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Including Informal Sector Workers In Public Income Support Programs

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In developing countries, tax and reporting compliance tends to be low for institutional reasons. Therefore, compliance can be dependent more upon program adopted or design of the program than on enforcement and tax rates. To include as many workers as possible in the public income support program against unemployment, therefore choosing or adapting to compliance-friendly program is desirable. A compliance-friendly program is the one where workers have strong interest in monitoring compliance. Severance pay individual account and UISA, with or without solidarity fund, are examples.

An income support program being existent, if the government expand the mandatory coverage by eliminating grandfather clause, and lowers explicit costs of formality such as the size of tax wedge and job security provisions, provides larger benefits to compliant workers, and raises cost of non-compliance by strengthening inspection system and raising penalties of non-compliance, the compliance rate will go up.

Besides these formal aspects, it is important to diagnose carefully various instances of the existing institution and behavioral aspects of administration officials. Coordination and information problems may exist, signaling the importance of a responsible task force which investigates tax collecting offices, administration of reporting routine, way of working in front office of the social insurance, and coordinates different units of entities of which the income support system is

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comprised.

In developing countries there exist rooms for enhancing compliance by having active recourse to organizational incentive arrangements for stimulating the personnel of social insurance administration. The last, but not the least important thing is to let workers see it pays to be entitled to social insurance via advertisement, sufficient number of recipients, possibility of other benefits when workers prove their employment status, etc.

Keywords: income support programs, unemployment, informal sector, compliance

I. Introduction

Unemployment is not the least, but not the unique social risk that brings about suspension of earnings from labor market activity. Disaster, disability, old-age, and sickness are other examples of social risk that cause rupture of earnings. Importance of unemployment as a social risk is different in developing and developed countries. In low-income countries where productivity is extremely low, even income loss from natural disaster is hardly supported. In many developing countries where financial resources are limited and capital market is far from perfect, managing unemployment as a social risk and running institutionalized income support programs for the unemployed cannot have high priority in the public expenditure (all along this paper, if otherwise explicitly mentioned, income support program designates income support program against unemployment).

Characteristics of unemployment are quite different in developing countries and developed countries. In developed countries, unemployment has dense spell while in developing countries, unemployment is sporadic events for the dominant part of the labor force. Widespread underemployment in many

developing countries blurs distinction of unemployment from (under) employment. In fact, widespread underemployment in the informal sector makes it practically impossible to operate many income support programs for the unemployed, or at least requires high monitoring cost that developing countries cannot afford. This may explain why the incidence of unemployment benefit systems is strongly related to the level of development of a country.

When development agencies or national policy makers ever shed light on 'unemployment' problem, in many cases it is an alternative way of expressing poverty or 'underemployment' rather than unemployment in proper sense (that is, unemployment characterized by dense unemployment spell). Therefore we have to be cautious for not falling into the trap of trick to which a certain connotation of the terminology unemployment can lead erroneously in approaching unemployment as a social risk and conceiving an appropriate safety net against it in developing countries.

Countries differ widely in providing income support to the unemployed. While developed countries base their income protection on social insurance and rely on multiple programs, a considerable number of developing countries do not have any special program for the unemployed (Vodopivec, 2004). Moreover, parameters of a particular income support program differ sharply from one country to another, contributing to differences in coverage and the degree of protection provided. One implication of this finding is that countries would have different challenges in adopting and/or refining their income support system for the unemployed.

After the Asian financial crisis in 1997, vulnerability of unemployed became a keen issue and building of social safety net came into policy agenda in many countries. But in most of them, introducing unemployment insurance, the most widely used income protection program for the unemployed in developed countries, was proven to be quite difficult.

Some countries have formally introduced such systems, but they have failed

to implement them (Vietnam, Venezuela and Egypt). Many reviewers expressed reserved opinion regarding the desirability of the introduction of unemployment insurance program to developing countries. For example, Yoo (2001) argues against its immediate introduction to the Philippines, but maintains that the system should be seriously considered in the medium term. Esguerra et al. (2001) do not recommend the introduction of unemployment insurance in the Philippines. Similar assessment is found in Gill and Ilahi (2000) for Latin American countries.

In developing countries where the institutionalized income support programs (unemployment insurance, unemployment insurance individual account, and severance pay) are existent, the protection is limited to formal sector workers, beneficiaries being concentrated among already better-off segments of the population. The objective of this paper is to present a feasible approach to protect as many informal sector workers as possible in public income support programs against unemployment, thus in some sense, a way to transform as many informal sector workers as possible into formal sector workers. For this, we argue that it is crucial to adopt a compliance-friendly program, to understand the rationality of non-compliance, and to implement coverage expansion strategy based on diagnoses of institutional aspects.

One of the key features of the unemployment insurance system is to monitor the continuing eligibility. Thus the feasibility and administration cost of unemployment insurance depends much on the nature of unemployment whether or not it is characterized by dense spell. In contrast, developing countries have very limited administration capacity. Thus, consideration of the nature of unemployment and the administration capacity recommends individual-account-based income support system in developing countries, which avoids monitoring the continuing eligibility and makes workers more active in monitoring compliance. However, in some countries where efficiency and welfare gain from eligibility monitoring and PES system is deemed to

dominate enforcement cost, more administration-intensive program, such as unemployment insurance or solidarity-fund-augmented UISA could be adopted.

Many features of the informal sector make firms and workers fail to comply with regulations. Therefore, informality is frequently a sufficient condition of non-compliance or sometimes a synonym of non-compliance. One typical approach of analyzing the informal sector is to contrast optimizing behavior of formal sector workers with informal sector workers to derive an equilibrium size of the informal sector (Loayza, 1996; Sarte, 2000; Ihrig and Moe, 2001; Dessy and Pallage, 2003). Subsequently growth and welfare implications are discussed together with the impact of government policy on the size of informal sector. According to them, to reduce the informal sector and thus non-compliance, tax reduction, deregulation, and enforcement would be necessary. However, in developing countries, adjustment of tax rates may not influence compliance rate greatly. In fact, it is not rare that in some countries that tax rates are set under presumption of law-dodging or underreporting, and that various sub-institutions of administration are poorly coordinated. As a natural consequence, compliance to social insurance can be insensitive to tax reduction without coordination of institutional aspects.

Coverage will be determined by at once regulations imposed by the government and complying behavior of the firms and workers. Government regulations usually grandfather a certain category of workers by consideration of just cause or for shortage of administration capacity. Private economic agents decide their behavior on compliance under given circumstances. If the government lowers explicit costs of formality such as the size of tax wedge and job security provisions, provides larger benefits to compliant workers, and raises cost of non-compliance by strengthening inspection system and raising penalties of non-compliance, the compliance rate will go up.

Besides these formal aspects, expanding coverage to workers in the informal sector requires careful diagnosis of various instances of the existing institution

and behavioral aspects of administration officials. As coordination and information problems may exist, confining the coverage of income support program, it is important that an authorized task force guides and coordinates different units of entities of which the income support system is comprised. Also there are rooms for enhancing compliance by having active recourse to organizational incentive arrangements to stimulate social insurance administration of developing countries. The last, but not the least important thing is to let workers see it pays to be entitled to income support program and other social insurance via advertisement, sufficient number of recipients, possibility of other benefits when reported, etc.

The paper is composed as follows.

In Section II, we first examine and compare characteristics and required administrative capacity of income support program candidates for developing countries. Assuming that the welfare impact of each program is dependent upon whether it is combined with relevant administration capacity or not, we suggest feasible options of income support program for developing countries.

In Section III, we analyze rationality of non-compliance and address the implementation dimension of expanding coverage of an income support program already established.

Section IV concludes.

II. Adopting a Compliance-friendly Program in Developing Countries

Country-specific features determine how a certain program works in a particular country. Also inherent features of an income support program determine, to a certain extent, coverage of the program, because workers behave differently in compliance monitoring under different programs. This

implies that adoption of an income support program, as well as implementation, is important to coverage of income support program.

