

# Issues in Developing a Common Framework on Informal Employment<sup>1</sup>

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## Section 1. Introduction

This paper has been written to stimulate discussion on the definition and measurement of informal employment in developed economies. Much has been written on the definitions of informal employment and the informal sector in the context of developing countries, and these definitions have been applied in collecting and analyzing data from labor force, multi-purpose household, and enterprise surveys. It is less common that the recommendations and techniques for measuring informal employment and informal sector have been applied in developed countries.

In high-income economies, it is more common to speak of ‘nonstandard’ or ‘atypical’ employment. The two concepts of ‘informal employment’ and ‘nonstandard employment’ are not identical. Informal employment typically refers to employment that is not subject to legal, social or economic regulations/protections. That is, the emphasis is on the regulatory status of the job or the enterprise. ‘Nonstandard employment’ refers to variations in the employment relationship relative to a dominant or traditional form. In this case, the emphasis is on the economic arrangement and the nature of the employment contract (be it explicit or implied).

In some circumstances, non-standard employment is defined analogously to informal employment. However, nonstandard employment more frequently refers to employment arrangements which are short-term and contingent in nature (e.g. short-term hires and day laborers), which are characterized by partial employment or volatile work-time regimes (e.g. part-time and on-call employment), or which sit uneasily between the standard employment status categories of ‘paid employee’ or ‘self-employed.’

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Nonstandard employment is frequently associated with a reduced level of social and regulatory protection (that is, nonstandard work is also often informal).

Our aim in this short paper is to raise a number of issues which we think are important when linking concepts and definitions of informal employment and nonstandard employment. The objective is to move closer to a framework for developed countries that can be used to measure informal employment in a way that is conceptually consistent with the approaches used to measure informal employment in developing countries.

Before moving forward, we need to say a few words about definitions. In this paper, we use the term ‘nonstandard employment.’ Other terms commonly used to refer to similar types of employment relationships or to a subset of these forms of employment include ‘atypical employment,’ ‘contingent employment,’ or ‘precarious employment.’ In some cases, actual definitions vary somewhat from one usage to another. We do not want to get bogged down in the details of all the variations in the usage of these terms here and therefore we use ‘nonstandard employment’ throughout.

We feel that a fruitful way of examining the intersection of informal employment and nonstandard employment is to treat these two concepts separately and then to see how they interact. As discussed above, informal employment is distinguished from formal employment through differences in the regulatory status of jobs (employment arrangements) or enterprises in which jobs are located. In contrast, we suggest that nonstandard employment categories differ from ‘standard employment’ in terms of (1) the type and degree of economic risk, including the strength of attachment between the person and the job, and (2) the type and degree of authority/autonomy which workers have in a particular employment situation. We discuss this approach in greater detail later in the paper.

The commonly used employment status categories were recommended in 1993 by the International Conference of Labor Statisticians (ICLS) to capture the distribution of risk and authority of jobs. The ICLS recognized that these categories will need to be further improved in the future. The original categories (e.g. paid employee, employer, own-account worker, unpaid contributing family worker, etc.) are often insufficient to fully reflect the economic arrangements associated with ‘nonstandard employment.’ To avoid confusion, we use the term ‘employment status’ to refer to the official status in employment categories and ‘forms of employment’ to refer to a broader set of employment categories that reflect the distribution of risk and control, but which also explicitly include various types of nonstandard employment. Table 1 presents a simple matrix to graphically illustrate our approach.

The remainder of this discussion paper outlines conceptual issues and measurement challenges which we feel need to be worked out before a common framework linking informal and nonstandard employment can be fully developed. Following this introduction, we discuss the concept and definitions of informal employment. In Section 3, we then turn to the issue of nonstandard employment. In

section 4, we bring together the two sets of issues together and summarize the issues and questions that would need to be addressed in order to establish a common framework. In section 5, we conclude by summarizing some of the lessons learned from an international workshop on Informal Employment in Developed Countries, held at Harvard University from October 31 to November 1, 2008 to discuss these issues. In so doing, we also highlight some concrete steps which could be taken to further develop the ideas and answer some of the questions we present in the remainder of this paper.

Table 1.

		REGULATORY STATUS	
		Formal	Informal
FORMS OF EMPLOYMENT (INCLUDING EMPLOYMENT STATUS AND NONSTANDARD ARRANGEMENTS)	Category A		
	Category B		
	Category C		
	Category D		
	etc.		

## Section 2. Informality and regulatory status

### 2a. Definitions of informal employment and the informal sector.

Before addressing issues entailed in capturing informal employment in developed countries, we briefly review the definitions of informal employment as developed by the ICLS and how these definitions have evolved over time. As discussed in the introduction, the concept of informal employment is meant to include employment relationships that are not governed by formal economic regulations and/or basic legal and social protections.

Labor statisticians have devoted considerable effort in recent years to develop international recommendations for defining informal employment. There is an important conceptual distinction between 'employment in the informal sector' and 'informal employment.' (see Table 2) The informal sector is comprised of all informal enterprises. Therefore, 'employment in the informal sector' in any particular country refers to all employment in enterprises which are classified as informal according to a common set of criteria. Employers operating informal enterprises, wage workers in these enterprises, informal own-account workers, and contributing family workers are included in this concept. In addition, informal partnerships and cooperatives would also be considered part of the informal sector. Note that the concept of 'enterprise' is broad and includes home-based production of goods for market exchange (e.g. industrial outworkers) and non-permanent sites of productive activity (e.g. mobile street traders and self-employed waste collectors).

To define the informal sector, informal enterprises must be distinguished from formal enterprises. In 1993, the 15th International Conference of Labor Statisticians (ICLS) adopted an approach for defining the informal sector that could be applied across countries. The resolution adopted by the 15th ICLS identified the following set of criteria for defining informal enterprises (Husmanns and du Jeu, 2002):

**Legal organization of the enterprise.** Informal enterprises are private unincorporated enterprises for which no consistent set of accounts are available that would allow the financial activities of the enterprises to be clearly separated from those of the household.

**Market production.** A portion of the goods or services produced by the informal enterprise must be sold or bartered in market transactions.

**Size and/or registration.** Informal enterprises are frequently defined in terms of the number of paid employees, i.e. in informal enterprises the number of employees falls below a given threshold. Alternatively, informal enterprises may be defined in terms of their registration status with respect to national regulatory frameworks and legislation.

