

Women's Participation to Self-employment and Informal Sector



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ABSTRACT

Using comparable micro-level data from three countries, we ask what type of person works in the informal sector and whether informal workers earn lower wages than observationally equivalent workers in the formal sector. The characteristics of informal workers are similar across countries. Surprisingly, when we control for these personal characteristics, we find a significant wage premium associated with formal employment. A model of endogenous selection offers little help in explaining the differences in wage patterns. The research casts doubt on the received wisdom that the informal sector, always and everywhere, is a poorly-paid but easily-entered refuge for those who have no other employment opportunities.

KEY WORDS: women, Informal workers, self-employment, labour market

Introduction

For many researchers, social scientists, and more generally for observers and policymakers, it is taken for granted that the bulk of female labour force, in developing countries, is engaged in the informal sector. As a consequence, it is also admitted that the contribution of women to GDP, and especially to informal GDP, is widely under-estimated, because informal sector activities are under-estimated by nature and for

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methodological reasons, and within the informal sector, female activities are those which are the most difficult to capture and to measure (Charmes, 1998).

Since 1993 when an international definition was adopted for the informal sector as a concept of labour force, by the XVth International Conference of Labour Statisticians (ILO, 1993a and 1993b), a great impetus has been given to data collection and statistical estimation for this sector at national level. For many developing countries, in various regions and for various periods, overall estimates of the numbers engaged in the informal sector are now available (Charmes, 1998). Similar data for informal sector contribution to GDP remain scarce, except in Africa where such an exercise was taken as a necessity, given the very small size of the formal sector (see also Charmes, 1998). But more and more countries in Asia, and in Latin America, are now attempting to produce such estimates which reveal particularly useful in order to understand how the households - and the economy as a whole - cope with, and succeed in maintaining their levels of living and their performance during the crises of the business cycle.

Although the informal sector has been characterized by several attributes, noncompliance with the legal and administrative regulations is often regarded as its most important characteristic. Castells and Portes (1989: 12) state that the most central feature of informal sector activities is that they are unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated. Portes (1994) and Assaad (1997) emphasize that it is noncompliance with the legal and administrative regulations rather than with social regulations that is important.

The early development literature assumed that in the developing countries the informal sector would disappear over time as it did in the developed countries. Turnham (1993: 147) estimated the proportion of informal employment for groups of countries at different levels of development and found that the share of informal employment declines as the level of development rises. His definition of informal sector employment included wage workers in small enterprises and the self-employed excluding professionals and technicians. Recently, governments and international organizations have emphasized the dynamic features of the informal sector and its job creating aspect. Ranis and Stewart (1999) examined the informal sector in relation to the rest of the economy and

divided it into two parts, a modernizing dynamic component and a traditional stagnant one. The traditional view sees the informal sector as the disadvantaged segment of a dualistic labor market. This view is expressed in the Harris-Todaro (1970) model and by Mazumdar (1983) among other writers. According to an alternate view, dualism arises endogenously from efficiency wage type considerations which lead large firms to pay remuneration above market clearing levels. This is expressed by Stiglitz (1974), Esfahani and Salehi-Isfahani (1989) and Rosenzweig (1989). According to a more recent conceptualization of duality, large firms confronted by global competition subcontract to unprotected workers in order to reduce costs and gain flexibility. For this view see Portes, Castells and Benton (1989) and Portes and Schaufli (1993). This study focuses on the gender earnings differential of private sector wage earners and the self-employed. The wage earner in this study is defined to include regular employees (wage and salary earners) and casual workers. Two groups of private sector wage earners are considered: those who are covered by a social security program and those who are not covered by any social security program. They are sometimes referred to as protected and unprotected workers respectively. They will be referred to as covered and uncovered wage earners in this paper. They are parts of the formal and informal sectors respectively. Self-employment defined to include people who own their business. They are the sole workers of their enterprises. They do not hire labor or use services of unpaid family members. They exclude the professionals and technicians and as such they are part of the informal sector. In the survey used in this study no question was asked about the social security coverage of the self-employed. Thus, uncovered wage-earners and all of the self-employed (excluding professionals and technicians) are taken to form the informal sector. This may not be the general way of identifying the formal and informal sectors in the literature (Radovic, Markovic M. et al. 2010)