Many income support programs exist throughout the world in diversified forms.¹⁾ If self-standing unemployment assistance programs are not desirable, but it is desirable that unemployment assistance exists in tandem with unemployment insurance, unemployment assistance will be meaningful as a supplementary for unemployment insurance and thus it will not be of first consideration for developing countries. Moreover, if it is reasonable to assume that, the severance pay system, given that it exists in most of developing countries (Holzman, Iyer and Vodopivec, 2003), cannot be dispensed with for whatever reason,²⁾ then strategic decision as to adopting a new income support

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- 1) For complete list of income support programs for the unemployed, see Vodopivec (2004).
 - 2) One important reason is that severance pay is very difficult to reform because political economy of social partners frequently ends in intact conservation of existing features. Generous benefit rule is most difficult to change. For example, in Peru, in November 1996, in the context of its policy dialogue with multilateral organizations, the Peruvian government conveyed the impression that it wanted to slash mandatory severance pay by half. As a draft regulation containing this change made it to the news, there was public-opinion uproar, forcing an immediate reaction. Shortly after, the government announced that the publicized draft contained an unfortunate typo, its true intention being to raise severance pay by half. Since then, there have been no further changes to the severance pay formula (McIsaac and Rama 2001). Severance pay had traditionally multiple roles of social safety net when Korea did not have public welfare programs: unemployment benefits, savings for housing, and retirement benefits. When the National Pension and the Employment Insurance System were introduced in Korea in 1988 and 1995 respectively, the traditional role and *raison d'être* of the severance pay system was faced with challenges. However, the traditional aspects of severance pay remain virtually unchanged, entitled to every worker who has served more than a year, irrespective of the reasons of separation (Hur, 2003). In Sri Lanka, the very generous and non-transparent severance pay system (Termination of Employment of Workman Act of 1971) could be amended only on the condition of introducing the unemployment insurance system without substantial changes in benefit generosity (Vodopivec, 2003). In Turkey also uncompromising attitude by social partners made it impossible to change the existing rules and to establish a severance pay fund when the unemployment insurance was introduced in 2002 (Sural, 2003).

system becomes clear: either to refine extant severance pay program or to introduce unemployment insurance or UISA as a principal safety net for the unemployed.

In the standard, OECD-type unemployment benefit system, it is indispensable to monitor job-search behavior of benefit recipients and their labor market status. In contrast, the individual account systems can be designed to run on self-monitoring. In this section, we examine and compare characteristics and required administrative capacity of six key income support programs as a set of candidate income support programs for developing countries: unemployment insurance, solidarity-fund-augmented unemployment insurance savings account (UISA) system, pure UISA, pre-funded severance pay system, guarantee-fund-augmented severance pay system, and traditional severance pay system. And then we address the problem of adopting a compliance-friendly program.

In developing countries where the informal sector is large and productivity is low to the extent that unemployment is sporadic events and characterized by short span, and administrative capacity is inadequate, it is desirable to adopt an income support program that interests those workers experiencing unemployment recurrently in a way that they could be eligible, and that lets workers have their own interest in monitoring the compliance. More explicitly, it is plausible to introduce individual-account-based system. However, in some countries where efficiency and welfare gain, dominating enforcement cost, can be expected from eligibility monitoring and PES system, more administration-intensive program could be adopted.

1. Nature of Unemployment, Administrative Capacity, and Compliance in Developing Countries

(A) Nature of unemployment spell, eligibility monitoring, and administration cost

In contrast to developed countries, unemployment spell of the unemployed in developing countries is not dense. In traditional societies, individuals cannot afford to be jobless and therefore they undertake any type of work, even work which leaves them underemployed or that is unsuitable for their skills. Because overall productivity of the economy is low, they are obliged to opt for low productivity jobs, mostly in the informal sector, instead of not working at all continuing to search for more adequate and better paid jobs. Therefore, the dominant proportion of the workforce is underemployed or partly unemployed, and thus unemployment spell is not dense.

Another reason why unemployment spell in developing countries is not dense comes from the fact that the informal sector in these countries is much larger and imposes low entry and exit costs in comparison to often prohibitive costs of entry in the informal sector of developed countries. Low-cost entry to and exit from informal employment can be explained by low capital requirements due to low labor productivity in general, but very importantly, also by few institutional constraints imposed on the labor market. In contrast, developed countries impose large costs of entry into many occupations where the informal sector flourishes in developing countries (such as retail trade, transportation, various household services and repair) through taxation, sanitary as well as health and safety regulations, zoning rules, and licensing.

In developing countries, the dominant portion of workers are on the border of independent workers, employees and unemployment, and thus dense unemployment spell is not a general phenomenon. In this case, the effort to maintain the unemployment insurance system may degenerate or protect only limited number of people. Examples can be found even in developed countries. The challenge of false self-employed workers is an example which is frequently found in construction sites of developed countries. Because of the characteristics of construction industry such as ordered production, and fixed-term contract, independent contractors and employed workers are difficult

to distinguish.

In Korea, compensation for construction site workers, be it of independent workers or daily employees, will be regarded as wages. Thus construction site workers are regarded as wage workers without counter proof of independent workers (Hur and Yoo, 2001). In Germany, if at least three out of the five conditions below are satisfied, they should be regarded as wage workers rather than independent workers (Sozialgesetzbuch IV), and thus they are liable to contribution of social insurance premium.

- If s/he does not employ any worker at all, who is covered by social insurance, in relation to her or his work.
- If s/he works continuously and fundamentally for one agent.
- If her or his job is identical with the job of other workers the agent had employed.
- If her or his job does not have any typical feature as an entrepreneur (for example, s/he does not own any capital or office, and does not advertise)
- If her or his job is identical with the job s/he did when s/he was employed under the agent s/he is now working for.

If a small part of labor market participants are exceptionally on the border of self-employed, employees and unemployment, unemployment insurance might be maintained with Germany-type regulations and inspections. However, if the modern type of unemployment which is characterized by dense spell is not general, monitoring the initial and continuing eligibility, which is an indispensable part of the unemployment insurance system, becomes extremely difficult or impossible. If the monitoring system ever functions, paradoxically those experiencing unemployment recurrently will not be eligible at all. This will provide little incentive for workers to be compliant. Then the dominant part of workers will not be integrated into the system, and the public authority will have to tolerate permanent gap between institution and regulation. In this way, the nature of unemployment in developing countries has important

implications for the design of an unemployment benefit system.

If any institutionalized income support program is introduced in a country where unemployment is sporadic events, it would be, therefore, better to introduce a system which does not require continuing benefit eligibility (monitoring whether the benefit recipients are actively seeking a job, and whether they are available for and capable to work), because monitoring availability, willingness, and active searching for a job is not only difficult but also prone to restrict compliance in developing countries.

Moreover, the implementation of monitoring eligibility requires extensive and sophisticated information which often cannot be readily provided by the existing capacity of developing countries. To support the unemployed, eligibility monitoring would be more demanding and costly in developing countries than in developed countries, because of lower efficiency of administration and larger extent of the informal sector. More abundant informal employment opportunities, combined with weaker administrative databases, prevent cost-effective methods of monitoring (cross-checking of the benefit receipt or employment status) and make the existing capacity much weaker. In contrast, available resources allocable to administration of income support program is in general scarce in developing countries.

The lack of appropriate administrative capacity to effectively monitor the continuing eligibility and to impose sanctions suggests that the moral hazard problem which arises from asymmetric information will be prominent. Faced by ineffective monitoring, one option is to adopt an income support program giving up completely direct monitoring of job search behavior and labor market status and introduce a device completely internalizing the cost of moral hazard. This would drastically simplify the administration of the income support program introduced. Under more favorable circumstances, a more sophisticated system could be set up combining self-insurance with social insurance, as it is done under the Chilean system.

Box 1. Chilean income support system

In 2002, Chile introduced a new unemployment insurance system which combines social insurance with self-insurance. Unemployment contributions are split between individual accounts and a common, solidarity account, which is partly financed also by the government. Both workers and employers pay contributions. By doing so, employers reduced their severance payments obligations, which are being partly replaced by the new unemployment insurance system. The new system is effectively a funded system, with funds on individual accounts being managed by a freestanding administrator selected through a competitive tender. To stimulate reemployment, benefit recipients first draw resources from their own accounts, and upon depletion from the solidarity fund. Withdrawals from individual accounts are triggered by separation from the employer, regardless of the reason. Withdrawals from the common fund are triggered by insufficient resources on individual accounts. The claimant have to satisfy the usual conditions of continuing eligibility under unemployment insurance (such as not working and being available and searching for job) to withdraw from the solidarity fund, but are limited to 2 withdrawals per 5 years. Benefits are linked to past earnings, with a declining schedule.

