory pension system whether they are employed or not. This group is distinguished from last group of the inactive and unemployed because it is certain that these persons are already covered by the social security system.

7. The unemployed and inactive: this group includes the persons that report that they do not work either because they could not find a job or for other reasons. The group probably includes temporary unemployed from the formal sector. This possibility seems, however, very little because unemployment rate is rather low in Vietnam.

Table 1: Working age population under pension age and social security

	Persons	Share in total
Wage workers with at least one wage above the minimum wage (possibly with other labor non wage income)		
Registered	6 769 062	12.9
Avoiders and temporaries	2 984 041	5.7
Household unit's employees	7 707 555	14.7
Non wage workers with individual income above the minimum wage (possibly with wage incomes but each lower than the minimum wage)		
Farmers and self-employed	19 356 539	36.9
Not in agriculture, aquaculture and forestry	5 028 279	9.6
Only in agriculture, aquaculture and forestry	9 924 339	18.9
In both sectors	4 403 921	8.4
Low income earners	5 076 316	9.7
Others		
Pensioners	461 269	0.9
Inactive and unemployed	10 126 301	19.3
Total	52 481 082	100.0

Source: VHLSS 2006 and authors' calculations, details are in Annex 1

According to the results in Table 1, about 79.8% of the working age population under pension age could participate to social security, either in the mandatory scheme or the voluntary pension scheme. If besides the pensioners and the inactive and the unemployed, the participation of the low income earners is considered unlikely, the maximum plausible achievable participation rate is 70.1%.

The figures on poverty in Table 2 effectively indicate that the poverty rate is the highest among the low income earners. It is also relatively high among the farmers (workers only employed in the sectors of agriculture, aquaculture and forestry), and the household unit's employees. If the participation of the poor is also considered unlikely, then the maximum participation rate is reduced by another 8.3 p.p. to 61.8%.

This approximation of the participation rate is different from the coverage rate of the social security systems that is usually calculated only on the active population[7] (the employed and the unemployed). In that respect, the large access of the voluntary system to all the type of workers could create the possibility to achieve rather high coverage rates in Vietnam.

Currently, the participation and the coverage rates are rather low. According to the figures in Table 1 only 12.9% of the working age population under pension age participates to social security. Based on Vietnam Social Security contributors and VHLSS figures on employment, only 16.2% of the employed (6.6 in a total of 41.894 million) is covered.

Table 2: Poverty rates of the working age population under pension age classified according to social security coverage

	Not poor	Poor[1]	Total	Poverty rate	Share in total
Registered	6 263 523	505 539	6 769 062	7.5	7.3
Avoiders and temporaries	2 701 278	282 763	2 984 041	9.5	4.1
Household unit's employees	6 368 701	1 338 854	7 707 555	17.4	19.3
Farmers and self-employed	17 115 437	2 254 287	19 369 724	11.6	32.4
Not in agriculture, aquaculture, forestry	4 930 453	101 791	5 032 245	2.0	1.5
Only in agriculture, aquaculture and forestry	8 188 820	1 735 519	9 924 339	17.5	25.0
In both sectors	3 996 164	416 977	4 413 141	9.5	6.0
Low income earners	3 270 306	1 806 010	5 076 316	35.6	26.0
Pensioners	455 402	5 867	461 269	1.3	0.1
Unemployed and inactive	9 370 873	755 428	10 126 301	7.5	10.9
Total	45 545 521	6 948 747	52 494 268	13.2	100.0

Source: VHLSS 2006 and authors' calculations. Notes: 1/ GSO definition of poverty (see Tuyet and Paulette for more precisions), the national poverty rat is 15.8%.

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[7] With the exception of the countries in which all the residents have the obligation or the possibility to contribute whatever their employment status. Switzerland, Japan to be developed

Box 1 VHLSS employees registered to the Vietnam Social Security

The VHLSS of 2006 does not include any question about the registration of employees to the Vietnam Social Security (VSS). Participation is approximate based on the responses to the participation in the mandatory health insurance system.

- All the employees of working age with wage above the minimum wage and mandatory health insurance are assumed to be also registered to VSS (pensioners are excluded).
- All the employees of working age with above the minimum wage and employed in a FDI enterprise are assumed to be also registered to VSS, even if they do not report being in the mandatory health insurance. This assumption is consistent with the finding of Thanh and Paulette (2009) that about 80% of the FDI enterprises are registered to VSS. In case of multi-employment the place with the highest wage is determinant.

As the figures in Table 3 show, the results are close to the figures published by VSS.

Table 3: Registered employees VSS and VHLSS 2006

	VSS	VHLSS estimate registered employees
1. Public sector $^{1/}$	3 724 832	4 018 928
2. FDI sector	1 189 326	940 120
3. Private sector	1 578 482	1 810 014
4. Others	58 136	
Total	6 550 776	6 769 062

Note: 1/ Employees reporting in health insurance for public employment

The number of employees of the public sector is larger. The figures in the Labor Force Surveys of MOLISA and GSO of 2007 report even higher number of employees in the public sector: 4.215 and 4.977 million respectively. These discrepancies maybe arise from the difficulty of survey's respondents and/or VSS to determine the ownership of the enterprises in process of equitisation (transformation into a public limited company or a corporation).

The number of FDI employees is smaller. The figures in the Labor Force Surveys of MOLISA and GSO of 2007 report also smaller numbers: 0.836 and 0.920 million respectively. This could also be connected to the confusion of ownership related to the process of equitisation.

