

**Political Feasibility Study on the Reform of the Financing Scheme of
Taiwan's National Health Insurance Program[†]**

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Abstract

The National Health Insurance Program in Taiwan has just celebrated its 10th anniversary on 1 March 2005. In the past 10 years, the NHI Program has significantly transformed the ways people seek for medical services in Taiwan. According to recent statistics, the Program covers nearly all citizens and contracts around 92% of total hospitals and clinics. The public satisfaction rates with the Program have often been above 70%, and hence it is regarded as the most popular social policy in Taiwan.

Nevertheless, the NHI Program is not that successful in terms of other aspects. For example, the financial status of the Program is not sound. Since 1998, the medical costs have exceeded the insurance revenue and therefore created large deficits. Moreover, it is difficult to raise the NHI contribution rate due to political pressures from the Parliament and the general public. As a consequence, the NHI deficits have become greater and may even jeopardize its operation.

On the face of the aforementioned problem, the Department of Health in Taiwan launched a massive re-planning project from 2001 to 2004 (the so called Second Generation of NHI or 2G-NHI), which attempted to thoroughly study the problems encountered by the Program and propose systematic suggestions for solutions. In this paper, we would like to draw data on the re-planning project, especially focusing on the pre-evaluation of the new NHI financing scheme.

This paper first reviews a model of political feasibility analysis and then introduces the main contents of the new financing scheme. It is followed by an empirical study on the political feasibility of the scheme. The results show that the new financing scheme receives a certain degree of support from the major policy participants, and the measures concerning equity and sustainability are most welcome. However, the contribution-sharing among the employee, the employer, and the government remains controversial. Besides, the administrative and the legislative elites strongly agree with the new scheme, but the social elites affiliated with the employee's associations and the welfare groups do not. The degree of support from the employer's associations, the medical associations, and the intermediate groups is in between.

**Key words: health insurance, health politics, political feasibility analysis,
Taiwanese NHI program**

Political Feasibility Study on the Reform of the Financing Scheme of Taiwan's National Health Insurance Program

1. Introduction

The National Health Insurance Program (NHI Program) in Taiwan has just celebrated its 10th anniversary on 1 March 2005. In the past 10 years, the NHI Program has significantly transformed the ways people seek for medical services in Taiwan. According to recent statistics, the Program covers nearly all citizens and contracts around 92% of total hospitals and clinics. The public satisfaction rates with the Program have often been above 70%, and hence it is regarded as the most popular social policy in Taiwan.

Nevertheless, the NHI Program is not that successful in terms of other aspects. First of all, the financial status of the Program is not sound. Since 1998, the medical costs have exceeded the insurance revenues and therefore created large deficits. Moreover, it is difficult to raise the NHI contribution rate due to political pressures from the Parliament and the general public. As a consequence, the NHI deficits have become greater and may even jeopardize its operation. Second, as people's expectations on medical services are growing, the demands for quality care are also rising. The quality of medical services provided under the NHI Program has frequently been challenged, though it is still regarded as acceptable. Third, the government-run NHI has been criticized about its inefficiency as well as proneness to political intervention. Hence, calls for the reform of the NHI governance structure from public nature to semi-public or even private have frequently been mentioned.

On the face of the aforementioned problems, the Department of Health in Taiwan launched a comprehensive re-planning project from 2001 to 2004 (the so-called Second Generation of NHI or 2G-NHI), which attempted to thoroughly study the difficulties encountered by the Program and to propose systematic suggestions for practical solutions. Nevertheless, the implementation of reform proposals is by no means an easy mission. As Glassman et al. indicate (1999), reform is a profoundly political process that affects the allocation of resources in society, and often imposes significant costs on well-organized, politically powerful groups. Hence, with the aim of implementing the reform proposals smoothly and successfully, it is regarded important to include pre-evaluations of those proposals into the process of planning. In general, the economic pre-evaluation of health care reform is conducted in a

widespread fashion, but little attention has been paid to the political pre-evaluation and therefore reform proposals often come across unexpected blockades during the legislative and political process.

The 2G-NHI Planning Task Force (abbreviated as 2G Task Force) envisaged possible political obstructions to the reform proposals, and hence conducted political feasibility studies on key proposals, such as the new financing scheme and the new governance and management structure. In this paper, we would like to report the political feasibility study on the new NHI financing scheme and look into opportunities and obstacles to the policy change under consideration. This paper first reviews a model of political feasibility analysis. We then introduce the main contents of the new financing scheme and followed by an empirical study on its political feasibility. Finally, we discuss the results of the study and draw general conclusions about possible advantages and conflicts with regard to the introduction of the new NHI financing scheme.

