Gender, Informality and Employment Adjustment in Latin America

Working Paper No. 85

Rossana Galli
and
David Kucera*

Policy Integration and Statistics Department
International Labour Office
Geneva

April 2008

Working papers are preliminary documents circulated
to stimulate discussion and obtain comments

* The authors would like to thank colleagues at ILO-SIAL (Information System and Labour Analysis) in Panama, who provided the data used in this paper. We would particularly like to thank Bolivar Pino at ILO-SIAL. We are also very grateful to Tita Prada de Mesa for facilitating the contact with ILO-SIAL. For their helpful comments, the authors would like to thank Marie-Thérèse Chica, Susan Hayter, Tita Prada de Mesa and Stephanie Reynolds, as well as the participants of the International Conference on Engendering Macroeconomics and International Economics in Istabul, July 2007, particularly Lourdes Beneria, Diane Elson, Ajit Singh and Anne Zammit.

ILO Cataloguing in Publication Data

Galli, Rossana; Kucera, David

Gender, informality and employment adjustment in Latin America / Rossana Galli and David Kucera ; International Labour Office, Policy Integration and Statistics Department. - Geneva: ILO, 2008
49 p. (Working paper ; no.85)

ISBN: 9789221213420;9789221213437 (web pdf)

International Labour Office

informal employment / woman worker / men workers / trend / Latin America

13.01.3

Printed in *Switzerland*

Abstract: The paper uses panel data for up to ten Latin America countries to analyze whether informal employment functions as a cyclic buffer for formal employment as well as whether women's employment functions as a cyclic buffer for men's employment. The paper also evaluates related patterns and trends of men and women's representation in formal and informal employment, using three different definitions of informality, including addressing informal employment within formal establishments based on whether workers have social security coverage. The paper does not find strong evidence of informal employment functioning as a buffer, though does find evidence of women's employment functioning as a buffer within informal employment. Neither does the paper find strong evidence of increases in informal employment in Latin America in the 1990s, with the exception of Brazil. The papers finds that the disproportionate share of women in informal employment found in prior studies, based on an establishment-type definition of informality, results entirely from women's over-representation in domestic services and indeed that women are under-represented (as employees and employers) in small firms. The paper also finds that in several Latin American countries, sizeable shares of workers in informal establishments have some form of social security coverage. However, the share of workers with social security coverage is generally lower for women than men.

JEL classification: J16, J40, J60.

Résumé: Le document utilise des données recueillies au moyen d'un panel dans dix pays d'Amérique latine pour analyser d'une part, si l'emploi dans le secteur informel agit comme un tampon cyclique pour l'emploi dans le secteur formel et d'autre part, si l'emploi des femmes agit comme un tampon cyclique pour l'emploi des hommes. Le document évalue également les schémas et les tendances de la représentation des hommes et des femmes dans les secteurs formel et informel, en utilisant trois définitions différentes de l'informalité, l'une d'elles s'intéressant aux emplois informels aux sein d'entreprises du secteur formel et basée sur l'existence d'une couverture sociale pour ces emplois. L'étude ne démontre pas catégoriquement pas que l'emploi dans le secteur informel agit comme un tampon bien qu'elle démontre que l'emploi des femmes agit comme un tampon pour l'emploi dans le secteur informel en général. L'étude ne démontre pas non plus une augmentation claire du nombre d'emplois dans le secteur informel en Amérique latine depuis les années 1990, sauf au Brésil. L'étude montre que la part disproportionnée du nombre d'emplois du secteur informel occupés par des femmes, révélée dans des études précédentes, basées sur la définition de l'informalité fondée sur l'entreprise, résulte complètement d'un surreprésentation des femmes dans les services domestiques et d'une sous-représentation (comme employées ou employeuses) dans les petites entreprises. L'étude révèle également que dans plusieurs pays d'Amérique latine, une part importante des employés des entreprises du secteur informel bénéficie d'une forme de protection sociale. Néanmoins, la part des employés bénéficiant d'une couverture sociale est généralement plus faible pour les femmes que pour les hommes.

Classification JEL: J16, J40, J60.

Resumen: En el documento se utilizan los datos de diez países de América Latina, analizados por un grupo de trabajo, a fin de examinar si el empleo informal actúa como un elemento regulador cíclico para el empleo formal, y si el empleo de las mujeres funciona como un elemento regulador cíclico para el empleo de los hombres. En el documento también se evalúan los patrones y tendencias correspondientes de la participación de hombres y mujeres en el empleo formal e informal, para lo cual se utilizan tres definiciones diferentes de informalidad: Entre ellas destaca la de abordar el empleo informal en empresas formales basándose en determinar si los trabajadores disponen de una cobertura de seguridad social. En el documento se señala que no hay pruebas contundentes de que el empleo informal funcione como elemento regulador, en cambio sí las hay con respecto al empleo de las mujeres como elemento regulador dentro del empleo informal. Tampoco hay pruebas sólidas en cuanto al aumento del empleo informal en América Latina en el decenio de 1990, con excepción de Brasil. Se indica además que el desproporcionado porcentaje de mujeres en el empleo informal, comprobado en estudios anteriores según la definición de economía informal basada en el tipo de empresas, se debe totalmente a la representación excesiva de mujeres en los servicios domésticos y al hecho de que las mujeres están subrepresentadas (como empleadas y empleadoras) en las pequeñas empresas. En el documento se considera, asimismo, que en varios países de América Latina, una parte considerable de trabajadores de empresas informales dispone de alguna forma de cobertura de seguridad social. No obstante, la proporción de trabajadores con una cobertura de seguridad social suele ser más baja para las mujeres que para los hombres.

Clasificación JEL: J16, J40, J60.

The Policy Integration and Statistics Department

The Policy Integration and Statistics Department pursues the ILO's decent work and fair globalization agenda from an integrated perspective. It consists of the Bureau of Statistics and the Policy Coherence Group.

The central objective of the latter is to further greater policy coherence and the integration of social and economic policies at the international and national level. To this end, it works closely with other multilateral agencies and national actors such as Governments, trade unions, employers' federations, NGO's and universities. Through its policy-oriented research agenda, it explores complementarities and interdependencies between employment, working conditions, social protection, social dialogue and labour standards. Current work is organized around four thematic areas that call for greater policy coherence: Fair globalization, the global poor and informality, macro-economic policies for decent work, and emerging issues.

Labour statistics play an essential role in the efforts of member States to achieve decent work for all and for the ILO's support of these efforts. These statistics are needed for the development and evaluation of policies towards this goal, for assessing progress towards decent work, and for information and analysis of relevant labour issues. The ILO Bureau of Statistics works with integrity, independence and high professional standards to provide users within and outside the ILO with relevant, timely and reliable labour statistics, to develop international standards for better measurement of labour issues and enhanced international comparability, and to help member States develop and improve their labour statistics. It maintains strong professional relationship with national statistical systems and with statistics offices of other international agencies.

Director of the Policy Integration and Statistics Department: *Stephen Pursey*
Director of the Bureau of Statistics: *Sylvester Young*
Director of the Policy Coherence Group and Research Advisor: *Rolph van der Hoeven*

Gender, Informality and Employment Adjustment in Latin America

Contents

Gender, Informality and Employment Adjustment in Latin America

1. Introduction

Informal employment is commonly thought to serve as a buffer for formal employment over the course of business cycles, particularly in developing countries (Cf. Carneiro 1997; Maloney 1997). The basic logic of this hypothesis is that in the absence of strong unemployment insurance systems, workers who fall out of formal employment during cyclic downturns have little choice but to take up informal employment. This dynamic underlies debates about the meaningfulness of the unemployment rate as an indicator of labour market slack in developing countries. Yet there are a number of reasons to call this hypothesis into question. There are several factors determining the magnitude of the procyclicality of formal employment and thus the need for informal employment to function as a buffer. Perhaps more fundamentally, informal employment is highly heterogeneous, and while some types might be expected to move countercyclically, others seem more likely to move procyclically. In the absence of an unambiguous theoretical expectation, this paper focuses on what the data tell us on these issues.

There is also a literature on women's employment as a buffer for men's employment over business cycles, with its own set of competing hypotheses, depending importantly on patterns of gender segregation across jobs that are more or less secure over business cycles (e.g., Rubery 1988; Kucera 2001). Given that men and women are differently concentrated in formal and informal employment, as well as within different types of jobs within formal and informal employment, there is clearly overlap between the hypotheses of informal employment and women's employment as cyclic buffers. There is however little systematic empirical evidence on informal employment as a buffer, and most studies of women's employment as a buffer address developed countries. It is hoped that this paper makes a useful contribution by providing evidence on both issues, as well as on patterns of gender segregation between and within formal and informal employment.

1.1 Informal Employment as a Cyclic Buffer

What are the determinants of whether informal employment functions as a cyclic buffer? Several factors come to mind, most obviously the strength of a country's unemployment insurance system. We study Latin America, which in spite of having high shares of informal employment is in many respects the most developed of developing regions, with comparatively high levels of per capita income and (at least for a number of countries in the region) comparatively strong social protection, including unemployment benefits (Botero et al. 2004). Consistent with this, there is a good deal of movement in Latin American countries into and out of open unemployment, and thus it is unemployment that appears to serve to a significant extent as a buffer for formal employment (Table 1). There has also been a trend increase in unemployment in a number of Latin American countries in recent years, suggesting a changing dynamic among formal and informal employment and open unemployment. Also relevant is the extent to which formal workers leave the labour force altogether in downturns, entering into neither open unemployment nor informal employment.

There is consistent empirical evidence for Latin America countries of stronger employment protection legislation associated with less formal employment volatility, lessening the need

for informal employment to serve as a buffer.[1] Worth noting in this regard is that employment protection legislation weakened in a number of Latin American countries in the 1990s (the period we study), potentially increasing the volatility of formal employment and, all else equal, increasing the need for informal employment to serve as a buffer (Heckman and Pagés-Serra 2000; Frisoni and Kongolo 2002). It is also reasonable to expect greater stability in public sector than private sector formal employment, with the volatility of total formal employment then depending on the relative size of public and private sectors. The share of public sector employment declined in Latin America in the 1990s, also potentially increasing the volatility of total formal employment. In addition, adjustments to changes in output can occur not only through changes in the number of workers but also changes in hours worked, thus dampening the volatility of employment. Our study looks only at changes in employment, and it is these changes – particularly shifts into and out of informal employment – that are relevant to the buffer hypothesis.

The above discussion pertains to the magnitude of the procylicality of formal employment rather than the direction with cyclicality. As with formal employment, there are similar factors affecting the magnitude of volatility of informal employment. For instance, informal workers may also become openly unemployed in downturns, as one study of Mexico finds (Calderon-Madrid 2000). It is also reasonable to expect that much labour adjustment in informal employment occurs through changes in hours worked rather than changes in the number of workers.

In contrast with formal employment, however, for informal employment there are a number of determinants not only of the magnitude of cyclicality but also, more fundamentally, of the direction of cyclicality. Useful in this regard is Portes' classification of types of informal employment into "survival," "independent" and "subordinate" informal employment, which he describes as follows.[2]

> In terms of their functions, at least three types of informal "sectors" could be distinguished. First, there was an informality of "*survival*," most visible and best publicized, whose sole function was the physical reproduction of those involved. Invented self-employment at the margins of the urban economy such as begging, shoe shining and casual street vending represent examples of these activities. Second, there was a vast sector of *independent* informal enterprises catering to the needs of the low-income urban population. These activities stretched all the way from the production and sale of foodstuffs to the repair and reconditioning of TV sets, other appliances and even automobiles…. Third, there was a sector of enterprises *subordinate* to formal firms through various subcontracting arrangements which helped supply the high-income market…. [T]hese subcontracting chains benefited directly the large formal producers by increasing their labour flexibility and lowering their costs (Portes 1994, pp. 165-7, italics added).

A variation of "subordinate" informal employment is off-the-books hiring of workers directly by formal firms and working within these firms (Portes and Shauffler 1993).

Survival informal employment corresponds to the archetypal informal employment of the buffer hypothesis and is thus expected to move countercyclically. This hypothesis may work not only through an individual worker moving from formal to informal employment, but also occur by proxy, through an "added worker effect." For example, the main income

[1] Cf. Hopenhayn (2000); Kugler (2000); Márquez and Pagés (1998); Micco and Pagés (2004); Paes de Barros and Corseuil (2000); and Saavedra and Torero (2000).

[2] Cf. Tokman (1989) for an alternative perspective on the heterogeneity of informal employment.

earner in a family may lose his or her job in formal employment, leading other family members to enter into the labour force by taking up informal employment.[3]

Independent informal employment is expected to vary in the same direction as the income of urban dwellers and, on these grounds, to move procyclically. We do not limit this to "low-income" urban dwellers, however, as does Portes. For within informal employment is the category of relatively well-paid self-employment, commonly desired by workers in both formal and informal employment and corresponding most closely to independent informal employment. Studies on El Salvador, Mexico and Peru finds that self-employed workers tend to be older than average, which the authors' argue results from life-cycle patterns in which younger workers continue as wage earners (in formal and informal employment) until they have accumulated enough capital to set up their own businesses, for which conditions are likely to be most favorable during upswings (Maloney 1999; Marcouiller et al. 1997). Self-employed workers may also sell their products to formal establishments on a non-subcontracting basis (Zuin 2004). All these factors argue for independent informal employment to move procyclically.

Subordinate informal employment can move either procyclically or countercyclically. In the procyclical scenario, formal firms using subordinate informal employment might, for a number of reasons (e.g., because of strong employment protection or to endeavor to maintain favorable relations with regular employees) adjust to downturns by lessening reliance on subcontracted and off-the-books workers. On the other hand, formal firms might substitute subordinate informal for formal workers as a cost-cutting measure during downturns (or as part of a trend), thus creating countercyclical patterns of subordinate informal employment.

Considering survival, independent and subordinate employment together, therefore, it is difficult to have a clearcut expectation as to whether informal employment as a whole moves procyclically or countercyclically. An alternative perspective is provided by Beneria and Floros' notion of "degrees of informality," based on their study of workers in Bolivia and Ecuador, in which greater informality is associated with greater job insecurity by definition:

> [W]e classify jobs as having a low, medium or severe/high degree of informality. Jobs with a *low degree of informality* refer to permanent, regular jobs in private and public sectors as well as self-employed activities that a person has steadily been engaged in for over 60 months with at least 19 steady work days per month. *Medium informal jobs* refer to self-employed activities held between 24 and 60 months with an average of 12-18 steady days of work per month, and piece-rate work for private individual/contractor involving working contracts with a time period of over one year. *Highly informal or severely precarious employment* includes those formal and informal jobs classified as temporary or casual, self-employed activities that have highly irregular days of operation or below 12 work days per month, and subcontracted or piece-rate work involving contracts with a time period of less than one year (Beneria and Floro 2006, p. 202).

One complication is that our informal employment data are not available with either Portes' or Beneria and Floros' breakdowns. Particularly regarding Portes' classification, this results in somewhat of a mismatch between our motivating hypotheses and empirical findings.

[3] Thanks to Diane Elson for this insight.

1.2 Women's Employment as a Cyclic Buffer

By including gender in the analysis, one might pick up part of the distinction among types of informal activities insofar as men and women are concentrated in them differently. Of course these gender differences are important in their own right, and indeed there is a sizeable theoretical and empirical literature on the role of women as a buffer workforce. This focuses, however, on developed countries and thus corresponds more closely to formal than informal employment. As regards men and women's employment, the buffer hypothesis posits that women tend to be last hired and first fired and thus that their employment is more procyclically volatile than men's. This literature also hypothesizes, however, that women (being generally paid less) may be substituted for men during downturns as a cost-cutting measure, resulting in a countercyclical pattern of women's employment. The possibility of such a countercyclical pattern is referred to as the substitution hypothesis, in contrast to the buffer hypothesis, and is analogous to the above discussion regarding the substitution of subordinate informal employment for formal employees during downturns.

Women may also be disproportionately concentrated in sectors (e.g., services) or occupations (e.g., clerical) that are less vulnerable in downturns, providing them with a measure of job stability over business cycles. Conversely, in some sectors (e.g., apparel) women may be disproportionately concentrated in production jobs, which are generally more vulnerable to job loss during downturns. In this sense, patterns of gender segregation by sector and occupation are closely linked to patterns of men and women's relative employment volatility.[4]

Though the literature on the role of women as a buffer workforce largely addresses developed countries and therefore formal employment, similar considerations apply for informal employment regarding the link between patterns of gender segregation and patterns of men and women's relative employment volatility, depending on how men and women are concentrated in survival, independent and subordinate informal employment. Some authors suggest, for instance, that women are likely to be disproportionately concentrated in subordinate informal employment (Carr and Chen 2004). The rationale is that women constitute the bulk of the workforce of labour-intensive export-oriented manufacturing industries. In these industries, it is argued that intense competition pushes companies to cut labour costs by decreasing the number of permanent employees and increasing the number of largely female casual and home workers, such as through sub-contracting with smaller informal establishments.[5]

In these discussions of informal employment and women's employment as business cycle buffers, informal employment is hypothesized to move countercyclically and women's employment procyclically – that is, in opposite directions. Regarding informal employment, the buffer functions through a change in employment status, with formal workers *becoming* informal workers in downturns and vice versa in upswings (with the exception of the "added worker effect" noted above). In this sense, formal jobs are more vulnerable than informal jobs in downturns, with the latter assumed to be there for the taking even in the face of weak aggregate demand. Regarding men and women's relative employment volatility, in contrast, there is no analogous change of status. The hypothesis

[4] Relevant in this regard is a study of Costa Rica, Ecuador and Uruguay showing strong and persistent patterns of occupational segregation by gender over the 1989 to 1997 period (Deutsch et al. 2002).

[5] The point is illustrated by Portes (1989, p. 29), who reports that in the Uruguayan leather export industry, women accounted for more than two-thirds of skilled home workers and sweatshop labourers.

is rather that women workers are more vulnerable than men workers in downturns, resulting in the greater procyclical volatility of women's employment. Women are generally thought to be disproportionately concentrated in informal employment, which our data confirm. This effectively conflates the hypotheses of informal employment and women's employment as business cycle buffers. An additional consideration is the "added worker effect," insofar as main income earners in formal employment are disproportionately male and added workers in informal employment are disproportionately female. In describing our empirical results we nonetheless follow the convention of regarding the countercyclical movement of informal employment and the greater procyclicality of women than men's employment as positive evidence for the two respective buffer hypotheses.

In sum, there are competing sets of hypotheses as to whether informal employment as well as women's employment function as buffers over business cycles. We use a unique dataset that enables us to empirically test these hypotheses and to evaluate trends and patterns of men and women's representation in various types of formal and informal employment, based on three different definitions of informality. Two of these definitions address on whether workers have some form of social security coverage, enabling an analysis of gender differences in social security coverage between formal and informal employment as well as gender differences among employment categories within formal and informal employment.

