An analysis of the effects of the economic crisis on labour supply of Mexican Households: Mobility between the formal and informal sector*

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Abstract

This papers explores the explanations behind the mobility between the informal and formal sector in a developing country such as Mexico where mobility is understood as intrinsic to the dynamics of labour supply. Models on mobility in the development literature may be traced back to the original propositions on rural-urban migration. The view of synthesising segmentation and rural-urban migration theories that we take in this study attempts to explain why formal employment is preferred to informal employment by some household members. Using panel data for the 1992-93 and the 1994-95 periods from the Mexican urban LFS data we model the decision to move from one sector into the other. We find that the economic situation of the household has a strong influence on the probability of moving from one sector into the other, and we also find that the main theoretical predictions are also warranted by the data available. One of the most important results is the disadvantage women have with respect to informal market employment. If we take the view that this type of employment is inferior to formal employment, women have a higher probability to be employed in this sector and they are also less likely to move into formal employment. On the other hand this type of employment might offer some flexibility to women in the location and hours that they may wish to combine with their household responsibilities. Our data confirms that those with higher education have less probability to find themselves in informal work and that they have a higher probability to move into formal employment. However, higher education in Mexico is concentrated in households with better economic conditions. Thus it is not clear that higher levels of education alone would take individuals into formal jobs. What is clear is that informal employment is related to a set of worse economic conditions in the household. We find two distinct profiles of individuals who coincide with higher or lower probability to move into the formal sector which do seem to support that only individuals who are better off or are willing to migrate will find that their probability to move into formal employment is increased, while women and individuals in poorer households will have more difficulties in finding formal work.

* This paper is based on the doctoral dissertation presented in Alcalá de Henares, Madrid under the supervision of Dr. Inmaculada Cebrián López.

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Introduction

The recurrent economic crises affecting Mexico since 1982 and the economic policy remedies adopted have left a profound mark on the labour market in many aspects. Plummeting real wages, closure of inefficient firms and the subsequent fall in industrial employment and the rise of the in-bond industry, to name just three elements, can be pointed to as some of the effects on the labour market of stabilisation programmes and the opening up of the economy. However, the negative effects one could expect on unemployment assuming some rigidities in the labour force, especially in industrial sectors where global competition have drastically reduced the share for Mexican companies, have failed to materialise. While other countries in the area show high unemployment rates, Mexico has reached the rarely seen rate of 8% during the last financial crisis in 1995. At present, in the year 2000, this rate only reaches only 3%.

These low unemployment rates hide a widespread phenomenon known in the economic development literature as the urban informal labour market. Indeed, the absence of income support measures in times of crisis in most less developed countries can be seen as the explanation that forces some breadwinners and other members of the family to engage in informal economic activities in order to simply survive after having lost jobs or lost a large amount of the purchasing power of their income. According to the International Labor Organisation (ILO) the definition of informality is precisely those economic activities in which people engage to make a living and that do not intentionally break laws (such as payment of taxes or the use of public streets) in the same way as those activities understood as black economy or illegal activities (ILO, 1993).

Although the exact role of the informal market in the wider economy (e.g. macroeconomy) has not been the subject of much quantitative research¹, the behavioural aspects (e.g. microeconomy) have been more widely modelled but also rarely measured due to lack of proper data.

In this paper the aim is to measure some aspects of the informal market taking the household as the unit of observation in two years during the nineties that represent the splendour and the fall of the Mexican economy in recent years, 1992 and 1995. The main behavioural aspects that are modelled and measured do not vary widely in the results obtained in each year, as could be expected, but there is some indication that the harsher economic conditions in 1995 simply made things harder for those pushed into informal activities to find a way out into the formal market again. The mirage of 1992 in Mexico already hid the stark reality of a large amount of households affected by informal work and the crisis in 1995 simply widened the number of households that were forced to enter this type of economic activity as a consequence of a fall in employment.

In this paper we model mobility between informal sector employment and formal sector employment in order to single-out the elements that explain both the "choice" of working in the informal market and the "decision" to move into another activity as part of the dynamics of the labour market in Mexico. From the policy point of view, it is important to have some information on the mobility behaviour and finding the variables that have a greater or a lesser impact on the probability to exit the informal market successfully into a formal job. Given the unsuccessful attempts to "formalise" informal activities which have included credits for micro enterprises, removal of street vendors

¹ We can mention here an exceptional paper by Montaud (1999) on the macroeconomic effects of the informal sector. The theoretical aspects of the influence of the informal market on wages, income and

into indoor markets, taxing of informal activities or forceful removal or close-down of small production shops it seems that having a better insight into the workings of mobility into the formal market will provide better ideas on either promoting or reducing the informal market

This paper offers first a brief descriptive profile of the labour market in Mexico focusing on the extent of informal market activities in households. Next the basic theoretical background is detailed and after the models and the estimation results are presented. A section of conclusions and future research closes the paper.

The labour market in Mexico

In this section the aim is to present a profile of the Mexican labour market focusing on the effects that the crises have had on employment as well as the evolution of the informal market in recent years and the incidence of informal activities on households.

In the first place, the evolution of the active labour force, employment and unemployment is presented in the following graph. Unemployment indeed has not been a major problem in Mexico in the last 10 years. Although as we shall see below the phenomenon affects persons with higher education for longer periods and may be thus be perceived socially as a larger problem than what it is compared to conditions in the informal market. The rising activity of the labour force observed in the graph is due mainly to the rising activity rates of women in practically all the age groups, while that of men, as in more developed countries, is falling although in the older age groups it is still much higher than that of the U.S. (Fleck and Sorrentino, 1997). We note that during the

other macroeconomic variables are found in Moser (1978) and Tokman (1978).

last crisis in 1995 employment slowed down considerably, but that it has immediately recovered.