In practice, the full set of criteria may not be consistently applied in defining the informal sector. Specifically, the legal organization of the enterprises may be unknown or presumed. Often, the size criterion and/or the registration criterion are the primary indicators used to identify informal enterprises.

In 2003, the 17th ICLS endorsed a framework which complements the concept of ‘employment in the informal sector’ with a jobs-based concept of ‘informal employment.’ Informal employment is defined to include *self-employment in the informal sector*, based on the earlier definition of informal enterprises, *plus employees in informal jobs regardless of where those jobs are located*. Informal jobs are generally defined as jobs that lack a core set of legal or social protections. The ICLS framework for defining informal employment includes the following guidelines (Husmanns, 2004):

**Informal own-account workers, employers, and members of producer cooperatives.** Own-account workers, employers, and members of producer cooperatives are engaged in informal employment if the enterprise in which they work is informal (as per the definition above).

**Contributing family workers.** The 17th ICLS recommendation is that all contributing family workers are classified as being engaged in informal employment.

**Paid employees in informal jobs.** Employees are considered to work in informal jobs if those wage and salary jobs lack basic legal and/or social protections, and/or if the employment relationship is not subject to national labor regulation or taxation. Husmanns (2004) provides a full characterization of the recommendation. “According to paragraph 3(5) of the [ICLS] guidelines, employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labor

legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.).

**Own-account workers producing goods for own-use.** Own account workers producing goods for their households' own final use are defined as working informally if they are also classified as employed in national surveys.

Note that the definition of informal employment is conditional on status in employment. That is, the definition of informality for the self-employed utilizes a different set of criteria than the definition of informality for wage employees. In addition, the concept of 'informal employment' includes employment relationships which are not located in an enterprise setting (e.g. domestic workers employed by households).

There are a variety of reasons why wage employment may be informal, based on the application of the ICLS definition: the jobs or the employees may not be declared; jobs are temporary or short-term, jobs are part time or have volatile working hours; jobs may be based in households, not enterprises; jobs may be subcontracted, or labor regulations may not apply or are not enforced. Note that many of the reasons behind the informality of jobs also correspond to categories of 'nonstandard' work. The two concepts are closely related – the nature of the employment arrangement is the cause of informality.

Table 2: Employment in the Informal sector vs. Informal employment:

	Employment in the Informal Sector –	Informal Employment
	Enterprise-based: Informal enterprises <i>only</i>	Job-based: <i>All</i> enterprises unless specified
Wage workers	All those in informal enterprises	Only those without access to social protection or specific employment benefits
Self-employed employers	All those in informal enterprises	Those in informal enterprises
Self-employed own-account, coop members	All those in informal enterprises	Those in informal enterprises (own-account = worker is enterprise)
Contributing family member	All those in informal enterprises	All
Own-use production		If are considered to be employed

## 2b. Informality: issues for developed countries

### 2.b.1. Self-employment and wage employment: Critical distinctions

**2.b.1.1.** The concept of informal employment has typically been applied to developing countries, but could equally be applied to developed countries. However, the extension of

the definitions of informal employment, as commonly applied in developing countries, raises a number of issues and questions in the context of developed economies.

**2.b.1.2 Informal self-employment.** As discussed above, informal self-employment is distinguished from formal self-employment by the nature of the enterprise. In developing countries with a large proportion of the labor force engaged in informal employment, informal enterprises often operate quite openly. Household surveys (including labor force surveys and surveys with a household enterprise module) are able to document the extent of these forms of employment. In developed countries, enterprises which operate outside of the government's regulatory sphere (for example, unregistered) are more likely to be clandestine than in developing countries. Enterprises operating outside the regulatory sphere range from the own account self-employed who do not report their income to enterprises with employees engaged in undeclared activities (cash-under-the-table, tax avoidance/evasion) and to illegal enterprises producing or exchanging illicit goods or services. This poses several notable challenges. Are the criteria that are often used in measuring informal self-employment in developing countries also applicable to measuring informal self-employment in developed countries? Given the more clandestine nature of unregulated self-employment in developed countries, can existing survey instruments be adapted to capture informal self-employment or are different approaches needed?

**2.b.1.3 Informal wage employment.** One approach to defining informal wage employment is in terms of access to basic social protections. This raises the question of what package of social protections is most relevant for defining informal employment in the developed country context. Legislatively mandated social protections vary enormously among these countries, from the U.S. situation (very few guaranteed protections) to the more regulated Western European models. Social norms regarding what constitutes a core set of basic protections may be more consistent across countries, but significant variation remains (and could be changing over time as employment arrangements become increasingly flexible). Violations of labor standards could also be used to identify informal employment. However, the stringency of labor market regulations varies from country to country and violations will be underreported in survey data. The legal standing of workers themselves may determine whether employment arrangements violate employment law, as in the case of unauthorized migrant workers. This is a particularly important employment category for many developed countries. Any employment of unauthorized migrant workers could constitute informal employment, since it, by definition, would lie outside of the formal regulatory structure.

**2.b.1.4 *De facto* and *de jure* informality.** Given the plurality of institutions, regulatory frameworks, and labor laws that exist in developed countries, it is useful to distinguish between *de facto* and *de jure* informality. Employment is *de facto* informal when actual employment conditions do not include basic social, employer-based, and legal protections. Employment is *de jure* informal when workers in certain employment arrangements do not have rights to core social protections based on current labor laws and existing legislation. In countries with extensive social protections and labor market regulations, *de jure* informality may be relatively rare and *de facto* informality more

common. *De jure* informality can change across different employment arrangements: disguised wage employees are treated in the law as self-employed workers. If this kind of reclassification is used to avoid labor laws, employment becomes both *de facto* and *de jure* informal.

## **2. b.2. Regulatory status and nonstandard employment**

**2.b.2.1.** It is worth noting that the regulation of employment encompasses a range of dimensions of employment: employment status per se, treatment in labor law, workplace health and safety laws, and contract law as well as how national legislation interacts with employer policies. Social protection is one dimension of the regulation of employment, albeit one with key implications for worker experience.

In developing countries, access to social protection may be an appropriate indicator for differential treatment by regulation because it correlates with other aspects of regulation of formal employment (e.g. labor law, workplace health and safety law). However, employment arrangements may be differentiated in more complex ways, among several dimensions. For example, coverage by welfare state regulation may not correlate closely with the presence of a written employment contract.<sup>4</sup>

The key social protections for which access is differentiated across employment arrangements vary among categories of countries. Even the notion of “welfare state social protections” varies across countries with some encompassing paid time off because it is state mandated, while others limit themselves to health and pension coverage.