The remainder of this paper is structured as follows. Section 2 surveys the relevant empirical literature. Section 3 discusses the data on and definitions of formal and informal employment permitted by the data. Section 4 describes trends in formal and informal employment and men and women's representation in different types of formal and informal employment. Section 5 provides main empirical results regarding informal employment and women's employment as cyclic buffers, and Section 6 concludes.

2. Prior Empirical Evidence for Latin America

2.1 Informal Employment as a Buffer

Many studies addressing the cyclical movement of informal employment are fairly anecdotal in nature, at least for Latin America. For instance, no studies were found that compared patterns across a sizeable number of countries, and neither do many studies evaluate an extended period of time and thus complete business cycles, limiting the ability to distinguish between cycle and trend. That said, the available studies, using varying definitions and evaluating both shares and raw numbers of formal and informal employment, suggest on balance a countercyclical pattern of informal employment.

Several studies observe a decline in formal employment and an increase in informal employment during the mid-1980s economic crisis in several Latin American cities, for instance Portes (1989) on Bogotá, Montevideo and Santiago and Franks (1994) and Pradhan and van Soest (1995) on urban Bolivia. Another study finds the same pattern for Sao Paulo during the late-1980s to early-1990s recession (Carneiro and Henley 1998). A study of formal and informal employment shares in Peru from 1990 to 1995 found a generally countercyclical movement of informal employment, with the share increasing overall during the downturn up to 1992 and then declining for two of the three upturn years thereafter (Saavedra and Chong 1999). Another study for Peru also found a generally procyclical movement of both numbers of formal employees and shares of formal employment from 1987 to 1997 (Saavedra and Torero 2000). This movement was more

strongly procyclical later in the period, which the authors attribute to weakening job security regulations in the 1990s.

Maloney examines employment shares of formal salaried, self-employed, informal salaried, contract and unpaid workers for urban Mexico from 1987 to 1993, during which 1990 was a peak year (Maloney 1997). Regarding categories of informal employment, Maloney finds a *procyclical* movement of self-employment shares, which provides evidence for his life-cycle view of self-employment, in which workers from other employment categories, including formal employment, are expected to enter into self-employment when times are good. However, the movement of shares of contract and unpaid workers is countercyclical while the share of informal salaried workers shows an overall upward trend. Looking at the movements of shares of formal salaried employment provides a summary sense of the relative cyclicality of formal and informal employment. The share of formal salaried employment is quite flat over the 1987 to 1990 upturn but is downward over the 1991 to 1993 years of slower growth. This suggests that, on balance, the movement of formal employment tends to be procyclical and thus that of informal employment to be countercyclical. This is consistent with the evidence provided in a study on Mexico by Calderon-Madrid (2000), which shows procyclical movements of workers from informal into formal employment.

2.2 Gender and Informality

Several empirical studies of Latin American countries analyze movements of formal and informal employment over time separately for male and female workers. These studies find notable differences between male and female workers in formal and informal employment.

In a study of formal and informal employment in El Salvadoran urban areas, Funkhouser evaluates movements of individual male and female workers within and between formal and informal employment from 1991 to 1992, a period of rapid GDP growth in El Salvador, as well as how such movements are associated with changes in earnings (Funkhouser 1997).[6] The study finds a fair amount of mobility between formal and informal employment for males but considerably less for females, especially regarding movement from informal to formal employment. For males initially in informal employment, 7.3 per cent moved into formal employment over the period; for males initially in formal employment, 4.7 per cent moved into informal employment. For females initially in informal employment, only 2.1 per cent moved into formal employment, well under the rate for males; for females initially in formal employment, 3.3 per cent moved into informal employment.[7] The author finds that those less likely to move are the better educated, those with more work experience, heads of households and married women,

[6] With informal employment defined to include the self-employed, family workers, domestic workers, and employees in firms of four or fewer employees, excepting professional and technical employees, and with formal employment defined to other employees. Employers are excluded from both categories.

[7] Looking at those who have changed jobs either within or between formal and informal employment, a similar picture emerges regarding male-female differences. For males, of the 19 per cent of who were in informal employment in 1991 and subsequently changed jobs, 40 per cent moved into formal employment (the rest moving within informal employment); of the 16 per cent of who were in formal employment in 1991 and subsequently changed jobs, about 29 per cent moved into informal employment. For females, of the 12 per cent of who were in informal employment in 1991 and subsequently changed jobs, only 17 per cent moved into formal employment; of the 12 per cent of who were in formal employment in 1991 and subsequently changed jobs, 28 per cent moved into informal employment.

which is attributed to the greater ease with which these workers are able to achieve a match between jobs and their personal characteristics.

For males those who changed jobs between 1991 and 1992, roughly the same earnings increases are observed for those moving from informal to formal employment as for those changing jobs within formal or informal employment. For males in formal employment in 1991, however, moving into informal employment resulted in much smaller earnings increases (about one-tenth) than males moving from informal to formal employment or changing jobs within formal or informal employment. As for females, moving from informal to formal employment resulted in much higher earnings increases than changing jobs within either formal or informal employment. And for females in formal employment in 1991, moving into informal employment resulted in very substantial earnings declines. For both males and females, then, moving from informal to formal employment resulted in much larger earnings increases than moving from formal to informal employment.[8]

Taking these results on mobility and earnings together, the author argues that they do not provide strong evidence of labour market segmentation for males, whereas such evidence is stronger for females. The author also suggests that important aspects of segmentation are determined largely prior to entry into the labour market. He writes, "Though there may not be pervasive segmentation in the Salvadoran labor market within educational groups, it is likely that the ability to change one's educational status is restricted by educational policy or economic need. Indeed, segmentation within the labor market may be the result of restricted access to pre-labor-market characteristics. This finding is more pronounced for females" (ibid., p. 151).

A similar study was conducted by Gong and van Soest (2002) for urban Mexico, tracing movements of individual male and female workers between formal and informal employment over five quarters in 1992 and 1993.[9] The authors estimate the probability of working in formal or informal employment controlling for wages and worker characteristics and whether a worker was in formal or informal employment in the previous quarter. They find that for males, working in either formal or informal employment in the previous quarter does not affect the probability of working in formal employment in the subsequent quarter. For females, in contrast, working in formal or informal employment in the previous quarter increases the probability of remaining in the same type of employment in the subsequent quarter. In the authors' view these results suggest that for males there are no costs of entry into formal employment, at odds with the labour market segmentation hypothesis, whereas there is evidence of labour market segmentation for females. This difference between males and females is similar to that found by Funkhouser for El Salvador.

Beneria and Floros evaluate the distribution of male and female workers in poor urban households in Bolivia and Ecuador by three "degrees of informality" – low, medium and

[8] The study also finds, for both males and females, the highest earnings in 1992 for those who worked continuously between 1991 and 1992 at the same job within formal employment. For both males and females who worked in informal employment at some point in either 1991 or 1992 – including those staying within informal employment or moving in either direction between formal and informal employment – 1992 earnings were highest for those who worked continuously at the same job within informal employment.

[9] Gong and van Soest use two different definitions of informal employment, one based on firm size and the other based on job type, the latter including own-account workers, those who manage a firm without employees, and piece-workers. The authors only present results for the latter definition, but write that "Most of the results based upon the firm size definition are qualitatively similar" (Gong and van Soest 2002, p. 517).

high (Beneria and Floros 2006). As noted above, these "degrees of informality" are defined with respect to job security. Based on a survey undertaken in 2002 for both countries, the authors find that in Bolivia, women are somewhat over-represented in jobs with medium informality and more strongly over-represented in highly informal jobs; for Ecuador, women are over-represented in jobs with medium informality and somewhat under-represented in highly informal jobs. In both countries, however, the authors find that women are greatly under-represented in jobs with low informality.[10]

3. Data and Definitions

The data on formal and informal employment were compiled from labour force surveys by ILO-SIAL (Information System and Labour Analysis) in Panama. These data have some advantages over other formal and informal employment data for Latin America published by the ILO, particularly in that it is in the form of raw employment numbers rather than shares by employment categories. The data permit different definitions of formality and informality. First is an enterprise-based sectoral definition. For this, informality is defined as the sum of employment in four employment categories: employers in small firms (with fewer than five workers), employees in small firms, employment in domestic services, and self-employment (own-account workers – excluding administrative, professional and technical workers – and unpaid family workers). This basically corresponds to *employment in the informal sector*.[11] Formality is defined as the sum of employment in two employment categories: employment in larger firms (employers and employees in firms with more than five workers) and in the public sector, and corresponds to *employment in the formal sector*.

There has been, however, growing interest in recent years in the phenomena of informal employment in the formal sector (ILO 2002a; 2003; Hussmanns 2004). This is one of the factors leading the ILO to develop a conception of informality defined as *the sum of employment in the informal sector and informal employment in the formal sector*. One useful indicator of informality is the lack of de facto (versus legal) social security coverage. Making use of this breakdown in the data enables three definitions of formality and informality, all of which have precedents in the literature.

1. The first definition is simply employment in the formal sector and employment in the informal sector, which we refer to as the *enterprise definition*.

2. Corresponding most closely to the ILO's new definition of informal employment, the second definition adds to employment in the informal sector (the first definition of

[10] This is based on constructing female propensities of employment for the three "degrees of informality," leaving out respondents who were not employed. The female propensity of employment is defined as the ratio of female percentage of employment for each category of employment over the female percentage of total employment. For Bolivia, the ratios for are 0.00, 1.03 and 1.08 for low, medium and high informality, respectively (based on a sample of 245 workers); for Ecuador, the respective ratios are 0.55, 1.20 and 0.96 (based on a sample of 208 workers) (ibid., p. 203).

[11] The possible exception is for employment in domestic services. As described in the report of the seventeenth International Conference of Labour Statisticians (ICLS), "The Fifteenth ICLC definition excludes households producing *goods* exclusively for their own final use, but provides an option to include households employing paid domestic workers. The framework presented here does not use this option and, hence, *excludes* households employing paid domestic workers from the informal sector" (ILO 2003, p. 50; Cf. Hussmanns 2004, p. 4). However, as we also evaluate main results for each of the employment categories separately, we opted to include domestic workers in the construction of aggregate employment in the informal sector.

informality) and subtracts from employment in the formal sector those without de facto social security coverage employed in the formal sector. We refer to this as the *total informality definition*.

3. We also define formality by those with de facto social security coverage regardless of whether they work in the formal or informal sector, and we define informality conversely. This definition definition has been used in the literature (e.g., Marcouiller et al. 1997; Saavedra and Chong 1999) and is important because a key policy concern regarding informal workers is that they lack social protection. We refer to this as the *social security coverage definition*. Note that the definition of social security coverage varies among countries. For Argentina, this refers to health coverage; for Brazil to contributions to social security; for Costa Rica, Mexico and Venezuela to health and pension coverage; and for Ecuador and Peru to affiliation with a social security system, public or private (ILO 2005, p. 99).

The data are annual and span from 1990 to 2000, though there is a fair amount of missing data. They were provided to us for 10 countries: Argentina, Brazil, Costa Rica, Ecuador, Honduras, Mexico, Panama, Paraguay, Peru and Venezuela. Data on social security coverage were provided to us for seven countries: Argentina, Brazil, Costa Rica, Ecuador, Mexico, Peru and Venezuela. Since all countries in the sample have data for urban employment but only four countries have in addition data for rural (non-agricultural) employment – that is, Costa Rica, Honduras, Panama and Venezuela – we focus our analysis on urban employment, with occasional reference to urban-rural comparisons for these four countries.[12] Last, all countries in the sample have data with small firms defined as fewer than five workers but only three countries have in addition data with small firms size defined as having fewer than 10 workers (Costa Rica, Honduras, Panama and Venezuela). Thus we use data for which small firms are defined as having fewer than five workers.

A few words of caution about the data may be useful, in addition to the problem of missing data. Since workers may hold more than one job at a time, they may therefore count as both formal and informal in a given period. Moreover, the surveys on which the data are based may undercount the most marginal forms of informal employment, particularly what Portes refers to as "survival" informal employment. This may lead us to underestimate the extent to which informal employment functions as a buffer for formal employment.

4. Patterns and Trends of Formal and Informal Employment

4.1 Overall Patterns and Trends

For the sake of economy in presenting patterns and trends, we focus on the two most dissimilar of the three definitions of informality described in the prior section, the enterprise definition referring to employment in informal establishments and the social security definition referring to workers without social security coverage in both formal and informal establishments.

[12] For Argentina, the data refers to 28 urban areas, for Mexico, 32 urban areas, for Peru, metropolitian Lima, with the data remainder of countries providing national urban coverage (ILO 2005, p. 95).

Based on the enterprise definition for the 1990-2000 period on average, the share of informal employment ranges between just over 30 per cent for Costa Rica and Panama to around 55 per cent for Ecuador, Paraguay and Peru (Table 2, Figure 1).[13] Based on the social security coverage definition, the share of informal employment ranges from around 30 per cent in Costa Rica and Venezuela to over 60 per cent in Ecuador and Peru. In other words, for the seven countries for which we have data for both definitions, we see similar countries having highest and lowest shares of informality by both definitions.[14] Further comparing the enterprise and social security coverage definitions for Latin America, we see that for the 1990-2000 period on average, informal employment shares are higher by the enterprise definition for Argentina, Brazil, Costa Rica and Venezuela and higher by the social security coverage definition for Ecuador, Mexico and Peru. For these last three countries, this means that there are a greater number of workers in formal enterprises without social security coverage than workers in informal enterprises with social security coverage.

It is instructive in this regard to consider the share of workers in the informal and formal sectors with social security coverage, that is, the share of workers who are *formal* by this definition, within either informal or formal establishments (Appendix Table 2). For the informal sector as a whole for the 1990-2000 period on average, the share ranges from around 15 per cent or less in Ecuador and Mexico to around 25 per cent in Brazil and Venezuela, 30 per cent in Argentina, and 40 per cent in Costa Rica. At least for some Latin America countries, then, a significant share of workers in the informal sector do have some form of social protection. Worth noting is that governments in three of the four countries with comparatively high actual coverage for workers in the informal sector – Argentina, Brazil and Costa Rica – have made concerted efforts to extend social security coverage to workers throughout the economy (Mesa-Lago 1992). For most countries in the region, *legal* coverage for social protection extended to workers in self-employment and domestic services, more often on a voluntary basis for self-employment and on a compulsory basis for domestic services (ibid., pp. 179-80). There are commonly large gaps, though, between legal and de facto protection. Regarding gaps for the self-employed, Mesa-Lago writes that "even in countries where self-employed workers have legal compulsory or voluntary coverage, the cost of financing it is much higher than for wage-earners…. The rate of contribution is so high for self-employed workers that even when they are affiliated with social insurance (whether compulsory or voluntary), only a small minority pay…" (ibid., p. 187).

For the formal sector as a whole, the share of workers with social security coverage ranges from around 60 per cent in Ecuador and Peru to 80 per cent or higher in Brazil and Costa Rica. The share of workers with social security coverage by six employment categories for the 1990-2000 period on average is shown in Table 3. For the average of four countries for which we have data for all six employment categories, these rank in order of coverage by employment in the public sector (88.2 per cent), employment in larger firms (73.3 per cent), employers in small firms (36.9 per cent), employees in small

[13] Formal and informal employment shares by employment category and sex for the enterprise definition are shown in Appendix Table 1.

[14] Note, however, that the question on social security coverage was not asked of the self-employed and employers in small firms in Argentina and Venezuela. We adjust the denominator accordingly for informal employment shares based on the social security definition by leaving out the self-employed and employers in small firms, but not for the enterprise and total informality definitions.

firms (31.2 per cent), domestic services (22.1 per cent) and self-employment (17.5 per cent).[15]

Overall, we do not see strong trend changes in informal employment shares for the 1990-2000 period.[16] First consider the three countries for which we have data only for the enterprise definition, Honduras, Panama and Paraguay. For the first two countries, informal employment shares were roughly the same in the beginning and end of the period, with a fair amount of volatility in the shares in intervening years, especially for Honduras. Paraguay experienced an overall decline in informal employment shares by the enterprise definition.

For the seven countries having data with both the enterprise and social security coverage definitions, the shares are quite flat overall for Mexico and Peru. For Costa Rica, there are upward trends for both definitions of informality from 1992 on, but the shares as of 2000 were only slightly higher than in 1991. For Ecuador and Venezuela, there are slightly upward trends for the social security coverage definition while the shares by the enterprise definition are quite flat. For Argentina, we see a trend decline in the informal employment share by the enterprise definition and a trend increase by the social security coverage definition. The share of workers with social security coverage declined in both the formal and informal sectors in Argentina, from 35.4 to 25.8 per cent in the informal sector and from 77.5 to 73.7 per cent in the formal sector from 1990 to 1997 (Appendix Table 2).

Brazil is the only country in the sample showing sizeable overall increases in informal employment shares by both definitions of informality. The increase in informality for Brazil by the social security coverage definition is driven both by the overall decline in social security coverage in the formal sector (from 82.7 to 80.3 per cent from 1992 to 1999) as well as the compositional shift in employment from the formal to informal sectors, with somewhat under one-third as many workers in the informal sector having social security coverage (Appendix Table 2). It is worth noting in this regard that since the share of workers with social security coverage is considerably higher in the formal than informal sectors for all our countries, a change in the share of informal employment by the enterprise definition will be associated, *ceteris paribus*, with a change in the share of informal employment in the same direction by the social security coverage definition.

Note that these overall trends are largely confirmed by data extending to more recent years and for a larger set of Latin American countries. For the enterprise definition for the region on average, informality dropped from 50.1 per cent in 1995 to 48.6 per cent in 2000 to 48.5 per cent in 2005; for the social security coverage definition, informality dropped from 47.0 per cent to 46.4 per cent to 41.1 per cent for these same years, respectively (ILO 2006).

It is worth noting that the year-to-year fluctuations in informal employment shares for the enterprise and social security coverage definitions move roughly in parallel for all seven countries for which we have these data. This suggests that results on informal employment

[15] Though we also have these data for Ecuador, we regard them as problematically discontinuous within employment categories (particularly for employees in small firms and employment in the public sector and in larger firms), and so leave them out of this table. However, average results across these employment categories are quite similar with or without Ecuador. Note that in any case Ecuador drops out of the regression analysis, as a result of missing data.

[16] For discussions of the structural determinants of trends in informal employment, see Tokman (1982) and Galli and Kucera (2004, pp. 809-10). For an insightful analysis of competing views of the structural relationships between formal and informal sectors, see Tokman (1978).

as a buffer for formal employment should be broadly similar regardless of which definition of informality one uses.