Evolution of the active population, employed and unemployed

On the other hand, the activity rates for women not only have been rising but the pattern over the different age groups has become closer to that of men, at least in Mexico City. In other words women do not seem to be abandoning the work force during child bearing and rearing ages. The difference in the pattern in just 5 years as shown in Graph 2 shows that these changes are taking place very fast.

Another important change to note is the rising activity rates of the younger age groups that affect both men and women and which are reflected in the low educational levels achieved by the Mexican population.

Graph 2. Participation rates by age group. Mexico City, 1990 and 1995.



Source: XI Censo de la Población y Vivienda (in Rendón, 1993) and ENEU, 1995, INEGI.

Next we look at the evolution of GDP and employment over the last 20 years represented in Graph 3. Again, the crises years show a marked downturn of industrial employment and on the contrary a large rise in in-bond employment due to the effects of the devaluation of the peso, boosting export based sectors.





Source: BDINEGI, 1997.

Now we turn to the evolution of informal employment in five Mexican cities in last few years, which is shown in Table 1. Here the definition of informal work is that related to self-employment, piece-work and unpaid family workers. In Table A1 the changes are presented in more detail

Table 1 Annual variations in total employment and informal employment 1992 to1996

	1992-1993	1993-1994	1994-1995	1995-1996	1992-1996
					annual
MEXICO CITY	2,95	-0,76	-1,60	1,88	0,59
INFORMAL	3,88	-0,98	1,37	3,98	2,11
GUADALAJARA	10,03	-1,18	-3,90	7,02	2,64
INFORMAL	1,55	9,49	-3,15	1,02	2,20
MONTERREY	7,09	7,40	-5,79	6,97	3,43
INFORMAL	29,39	15,81	-3,04	-5,66	9,27
CIUDAD JUÁREZ	2,78	13,49	-5,38	-2,35	1,81
INFORMAL	-5,61	-3,08	5,92	-10,98	-3,44
TIJUANA	10,46	-6,04	10,04	7,03	4,55
INFORMAL	-2,96	1,63	-1,20	23,27	5,03

Source: ENEU, various years, 2nd quarter

The hypothesis here is that all these categories reflecting informal employment should decrease under favourable economic conditions (1992-1994) and that they should rise during the economic crisis years and its aftermath (1994-1996). However, other effects could alter the expected results, such as the change in production processes (making more extensive use of small units or piece work), exchange rates (especially in the border towns and in-bond industries in general), or specific characteristics or needs of informal businesses (such as the permissiveness of city government towards street activities or the use of unpaid family workers or sporadic employment of salaried workers).

The most important informal employment annual changes for the entire period (last column) can be found for the border towns of Tijuana and Ciudad Juárez and for Monterrey where annual variations reach high percentages. On balance, the only city actually experiencing an overall decrease in informal workers is the border town of Ciudad Juárez while the rest of the cities show rather strong growth for informal employment, above that of total employment, except in Guadalajara where it is slightly lower.

During the periods when the economic crisis took its toll (1994-95 and 1995-96) we observe a generalised fall in total employment which only left the border town of Tijuana unscathed and that in the second period continued to affect Ciudad Juárez only. In relation to informal employment, we note that only in Mexico City informality increases during both periods and that the changes throughout can be traced to the increase in self-employed and also unpaid workers in the second period. In Guadalajara and Tijuana informal employment decreased during the first period and increased during

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the second, however the changes do not correspond to the same reasons since salaried and piece workers in Tijuana make up the bulk of the change and in Guadalajara the change is more varied..

Changes in informal employment do not always reflect the expectation of increases during economic downturns and decreases under better conditions. This basically means that not all those affected by unemployment at any given moment seek employment in the informal sector, nor that better economic conditions have a large negative effect on informal employment. The complexity behind the changes that we have analysed here can be explained, at least in part, through the analysis of individual transitions between the formal and informal sector including the importance of a series of household variables.

Finally, the strong relationship between the sector of employment of the head of household (HOH) and the rest of the household members found in the samples used point directly to a very strong influence of the activity of the HOH on the employment choices of the rest of the household. The higher percentage of persons in informal work in 1995 and the lower number of salaried members also support the idea that the informal market serves to maintain family incomes under harsher economic conditions. The higher percentages of unemployed household members, except in the case of households where the head is informal also support the idea that households more affected by informal work are less likely to be unemployed. More detailed quarter by quarter data is found in Table A4 in the Annex where inactivity is also included as a possible labour market state.

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	HOH activi	ty 1992 (N=2883)		
Household member	Informal	Employer/	Salaried	Unemployed
activity		Professional		
Informal	80,74	44,93	0,06	17,69
Employer/Professional	0,00	27,12	0,00	4,62
Salaried	0,00	22,47	84,88	60,00
Unemployed	19,26	5,48	15,06	17,69
	HOH activi	ty 1995 (N=2421)		
Household member	Informal	Employer/	Salaried	Unemployed
activity		Professional		
Informal	83,40	48,48	0,00	27,12
Employer/Professional	0,19	13,26	4,28	4,52
Salaried	0,00	28,98	76,26	42,37
Unemployed	16,41	9,28	19,46	25,99

 Table 2 Activity of HOH and the rest of household members, 1992 and 1995.

Source: ENEU, 2°quarter, sample 1992 and 1995.

The evolution of the labour market in Mexico over the last two decades that we have presented in this section points to the importance that the informal market has in understanding the high levels of employment and low unemployment. Moreover, the characteristics of workers and of their households working in the different sectors as well as how these affect the chances to move from one of the sectors to another seems to explain a large part of the aggregate results. In what follows a theoretical framework to analyse the mobility form one sector to another is analysed.