3. Participation of the employees to the mandatory scheme

The first three groups in Table 1 include employees with wages above the minimum wage that could participate to the mandatory scheme unless they are hired under short-term contracts (less than 3 months) or without labor contract at all. Because the large number of the household units in Vietnam, only few workers must be registered to the Vietnam social security. Based on the VHLSS, there were in 2006 17.461 million wage employees under pension age. Only 38.8% were covered (see Table 4).[8]

Among the wage employees not registered to the Vietnam Social Security, 44.1% are employed in household units, most likely without labor contract and, 17.1% are employed in the enterprise sector. If according to the findings of Thanh and Paulette (2009) about 1 110 823 of these employees are employed under short-term contracts, the share of the employees working in enterprises that do not comply with the law is rather law: 10.7% (see Table 3). In such cases, the low coverage of the wage employed is not an issue of legal enforcement.

Table 3: Social Security Status of wages workers[1/]

	Number	Share
Registered	6 769 062	38.8
Avoiders and temporaries	2 984 041	17.1
Short-term employees[2/]	1 110 823	6.4
Others	1 873 318	10.7
Household units	7 707 555	44.1
Total	17 460 658	100.0

Notes: 1/ Employees are potential participants to the mandatory scheme if one of the wages they earn is above to the minimum wage. Employees for which only the sum of the wages they earn is above the minimum wage are excluded from this group. 2/ Thanh and Paulette (2009)

Table 4 observes that the employees of the group of the "avoiders and temporaries" have effectively a working profile of temporary workers. They have lower years of experience in the enterprise they work than the other workers: one quarter of these employees have one year or less of experience.

Table 4: Wage workers' Social Security status and year of experience in enterprise

	1 year or less	2 years or less than 3 years	3 years or more	Total
Registered	10.4	12.2	77.4	100.0
Avoiders and temporaries	25.1	18.3	56.6	100.0
Household units	10.3	14.9	74.8	100.0
Total	12.9	14.4	72.7	100.0

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[8] The LFS of MOLISA and GSO report smaller numbers of wage workers: 10.290 and 13.860 million respectively although they include also the wage employed above retirement age. If the VHLSS, effectively, overestimates the number of wage employees, the mandatory system covers a higher share of the wage employed.

Table 5 observes how many wage employees are likely to be working as employees in their own household units and by so, have a special employer employee relationship that could not require the same type of social insurance that the proposed under the mandatory system. Depending on the group, between 28 and 35% of the wage employees are effectively living in households that report some income from non wage employment in other sectors than agriculture, aquaculture and forestry. The number of persons employed as wage worker in their own household unit is, however, very low: 2%. Such a type of employer employee relationship cannot explain, therefore, the lack of registration of the wage workers in the household units.

Table 5: Wage workers' employment in household units

	Total	In household with some non agriculture income		In households employing some members	
		Number	Share in category	Number	Share in category
Registered	6769062	2095178	31%	108884	2%
Avoiders and temporaries	2984041	1049088	35%	68670	2%
Household units	7707555	2196030	28%	88426	1%
Total	17460658	5340296	31%	265980	2%

More generally, only 5.2% of the workers that live in households that report some income from non wage employment in other sectors than agriculture, aquaculture and forestry, possibly employ members of the household (as wage employed, Table 6).
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Table 6: Number of workers living in households with non farm income

Employ members of households	Number of people reporting income from non self-employment (non farm)	Share
Yes	637 748	5.2
No	11 611 403	94.8
Total	12 249 151	100.0

4. Participation of the non wage workers to the voluntary scheme

The Social Security Law of 2006 foresees the creation of a voluntary pension system. Its implementation started in 2008, there is still very little information about the process. This section, consequently, only assesses the potential participation of the non-wage workers.

4.1 the regulations and the total number of the potential participants

The design of the voluntary pension system is almost similar to the design of the mandatory pension system, except that there is no guaranteed minimum pension:

- Participants must on average (different periodicities are allowed) contribute at least 16% of the minimum wage per year. After 2010, this rate will be increased by 2% every 2 years until it reaches 22%

- When reaching pension age, workers with less than 20 years of contributions are entitled to one lump sum amount; those with 20 years and more are entitled to a monthly pension and, eventually a lump sum.

- The amount of the monthly benefit and the lump sum are calculated with the same formula than in the mandatory scheme, but there is no minimum pension.

Table 7 presents estimates of the total number of the potential participants. The group includes the 19.357 million self-employed and farmers classified in Table 1. It could also include the wage workers who are not registered to the Vietnam Social Security and are involved in non wage activities. In that case the total number of potential participants is 20.600 million.

Table 7 Potential participants to the voluntary system[1/]

	Excluding not registered employees with wages and other income below the minimum wage		Including only not registered employees with wages and other income above the minimum wage income	
	Number	Share	Number	Share
Not in agriculture, aquaculture and forestry	5 028 279	26.0	5 097 680	24.7
Only in agriculture, aquaculture and forestry	9 924 339	51.3	10 767 979	52.3
In both sectors	4 403 921	22.8	4 740 454	23.0
Total Self-employed and farmers	19 356 539	100.0	20 606 113	100.0

Note: 1/ include workers with non wage labor activities and total labor income (eventually wages included) is above the minimum wage

4.2 Affordability

Achieving high coverage of the self-employed and the farmers could be rather difficult. Because rural incomes are relatively low, it could be that only few farmers can afford participate. As the figures in Table 8 indicate, there were about 5.1 million of low income earners in 2006. They represent 26% of the working-age population. The poverty rate among low income earners is particularly high (35.6% of them), some are, however, not poor. For personal reasons they work part-time or on temporary basis (students, etc.).