Source: Vodopivec (2004).

(B) Administrative capacity and workers' initiative in compliance monitoring

With recent advancements in information and communication technology, the record-keeping of payments of insurance premiums as well as disbursements of benefits has become increasingly affordable even in low-income countries.

While information technology is instrumental in maintaining records on premium payments, it is not of great help to record-reporting which is indispensable to checking eligibility requirements under unemployment insurance system because record-reporting depends more on institutions of country rather than on technology.

In developing countries where the size of the informal sector is large, benefit recipients can work in the informal sector such as household factory or in small agricultural firms where compensation is given in kind. Formal sector work is limited and productivity gap between the formal and informal sector is not so quite distinguished in comparison to developed countries. Self-help behavior is not easily distinguishable from employment. The existence of the large informal sector, together with the ease of entry into and exit from informal sector activities, makes verification of the status of (un)employment, as well as earnings of individuals, difficult if not impossible. Therefore, one important consideration when adopting an income support program is the availability of administrative capacity to handle those informal sector firms and workers and to process information, and the capacity to enforce firms and workers to contribute and declare the employment/unemployment status.

When workers and/or firms contribute directly into individual accounts instead of fund pool, workers tend to be more active in monitoring compliance. In 1996, Korea introduced the severance pay individual account system in the construction industry. Because most of construction workers could not satisfy the minimum service period (one year), the service period was calculated based on service period in the construction industry, instead of service period in a firm. When a construction worker declares that s/he quits construction industry, then the accumulated balance which is calculated by the number of stamp posted was paid to the worker. Korea introduced unemployment insurance in 1995. Workers on the same construction site showed more interest and thus were more proactive in complying with the construction workers' severance pay

account than with the unemployment insurance system.

It is likely that compliance is lower in the unemployment insurance system than in individual-account-based systems because the required administrative system is more complicated and the benefit is only dependent upon unemployment and contributed premiums are administered in the form of central fund pool in the unemployment insurance system while accumulated premiums are directly visible by workers in individual account system.

(C) Compliance and institution

Low stage of development of labor market with large informal sector has multiple implications for adopting a relevant income support program. Table 1 summarizes features of developing countries together with influencing factors which have implications for adoption of income support program in developing countries. Table 1 suggests that, for a given program, compliance would be low for various reasons in developing countries, because opportunity cost of non-compliance is not high, enforcement is very costly and is not strong, and government's tolerance to non-compliance is high. Table 1 also suggests that only a few workers can pass eligibility criteria of the standard OECD-type unemployment insurance in developing countries, and that, even if applicants have passed initial eligibility condition, dominant number of them would not pass the continuous eligibility criteria.

It is clear from Table 1 that, when the fundamental working of any income support program is based on eligibility monitoring, compliance will be inevitably low in developing countries, because on the one hand few workers would be eligible, and on the other eligibility monitoring requires high level of administrative capacity which most of developing countries cannot afford. Furthermore, tax and reporting compliance tends to be low for '*institutional*' reasons, and the gap between institution and regulation is difficult to be corrected. In this sense, compliance level is very much determined by

Table 1. Characteristics of developing countries and their implication for the design of income support program

Characteristics of developing countries	Factors influencing the design of income support program	Implications for the design of income support program
Low stage of development of labor market with large informal sector	Traditional aspect dominates in employment relation (written contract is rare, employers have dominant position in employment relation, etc). Future discount rate of workers is high.	Tax compliance is low. Compliance in reporting is even lower than tax compliance. Gap between institutions and regulations has to be tolerated.
	Unemployment is sporadic and unemployment spell is not dense because of ubiquitous existence of underemployment.	Few workers, except for a few formal sector workers, can pass initial and continuing eligibility criteria.
	Difficult to judge suitability of a job and availability for work.	Monitoring the continuing eligibility is difficult or will leave only few of applicants eligible. Monitoring of continuing eligibility could be counterproductive.
	Labor market is characterized by unlimited labor supply on a subsistence wage level.	Probability of market failure due to imperfect labor market information is low, and efficiency loss, if any, due to market failure is small.
	Incidence of private transfers is high (via family solidarity and community solidarity).	A public income support could substitute efficient and effective self-insurance or self-help mechanisms.
Inadequate administrative capacity	Efficiency of administration is low in comparison to developed countries. Exposed to higher political risk.	Monitoring of eligibility is costly. Centrally administered fund is susceptible to misuse and political abuse.
Overall productivity of the economy is low and resources are limited.	Little margin of public expenditure for enforcement and monitoring in social policy area.	Monitoring of contribution (tax compliance) is costly and difficult. Gap between institution and regulation can be hardly corrected.

'institution' (meaning determinants of the social structure that are durable and, as such, constrain choices and policies) rather than by policies. Therefore, compliance will be dependant more upon program adopted or design of the program than on enforcement and tax rates. In sum, income support programs should be designed as compliance-friendly as possible in developing countries.

Here two points are additionally noteworthy. One is that supplementary programs such as public works for informal sector workers would be necessary to complement uncovered holes of the institutionalized income support program because coverage of institutionalized income support program is inevitably low as a consequence of low tax- and report-compliance, and the nature of unemployment. The other is that once it has introduced an income support program, to reach a long-run goal of high compliance and coverage, it is necessary for the developing countries to have recourse to incentive arrangements to discipline labor market agents in the long-run perspective.

2. Compliance-friendly Income Support System for Developing Countries

(A) Compliance-friendly program

The prevalence of the large informal sector and low productivity in developing countries make unemployment rather sporadic events, with important consequences for the design of income support program. Monitoring availability, willingness, and active searching for a job is prone to restrict compliance in developing countries. Moreover, the administrative capacity of developing countries lags behind the capacity of developed countries.

These circumstances of developing countries recommend an income support system with self-monitoring device so that required administrative capacity should be minimal, making contributions to the savings account of the covered workers and simplifying benefit payments based on initial eligibility conditions. Under such device, workers will be active vis--vis compliance because

contribution is directly accumulated in the individual account. Also monitoring the continuing eligibility is automatically accomplished by self-monitoring, because the cost of moral hazard is fully internalized.

Let us note here that the unemployment insurance system without monitoring the continuing eligibility is equivalent to the severance pay system. The reason is as follows. The initial eligibility triggers the payment of benefit under unemployment insurance system. Therefore, if the unemployment insurance administration gives up monitoring the continuing eligibility, initially eligible applicants, except those limited number of formal sector workers who will find a formal sector job before maximum benefit period, will receive unemployment benefit up to maximum benefit period. Then it would not be quite different from a severance pay which is paid in lump-sum when a separation occurs. Moreover, public employment service (PES), which is a crucial factor that distinguishes the unemployment insurance system from the severance pay system, is neither urgent nor indispensable device when monitoring of eligibility is absent, the appropriateness of PES having to be evaluated based on other consideration than monitoring unemployment benefit eligibility.³⁾

3) In developing countries, the learning curve of counselors in PES, and thus the role of PES in circulating labor market information and job placement is much dependent upon monitoring process of continuing benefit eligibility such as obligation of showing up every two weeks at public employment office and submitting proof of active job search. Therefore, waiving the continuing benefit eligibility condition suggests that developing countries need not invest in large scale on PES when they introduce an income support program before any need to monitoring eligibility arises or the labor market otherwise signals the need. The development of PES and improvement of counseling service in developed countries are closely related with institutional improvement of eligibility monitoring. Therefore, the desirability of simplifying the system by eliminating direct, personal monitoring of continuing eligibility requirements suggests that the learning speed of job matching service would be very slow. Also, in developing countries, market failure due to imperfect labor market information is not dominant one, and efficiency loss, if any, due to imperfect circulation of labor market information is relatively small in comparison to efficiency loss from other distortions. Even if mismatches are observed, it is quite probable that it is due to irrelevant training and education system rather than bad circulation of labor market information. Therefore, large

(B) Comparison of income support programs

Now let us compare possible options of income support program that a developing country can opt for. Table 2 describes six alternative income support programs with general characteristics as well as factors determining administration costs. The factors (1), (2), (3) and (4) are determinants of the required administration capacity. In a way that if relevant numbers are given, $(1) \times (3) + (2) \times (4)$ could give an index of required administration capacity. There can be other variants, such as UISA allowing negative balance.⁴⁾ However, it is not considered here as the effect of moral hazard related with negative balance holders is not known for developing countries.