Theoretical background

In the rural-urban migration models mobility between the formal and informal sectors is a phenomenon derived from job-search in the formal sector (Harris and Todaro, 1970; Fields 1975 and 1990; Pradhan 1994). While some individuals decide to search from an unemployment situation, others may do so while they are employed in the informal sector as is indicated in Diagram 1, and one can even include the possibility of

some to cross into informal activities directly from a state of inactivity as is also illustrated in the Diagram.



Diagram 1 Participation decision and individual sector choice

The synthesis of segmentation and rural-urban migration theories in this paper attempts to explain why formal employment is preferred to informal employment by some individuals. Our aim is to know which variables, other than the expected higher wages in the formal sector, could be explaining mobility from the informal to the formal sector.

Elsewhere it has been assumed that the household members could freely choose their sector of employment (Villagómez, 1999). However, there are several household variables which have a strong influence in that choice. It can be expected that these same variables will be influential in the change from informal to formal employment. While the difference in income in each of the sectors is surely important, and the models are based on this idea, we can also assume that other characteristics that are attached to the jobs in the different sectors, such as diverse types of work benefits, can also have an impact in the decision to move out of one sector and into the other. We may in fact find that lower wages are paid, but that these benefits plus other non observable characteristics (such as social prestige, contacts for future jobs, etc.) make up an important part of the decision to move into the formal sector². While in previous work we have assumed a choice between the formal and informal sector only, here we are able to expand the alternatives of choice between the informal sector and any other possibility that is shown in Diagram 1 which includes unemployment and inactivity.

Models and estimation results

The data used in this case are two sets of panel data from the Encuesta Nacional de Empleo Urbano (ENEU, National Urban Employment Survey) corresponding to the first quarter of 1992 to the first quarter of 1993, and to the fourth quarter of 1994 to the fourth quarter of 1995. In the survey each household is visited five times in continuous quarters and each quarter a fifth of the sample is rotated (that is 20% of the households are surveyed for the first time). In order to obtain the highest number of observations we have constructed a variable which reflects at least one move from informal work into formal employment corresponding to two continuous quarters.

We have constructed the sample taking into account those individuals who are informal at any moment and who in the following quarter still show-up as informal or who have moved into formal work (as salaried workers or into the employers/selfemployed professionals category). The dynamics that we wish to analyse pose the problem known as the initial conditions bias conditioning on the initial informal state. This problem may be solved in an analogous form to the endogeneity bias encountered in

 $^{^2}$ These benefits in Mexico are of two types: those imposed by law, such as social security and pensions; and those employers can offer workers as extras: housing funds, private medical insurance, monthly food coupons, or others. This last set of benefits may carry a fiscal incentive or a reduction of social security payments.

sector choice and the model we propose allows for a straightforward estimation at the same time that is solves the endogeneity bias. Our data base allows for mobility among the different labour market categories reflected in Diagram 1, but the transitions that we shall be concentrating on are those from informal to formal employment. In addition, the aggregate data for the five cities under study (Mexico City, Guadalajara, Monterrey, Ciudad Juárez and Tijuana) which the Instituto Nacional de Estadística, Geografía e Informática (INEGI, National Statistics Institute) publishes yearly can also indicate the aggregate annual changes, but not flows, in informal work. These cities represent 60 percent of urban employment in Mexico and include two northern border towns (Tijuana and Ciudad Juárez) which allow to capture the differences that the in-bond industries³. Furthermore, Mexico City, Guadalajara and Monterrey represent about a quarter of the entire population of Mexico, half the population of cities with more than 100,000 inhabitants.

A model and estimation of the probability to move from informal to formal employment.

In this section we proceed to present and estimate a model measuring the probability of moving from the informal to the formal sector taking into account the predictions made by rural-urban migration theory (an intermediate stage between unemployment and a formal job) and segmentation theory (rationing and queues).

Parting from the Field (1990) model and introducing the ideas forwarded above about the importance of other variables, the following model is suggested. The base of this model has been written following Stewart and Swaffield (1997) and Albert (1997).

³ These industries consist of assembly lines with imported parts to be re-exported as finished goods, usually to the United States, taking advantage of cheap labour and also of some fiscal incentives offered by the federal government in Mexico.

We begin by taking mobility between two consecutive periods or quarters, t-1 and t. Let us suppose that in period t-1 an individual is employed in the informal market and that in period t this individual may continue as an informal worker or transit into formal work. Defining the variable E_{it-1} as the state with respect to the labour market in which the individual is found in period t-1 and assuming that the process can be explained by

$$\mathbf{g}_{1}(\mathbf{E}_{it-1}^{*}) = \mathbf{X}_{it-1}^{*}\boldsymbol{\beta}^{*} + \boldsymbol{\varepsilon}_{i1} \qquad (1)$$

where E_{it-1}^* is the observed state in t-1, X_{it-1} is a vector of characteristics Household and personal) which determine the state with respect to the labour market and **g** is a monotonic transformation such that ε_{i1} , the error term, has a distribution N(0,1). We further define $E_{it-1}=1$ if the individual is informal and on the other hand $E_{it-1}=0$ if any other state, including inactivity and unemployment is found, such that

E=1 if E*>0
E=0 otherwise
$$P[E_{it-1}=1] = P[g_1 (E_{it-1}*)]$$
$$= [X_{it-1}\beta^* > \varepsilon_{i1}]$$
$$= 1 - F(X_{it-1}\beta^*) (2)$$

where F is the cumulative distribution of the error term ε . If we assume a logistic distribution we have:

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$$F(-X_{it-1}\beta^*) = \exp(X_{it-1}\beta^*)/1 + \exp(X_{it-1}\beta^*)$$
 (3)

Now lets assume that the process determining that the individual be formal or informal in period t depends on the situation found in t-1. For t-1 we define $E_{it-1}=1$ as being employed in the formal sector and defining the process in t as:

$$\mathbf{g}_2(\mathbf{E}_{it}^*) = \mathbf{Z}_{it}' \boldsymbol{\gamma}^* + \boldsymbol{\varepsilon}_{i2} \quad (4)$$

Therefore, the probability that the individual will be informal in the first year and formal in the second will be given by

$$P[E_{it-1}=1; E_{it}=1] = (1 - F(X_{it-1}\beta^*)) * (1 - F(Zi_t\gamma^*))$$
(5)

We must note that the variables in both vector X and Z are practically the same, and that the estimation in two stages of this model includes other variables in Z which are referred to the income in the formal sector and also whether or not there are benefits in the formal job.