2. A Model of Political Feasibility Analysis

The politics of health care reform are complicated. Policy makers need to understand and manage the politics of health care reform and not just to design good policies. In this way, political feasibility analyses for any sorts of reform proposals appear to be significant. Conventionally, this part of work may be assigned to internal staff or external experts. People responsible for the legislation of policies may gather information from different sources, such as consultations, interviews, newspapers, published or unpublished documents etc., and then analyze these data with themselves as analytic instruments. With the development of information technology and artificial intelligence, Computer-Assisted Political Analysis (CAPA) seems to be possible. In the field of health politics, a software program called *PolicyMaker* has been developed by a team headed by Professor Michael R. Reich at Harvard School of Public Health. The software can be applied to any policy problem that involves multiple players with diverging interests; the software is not specific to health policy. In the political pre-evaluation of the new NHI financing scheme, we attempted to apply this method of analysis to look into the policymaking of Taiwan's health care reform.

According to its official website (<http://www.polimap.com>), *PolicyMaker* is a Window-based software program for Computer-Assisted Political Analysis. The software brings together three methods of applied political analysis. First, the

software uses political mapping techniques to analyze the political actors in a policy environment. These techniques assess the power and position of key political actors, and then display the supporters, opponents, and non-mobilized players in a political “map” of the policy. Second, the software incorporates techniques of political risk analysis, in order to provide a quantitative assessment of whether a policy is politically feasible. Third, *PolicyMaker* uses methods of organizational analysis and a rule-based decision method system, in order to suggest strategies that can enhance a policy’s feasibility. The software includes 31 basic political strategies, which can be customized by users, to affect the power, position, and number of mobilized players and thereby change a policy’s political feasibility.

PolicyMaker has been applied to several initiatives of health reform, such as the health reform in the Dominican Republic (Glassman et al, 1999). In fact, this method of analysis helps policy-makers and policy analysts do what they usually should do anyway: systematically analyze the support and opposition for a proposed policy; consult with the major stakeholders on their views; analyze opportunities and obstacles to change; design a set of creative and effective strategies for change; and assess and track the processes of implementing those strategies (Glassman et al, 1999). In a more practical and operational way, *PolicyMaker* guides the user through five steps for assessing the political dimensions of policymaking:

- **Step One – Policy:** The first step is to define the desired policy or decision, including major goals and mechanisms, and to propose an indicator to measure progress towards achieving each goal.
- **Step Two – Players:** The second step is to identify the major players involved in the policy, including an evaluation of each player’s position and power. This assessment resembles a stakeholder analysis.
- **Step Three – Opportunities and Obstacles:** The third step is to identify opportunities and obstacles to change in the general organizational environment and in the broader political environment.
- **Step Four – Strategies:** The program’s fourth step provides a rule based problem-solving system, using principles of artificial intelligence, to suggest strategies that can improve the policy’s feasibility.
- **Step Five – Impacts:** The final step is to assess each strategy’s likely impacts on the power and position of major players. The program can also be used to track the implementation of strategies, and compare observed and anticipated impacts.

(Source: summarized from Reich, 1996)

In our study, we attempted to complete the steps mentioned above but failed to do so due to the constraints of time and funding. Nevertheless, during a research period of six months (July - December 2003), we first clarified key points of the new NHI financing scheme designed by economic and financial experts. Second, a list of potential policy participants concerning the NHI reform was carefully discussed and identified. Third, 33 structured-questionnaire interviews with key figures were conducted in order to recognize their policy preferences. Finally, policy suggestions on the reform proposal and to the policy makers were provided. In this study, macro-level analyses of political climates and organizational structure were not yet conducted. Also, impacts on each policy player were not explored explicitly. However, we added a network analysis to explore the inter-relationships among these policy participants in order to know their information network, interaction network, and mobilization network. In doing so, we can better understand the players in a sense of alliances rather than individuals. The results of network analysis will be discussed in our other papers.