In the standard OECD-type unemployment insurance system, solidarity-fund-augmented UISA of Chilean type, pure type UISA, and pre-funded severance pay systems which is in place in Brazil, Colombia, Ecuador, Panama, Peru, and Venezuela (A,B, C and D), compliance is explicitly monitored and enforced by a brigade of inspectors or labor commissioners, while it is complaint-driven in the classical severance pay system, whether it is guarantee-fund-augmented or not (E and F). Applicants should pass the initial and continuing eligibility in the unemployment insurance system and in the UISA with or without solidarity fund (A, B and C). But more discretion is given to workers under severance pay variants (D, E and F). Activeness of workers in monitoring compliance is weak under the unemployment insurance system (A), while it is very strong under the pre-funded individual account systems (B, C and D). Workers are less active in monitoring the ex ante compliance under the severance pay system because it is complaint-driven (E and F).

investment on PES is neither urgent nor necessary.

4) Coloma (1996), Feldstein and Altman (1998), and Stiglitz and Yun (2003) propose that unemployed workers would be able to draw benefits monthly as under the traditional unemployment insurance, and the government would lend money to accounts where the balance falls below zero.

Unemployment insurance pools the risk of unemployment, both intertemporally [individually] and cross-sectionally [socially], and thus enables a high degree of consumption smoothing and functions as a built-in macroeconomic stabilizer. However, it does not necessarily mean that the unemployment insurance system is most welfare-achieving. It is well known that moral hazard in job searching behavior is strong in the unemployment insurance system, because the cost of moral hazard is not internalized. Otherwise saying self-monitoring is quasi-absent in the unemployment insurance system. In solidarity-fund-supplemented UISA of Chilean type, the moral hazard will be present only when the applicant is given benefits of the solidarity fund. In other income support programs, the cost of moral hazard is fully internalized, thus self-monitoring is strong.

However, their effect on welfare and efficiency is not unilaterally known a priori. It would depend on country-specific condition of the labor market, the parameter design of the program, and the quality of administration services. For example, if the required administrative capacity and the income support program are perfect complementary input to produce welfare gain, but if administrative capacity falls short of the required administrative capacity, the introduction of any institutionalized income support program will not be welfare improving. This implies that under the circumstances of weak administration, compliance-friendly programs may have the welfare properties of the optimal unemployment benefit system.

To adopt a relevant income support program, of course, many considerations may intervene: not only welfare, but also efficiency, historical legacy, and political economy. Among those three compliance-friendly programs (B, C and D), if eligibility monitoring is deemed not possible because of prevalence of the informal sector, and the PES system is not expected to bring forth much efficiency gain in the labor market, severance pay individual account may be

Table 2. Comparison of institutionalized income support programs and determinants of administration capacity

	(A) UI	(B) UISA, SF- supplemented	(C) UISA, pure type	(D) SPIA	(E) SP, GF- augmented	(F) SP
Characteristics	Intertemporal consumption smoothing & cross-sectional risk pooling	With solidarity fund	Negative balance not allowed	Negative balance not allowed	With a guarantee fund	Employer's labor cost
Degree of cross-sectional risk pooling	High	Low	None	None	Middle	None
Individual account	Fund pool	Individual account	Individual account	Individual account	Fund pool	Fund pool
Funded	Pre-funded	Pre-funded	Pre-funded	Pre-funded	Book-kept	Book-kept
Experience rating	None	Almost full	Full	Full	Almost full	Partial
Impact on welfare & efficiency	Dependent upon country-specific conditions of the labor market, parameter design of the program, and administration quality					
(1) Compliance monitoring & enforcement	Explicite	Explicite	Explicite	Explicite	Complaint-driven	Complaint-driven
(2) Eligibility monitoring & PES	Yes	Yes	Yes	No	No	No
(3) Activeness of workers in compliance monitoring	Weak	Strong	Strong	Strong	Less strong	Less strong
(4) Self-monitoring of moral hazard	Absent	Less strong	Strong	Strong	Strong	Strong
Required administration capacity	Very high	High	Middle	Low	Low	Very low

most plausible.⁵⁾ If PES is deemed desirable to correct imperfect circulation of labor market information and to provide job information to new and future labor market entrants, UISA, with or without solidarity, would be more desirable, because both monitoring and job placement services are inseparably related to each other.

III. Expanding the Income Support Program

The incidence of unemployment benefit system is strongly related to the stage of development of labor market, more industrialized countries with less informal sector not only affording multiple programs but also better performance of the systems. The reviews in the previous section suggest that income support programs have to be adopted in consideration of the reality of developing countries. The nature of unemployment and administration capacity seems to recommend, if any, individual-account-based system.

Once a program is adopted in a developing country, coverage will be determined by at once regulations imposed by the government and complying behavior of the firms and workers. Government regulations usually grandfather a certain category of workers such as civil servants, teachers, independent workers, workers in small firms, etc. by consideration of just cause or for shortage of administration capacity. Private economic agents decide their compliance under given circumstances. To understand bottlenecks in expanding coverage of institutionalized income support programs and rooms for improvement by policy initiatives, it is necessary to understand first the *raison*

5) Simulations of Hopenhayn and Hatchondo (2003) show that when its parameters are appropriately selected, a system which combines self- and social insurance comes very close to the welfare properties of the optimal unemployment insurance system. But here focus is not much on those parameters considered by Hopenhayn and Hatchondo, but on PES.

d'tre of non-compliance.

The size of tax wedge is important for compliance as literature on the informal sector shows, but more or at least equally important is institutional aspects such as incentive structure and administrative effort. What can be done for including more of non-compliant workers in an existent institutionalized income support program in developing countries? Frequently the same problematic is found in broader context of the social insurance system. The major bottleneck may well vary from one developing country to another, making 'one-size-fits-all' type approach impossible. But it is not totally impossible to address principal guidelines for diagnosis and to plan some policy packages.

On-site diagnosis about overall economic condition, administration, employers' and workers' behavior, regulations and enforcement system of social policy administration, etc. will be the first thing to be done before adopting appropriate approach for coverage expansion or compliance enforcing. Basic ideas in that stage, which may be helpful to the task force, are whether low coverage or low compliance resulted from force of habit in administration, high monitoring cost, or absence of coordination among contribution agencies [tax collecting offices], administration of reporting routine, way of working in front office of the social insurance. An overall diagnosis, if not exhaustive, of forefront administration office, tax administration, social insurance administration would be helpful to be convinced if a considerable number of elusive workers and firms could be covered by reasonable and effective effort of administration.

1. Reasons of Low Compliance

(A) Rationality of non-compliance

Why does the non-compliant sector exist? What determines the compliance

rate? In the previous section, we could see that many features of the informal sector makes economic agents fail to comply with regulations (Table 1). Informality is in many cases a sufficient condition of non-compliance, or sometimes a synonym of non-compliance. Thus the *raison d'être* of the informal sector can explain the rationality of non-compliance.

The informal economy can arise when productivity level is very low to the extent that the economic activities cannot afford taxes. This informality can be called as a forced one, or just result from the gap between primitiveness of economic activities and administrative regulations which are inevitably bureaucratic and therefore are not costless to a certain degree.