In Western Europe, eligibility for welfare state provided benefits varies across employment arrangements. Welfare states that provide universal health and basic pension do not exclude most forms of nonstandard employment in principle; many also have provisions for including the self-employed (at their own cost) in the universal schemes for health and pension in particular. However, access to other publicly sponsored benefits, such as maternity and sick leave is closely linked to length of service (weeks or hours of work in a set period of time with a single employer). There is significant variation in the impacts of length of service requirements across countries, and across the multiple regulatory texts within countries. Lack of access to social protections due to length-of-service requirements is a particularly critical issue for non-standard workers across all EU member countries. Part-time workers are also affected because their work hours accrue at slower rates than full-time workers. For example, Danish fixed-term employees with contracts of over three months duration are covered by collective bargaining agreements and by a national law governing employment conditions for white-collar salaried workers. However, historically, fixed-term workers with contracts of shorter duration were not covered under this same national law and, therefore, ineligible for such mandated benefits as full pay for sick days, paid holidays, and not covered by the ground rules governing discharge and layoffs for regular employees (EIRO 2002).

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<sup>4</sup> One approach would be to recognize the regulatory status of formal employment as that which fits the ILO’s universal rights in employment declarations. Unfortunately, these standards are not as universally accepted, and respected, as might be expected.

In the United States, where social protection is employer sponsored and employer based<sup>5</sup>, health insurance and private pension access are most often restricted, or outright denied, to workers in most categories of nonstandard employment—limited duration hires, on-call workers, and casual and seasonal hires. This pattern is driven by employer practice, not by law. Temporary help industry workers are excluded from plans of the user employer and length of service requirements tend to limit their access to temporary firm-based health insurance plans (pension plan contributions are not available). Independent contractors, treated as self-employed, are not covered by employer-based plans.

In some Asian countries, access to social protection, is also used to sort among employment arrangements. Some states have universally mandated benefits; others have fewer benefits. For example, in Japan, one form of part-time employment with short hours entails restricted access to state-sponsored benefits.

In some of the transition economies, differentiation of employment arrangements occurs around treatment under employment protection legislation (dismissal and layoff restrictions) in particular—with varied degrees of restriction across countries. The employment contract per se, can be formal as in some Western European countries, but that is not a universal pattern. (In these countries, lack of enforcement of strong legislation, or practices that lie beyond the reach of out-of-date legislation seem to be an issue.) (EEO review 2006).

**2.b.2.2.** Identifying and addressing differences in regulatory status presents different challenges in countries that rely on a legal framework to regulate employment status (France, Italy, Denmark for example) than those that have a common law system for employment (e.g. US, UK). In countries with regulation of employment by contracts, the legislation encodes common (historically bound) understandings of formal employment. Changes to these understandings require new legislation or regulations, hence the proliferation of nonstandard employment contracts. In countries without employment contracts, social norms and common law standards are revealed in case law decisions and sometimes amended this way. In these latter settings, statistically capturing nonstandard employment is more difficult (and may require the use of proxies, such as access to social protection benefits, or protection from labor standards legislation).

**2.b.2.3.** Categories that are under-captured and require further attention from analysts and statisticians include the following:

A. Activities that *occur in a legal vacuum*: They are practices that are too novel in a particular country to have been the subject of legislation or are the result of “exit options” from the regulatory framework. Examples include home based work in some transition countries or temporary help employment. Home-based work may be taking place without a clear legal/contractual arrangement and workers are, by default, in informal employment. Also, if temp companies operate and the

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<sup>5</sup> Employer contributions toward a group health premium and a pension plan are tax deductible and not mandated.



government has not recognized triangular arrangements, there is ambiguity about how people would understand a survey question. Even in the US Current Population Survey, some temp workers do not know they are paid by a temp agency. These are the most problematic to capture statistically for obvious reasons.

- B. *Undeclared or unregistered employment*: First, the enterprise itself is unregistered—not registered with the appropriate regulatory institutions (board or commission) or not complying with tax law. If the “enterprise” is a one-person enterprise (self employed without employee), not being registered is a possible occurrence. Second, employment inside a registered enterprise may be undeclared. For example, a registered enterprise may not comply with income tax law or unemployment tax law. It may not declare some of the workers on its payroll. Concurrently, workers themselves may not declare their income for taxation (OECD 2008, chapter 2).
- C. *Illegal employment situations*: These occur when the enterprise itself is declared/registered but the employment conditions are managed in ways that are systematically and deliberately illegal. Most frequently, the cases will entail a systematic violation of labor standards and of other laws and regulations that impact work conditions (health and safety, immigration).

Where the enterprise itself is registered, it is difficult to distinguish between “unregistered” employment and “illegal” employment situations (B and C above). Enterprises that break one law or regulation tend to also not be in compliance with other laws with bearing on employment conditions. Evidence of violation in one area may correlate strongly with violations in multiple areas.

Cases of “unregistered” and “illegal” employment situations are slightly easier to capture than employment arrangements that occur in a legal vacuum. They are easier to define; they entail violations of some legal standards. Yet, they are difficult to document because stakeholders, primarily employers but occasionally workers as well, hide the practice.

In the US context, for example, Bernhardt et al. (2007) have begun to document examples of systematic illegal employment situations as part of a broader pattern of corporate practices called “unregulated” employment. In a preliminary study (Bernhardt et al 2007) employment practices that entail a mix of undeclared/unregistered employment and illegal employment (undocumented workers, health code violation, minimum wage violation) have been identified and sectors with likely higher incidence of such practices have been singled out for in-depth investigation (e.g. restaurants/food service, personal services, and day labor companies.) Empirical work is underway in Chicago, Los Angeles, and New York City to locate, assess, and statistically capture the incidence and severity of “unregulated” employment. The field work approach entails constructing a population sample through interpersonal networks of low wage workers in target industries (Bernhardt et al. 2007).

Another example of illegal employment situations concerns misclassified independent contractors in the US. These are workers who by law should be to be (dependent) wage/salary employees but are treated as self-employed by the employing company.<sup>6</sup>

D. *Illegal activities entailing illicit goods*: This category includes activities that are comparable in character, but maybe not incidence, to illegal activities entailing illicit goods in developing countries. Examples include: sex trades, trafficking in products from endangered species, or the manufacture and sale of illegal drugs.