3. Pre-evaluation of the New NHI Financing Scheme

3.1 Reform proposal

Like many countries implementing national health insurance system, Taiwan's NHI Program is chiefly financed by payroll taxes collected from the employee and the employer. However, the government plays a very significant role in subsidizing the premiums and the rates of subsidization are different among insured categories. As Table 1 shows, the NHI insured are divided into six categories and the share of premiums is various from category to category. Because of the division of the insured, people often shift their insurance statuses for the sake of changing jobs, moving houses, marriage, etc. Their shares of premiums will be adjusted as a consequence of shifting insurance statuses. This arrangement seems to create a loophole that people or their dependents tend to join the categories which share less contribution fees. In this sense, the revenues of the NHI Program can scarcely be sufficient and the share of contributions among different categories can hardly be equitable.

Table 1: Share of Premium Contribution

Category	Beneficiary Category	Share %		
		Insured	Employer	Government
Category 1	Civil servants or government employees	30	70	0
	Self-employed persons; employers	100	0	0
	Employees of public or private enterprises	30	60	10
Category 2	Members of professional associations without specific employers; seamen serving on foreign vessels	60	0	40
Category 3	Members of Farmers' or Fishermen's Associations	30	0	70
Category 4	Military personnel	0	0	100
Category 5	Low-income household heads	0	0	100
Category 6	Veterans	0	0	100
	Veterans' dependents	30	0	70
	Community population	60	0	40

Source: BNHI, 2004: 19

Since the implementation of the NHI, the medical costs in Taiwan have increased dramatically. However, the growth of insurance revenues has not been comparable to that of medical costs. Moreover, the NHI premiums are calculated according to insurable incomes reported by the insured¹ rather than real personal incomes. Hence, the financial base for calculating and collecting premiums is even smaller than expected. For example, from 1996 to 2001, the growth rate of medical expenditure per person was 28.27%, that of average insurable incomes was 17.44%, and that of average personal incomes was 19.56%. In other words, the escalation of medical costs is greater than that of personal incomes; and the growth of personal incomes is larger than that of insurable incomes.

In order to address the problems of insufficiency and inequity regarding the current NHI financing scheme, the 2G Task Force submitted an NHI funding reform

¹ The definition of insurable income is different from that of personal income. The former mainly means regular incomes received from the employer, and is self-reported by the employer or the employee. The latter include all incomes a person may acquire from the employer as well as other sources. The current scale of the NHI insurable income has 47 levels and ranges from a minimum wage of NT\$15,840 to NT\$131,700. (32 NT Dollars are equivalent to 1 US dollar.)

proposal. The major policy objective of the proposal is that premium revenues should be in balance with the medical expenditures. The other objectives include the achievement of more equitable shares of premium contributions, simpler administrative procedures, and more affordable and sustainable financing mechanisms. To accomplish these reform objectives, the financing planning section of the 2G Task Force proposed a reform plan that spells out general principles and specific measures for the future NHI financing system. We will present the reform proposal in detail as follows.

1. General principles

Based on the major policy objectives mentioned above, five general principles are laid out:

- (1) The shares of premiums for the employer and the government are calculated according to fixed formulas with certain parameters, such as the proportion of personnel fees in firms or the GDP of the country.
- (2) The representatives of insured persons collectively decide the scope of benefits as well as the level of premiums.
- (3) The insured does not have to report to the Bureau of the NHI (BNHI) for shifting insurance status due to changes in job, residence, or other matters.
- (4) Different proportions of premium sharing as well as government subsidization among insurance categories are eliminated.
- (5) The premiums of insured persons are calculated according to personal incomes rather than insurable incomes.

2. Specific measures

The first one is to remove the current complex classification system that divides insured persons into different categories according to their occupations. This is because that inequity in premium sharing is so obvious within the current system. Some categories are heavily subsidized by the government, and some are not. Also, with this new measure, the administration of the NHI insured can be simpler, for the insured no longer has to shift their insurance statuses within the Program.

The second one is to enlarge the financial base for the calculation of the NHI premiums. Instead of calculating the premiums according to insurable incomes (which may often be under-reported), the 2G Task Force suggests to use the taxable incomes of households as the basis for the premium calculation.

The third one is to set the top and bottom limits of the NHI premiums, in case that the taxable incomes are either too large or too small for collecting premiums. Since the NHI is a universal service, those who need not to pay any tax still have to pay a minimum premium; and those who pay a great amount of tax are allowed to pay a maximum premium.

The fourth one is to fix the financial responsibility of the employer and the government for funding the NHI Program. The contributions of the employer are calculated by a certain percentage of their total personnel fees; and that of the government is calculated half according to the growth rate of GDP and half to the growth rate of the whole medical expenditures. In this sense, any extra increases or decreases in medical expenditures should be shouldered by the insured.