Urban-rural (non-agricultural) comparisons of informal employment shares for the enterprise definition are shown in Figure 2 for Costa Rica, Honduras, Panama and Venezuela. Note that these shares are a good deal higher in rural areas for all four countries, indeed about 20 percentage points higher in Honduras and Panama. Comparing employment shares by six employment categories enables us to determine what is driving the difference between urban and rural areas in this regard (Table 4). For Costa Rica, the biggest difference is the smaller share of employment in the public sector in rural areas; for Honduras, Panama and Venezuela alike, the biggest differences are the higher shares of self-employment and the smaller shares of employment in larger firms in rural areas, a pattern also shown to a lesser extent in Costa Rica.

Our data also enable urban-rural comparisons of informal employment shares based on the social security coverage definition for Costa Rica and Venezuela. Here too we find informal employment shares higher in rural than urban areas. For Costa Rica, informal employment shares by the social security coverage definition are 29.2 and 33.8 per cent for urban and rural areas, respectively; for Venezuela, the shares are 31.6 and 47.7 per cent for urban and rural areas, respectively (period averages).

4.2 Gender Differences in Patterns and Trends[17]

It is commonly thought that women are disproportionately concentrated – or over-represented – in informal employment, including in Latin America (Tokman 1989; Sethuraman 1998; ILO 2002b). We examine this issue by constructing ratios of the female propensity of informal employment, defined as the female percentage of informal employment divided by the female percentage of total employment, based on both the enterprise and social security coverage definitions of informality. A ratio of greater than one indicates over-representation and of less than one indicates under-representation. Based on the enterprise definition, we also evaluate breakdowns for six employment categories – that is, for self-employment, domestic services, and employers and employees in small firms (the informal sector); and for the public sector and employment in larger firms (the formal sector).

For the enterprise definition of informality, the ratios are shown in Figure 3 for the 1990 to 2000 period on average, with and without workers in domestic services (in numerators and denominators). Including domestic services, we see that the female propensity ratio is greater than one for nine of ten countries, the exception being Venezuela. The average (unweighted) female propensity ratio for the ten countries is 1.10. Excluding domestic services, however, the female propensity ratio is greater than one in just three countries – Ecuador, Honduras and Paraguay – and the average ratio for the ten countries is 0.96. This difference results of course from the very high shares of women in domestic services, ranging from 88.7 per cent in Mexico to 96.5 per cent in Costa Rica for the 1990 to 2000 period on average. In sum, women are indeed over-represented in informal

[17] For a useful overview of gender and informality in Latin America, particularly regarding microenterprises, see Valenzuela (2005).

employment by the enterprise definition for the countries in our sample, a result of their very high representation in domestic services.[18]

We further explore these issues by constructing female propensity ratios for six employment categories, shown in Figure 4. We rank these ratios from high to low for each country based on the ten-country average, shown to the rightmost of the figure. For the ten-country average, we see that women are most over-represented in domestic services, with a ratio of 2.34, but are also over-represented in the public sector, at 1.12, and in self-employment, at 1.05. In contrast, women are under-represented in larger firms, at 0.81, as employees in small firms, at 0.74, and as employers in small firms, at 0.54. These ratios present a more nuanced sense of women's concentration in formal and informal employment, as we find that women are most under-represented in two of the four employment categories comprising the informal sector as well as over-represented in the public sector.

Looking at the country level ratios in Figure 4, we see little variation in the female propensity of employment in domestic services, with all ratios greater than two and with Costa Rica and Venezuela exceeding 2.5. There is also broad similarity across countries in the distribution of women among other employment categories. The female employment propensities for the public sector range from around 0.9 for Argentina and Paraguay to greater than 1.2 in Brazil, Mexico and Venezuela; for self-employment from less than 0.9 in Brazil and Panama to greater than 1.2 in Honduras and Peru; for larger firms from less than 0.75 in Brazil, Honduras and Peru to around 0.9 in Argentina and Mexico; for employees in small firms from less than 0.7 in Ecuador, Honduras, Mexico and Paraguay to around 0.85 in Argentina, Costa Rica and Panama; and, last, for employers in small firms from around 0.4 in Mexico and Venezuela to 0.6 or greater in Ecuador, Panama and Paraguay.

Urban-rural (non-agricultural) comparisons of the female propensity of total informal employment based on the enterprise definition as well as for six employment categories are shown in Table 5 for Costa Rica, Honduras, Panama and Venezuela. With the exception of Honduras, the female propensity of informal employment is greater in rural than urban areas and for all four countries is greater than one in rural areas. There are also, for all four countries, striking similarities in these ratios across employment categories between urban and rural areas. Constructing correlations coefficients provides a summary sense of this, and these range in value from 0.95 in Panama to 0.99 in Costa Rica. These similarities are perhaps all the more noteworthy in light of the sizeable differences in informal employment shares between urban and rural areas (Figure 2).

We next look at the female propensity of informal employment using the social security coverage definition (Figure 5). For the seven countries for which we have data, the ratio (unweighted) for the 1990-2000 period on average is 1.04, indicating that women are generally over-represented in informal employment by this definition as well as by the enterprise definition. Female propensities of informal employment are particularly high in Argentina, Brazil and Costa Rica. Women are, in contrast, under-represented in informality by this definition in Mexico and Venezuela.

Shown in Table 3 and Figure 6 are shares of workers with social security coverage by six employment categories with gender breakdowns. For the average of four countries for which we have data for all six employment categories, the female share is larger than the

[18] Worth noting in this regard is that domestic services is *not* included in the definition of employment in the informal sector adopted by the 17th International Conference of Labour Statisticians and is referred to as one of four components of "informal employment outside the informal sector" (ILO 2003, p. 14; Cf. Hussmanns 2004).

male share for employment in the public sector and employees in small firms; about the same in larger firms; and is lower than the male share for self-employment, domestic services and employers in small firms. Self-employment merits particular attention, as this makes up the largest share of informal employment in all the countries in our sample (Appendix Table 1). The percentage of males with social security coverage is 20.5 per cent, whereas for females the figure is only 12.7 per cent. Noted above is that most countries in the region provided legal social security coverage on a voluntary basis for self-employed workers and that the burden of payment of contributions is high, leading to low rates of de facto coverage (Mesa-Lago 1992). One interpretation of the gender difference in de facto social security coverage for the self-employed is that, since women tend to earn less than men in informal as well as formal employment, the burden of payment is that much greater for women and so coverage lower. Regarding domestic services, the countries for which we have data generally provided legal social security coverage to these workers on a compulsory basis, and thus absence of de facto coverage indicates non-compliance with the law or, in other words, informality as illegality.

Urban-rural (non-agricultural) comparisons of the female propensity of informal employment based on the social security coverage definition can be made for Costa Rica and Venezuela. The ratios are considerably higher in rural than urban areas for both countries. For Costa Rica, the female propensities of informal employment based on the social security coverage are 1.15 and 1.29 for urban and rural areas, respectively; for Venezuela, the ratios are 0.87 and 1.05 for urban and rural areas, respectively.

To assess trends in the female propensity of informal employment, annual data for the female propensity of informal employment are presented, using the enterprise definition with and without employment in domestic services and also the social security coverage definition (Appendix Table 3). For most countries, it is difficult to discern clear-cut trends. The exceptions are Brazil and Honduras, for which there are downward trends for the different definitions of informality.

5. Informal Employment and Women's Employment as Business Cycle Buffers

We evaluate the cyclical behaviour of men and women's formal and informal employment for our sample of Latin American countries by estimating employment elasticities relative to output (GDP) with panel data econometric models. Note that the analysis is based on absolute numbers rather than shares of workers. In order to focus on cyclic movement – that is, fluctuations around a trend – data are transformed as the difference between the log of variables and the Hodrick-Prescott (non-linear) trend of the log of variables. We construct the Hodrick-Prescott trend based on at least five continuous observations, and so Ecuador and Venezuela drop out, leaving eight countries in the sample.

Regressions are run with two panel data model specifications: controlling for country-specific fixed effects and controlling for both time and country-specific fixed effects. Country-specific fixed effects represent omitted variables that differ among countries but are constant over time and are correlated with employment and output. Time fixed effects represent omitted variables that are correlated with employment and output and vary over time but that have a common impact on all countries, such as through a regional or global economic shock. It is useful to control for both country-specific and time factors, in order to isolate the output-employment relationship over business cycles within countries. Yet since each restriction removes degrees of freedom from a panel having relatively few observations, we tend to rely on the more parsimonious model (without time fixed effects) in describing main results. In the context of robustness analysis, however, we focus on the more restricted specification that includes both country-specific and time fixed effects. The

same set of regressions is run for each of the three definitions of formality and informality – that is, the enterprise, total informality and social security coverage definitions.

Note that the data used do not trace movements of individual workers between formal and informal employment over time, but rather total numbers of formal and informal workers. Our assumption is that movements in opposite directions between the number of formal and informal workers represents either movements of individual workers from one to the other type of employment or movements of workers into and out of the labour force corresponding to an "added worker effect."

5.1 Enterprise Definition

Main regression results based on the enterprise definition of formal and informal employment are shown in Table 6.[19] For the model specification without time fixed effects, total (male plus female) employment elasticities are estimated to be positive and statistically significant for both formal and informal employment. Thus these estimates do not provide evidence that informal employment functioned as a buffer over business cycles in the 1990s for our sample of Latin American countries. This evidence suggests, rather, that formal and informal employment moved roughly in parallel, with both increasing in upturns and decreasing in downturns. Gender breakdowns in these elasticities do not reveal a clear-cut pattern of differences between males and females, and in any case these differences are not found to be statistically significant, based on confidence interval tests.[20]

Our main test of robustness is to drop one country at a time from the sample while including in the model both country-specific and time fixed effects, and Table 7 follows from Table 6 in this regard.[21] For informal employment based on this specification for the full sample of countries, only the coefficient estimates for total and female employment are statistically significant, but statistical significance for both is lost when we exclude Argentina from the sample. For formal employment based on this specification for the full sample of countries, there is little robustness to test for, since only the coefficient estimate for male employment is found to have any statistical significance, and at just the ten per cent level. Upon dropping Peru from the sample, this too is lost and indeed the coefficient estimates on total and female formal employment actually become negative.

We also look at the six individual employment categories that provide the basis of the enterprise definition of formality and informality, shown in Table 8. For the four employment categories that comprise informal employment in model specifications without time fixed effects, employment elasticities are estimated to be consistently positive but never statistically significant. For employment in larger firms, employment elasticities are estimated to be significantly positive for total (male plus female), male and female employment, though at only the ten per cent level for female employment. Results are similar in model specifications with or without time fixed effects. For public sector employment, in contrast, employment elasticities are consistently negative, though not statistically significant. It is thus only results for employment in larger firms that merit

[19] Tables also show regression results for formal and informal employment together, to help situate more disaggregated results, though we do not generally comment on these given the motivating hypotheses of the paper.

[20] Confidence interval tests, do, however, tend to be conservative in establishing the statistical significance of differences. Results of confidence interval tests are available upon request.

[21] Drop country results are also available for regressions including only country-specific fixed effects.

robustness testing, shown in Table 9. We see, though, that statistical significance is lost for total, male and female employment in larger firms upon dropping Peru from the sample.

5.2 Total Informality Definition

The total informality definition requires data on social security coverage in formal establishments, which are not available for Honduras, Panama and Paraguay. These three countries thus drop out, leaving only five in the sample. Main regression results are shown in Table 10. For the sake of comparability, the lower panel of the table shows regressions results using the enterprise definition of formality and informality for this same sample of five countries.

For total (male plus female) formal employment by the total informality definition, elasticities are estimated to be positive and statistically significant, with or without time fixed effects. Elasticities are similar for male and female formal employment by this definition. For informal employment, elasticities are estimated to be positive and statistically significant for female employment, positive but smaller and of borderline (ten per cent) significance for total (male plus female) employment, and not significantly different from zero for male employment, with or without time fixed effects. Here, then, we find evidence that women function as a buffer workforce *within* informal employment. However, we do not find these gender differences, sizeable as they are, to be statistically significant based on confidence interval testing, a result of the relatively large standard errors of the estimates. Note also that elasticity estimates for female informal employment are very similar for this same sample of five countries for the total informality and enterprise definitions, suggesting that the difference between results in Table 6 and Table 10 derives less from the difference in definitions than the difference in samples. The gender differences for informal employment should perhaps not be dismissed out of hand, though, for they remain sizeable throughout the sensitivity analysis of dropping one country at time for the sample and the elasticity estimate for female employment likewise remains consistently sizeable, positive and statistically significant, though reduced to the ten per cent level upon dropping Argentina from the sample (Table 11).

5.3 Social Security Coverage Definition.

Results based on the social security coverage definition of informality are shown in Table 12. Regressions are based on data for only four countries, since data for Argentina on social security coverage for self-employment and employers in small firms employers are missing. For the sake of comparability, the lower panel of the table presents results based on the enterprise definition of formality and informality for this same sample of four countries.

For total (male plus female) formal employment by the social security coverage definition, elasticities are estimated to be consistently positive, though not statistically significant. Elasticities are a good deal larger, or more strongly positive, for male than female formal employment by this definition, and the only elasticity of statistical significance is for male employment without time fixed effects. For total (male plus female) informal employment, elasticities are around zero in value and not statistically significant. In contrast with formal employment by this definition, the elasticity estimates for female employment are substantially larger than for male employment and indeed are negative for male employment, broadly consistent with gender differences for informal employment based on the total informality definition noted in Table 10. These gender differences in results hold for specifications with and without time fixed effects. As these results are not generally statistically significant, however, we do not pursue further sensitivity analysis.

6. Main Conclusions

We evaluate trends and patterns of men and women's formal and informal employment for a sample of up to ten Latin American countries in the 1990s, based on a dataset that enables us to consider three different definitions of informality: the enterprise definition (based on employment in formal and informal enterprises), the total informality definition (modifying the enterprise definition by reclassifying workers in formal enterprises without de facto social security coverage as informal) and the social security coverage definition (based on whether workers have de facto social security coverage, regardless of enterprise type). Based on the enterprise definition, we also evaluate employment by six enterprise types (or employment categories), four defined as informal and two as formal: namely, self-employment, domestic services, employers in small firms, and employees in small firms (informal) and employment in larger firms and the public sector (formal). The data also allows us, for a smaller sample of countries, to evaluate differences between non-agricultural rural and urban formal and informal employment.

We do not find statistically significant evidence that informal employment functioned as a macroeconomic buffer for formal employment – that is, that informal employment moved countercyclically. It is worth noting that during the 1990s in many Latin American countries, employment protection legislation was weakened and the share of the public sector employment declined. We expect these developments to weaken formal employment job security and thus strengthen the tendency for informal employment to serve as a cyclic buffer. At the same time, however, we see a good deal of movement into and out of open unemployment in Latin America as well as trend increases in unemployment rates. This suggests that the unemployment insurance system in Latin America provided a more important buffer for formal employment than did informal employment. Based on this evidence, it appears that unemployment rates are a useful indicator of labour market slack in Latin America. We have also considered, though, that the expectation of a countercyclical movement of informal employment depends very much on the relative importance of different types of informal employment. Using Portes' three categories of informal employment, it is only for "survival" informal employment that we have an unambiguous expectation of countercyclicality (Portes 1994). Perhaps more important in Latin America are "independent" informal employment, which we expect to move procyclically, and similarly procyclical types of "subordinate" informal employment. One qualification, though, is that "survival" informal employment may be undercounted in the surveys on which the data are based, leading to an underestimation of the extent to which informal employment functions as a buffer.

We also considered whether women's employment provides a business cycle buffer, specifically whether women's employment is significantly more procyclical than men's employment. We do not find statistically significant differences between men and women's formal or informal employment in this regard. Based on the total informality definition, however, we find statistically significant evidence of the procyclicality of women's informal employment, though not of men's. This tentative finding seems worth following up, preferably in a larger sample of countries over a greater span of years.

More clear-cut results derive from the consideration of other patterns of formal and informal employment. We do not see decisive trend increases in the share of informal employment, with the important exception of Brazil, the most populous country in the region, driven by a compositional shift in employment from formal to informal enterprises as well as a decline in social security coverage within formal enterprises. Indeed, for Latin America as a whole, the share of informal employment has declined overall from 1995 to 2005, by both the enterprise and social security coverage definitions (ILO 2006).

We find that informal employment shares are consistently higher in rural than urban areas, by all definitions of informality, bearing in mind that we address only non-agricultural

employment. For the enterprise definition, this difference is largely driven by the higher shares of self-employment and smaller shares of employment in larger firms in rural than urban areas.

Confirming the results of prior studies, we find that women tend to be over-represented in informal employment. Based on the enterprise definition, this results from women's very high concentration in domestic services, in both rural and urban areas. We also find that women are under-represented in small firms, as employees and particularly as employers, and that they tend to be somewhat over-represented in public sector employment. This finding is noteworthy in that small firms are generally associated with informality and the public sector with formality. We also find that women's concentration in informal (non-agricultural) employment tends to be higher in rural than urban areas and that there were overall declines in women's concentration in informal employment in Brazil and Honduras.

It is hoped that this paper provides insights of policy relevance regarding informal employment in Latin America. Noteworthy in this regard are gender aspects of informality. We have highlighted women's very high concentration in domestic services in all countries for which we have data and that de facto social security coverage is low in domestic services, even lower for women than men. The countries for which we have data generally provided social security coverage to workers in domestic services on a compulsory basis, and so weak de facto coverage means weak compliance with the law. Most informal workers are self-employed, and here men and women are concentrated roughly equally. However, women appear to be concentrated among lower quality jobs within self-employment, as suggested by their considerably lower de facto social security coverage. Even though men and women in self-employment may have the same legal social security coverage, the voluntary basis of this coverage combined with gender earnings gaps appears to result in gender gaps in social security coverage. The general view that women are concentrated among the more marginal types of informal employment is also suggested by the findings of prior studies on El Salvador (Funkhouser 1997), Mexico (Gong and van Soest 2002) and Bolivia and Ecuador (Beneria and Floros 2006). These findings also suggest the value of evaluating men and women's informal employment not just in total, as is often done, but with more detailed breakdowns, particularly important for informing policies aimed reducing informal employment or improving working conditions within informal employment.

We have also seen that in Argentina, Brazil, Costa Rica and Venezuela, a sizeable share of workers in informal establishments have some form of de facto social security coverage. The first three of these countries are specifically mentioned by Mesa-Lago regarding the "political commitment" of their governments to extending social protection to workers (Mesa-Lago 1992, p. 189). The author points out that "some studies show that the political will of governments has been crucial in a number of countries in the region in…extending coverage beyond what was thought possible in accordance with the degree of development" (ibid, p. 189). There appear to be lessons here for other countries aiming to reduce informality through the extension of social security coverage, whatever these countries' levels of development.

It seems worth restating that there is a good deal of missing data in our analysis. This is all the more striking given that data on informal employment are more complete for Latin America than for other developing regions and that we focus on our inquiry on those countries in the region with the most complete data. The problem of missing data is particularly problematic for econometric analysis, giving the requirements of continuous data and sufficient degrees of freedom. Developing better data on formal and informal employment should be a priority, making possible a deeper understanding of the workings of labour markets in developing countries.