Among the workers that earn income equal or above the minimum wage, farmers and the wage employed in small business units register the same probability of being poor (17.5% and 17.4%, respectively). It is interesting to observe that contrary to some common belief about the workers of the formal sector are poor: 7.5% of the registered employees, who earn income equal or above the minimum are poor. For all these people affordability is an important issue for participating into a pension scheme.

Table 8 Poverty rates of the working age population under pension age classified according to social security coverage

	Not poor	Poor[1/]	Total	Poverty rate	Share in total
Registered	6 263 523	505 539	6 769 062	7.5	7.3
Avoiders and temporaries	2 701 278	282 763	2 984 041	9.5	4.1
Household unit's employees	6 368 701	1 338 854	7 707 555	17.4	19.3
Farmers and self-employed	17 115 437	2 254 287	19 369 724	11.6	32.4
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In both sectors	3 996 164	416 977	4 413 141	9.5	6.0
Low income earners	3 270 306	1 806 010	5 076 316	35.6	26.0
Pensioners	455 402	5 867	461 269	1.3	0.1
Unemployed and inactive	9 370 873	755 428	10 126 301	7.5	10.9
Total	45 545 521	6 948 747	52 494 268	13.2	100.0

Source: VHLSS 2006. Notes: 1/ GSO definition of poverty, the national poverty rate in 2006 was 15.8%.

4.3 Expected benefits

The willingness to participate is also sensitive to the expected level of pension benefits workers can expect at retirement. One important feature of the voluntary pension system (and the mandatory as well) is that receiving a monthly pension at retirement requires a contribution period of at least 20 years. Workers who have contributed less than 20 years are entitled to a lumps sum.

4.3.1. Previous study

Several studies show that if about half of the informal workers are interested in participation in a pension system, very few are willing to do so if they are entitled to a lump sum instead of a pension at retirement.

The study Sarah Bahles and Paulette Castel (2005) organized with the support of ILSSA presents a measure of the willingness of the workers of the informal sector to participate in pension scheme[9]. For that purpose a survey was designed in which respondents were asked about their readiness to participate in an actuarially fair pension system. In such a system, participants are entitled to receive a pension (in this case equal to half of the minimum wage) if, by the time they reach retirement age, the total amount of contributions they paid plus the interests these contributions have accumulated during the contributory period reach a certain minimum level. Under such a scheme, persons who start contributing at older age have to pay higher amounts of monthly contribution to

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[9] The study also evaluates the risk and the income shock associated with severe disability and the lost of the breadwinner and the willingness to participate in a disability and survivorship social insurance scheme.

be able to achieve the required accumulation of contributions plus interest for pension at the time they reach retirement age. This principle is also observed in the case of life insurance. Therefore, for a same level of income, it is financially harder for middle age workers to participate in such a scheme.

About 34.5% of the respondents declared that they would be willing to participate in such a scheme; 16.5 percentage points more would be interested if part of their contributions would be subsidized and, 49 % were not interested at all. Table 9 shows the reasons people indicated for not willing to participate.

Table 9: Reasons for non-participation in a pension scheme

	Share	<30 years	31-40 years	41-50 years	51-60 years
Premiums too high	14.2	8.9	13.7	15.3	18.5
No money to contribute	42.1	40.1	38.8	46.4	41.6
Don't really understand	3.4	3.9	3.6	3.0	3.4
Wary of complicated paperwork	3.3	3.5	3.1	2.3	5.4
Low benefits	11.3	7.0	14.9	10.4	10.2
Have other source of support	3.7	4.6	3.4	3.1	5.0
Retirement age too high	9.2	11.0	8.9	9.5	7.2
Not interested	10.5	20.1	11.5	7.1	5.6
Other	2.4	1.0	2.1	3.0	2.9
Total	100.0	100.0	100.0	100.0	100.0

Based on 1632 observations   Source: VSIIS

With the results of the VSIIS, a second study (Castel P. 2008) estimated the potential coverage rate that the voluntary pension system could achieve in Vietnam. The study first estimated the relationship between the willingness to participate and the characteristics of the respondents and of the pension system. The relationship was then used to predict the potential coverage of the voluntary pension system in Vietnam after replacing in the initial equation the value of the contribution rates and the replacement rates of the VSIIS actuarially fair scheme by the levels taken by these variables in the voluntary pension system.

Graph 3 and Graph 4 compares by age group the levels of the contribution and replacement rates in the VSIIS and the voluntary pension systems. In this study, the contribution rate was equal to the minimum amount of contribution divided by the respondents' household income per capita. The replacement rate was equal to the level of the pension benefits divided by the respondents' household income per capita.

As it was explained above, the contribution rates in the VSIIS increase exponentially with age, because the system is actuarially fair. By contrast the contribution rates in the voluntary pension system are rather flat. The reason is that all the participants have to contribute the same minimum amount in VND and the range of households' income per capita in the informal sector is rather narrow.