The informal economy can also arise when excessive taxes and regulations are imposed by governments that lack the capability to enforce compliance. When the choice to be informal is a rational one, in the sense that economic agents are not forced by their constraints to be informal, economic agents choose to be informal by weighing the costs and benefits a legal status entails and considering their particular institutional and resource constraints. Thus, the size of the informal sector depends positively on tax burden and labor-market regulations, and negatively on the quality of government institutions (Loayza, 1996; Ihrig and Moe, 2001).

One typical way of explaining the *raison d'être* and size of the non-compliant sector in developing countries can be described as follows. The individual agent has a choice of compliance or non-compliance. From the perspective of this agent, non-compliance has both advantages and costs. On the one hand, non-compliance exempts him from entry cost to compliance (reporting requirements, other registration fees, etc.) and costs of remaining compliant (insurance premiums and other taxes).⁶⁾

6) With information and communication technology making it possible to monitor via cross-checking, it is likely that, when a worker's activity is declared to a social insurance administration, additional burden is not only the direct premium of that social insurance, but other mandatory taxes and regulations imposed on the formal activities.

However, as the government puts efforts in collecting taxes and maintaining regulations, non-compliance is not costless. With non-zero probability of being caught, the agent may have to pay penalties. Furthermore, he cannot receive the government service to the full extent. For example, he cannot receive welfare benefit, training-programs, and other government-sponsored credit facilities. Therefore, the return (before tax) from non-compliance is lower than that he would get from compliance. Alternatively, the agent must pay insurance premium and other taxes to the government when he is compliant.

The net return of the compliant agent can be either higher than, equal to, or lower than the return from non-compliance, depending on institutional and political circumstances. When the net return from compliance is larger than the return from non-compliance, the agent will choose to be compliant. On the contrary, when the return from non-compliance is larger than the net return from compliance, the agent will choose not to be compliant. In equilibrium, given that the agents are free to choose between compliance and non-compliance, the rates of return to compliance and non-compliance must be equal. The equilibrium size of compliant sector will depend on the ability of the agents to make the best of public services, the premium rate of social insurance, other tax rates, other costs from observance of regulations, the amount of government services deprived of when the agents are non-compliant, the strength of enforcement system, the tolerance level of the public authority to non-compliance, etc.

The instantaneous implication of this formal framework is clear. If the government lowers explicit costs of formality such as the size of tax wedge and job security provisions, provides larger benefits to compliant workers, and raises cost of non-compliance by raising penalties of non-compliance, the compliance rate will go up. Also when the enforcement system is strong with more systematic and frequent monitoring or inspection, and when the tolerance level of public authority to non-compliance is not low, then compliance rate

will be high.

In comparison to developed countries, benefits and government services given to compliant workers are likely to be small in developing countries while inefficient administration and monitoring system is more likely to require higher contribution rate for given benefit level. When earnings are not stable and wage level is low, future discount rate tends to be high, the disutility due to present tax payment not necessarily compensated by the promise of future benefit. Therefore, the myopia is more likely to prevail, and thus enforcement system has to be stronger in developing countries than in developed countries. With low productivity and limited financial resources, the government cannot afford the strong enforcement system in developing countries. Therefore, penalties may not be effective and the size of the non-compliant sector tolerated by the public authority may well be high in developing countries.

(B) Some institutional aspects

They are not all. There are other points which are only implicitly treated or overlooked in the formal description above.

First, institutional aspects should be clearly distinguished from policies in preparing implementation of compliance enhancing. For example, in the formal discussion described above, the costs arising from declaration forms & declaration procedures which are not reporter-friendly, regulations on declaration frequencies which do not reflect correctly the reality of the labor market, lack of coordination among various instances of social insurance administration, etc are not explicit, hidden behind the same parameter.

Second, when coverage is limited to, for example, large firms by regulations, government officials can constrain the coverage by continuously insisting to grandfather certain categories of workers of which administrative works are tedious and cumbersome. In a bureaucratic setting, inertia is strong once an institution is settled down, and officials of social insurance administration tend

to be resistant to working more intensively without additional allocation of budget and personnel, suggesting that motivating arrangements are necessary as well as additional allocation and personnel. In worse cases, rent-seeking bureaucrat or interest groups related to them can prefer the existence of non-compliance when they can profit in some way from the presence of the non-compliant sector. Then they will create an environment that makes non-compliance attractive or simply unavoidable. The behavior of government officials, as the latter both monitors the regulatory and enforcement systems and administers public services, plays a crucial role in the formation of the non-compliant sector.

Third, the information problem can be very important in developing countries. In discussions within a formal framework, everything is known and the agents have perfect foresight. However, in developing countries where a social insurance is newly introduced or supposed to expand, the role of information may be considerable. Economic agents can underestimate the benefits of social insurance based on imperfect information. Those underestimating agents usually begin to evaluate correctly when their compliant neighbors begin to enjoy benefits.

Fourth, the similar information problem can exist on the government side. It is usual in developing countries that budget or planning officers might not have evaluated seriously once-and-for-all cost of strengthening administration and its long-term effect. External economy of transparency may not have been explicitly and appropriately taken into account, which can have great influence on expenditure on administration. For example, by strengthening the monitoring and inspection, and thus compliance, developing countries can increase revenue collection. But also they can increase the equity of the tax system by making the tax administration more transparent. In some developing countries, increase of transparency can lead to huge efficiency gain by creating an enabling environment for private sector development, particularly when

non-transparency is related with corruption. Owing to recent progress in information and communication technology, the record-keeping and monitoring via cross-checking has become increasingly affordable. Therefore, declaration to one social insurance administration means declaration to other tax collecting agency, reducing the possibility of corruption.

Doubtlessly, explicit costs such as tax rates and job security provisions have a crucial role in explaining compliance. However, when above-mentioned institutional and/or informational factors, rather than explicit costs, are dominant in explaining incidence of non-compliance, which does not seem unreasonable in the context of developing countries, tax reduction may not be effective in reducing non-compliance. When compliance matters, therefore, the *raison d'être* and characteristics of undeclared work should be identified. Diagnoses can be accomplished on following points.

- Are explicit costs of compliance (such as tax rates and job security provisions) too high compared to benefits?
- Are benefits sufficiently accessible and large to induce workers?
- Can less explicit costs be reduced by rationalization of declaration forms, procedures, and regulations on declaration frequencies, and by better coordinating the administration of various instances of social insurance? If regulations are grand-fathering certain category of workers, is this limited coverage, more or less, related with government officials' behavior?
- Are workers sufficiently informed regarding the benefits and costs of social insurance?
- Are benefits from transparency correctly evaluated within the government? What is the cause, misunderstanding or influence of the interest groups?
- Is there any room for enhancing efficiency of enforcement system by technical devices?

2. Enhancing Compliance

(A) Stage of development

Certain level of economic development is necessary for pursuing and reaching universal coverage of social insurance. For example, it would be difficult to introduce social insurance and expand coverage in low income countries with extremely low productivity. But economic growth only will not suffice.

Failure of compliance can result from political reasons. Government can exempt taxes from small firms but does not care them either. It is the devil's deal to use Judith Tendler's term (Tendler, 2002). No tax, no care for small firms, providing sporadically privileged support packets, simply because it's convenient for the government or politicians to get their electoral loyalty. It is not only authoritarian and corrupted government, combined with unmotivated government officials, that is inclined to the devil's deal. It is also possible that ordinary government can be trapped in the devil's deal. Once the deal is made between politicians and those small-firm owners in the informal sector, it is difficult for either side to get out of it.

Development planning officials regard firms in the informal sector as an instrument for preserving and creating jobs rather than an opportunity group to stimulate economic development. The problem of non-compliance is deemed to have trade-off relation with job creation. Otherwise saying, when government officials do not see themselves as having the option to enforce the compliance to regulations, they tend to advocate special relief to small firms in the form of exemptions from compliance. When it is necessary to take initiatives to reform or restructure the economy, in their eyes, so is the need to support small firms. Therefore, government officials have to be convinced that those small firms can be upgraded and that they are an opportunity group to

stimulate economic development if compliance should be enforced. In this sense, the government has to be able to avail of development officials, who are able to identify bottlenecks to efficiency and productivity of small firms, and feasible policy measures. Insofar as these conditions are necessary, economic development might be said as a necessary condition for universal coverage.