Table 1: Unemployment, 1990-2000

Number of unemployed (in thousands)

	Argentina	Brazil	Costa Rica	Ecuador	Honduras	Mexico	Panama	Paraguay	Peru	Venezuela
1990	332	2,367	50	150	62			34	210	743
1991	257		59	158	72	919	138	27	145	702
1992	305	4,573	44	263	54	967	134	29	249	582
1993	494	4,396	47	241	44	1,041	125	30	270	503
1994	595		49	207	50	1,412	135	48	262	687
1995	964	4,510	64	213	59	2,010	141	82	218	875
1996	1,531	5,076	76	335	89	1,550	145	106	462	1,043
1997	1,375	5,882	74	312	69	1,280	140		565	1,061
1998	1,219	6,923	77	409	88	1,120	147	122	582	1,093
1999	1,360	7,639	83	543	89	802	128	161	625	1,526
2000	1,461		72	333		848	147		566	1,424

Unemployment rate

	Argentina	Brazil	Costa Rica	Ecuador	Honduras	Mexico	Panama	Paraguay	Peru	Venezuela
1990	7.3	3.7	4.6	6.1	4.8			6.6	8.6	10.4
1991	5.8		5.5	5.8	4.6	3.0	16.2	5.1	5.8	9.5
1992	6.7	6.5	4.1	8.9	3.1	3.1	14.7	5.3	9.4	7.7
1993	10.1	6.2	4.1	8.3	5.6	3.2	13.3	5.1	9.9	6.7
1994	12.1		4.2	7.1	2.8	4.2	14.0	4.4	8.9	8.7
1995	18.8	6.1	5.2	6.9	3.2	5.8	14.0	3.4	7.0	10.3
1996	17.2	7.0	6.2	10.4	4.3	4.3	14.3	8.2	7.0	11.8
1997	14.9	7.8	5.7	9.2	3.2	3.4	13.4		7.7	11.4
1998	12.8	9.0	5.6	11.5	3.9	2.9	13.6	5.4	7.8	11.2
1999	14.1	9.6	6.0	14.0	3.7	2.1	11.8	6.8	8.0	14.9
2000	15.0		5.2	9.0		2.2	13.5		7.4	13.9

Sources: ILO, *Laborsta*; ILO, *KILM* (*KILM* is used for Honduras, Mexico, Paraguay and Peru as it has more complete data).

Note: Data for Argentina, Brazil, Honduras (1993-94), Paraguay (1990-94, 1996) and Peru refer not to the entire country, but to regions of the country, mostly urban regions.

Table 2: Informal Employment Shares, 1990-2000 (% of total urban employment)

Enterprise definition: Employment in the informal sector

	Argentina	Brazil	Costa Rica	Ecuador	Honduras	Mexico	Panama	Paraguay	Peru	Venezuela
1990	50.4		32.8	52.9	50.8	38.5		58.9	51.9	
1991	51.9		33.7	58.7	47.5	38.9	30.4	58.8	52.7	
1992	51.3	44.8	29.3		47.1	39.6	31.8	54.7	55.8	
1993	49.6	45.0	32.6		46.7	40.6	30.5	56.1	55.5	
1994	47.7		32.8	54.7	45.6		30.6	54.5	52.1	43.2
1995	46.4	47.3	32.2	54.4	48.5	43.2	31.0		55.1	43.1
1996	48.3	46.8	32.7		48.6	42.5	31.3	53.5		44.0
1997	45.6	47.5	34.6		50.4	41.5	31.3	51.9	55.7	
1998		46.7	34.2	55.6	50.0	41.0	32.4		53.7	
1999		47.6	36.3	56.1	50.9	40.1	32.0	46.9		
2000			34.2			39.2	32.2		59.2	
Average	48.9	46.5	33.2	55.4	48.6	40.5	31.3	54.4	54.6	43.4

Social security coverage definition: Workers without coverage in formal and informal sectors

	Argentina	Brazil	Costa Rica	Ecuador	Honduras	Mexico	Panama	Paraguay	Peru	Venezuela
1990	34.7		26.9	61.7		47.4			59.6	
1991	36.1		30.1	62.5		47.9			59.1	
1992	35.8	42.6	24.8			48.6			62.5	
1993	36.3	44.1	25.9			50.5			63.7	
1994	33.9		28.8	63.1					55.0	29.2
1995	38.0	44.9	29.4	64.1		54.0			65.3	30.6
1996	40.8	45.5	28.7			53.8				35.0
1997	40.0	45.4	31.2			53.1			63.4	
1998		45.1	30.7	66.1		51.7			62.4	
1999		45.8	32.8	67.0		51.1				
2000			31.7			50.0			63.6	
Average	36.9	44.8	29.2	64.1		50.8			61.6	31.6

Source: ILO SIAL.

Notes: For Argentina, data for 1998-2000 are available but not comparable because of a change in the survey structure.
For Ecuador, data for 2000 are available but not comparable because of a change in the survey structure.
For Paraguay, data for 1995 are available but dropped because of problematic discontinuity.
For Argentina and Venezuela, the definition of informality by social security coverage refers to employees only (including employment in domestic service) because this question was not asked of the self-employed and employers in small firms.

Table 3: Percentage of Workers with Social Security Coverage by Employment Category and Sex, 1990-2000 (annual avg., urban)

	Self-employment			Domestic Services			Employers in Small Firms			Employees in Small Firms			Public Sector			Employment in Larger Firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Argentina				13.5	33.5	11.0				36.8	35.8	39.1	93.9	94.3	93.0	74.3	73.2	76.4
Brazil	19.1	22.9	12.8	22.7	39.2	21.5	65.0	64.2	67.3	35.0	30.2	46.0	82.8	79.2	85.9	80.0	80.1	80.0
Costa Rica	35.1	43.3	21.9	40.3	53.1	39.9	54.7	62.2	27.5	47.6	44.9	52.9	96.8	97.9	95.4	80.2	80.4	79.6
Mexico	0.4	0.5	0.1	18.8	24.0	18.1	2.1	2.1	1.8	17.2	14.4	26.3	90.7	90.4	91.0	72.2	71.2	74.4
Peru	15.6	15.2	16.0	15.5	31.9	14.5	25.8	24.6	32.8	19.3	17.3	23.5	77.1	72.4	84.7	60.0	60.6	58.5
Venezuela				18.2	25.9	18.0				26.8	23.3	35.8	91.1	92.6	89.8	70.8	68.8	75.4
Four-country avg.*	17.5	20.5	12.7	22.1	36.3	21.0	36.9	38.3	32.3	31.2	28.5	37.6	88.2	86.8	90.0	73.3	73.1	73.7

Source: ILO SIAL.

Note: * Average refers to four countries with data for all six employment categories and thus does not include Argentina and Venezuela.

Table 4: Employment Shares by Employment Category, Urban Verus Rural, 1990-2000 (annual avg., % of total employment)

	Costa Rica		Honduras		Panama		Venezuela	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Self-employment	16.8	20.4	26.3	48.7	17.0	32.0	27.6	34.7
Domestic services	4.2	7.6	6.2	5.8	7.2	8.3	2.0	4.2
Employers in small firms	3.2	3.3	6.2	5.0	1.5	1.7	3.5	3.7
Employees in small firms	9.0	13.2	9.9	9.1	5.7	9.6	10.3	13.7
Public sector	22.2	15.7	13.5	11.7	26.6	21.0	19.4	17.2
Employment in larger firms	44.6	39.9	37.9	19.7	42.0	27.4	37.2	26.5

Source: ILO SIAL.

Table 5: Female Propensity of Employment* for Informal Employment, Enterprise Definition, and by Employment Category, Urban Versus Rural (Non-Agricultural), 1990-2000 (annual avg.)

	Costa Rica		Honduras		Panama		Venezuela	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Informal Employment	1.13	1.20	1.17	1.15	1.08	1.14	0.94	1.06
Domestic services	2.57	2.71	2.14	1.71	2.22	2.34	2.60	2.44
Public sector	1.19	1.04	1.11	0.84	1.13	1.19	1.48	1.43
Self-employment	1.01	1.06	1.33	1.30	0.71	0.99	0.96	1.12
Employment in larger firms	0.81	0.77	0.74	0.58	0.86	0.61	0.81	0.59
Employees in small firms	0.87	0.70	0.52	0.39	0.85	0.66	0.78	0.68
Employers in small firms	0.58	0.53	0.56	0.43	0.60	0.74	0.39	0.22
Spearman correlation coefficient		0.99		0.98		0.95		0.98

Source: ILO SIAL.

Note: * Defined as ratio of female % of employment in employment category to female % of total employment.

Table 6: Regression-estimated Employment Elasticities Relative to GDP for 8 Latin American Countries, Enterprise Definition, 1990-2000 (urban)

	Country fixed effects			Country and time fixed effects		
Dependent variable	**Total**	**Males**	**Females**	**Total**	**Males**	**Females**
Total employment	0.4033 **	0.3842 **	0.3760 *	0.3436 **	0.2584 *	0.4551 **
	(0.1229)	(0.1246)	(0.1675)	(0.1110)	(0.1140)	(0.1405)
Informal employment	0.3685 **	0.2796 #	0.3946 #	0.3619 *	0.2032	0.5377 **
	(0.1308)	(0.1487)	(0.2064)	(0.1351)	(0.1718)	(0.1842)
Formal employment	0.4706 *	0.5113 **	0.4460	0.3482	0.3080 #	0.4812
	(0.1945)	(0.1827)	(0.2859)	(0.2087)	(0.1701)	(0.3329)

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.
White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.
For Paraguay, 1990-91 male domestic sector data are missing, but were replaced with "zero" in order to keep 1990-91 observations for other employment categories.

Table 7: Robustness of Regression-estimated Employment Elasticities Relative to GDP with respect to Dropping One Country at a Time from Sample, Country and Time Fixed Effects, Enterprise Definition, 1990-2000 (urban)

	Total employment			Informal employment			Formal employment		
	Total	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**	**Males**	**Females**
Full sample	0.3436 **	0.2584 *	0.4551 **	0.3619 *	0.2032	0.5377 **	0.3482	0.3080 #	0.4812
	(0.1110)	(0.1140)	(0.1405)	(0.1351)	(0.1718)	(0.1842)	(0.2087)	(0.1701)	(0.3329)
w/o Argentina	0.3979 **	0.2763 *	0.5158 **	0.2781	0.1006	0.3886	0.5483 *	0.4320 *	0.8424 *
	(0.1156)	(0.1342)	(0.1795)	(0.1990)	(0.2453)	(0.2560)	(0.2030)	(0.1898)	(0.3202)
w/o Brazil	0.3486 **	0.2593 *	0.4579 **	0.3533 *	0.2018	0.5070 *	0.3635	0.3182 #	0.5126
	(0.1211)	(0.1252)	(0.1516)	(0.1455)	(0.1889)	(0.1912)	(0.2269)	(0.1866)	(0.3616)
w/o Costa Rica	0.3597 **	0.2930 *	0.4314 **	0.3616 **	0.2399 #	0.4815 *	0.3707	0.3476 #	0.4822
	(0.1290)	(0.1259)	(0.1589)	(0.0984)	(0.1385)	(0.1768)	(0.2311)	(0.1812)	(0.3805)
w/o Honduras	0.3310 **	0.2426 #	0.4709 **	0.3393 *	0.1625	0.5524 **	0.3575 #	0.3171 #	0.4960
	(0.1152)	(0.1211)	(0.1457)	(0.1389)	(0.1791)	(0.1494)	(0.2018)	(0.1648)	(0.3217)
w/o Mexico	0.3862 **	0.2782 *	0.5309 **	0.4169 *	0.2304	0.6290 **	0.3815	0.3207	0.5518
	(0.1264)	(0.1295)	(0.1551)	(0.1552)	(0.1992)	(0.2008)	(0.2424)	(0.1938)	(0.3880)
w/o Panama	0.3663 **	0.2766 *	0.4767 **	0.3652 *	0.1949	0.5420 *	0.3801 #	0.3330 #	0.5233
	(0.1186)	(0.1161)	(0.1522)	(0.1685)	(0.2082)	(0.2084)	(0.2235)	(0.1736)	(0.3602)
w/o Paraguay	0.3509 **	0.2438 *	0.4982 **	0.3640 *	0.1995	0.5605 **	0.3727 #	0.2931 #	0.5700 *
	(0.1048)	(0.1122)	(0.1245)	(0.1513)	(0.1978)	(0.2011)	(0.1882)	(0.1680)	(0.2789)
w/o Peru	0.1975	0.2114	0.2084	0.4363 *	0.3334	0.6332 *	-0.0417	0.0822	-0.2459
	(0.1422)	(0.1564)	(0.1619)	(0.1950)	(0.2374)	(0.2733)	(0.1904)	(0.1730)	(0.2792)

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.

= loss of statistical significance relative to full sample.

= gain of statistical significance relative to full sample.

White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.
For Paraguay, 1990-91 male domestic sector data are missing, but were replaced with "zero" in order to keep 1990-91 observations for other employment categories.

Table 8: Regression-estimated Employment Elasticities Relative to GDP for 8 Latin American Countries by Employment Category, 1990-2000 (urban)

	Country fixed effects			Country and time fixed effects		
Employment category	**Total**	**Males**	**Females**	**Total**	**Males**	**Females**
Self-employment	0.3358	0.2523	0.4187	0.3512 #	0.0788	0.6732 *
	(0.2038)	(0.1906)	(0.3244)	(0.2079)	(0.2486)	(0.2750)
Domestic services	0.1878	1.7977	0.2816	0.4068	2.9452	0.3727
	(0.5047)	(3.3352)	(0.3309)	(0.3854)	(3.1242)	(0.2871)
Employers in small firms	0.2453	0.3353	0.1336	0.2394	0.2240	0.4821
	(0.3495)	(0.3910)	(0.7651)	(0.3811)	(0.3964)	(0.8737)
Employees in small firms	0.3876	0.4722	0.1516	0.4494	0.6023 #	0.0636
	(0.3023)	(0.3185)	(0.5014)	(0.3152)	(0.3201)	(0.5535)
Public sector	-0.2941	-0.3099	-0.2233	-0.3652	-0.5550 #	-0.0486
	(0.3019)	(0.3258)	(0.3955)	(0.3129)	(0.3034)	(0.4276)
Employment in larger firms	0.6285 **	0.6550 **	0.6428 #	0.5096 *	0.4786 *	0.6524 #
	(0.2163)	(0.1994)	(0.3400)	(0.2393)	(0.2052)	(0.3813)

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.
White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.
Domestic service regressions for total and male workers exclude Paraguay due to missing data.

Table 9: Robustness of Regression-estimated Employment Elasticities Relative to GDP with respect to Dropping One Country at a Time from Sample, Country and Time Fixed Effects, by Employment Category, 1990-2000 (urban)

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Full sample	0.3512#	0.0788	0.6732*	0.4068	2.9452	0.3727	0.2394	0.2240	0.4821	0.4494	0.6023#	0.0636	-0.3652	-0.5550#	-0.0486	0.5096 *	0.4786*	0.6524#
	(0.2079)	(0.2486)	(0.2750)	(0.3854)	(3.1242)	(0.2871)	(0.3811)	(0.3964)	(0.8737)	(0.3152)	(0.3201)	(0.5535)	(0.3129)	(0.3034)	(0.4276)	(0.2393)	(0.2052)	(0.3813)
w/o Argentina	0.1471	-0.0379	0.3729	0.6772	3.2362	0.5295	0.0692	-0.0225	0.7489	0.2036	0.4474	-0.4541	0.0549	-0.1395	0.3909	0.7236 **	0.5980*	1.0752**
	(0.2614)	(0.3134)	(0.3421)	(0.4124)	(3.0555)	(0.3702)	(0.5335)	(0.5455)	(0.9572)	(0.3505)	(0.3831)	(0.6078)	(0.2620)	(0.2780)	(0.3905)	(0.2369)	(0.2407)	(0.3534)
w/o Brazil	0.3694#	0.0882	0.6856*	0.3171	2.9795	0.2876	0.1786	0.1901	0.3440	0.4268	0.6044#	-0.0301	-0.4008	-0.6158#	-0.0416	0.5446 *	0.5099*	0.7026#
	(0.2180)	(0.2701)	(0.2721)	(0.3952)	(3.4041)	(0.2897)	(0.4031)	(0.4173)	(0.9212)	(0.3426)	(0.3445)	(0.6012)	(0.3336)	(0.3121)	(0.4660)	(0.2608)	(0.2241)	(0.4136)
w/o Costa Rica	0.3748#	0.1124	0.6476*	0.2459	3.0736	0.2352	0.2367	0.1831	0.6190	0.4664	0.7072*	-0.1058	-0.3978	-0.6677*	0.0188	0.5392 *	0.5579*	0.5784
	(0.1940)	(0.2341)	(0.3074)	(0.3842)	(3.6519)	(0.2564)	(0.3371)	(0.3446)	(0.9396)	(0.3377)	(0.3328)	(0.6321)	(0.3524)	(0.3113)	(0.4929)	(0.2589)	(0.2207)	(0.4166)
w/o Honduras	0.3185	0.0464	0.6493*	0.3402	2.8496	0.3664	0.1240	0.0523	0.5628	0.4770	0.5810#	0.2707	-0.3673	-0.5203#	-0.0633	0.5146 *	0.4765*	0.6792#
	(0.2106)	(0.2854)	(0.2541)	(0.3970)	(3.3065)	(0.2881)	(0.4588)	(0.5204)	(0.9938)	(0.2849)	(0.3409)	(0.4038)	(0.2779)	(0.2761)	(0.4048)	(0.2361)	(0.1997)	(0.3759)
w/o Mexico	0.4265#	0.1375	0.7488*	0.5017	3.2971	0.4722	0.0960	0.0389	0.4974	0.4938	0.6379#	0.1202	-0.4228	-0.6480#	-0.0594	0.5470 #	0.4939*	0.7413
	(0.2307)	(0.2698)	(0.3025)	(0.4511)	(3.5710)	(0.3404)	(0.3828)	(0.4332)	(1.0011)	(0.3572)	(0.3665)	(0.6500)	(0.3703)	(0.3550)	(0.4980)	(0.2782)	(0.2368)	(0.4433)
w/o Panama	0.3703	0.1111	0.7072*	0.4380	2.7836	0.3968	0.3655	0.4787	0.2168	0.2941	0.3326	0.1059	-0.3704	-0.5862	-0.0167	0.5299 *	0.4940*	0.6851
	(0.2452)	(0.2862)	(0.3108)	(0.4332)	(3.4037)	(0.3258)	(0.4681)	(0.4544)	(0.9541)	(0.3560)	(0.3423)	(0.6079)	(0.3520)	(0.3473)	(0.4682)	(0.2459)	(0.2045)	(0.4066)
w/o Paraguay	0.3742	0.0809	0.7265*	n.a.	n.a.	0.4066	0.2480	0.2217	0.5867	0.4501	0.6303#	0.0075	-0.2758	-0.5065#	0.0916	0.5025 *	0.4353*	0.7106*
	(0.2228)	(0.2441)	(0.2805)	n.a.	n.a.	(0.2965)	(0.3551)	(0.3565)	(0.7737)	(0.3504)	(0.3535)	(0.5731)	(0.2720)	(0.2878)	(0.3638)	(0.2339)	(0.2127)	(0.3433)
w/o Peru	0.4107	0.0993	0.7957#	0.5262	3.5403	0.3491	0.6239	0.6663	0.2520	0.8376*	0.9377*	0.6276	-0.7804#	-0.7085	-0.8765*	0.1411	0.2443	-0.0224
	(0.2559)	(0.2950)	(0.4058)	(0.5868)	(2.7265)	(0.4558)	(0.4786)	(0.5271)	(1.0799)	(0.3553)	(0.4146)	(0.6245)	(0.3896)	(0.4328)	(0.4095)	(0.2271)	(0.2060)	(0.3751)

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.