If we also assume that the errors in equations 2 and 4 are independent we may proceed to the estimation of the model. However, a problem known as the initial conditions problem arises in which our probability model may suffer from endogenous selection bias conditioning on the initial informal state⁴. This is much different from informal sector choice that has appeared in our previous work (Villagómez, 1996 and 1999) and done by others (Pradhan, 1994) where the bias that could be introduced in separate wage equations for the formal and informal markets include a term that corrects endogeneity resulting from "choosing" between a formal and an informal job. Here we are including unemployment and inactivity also as a choice to informal work in our first equation, and in the second one we simply restrict the sample to those who continue in informal work or who have found formal employment. Our models requires two stages of estimation and we simply calculate the predicted values of the probability of being informal in the first period in order to introduce them in the second stage where we estimate the probability of transiting into the formal sector.

⁴ The use of this model applied to transitions between lower and higher paying jobs can be found in Stewart y Swaffield (1998) and from which we take the main ideas, albeit using logit instead of probit models.

The sample we have constructed to estimate this model is made up of the pool of individuals who where at any moment informal and then restricted to those who remained informal in the following quarter or that moved into a formal sector job. We are not restricting ourselves to a cohort of individuals, but for all those for whom we could observe at least one transition from informal to formal employment.

Logit estimation of the probability to work in the informal sector.

In Table 4 we find the results of our first estimation according to the model presented above. We note that the model has been estimated for both men and women together as the restrictions on observations would become too scarce to obtain significant results.

As in other studies, the results indicate the importance of the level of studies in determining informal employment (Magnac, 1991; Pradhan, 1994; Villagómez, 1996 and 1999). In this case the lowest levels increase participation while higher levels reduce the probability. Age is also very important and for both age groups we find reduced probabilities of informal employment. Given that these two age groups have a higher proportion of inactive individuals, we should not think that these individuals have higher probabilities to enter formal sector employment, but rather that their probability of being informal over the period is reduced. This perhaps gives some credit to the idea that the individuals in these age groups, which are very likely to be children living at home or older members of the family, only come into contact with economic activity in a rather occasional manner.

While the probability for women with respect to men decreased in 1992-93, it increased, and with the same level of significance, in the 1994-95 period. This results seems to support the idea about household members increasing or decreasing their participation according the general economic conditions, in this case women which are more likely to be secondary or additional workers.

Table 4 Logit estimation of the probability to work in the informal sector (1=Informal, 0= any other alternative). (Source: ENEU, 199293 y 1994-95 panel).

	1992-93		199	4-95
	Coefficient	t	Coefficient	t
Studies				
Primary	0,38*	5,21	0,11	1,10
Secondary	0,18	1,80	-0,16	1,43
High school	0,12	1,38	0,15	0,72
Medium higher	0,14	1,71	-0,29*	2,58
Higher and graduate	-0,89*	7,29	-0,82*	6,76
Age group				
12-24	-0,17*	2,65	-0,28*	4,49
50 or more	-0,22*	3,01	-0,56*	7,31

Woman	-0,67*	13,46	0,74*	13,49
Married	-0,24*	4,32	-0,21*	3,61
Head of household	0,54*	7,70	0,56*	7,30
Residence				
Mexico City	-0,33*	5,50	-0,34*	5,36
Monterrey	-0,30*	4,54	-0,36*	5,01
Ciudad Juárez	-0,50*	6,76	-0,82*	9,75
Tijuana	-0,43*	5,23	-0,55*	6,25
Household variables Age of youngest child				
0 a 5	0,23*	2,90	-0,05	0,89
6 a 14	0,14*	2,86	-0,08	1,51
Number of HOH children				
none	-0.08	0.54	-0.17	1 33
one child	-0.13	1.26	-0.16	1,65
two children	-0.20*	2.46	-0.28*	3.68
Number of household members	- / -	, -		- /
one or two members	0,04	0,49	0,21*	2,37
three members	0,15*	2,03	0,16*	2,22
four meembers	0,00	0,04	-0,06	1,05
Household economicconditions				
HOH informal	0.43*	7.99	0.14*	2.33
Family income > 5 times the minimum wage	0.08	1.38	0.32*	5.04
0 unemployed	0,16*	3,10	0,39*	7,86
one unemployed	0,09	1,48	0,07	1,15
Constant	-0,54*	5,87	-0,77*	5,35
	N= 10171	$\chi^2 = 709,353$	N = 8906	$\chi^2 = 863,055$

Reference individual: Illiterate or only knows how to read and write, age group between 25 and 49 years of age, woman, married, HOH, resident in Guadalajara, age of youngest HOH child 15 or more, HOH, five members or more in the household, three children of the HOH or more, two unemployed or more.

Another important personal characteristic is civil status and with reference to any other category, married individuals seem to have a lower probability of informal employment. However, given that we have not split the by gender, this result might not be applicable in the same manner to both men and women alike. The same is true of the variable showing the results for the head of household with reference to all the other family members. In this case we find that in both periods the probability increases. if we take into account the most likely large importance that the income of the head of household carries in the total family income, then any policy decision aimed at affecting the growth or decrease of informal employment should take this into account. But again, the results by gender might turn out to be different. As a last personal characteristic, which also picks up local economic conditions, we comment on the results for place of residence. As expected, the probability in any city other than Guadalajara is reduced simply reflecting the fact that Guadalajara is the city with the highest proportion of informal activity.