(B) Reasonable tax wedge

Income support programs such as UI, UISA, and severance pay are financed in general by payroll tax. It was traditionally argued that as labor supply curve is vertical [inelastic] at least in the long-run, the incidence of payroll tax will be on workers wage without impact on employment (Hamermesh 1993, Gruber 1997). However, in many developing countries, the labor market is characterized by duality and the informal sector workers' labor supply curve tends to be flat in the long-run as well as the short-run, implying that the incidence of payroll tax would be on employment.

In many developing countries, where the inspection and penalty system is not effective, high level of tax wedge tempts firms to evade payroll tax, and workers also tend to accept job offers without payroll tax, and thus deprived of fringe benefits (which is also the origin of false independent workers in developed countries). Tax wedge should be reasonable so that other efforts should be effective, because no benefit is more attractive than a job for low income workers.

(C) Benefits sufficiently accessible and large

If employers and employees are not induced to declare employment records to the administration of the income support system, it is difficult that coverage is successfully expanded or compliance rate is enhanced only with government initiatives because the inspection and penalty system is not effective in

developing countries. When workers and employers collude, monitoring the compliance becomes extremely difficult and thus monitoring costs become unaffordable. If workers are active in defending their interest in the entitlement to income support benefits, which is the case with workers in developed countries, monitoring cost will become modest.

Social insurance compliance has different aspects than general tax compliance. Social insurance provides benefits while general tax does not. Social insurance, particularly income support system, requires much more complicated reporting structure than general tax administration. They can be designed in a way that risk-averse workers can improve their welfare by pooling their risk. However, to stimulate workers interest, benefits should be accessible to as many workers as possible. Also benefits should be sufficiently large.

Turkey introduced the unemployment insurance system in June 2000, and first recipients started to collect unemployment benefits in March 2002. The system models closely the standard OECD-type unemployment insurance: it is mandatory and covers all industries and occupations, mostly financed by employer and worker contributions; benefit levels are earnings-related; and the duration of entitlement is tied to previous employment history. However, dictated by the presence of the large informal sector and lack of administrative capacity, it eliminated continuing eligibility check. Worried about the moral hazard of benefit recipients, which was intrinsic to the unemployment insurance system, and the fraud, Turkish government set the initial eligibility condition strict.

Under Turkish unemployment insurance, to be eligible, the unemployed must register at the local employment office and have paid insurance premiums continuously for 120 days preceding the termination of employment, and 600 days in the three-year period preceding the termination. These initial eligibility conditions are too restrictive to the extent that Turkish unemployment insurance would protect only open-ended permanent workers who explain

inevitably extremely small fraction of those in unemployment pool. They provide little incentive for undeclared workers to declare themselves or to demand employers to report their employment record.

Thus those who are difficult to satisfy the restrictive eligibility conditions remain indifferent to the system. This implies that coverage will be limited even in the long-run and the newly introduced unemployment insurance system will not contribute to reducing the size of informal sector. In principle, any social benefit program can contribute to expanding the formal sector by providing workers with incentives of registering employment in the public administration. However, as the Turkish unemployment insurance system was designed only to cover a very limited number of formal sector workers, it could not contribute to compliance increase.

Korean government extended the coverage of unemployment insurance to all establishments with at least one employee in 1998. After the expansion of regulatory coverage, only those part-time workers working less than 80 hours a month and those workers employed less than a month remained legitimately excluded from EIS coverage. Also Korean government eased the initial eligibility conditions, relaxing the minimum contribution requirements from 12 months out of the last 18 months to 180 days of contribution out of the last 12 months. However, construction site workers could not be eligible because there were many workers whose employment contract fell below a month in construction sites. Therefore, even if "tax" compliance rate was not low in the construction industry, "employment record" compliance rate of the Korean unemployment insurance system was much lower (Hur and Shim, 2001). That is, many firms paid unemployment insurance tax, but did not report worker turnover correctly, and workers were not proactive in demanding the reporting (Hur and Yoo, 2001). Korean government changed the regulatory coverage and construction workers could accumulate their employment records from 2004.

In sum, if restrictive eligibility conditions provide little incentive for

undeclared workers to declare themselves or to demand employers to report their employment record, more loosened eligibility conditions will provide incentives to declare and register.

Furthermore, it would be desirable to introduce privileged programs for workers (such as privileged loan program for low wage workers, workers saving plan with privileged tax on interest rate, tax credit for low-wage earners, etc.) which requires employment record at employment office, to advertise those benefits, and to introduce facilitating arrangements for workers and firms to report employment records to local employment office. They will contribute in long run to enhancing compliance.

In Korea, where unemployment insurance together with training, subsidy, and job information service constitutes one component of the 'employment insurance system,' reporting firms were generously treated when they applied for subsidy programs of the EIS.

(D) Coordination among institutions

Inertia of administration and lack of coordination can hinder coverage expansion or compliance enhancing. Growing economies might have come to afford high monitoring cost, or monitoring cost might have been lowered during economic development. But behavior of public service may not have changed correspondingly.

By favor of computer and data processing technology, record keeping became extremely cheap and manageable. But record keeping should be clearly distinguished from record reporting. It is very much likely that traditional reporting forms, reporting procedures, and regulations on reporting may have been based on labor turn-over pattern of regular workers, i.e. workers with sufficiently long tenure. They could have been conceived in a way that they are not so friendly with computerization, or old system could not be so flexible as to admit changes. It is also possible that front office officers resist to

changes.

Government officials who made regulations of the income support system may not have known well about behavior of workers in small firms. Existing prototype conception of reporting mechanism can be far from perfect and may not fit the reality. If the conception of reporting system is based on traditional full-time regular workers, and one or several entity of public administration in the whole income support system resists to adaptation to changes of the labor market, feedback between small firms and administration can be blocked. Small firms in developing countries have little or weak voice in claiming improvement of administration, while large firms, which can avail of sufficient capacity to handle paper works to social insurance institution, not necessarily speaking for small firms.

Therefore, reporting process can be far from small-firm-friendly, which can lead to high cost in correct reporting, and small firms might prefer non-reporting to compliance. Small firms might want to bypass, if inevitable, regulations through bribery, or simply ignore, if possible, regulations to be non-compliant. Under these circumstances, labor inspectors might not be able to enforce compliance firmly at least for certain kind of workers, and subtle low-compliance equilibrium can result (Hur and Yoo, 2001). Monitoring cost might not be so high, but monitoring is not implemented. This explains why it is not rare in developing countries that social insurance administration cannot penalize with a heavy penalty on employers or imprison them, as the inspection authority of some industrialized countries does, because small firms have not reported workers and contributed social insurance premium correctly.

If one or several entity of public administration in the whole income support system resist to adaptation to changes of the labor market, the higher authority may have to coordinate those entities. It will not be possible unless the high authority is interested in the challenge and has willingness to coordinate. The high authority can be motivated by public opinion, debates in the National

Assembly, claims from NGOs, etc. It would help for the high authority to be informed of cost-effectiveness of ad hoc programs and expenditure for capacity building of administration.

When this type of coordination problem is confirmed, it would be desirable to establish an authorized task force and let it lead and coordinate different units of entities of which the income support system is comprised. When the Korean government extended the coverage of the unemployment insurance system in 1998 and when it further prepared its coverage extension to daily workers in 2002-3, it was via installing task force which coordinated different instances of unemployment insurance administration.

In Korea, unemployment insurance is regarded as providing the least interesting benefit among the four major social insurance schemes.⁷⁾ But it requires the most refined UI provides least interesting benefit among four major social insurance schemes. Untries but special attention will be paid to † record reporting & keeping system among the social insurance schemes because the benefit rule and eligibility rule of unemployment insurance require very concrete information on employment record: when, where, how long within a given period, and under what wage level a worker worked. Meanwhile, the capacity of enforcement was better at unemployment administration than at the National Pension and National Health Insurance because the former was administered by Ministry of Labor to which labor commissioners belong. Thus, other social insurance schemes could, more or less, piggyback on the record keeping and monitoring infrastructure. This

7) Korean Employment Insurance System (EIS), of which unemployment insurance is one pillar, was introduced in 1995 as the fourth social insurance schemes in Korea. The other three are the Industrial Accident Compensation Insurance, the National Health Insurance, and the National Pension, introduced 1964, 1977, and 1988, respectively. Like other insurance schemes, at start, coverage of EIS was limited to workers in large firms. But in 1998 coverage was expanded to all employees with more-than-a-month contract. Coverage expansion of EIS was soon followed by other social insurance schemes.

shows the possibility that expansion of income support program could be, in a certain context, a critical and very important momentum for expanding the formal sector.