Graph 3
Contribution rates
VSIIS and Voluntary pension systems
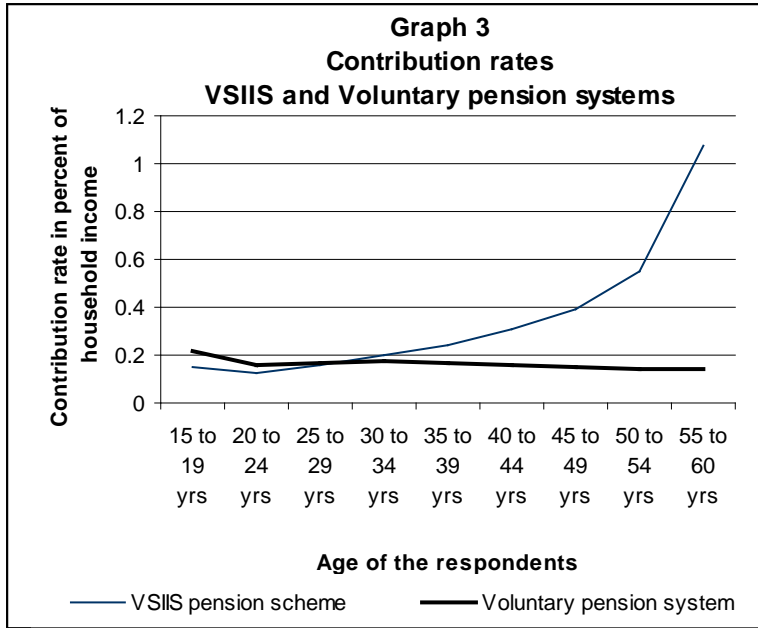
Opposite trends are observed on replacement rates. In the VSIIS, replacement rates are rather flat because the level of the pension benefit is the same for all the participants, and the range of households' income per age group is narrow. Replacement rates in the voluntary fund decrease with age, because pension entitlements diminish when the length of contribution shortens. Replacement rates calculated on retirees' lump sums (after they are transformed into monthly annuities) are particularly low, especially for the workers that start contributing in their 40's or after.

Graph 4
Replacement rates
VSIIS and Voluntary pension systems
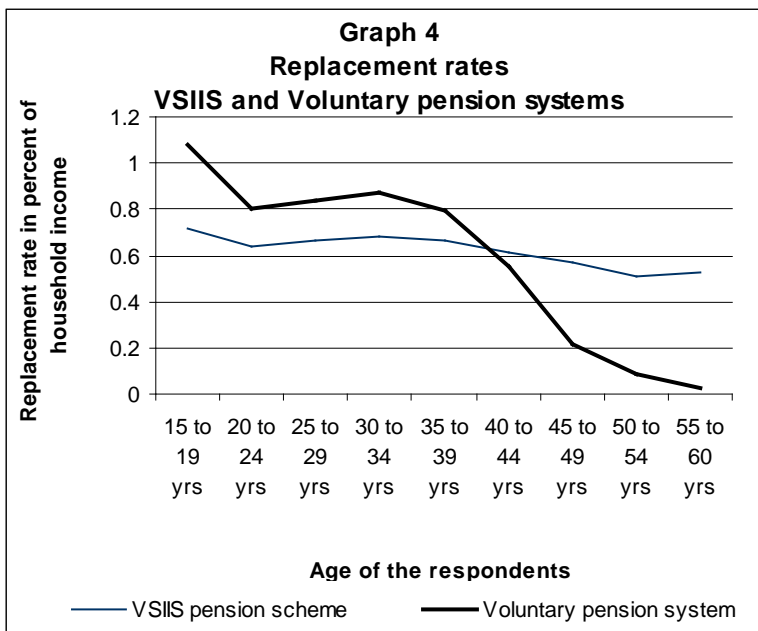
The results of the simulation show (see Table 10) that high coverage could be achieved among the young population. The expected participation of middle age workers (40 years and above) is rather low. Although participation is much more affordable than in the VSIIS pension scheme, the very low level of the expected benefits reduces significantly the willingness to participate.

Table 10: Predicted potential participation in the voluntary pension system

Age group	Participation rate
15 to 19 yrs	60.6
20 to 24 yrs	87.7
25 to 29 yrs	86.3
30 to 34 yrs	83.9
35 to 39 yrs	72.2
40 to 44 yrs	41.5
45 to 49 yrs	8.1
50 to 54 yrs	0.4
55 to 60 yrs	0.2
Total	48.8

A third study (ILSSA, Castel P. 2007) on the members of the Nghe An Pension Fund for farmers about their willingness to move to the voluntary pension scheme confirms the low interest of the population to participate in the case there is no chance to obtain a pension. Because of their age or the low level of the savings they had accumulated in the Nghe An Pension Fund, many participants of this fund could not expect to be entitled to a pension if they transfer their savings and contribute into the voluntary pension system until retirement. The study calculated the amount of savings these persons should pay in order to be entitled to receive a pension instead of a lump sum if they were allowed to "buy the missing contributory years". Respondents were asked about their preferences. The results are shown in Table 11.

The category of the participants that were proposed to realize additional contributions are the second and the third category. A rather large number of these persons would be interested in participating in the voluntary pension scheme if they can realize additional payments and receive a pension at retirement. Among those who refuse to realize additional payments and can choose to contribute to receive a lump sum instead, only 2 percentage points are interested in receiving a lump sum.

In summary, these studies show that if about half of the population of the informal workers could be interested in participating in a pension system. Very few of the middle aged workers would consider participate if they cannot expect receiving a pension at retirement.