Now we turn to the household variables in our estimation. During the 1992-93 period the presence of children under 15 increased the probability of informal employment while in the crisis period these variables cease to show any significance. We also find that the presence of two or more children of the HOH decreases the probability during both periods. Both of these results might be more applicable to women than to men. Furthermore, the presence of other women in the house may increase the probability of participation but only under a certain income level, as Gong and Van der Soest (1998) has found in some recent work on Mexico City. The other variable used to reflect household composition is the total number of members in the household. With reference to five members, which is close to the average for the sample, we find that in both years it is individuals in households with three members or less who find the probability of informal employment increased. This could be due to the effect social networks may have on labour market entry or also due to the fact that in these smaller household there are less difficulties in entering the informal sector such as the presence of children in the home.

Now we turn to the economic conditions in the household, which are reflected in the position of the head of household, family income level⁵ and the number of unemployed. In all three cases we observe an increase in the probability of informal employment. We can then say that if the head of household is informal, the household receives little income and that there are no unemployed persons in the household the probability of informal employment will increase. All these situations clearly reflect a disadvantaged situation and it remains to be seen if they are also important in the probability of exiting the informal status.

We shall close this brief analysis pointing to the importance of both personal and household characteristics that we have found in determining informal employment for an individual. The economic conditions seem to be of special relevance. We also note that the different economic conditions represented in each of the estimations only seem to have contrary effects with respect to gender. We now turn to the estimation of the probabilities of transition from informal to formal employment.

Logit probability model of informal to formal employment transition.

In Table 5 we present the results for 1992-93 and 1994-95 of informal to formal transitions. We have included the variable which corrects the endogeneity bias caused by the initial conditions problem and which has been calculated in the previous estimation (the inverse Mills ratio or predicted value of the probability of informal employment). We have further reduced the sample to only those individuals who at time t-1 were informal and at time t are either formal or continue in a state of informal employment.

⁵ This variable is taken as a threshold of five times the minimum salary or less since it has been indicated by various Mexican researchers as the amount needed to cover the minimum living necessities (Rendón and Salas, 1993; Chávez, 1995).

	1992-93		19	94-95
	Coefficient	t	Coefficient	t
Formal income > informal income	1,57*	13,35	1,85*	15,93
Social security or other benefits	1,75*	13,43	1,40*	11,43
School level				
Primary	0,00	0,01	-0,37	-1,53
Secondary	-0,65*	-2,08	-0,05	-0,18
High school	-0,10	-0,38	-0,74	-1,39
Medium higher	0,12	0,48	-0,05	-0,19
Higher and post-graduate	0,86*	2,15	0,69*	1,76
Age group				
12-24	-0,10	-0,54	0,41*	2,05
50 or more	-0,27	-1,49	0,34	1,45
Woman	-0,52+	-1,88	-0,77*	-2,38
Married	0,25+	1,64	0,24	1,14
Residence				
Mexico City	0,10	0,58	0,44*	2,91
Monterrey	-0,08	-0,43	0,20	1,10
Ciudad Juárez	0,04	0,15	-0,02	-0,08
Tijuana	0,52*	2,12	0,30	0,89
Household variables				
Age of youngest child				
From 0 to.5	0,46*	2,06	0,15	0,55
From 6 to 14	0,09	0,59	-0,36*	-2,33
Number of persons in the home				
One	-0,14	-0,56	-0,26+	-1,99
Two	-0,16	-0,79	-0,37	-1,60
Three	0,06	0,34	-0,03	-0,18
Number of children of HOH				
No children	0,25	0,68	0,13	0,90
One child	0,03	0,10	0,67*	2,34
Two children	-0,63*	-2,72	0,01	0,03
Economic variables of the household				
HOH is informal	-0,11	-0,71	-0,24+	-1,64
Household income < 5 times minimum wage	-0,41*	-2,49	-0,52*	-2,90
Number of unemployed				
No unemployed	0,06	0,41	-0,32+	-1,76
One unemployed	0,42*	2,79	0,21	1,46
Predicted value of the probability of being	-0,67	-0,49	2,41+	1,67
informal Constant	-1 38*	-2.21	-2 38*	-3 69
Constant	N = 2132	2,21 y=521 070	N = 2303	y-550 218
	11 = 2152	L-521,979	11 = 2505	L-339,310

Table 5 Probability to exit informal work and enter formal work.(1=formal; 0=remains informal)

* 1% sifnificnce + 2,5 % or 5% significance

Reference individual: receives higher salary in the formal sector; receives social security or other work benefits; illiterate or only reads and writes; 25 to 49 years of age; woman; married; resident of Guadalajara; age of youngest child: 15; five people or more living in the home; HOH has three children or more; two unemployed or more at home.

The variable indicating a larger income in the new formal sector job is positive and significant for both periods.⁶ We can then confirm the theoretical expectation to be

⁶ This variable has been constructed taking value 1 if the individual is formal at time t and the income received is higher than in the previous informal job. The three other possibilities are all represented by

true for some individuals where $W_i < W_f$ explains the movement from informal to formal, but we also note that other variables carry a high level of significance.

The variable picking up work benefits in the new formal sector job also show a positive and significant probability of moving into the formal sector. With respect to income, this variable may take on two effects. One of these is to act as a complement to better conditions in the workplace, and the other is to act as a compensation for lower income, but perhaps for more stability, social status or other unobserved variables attached to formal sector employment (Villagómez, 1999). In this case the positive result can only be indicating the better working conditions that prevail in formal sector work.

The level of education is also very important and we note that only the highest level of schooling increases the probabilities of formal sector work, and that lower levels (the secondary level, which coincides with the average level of the population) decreases the probability. We should point out that individuals with higher education in the informal market might be at risk of suffering a depreciation of their acquired skills.⁷ It would remain for another study to reveal if those with a previous spell of informal work enter the formal market with lower wages than for comparable individuals who have not worked in the informal sector.