### **2.b.3. Statistical challenges**

**2.b.3.1. Measuring the unregulated.** In developed countries, employment that is unregulated/unregistered – be it located in enterprises that are registered or unregistered employment in registered enterprises – is often hidden. It is hidden from regulatory authorities but also from conventional employer and household surveys. This is in sharp contrast with data collection in developing countries where it is frequently possible to get answers from unregistered enterprises and workers in surveys and the primary challenge is devising definitions and appropriate survey questions. In developed country contexts, because people do not report unregistered employment, statistical difficulties are compounded, there haven't been opportunities to establish conventional ways to query respondents about unregistered status. Thus, creating conditions in which situations in which unregistered employment can be safely reported by worker (and/or worker advocates, or even employers) will be an important step.

**2.b.3.2. Markers of informality.** During the discussion held at the October 2008 workshop (for which a version of this paper was prepared), quite a number of participants concurred that a first step towards a common framework for conceptualizing informal employment in developed countries could involve the measurement of various 'markers of informality.' We concur with this proposition. The markers would aim to capture dimensions of *de facto* informality, for example, whether workers have access to health insurance, or pension.

Participants discussed principles that these markers would need to observe to be useful:

- Markers must be indicators of access to protection from economic risks (or other risks with impact on economic outcomes), or that limit exposure to economic risk. In combination, they would help identify who has a high degree of exposure to economic risk.
- Markers should cut across most categories of employment arrangements, but they may have different meaning across different ICSE categories, particularly between wage and self-employment. These markers are manifestations of risk exposure, and sometimes a consequence of how employment relationships are structured.
- Markers should cut across type of enterprise (small, large, formal/informal).

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<sup>6</sup> There also are independent contractor situations that are truly ambiguous. The relationship presents characteristics of economic dependence but, when audited by regulatory agencies, the finding remains in favor of self-employment classification.

A provisional list of such markers includes:

- Unemployment insurance/income replacement (for wage workers, at this point not for the self-employed.<sup>7</sup>);
- Health insurance;
- Pension coverage (with subsidy from employer, from the state);
- Rights under employment and labor law (coverage); and
- Paid time off: for example, vacation days; sick days; holiday pay.

Others might include additional dimensions without which they would consider employment informal. They would include: medical leave eligibility (unpaid or paid); hourly (or daily) vs. monthly pay, in some countries where lack of monthly pay is a marker (e.g. Japan); and volatility of hours.

These markers have different implications in different institutional environments but, for the most part, are markers of economic risk exposure. They are dependent on either, or both, state and non-state regulation (non-state = collective bargaining coverage; employer provided training). They are independent of the presence/absence of an employment contract (although in some countries the presence of an employment contract is the “trigger” for access to all these degrees of protection.)<sup>8</sup>

The markers would aim to capture dimensions of *de facto* informality: whether workers have access to basic health care, pensions, paid leave, maternity/paternity benefits, and legal protections. Coverage by collective bargaining agreements could provide some indicators of non-state governance of employment arrangements.

We fully expect that the relevance of these different markers would vary from one institutional context to the next. Given the existence of detailed labor market data, estimates of such markers could be developed for a range of countries. These markers could then be analyzed within countries (e.g. by employment arrangements, including non-standard employment categories) and across countries (by broad social protection/labor regulation regime). The relevance (and relativity) of the various markers could then be assessed.

## **3: Employment status and forms of employment**

### **3a. Employment status and economic arrangement**

The International Classification of Status in Employment (ICSE-93) provides a set of standard categories for classifying employment along two basic criteria : (1) the type and degree of economic risk, including the strength of attachment between the

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<sup>7</sup> For those in ambiguous situations between wage and self-employment, there are questions about how to deal with income replacement during economic downturns.

<sup>8</sup> Notably excluded from this list: minimum wage; legal protection from disciplinary discharge; legal regulation of layoff terms and conditions; and place of work (as a characteristic, not the basis for a new category)

person and the job, and (2) the type and degree of authority/autonomy which workers have in a particular employment situation. The general concept of employment status – defined in terms of the allocation of economic risk and the allocation of authority and control – is particularly relevant for analyzing categories of nonstandard employment. It is often argued that the emergence and growth of non-standard employment involves a reallocation of economic risk and authority. If so, employment status categories should be defined so as to be able to track such changes over time. If the employment status categories typically used are not able to identify changes in the allocation of economic risk, the degree of autonomy, and the distribution of power/control, then there is a need to revisit how employment status categories are constructed.

### **3b. The standard employment status categories**

Five primary employment status categories are identified in the ICSE-93, with a sixth residual category (“not classifiable by status”). The five categories are:

- (1) employees;
- (2) employers;
- (3) own-account workers;
- (4) members of producers' cooperatives; and
- (5) contributing family workers;

The ICSE-93 notes that the first category – employees – may be further subdivided into employees with a stable contract and those without a stable contract.

Many forms of nonstandard employment can be classified within the five main groups of the ICSE-93 (Greenwood and Hoffmann, 2002). For example, part-time workers are employees. Often short-term hires and temporary workers would also be considered wage employees (possibly without a stable employment contract). Independent contractors would usually be classified as either own-account workers or employers, depending on whether they themselves have employees.

However, the lines between these employment status categories may be blurred for other forms of nonstandard employment. For example, short-term hires who sell their labor to a series of different employers share characteristics of wage employees and the self-employed. “On-call workers” who only work when called, represent a similar intermediate case. Day laborers may be classified as wage employees or self-employed, depending on the interpretation of the implicit contract, even if the employment arrangement is effectively the same in both cases. Forms of “disguised wage employment” are treated as self-employment for regulatory purposes, but may have risk and authority profiles similar to wage employees (indeed, standard wage employees may enjoy lower risk and more authority in many situations).

Although the five broad ICSE-93 employment status categories can theoretically accommodate the various forms of nonstandard employment typically discussed, the question raises as to whether these categories are sufficient for documenting the

distribution of risk and authority among various forms of employment and for analyzing changes in the degree of risk and authority over time. We return to this question below.

### **3.c. Existing dimensions of non standard employment**

Nonstandard employment is partly captured with a number of distinct ‘forms of employment.’ These categories are more or less consistently applied across countries.

#### ***3.c.1. Short-term hires, agency workers and day laborers***

##### *Short-term hires:*

In Western European, Japan, Korea, and some transition countries with formalized contracting, this category includes “fixed term contracts”, and/or “temporary contracts” of employment. For example, the European Labor Force Survey has a category for this employment arrangement. The sorting mechanism usually involves the existence of an explicit, expected, duration of employment.