= loss of statistical significance relative to full sample.

= gain of statistical significance relative to full sample.

White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.

Table 10: Regression-estimated Employment Elasticities Relative to GDP for 5 Latin American Countries, Total Informality and Enterprise Definitions, 1990-2000 (urban)

		Country fixed effects			Country and time fixed effects		
Dependent variable		**Total**	**Males**	**Females**	**Total**	**Males**	**Females**
Total employment		0.3766 **	0.3104 *	0.4777 *	0.3613 **	0.2441 *	0.5409 **
		(0.1285)	(0.1193)	(0.1837)	(0.1112)	(0.1166)	(0.1279)
Total informality definition	**Informal employment**	0.2439 #	0.0841	0.4575 *	0.3037 #	0.0615	0.6313 **
		(0.1359)	(0.1281)	(0.2201)	(0.1653)	(0.1952)	(0.1723)
	Formal employment	0.6170 *	0.6429 *	0.5851 *	0.4924 *	0.5004 *	0.4991 *
		(0.2632)	(0.2694)	(0.2713)	(0.2073)	(0.2302)	(0.1798)
Enterprise definition	**Informal employment**	0.3014 *	0.1326	0.5151 *	0.3510 #	0.1465	0.6025 **
		(0.1387)	(0.1473)	(0.2024)	(0.2013)	(0.2571)	(0.1778)
	Formal employment	0.4607 *	0.4404 *	0.5369	0.3975 *	0.3178 *	0.6004 *
		(0.2249)	(0.1941)	(0.3423)	(0.1704)	(0.1496)	(0.2477)

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.
White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.
Regressions include Argentina, Brazil, Costa Rica, Mexico and Peru.

Table 11: Robustness of Regression-estimated Employment Elasticities Relative to GDP with respect to Dropping One Country at a Time from Sample, Country and Time Fixed Effects, Total Informality Definition, 1990-2000 (urban)

	Total employment			Informal employment			Formal employment		
	Total	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**	**Males**	**Females**
Full sample	0.3613 **	0.2441 *	0.5409 **	0.3037 #	0.0615	0.6313 **	0.4924 *	0.5004 *	0.4991 *
	(0.1112)	(0.1166)	(0.1279)	(0.1653)	(0.1952)	(0.1723)	(0.2073)	(0.2302)	(0.1798)
w/o Argentina	0.2640 #	0.1036	0.5136 **	0.0595	-0.3087	0.5731 #	0.5444 #	0.5548	0.5399 *
	(0.1298)	(0.1467)	(0.1657)	(0.2778)	(0.3309)	(0.2752)	(0.2892)	(0.3423)	(0.2169)
w/o Brazil	0.3491 *	0.2278	0.5336 **	0.2682	0.0321	0.5836 **	0.5272 #	0.5356 #	0.5361 *
	(0.1259)	(0.1351)	(0.1360)	(0.1888)	(0.2301)	(0.1738)	(0.2485)	(0.2763)	(0.2090)
w/o Costa Rica	0.4461 *	0.3422 *	0.6024 **	0.4115 *	0.2461	0.6228 *	0.4570 #	0.4300	0.5361 *
	(0.1481)	(0.1435)	(0.1691)	(0.1526)	(0.1413)	(0.1965)	(0.2322)	(0.2401)	(0.2227)
w/o Mexico	0.4631 **	0.3271 *	0.6480 **	0.3632 #	0.0679	0.7650 **	0.5759 *	0.5948 *	0.5649 *
	(0.1189)	(0.1213)	(0.1478)	(0.1986)	(0.2328)	(0.2099)	(0.2421)	(0.2673)	(0.2132)
w/o Peru	0.2381 #	0.2080	0.3221 *	0.4612 *	0.3150	0.6660 *	0.2685	0.3223	0.1757
	(0.1358)	(0.1539)	(0.1638)	(0.1717)	(0.1951)	(0.2557)	(0.1786)	(0.2023)	(0.1730)

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.
= loss of statistical significance relative to full sample.

White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.

Table 12: Regression-estimated Employment Elasticities Relative to GDP for 4 Latin American Countries, Social Security Coverage and Enterprise Definitions, 1990-2000 (urban)

		Country fixed effects						Country and time fixed effects					
Dependent variable		**Total**		**Males**		**Females**		**Total**		**Males**		**Females**	
Total employment		0.3760	*	0.2029		0.6465	**	0.2640	#	0.1036		0.5136	**
		(0.1511)		(0.1324)		(0.2282)		(0.1298)		(0.1467)		(0.1657)	
Social security coverage definition	**Informal employment**	0.0563		-0.4450		0.7376		-0.1009		-0.6484		0.6359	
		(0.3413)		(0.3054)		(0.4717)		(0.4104)		(0.4826)		(0.3671)	
	Formal employment	0.7316		0.9277	*	0.3527		0.4720		0.6895		0.0506	
		(0.4264)		(0.4329)		(0.5071)		(0.3986)		(0.4575)		(0.3589)	
Enterprise definition	**Informal employment**	0.1460		-0.1511		0.5211		-0.0017		-0.2885		0.3586	
		(0.2154)		(0.2050)		(0.3377)		(0.3128)		(0.4096)		(0.2946)	
	Formal employment	0.6166	**	0.4671	*	0.9583	**	0.4753	*	0.3318		0.8090	*
		(0.2185)		(0.2067)		(0.3264)		(0.1999)		(0.1925)		(0.2799)	

Notes: #, * and ** indicate significance at 10, 5 and 1% levels, respectively.
White heteroskedasticity-consistent standard errors are in parentheses.
Data are transformed as the difference between the log of variables and the Hodrick-Prescott trend of the log of variables.
Hodrick-Prescott trend is based on at least five continuous observations from 1990-2000 and a smoothing parameter of 100; series of less than five continuous observations are dropped from the sample.
GDP is in constant terms.
Regressions include Brazil, Costa Rica, Mexico and Peru;
They do not include Argentina due to missing data on social security coverage for self-employment and employers in small firms.

Figure 1: Informal Employment Shares, Enterprise and Social Security Coverage Definitions, 1990-2000 (% of total urban employment)

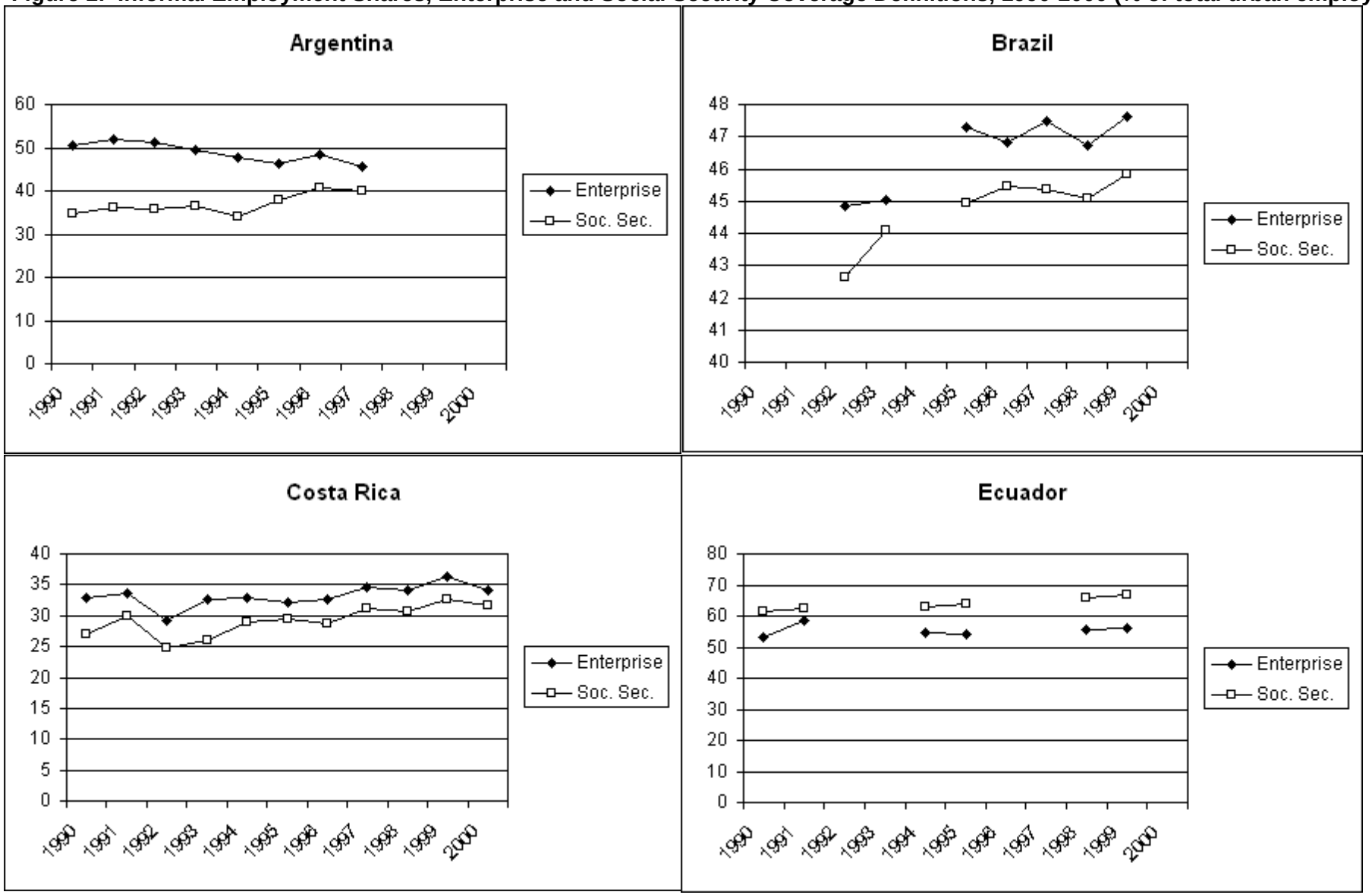


Figure 1: Informal Employment Shares, Enterprise and Social Security Coverage Definitions, 1990-2000 (% of total urban employment)

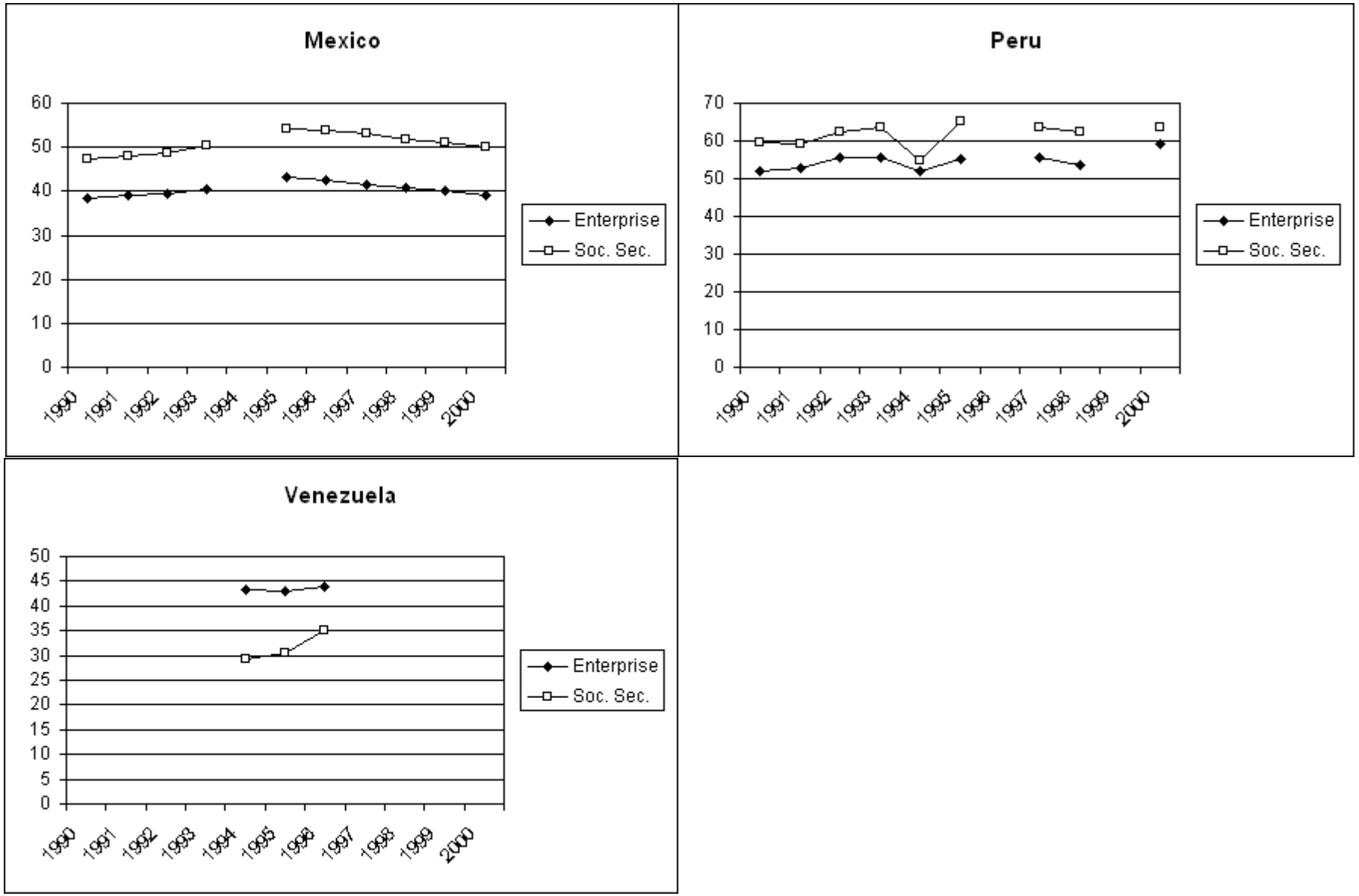
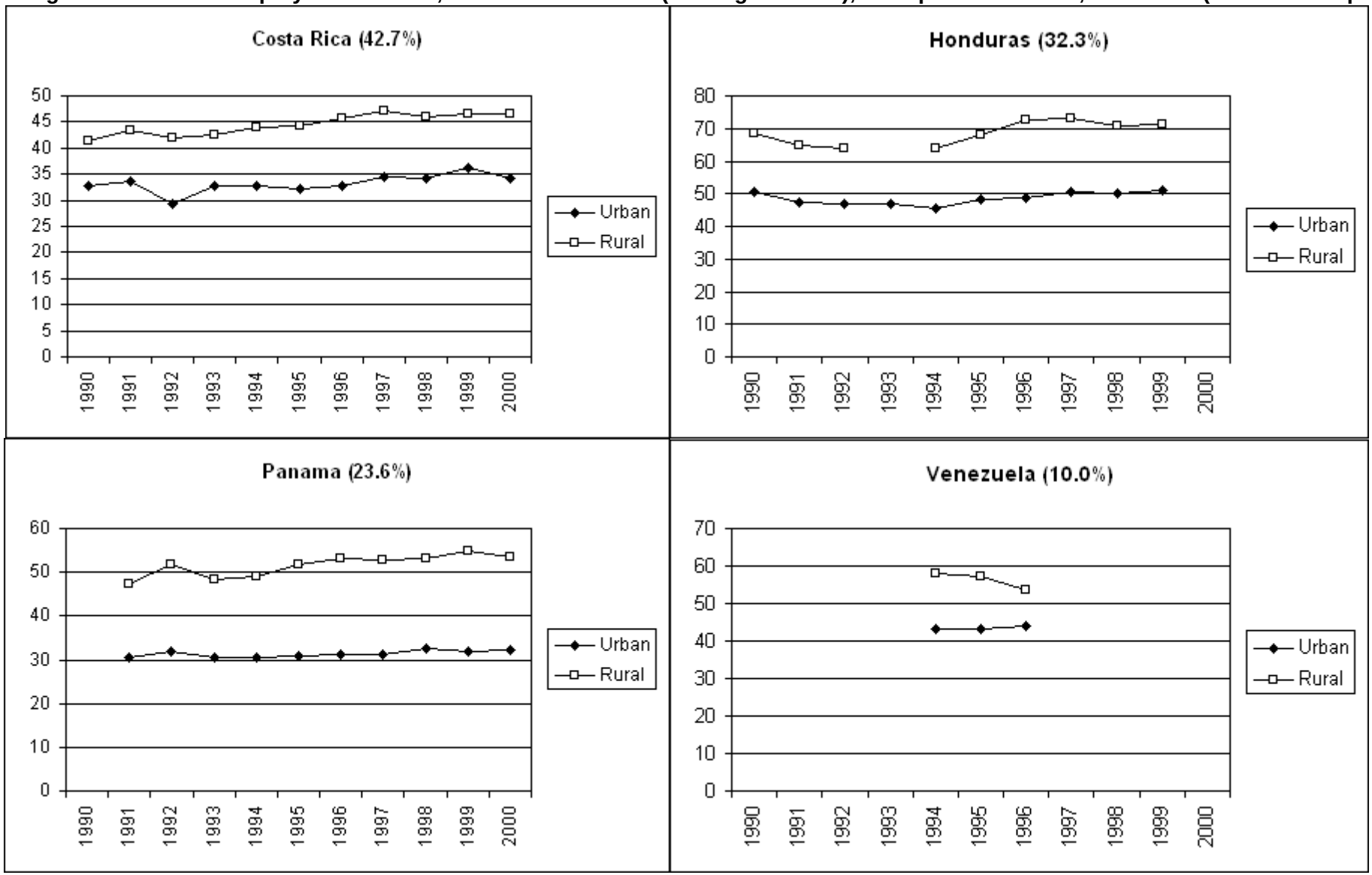
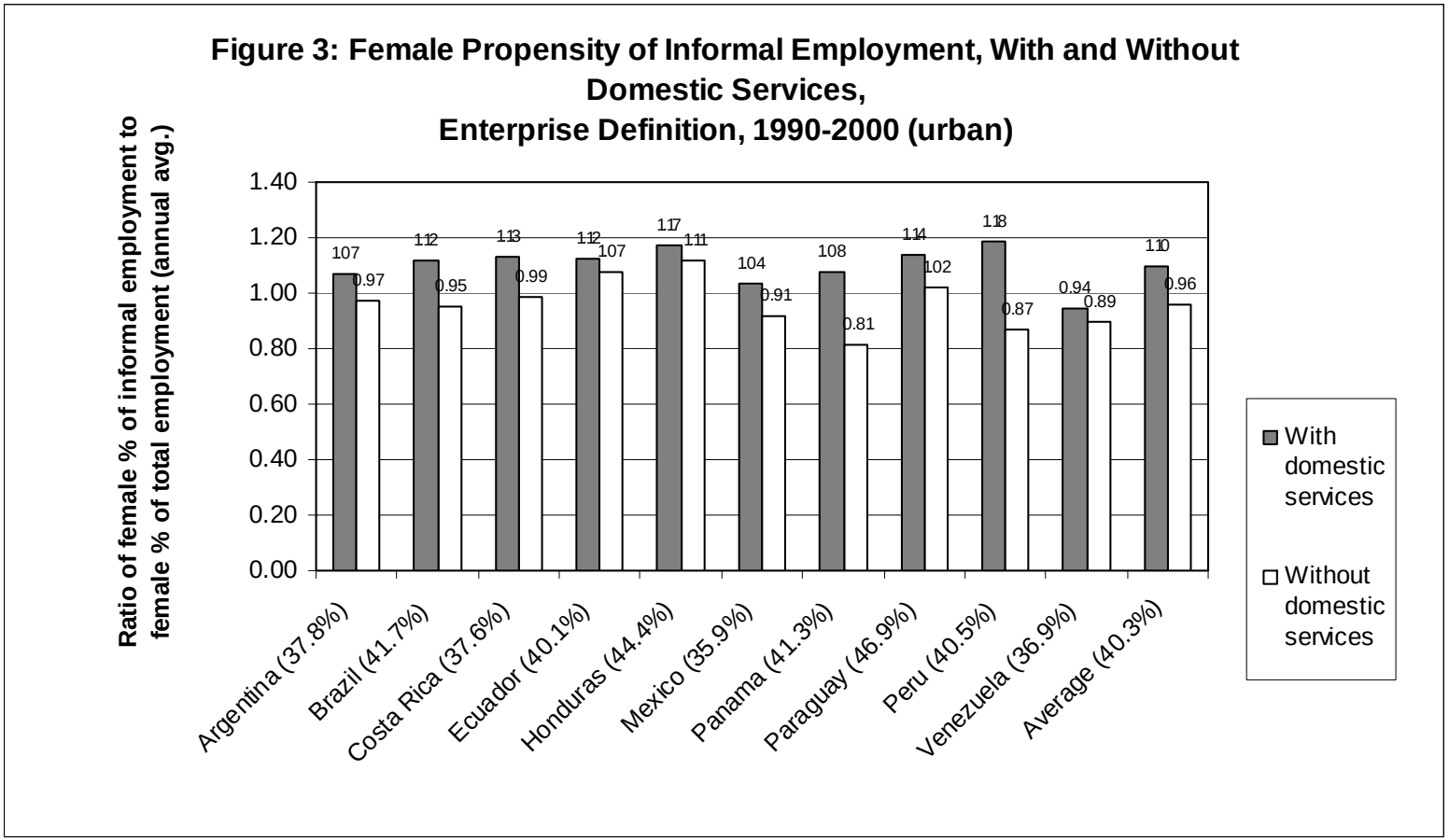