Individual characteristics such as sex, age and civil status do not always show the expected significance. In 1994-95 the younger population had a higher probability of leaving informal work. Perhaps the worsening economic conditions have in this case pushed younger people into work, but formal work might also be paid worse to this

^{0.} These are: moved but receiving the same income or less; still informal but income higher than at t-1 or the same or lower at t-1.

group and perhaps the effect we see here is the substitution of younger for older workers under harsh economic conditions for firms. In both years women have a lower probability to transit from informal employment into formal work and we recall that they also have a higher probability of being informal workers. The situation of women seems to be rather unfavourable according to our results. In 1992-93 married individuals had a positive but not very significant probability of finding formal work, again the absence of an analysis by gender may be affecting this result.

The place of residence shows that only in the border city of Tijuana do informal individuals increase their probability of finding formal sector work. The fact that Tijuana shows one of the largest increases of informal activity over the 1992-96 period (Table 1) and that the in-bond industry is very important to that city seem to be the main reasons explaining this result. The hypothesis of migration theory of informal work as a staging post seems to be very adequate in the dynamics of this local labour market.

We briefly comment on the household variables that have little to add to the probability of finding formal work. Therefore, the idea of finding evidence for the networks hypothesis in these figures, as in the previous case defining informal employment, is not warranted by the results. Again, analysis by gender could also be behind the poor results for these variables.

However, the economic variables do show greater relevance. The importance of the situation faced by the head of household on the rest of household members can be observed in table A4 in the Annex. There we find that a large proportion of the cohort remains as an informal worker given the same status for the head. The economic

⁷ In the sample around 70 to 75 per cent of previously informal workers with higher education seem to

downturn greatly increased this figure. We also note that the transit to formal work is much higher in 1995 and that inactivity and unemployment decrease substantially. Accordingly, we find that this variable is not significant in the 1992-93 period, but that it takes the expected sign and significance in the 1994-95 period decreasing the probability of movement.

Low incomes in households also decrease the probability of obtaining formal work and the situation has seemed to worsen with the economic crisis. This also reinforces the idea in the previous section, where this variable increased the probabilities of informal employment, that bad economic conditions may be not only breeding but maintaining informality. This result along with the situation for an informal head of household may be pointing the way towards policies that support family incomes or to those that diminish informal work only at the cost of increasing the number of formal posts.

We now look at the number of unemployed recalling that our analysis has taken us to the conclusion that unemployment is a situation that only a few can afford in countries like Mexico and that, on the other hand, bad economic situations may increase the household activity rate. Therefore, our results show that during 1992-93 the presence of one unemployed person in the household, with reference to two persons, increased the probability of entering formal sector employment and that during 1994-95 the absence of unemployed persons decreased the probability. We then find evidence for the idea that the presence of unemployed persons can be taken as a signal of better economic conditions in the household, and that the absence of unemployed persons, coinciding

acquire a formal job.

with worse overall economic conditions, could be implying a more pressing need for worse off families which can not afford anyone in their household as unemployed.

The variable representing the predicted value of the probability of being informal in any quarter is not significant in the first period, and not very significant in the second period. This means that only in one of the periods can we accept the hypothesis of an exogenous selection with respect to the initial condition of being informal and reject the endogeneity hypothesis.

Up to this point we have only discussed the elements which explain the movement from the informal to the formal state. The theoretical prediction about higher wages and also various personal and household characteristics have proven to have a significant effect on the transition. We should take into account that our definition of informality may be influencing the results. Including salaried and piece workers employed in firms with 5 employees or less may be biasing the results if we consider that there is a great deal of flexibility reflected in the sample with respect to changes in the number of employees from one quarter to the next. In 1992 between 30 and 40 per cent of the sample moved up to larger firms in the first quarter of observation, and in 1995 this figure rose to between 50 and 60 per cent.

Finally we construct a profile of those who are able to cross over into formal employment and those who are not in Diagram 2.

Diagram 2 Profile of individuals who have increased probabilities into formal employment and those who have decreased probabilities.

Increases probability	Lowers probability
Higher education	Woman
Tijuana residence	Head of household informal
12 to 24 years of age (1992-93)	Family income < five times the minimum
Unemployed individuals in the household	salary

Beyond receiving higher income or work benefits as incentives to move into the formal sector, it is clear that not all the individuals have the same probabilities to enter formal employment. In other words we find some evidence for heterogeneity in the incidence of informality. Higher education and high local employment growth seem to be the main ingredients in escaping informal employment.

These elements can be changed with various degrees of difficulties. Our hypothesis with respect to educational levels is that they are closely linked to household economic conditions in a direct manner (higher levels for higher incomes and lower levels for lower incomes). On the other hand migrating to booming in-bond industry towns is a widely observed phenomenon in the last decade in Mexico. In 1995 over 47 of the population in Baja California, where Tijuana is situated, was immigrant population from other parts of the country (INEGI, 1997). So an individual may take the decision to migrate in order to obtain a formal sector job.

The variables which point to a decrease in the probability of transiting to a formal sector job are much harder to change. Women in informal employment may well only be secondary workers keeping the family income from falling, or adding to the income for very specific purposes, or helping out as unpaid workers at very specific times. However, better economic conditions do not show a decrease in their probability to be informal relative to men nor an increase in their probability to escape informality.

This worse situation for women calls for specific policies that could increase the probability of finding better work, one of them is clearly education or perhaps simply

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specific training. However, some women may prefer this type of employment given the flexibility in location and hours that can be combined with their household responsibilities.

As to the disadvantageous household economic conditions it is also clear that only very specific policies aimed at supporting family income may improve the overall situation (including a better access to education or training) that may help individuals in having access to formal employment.