The fifth one is to change the procedure of collecting premiums. Since the taxable incomes can only be known at the end of a tax year, and therefore the total NHI contribution fees of insured persons are ascertained at that time. For fear of running out contributions during the year, the insured's premiums are pre-deducted by their employers according to a hypothetical contribution rate. Extra money shall be returned to insured persons, should they pay more premiums than expected during the year.

(Source: summarized from 2G-NHI Task Force, 2002)

In summary, the ideas of **sustainability, equity, and responsibility** are embedded in the design of 2G NHI financing system. To balance the incomes and expenditures of the NHI Program is of the utmost importance, so that the Program can be operated in a stable and sustainable way. Besides, the current NHI financing scheme appears to be unequal among different categories of insured persons, and this issue should also be tackled during the reform. Finally, insured persons need to recognize their rights and obligations for the Program. They are empowered to determine the levels of benefits and premiums, so that the growth of medical expenditure can be closely linked to that of insurance revenues. The following table will show a contrast of key components of the current and the 2G NHI financing schemes. Based on these major issues, we developed a structured questionnaire and interviewed key policy participants with that, in order to identify their opinions and positions with regard to the 2G NHI financing scheme.

Table 2 : A contrast of major issues between the current and the 2G NHI financing schemes

Major issue	The current NHI financing scheme	The 2G NHI financing scheme
Classification of the insured	<ul style="list-style-type: none"> ● Six categories and fourteen subcategories 	<ul style="list-style-type: none"> ● No more classification
Funding base for the calculation of premiums	<ul style="list-style-type: none"> ● The employee: wages or salaries ● The employer and self-employed: business incomes ● Independently practicing professionals and technicians: incomes from professional practices ● Members of occupational unions who have no fixed employers: self-reported incomes ● Members of Farmers' Associations and Fishermen's Associations: a fixed premium announced by the government 	<ul style="list-style-type: none"> ● Premiums are calculated on the basis of the taxable incomes of the insured's household, including wages, bonuses, allowances, subsidies, etc.
Methods of collecting premiums	<ul style="list-style-type: none"> ● The employee: premiums are deducted from the payroll by the employer. ● Non-employee: premiums are collected through unions or associations to which they belong. 	<ul style="list-style-type: none"> ● The employee: as current system but pre-deducted with a hypothetical contribution rate. ● Non-employee: premiums are directly paid by the insured through financial institutes like banks or cooperatives.
Difference between the top and the bottom limits of premiums	<ul style="list-style-type: none"> ● The maximum insurable income is 8.3 times the amount of the minimum insurable incomes. 	<ul style="list-style-type: none"> ● The table of insurable incomes is abolished. ● Top and bottom limits of NHI premiums are set up.
Shares of premiums among the employee, the employer and the government	<ul style="list-style-type: none"> ● Current sharing of total premiums is 40 percent by employees, 32 percent by employers, and 28 percent by the government. 	<ul style="list-style-type: none"> ● Shares of premiums from the employee and the government are fixed ● Any increases or decreases in medical benefits are closely linked to the premiums paid by the insured.

Source: Chang et al, 2002: 8.

3.2 Identify players

Assessment of political feasibility requires an analysis of the stakeholders – the political actors affected by or affecting a given policy. These actors are called the “players” in *PolicyMaking*. The field of policy analysis has not produced a single or simple method for assessing the characteristics of players involved in policy change

(Reich, 1996). In our study of the political feasibility of the reform proposal, we also had to identify those who may affect or be affected by the implementation of the new financing schemes. In this study, we focused at the level of social groups and attempted to explore their preferences and positions regarding the new scheme. The viewpoints of social groups were mostly collected through structured interviews with leaders or key persons responsible for the NHI affairs in the groups. Researchers were also the interviewers in this study and each interview took around one hour on average. The steps of identifying major policy participants will be discussed as follows.

According to the concept of the political system, we classified social groups or key persons into 3 categories: **internal, external, and intermediate**. The internal category includes political elites in the administrative and legislative sectors, such as senior civil servants or influential legislators. The external category includes social elites of major associations and non-governmental organizations (NGOs). We further divided this category into employers' associations, employees' associations, welfare groups, and medical groups. The intermediate category shuttles between the external and the internal categories and may include those opinion leaders in the press, political parties, and the academic community.