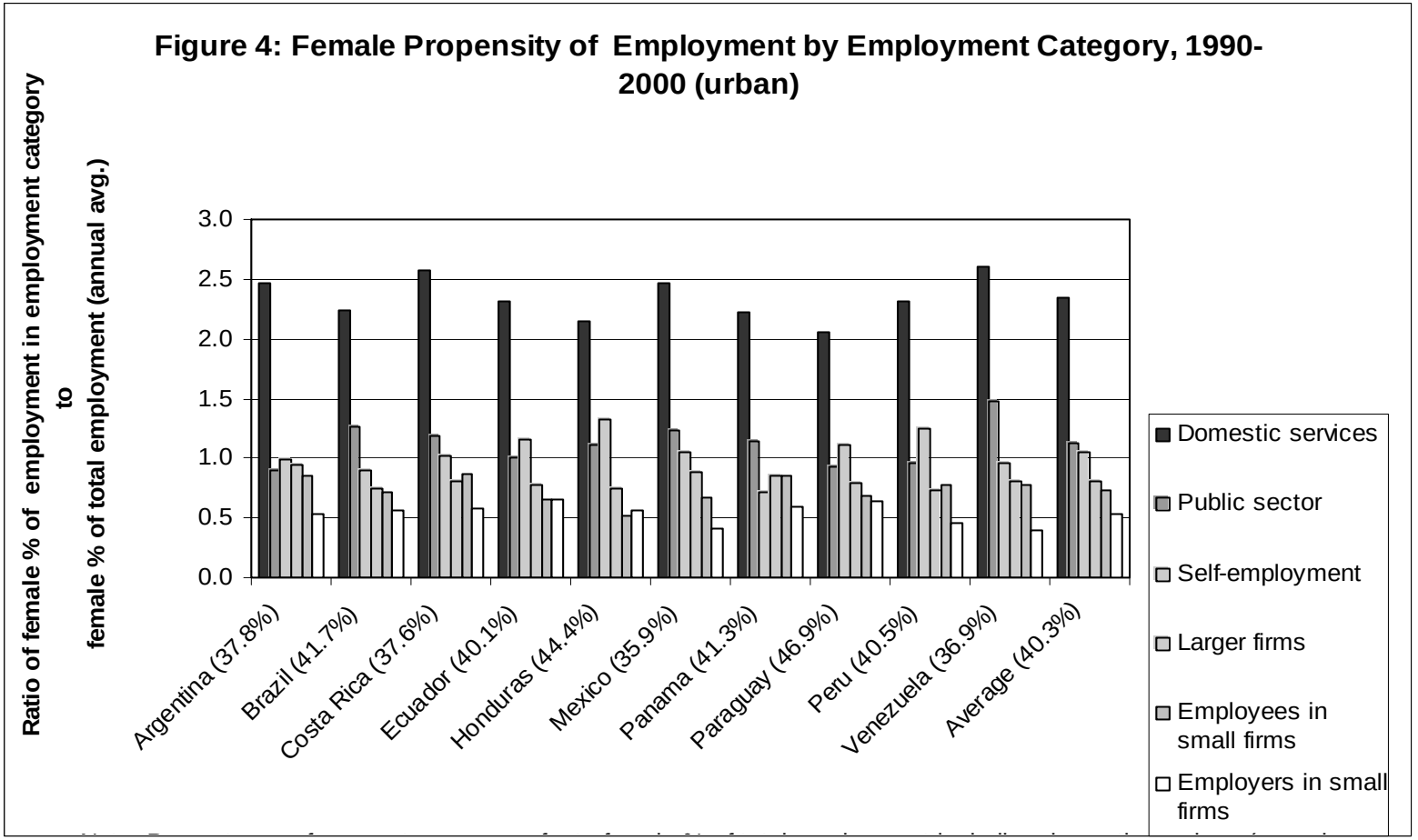
Figure 2: Informal Employment Shares, Urban Versus Rural (Non-Agricultural), Enterprise Definition, 1990-2000 (% of total employment)



Note: Percentages after country names refer to rural employment as % of total employment (annual avg.).

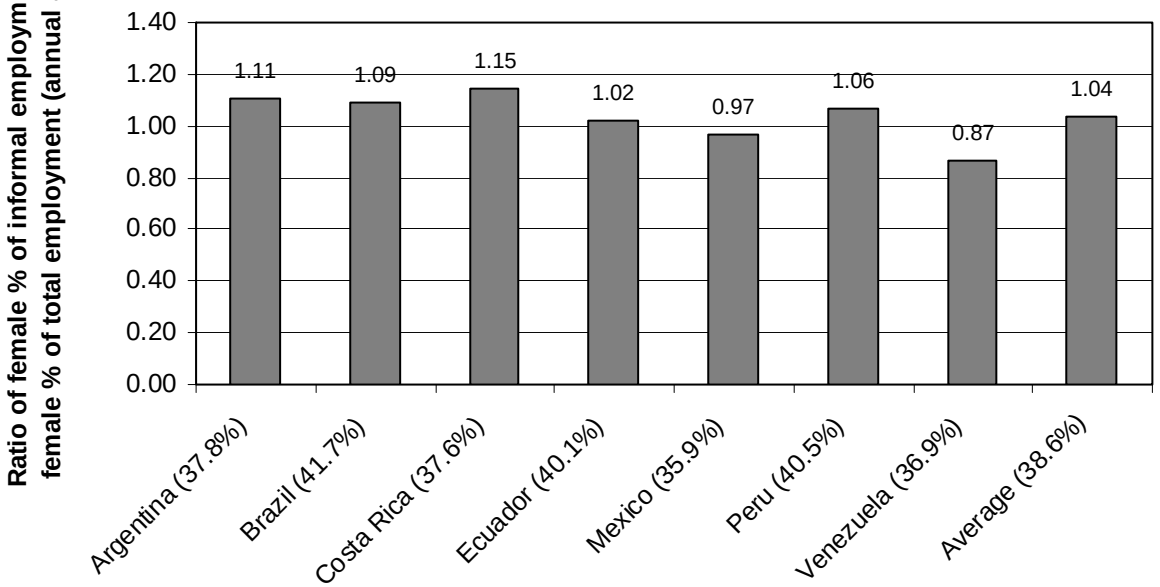


Note: Percentages after country names refers to female % of total employment including domestic services (annual avg.).



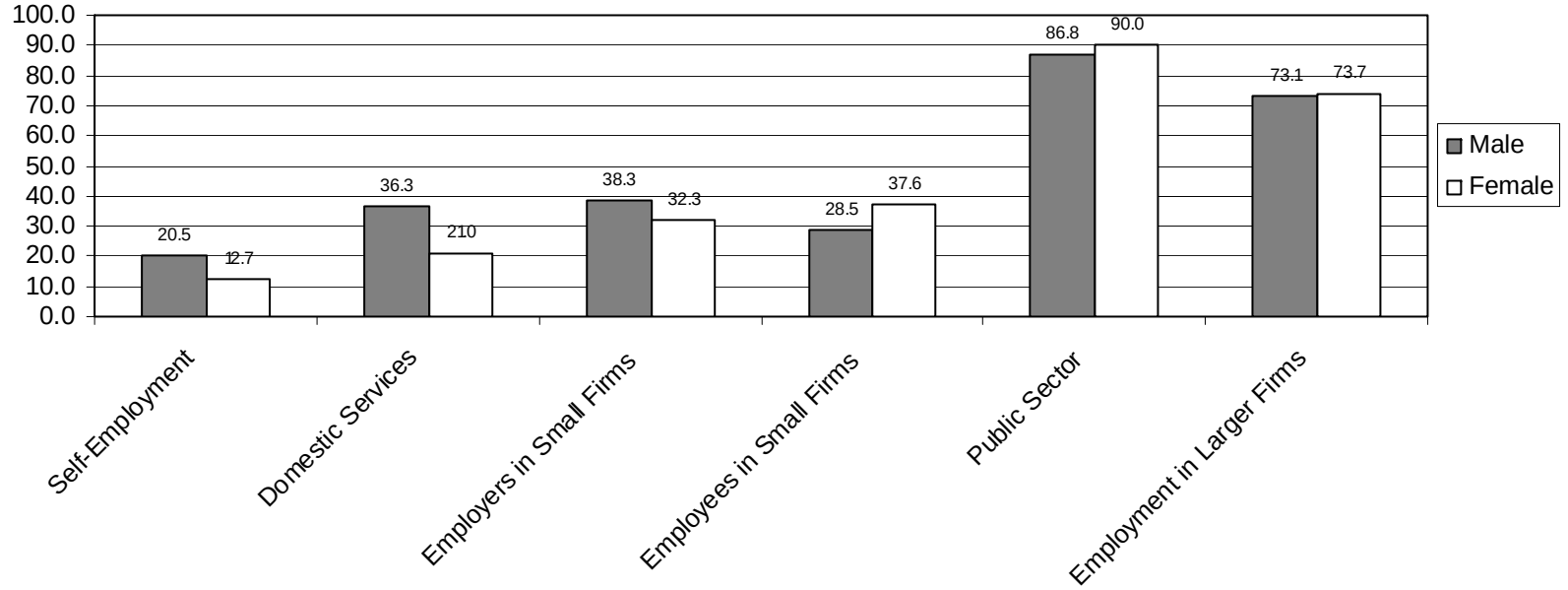
Note: Percentages after country names refer to female % of total employment including domestic services (annual avg.).

Figure 5: Female Propensity of Informal Employment, Social Security Coverage Definition, 1990-2000 (urban)



Note: Percentages after country names refers to female % of total employment including domestic services (annual avg.).

Figure 6: Percentage of Workers with Social Security Coverage by Employment Category and Sex, 1990-2000 (annual avg., urban)



Note: Refers to Brazil, Costa Rica, Mexico and Peru.

Appendix Table 1: Employment Shares by Employment Category and Sex, 1990-2000 (% of total urban employment)

Argentina

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	25.9	26.6	24.8	6.6	2.1	14.1	4.2	5.3	2.5	13.6	14.7	11.7	6.3	6.9	5.3	43.3	44.4	41.6
1991	25.8	25.5	26.2	5.0	0.5	12.5	3.9	5.1	2.0	17.2	18.4	15.3	5.4	6.0	4.4	42.7	44.5	39.6
1992	25.5	25.6	25.3	5.1	0.4	13.0	4.3	5.7	2.1	16.5	17.8	14.2	4.9	4.9	4.9	43.8	45.7	40.5
1993	25.0	25.0	25.0	5.3	0.7	12.9	4.5	5.8	2.2	14.9	15.6	13.7	4.9	5.2	4.3	45.5	47.7	41.8
1994	23.5	24.0	22.9	5.2	0.4	13.2	3.5	4.5	1.7	15.5	16.5	13.6	4.9	5.4	4.1	47.4	49.1	44.5
1995	22.4	23.5	20.7	5.3	0.2	13.5	3.5	4.7	1.7	15.2	16.2	13.6	5.1	5.4	4.6	48.4	50.0	45.9
1996	21.5	21.6	21.4	5.4	0.2	13.7	3.8	4.9	2.1	17.6	19.9	14.0	6.2	6.3	6.2	45.4	47.2	42.7
1997	19.9	19.6	20.4	5.3	0.5	13.2	3.9	4.7	2.6	16.5	19.5	11.5	5.5	5.7	5.3	48.8	50.0	47.0
1998																		
1999																		
2000																		
Average	23.7	23.9	23.3	5.4	0.6	13.3	4.0	5.1	2.1	15.9	17.3	13.5	5.4	5.7	4.9	45.7	47.3	43.0

Brazil

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990																		
1991																		
1992	23.3	24.4	21.7	9.4	0.9	21.5	2.1	2.9	1.1	10.0	12.1	7.1	16.1	13.2	20.3	39.0	46.5	28.4
1993	23.4	24.6	21.6	9.6	1.0	21.9	2.2	2.9	1.1	9.9	12.1	6.9	16.6	13.7	20.8	38.3	45.7	27.8
1994																		
1995	24.2	25.6	22.2	10.0	1.2	22.2	2.4	3.1	1.3	10.7	12.9	7.6	15.3	12.4	19.4	37.4	44.8	27.2
1996	23.2	25.3	20.3	9.8	1.1	21.8	2.3	2.9	1.4	11.5	13.7	8.5	15.3	12.2	19.6	37.9	44.8	28.4
1997	23.6	25.6	20.7	10.0	1.2	22.3	2.6	3.5	1.4	11.2	13.3	8.3	16.4	13.3	20.7	36.1	43.0	26.6
1998	23.7	26.0	20.6	9.4	1.1	21.0	2.5	3.1	1.5	11.1	13.2	8.1	14.9	11.8	19.2	38.4	44.7	29.6
1999	24.2	26.7	20.9	9.9	1.2	21.6	2.6	3.3	1.5	11.0	13.1	8.1	14.6	11.5	18.8	37.8	44.2	29.1
2000																		
Average	23.7	25.5	21.1	9.7	1.1	21.8	2.4	3.1	1.3	10.8	12.9	7.8	15.6	12.6	19.8	37.9	44.8	28.1

Appendix Table 1: Employment Shares by Employment Category and Sex, 1990-2000 (% of total urban employment)

Costa Rica

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	17.2	17.5	16.7	4.5	0.2	12.0	3.0	3.9	1.4	8.1	8.5	7.3	26.0	24.4	28.9	41.2	45.4	33.8
1991	18.4	17.8	19.5	4.3	0.1	11.3	2.7	3.4	1.6	8.3	8.9	7.2	24.1	23.0	26.0	42.2	46.8	34.5
1992	16.1	15.7	16.7	3.5	0.1	9.3	2.2	2.9	1.1	7.5	7.4	7.8	25.2	23.8	27.7	45.4	50.2	37.5
1993	17.7	17.9	17.6	3.3	0.1	9.0	2.6	3.3	1.3	9.0	8.9	9.2	24.5	22.2	28.5	42.9	47.7	34.5
1994	16.2	16.2	16.4	3.9	0.3	10.1	3.4	4.0	2.3	9.2	9.9	8.1	22.6	21.2	24.8	44.7	48.5	38.3
1995	16.4	15.6	17.8	3.7	0.3	9.4	3.1	3.9	1.7	9.0	10.0	7.3	21.4	19.4	24.8	46.4	50.8	38.9
1996	15.2	15.8	14.2	4.0	0.3	10.3	3.7	4.0	3.2	9.9	11.4	7.2	20.9	16.6	28.3	46.3	51.8	36.8
1997	17.7	17.0	18.9	3.6	0.2	9.3	3.8	4.8	2.2	9.5	10.4	8.0	21.2	17.2	27.7	44.2	50.4	34.0
1998	15.2	14.9	15.6	4.9	0.2	12.3	5.1	6.5	2.9	9.0	10.0	7.5	20.3	16.7	26.0	45.5	51.8	35.7
1999	17.3	16.5	18.5	5.4	0.5	12.7	3.5	4.5	2.0	10.1	11.3	8.2	18.1	15.7	21.7	45.6	51.5	36.9
2000	17.2	18.2	15.7	4.7	0.4	11.5	2.4	3.2	1.2	9.9	10.5	8.8	19.5	16.8	23.8	46.3	50.9	39.1
Average	16.8	16.6	17.0	4.2	0.2	10.7	3.2	4.0	1.9	9.0	9.7	7.8	22.2	19.7	26.2	44.6	49.6	36.3