In common law countries, such as the United States, there exists customary personnel policy terminology that explicitly name some employment arrangements as “limited duration/short-term” hires but there is little systematic statistical documentation of the arrangement.

##### *Temporary agency workers and temporary/day labor:*

This type of short-term employment is brokered through a labor market intermediary. This category of employment is captured in many countries, either through the labor force survey because it is a named employment contract (e.g. France “*contrat d’intérim*” or Korea) or “arrangement” (US)<sup>9</sup>, or through an employer survey (employment statistics) for the temporary/staffing industry (Japan, US). There may be a few exceptions; in some countries, the legal framework has not kept pace with the growth of temporary staffing and the arrangement exists in a legal vacuum and, therefore, is captured partly or not at all. For example, day laborers pick up very short work assignments (of one or few days) with shifting employers. When day laborers are brokered into work through a temporary staffing company, they will be counted in this category. Otherwise, they are generally omitted.

##### *On-call workers:*

Under this arrangement, workers work as needed and with short notice. They are “on-call” for a particular employer or group of employers. In countries with formalized contracting, these arrangements may fall under “casual” or “intermittent” employment contracts. Certain forms of day labor are governed by “daily contracts” in Japan<sup>10</sup> and Korea for example. In the US, this category is documented in the Current Population Survey (but does not correspond to a formal employment contract).<sup>11</sup>

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<sup>9</sup> US Current Population Survey Supplement, Contingent and Alternative Employment Arrangements.

<sup>10</sup> Day labor contracts are for work lasting under one month.

<sup>11</sup> See footnote 8.

*Cross-cutting dimension: Contingency (employment security/continuity)*

Particularly for countries without formalized employment contracts, a “contingency” variable can be constructed as a proxy for some (not all) dimensions of non-standard employment. A measure of contingency may capture *expected* employment continuity. This is the case in the United States where the labor survey includes a measure of contingency. The Current Population Survey Supplement on Contingent and Alternative Work Arrangements captures varied degrees of employment continuity, Contingent workers are: 1) Wage/salary workers who expect their job will last one additional year or less and who had worked at their job one year or less; 2) wage/salary and self-employed workers/independent contractors who expect their job will last one additional year or less and who had worked at their job, or been self-employed, one year or less; and 3) Workers who do not expect their job to last. The latter definition is the broadest. While, by itself, the measure of contingency has limited application, it can be used in conjunction with other indicators available in the same survey to assess the degree of employment discontinuity and likely risk associated with specific forms of employment.

***3.c.2. Part-time workers (work-time regime as a status category, not hours of work outcome)***

While part-time work hours are defined differently across countries, and sometimes across employers within countries, two aspects of part-time employment relate to the notion of employment informality. First, in countries without formalized employment contracts—and often with lighter government regulation and few universal benefits—part-time status constitutes a unique employment status that goes beyond limited and/or volatile hours of work. Part-time status is often used to restrict access to employer based health insurance, employer sponsored pension, and paid time off for some workers (who are labeled “part-time” regardless of effective work hours).<sup>12</sup> Second, part-time jobs can be sorted according to *hours* into very short hour jobs and other part-time jobs. The presence of very short-hours part-time may be used as a proxy for casual employment, or employment leading to severe economic vulnerability.

***3.c.3. Own-account self-employment (self-employed without employees)***

Self-employment that is economically vulnerable and/or limited in control/autonomy is, by all accounts, one feature of informal employment to be documented in developed countries. As discussed earlier, often the size of the enterprise is used to identify informal self-employment particularly when labor force surveys do not contain other variables for distinguishing informal self-employment. , Based on size alone, all own-account self-employment would be classified as informal – capturing the notion that very small-scale self-employment typically represents highly vulnerable employment. For this reason, own-account self-employment, particularly outside of agriculture, has been of primary interest in capturing dimensions of informal employment in many developing countries.

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<sup>12</sup> For part-time jobs in US retail trade example, see Carré and Tilly with Holgate 2007).

A number of OECD countries, particularly Western European countries, as well as Japan, capture statistics on the self-employed without paid employees. This measure, however, has limitations. In developed countries, the category of own-account self-employment masks significant differences in earnings and working arrangements. It encompasses arrangements ranging from self-employed day laborers, micro enterprises, or workers paid exclusively on commission to independent professionals. Thus, in aggregate, the category is insufficiently informative about the dimensions of informal employment. This heterogeneity is also present in developing countries but represents far less of a hurdle to analysis because there are far fewer independent professionals.

In some cases, the way within-category heterogeneity has been handled is by creating bifurcations based on occupation, regrouping the self-employed without employees along a professional/non-professional dimension. This type of analysis enables researchers to differentiate the self-employed along a dimension of market power.

### ***3.c.4. A few thorny issues***

Among the following dimensions of employment, some present particular definitional challenges for statistics while others are pointers to informality and might be used as proxies when specific categories of employment are not yet captured in official statistics.

**3.c.4.1. The economically dependent self-employed.** Two categories of economically dependent self-employed are not captured in official statistics of developed countries:

*(1) workers who fit the legal criteria of wage employee but are treated as self-employed by their customer/employer.* Criteria are usually set in employment law and “social security” eligibility rules. As we noted above, employers who break the law (civil offence) do not report their practice, neither do workers (either out of ignorance, or collusion).

In the US context, the extent of misclassified independent contractor status cannot be assessed unless administrative audits that are used to determine whether a worker should have been treated as a dependent wage/salary worker<sup>13</sup> are conducted in statistically random fashion and over a large number of employers. Currently, inspection programs are ill suited to do so because their primary goal is to target likely violators, particularly those that have shown indication of systematic violation, so as to maximize the recouping of lost tax revenue (past offenders and firms in industries with a history of the practice) (GAO 1989, Carré and Wilson 2004, Donahue et al. 2007).

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<sup>13</sup> Administrative audits usually concern non payment of payroll taxes by the presumed employer, usually audits of unemployment insurance tax compliance. This type of audit can be triggered by a worker filing for unemployment insurance, not realizing they have been treated as independent contractor. Another type of administrative audit entails matching individual income tax reports against employer reports of payments to independent workers (GAO 1989).

Another “trail” than can be followed to pursue the documentation of occurrences of misclassification comes from answers to the US Current Population Survey. During the 1990s and as late as in 2005, a small fraction of respondents to this household employment survey (CPS) reported their status as Wage worker in the main part of the survey and as Independent Contractor in the Alternative Work Arrangement supplement the survey.