In the Taiwanese health politics, we tried to pinpoint these key policy players through the lists of three major NHI committees: **the NHI Supervisory Committee, the NHI Disputes Review and Settlement Committee, and the NHI Committee for the Arbitration of Medical Costs**. These three functional committees are under the Department of Health and composed of members from both public and private sectors. The function of the NHI Supervisory Committee is to oversee the operation of the Program; that of the NHI Disputes Review and Settlement Committee is to mediate disputes related to the Program; and that of the NHI Committee for the Arbitration of Medical Costs is to decide the annual medical expenses for the Program (BNHI, 2004: 13). Most key groups have seats in these Committees in order to take part regularly in the policymaking process of the NHI Program. As for influential legislators regarding the NHI Program, we drew a list based on data collected from legislative assistants in the Parliament in 2002. Following intensive discussions and consultations, we finally decided an interview list of 52 NHI policy participants as Table 3 shows.

Table 3: Major policy participants in the NHI Program

Category	No.	Title	Category	No.	Title
Administrative Sector	1	Department of Health	Employees' Associations	27	Chinese General Federation of Craft Unions
	2	Ministry of Civil Service		28	Taiwan Provincial Fishermen's Association
	3	Ministry of the Interior		29	Taiwan Provincial Farmers' Association
	4	Ministry of Finance		30	Committee of Action for Labor Legislation
	5	Council of Labor Affairs		31	Chinese General Labor League
	6	Directorate General of Budget, Accounting and Statistics	Welfare NGOs	32	Consumers' Foundation
	7	Ministry of Economic Affairs		33	Taiwan Health Reform Foundation
	8	Taipei City Government		34	League of Disable Groups
	9	Kaohsiung City Government	Medical Associations	35	Taiwan Medical Association
	10	Bureau of the NHI		36	The National Union of Pharmacist Associations
Legislative Sector	11	Legislator CHEN, Wen-Chien	Medical Associations	37	China Dental Association
	12	Legislator Kao, Ming-Chien		38	The National Union of Chinese Medical Doctors' Associations
	13	Legislator Shen, Fu-hsiung		39	Taiwan Hospital Association
	14	Legislator Lai, Ching-Te		40	Taiwan Community Hospital Association
	15	Legislator Shyu, Jong-Shyong	Intermediate Groups	41	United Daily News
	16	Democratic Progressive Party (DPP) Caucus		42	China Times
	17	Kuomintang (KMT) Caucus		43	Liberty Times
	18	People First Party (PFP) Caucus		44	DPP Policy Section
	19	Taiwan Solidarity Union (TSU) Caucus		45	KMT Policy Section
Employers' Associations	20	The Chinese National Federation of Industries	Intermediate Groups	46	PFP Policy Section
	21	The Chinese National Federation of Commerce		47	Alliance of Fairness and Justice
	22	The Chinese National Association of Industry and Commerce	Scholars	48	Prof. Lee, Yu-Tsun
	23	National Association of Small and Medium Enterprises		49	Prof. Hsieh, Po-Sheng
	24	Association of Public Enterprises		50	Prof. Yaung, Chih-Liang
	25	Chinese Federation of Labor	51	Prof. Yeh, Chin-Chun	
	26	Taiwan Confederation of Trade Unions	52	Prof. Shih, Yao-Tang	

Source: Authors.

3.3 Policy preferences and positions

The preferences and positions of policy participants on the 2G NHI financing scheme were collected through structured interviews within 6 months. Apart from the category of scholars, 47 NHI elites were contacted and 33 were successfully interviewed; the successful response rate was 70%². In this paper, we would like to analyze the viewpoints of the interviewees on certain key elements of the new financing scheme. Eight issues were selected for enquiry as shown at Table 4 and the interviewees were asked to express their opinions on these issues as well as their reasoning. Nevertheless, we tended to analyze their policy positions in a quantitative way here and supplemented with their qualitative explanations.

Table 4: Major issues about the 2G NHI financing scheme in the questionnaire

Question	Strongly disagree	disagree	Neither agree nor disagree	Agree	Strongly agree
1. The classification of the insured is eliminated.	1	2	3	4	5
2. The premiums are calculated according to taxable incomes.	1	2	3	4	5
3. The premiums are pre-deducted on the basis of a hypothetical contribution rate.	1	2	3	4	5
4. The representatives of insured persons collectively decide the scope of benefits and the level of premiums.	1	2	3	4	5
5. A top limit of the NHI premium is set.	1	2	3	4	5
6. A bottom limit of the NHI premium is set.	1	2	3	4	5
7. The contribution sharing of the government is based on a fix formula with parameters like the growth rates of GDP and medical expenditure.	1	2	3	4	5
8. The contribution sharing of employers is based on a certain percentage of personnel fees in firms.	1	2	3	4	5

Source: Authors.