Ecuador

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	35.4	32.6	39.9	5.0	0.7	12.1	3.1	3.7	2.1	9.5	11.6	6.1	18.7	19.1	18.1	28.3	32.3	21.7
1991	33.3	29.5	39.0	5.2	0.6	12.3	5.0	6.1	3.3	15.2	18.5	10.1	17.3	17.8	16.6	24.0	27.4	18.7
1992																		
1993																		
1994	32.9	29.5	38.1	5.1	0.4	12.1	5.7	6.9	4.0	10.9	13.7	6.9	14.7	14.5	15.1	30.5	35.1	23.8
1995	33.6	29.6	39.5	5.1	0.7	11.7	5.5	6.8	3.6	10.1	12.3	6.9	14.2	14.1	14.4	31.4	36.5	23.9
1996																		
1997																		
1998	33.0	28.9	38.8	6.0	1.0	13.1	5.4	6.7	3.5	11.2	14.3	6.9	12.6	12.3	13.2	31.7	36.8	24.5
1999	31.3	27.5	36.7	5.9	0.7	13.5	6.1	7.6	3.9	12.8	15.6	8.8	11.3	11.3	11.4	32.5	37.3	25.6
2000																		
Average	33.2	29.6	38.7	5.4	0.7	12.5	5.1	6.3	3.4	11.6	14.3	7.6	14.8	14.9	14.8	29.7	34.3	23.0

Appendix Table 1: Employment Shares by Employment Category and Sex, 1990-2000 (% of total urban employment)

Honduras

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	26.4	17.8	37.4	7.5	0.5	16.4	5.2	6.7	3.3	11.7	15.7	6.5	16.0	16.2	15.9	33.2	43.1	20.6
1991	24.8	18.8	32.6	7.6	0.6	16.6	5.6	7.5	3.1	9.5	13.1	4.8	17.6	16.8	18.7	34.9	43.2	24.1
1992	24.1	18.4	31.4	7.4	0.4	16.2	6.7	9.2	3.6	8.9	12.4	4.4	16.5	15.6	17.7	36.4	44.0	26.7
1993	23.3	16.8	32.8	6.3	0.2	15.3	7.0	9.4	3.5	10.1	13.8	4.7	14.7	12.8	17.4	38.6	47.1	26.2
1994	24.2	18.0	32.4	6.0	0.0	13.9	5.8	7.7	3.4	9.6	12.5	5.8	12.5	12.0	13.1	41.9	49.8	31.5
1995	27.1	20.3	35.8	5.9	0.8	12.4	5.3	6.8	3.4	10.2	14.0	5.2	13.4	12.4	14.7	38.2	45.7	28.4
1996	27.0	19.2	36.1	6.0	0.7	12.2	6.0	8.6	3.1	9.6	13.8	4.7	12.3	11.1	13.7	39.1	46.5	30.4
1997	29.0	21.0	38.1	5.6	0.9	10.9	6.4	9.2	3.3	9.4	13.7	4.5	11.0	9.7	12.5	38.6	45.5	30.7
1998	27.2	21.0	34.7	5.0	0.7	10.3	7.4	10.1	4.2	10.4	14.1	5.8	10.3	8.2	13.0	39.7	45.9	32.0
1999	29.9	21.8	38.5	5.2	0.7	10.1	6.3	8.6	3.8	9.5	13.9	4.9	10.6	9.2	12.0	38.5	45.7	30.8
2000																		
Average	26.3	19.3	35.0	6.2	0.6	13.4	6.2	8.4	3.5	9.9	13.7	5.1	13.5	12.4	14.9	37.9	45.7	28.2

Mexico

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	19.1	19.3	18.8	4.6	0.7	12.0	3.4	4.6	1.2	11.4	13.2	8.0	19.4	17.5	23.0	42.1	44.8	37.0
1991	18.0	18.0	17.9	4.4	0.5	11.7	3.9	5.1	1.6	12.6	14.8	8.5	17.3	14.9	21.8	43.8	46.6	38.5
1992	18.4	17.8	19.4	4.6	0.9	11.6	3.8	5.1	1.4	12.7	15.0	8.5	16.9	14.5	21.3	43.6	46.7	37.7
1993	18.8	17.9	20.4	4.7	0.8	11.9	4.0	5.3	1.7	13.0	15.4	8.8	16.2	13.8	20.6	43.2	46.8	36.6
1994																		
1995	20.9	19.9	22.6	5.3	1.1	12.6	3.6	4.9	1.4	13.4	16.3	8.6	16.1	13.9	20.0	40.7	44.0	34.9
1996	20.7	19.9	22.1	5.0	1.1	11.8	3.8	5.1	1.6	13.1	15.8	8.3	15.5	13.5	18.9	42.0	44.7	37.2
1997	19.5	18.6	21.2	5.0	1.0	11.9	3.7	5.0	1.4	13.3	15.9	8.7	15.0	13.2	18.2	43.5	46.3	38.6
1998	19.4	18.7	20.5	5.0	1.2	11.5	3.7	4.8	1.7	12.9	15.4	8.6	14.4	12.5	17.5	44.7	47.3	40.1
1999	18.3	17.8	19.2	4.8	1.2	11.4	3.6	4.8	1.6	13.4	15.8	9.0	14.5	12.4	18.3	45.4	48.1	40.6
2000	18.3	17.5	19.6	3.7	0.2	9.6	3.6	4.7	1.7	13.6	15.9	9.7	14.5	12.5	17.9	46.4	49.1	41.6
Average	19.1	18.5	20.2	4.7	0.8	11.6	3.7	4.9	1.5	13.0	15.4	8.7	16.0	13.9	19.8	43.5	46.5	38.3

Appendix Table 1: Employment Shares by Employment Category and Sex, 1990-2000 (% of total urban employment)

Panama

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990																		
1991	16.2	20.5	10.7	7.6	0.9	16.3	1.5	2.0	1.0	5.1	5.7	4.3	31.4	28.9	34.8	38.2	42.2	33.0
1992	15.9	20.3	9.7	8.4	0.9	19.1	1.4	1.9	0.8	6.0	7.0	4.5	29.4	26.6	33.4	38.9	43.3	32.5
1993	15.4	19.5	9.4	7.7	0.9	17.4	1.4	1.8	0.8	6.1	7.3	4.4	28.8	26.0	32.9	40.7	44.6	35.1
1994	16.4	20.7	10.0	7.7	1.0	17.6	1.3	1.7	0.7	5.1	5.7	4.3	28.5	25.9	32.2	41.0	44.9	35.1
1995	16.8	20.5	11.3	7.4	0.9	16.8	1.4	1.9	0.6	5.5	5.9	5.0	27.5	25.0	31.2	41.5	45.8	35.1
1996	16.8	20.0	12.1	6.9	0.9	15.7	1.7	2.3	0.7	5.9	6.4	5.1	26.5	23.8	30.5	42.2	46.5	35.8
1997	17.8	20.4	14.2	6.7	1.1	14.5	1.5	2.0	0.8	5.3	5.5	5.1	25.3	23.0	28.5	43.4	48.0	37.0
1998	17.8	19.9	14.7	6.8	1.1	14.9	1.6	1.9	1.3	6.3	7.1	5.1	24.1	21.7	27.6	43.5	48.4	36.4
1999	18.4	20.3	15.8	6.1	0.9	13.5	1.4	1.7	1.0	6.0	6.5	5.3	21.8	19.9	24.4	46.3	50.7	40.0
2000	18.8	22.1	14.0	6.4	1.4	13.5	1.4	1.5	1.1	5.6	5.9	5.2	22.8	20.2	26.4	45.1	48.8	39.8
Average	17.0	20.4	12.2	7.2	1.0	15.9	1.5	1.9	0.9	5.7	6.3	4.8	26.6	24.1	30.2	42.0	46.3	36.0

Paraguay

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	17.3	14.6	20.7	13.3	0.0	29.8	7.5	11.4	2.6	20.8	25.9	14.6	14.9	16.0	13.5	26.2	32.0	18.9
1991	17.6	17.0	18.4	12.9	0.0	28.7	5.9	6.7	4.8	22.4	28.1	15.4	13.0	14.0	11.7	28.2	34.1	20.9
1992	17.2	15.5	19.0	12.2	0.6	24.9	7.5	9.6	5.2	17.8	24.7	10.3	17.1	17.4	16.7	28.2	32.2	23.8
1993	17.6	16.7	18.7	13.6	0.8	28.3	6.5	8.7	4.1	18.3	23.1	12.8	14.8	16.1	13.2	29.1	34.6	22.9
1994	17.6	14.6	20.8	12.7	1.8	24.1	8.5	9.8	7.1	15.7	20.1	11.2	13.4	14.8	11.9	32.1	38.9	25.0
1995																		
1996	21.8	18.8	25.1	11.6	1.5	22.8	6.4	8.6	3.9	13.7	18.7	8.1	12.9	12.1	13.7	33.6	40.2	26.3
1997	24.1	22.4	25.9	12.0	1.4	23.8	7.2	10.1	3.9	8.6	10.8	6.2	14.0	16.3	11.5	34.1	38.9	28.6
1998																		
1999	18.6	17.0	20.4	10.7	1.3	21.1	5.1	7.1	3.0	12.4	14.7	9.9	16.2	16.2	16.3	36.9	43.8	29.3
2000																		
Average	19.0	17.1	21.1	12.4	0.9	25.4	6.8	9.0	4.3	16.2	20.8	11.0	14.5	15.4	13.6	31.0	36.8	24.5

Appendix Table 1: Employment Shares by Employment Category and Sex, 1990-2000 (% of total urban employment)

Peru

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990	33.8	27.7	43.0	5.2	1.1	11.4	3.8	5.5	1.1	9.2	11.1	6.4	14.9	15.3	14.3	33.2	39.4	23.7
1991	33.4	28.9	40.4	4.9	0.6	11.6	4.5	6.2	1.7	10.0	10.6	9.1	11.9	12.0	11.8	35.3	41.7	25.3
1992	35.6	30.4	44.2	4.9	0.9	11.4	4.4	6.4	1.2	10.8	12.3	8.4	12.1	12.5	11.5	32.2	37.5	23.4
1993	32.6	27.1	41.4	4.6	0.1	12.0	5.2	7.2	2.0	13.0	14.2	11.2	11.9	12.4	11.2	32.6	39.0	22.3
1994	33.1	27.3	42.3	4.6	0.5	11.0	4.5	5.8	2.4	9.9	11.5	7.3	10.1	10.5	9.5	37.8	44.4	27.5
1995	33.0	26.9	41.8	4.8	0.5	11.0	4.6	6.4	2.1	12.7	15.0	9.3	9.3	9.2	9.5	35.6	42.0	26.4
1996																		
1997	34.9	27.8	44.2	5.1	0.2	11.4	4.0	5.4	2.2	11.7	14.6	8.0	7.0	7.4	6.6	37.3	44.6	27.7
1998	30.2	23.8	38.7	5.5	0.5	11.9	5.4	7.1	3.2	12.5	13.9	10.8	8.6	9.1	8.0	37.7	45.6	27.4
1999																		
2000	36.4	31.8	42.4	5.4	0.4	11.9	4.1	5.2	2.7	13.3	15.7	10.0	7.9	7.8	7.9	33.0	39.0	25.0
Average	33.7	28.0	42.0	5.0	0.5	11.5	4.5	6.1	2.1	11.5	13.2	8.9	10.4	10.7	10.0	35.0	41.5	25.4

Venezuela

	Self-employment			Domestic services			Employers in small firms			Employees in small firms			Public sector			Employment in larger firms		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990																		
1991																		
1992																		
1993																		
1994	27.1	28.7	24.1	1.6	0.1	4.3	4.0	5.7	1.1	10.5	11.0	9.6	18.7	13.4	28.3	38.1	41.1	32.7
1995	27.2	27.5	26.7	2.2	0.1	5.7	3.6	4.7	1.6	10.1	11.9	7.2	20.0	14.3	29.7	36.9	41.5	29.1
1996	28.7	28.6	28.8	2.1	0.2	5.2	3.0	4.0	1.3	10.2	12.0	7.4	19.4	14.0	28.2	36.6	41.2	29.1
1997																		
1998																		
1999																		
2000																		
Average	27.6	28.3	26.5	2.0	0.1	5.1	3.5	4.8	1.3	10.3	11.6	8.0	19.4	13.9	28.7	37.2	41.3	30.3

Source: ILO SIAL.

Appendix Table 2: Percentage of Workers with Social Security Coverage in Formal and Informal Sectors by Sex, 1990-2000 (urban)

Argentina

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990	35.4	40.9	29.3	77.5	78.0	76.6
1991	32.9	35.9	29.6	78.2	78.2	78.1
1992	31.2	36.1	25.8	78.8	77.2	81.7
1993	30.3	37.0	23.5	77.0	75.4	80.1
1994	36.3	42.9	29.2	77.9	76.8	80.0
1995	28.8	35.2	22.7	74.7	72.5	78.6
1996	27.4	33.3	20.6	73.4	72.9	74.1
1997	25.8	29.8	20.7	73.7	72.8	75.3
1998						
1999						
2000						
Average	31.0	36.4	25.2	76.4	75.5	78.1

Brazil

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990						
1991						
1992	26.2	31.1	20.7	82.7	82.1	83.8
1993	25.2	29.7	20.0	81.1	80.5	82.3
1994						
1995	25.3	28.9	21.4	81.7	80.8	83.3
1996	26.8	29.6	23.7	78.9	78.2	80.1
1997	26.2	27.8	24.3	80.4	79.4	82.1
1998	25.9	26.8	24.7	80.4	79.2	82.5
1999	25.4	26.1	24.6	80.3	78.9	82.5
2000						
Average	25.8	28.5	22.8	80.8	79.9	82.4

Costa Rica

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990	43.3	48.0	36.7	87.6	87.4	88.2
1991	38.9	43.2	33.5	85.7	84.8	87.5
1992	45.2	52.4	36.2	87.6	87.2	88.3
1993	45.8	49.9	39.8	87.8	87.8	87.8
1994	41.9	48.5	32.7	85.4	84.5	87.2
1995	39.3	46.3	29.4	85.5	85.0	86.5
1996	42.2	46.8	34.9	85.4	85.9	84.5
1997	38.6	43.0	32.5	84.8	84.1	85.9
1998	39.0	44.9	31.4	85.1	84.7	85.8
1999	37.5	42.9	31.2	84.2	84.9	83.0
2000	39.5	44.1	33.3	83.3	83.2	83.4
Average	41.0	46.4	33.8	85.7	85.4	86.2

Appendix Table 2: Percentage of Workers with Social Security Coverage in Formal and Informal Sectors by Sex, 1990-2000 (urban)

Ecuador

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990	10.9	10.9	10.9	69.3	67.9	72.1
1991	14.7	14.8	14.6	69.9	68.5	72.6
1992						
1993						
1994	16.4	16.3	16.5	61.8	59.5	66.1
1995	25.6	28.1	22.6	48.3	44.8	55.1
1996						
1997						
1998	12.3	11.9	12.8	61.1	58.0	66.7
1999	13.2	13.6	12.7	58.3	54.8	65.0
2000						
Average	15.5	15.9	15.0	61.4	58.9	66.3

Mexico

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990	10.5	7.9	15.2	79.0	77.0	83.1
1991	10.9	8.8	14.7	78.3	76.5	81.8
1992	10.4	8.9	13.0	78.3	76.4	82.0
1993	9.3	7.9	11.7	77.0	75.5	79.9
1994						
1995	7.0	5.8	9.0	75.5	73.3	79.6
1996	6.8	5.3	9.3	75.3	73.8	78.0
1997	6.5	5.1	8.8	75.6	74.5	77.5
1998	6.8	5.4	9.1	77.1	76.3	78.6
1999	6.0	5.0	7.8	77.7	76.8	79.2
2000	6.3	5.3	8.0	78.1	76.6	80.8
Average	8.1	6.5	10.7	77.2	75.7	80.0

Peru

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990	15.3	16.0	14.7	67.5	67.0	68.6
1991	17.9	18.7	16.9	66.6	66.3	67.2
1992	15.6	15.7	15.4	65.1	63.5	69.0
1993	18.2	17.7	18.8	58.9	55.8	66.7
1994	21.2	20.6	21.8	70.9	71.0	70.8
1995	11.4	14.5	8.0	63.2	64.9	59.6
1996						
1997	19.4	17.6	21.2	58.2	59.7	55.1
1998	18.0	16.7	19.1	60.2	56.5	67.8
1999						
2000	17.3	15.5	19.2	64.0	62.1	67.6
Average	17.1	17.0	17.2	63.8	63.0	65.8

Appendix Table 2: Percentage of Workers with Social Security Coverage in Formal and Informal Sectors by Sex, 1990-2000 (urban)

Venezuela

	Total employment in the informal sector			Total employment in the formal sector		
	Total	Male	Female	Total	Male	Female
1990						
1991						
1992						
1993						
1994	24.8	21.7	29.2	80.6	78.6	83.9
1995	28.3	27.7	29.2	78.3	75.3	83.2
1996	23.3	20.3	28.0	74.2	70.6	80.0
1997						
1998						
1999						
2000						
Average	25.4	23.2	28.8	77.7	74.8	82.4

Source: ILO SIAL.