Literature Review

Self-employment outside agriculture has increased at world-wide level over the past three decades, and so did the share of women in self-employment, although at a lesser rhythm. The diversity of experiences of economic informality is reflected in the economic literature, parts of which emphasize the choices which workers make while other parts underscore

the constraints on choice. Some allege that the “modern” sector is incapable of generating sufficient employment. The small firms of the informal sector then offer second-best opportunities in easily-entered, competitive markets (Tokman, 1989). Others see the informal sector as that part of the economy which is “unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated” (Castells and Portes, 1989, p.12). For better (de Soto, 1989) or for worse (Roberts, 1990), people freely shift operations between the formal sector, where licensing is enforced and worker entitlements are protected, and the unregulated informal sector (Marcouiller and Young, 1995). The first of these strands of thought intertwines naturally with the analysis of labor. Despite these recent efforts and greater concern and sensibility for gender issues, disaggregation of informal sector data by sex are not always nor often available for various reasons: even when ad hoc surveys at national level have been carried out for measuring the informal sector, the published reports and tables may have not emphasize such issues, although they are of primary importance for the understanding of the sector, where estimates are based on comparisons of various sources, it frequently and surprisingly occurs that disaggregation by sex is missing for registered employment in the formal sector. This is why it is useful to distinguish two segments or sub-sectors in the informal sector as it is internationally defined: the self-employed comprising of independent own-account workers and family workers, the micro-enterprises sub-sector comprising of employers and their regular employees in enterprises with less than 5 or 10 permanent employees. For comparisons purposes and in order to facilitate the use of existing statistical sources of data, most of the following tables and figures include the employers in the category of self-employed, so that the micro-enterprises segment only comprises of employees in enterprises with less than 5 or 10 employees. These proxies greatly facilitate the comparisons and their impact on the overall actual figures for the informal sector is negligible, given the low number of employers in the formal sector on the one hand, and in both formal and informal sectors on the other hand. Taking ground of available data or other data elaborated for this purpose through a common conceptual framework and methodology, we will present a compilation of women’s participation to the labour force and to informal sector employment in a first section, then in a second section, women’s contribution to informal sector in GDP.

The first of these strands of thought intertwines naturally with the analysis of labor market segmentation. Theories of segmentation generally make two assertions. The first is that “rewards in different economic sectors may differ for workers of equal potential productivity” (Magnac, 1991, p.165), or, more specifically, “that there is a distinct low-wage (secondary) labor market in which there are no returns to schooling and workers do not receive on-the-job training” (Dickens and Lang, 1985, p.792). The second assertion is that, “because of institutional barriers to occupational mobility between sectors, a worker in the lower sector has less than full access to a job in the upper sector held by an observationally identical worker” (Gindling, 1991, p.585). The image of workers queued for high-wage formal jobs fits this frame. What do the data show? Using individual- and household-level data from surveys of urban areas in three different countries, we ask what type of person works in the informal sector and whether informal workers earn lower wages than observationally equivalent workers in the formal sector. We find significant wage premia associated with work in the formal sector in El Salvador and Peru. In Mexico, on the other hand, a premium is associated with work in the informal sector. Our paper does not formally test the segmentation hypothesis.³ However, the evidence we offer on wage differentials does challenge the widespread notion that informal employment is, by its nature, the last resort of those who have no other choice. Papers using recent large-scale household surveys from different countries in a completely consistent approach to the analysis of the informal sector are few and far between. Our work is close in spirit to Gindling’s analysis of informal, private formal, and public labor markets in Costa Rica (1991). Terrell (1989) estimates wage regressions for Guatemala City. Tannen (1991) and Telles (1993) study the wage structures of parts of Brazil. Heckman and Hotz (1986) explore a more general notion of primary and secondary labor markets in Panama. A recent working paper by Funkhouser (1994) presents interesting comparative analysis of household data from the five Spanish-speaking Central American countries. For all regions in the world, except in South-Eastern Asia (a region which has known a rapid industrialisation in the recent period until the 1997 financial crisis which has abruptly the process, and the impact of which is not taken into account in the present statistics), and in Northern, the proportion of non-agricultural self-employment (i.e.non-wage employment) has steadily increased over the past three decades. From 33.4 per cent in the 70’s, self-employment rose up to 43.7