Table 5 presents the basic descriptive statistics of the above eight questions, such as their means, medians, and standard deviations. If we treat the eight questions as a Likert Scale, the numbers of eight responses may be summed into a total score, indicating respondents' viewpoints on the new financing scheme as a whole. The total

² The response ratio (success/total) of each category are as follows: administrative sector (9/10), legislative sector (3/9), employers' associations (4/5), employees' associations (5/7), welfare NGOs (2/3), medical associations (6/6), and intermediate groups (4/7). The scholars were not interviewed in the first wave.

score can range from 8 to 40. Besides, a general question about the respondents' attitudes towards the reform was consulted. By comparing the current and the new schemes, choice 1 means to maintain the status quo; choice 2 means to reform the financing system based on the current scheme; choice 3 means to adopt neither current nor new scheme; choice 4 means to reform the system based on the new scheme; and choice 5 means to adopt the new scheme completely.

Table 5: The descriptive statistics of each question

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total Score	Degree of Support Reform
N (Valid)	33	33	33	33	33	33	33	33	33	33
N (Missing)	0	0	0	0	0	0	0	0	0	0
Mean	3.91	3.52	3.45	3.42	3.94	3.73	3.73	3.67	29.36	3.27
Median	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	30.00	4.00
Mode	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	25.00	4.00
Std. Dev.	0.91	1.09	1.03	1.32	0.93	0.84	1.15	1.08	5.19	1.21

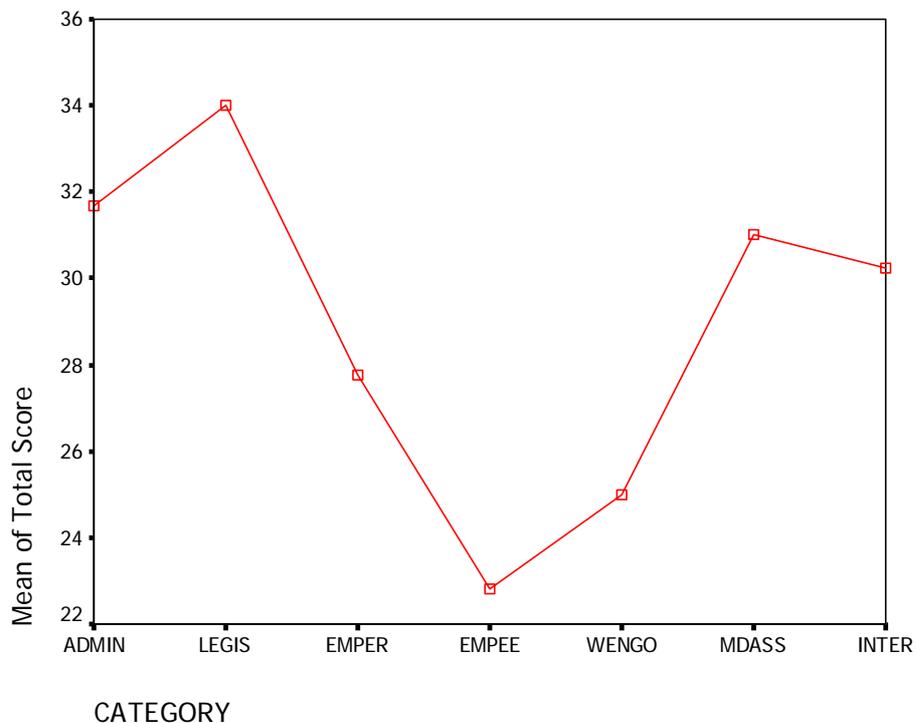
Source: Authors.

As discussed in the reform proposal, the ideas of sustainability, equity, and responsibility are embedded in the 2G NHI financing scheme. According to the results of interviews, eight issues of the new scheme all acquire a certain degree of support from the NHI elites, especially those regarding the elimination of insured classification and the establishment of top and bottom limits of NHI premiums. Nevertheless, to change the way of collecting premiums and to lay financial responsibility on the insured are least popular among the interviewees. Expanding the financial base from insurable income to taxable income also gets somewhat support from the respondents. In other words, most policy participants expect the new financing scheme to address the issue of equity among the insured and then to consider the sustainability of the Program. However, the sharing of contributions among the employee, the employer, and the government remains to be a troublesome subject, for not many policy participants agree with that the insured alone have to bear the responsibility for the fluctuation of medical expenditure.