Table 11: Participation rates to VN scheme by members' group of the Nghe An Pension Fund for farmers

| | Accept | Contribution per month | | | Refuse | Total |
| | | Option 1 [4/] | Option 2 [5/] | Option 3 [6/] | | |
		72 000 VND pension income	50 000 VND pension income	50 000 VND Lump sum		
Entitled to pension [1/]	78.2	58.3	19.9	…	21.8	100.0
Additional payments [2/]	61.3	39.1	20.3	2.0	38.7	100.0
Lees than 5 years from retirement [3/]	55.7	41.6	15.1	…	43.4	100.0

Note 4815 respondents Notes: 1/ people young or with enough savings in the Nghe An Pension Fund to be obtain a pension if they continue to contribute in the voluntary pension scheme until retirement age 2/ people not young enough or with insufficient savings to obtain a pension. These persons would be entitled to a lump sum if they continue to contribute in the voluntary pension scheme until retirement age. The study asked these persons about their willingness to pay a certain amount of additional contributions (calculated on their savings) to obtain a pension instead. 3/ These persons are less than 5 years from retirement age they could not participate in the voluntary pension scheme. Like in the case of 2/, the study asked these persons about their willingness to pay a certain amount of additional contributions (calculated on their savings) to obtain a pension instead. 4/ Contribute 72 th. VND per month and if needed pay additional contributions to obtain a pension 5/ Contribute 50 th. VND per month and if needed pay additional contributions to obtain a pension 6/ Contribute 50 th VND per month and obtain a lump sum at retirement.

4.3.2. Age structure of workers in the informal sector

Many current workers of the informal sector, today, are less than 20 years from standard retirement age. These workers are less likely to participate even if they are probably the persons that are the most ready to save towards old-age income. The results in Table 12 indicate that, if the access to the voluntary pension system had been possible in 2006, about 36.4 of the self-employed and farmers could not have been able to contribute for 20 years before reaching pension age.

Table 12: self-employed and farmers by young and middle aged

Self employed and farmers (including not register wage workers)	Women below 40, men below 45 years	Women above 40, men above 45 years
Not in agriculture, aquaculture and forestry	62.0	38.0
Only in agriculture, aquaculture and forestry	64.4	35.6
In both sectors	63.4	36.6
Total	63.6	36.4

In such a context, Vietnam could also start a vicious circle regarding the participation to the voluntary pension scheme. Problems of affordability combined with institutional design that reduce potential participants' access to monthly benefit at retirement could

result, in the coming years, to low participation. Because of the low coverage, young workers of the informal sector will continue to be little aware of the voluntary system. And by the time they will plan to save for old-age income, it will be too late for them to contribute so that they obtain a pension. Consequently, besides the poor, many elderly will continue to be uncovered. Public perception that the voluntary pension system is not efficient will slowly increase and this in turn will turn away new potential participants.

5. Policy implications and options

All these elements raise concerns about the ability of the new social insurance law to significantly lead to high coverage in the future.

Social security coverage rates are often low in developing countries. The graph below from Rofman R. (2005) shows, for example, that Latin American countries manage to reach coverage rates lower than 60% of the active population.

Figure 2. Coverage Rates for the Economically Active Population and the Elderly. Selected Countries of Latin America
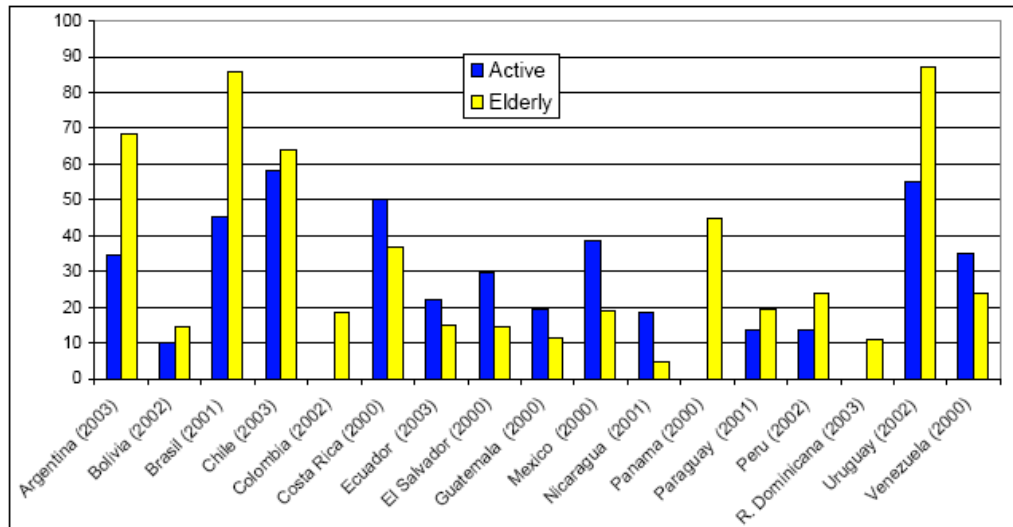
Source: Own, based on household surveys

More than government's capacity to enforce the law, low coverage rates are associated to the large share in employment of jobs with no social security benefits attached to (Jackle and Li, 2006). Long minimum contributory period explain the rather low number of workers eligible for old-age pension receipts in Uruguay, Brazil and Chile (Bucheli M. and all, 2005; Kritzer B., 2008; Schwarzer H. 2002 Bustamante J, 2006). In these countries however, the phenomenon is associated to the turnover of workers between jobs with and without mandatory participation. Finally, several studies suggest that the minimum contribution reduce the participation of the low income earners (Bucheli M. and all, 2007, Auerbach P. 2007, Kritzer, 2008). Other studies suggest that besides the characteristics of the labor market and the institutional design of the system, low rates of participation can also be related to the weak preferences for participating in social insurance programs of many workers (Barr A. and Packard T. 2002). The analysis

of Thanh and Paulette (2009) suggests that this cause is also not negligible in Vietnam, and could worsen in the coming years.

In such a context, solutions that only focus on one dimension of the problem might be ineffective. If wage workers are not willing to contribute, integrating the wage workers employed in the household units to the social security system does not only require impose more stringent legal directives on these places. The policy packages must therefore prioritize the reforms that lower workers' resistance to participate. Measures that strengthen the legal framework of the labor market and support law enforcement will be effective only if workers are themselves motivated to participate.