(E) Let workers see entitlement pay

In developing countries where an income support program is newly introduced or supposed to expand, the role of information may be crucial. Workers can underestimate the benefits of social insurance because of imperfect information. Those underestimating workers usually begin to evaluate correctly when their compliant neighbors begin to enjoy benefits. It is absolutely necessary to let workers see it pays to be entitled to. It may take time. But the government of developing countries has to know waiting for certain time. If those non-compliant workers see that their neighbors benefit from the income support program, they would claim. Then monitoring costs will be reduced enormously.

In Korea, the system was advertised intensively in media with fascinating ideas and spectacular scenes in order that firms and workers are informed of benefits of unemployment insurance and other components of the employment insurance system.

(F) True cost and benefit of administration

Lack of administration capacity or high monitoring cost is one of principal causes of low compliance in developing countries. In developing countries, though the threshold firm size is different from one country, coverage has been limited by regulations for the consideration of administration cost.

Many small firms and their workers belong to the informal sector in developing countries. Their future discount rates are very high: they put much more importance on present income in comparison to future income. Workers and employers collude frequently and evade from tax regulations.

Consequently, inspection costs tend to be too high for resource-constrained government of developing countries, which is very much binding factor in expanding coverage. Therefore, it is usual that, thinking that expenditures on the enforcement system are inefficient, the budget office is reluctant to allocating resources in strengthening the enforcement capacity of social insurance administration. Furthermore, priority of investing on the infrastructure of income support program is not high in developing countries because they lack in financial resources and their capital market is imperfect. Cost-effectiveness of investment on income support program is judged lower than other investments directly contributing to production of value-added such as SOC construction, and other government investment.

With this tradition having lasted for long, even when coverage expansion of social insurance is desirable and has to be treated as a national agenda, the budget office of developing countries may not provide the ministry in charge of income support program with proactive support for increasing administrative capacity. When social insurance fails the dominant proportion of workers in coverage, and the effects of this failure are deemed large and continuing, and as a consequence, the government is obliged to introduce many ad hoc & inefficient supplementary programs in periodically or quasi-permanently, the budget office should be informed that the costs of the shaky social insurance system or tax administration, which will include expenditure on ad hoc supplementary programs, can dominate once-and-for-all cost of administration necessary for coverage expansion and compliance enhancing, and thus that enhancing administrative capacity of social insurance is an efficient way of budget allocation in the medium- and long-term perspective. This kind of knowledge sharing is particularly recommended when the administration costs are judged large in the initial phase and reasonable afterwards or decreasing while, in contrast, the need for ad hoc program would be continuing.

(G) Technical arrangements for staff-motivating programs

Effective monitoring and the use of sanctions would strongly reduce the non-compliance. That is, if the government strengthens the enforcement system, the size of the informal sector will shrink. However, the problem is the cost of enforcement. Enforcement require not only inspectors but also high level of administration capacity as a prerequisite. In developing countries, therefore, introduction of an income support program may imply a systematic increase of tax rate, without necessarily increase of enforcement. Monitoring cost can be remarkably reduced if the government can share the task of monitoring with trade unions and other NGOs.

Once coverage expansion is legislated and coordination system is in place, considerations on technical aspects become important. There are examples of technical initiatives which should accompany legislation initiative.

- Campaign-cum-guidance by visiting canvassers: In initial stages, guidance, instead of penalizing, is desirable. Canvasser program is an example of effective measures. Canvassers can visit workshops or call to give guidance to employers and workers. If this program can not last for long, it is good to do it by public works program. Particularly in the initial stage, it is good to introduce an evaluation system so that the performance of local offices should be evaluated and appreciated appropriately.
- Labeling of plants, shops, offices, etc.: Once canvassers visit workshops and the plants are insured, labeling on the entrance of firms such as UI-insured firm will have effect of declaration or monitoring.
- Workshops and encouragement programs for staff: Workshop among social insurance administrations, and bonus program for encouraging staff in local social insurance offices such as bench-marking visit to best practice institutions in other countries help to share knowledge and motivate staff members of the income support system.
- Cross-checking system by cooperation among different social insurance

agencies and tax office: Cross-checking among different social insurance administrations and tax office is a basic instrument to monitoring. It became extremely cheap and feasible with modern computer technology. But it should be harmonized with regulations on privacy protection.

3. Korea's Experience

In the general context of developing countries, there is a considerable limit in expanding coverage by policy measures when the size of the informal sector is dominantly determined by institutional factors. Paradoxically Korea is expanding the formal sector via coverage expansion of income support program. Korea has expanded its coverage of income support program in 1998, and further initiative was taken in 2004. Even if the extended coverage only explains 49.4 percent of wage workers as of June 2003, it is worth while to note the effort, rationale, and evolution of the Korea's experience (Table 3). In fact little is known about the feasible approach of coverage expansion in any developing countries.

In 1995, after more than two years of intense discussions and hearings, Korea introduced an unemployment insurance of compulsory social insurance type, together with training, subsidy, and job information service, which forms the 'employment insurance system (EIS).' At its introduction, unemployment insurance was limited to workers in firms with at least 30 workers, covering about 32 percent of total wage workers. The limited coverage was more or less due to the government's stance to exempt small firms and non-regular workers from the income support program.

There are several reasons for this. First, the marginal administrative cost increases as the coverage expands to smaller firms and non-regular workers. Second, due to high taxes and strict labor regulations of formal sector, low wage workers and small and inefficient employers have strong incentives not

Table 3. Coverage expansion of the Korean unemployment insurance

(Unit: thousand persons)

	Wage employment (1)	Contributing employers All Sizes (2)	Registered employees All Sizes (3)	Reg. employees /Wage employment (4)=(3)/(1)	Contib. employers Size 1-29 (5)	Reg. employees Size 1-29 (6)
Dec. 1995	13,045	39	4,204	0.322	2	43
Dec. 1996	13,387	44	4,331	0.324	2	45
Dec. 1997	13,387	47	4,280	0.320	4	77
Dec. 1998*	12,280	400	5,268	0.429	356	1,556
Dec. 1999	13,195	601	6,054	0.459	560	2,245
Dec. 2000	13,548	693	6,747	0.498	647	2,698
Dec. 2001	13,996	806	6,909	0.494	757	2,908
Dec. 2002	14,406	826	7,171	0.498	776	3,065
June 2003	14,524	814	7,186	0.495	761	2,911

Note : * Korea changed minimum establishment size of unemployment insurance coverage in 1998. Before 1998 minimum establishment size of the coverage was 30 workers. Since October 1998, the minimum size is 1 worker.

Source : Central Employment Information Office, *Monthly Statistics Employment Insurance*, various issues.

National Statistical Office, *Economically Active Population Survey*, various issues.

to participate in the social safety net programs (Loayza, 1994; Fortin et al., 1997). Therefore, the monitoring and enforcement cost will have to increase as the government tries to expand its coverage (Polinsky and Shavell, 2000). Third, the rent-seeking activities of government bureaucracy and political pressure may prevent to expanding the government-sponsored social safety net (Sarte, 2000). In fact, government officials did not want to expand coverage. It has been known secret that transactions, earnings and profits are not transparent at all in the construction companies, and they have been the source of huge amount of black money. This explains partly why every Chaebeol has

owned a big general construction company. Both the interest of politicians and construction company owners, combined with the very backward employment relation in construction sites, have prevented the expansion of the unemployment system and expanding the employment reporting.