There seems to be a strong relationship between informal work, reduced probability of formal sector work and bad household economic conditions, which is also found in other work carried out for Latin America (Rosenbluth, 1994).

Conclusions

The analysis and results in this study have come to direct our attention to the elements that determine mobility between the informal and formal sectors in a developing country such as Mexico. We have found the economic conditions of the household to be quite important in the mobility process, and that the main theoretical predictions are also warranted by the data available.

We may not hide the fact that by limiting the study to only one possibility in the mobility matrix we have simplified the model and the estimations as well as the interpretation. Widening the model to include other mobility possibilities or applying the same model to other possibilities would make the interpretation of the results more difficult and perhaps the data needed would not match that demanded by the model. A model now exists and does not seem to add new information on the informal-formal transition (Gong, Van der Soest and Villagómez, 2000). However, the descriptive analysis that we have presented does offer insights and complements the estimation findings.

One of the most important results we wish to highlight is the disadvantage women have with respect to informal market employment. If we take the view that this type of employment is inferior to formal employment, women have a higher probability to be employed in this sector and they are also less likely to move into formal employment. On the other hand this type of employment might offer some flexibility to women in the location and hours that they may wish to combine with their household responsibilities.

Another result is the relationship between household economic conditions and informality. Although there are some cases in which informal income is found to be higher than formal income and previous work has found that the human capital model does apply, such that the higher the level of education the higher the income (Pradhan, 1994; Villagómez, 1996), income in the informal market may be more prone to fluctuations depending on seasonal or other elements affecting the market in which informal goods and services are sold. While a formal worker will be receiving a fixed amount of income at regular time intervals, informal workers will be on a day to day basis that will be more prone to changes⁸. Our data can confirm that those with higher education have less probability to find themselves working informally and that they have a higher probability to move into formal employment. However, higher education in Mexico is concentrated in households with better economic conditions. Thus it is not

⁸ The tabulated data shows that since 1992 an increasing proportion of the employed population depends on variable income. Although the level in each of the cities of interest is quite different, the main trend of an increase in clear in all cases Given that in some cases informal workers may report

clear that higher levels of education alone would take individuals into formal jobs. What is clear is that informal employment is also related to a set of worse economic conditions in the household.

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their income as benefits, we find that the proportion reporting benefits has also increased in all the cities except for Tijuana, where it has declined.

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	1992-1993	1993-1994	1994-1995	1995-1996	1992-1996
MEXICO CITY	2,95	-0,76	-1,60	1,88	0,59
SELF-EMPLOYED WORKERS	0,54	-10,65	6,57	6,46	0,47
SALARIED WORKERS	-2,04	1,38	0,45	3,91	0,88
PIECE WORKERS	12,68	8,70	7,16	-0,07	5,94
UNPAID WORKERS	14,81	-13,32	-0,94	7,91	1,50
GUADALAJARA	10,03	-1,18	-3,90	7,02	2,64
SELF-EMPLOYED WORKERS	11,68	5,50	0,52	6,57	5,19
SALARIED WORKERS	9,38	12,59	-3,19	-3,95	3,17
PIECE WORKERS	-27,20	9,92	10,18	15,93	0,54
UNPAID WORKERS	1,17	3,41	-7,89	5,50	0,41
MONTERREY	7,09	7,40	-5,79	6,97	3,43
SELF-EMPLOYED WORKERS	19,88	-5,00	11,44	-2,20	4,86
SALARIED WORKERS	32,71	5,57	-1,16	6,04	7,97
PIECE WORKERS	41,84	24,64	-1,10	-13,78	8,42
UNPAID WORKERS	15,46	55,78	-8,64	-39,14	0,00
CIUDAD JUÁREZ	2,78	13,49	-5,38	-2,35	1,81
SELF-EMPLOYED WORKERS	-8,51	-5,74	11,53	7,26	0,77
SALARIED WORKERS	-6,60	1,11	5,29	-30,17	-11,01
PIECE WORKERS	-27,36	15,28	-3,06	-15,46	-11,43
UNPAID WORKERS	47,46	-16,33	-7,90	-35,08	-8,89
TIJUANA	10,46	-6,04	10,04	7,03	4,55
SELF-EMPLOYED WORKERS	-5,15	-3,61	13,47	7,24	2,53
SALARIED WORKERS	-2,33	14,89	-18,77	55,70	7,38
PIECE WORKERS	-7,55	57,50	-30,96	19,43	4,18
UNPAID WORKERS	5,84	-29,27	18,32	3,61	-2,24

Annex Table A1 Annual variations by employment position 1992 to 1996. Source: ENEU, various years, 2nd quarter.