One of the most important disincentives to participate is the lack of possible entitlement for pension if the person cannot contribute for 20 years.

Policy 1: Increase likelihood to obtain old-age pension

The minimum length of contribution to obtain a pension turns off the willingness to participate of middle age workers. The rationales behind such a regulation suggest that its elimination might, however, not be the best policy option in Vietnam.

Many pension systems include a rather long minimum contributory period to avoid large financial imbalances between participant's present values of contributions and pension incomes. At retirement, in an actuarial fair pension system in which the contributions return interests, the present value of a retiree's sum of pension benefits must be equal to the total contributions plus interest the retiree has accumulated. In such a system, pensions increase wit the length of the contributory period but the relation is not linear (not proportional). There are two types of consequences that lead to impose minimum length of contribution. First, pension formulas are usually rough linear approximation of the relation between pension income and years of contribution. When applied to short contributory periods they provide low pensions in absolute terms, but still excessively high in relation to the amount of contributions paid. Second, the delivery of very low pension benefits (although actuarially fair) to retirees is socially unsustainable, particularly if the recipients are low income earners.

As it was mentioned above the minimum length of contribution has a negative impact on coverage because a large share of the contributors in developing countries participates for relatively short periods. Several governments in Latin America, accordingly, are currently considering the reduction or the elimination of the minimum length of contribution. Colombia and Uruguay are considering reforms that would reduce the vesting period (Bucheli and al. 2007). In the case of Chile, the 2008 reform eliminates the condition that workers have 20 years of contribution to access the guaranteed minimum pension. Unless participation is mandatory for all the categories of workers like in Chile (see Box 3), these options, however, do not solve the financial issues exposed above.

Because the participation of the self-employed is voluntary in Vietnam, eliminating the requirement of a minimum length of contribution to obtain a pension income could,

not be the best policy option in the case of Vietnam. The following option presents an alternative.

Box 3: Pension system coverage, the case of Chile[*]

Since the reform of 1981 pension incomes in Chile are obtained from fully funded individual accounts and government's recognition bond related to the pension rights contributors had accumulated in the previous pay-as-you-go system. Initially, the system had two types of minimum guaranteed benefits: (1) the guaranteed minimum pension under the capitalization system if the contributor had 20 years of contribution and, (2) means-tested benefits to low income earners disabled or over 65 years old who were not eligible for any other type of pension.

The first evaluation of the impact of the new reform found that a large share of the workers, who are reaching pension age now or in the next decades, won't receive any pension income because they do not comply with the requirement of 20 years of contributions and do not qualify for the means-tested benefit.

To expand coverage, the reform of 2008 has created a new mandatory "solidarity scheme". The new system provides a basic pension that replaces the current government's guaranteed pension. The requirement of 20 years of contribution is eliminated and replaced with a minimum requirement of 20 years of residency.

To avoid free-riding behaviors (workers that do not contribute when they can afford it and that receive the basic pension anyway) the participation to the "solidarity scheme" is mandatory and the participation to the individual accounts is progressively becoming also mandatory to the self-employed. The government provides also a monthly subsidy to low-income workers (those who earn less than one and a half times the minimum wage per month) between ages 18 and 35 and their employers for the first 24 months of employment after they first enter the labor force.

(*) based on Kritzer B. (2008)

***Option 1** the minimum length of contribution is maintained, but contributors are allowed to "buy years" and, by so, are able to complete the minimum contributory length*

This option introduces flexibility about the way people contribute to the system and manage to accumulate enough "contributions" when they reach pension age. In an actuarially fair pension system (like the one designed in the VSIIS), only workers who managed at retirement age to accumulate a minimum amount of contributions plus interests are entitled to a minimum pension. In an actuarial setting, the timing of the contributions does not matter as long as the minimum amount of contributions plus interest is achieved at retirement. In the case of the pension system in Vietnam, 20 years of minimum contributions are required to obtain a pension. Workers with less than this amount of "savings" would be authorized to realize additional contributions before reaching retirement. In such a framework, the minimum value of one contributory year

could be for example defined as equivalent to the minimum amount of contributions that is paid in a year on the minimum wage (currently, 16% of 12 times the monthly minimum wage). Other definitions can be used.

A similar mechanism is mentioned in the decree 41/2009/QĐ-TTg on the transfer of the Nghe An Farmer Pension Fund to the National voluntary pension scheme. The decree describes how the pension rights of the members of the Nghe An Pension Fund that decide to participate in the voluntary pension system are recognized. In the case that the voluntary pension system recognizes a number of years of contributions lower than the number of years of membership in the Nghe An Pension Fund, the insured can realize additional contributions and obtain that all the years are recognized.

Because the pension system in Vietnam is relatively new and economic widespread prosperity is relatively recent, many workers will reach pension age in the coming years with less than 20 years of minimum contributions and probably not enough savings to realize the additional contributions necessary to obtain a pension.

A complementary policy could be that The Vietnam Social Security (or a financial institution) provides loans to these workers so they can realize the necessary additional contributions before reaching retirement. These loans could be reimbursed partly at the time the pension is paid (lower amount are paid) and partly by the heirs[10].

There are strong rationales to provide subsidized loans to help retirees "buy years".[11] First, providing pension income to the workers with relatively small savings will avoid important drop in welfare among the future elderly, especially among the workers who have worked only in the private sector. Second, the consequent speed up of the progress of social security coverage in Vietnam will bring evidences of the advantage of a well functioning pension system. This, in turn, will foster younger generation willingness to participate. As the paper of Than and Paulette (2009) shows changing the perception and attitude of the young generations toward social security is fundamental to increase significantly coverage and bring more resources to the system.