per cent in Southern Asia, from 23.0 to 34.0 per cent in North Africa, from 28.8 to 37.8 per cent in Latin America, from 3.5 to 8.5 per cent in transition countries of Eastern Europe (which started from quasi-universal wage employment outside agriculture) and even from 20.9 to 25.0 per cent in Southern (Mediterranean) Europe. So that in the current period, self-employment represents nearly 1/3 of the total non-agricultural labour force in Asia, 2/5 in Latin America, 1/6 in Europe (but 1/4 in Southern Europe) and 1/10 in North America. Sub-Saharan Africa takes however the lion's share with an increase from 29.6 per cent in the 70's to 66.9 per cent in the 90's (more than 2/3 of the non-agricultural labour force). At world level, self-employment increased from less than 1/4 (22.6 percent) to 28.4 percent of the labour force outside agriculture. Such a figure can be taken as a minimum proxy for the informal sector, and it could be improved and it is actually confirmed by using the data collected by informal sector surveys, as shown in tables 5, 6 and 7 hereafter: according to the most recent surveys, the share of self-employment in total non-agricultural labour force rose up to 75.6 percent in the 90's.

At country level, the most dramatic growth of this component of the labour force and of the informal sector over the past decade are recorded in Poland, a country which embarked resolutely and rapidly into the process of privatization (4.2 percent in the 80's, 15.9 percent in the 90's), Italy, a country well-known for its fabric of small family enterprises particularly in its Northern part (from 19.7 percent to 30.8 percent, a very huge increase for a developed country), Tunisia where the small industries play a major role in the industrialisation process, and Brazil (20.9 to 32.0 percent), Ecuador (39.9 to 49.4 percent) and Venezuela (26.8 to 35.3 percent) in Latin America. Coming now to the share of self-employed in female non-agricultural labour force, it comes out from the compiled data that it has also increased over the three decades and for the same regions, but less markedly: in the current period, self-employment represents nearly 1/3 of non-agricultural female labour force in Latin America, 2/7 in Asia, 1/4 in North Africa, and 1/5 in Southern Europe. Here again, sub-Saharan Africa is outstanding: for women, the bulk of nonagricultural labour force is represented for more than 43 per cent by self-employment in the 70's and this proportion has increased up to more than 5/6 in the 90's; many indications show that this trend is continuing in the recent period. The same sources that are referred to in tables 5 to 6 hereafter show that female self-employment as a share of female non-agricultural employment has

increased up to 88.4 percent in the 90's. On the contrary, in Eastern and South-Eastern Asia, the share of self-employment in female non-agricultural employment has slightly decreased as a consequence of the industrialization process, a process which may have transformed many of these self-employed women into piece-rate home workers, an even less secure type of job.

On these grounds, the share of self-employed women at world level would represent nearly 2/7 of female non-agricultural labour force in the 90's (compared to 1/4 in the 70's).