With regard to the viewpoint of each category on the 2G NHI financing scheme, we used ANOVA to observe the differences of opinions among categories. As shown in Figure 1, employees' associations and welfare NGOs show least support to the Program as a whole. Nevertheless, the administrative sector and the legislative sector highly support the new scheme. The degree of support from employers' associations,

medical groups, and intermediate groups is in between. The reasons for the low support from employees' association and welfare groups could be twofold. First, the lack of knowledge on the new scheme may obstruct external groups to render full support for the reform proposal. Some interviewees were somewhat suspicious with the details of the new scheme and therefore tended to maintain the status quo. Second, there seems to be interest conflicts between the insured and the government. Within the new scheme, the financial responsibility of the government is rather fixed, whereas the insured have to watch out the balance of insurance revenues and medical expenditure. As the representatives of insured persons, it is not surprising that the employee associations and welfare groups did not agree with this mechanism. However, the administrative and legislative sectors seemed to welcome such a design of contribution sharing. What is interesting is that employers' associations did not fully support the method of sharing contribution according to a fixed percentage of personnel fees. For example, an interviewee of an employers' association mentioned that the calculation of personnel fees was rather complicated and differed between the manufacture sector and the service sector. Moreover, the development of manpower dispatch business may even confound the reckoning of personnel fees in firms or factories.

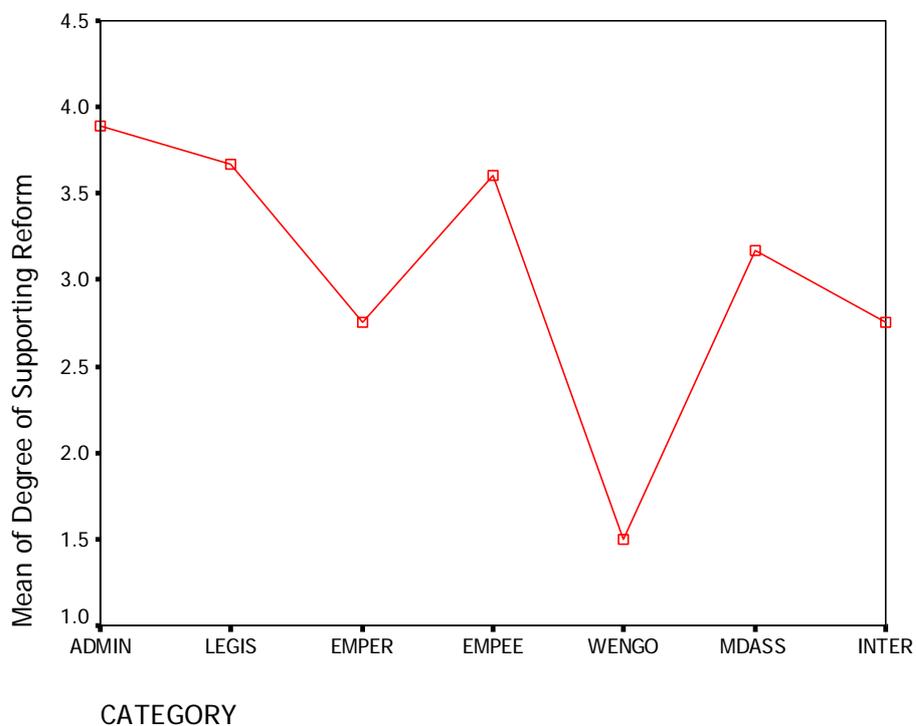
Figure 1: The mean plot of the total score for the new scheme, by category



Source: Authors.

While asking the policy participants about their choice between the current and the new financing scheme, we got a somehow different picture from the Figure 1. At Figure 2, the administrative sector showed stronger support for the new scheme than the legislative sector, and followed by employees' association, medical associations, employers' association, intermediate groups, and welfare groups. It is bizarre that the total score for the reform proposal assessed by the employees' association was low, but their degree of supporting the reform proposal was so high. This might be because the employee's associations did not pretty understand the meanings of the new financing scheme and therefore could not provide consistent answers. Alternatively, the employee's association recognized the importance of reforming the current system, but they did not agree with the details of the reform proposal. It can also be that the nature of the employee's association is rather heterogenic and difficult to reach consensus. In any case, the opinions of the employee's associations are rather diverse and need to clarify in the future.