Appendix Table 3: Female Propensity of Informal Employment*, 1990-2000 (urban)

	Argentina			Mexico		
	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition
1990	1.05	0.97	1.16	1.04	0.89	0.93
1991	1.08	1.01	1.13	1.02	0.88	0.94
1992	1.06	0.98	1.10	1.03	0.91	0.95
1993	1.09	1.00	1.12	1.05	0.93	0.98
1994	1.08	0.98	1.12			
1995	1.07	0.96	1.08	1.05	0.93	0.97
1996	1.06	0.96	1.11	1.03	0.92	0.97
1997	1.04	0.93	1.06	1.04	0.93	0.98
1998				1.03	0.92	0.98
1999				1.03	0.91	0.98
2000				1.03	0.93	0.97
Average	1.07	0.97	1.11	1.04	0.91	0.97

	Brazil			Panama		
	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition
1990						
1991				1.06	0.77	
1992	1.15	0.97	1.14	1.07	0.73	
1993	1.14	0.96	1.13	1.05	0.72	
1994				1.07	0.74	
1995	1.13	0.97	1.11	1.09	0.79	
1996	1.11	0.94	1.08	1.08	0.81	
1997	1.11	0.94	1.07	1.10	0.89	
1998	1.10	0.93	1.05	1.11	0.90	
1999	1.10	0.93	1.04	1.11	0.93	
2000				1.05	0.85	
Average	1.12	0.95	1.09	1.08	0.81	

Appendix Table 3: Female Propensity of Informal Employment*, 1990-2000 (urban)

	Costa Rica			Paraguay		
	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition
1990	1.14	0.97	1.15	1.15	1.02	
1991	1.17	1.03	1.13	1.15	1.03	
1992	1.19	1.05	1.20	1.09	0.95	
1993	1.13	1.01	1.16	1.14	1.01	
1994	1.13	0.99	1.14	1.16	1.07	
1995	1.13	1.00	1.16			
1996	1.07	0.92	1.14	1.12	1.02	
1997	1.11	0.99	1.11	1.15	1.04	
1998	1.12	0.96	1.14			
1999	1.14	1.01	1.17	1.16	1.04	
2000	1.09	0.94	1.11			
Average	1.13	0.99	1.15	1.14	1.02	

	Ecuador			Peru		
	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition
1990	1.14	1.08	1.05	1.19	0.86	1.09
1991	1.10	1.06	1.04	1.19	0.87	1.09
1992				1.17	0.88	1.05
1993				1.20	0.86	1.02
1994	1.12	1.07	1.02	1.21	0.85	1.09
1995	1.14	1.09	1.01	1.16	0.88	1.13
1996						
1997				1.18	0.87	1.06
1998	1.12	1.07	1.01	1.20	0.85	1.02
1999	1.12	1.07	1.01			
2000				1.13	0.91	1.02
Average	1.12	1.07	1.02	1.18	0.87	1.06

Appendix Table 3: Female Propensity of Informal Employment*, 1990-2000 (urban)

	Honduras			Venezuela		
	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition	Enterprise definition w/ domestic services	Enterprise definition w/o domestic services	Social security coverage definition
1990	1.25	1.21				
1991	1.20	1.13				
1992	1.18	1.10				
1993	1.21	1.12				
1994	1.22	1.15		0.90	0.86	0.90
1995	1.17	1.12		0.96	0.90	0.87
1996	1.15	1.10		0.97	0.92	0.84
1997	1.13	1.08				
1998	1.10	1.05				
1999	1.12	1.09				
2000						
Average	1.17	1.11		0.94	0.89	0.87

Source: ILO SIAL.

Note: * Defined as ratio of female % of informal employment to female % of total employment.

References

Beneria, L.; Floro, M. 2006. "Distribution, gender and labor market informalization: A conceptual framework with a focus on homeworkers," in Shahra Razawi and Shireen Hassim (eds.) Gender and social policy in a global context: Uncovering the gendered structure of "the social" (Houndmills, Basingstoke, Hampshire, Palgrave MacMillan).

Botero, J.C.; Djankov, S.; La Porta, R.; Lopez de Silanes, F.; Shleifer, A. 2004. "The regulation of labor", NBER Working Paper No. 9756.

Calderón Madrid, A. 2000. "Job stability and labor mobility in urban Mexico: a study based on duration models and transition analysis", Inter-American Development Bank Research Network working paper, No. R-419.

Carneiro, F. 1997. "The changing informal labour market in Brazil: cyclicality versus excessive intervention", in Labour, Vol. 11, No. 1, pp. 3-22.

Carr, M.; Chen, M. 2004. "Globalization, social exclusion and work: with special reference to informal employment and gender", Working Paper No. 20, Policy Integration Department, International Labour Office.

Deutsch, R.; Morrison, A.; Piras, C.; Nopo, H. 2002. "Working within confines: Occupational segregation by gender in three Latin American countries", Inter-American Development Bank, Sustainable Development Department Technical Paper Series.

Franks, J. 1994. "Macroeconomic policy and the informal sector", in C.A. Rakowski (ed.) Contrapunto: the informal sector debate in Latin America (Albany, NY, State University of New York Press).

Frisoni, R.; Kongolo, M. 2002. "The evolution of labour law in Latin America since the 1980s", background document for the International Institute for Labour Studies (available upon request).

Funkhouser, E. 1997. "Mobility and labor market segmentation: the urban labor market in El Salvador", in *Economic Development and Cultural Change*, Vol. 46, No. 1, pp. 123-53.

Galli, R.; Kucera, D. 2004. "Labor standards and informal employment in Latin America", in *World Development*, Vol. 42, No. 5, pp. 809-28.

Gong, Xiaodong; van Soest, A. 2002. "Wage differentials and mobility in the urban labour market: a panel data analysis for Mexico", in *Labour Economics*, Vol. 9, No. 4, pp. 513-29.

Heckman, J.; Pagés-Serra, C. 2000. "The cost of job security regulation: evidence from Latin American labor markets", in *Economia*, Vol. 1, No. 1, pp. 109-54.

Hopenhayn, H. 2001. "Labor market policies and employment duration: the effects of labor market reform in Argentina", Inter-American Development Bank Research Network working paper, No. R-407.

Hussmans, R. 2004. “Measuring the informal economy: From employment in the informal sector to informal employment”, Working Paper No. 53, Policy Integration Department, International Labour Office.

International Labour Office (ILO). 2002a. Decent work and the informal economy (Geneva).

___. 2002b. *Women and men in the informal economy: A statistical picture* (Geneva).

___. 2003. Report of the Conference, Seventeenth International Conference of Labour Statisticians (Geneva).

___. 2005. Labour Overview: Latin America and the Caribbean (Lima, ILO Regional Office for Latin America and the Caribbean).

___. 2006. Labour Overview: Latin America and the Caribbean (Lima, ILO Regional Office for Latin America and the Caribbean).

Kucera, D. 2001. Gender, growth and trade: The miracle economies of the postwar years. (London and New York, Routledge).

Kugler, A. 2000. “The impact of firing costs on turnover and unemployment: evidence from the Columbian labour market reform”, Inter-American Development Bank Research Network working paper, No. R-393.

Maloney, W.F. 1997. “Labor market structure in LDCs: time series evidence on competing views”, World Bank working paper.

Maloney, W.F. 1999. “Does informality imply segmentation in urban labor markets? Evidence from sectoral transitions in Mexico”, in *The World Bank Economic Review*, Vol. 13, No. 2, pp. 275-302.

Marcouiller, D., Veronica Ruiz de Castilla; Woodruff, C. 1997. “Formal measures of the informal-sector wage gap in Mexico, El Salvador, and Peru”, in *Economic Development and Cultural Change*, Vol. 45, No. 2, pp. 367-92.

Márquez, G.; Pagés, C. 1998. “Ties that bind: employment protection and labor market outcomes in Latin America”, Inter-American Development Bank working paper.

Mesa-Lago, C. 1992. “Protection for the informal sector in Latin America and the Caribbean by social security or alternative means”, in V. Tokman (ed.) Beyond regulation: The informal economy in Latin America (Boulder and London, Lynne Rienner Publishers).

Micco, A.; Pages, C. 2004. “Employment protection and gross job flows”, Econometric Society Latin American Meetings.

Paes de Barros, R.; Carlos Henrique Corseuil. 2001. “The impact of regulations on Brazilian labor market performance”, Inter-American Development Bank Research Network working paper, No. R-427.

Portes, A. 1989. “Latin American Urbanization in the Years of the Crisis”, in *Latin American Research Review*, Vol. 24, No. 3, pp. 7-44.

Portes, A. 1994. “By-passing the rules: the dialectics of labour standards and informalization in less developed countries”, in W. Sengenberger and D. Campbell (eds.) International labour standards and economic interdependence (Geneva, International Institute for Labour Studies).

Portes, A.; Schauffler, R. 1993. “Competing perspectives on the Latin American informal sector”, in *Population and Development Review*, Vol. 19, No. 1, pp. 33-60.

Pradhan, M.; van Soest, A. 1995. “Formal and informal sector employment in urban areas of Bolivia”, in *Labour Economics*, Vol. 2, No. 3, pp. 275-97.

Rubery, Jill (ed.). 1988. Women and recession (London and New York, Routledge).

Saavedra, J.; Chong, A. 1999. “Structural reform, institutions, and earnings: evidence from the formal and informal sectors in urban Peru”, in *The Journal of Development Studies*, Vol. 35, No. 4, pp. 95-116.

Saavedra, J.; Torero, M. 2000. “Labor market reforms and their impact on formal labor demand and job market turnover: the case of Peru”, Inter-American Development Bank Research Network working paper, No. R-394.

Sethuraman, S.V. 1998. “Gender, informality and poverty: A global review”, World Bank and WIEGO draft paper.

Tokman, V. 1978. “An exploration into the nature of informal-formal sector relationships”, in *World Development*, Vol. 6, No. 9/10, pp. 1065-75.

Tokman, V. 1982. “Unequal development and the absorption of labour: Latin America, 1950-1980”, in *CEPAL Review*, August, No. 17, pp. 121-33.

Tokman, V. 1989. “Policies for a heterogeneous informal sector in Latin America”, in *World Development*, Vol. 17, No. 7, pp. 1067-76.

Valenzuela, M.E. 2005. “Informality and Gender in Latin America”, Working Paper No. 50, Policy Integration Department, International Labour Office.

Zuin, V. 2004. “Business strategies of informal micro-entrepreneurs in Lima, Peru”, Working Paper No. 150, International Institute for Labour Studies, International Labour Office.

Policy Integration and Statistics Department

Working Papers*

No. 1 ILO activities on the social dimension of globalization: Synthesis report

No. 2 Measuring decent work with statistical indicators – *Richard Anker, Igor Chernyshev, Philippe Egger, Farhad Mehran and Joseph Ritter*

No. 3 Globalization and decent work: Options for Panama – *Philippe Egger*

No. 4 Globalización y trabajo decente: Opciones para Panamá – *Philippe Egger*

No. 5 Indicators of social dialogue: Concepts and measurements – *Lane Kenworthy and Bernhard Kittel*

No. 6 Assessing the impact of the attacks of 11 September 2001 on women's employment in the United States – *Gertrude Schaffner Goldberg and Helen Lachs Ginsburg*

No. 7 Decent work and the informal economy in Central America – *Juan Diego Trejos Solórzano and Miguel Del Cid*

No. 8 Poverty initiatives in the ILO: A review of past and present approaches – *Pat Holden and Dagmar Walter*

No. 9 Whither the International Standard Classification of Occupations (ISCO-88)? – *Debbie Budlender*

No. 10 Improving occupational classifications as tools for describing labour markets: A summary of recent national experiences – *Debbie Budlender*

No. 11 Recent developments in China's labour economy – *Thomas G. Rawski*

No. 12 The Impact of economic liberalization on employment and wages in India – *Sonia Bhalotra*

No. 13 The impact of trade liberalization upon inequality in developing countries – *Donald J. Robbins*

No. 14 The impact of liberalization and globalization on income inequality in developing and transitional economies – *Giovanni Andrea Cornia*

No. 15 The impact of technology transfer on employment and income distribution in developing countries: A survey of theoretical models and empirical studies – *Mariacristina Piva*

No. 16 International finance: Meeting the needs of people in developing countries – *José Guilherme Almeida dos Reis*

No. 17 The gender dimensions of globalization of production – *Stephanie Barrientos, Naila Kabeer and Naomi Hossain*

No. 18 Social exclusion in the context of globalization – *Jan Breman*

No. 19 Gender and globalization: A macroeconomic perspective – *Çağatay Nilüfer and Ertük Korkurt*

No. 20 Globalization, social exclusion, and work: With special reference to informal employment and gender – *Marilyn Carr and Martha Chen*

No. 21 Resources for social development – *Antony Clunies Ross*

No. 22 Does the new international trade regime leave room for industrialization policies in the middle-income countries? – *Alisa DiCaprio and Alice Amsden*

No. 23 Social dimension of globalization in Latin America: Lessons from Bolivia and Chile – *Ivaro García Hurtado*

No. 24 The social dimension of globalization: A review of the literature – *Bernhard Gunter and Rolph van der Hoeven*

No. 25 The social dimension of global production systems: A review of the issues – *Susan Hayter*

No. 26 Reforming global economic and social governance: A critical review of recent programmatic thinking – *Jeremy Heimans*

No. 27 Corporate social responsibility: An issues paper – *Michael Hopkins*

No. 28 Upgrading in global value chains – *John Humphrey*

* Working Papers 16-38 were prepared as background documents for the World Commission on the Social Dimension of Globalization.

No. 29 Implications of globalization and economic restructuring for skills development in Sub-Saharan Africa – *Richard K. Johanson*

No. 30 The outcome and impact of the main international commissions on development issues – *Frédéric Lapeyre*

No. 31 Globalization and structural adjustment as a development tool – *Frédéric Lapeyre*

No. 32 Globalization and perceptions of social inequality – *Malte Lübker*

No. 33 The changing structure of international trade linked to global production systems: what are the policy implications? – *William Milberg*

No. 34 Corporate social responsibility: An overview of principles and practice – *Jill Murray*

No. 35 Inclusive development strategy in an era of globalization – *Ignacy Sachs*

No. 36 Social consequences of the globalization of the media and communication sector: some strategic considerations – *Seán Ó. Siochrú*

No. 37 Globalization, history and international migration: A view from Latin America – *Andrés Solimano*

No. 38 Towards a different kind of globalization, or how the anti-globalists view the world – *Gijsbert van Liemt*

No. 39 How do trade union rights affect trade competitiveness? – *David Kucera and Ritash Sarna*

No. 40 Statistics on the employment situation of people with disabilities: A compendium of national methodologies – *ILO Bureau of Statistics in collaboration with the In Focus Programme on Skills, Knowledge and Employability*

No. 41 Employment in the informal economy in the Republic of Moldova – *ILO Bureau of Statistics in collaboration with the Department for Statistics and Sociology of the Republic of Moldova*

No. 42 Decent work in a least developed country: A critical assessment of the Ethiopia PRSP – *Graeme J. Buckley*

No. 43 Unemployment and labour market institutions: The failure of the empirical case for deregulation – *Dean Baker, Andrew Glyn, David Howell and John Schmitt*

No. 44 Women's access to occupations with authority, influence and decision-making power: Women as legislators, senior officials and managers around the world – *Richard Anker*

No. 45 The world of work in the context of economic integration and trade liberalization – *Daniel Martínez*

No. 46 Poverty reduction in Pakistan: The strategic impact of macro and employment policies – *Moazam Mahmood*

No. 47 Trends in work stoppages: A global perspective – *L. J. Perry and Patrick J. Wilson*

No. 48 Generating decent work for poverty reduction in Cambodia: The voice of workers, employers and the Government – *Moazam Mahmood*

No. 49 The social dimension of regional integration in ECOWAS – *René Robert*

No. 50 Measuring trade union rights: A country-level indicator constructed from coding violations recorded in textual sources – *David Kucera*

No. 51 Patterns of job quality attributes in European Union – *Joseph A. Ritter*

No. 52 Child labour, education and export performance – *David Kucera and Ritash Sarna*

No. 53 Measuring the informal economy: From employment in the informal sector to informal employment – *Ralf Hussmanns*

No. 54 Indicators of labour standards: An overview and comparison – *Richard N. Block*

No. 55 The pattern of globalization and some implications for the pursuit of social goals – *Gerry Rodgers*

No. 56 Statistical indicators of social dialogue: A compilation of multiple country databases – *Anne Chataigner*

No. 57 Trade unions and informal workers' associations in the urban informal economy of Ecuador – *Catherine Vaillancourt-Laflamme*

No. 58 Decent work, standards and indicators – *Monique Zarka-Martres and Monique Guichard-Kelly*

No. 59 Social dialogue indicators: Trade union membership and collective bargaining coverage. Statistical concepts, methods and findings – *Sophia Lawrence and Junko Ishikawa*

No. 60 Informality and gender in Latin America – *María Elena Valenzuela*

No. 61 Labour developments in dynamic Asia: What do the data show? – *David Kucera and Anne Chataignier*

No. 62 Sources and Methods: Labour Statistics – Volume 5: Total and economically active population, employment and unemployment (Population censuses), Third edition

No. 63 Desarrollo local en América Latina: Oportunidades y desafíos para el trabajo decente – *Francisco Alburquerque*

No. 64 Bangladesh decent work statistical indicators: A fact-finding study – *Mustafa K. Mujeri*

No. 65 The impact of globalization on poverty in Bangladesh – *S. R. Osmani*

No. 66 International labour migration from Bangladesh: A decent work perspective – *Tasneem Siddiqui*

No. 67 Globalization and decent work: A report for the Decent Work Pilot Programme in Bangladesh – *Sukti Dasgupta and Amelita King Dejardin*

No. 68 East Africa reduction poverty and gender inequality: Selected strategies and issues

No. 69 Sources et méthodes: statistiques du travail – Volume 5: Population totale et active, emploi et chômage (Recensements de population), Troisième édition

No. 70 Fuentes y Métodos: Estadísticas del Trabajo – Volumen 5: Población total y económicamente activa, empleo y desempleo (Censos de población), Tercera edición

No. 71 The quantification of respect for selected core labour standards: Towards a social development index? – *Ludo Cuyvers and Daniel van den Bulcke*

No. 72 A new methodology for estimating internationally comparable poverty lines and living wage rates – *Richard Anker*

No. 73 Issues in macroeconomic and financial policies, stability and growth – *Yilmaz Akyüz*

No. 74 From liberalization to investment and jobs: Lost in translation – *Yilmaz Akyüz*

No. 75 Financial openness and employment: The need for coherent international and national policies – *Rolph van der Hoeven and Malte Lübker*

No. 76 Socio-economic security and decent work in Ukraine: a comparative view and statistical findings *Igor Chernyshev*

No. 77 Global Production Systems and Decent Work – *Stephanie Barrientos*

No. 78 Globalization and the illicit market for human trafficking: an empirical analysis of supply and demand – *Gergana Danailova-Trainor and Patrick Belser*

No. 79 Employment Creation, Real Wages and Job Quality: How Much Aggregate Economic Growth Delivers? The Case of Chile – *Andrés Solimano*

No. 80 Growth, Investment and Employment in Ghana – *Ernest Aryeetey and William Baah-Boateng*

No. 81 Globalisation, Industrial Revolutions in India and China and Labour Markets in Advanced Countries: Implications for National and International Economic Policy – *Ajit Singh*

No. 82 Growth and Employment Dynamics in Botswana: A Case Study of Policy Coherence – *Happy K. Siphambe*

No. 83 Beyond the Employment/Unemployment Dichotomy: Measuring the Quality of Employment in Low Income Countries – *Sabina Dewan and Peter Peek*

No. 84 The Impact of Institutions and Policy on Informal Economy in Developing Countries: An econometric exploration – *Diego Rei and Manas Bhattacharya*

No. 85. Gender, Informality and Employment Adjustment in Latin America – *Rossana Galli and David Kucera*

Regional and Country Policy Coherence Reports

No. 1 Implementing the GPRGS in Vietnam through Decent Work – *Moazam Mahmood*

No. 2 Policy Coherence and Sequencing for Post-Conflict Recovery in Liberia – *Moazam Mahmood*

No. 3 Macro Policy Coherence for Decent Work in the Caribbean – *Moazam Mahmood*

No. 4 Employment, Decent Work and Poverty Reduction in Urban China – *Zhang Junfeng and Moazam Mahmood*