Policy 2: Increase coverage of low income earners

Participation is likely to be very low among many poor low income earners or casual workers. Contribution levels can be too high and many of these workers cannot focus on the long-term. In particular, income instability increases the uncertainty regarding the ability to contribute for a long period. In these conditions, poor workers' expectations to obtain an old-age pension at retirement are very little. Their participation, as a result, is

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[10] In France, certain social aids to elderly or to people with disability are repaid by the heirs (depending on the wealth passed to the heirs). See Bodson J. *La pratique du droit: l'aide sociale*.

[11] These loans could follow the same type of procedures that are currently being implemented by the Vietnam Development Bank. In 2009, the bank will provide 0% loans to enterprises that have had to lay off 100 persons or 30% of their staff (with labor contract) and still face financial difficulties to pay social contributions. The maximum duration of the loans is 12 months.

almost null. With very little savings, these workers are, however, vulnerable to poverty during old-age.

This section discusses two policy options: the provision of non-contributory pensions to low income earners when they reach pension ages and, the provision of subsidies to support low income earner's participation during their working life, and obtain old-age pension.

Option 2A: introduce non-contributory pensions

Participation and therefore coverage of low income earners are expected to be very low. Non-contributory or social pensions aim at filling this gap. In such a framework, governments guarantee a minimum old-age income to the poor elderly who are not entitled to pensions. Social pensions are usually granted at ages higher than standard retirement age. Brazil and South Africa are famous examples (Barientos M., 2002). The means tested pension benefit implemented in Chile until 2008 is another example. In Brazil, non-contributory pensions have been implemented since the 70's to cover poor farmers. The scheme at the beginning was limited to household' heads and, the level of the benefit was rather low (half of the minimum wage). In the 90's coverage was largely expanded and the pension increased to one minimum wage. The per capita family income of the beneficiaries cannot surpass one quarter of the minimum wage, however (Schwarzer H, 2007). In South Africa, most beneficiaries are poor Africans that could not participate to the social security system during the apartheid. Entitlements require a means test of the income of the beneficiary and spouse (Barientos M., 2002).

If well targeted, this solution has significant poverty alleviation impact among the elderly.

Option 2B: subsidize the participation of the poor and support the access to old-age pension under the general scheme

Instead of securing minimum pension incomes to the poor, the government subsidizes the contributions of the poor during their spell of poverty. At retirement, the government subsidizes the amount of the pension income that is not generated by the worker's contributions. For example, in the case of Vietnam, if a poor worker has managed to contribute only for 10 years (with and without government's support), the government finances the "buying" of the remaining 10 years so that the worker obtain a pension. Entitlements to these subsidies are subject to means test income and other screening procedures.

This option could require less government's funding that the previous option. The reason is that government's subsidies to contributions increase the probability that low income workers manage to contribute the number of years that give them access to pension. Without support, workers' uncertainty over their financial capacity to contribute enough years to obtain an old-age pension strongly limits their willingness to participate. The government's support reduces such a risk. It increases, accordingly, low income

earner's participation and their chances to reach pension age with enough years of contribution to obtain a pension. In option 2A, the government funds the totality of the pension incomes. In this option the government funds only a portion. The other portion is funded by the workers themselves in the periods they manage to receive higher income.

Because the system is voluntary, the policy bears the risk that once they have escape poverty workers stop to participate. Near poor workers probably face also a lot of economic hardship and uncertainty. In Vietnam, a simulation of the participation of poor workers who have moved from the first (the lowest) to the second income quintile indicates that about one third of the workers, after escaping poverty, could stop participating in the pension system (Castel P. 2008[12]). The policy includes, therefore, a risk of 'free riding": workers accumulate years of contribution when they are poor, stop contributing when they are better off, and receive government's support to receive a minimum pension income when they retire. Mandatory participation would solve this free-riding problem, a solution adopted recently by Chile (see box 3).

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[12] The simulation does not take into account, however, the spillover impact of the government's support in the expectation of the worker's ability to complete the minimum length of 20 years of contribution.

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Annex 1: Classification of the working age population and Vietnam Social Security status

Step 0 People are likely to be registered to the social security if they earn a wage above the minimum wage
- Construction of a variable that = 0 if maximum wage (of the possibly 3 wages reported) is higher than the minimum wage, =1 otherwise
- The average wage is calculated depending on the number of month the person report being employed in that job. The average wage is compared to the average wage over that period, depending on the date of the interview

Step 2 100% likely registered and very likely reported
- 100% likely registered: all the people that report having health insurance because they are wage employed (and earn above the min wage) in a public or private enterprise,
  - but the number of resulting contributors is much lower than VSS adm data
- Adding the very likely: all the other people that report having health insurance and that are wage employed (and earn above the min wage)
  - the number of resulting contributors is still much lower than VSS adm data

Step 3 Defining sector of employment
- The sector of employment is the sector corresponding to the highest wage received. There is a case in which the wage is of the same level in the first and second job, given that the worker is in FDI in the second job, this person is classified as in FDI. If the highest wage is earned in the third job the sector is undefined. These workers do not work in FDI in their first or second job.
- We compare working in public sector, in FDI and in other private to VSS figures.
  - The number of public is a little bit higher
  - The number of FDI is much lower
  - The number of private is little bit smaller

Step 4 Restricting the public sector, expanding FDI
- The public sector is restricted to employed in public sector (step 2) and obtained health insurance from public sector (step1)
- The FDI employees is expanded: by adding all the workers employed in FDI (step 2) with wage above the minimum wage even if they do not report having health insurance through employment or health insurance at all.