(2) *self-employed workers in highly dependent relationships*. Examples include subcontractors that are dependent on one or only a few customers for their entire livelihood. These individuals work in an ambiguous status between self-employment and wage employment. The lack of a common understanding of the degree of dependency of their situation, and of a legal standard that reflects current arrangements make statistical reporting very difficult. Conversely, shifting norms on dependent employment, with greater acceptance of autonomy on the part of the wage employee (particularly professional and para-professional occupations) contribute to muddying the thinking on this subject.

**3.c.4.2. Voluntary and involuntary status.** As a rule, for measurement, researchers would rather avoid measures of satisfaction with employment arrangement, whether the arrangement is “voluntary” or not, because such measures are context dependent and are likely to change over time for the same respondent. Furthermore, contexts (e.g. availability of other options, access to child care) and the constraints they create in worker choice, vary across countries, so that measures of voluntariness are difficult to interpret cross nationally. We would rather rely on measures that capture economic dimensions of the employment arrangement.

Taking account of these limitations, and of the fact that measuring voluntariness in labor force surveys is an insufficient and approximate means to capture economic constraint, we note that the voluntary/involuntary distinction has been used in developed countries as a “flag” to sort among desired and undesired “flexibility” in employment relations.<sup>14</sup> It has been used as a proxy to indicate the existence of barriers to labor market mobility when little else is available. For example, in US studies, it has been used with part-time and some categories of alternative employment arrangements.<sup>15</sup> Also, some French analyses of part-time use a “constrained part-time” category.

In developed countries, for which employment arrangements and under what conditions is the notion of voluntariness a useful criterion to invoke to define employment arrangements, or distinguish within them? And under what conditions is a *measure* of voluntariness sufficiently understandable (across countries) and reliable (across time)? Furthermore, are there situations when voluntariness, however reliable, is irrelevant in helping define employment arrangements?

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<sup>14</sup> This notion of voluntariness is not useful in developing countries because the sources of constraints are so numerous and affect broad swaths of the workforce; therefore, the notion does not increase researcher ability to distinguish among employment arrangements.

<sup>15</sup> Carré and Heintz (2008) tabulate involuntary independent contractors. See below.



Furthermore, voluntariness has been a dimension under consideration in developing country research for assessing whether or not there is mobility across formal and informal employment and among segments within these broad divisions. In an environment where employment relationships are regulated to vastly different extents across countries and the degree of labor mobility is constrained by a range of different factors, the meaning of voluntariness will undoubtedly vary across national contexts. Nevertheless, it is worth considering how the notion of ‘voluntariness’ could be used to delineate distinct employment arrangements with a particular distribution of risk and authority.

**3.c.4.3. Multiple job holding.** Multiple job holding, a dimension often reported in labor force surveys, can, when combined with nonstandard employment or other dimensions of employment (e.g. status=self employed; hours=part-time, particularly short hours part-time) be used as an indicator of economic risk and a pointer to informal employment. A related dimension is working excessively long hours.<sup>16</sup> This dimension can, when combined with nonstandard employment or other dimensions of employment, be used as an indicator of economic risk.

**3.c.4.4. Location of work.** Multiple aspects of location of work matter to employment experience. The most important dimensions are whether a person is working: on a single work site or rotates among sites; on the site of the employer of record; in public space; in the employer’s residence; or at the worker’s own home.

In developed countries, which aspect of the location of work is likely to be associated with informal employment? Possible associations with informality include when the locus of work is not overseen by the employer of record (supervision and employment of record are decoupled). All other aspects of the location of work will likely need to be coupled with other dimensions of employment arrangement (nonstandard relationship, unregistered/undeclared employment or unregulated employment) to be pointers of informality. One possible exception is the case of home-based work which exists in a legal vacuum in some transition countries.

### **3d. Limits of current categories to capture all forms of employment**

The discussion above suggests that, although the broad ICSE-93 can accommodate the various forms of nonstandard or atypical employment often identified in the literature, it may not be able to fully characterize the distribution of risk and authority associated with the emergence of new employment arrangements, including forms of self-employment with a high degree of dependency. A review of recent attempts to classify various forms of nonstandard employment in different settings is instructive.

Ceccato and Tronti (2005) propose a conceptual framework, based on work being done at ISTAT, for classifying atypical employment in Italy. They identify three dimensions along which employment arrangements may deviate from the standard or

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<sup>16</sup> For the US, Drago, Wooden, and Black (2006) finds very high hours among occupation groups low in the occupational hierarchy.

typical norm:

- 1) stability
- 2) work-time regime
- 3) entitlement to social rights

The first two dimensions – stability and work-time regime – may be considered criteria for determining employment status, while the issue of entitlement to social rights more closely corresponds to the concept of formality/informality (as outlined above). Ceccato and Tronti also point out that in Italy, as in other countries, work has been organized on the basis of self-employment when, in other contexts, wage employment arrangements would have prevailed. Again – this underscores the inadequacy of broad employment status categories in fully capturing the distribution of risk and control.

Carré and Heintz (forthcoming 2009) focus on similar categories of employment in their analysis of ‘precarious employment’ in the U.S. – short-term hires (temporary employees, day laborers, on-call workers, and temp agency workers), involuntary part-time workers and workers with multiple part-time jobs, and involuntary independent contracts (as an indicator of the dependent self-employed). The focus is on stability of the employment relationship and the work-time regime, but also includes a preliminary analysis of the allocation of risk and control among different types of self-employed workers.

Grubb, Lee, and Tergist (2007) analyze changes in South Korea’s labor market and the erosion of permanent employment (job-for-life type arrangements). Here the emphasis is on a radical change in the degree of stability and permanence in the employment arrangement – the rise of what is termed nonregular employment in the Korean context. A reduction in the degree of social protection (i.e. greater informality) has been associated with this shift, although legislative changes may help to counter the erosion of social protections.

An ILO (2006) study of Japan defined regular employees as those whose term of employment is not fixed, excluding part-timers and workers on loan from another employer. Nonregular employees are all other workers, including part-time workers, contract workers, and ‘workers on loan.’ According to the ILO study, approximately one-third of all employment arrangements can be considered nonregular. Like Korea, Japan has also experienced a rapid growth in these forms of employment in recent years. The dimensions of nonstandard work are similar to those identified in other studies: atypical work time regimes and short-term hires/fixed term contracts. Contract workers, including those in brokered employment arrangements (called “dispatched workers” in the report) are also included.