Figure 2: The mean plot of the degree of supporting reform by category



Source: Authors.

4. Conclusions

4.1 Policy implications

The main elements of the 2G NHI financing schemes received a certain degree of support from the key policy participants in the pre-evaluation. The political feasibility of the reform proposal should be acceptable. Most respondents recognized the ideas of equity and sustainability regarding the Program, and hence intended to support the measures of abolishing the classification of the insured and expanding the funding base for the NHI Program. Nevertheless, the design of contribution sharing remained to be controversial, as most insured persons believed that the government needs to play a role in financing the Program. Furthermore, the mechanism of negotiating insurance revenues and medical costs among the representatives of insured persons is not yet spelt out clearly. For instance, how the insured representatives are selected? How far can the decisions of insured representatives be enforced? As for the way of calculating the employer's share of contributions, not many employers' associations agreed with the design. As the employment relationship between employers and employees has become more flexible and diversified recently, it is difficult to estimate the personnel fees of factories or firms. In this sense, the 2G NHI Planning Task Force have to focus more on the issue of contribution sharing, should they determine to set up this mechanism for financial balancing.

With regard to the preferences of the key policy players, administrative and legislative elites strongly agreed with the reform proposal as a whole. This might be because these elites of internal groups are more familiar with the plan. Also, the proposal has somewhat reduced the burden of the government, which has been bothered about the endless insurance deficits for long. Employees' associations and welfare groups were discontent with the reform proposal, especially with regard to the place of financial responsibility on insured persons. Employers' associations also had their viewpoints on the new scheme. They did not agree to expand the funding base from insurable incomes to taxable incomes, as well as to calculate their contribution share according to personnel fees. Medical associations seemed to agree with most designs of the new financing scheme. In fact, they had fewer stakes on the financing system, for they were mainly health providers rather than insurance contributors. Intermediate groups did not show strong preferences but intended to agree with the reform proposal.

If we apply the idea of political mapping, legislative and administrative elites

may belong to the support side for the new scheme and the employee's associations and the welfare groups to the opposition side. In the middle, there might be medical associations, intermediate groups, and the employer's associations. However, while comparing the current and the new financing scheme, the positions of categories slightly changed on the map. Administrative elites were more in favor of adopting the new scheme than the legislative elites. Employees' associations completely changed their position from opposing the new scheme to supporting it. This inconsistent position of the employee's associations might be related to three reasons. First, the employee's associations did not fully understand the meanings of the new scheme, and therefore the 2G Task Force need to have more communications with them. Second, the employee's associations also recognized the direction of reforming the NHI Program, but they had some doubts about the designs of the new scheme. Third, the nature of the employee's associations is rather heterogeneous, and therefore the policy preferences of the associations also appeared to be diversified and need to be integrated.

4.2 Methodology implications

As mentioned at the beginning of this paper, the political pre-evaluation for health reform is becoming important. This study attempts to evaluate systematically the 2G NHI financing scheme with the concepts and skills developed by the *PolicyMaker* software program. However, due to the constraint of research resources and the immaturity of the scheme, we simply completed the first two steps the *PolicyMaker* suggests within a research period of 6 months. As the reform proposal proceeds in the political process, its political pre-evaluation should be followed by further analyses of the broader political environment, strategies to enhance the political feasibility, and impacts on different players. Nevertheless, a few methodological implications can still be drawn from this study.

First, the usage of political mapping is useful to observe the positions of policy players but seems to be too static to capture the dynamic process of policymaking. For example, the influential power of social groups depends not only on the number of associations or members, but also on their resources, homogeneity, mobilization, channels to influence decision making and so on.

Second, it is not sure that the viewpoints of NHI elites reveal the positions of the organizations or themselves. In our study, we had to assume that the opinions of the interviewees represented those of the organizations they belong to. However, as 2 out of 3 legislative interviewees were not re-elected in the last general election, we must

modify our interpretation about the viewpoints from the Parliament on the new scheme.

Third, to identify policy players and to interpret their positions remain challenging. Our list of interviewees might be questioned for that the administrative sector and the medical associations were over representative and that contributors or insured persons were under representative. Nevertheless, this list of interviewees does reflect the current power structure of the NHI politics in Taiwan. It also shows that some adjustments need to be made in order to improve the policy participation of contributor groups or the general public. Besides, associations or groups under the same category may not have the same viewpoint on the same issue. Hence, it seems to be problematic to picture the policy position at a categorical level by aggregating the responses of groups or associations.

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