Step 5 Estimation of the "avoiders"
- The avoiders are the wage employed with a wage higher than the minimum wage who are not classified as registered (step 1 to 4).
  - Some are employed in SoE
  - Others are employed in hh enterprises and small enterprises

Step6 Estimation of the farmers and self-employed potentially covered
- This group includes the farmers and self-employed with an individual income (that eventually includes some wage income) is higher than the minimum wage and do not benefit from mandatory health insurance
  - Only farmers with or without some wage employment
  - Only self-employed with or without some wage employment
  - Farmers and self-employed with or without wage employment

Step 7 Estimation of the potentially uncovered
- This group includes all the workers who don't benefit from mandatory health insurance that have an individual income (eventually includes wage income) lower than the minimum wage.
  - Only wage earners
  - Only farmers with or without some wage employment
  - Only self-employed with or without some wage employment
  - Farmers and self-employed with or without wage employment

Step 8 Active pensioners
- This group includes the persons that benefit from mandatory health insurance because they are retired
  - Active: they report working

Step 9 Inactive
- This group includes all the persons that report
  - Some benefit from mandatory health insurance because they are retired
  - The other don't
    - Householdkeeper, disabled, students,
    - Unemployed
    - Active: they report working

The people in this group could have or will have the opportunity to participate to the voluntary system, or to the mandatory system depending on the type of employment they had/will take.

Annex 2: Estimation of individual income

The VHLSS reports individual income figures only on wage earnings. Income from self-employment business activities or farming are reported and calculated at household level. The estimates of the individual income used in this study are based on a distribution of each household's income (excluding wages) among the working members of the household according to the time each member reports working in a year in that or these activities.

Step 1: reclassification of the type of employment when respondents report being involved in some activity but the household does not report any income from such activity, or inversely the household report some income but no household members declare involved in that type of activity.
- We expect that if a respondent indicate that he/she is wage worker, self-employed or farmer, the household effectively report wage income, non-wage

non-agriculture income and/or agriculture income or in case income is null, that the households released some expenditures related to the activity mentioned.

We observe:
- some households with no wage income have members that declare being wage workers (unpaid?)
- some households report some agriculture income but do not include any farmer
- some households with no agriculture income have members that declare being farmers
- some household with agriculture income do not have any members declaring being a farmer
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Reclassification:
- The 37 people that declare being wage worker but that do not report any wage. Among them16 live in households with no wage income, the rest live in households with wage income and other wage earners. All declare being involved also in another activity. All these persons are considered as unpaid wage workers and are not classified as wage worker in the variable Ewage
- One person report having some agriculture activity in an household that do not report any activity (spending or income) in agriculture This person reports also being self-employed and lives in a household with self-employment income. This person is not considered a farmer in the variable Eagr.
- There are 21 people that say they are farmers but live in household with no net income from agriculture or spending in the agriculture sector.
  - 10 of them do not report other activity.
    - 2 of them live in households with no labor income at all. They are reclassified as not being farmer and not working.
    - 5 persons live in households with non agriculture income. They are reclassified as being self-employed
    - 3 persons live in households with only wage income. They are reclassified as not being farmer and not working.
  - 11 person report other activity, they are reclassified as not being farmers
- In the case of the households with agriculture income but no farmers
  - all the members of the household that *report being employed* are reclassified as being also farmers.
  - still 106 persons live in a household with *no* employed member
    - all the person 15 years and above in these households that declare that they do not work but are not sick or disabled are reclassified as being farmer.
    - one person is the unique working-age member of the household and report not working because of illness. That person is reclassified as being farmer.

Step 2: estimation of the time spent in each activity. The time reported doing wage work is directly reported. The time spent in other activities must be distributed among the household's members that report being involved in these activities. The distribution is made in relation to the time spent at work by each member.

- Wage employment: the time reported in wage work.
- Farmers: the time reported in activities of the agriculture sector (branches between 1 and 5)
- Calculation of the remaining time: total reported time minus time spent on agriculture and wage works.
- Farmers and self-employed are assumed to spend equally their time in the two activities

Specific cases:

- Three wages are possibly reported but the time spent on labor activities is only reported for the first and the second job, not for the third. When the worker is a wage employed, it is assumed that the worker has been working in that job as long as in the first or the second job. When no time is indicated for the first and the second job the worker is assumed to have worked only for 1 month.
- We expect that the remaining time is equal to 0 when workers are only wage employed and/or with only farming activities. In 4 cases, the calculation obtains some unallocated remaining time. The reason is that these workers are wage employed in their 3rd job. The sector of their first and second job is in industry construction or service, so we assume that this time is the time they spend on wage employment.

Step 3: distribution of the income in accordance the percentage of household's time spent in the activity in the total of time spent by all households member in the activity. If there is no time mentioned, the income is divided by the number of household members involved in the activity.

		Table 3	
		Predicted potential participation to the voluntary pension system	
Age group	Participation rate	Quintile of household income per capita	Participation rate
15 to 19 yrs	60.6	Quintile 1 The poor[1/]	56.3
20 to 24 yrs	87.7		
25 to 29 yrs	86.3		
30 to 34 yrs	83.9	Quintile 2 The near poor	51.0
35 to 39 yrs	72.2		
40 to 44 yrs	41.5		
45 to 49 yrs	8.1	Quintiles 3,4,5 The better off	46.0
50 to 54 yrs	0.4		
55 to 60 yrs	0.2		
Total	48.8		48.8

Source: based on VSIIS results, on the population age 15-54 (women) and 15-59 (men)