The report identifies two classes of “in-between” workers. Workers in the first group are treated as employees in terms of personnel management and statistical categories but whose work arrangements exhibit elements of self-employed work – for example, workers on commission such as taxi drivers and certain sales-related

occupations (e.g. insurance policies); telecommuters; and multiple job holders. The second group includes workers who are categorized as “self-employed” but whose employment arrangements have characteristics in common with wage employees – for example, franchise owners (whose self-employment may be dependent on a larger firm) and actors, dancers, entertainers, software engineers, programmers, certain salespeople, and many construction and transportation workers who often have a contract with only one company for extended periods of time.

A paper submitted by the Australian Bureau of Statistics (2000) to a joint ECE-Eurostat-ILO seminar on measuring the quality of employment argues that information on the following variables is needed to fully characterized work arrangements:

- employment status (the standard categories: wage employee, employer, self-employment ... but also includes contract work and casual employees).
- Access to benefits (social protection/informality)
- Job duration (stability as an aspect of employment status)
- Hours worked and stability of hours
- Ability to chose/influence hours of work (including flexibility in when work occurs)
- Multiple job-holding, shift work, location of work (e.g. home)

Again – issues around stability, work-time regime, and social protection/informality are evident here. An effort is also made to distinguish “voluntary flexibility” (ability to have some control over work time) from “involuntary flexibility”. As discussed previously, this raises questions of whether indicators of “voluntarism” - efforts to assess whether individuals freely choose nonstandard employment because they feel they are better off by doing so – are appropriate for assessing the distribution of risk and authority. The degree of economic and social risk an individual associates with a particular employment arrangement depends on other institutional factors, including the composition and characteristics of the household and the distribution of responsibilities for non-market work essential for sustaining families.

These studies (and others) suggest that the classification of status in employment could be profitably extended to additional subcategories of wage employment and self-employment. Based on the discussion in this paper, a number of categories suggest themselves:

Wage employment:

- short-term hires, fixed term contracts, and contingent employment
- part-time, volatile hours, and atypical work time regimes
- brokered employees
- employees paid on commission

Self-employment

- dependent self-employment, self-employed workers with one employer, disguised wage workers.

- self-employed with volatile working hours, seasonal or erratic employment

As discussed earlier, these categories could be analyzed along with the various ‘markers of informality’ to better understand how differences in employment arrangements are correlated with varying degrees of informality.

A number of challenges present themselves for designing information systems that can capture the various forms of nonstandard employment. For example, the categories of employment listed above are not mutually exclusive. Short-term hires often also work part-time – how should such workers be classified? In addition, certain characteristics of employment arrangements are difficult to capture in existing survey instruments (e.g. the degree of dependency in self-employment). However, the above categories could be used as a starting point to explore the issues raised in this paper.

#### **4. Toward Improving Status in Employment Categories**

A common framework is needed that will permit the classification of varied forms of employment that present characteristics of informality in developed countries. We have taken as our point of departure the definition of informal employment developed by the ICLS. We have then highlighted issues that arise when applying these definitions to the context of developed countries. We have also discussed efforts to capture new and emerging forms of employment, specifically nonstandard arrangements, and related these concepts to the established employment status categories – meant to capture the distribution of risk and authority/control.

We think this exercise is a necessary first step towards developing a shared operational definition for informal employment in developed countries, one that takes into account the fact that informal forms of employment often manifest themselves in terms of nonstandard employment relationships. This paper puts forward the position that it is the intersection between informal employment and these diverse forms of employment (standard and nonstandard) that is critical for presenting a comprehensive picture of the structure of employment apparent in developed economies today.

However, much more work needs to be done to realize a common framework. The expertise of both statisticians and analysts is needed to create a usable approach for capturing the full range of changes in employment across developed and developing countries. Where might this exploration go next? We propose some thoughts and questions for further exploration and discussion.

First, fully capturing the distribution of risk and authority across all forms of employment in developed countries requires broadening the existing ICES categories with other forms of employment. This suggests that the ICES categories may require additions and/or modifications and these changes be incorporated into existing data

collection system. Practically, we see two challenges. The first is that some nonstandard forms of employment are not statistically captured at all—and we believe that applying the informal employment definitional criteria will help in this regard. Second, even existing nonstandard categories are not accurately comparable cross-nationally—and we believe that applying a common framework will be essential to solve this problem.

A first step might be comparing cross nationally existing measures for nonstandard forms of employment. This simple step has been challenging because countries capture nonstandard forms of employment to varied degrees of thoroughness. A subsequent step might be to ask to what extent definitions of informal employment can be applied in developed countries and to examine how the concepts of informal and nonstandard employment intersect in existing survey instruments. Clearly, issues we have raised, and other emerging issues, about meshing nonstandard categories and informal employment will come into play. Importantly, the limitations of existing ICES categories may once again become pronounced.

A number of questions suggest themselves. Within each country, and eventually cross nationally, what is possible given existing data collection practices? What do analysts need to know to come closer to capturing informal employment in their own country in ways that are internationally comparable? What can be done and where are the gaps? Given strengths and limitations of each country's data collection, what are appropriate first steps to improve measurements of informal employment?

Why is this effort important? Given the changes that have been happening to labor markets and the structure of employment worldwide, understanding employment dynamics, trends in labor market structure, and patterns of worker mobility seem increasingly important analytical goals for analysts. Accurate and common measurements of informal employment are critical for improving our understanding of these far-reaching forces and transformations. Therefore, exploring the intersection of the categories of non-standard employment and the markers of informality, discussed at length earlier in the paper, would be revealing. Once we have a better understanding of the nature of informality in developed economies, we can extend the boundary of research on informal employment. For example, it would be useful to know whether trends in informalization in developing countries are similar to or distinct from the growth in nonstandard employment observed in developed countries. At a very basic level, it would be helpful to know the fraction of global employment which is informal and whether that share has been growing or falling over time.

In addition, as concern continues to grow over global inequalities and the size of the 'working poor' population, understanding the role of informal employment becomes increasingly important. We also need to grasp patterns of worker mobility (from one job to another) and whether barriers to mobility mean that informal and nonstandard employment become 'poverty traps' for vulnerable groups. Such analysis will require panel datasets that are comparable in fundamental ways across countries. The starting place for such research work is the common approach we are advocating for in this discussion paper.