At country level, the most dramatic drop are recorded in Mexico (from 44.3 to 19.8 percent over the past decade) and in Thailand (from 42.5 to 36.8 percent), probably due to the increase of homework (or the "putting out system" which inserts women into the labour market but leaves them at home). Elsewhere, and especially in the same countries where self-employment as a whole has rapidly increased, the share of self-employed women grew steadily: Poland (from 1.9 to 9.4 percent), Italy and Portugal (from 17.2 to 30.2 and from 9.9 to 16.0 percent respectively), Brazil, Ecuador and Chile, but also in Sweden and UK (from 1.1 to 7.5 and from 3.9 to 8.0 percent respectively, such changes highlighting various modes of insertion on the labour market).

Even if these trends are partly due to improvements in the measurement of women's activities or to the extension of the definition of economic activity (or at least its better understanding by the persons in charge of data collection operations), they are also significant of the entry of women into the labour market in these times of structural adjustment and of necessity for them to undertake market activities in order to earn a living and to maintain the living standards of their families.

References

- [1] Assaad, R. (1997). Explaining Informality: The Determinants of Compliance with Labor Market Regulations in Egypt. Paper presented at the Economic Research Forum, Fourth Annual Conference in Beirut, Lebanon
- [2] Blinder, A.S. (1974). Wage Discrimination: Reduced Form and Structural Estimates.. *Journal of Human Resources*, 8(4): 436-455.
- [3] Becker, G.S. (1975). *Human Capital*. Second edition, National Bureau of Economic Research, New York: Columbia University Press.
- [4] Bernhardt, I. (1994). Comparative advantage in Self-Employment and Paid Work. *Canadian Journal of Economics*, 27: 273-289.

- [5] Bulutay, T. (1997). İşgücü Piyasası Bilgi Danışma Kurulu Raporu. (Report of the Information Commission on Labor Market) In T. Bulutay, ed. İmalat Sanayiinde İstihdam (Employment in the Manufacturing Sector) 267-308, Ankara:State Institute of Statistics.
- [6] Bernhardt, Irwin, "Comparative Advantage in Self-Employment and Paid Work," *Canadian Journal of Economics*, Vol. 27, No.2, May, 1994, pp. 273-289.
- [7] Brown, Charles, and Medoff, James, "The Employer Size--Wage Effect," *Journal of Political Economy*, Vol.97, No.5, October, 1989, pp.1027-1059.
- [8] Castells, M. and A. Portes, (1989) .World Underneath: The Origins, Dynamics and Effects of the Informal Economy. In A. Portes, M. Castells and L.A. Benton, eds., *The Informal Economy: Studies in Advanced and Less Developed Countries*, 11-37. Baltimore: The Johns Hopkins University Press.
- [9] Castells, Manuel, and Portes, Alejandro (1989). "World Underneath: The Origins, Dynamics, and Effects of the Informal Economy," in Alejandro Portes, Manuel Castells, and Lauren Benton, eds., *The Informal Economy: Studies in Advanced and Less Developed Countries*, Baltimore: Johns
- [10] Esfahani, H.S. and D. Salehi-Isfahani (1989). Effort Observability and Worker Productivity: Towards an Explanation of Economic Dualism. *Economic Journal*, 99 (September): 818-836.
- [11] Evans, D.S. and B. Jovanovic, (1989). An Estimated Model of Entrepreneurial Choice under Liquidity Constraints. *Journal of Political Economy*, 97(4): 808-827.
- [12] Fields, G.S., (1994). Changing Labor Market Conditions and Economic Development in Hong Kong, the Republic of Korea, Singapore, Taiwan and China.. *The World Bank Economic Review*, 8(3): 395-414.
- [13] Fields, Gary S., (1975) "Rural-Urban Migration, Urban Unemployment and Underemployment, and JobSearch Activity in LDC's," *Journal of Development Economics*, Vol.2, No.2, pp.165- 187.
- [14] Fields, Gary S., (1990) "Labour Market Modelling and the Urban Informal Sector: Theory and Evidence," in David Turnham, Bernard Salome, and Antoine Schwarz,eds., *The Informal Sector Revisited*. Paris: OECD Development Centre, pp.49-69.
- [15] Funkhouser, Edward. (1994) "The Urban Informal Sector in Central America: Household Survey Evidence," Working Paper in Economics #23-94, Department of Economics, University of California, Santa Barbara.
- [16] Gindling, T. H.,(1991) "Labor Market Segmentation and the Determination of Wages in the Public,Private-Formal, and Informal Sectors in San José, Costa Rica," *Economic Development and Cultural Change*, pp. 585-605.
- [17] Hall, Bronwyn H., *Times Series Processor Version 4.2 User's Guide* (Palo Alto: TSP International, February 1993).
- [18] Harris, John, and Todaro, Michael, (1970)"Migration, Unemployment, and Development: A Two- Sector Model," *American Economic Review*, Vol.60, No.1, pp.126-142.
- [19] Hart, Keith,(1973) "Informal Income Opportunities and Urban Employment in Ghana," *Journal of Modern African Studies*, Vol.11, No.1, pp.61-89.