To meet the needs of extended social safety net, the coverage was expanded during the financial crisis of 1997-98 to cover workers in all firms. Along the efforts of coverage expansion, the task force established within the government diagnosed bottlenecks on sites and through discussions and hearings, and investigated such points as follows:

- Whether explicit costs of compliance (such as tax rates and job security provisions) are too high compared to benefits,
- Whether benefits are sufficiently accessible, what benefits can be given to reported workers,
- Whether costs less explicit can be reduced by rationalizing declaration forms, procedures, and regulations on declaration frequencies, and by better coordinating administrations of various instances of social insurance,
- Whether workers are sufficiently informed regarding the benefit and cost of social insurance,
- Whether benefits from transparency are correctly evaluated, in particular, by budget office,
- What is the cause, misunderstanding or influence of interest group, and
- Whether there is any room for enhancing efficiency of enforcement system by technical device.

The benefit of transparency was evaluated so that budget office could support actively and relevantly the efforts of coverage expansion. The system was advertised intensively in media with fascinating ideas and spectacular scenes in order that firms and workers are informed of benefits of UI and other components of the EIS. Reporting firms were generously treated when they

applied for subsidy programs of the EIS. Very unrestricted 'recruitment subsidy' was given to small firms which newly hired and reported workers. Also enhanced enforcement efforts accompanied the legislation initiative.

At first, faced with labor market turmoil because of the 1997-98 financial crisis, expansion of the income support system was an imperative for the government to prevent social explosion. When the emergency was over, expanding the social safety net into the informal sector created certain dilemmas for the government. On the one hand, the expansion of the social safety net into the informal sector would increase the tax burden to the members of the informal sector. On the other hand, the expansion of the income support program, which meant the expansion of overall social insurance system, had become an irreversible policy request for Korean government, which also wanted policy initiatives to prove that the Korean economy was mature enough to provide minimum welfare benefits to its citizens, because the financial crisis proved that the nature of unemployment was characterized by dense spell for dominant proportion of workers.

There are several rationales why the mandatory expansion (with strong enforcement effort in the form of guidance and incentive for compliance on the one hand and penalty for non-compliance on the other hand) might make a good policy (Kim, 2003). First, the coverage expansion of income support program and thus social safety net frees up current household resources for current needs, resulting in an increase of the investment in human capital to the informal sector workers and their children. The increased human capital would in turn increase their potential in securing a more productive job in the formal sector with greater earning potential so that more workers can move from the lower paying informal sector jobs to the higher paying formal sector jobs. Second, the expansion of income support program requires a more pervasive and transparent social infrastructure so that the collection of taxes or social insurance premium and the provision of social benefits can be done

more efficiently. Therefore, the expansion of income support program would provide more transparent and disciplined economic environment in which firms and employees would both benefit in the long run, the additional cost imposed on the informal sector workers generating more than enough benefits in the long run.

Although the coverage was expanded, the coverage only modestly increased. The UI is covering, as of June 2003, 49.4 percent of all wage workers (compliance rate is estimated to be around 70 percent). Important limitations to further expansion of the coverage were set by a large segment of temporary and daily workers, who constitute about 80 percent of all the unemployed. Over 60 percent workers of these two groups were not reported to the unemployment insurance administration.

Regulations grand-fathering those workers employed less than a month at the same workplace were eliminated, and regulations were changed so that every workers had to be reported from 2004. Reporting information and procedure were simplified for frequently turning over workers. Various instances of the UI administration (collecting agency, employment information office, employment service office, front offices of reporting agency, etc) were coordinated so that the system fits frequently turning over workers and firms hiring those workers.

IV. Conclusion

In low income countries, unemployment is not well distinguished from (under)employment because underemployment is a general phenomenon. Thus most plausible income support program for the unemployed seems public works program, with social fund variants more effectively working depending on specific country's situation.

In middle income countries also, widespread informal sector workers experience recurrently unemployment which is not dense, and the government has limited financial resources allocable to administration capacity of income support programs. Tax and reporting compliance tends to be low for institutional reasons. Therefore, compliance is dependent more upon program adopted or design of the program than on enforcement and tax rates. To include as many workers as possible in the public income support program, first choosing or adapting to compliance-friendly program is important. A compliance-friendly program is the one where workers have strong interest in monitoring compliance. Severance pay individual account and UISA, with or without solidarity fund, are examples. When the fundamental working of any income support program is based on eligibility monitoring, compliance will be inevitably low in developing countries, because on the one hand few workers would be eligible, and on the other eligibility monitoring requires high level of administrative capacity which most of developing countries cannot afford.

Informal sector workers are characterized by non-compliance to government regulations. Informality is therefore a sufficient condition of non-compliance. Once a program is adopted in a developing country, coverage will be determined by at once regulations imposed by the government and complying behavior of the firms and workers. Government regulations usually grandfather a certain category of workers by consideration of just cause or for shortage of administration capacity. Private economic agents decide their behavior on compliance under given circumstances.

If the government expand the mandatory coverage by eliminating grandfather clause, and lowers explicit costs of formality such as the size of tax wedge and job security provisions, provides larger benefits to compliant workers, and raises cost of non-compliance by strengthening inspection system and raising penalties of non-compliance, the compliance rate will increase. Besides these formal aspects, expanding coverage to workers in the informal sector requires

Careful diagnosis of various instances of the existing institution and behavioral aspects of administration officials. As coordination and information problems may exist, confining the coverage of income support program, it is also important that an authorized task force leads and coordinates different units of entities of which the income support system is comprised.

Basic ideas in that stage, which may be helpful to the task force, are whether low coverage or low compliance resulted from force of habit in administration, high monitoring cost, or absence of coordination among tax collecting offices, administration of reporting routine, way of working in front office of the social insurance. An overall diagnosis, if not exhaustive, of forefront administration office, tax administration, social insurance administration would be helpful to be convinced if a considerable number of elusive workers and firms could be covered by reasonable and effective effort of administration.

Also there are rooms for enhancing compliance by having active recourse to small technical ideas to stimulate administrative activity of developing countries. The last, but not the least important thing is to let workers see it pays to be entitled to social insurance via advertisement, sufficient number of recipients, possibility of other benefits when reported, etc.

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비공식 부문이 큰 개발도상국 경제에서 실업자소득보존제도 적용률을 제고하기 위한 접근법

허재준

개도국에서는 제도적 요인으로 인해 조세 및 사회보험 적용률이 낮은 경향이 있다. 이로 인해 새로 소득보전프로그램을 도입할 때에는 감독이나 조세율보다 어떤 제도를 채택하느냐가 더 중요하다. 보다 많은 사람을 실업자 소득보전프로그램에 포착하기 위해서는 스스로의 유인에 의해 적용률이 높은 제도를 채택하는 것이 중요하다. 개별가입자의 적용률 제고 유인이 높은 제도는 퇴직금 개별구좌(Severance Pay Individual Account)나, 개인별저축구좌(UISA)가 그 예이다.

어떤 제도를 도입할 것이냐에서 나아가 하나의 실업자 소득보전프로그램이 이미 존재하고 있는 상태에서의 적용률 제고의 문제를 논하자면, 정부가 그 적용범위를 확대하고, 공식부문에 속하게 되었을 때 부담하게 될 비용(조세 등)을 줄여주고 받을 수 있는 혜택 수준을 늘려주며 감독이나 벌칙 강화를 통해 누락의 기회비용을 높이면 적용률이 올라갈 것이다.

이러한 공식부문적 특성 외에도 조세기관과 사회보험기관의 작동방식이나 그곳에서 일하는 직원의 행태를 진단하여 적용률을 제고하기 위한 노력을 하는 것도 중요하다. 일반적으로 기관간 정보교환이나 요원들의 일하는 방식이 효율적으로 작동하고 있지 않은 경우가 있기 때문이다.

개도국에서는 집행기관의 요원들의 유인프로그램 도입을 통해 적용률을 제고할 수 있는 여지가 존재한다. 또한 적극적 광고 등을 통해 많은 사람들이 수혜를 받고 있다는 사실과 자신들이 일했던 기록을 잘 관리함으로써 많은 혜택을 받을 수 있다는 사실을 알리는 것도 적용률 제고에 기여한다.

핵심용어: 소득보전제도, 실업, 적용률, 비공식부문