## Section 5: Lessons from the October 2008 Workshop

In this revised version of the paper, we have incorporated much of what we learned from the workshop convening producers and users of statistics and held by WIEGO at Harvard University in October 2008 (see Statistics Program at [www.wiego.org](http://www.wiego.org)). This section reports further insights from the discussion.

As discussed in an earlier section, quite a number of participants suggested that working on shared markers of informality would be one way to bridge ICLS definitions of informal employment with developed countries statistics on employment, particularly non-standard employment categories. Also, there was a fair amount of consensus about what remain challenging data issues. These include: 1) How to handle own-account self-employment which in developing countries is a marker of vulnerability but not so in some developed countries where the category also includes professionals. 2) How to handle unincorporated enterprises of the household sector and finding appropriate markers for “no work, no pay” situations. 3) How to incorporate undocumented immigrant status; and recent immigrant status as pathways and possible correlates for informal employment in some countries. (In several countries, particularly the US, undercounting of immigrants affects estimates for day laborers.<sup>17</sup>) 4) How to document unregistered, or undeclared, activity in developed countries where survey respondents do not provide such information, unlike in developing countries.

Some participants in the workshop, both WIEGO and non-WIEGO affiliates, noted plans to explore issues raised in the workshop in future work. A number planned to explore markers of informality in their own country and in a cross national comparison. Others thought to explore dimensions of *de facto* informal employment. A number of producers of statistics noted their country’s survey was due for revision and they would explore new categories and, importantly, clarify criteria used in used in definitions to more fully encompass dimensions of informal employment. The question of “false self-employment” was due for exploration and better documentation in a number of countries. All concurred that the question of to what extent economic risk is covered by basic social protections is one way to sort among different employment arrangements.

WIEGO and one of the workshop participants, contributed to statements at the 18<sup>th</sup> International Conference of Labor Statisticians (24 November – 5 December 2008.) requesting a review of the ICSE to identify ways in which it could be modified and further developed to better reflect contemporary realities and economic and social concerns. In its final report, the 18<sup>th</sup> ICLS highlighted the “need to review the range of existing national practices and user requirements with respect to statistics on status in employment and other aspects of contractual arrangements...”(ILO 2008) This has been taken forward in the work program of the ILO Statistics Bureau. Following the workshop, WIEGO posted participant papers on the Statistics Program page at [www.wiego.org](http://www.wiego.org). Going forward, WIEGO has engaged in a planning process to

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<sup>17</sup> US population controls are to be revised with estimates to account for undocumented immigrants.

plan further similar meetings progressively integrating developing country specialists in the discussions around specific topics. Pending funding, WIEGO also plans to commission country analyses exploring dimensions of informality, testing the “markers of informality” discussed in this paper, as well as testing other approaches. These commissioned studies will provide substantive focus to subsequent meetings bringing expert users and producers of labor force statistics from both developing and developed countries together to review and revise, as needed, the common framework and related categories of employment.

## References

- Australian Bureau of Statistics (2000) “Measuring the diversity of employment arrangements in the Australian labour market”, Joint ECE-Eurostat-ILO Seminar on the Measurement of the Quality of Employment, Geneva, May 3-5.
- Bernhardt, A., S. McGrath, and J. DeFilippis. 2007. *Unregulated Work in the Global City*. New York: Brennan Center for Social Justice.
- Carré, Françoise and James Heintz Forthcoming 2009. “Dimensions of Employment “Precarity” and Gender in the United States.” Presented at York University, November 2007 (revised). Forthcoming in Iain Campbell, Leah Vosko, and Martha MacDonald, Editors. Volume on Precarious Employment, Routledge.
- Carré, Françoise and Randall Wilson. 2004. *The Social and Economic Costs of Employee Misclassification in Construction*. Construction Policy Research Center, Labor and Worklife Program at Harvard Law School, and Harvard School of Public Health. December.
- Ceccato, Francesca and Tronti, Leonello. 2005. “The growth of atypical jobs in the Italian labour market”. Joint ECE-Eurostat-ILO Seminar on the Measurement of the Quality of Work, Geneva, May 11-13.
- Donahue, Linda H., James Ryan Lamare, and Fred B. Kotler. 2007. *The Cost of Worker Misclassification in New York State*. Cornell ILR School, Research Studies and Reports. February.
- Drago, Robert, Mark Wooden, and David Black. 2006. “Long Work Hours: Volunteers and Conscripts.”
- European Industrial Relations Observatory. 2002. “Non-permanent employment, quality of work and industrial relations.” EIRO Online.2002- 02.  
<http://www.eurofound.europa.eu/eiro/2002/02/study/tn0202101s.htm> (accessed October 2008)
- European Employment Observatory Review. 2006. “Overview of System Experts’ National Article on Flexicurity Submitted at the End of November 2006.” Autumn. Pp. 5-36.
- Grubb, David, Jae-Kap Lee, and Peter Tergist. 2007. “Addressing labor market duality in Korea.” OECD Social, Employment, and Migration Working Papers No. 61. October 5.
- Houseman, Susan and Machiko Osawa, eds. 2003. *Non-standard Work Arrangements in Japan, Europe, and the United States*. Kalamazoo.Mi: Institute for Employment Research.



Hussmanns, Ralf. 2004. "Statistical definitions of informal employment: Guidelines endorsed by the seventeenth International Conference of Labor Statisticians." Presented at 7<sup>th</sup> meeting of the Expert Group on Informal Sector Statistics (Dehli Group), New Dehli, February 2-4.

Hussmanns, Ralf and Brigitte du Jeu. 2002. "ILO compendium of official statistics on employment in the informal sector." STAT Working Paper 2002 – no. 1. ILO Bureau of Statistics.

International Labour Office. (ILO) 2008. Eighteenth Conference of Labour Statisticians (ICLS) , Report I - General Report., Geneva.

ILO (International Labor Office). 2006. *Report on Non-regular Workers in Japan*.

Michon, F. 1999. *Temporary Agency Work in Europe*.(Dublin, European Foundation for the Improvement of Living and Working Conditions)..

U.S. GAO. (Government Accounting Office) (1989) 'Tax Administration: Information Returns Can be Used to Identify Employers Who Misclassify Workers', GAO/GGD-89-107.

Vosko, Leah, Nancy Zukenwich, et Cynthia Cranford. 2003. "Precarious Jobs: A New Typology of Employment." *Statistics Canada: Perspectives*. October. pp. 16-26.