- [20] Heckman, James J., and Hotz, V. Joseph, (1986) "An Investigation of the Labor Market Earnings of Panamanian Males: Evaluating Sources of Inequality," *The Journal of Human Resources*, Vol. 21, No. 4, pp.509-542.
- [21] Hopkins University Press, (1989), de Soto, Hernando, *The Other Path: The Invisible Revolution in the Third World*, translated by June Abbott, New York: pp.11-40
- [22] Dickens, William T., and Lang, Kevin,(1985) "A Test of Dual Labor Market Theory," *American Economic Review*, Vol. 75, No. 4, September, pp. 792-805.
- [23] International Labor Organization (ILO), *Employment, Incomes, and Equality: A Strategy for Increasing Productive Employment in Kenya*, Geneva: ILO, 1972.
- [24] Harris, J.R. and M.P. Todaro, (1970). *Migration, Unemployment and Development: A Two-Sector Analysis*. *American Economic Review*, 60(1): 126-142.
- [25] Gill, A.M., (1988). *Choice of Employment Status and the Wage Employees and the Self-Employed: Some Further Evidence*. *Journal of Applied Econometrics*, 3: 229-234.
- [26] Gindling, T.H. (1991). *Labor Market Segmentation and the Determination of Wages in the Public, Private-Formal and Informal Sectors in San Jose, Costa Rica*.*Economic Development and Cultural Change*, 39(3): 585-605.
- [27] Heckman, J.J. (1974). *Shadow Prices, Market Wages and Labor Supply*. *Econometrica*, 42: 679-694.
- [28] Heckman, J. and V.J. Hotz (1986). *The Sources of Inequality for Males in Panama*.
- [29] Kuznets, S. (1971). *Economic Growth of Nations, Total Output and Production Structure*. Cambridge, Massachusetts: Harvard University Press.
- [30] Lee, L.F. (1983). *Generalized Econometric Models with Selectivity*. *Econometrica*, 51:507-512.
- [31] King, Elizabeth,(1990) "Does Education Pay in the Labor Market? The Labor Force Participation, Occupation, and Earnings of Peruvian Women," LSMS Working Paper#67, Washington, DC: The World Bank Labor Markets.. *The Journal of Human Resources*, 21(4): 507-542. Idson, T. and D.
- [32] Feaster. (1990). *A Selectivity Model of Employer-Size Wage Differentials*. *Journal of Labor Economics*, 8(1): 99-122.
- [33] Magnac, T.H. (1991). *Segmented or Competitive Labor Markets*.*Econometrica*, 59: 165-187.
- [34] Marcoiller, D.V., Ruiz de Castilla and C. Woodruff, (1997). *Formal Measures of the Informal Sector Wage Gap in Mexico, El Salvador and Peru*. *Economic Development and Cultural Change*, 45: 711-749.
- [35] Radovic, Markovic M. et.al. (2010) "Female Employment in Formal and Informal Sectors of the Serbian Economy". *Journal of Women's Entrepreneurship and Education*, No.3-4:18-27.

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