1992-1993						
1st to 2nd quarter	Informal	Employer/professional	Salaried	Unemployed	Inactive	
Informal	62,19	23,43	12,31	16,97	6,51	
Employer/professional	6,06	58,44	1,47	1,48	0,65	
Salaried	11,84	10,08	79,37	29,16	3,33	
Unemployed	6,34	1,51	4,02	23,56	4,13	
Inactive	13,58	6,55	2,83	28,83	85,37	
1st to 3rd quarter						
Informal	52,09	22,17	8,12	14,99	6,81	
Employer/professional	5,92	51,89	1,79	2,47	0,92	
Salaried	13,79	10,58	79,77	33,28	5,17	
Unemployed	6,06	2,52	4,70	18,78	3,18	
Inactive	15,25	8,06	3,62	26,36	79,73	
1st to 4th quarter						
Informal	47,35	22,92	7,89	13,01	6,57	
Employer/professional	5,43	49,87	1,51	1,32	0,68	
Salaried	14,35	7,56	72,88	31,96	6,03	
Unemployed	6,75	1,76	1,67	40,86	30,68	
Inactive	18,11	9,57	6,17	37,73	77,02	
1st to 5th quarter						
Informal	44,43	25,94	8,44	14,33	7,13	
Employer/professional	6,06	45,59	1,59	1,65	0,65	
Salaried	14,21	10,08	68,70	31,14	5,86	
Unemployed	5,15	1,51	4,86	11,37	4,31	
Inactive	16,50	7,30	5,93	27,02	73,60	
I		1994-1995				
1st to 2nd quarter	Informal	Employer/professional	Salaried	Unemployed	Inactive	
Informal	59,92	27,03	12,19	14,62	6,41	
Employer/professional	6,93	54,89	1,22	1,28	1,29	
Salaried	15,59	8,73	77,37	13,08	2,76	
Unemployed	5,47	3,74	5,42	33,85	4,23	
Inactive	12,02	5,61	3,49	36,15	85,00	
1st to 3rd quarter						
Informal	55,66	21,41	11,97	15,38	6,93	
Employer/professional	6,04	54,68	1,97	2,31	1,26	
Salaried	14,38	7,90	69,86	14,36	2,88	
Unemployed	8,08	5,20	6,64	22,56	4,02	
Inactive	10,56	6,86	3,54	39,74	79,85	
1st to 4th quarter						
Informal	51,40	25,99	11,31	16,15	8,10	
Employer/professional	5,60	49,69	1,88	2,56	1,29	
Salaried	14,95	9,15	66,10	14,10	4,57	
Unemployed	7,95	4,16	6,90	19,23	4,91	
Inactive	12,28	5,82	4,02	38,21	73,40	
1st to 5th quarter						
Informal	49,11	21,62	12,71	17,18	7,67	
Employer/professional	6,55	49,69	2,40	3,59	0,95	
Salaried	15,08	10,19	62,12	15,13	4,94	
Unemployed	7,12	4,16	5,85	14,10	4,94	
		1		1		

Table A2 Transition table for all employment categories and inactivity. Cohort.Source: ENEU, 1992-93 and 1994-95 Panel.

		1992-1993			
1st to 2nd quarter	Informal	Employer/professional	Salaried	Unemployed	Inactive
Informal	62,19	23,43	12,31	16,97	6,51
Employer/professional	6,06	58,44	1,47	1,48	0,65
Salaried	11,84	10,08	79,37	29,16	3,33
Unemployed	6,34	1,51	4,02	23,56	4,13
Inactive	13,58	6,55	2,83	28,83	85,37
2nd to 3rd quarter					
Informal	54,08	21,67	7,24	15,98	6,11
Employer/professional	6,91	57,96	1,50	2,25	0,86
Salaried	19,60	9,66	83,98	19,06	4,45
Unemployed	4,96	3,39	4,09	31,76	3,23
Inactive	14,45	7,31	3,20	30,94	85,35
3rd to 4th quarter					
Informal	57,33	23,73	7,25	14,56	5,53
Employer/professional	6,57	56,17	1,19	2,11	0,56
Salaried	14,25	9,69	82,01	18,57	4,03
Unemployed	5,81	2,91	3,24	10,97	8,65
Inactive	16,04	7,51	6,31	53,80	81,23
4th to 5th quarter					
Informal	47,54	20,25	6,20	4,83	5,49
Employer/professional	6,91	45,72	1,46	0,69	0,72
Salaried	11,89	5,22	66,70	3,59	3,95
Unemployed	4,57	2,30	3,52	3,04	5,32
Inactive	29,09	26,51	22,12	87,85	84,52
		1994-1995			
1st to 2nd quarter	Informal	Employer/professional	Salaried	Unemployed	Inactive
Informal	49,81	22,45	9,74	10,77	5,34
Informal Employer/professional	49,81 5,60	22,45 45,95	9,74 0,83	10,77 1,28	5,34 1,20
Informal Employer/professional Salaried	49,81 5,60 11,32	22,45 45,95 5,82	9,74 0,83 61,21	10,77 1,28 10,26	5,34 1,20 2,15
Informal Employer/professional Salaried Unemployed	49,81 5,60 11,32 4,20	22,45 45,95 5,82 3,12	9,74 0,83 61,21 4,37	10,77 1,28 10,26 29,23	5,34 1,20 2,15 3,56
Informal Employer/professional Salaried Unemployed Inactive	49,81 5,60 11,32 4,20 9,86	22,45 45,95 5,82 3,12 5,20	9,74 0,83 61,21 4,37 2,93	10,77 1,28 10,26 29,23 27,95	5,34 1,20 2,15 3,56 71,32
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter	49,81 5,60 11,32 4,20 9,86	22,45 45,95 5,82 3,12 5,20	9,74 0,83 61,21 4,37 2,93	10,77 1,28 10,26 29,23 27,95	5,34 1,20 2,15 3,56 71,32
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal	49,81 5,60 11,32 4,20 9,86 61,73	22,45 45,95 5,82 3,12 5,20 22,71	9,74 0,83 61,21 4,37 2,93 10,71	10,77 1,28 10,26 29,23 27,95 15,17	5,34 1,20 2,15 3,56 71,32 6,90
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional	49,81 5,60 11,32 4,20 9,86 61,73 7,31	22,45 45,95 5,82 3,12 5,20 22,71 59,39	9,74 0,83 61,21 4,37 2,93 10,71 1,94	10,77 1,28 10,26 29,23 27,95 15,17 2,40	5,34 1,20 2,15 3,56 71,32 6,90 0,88
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Salaried	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89	22,45 45,95 5,82 3,12 5,20 22,71 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 26,10 56,99 6,89 3,13	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed Inactive	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60 11,06	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89 3,13 6,89	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85 2,31	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95 28,65	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43 84,32
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed Inactive 4th to 5th quarter	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60 11,06	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89 3,13 6,89	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85 2,31	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95 28,65	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43 84,32
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed Inactive 4th to 5th quarter Informal	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60 11,06 61,75	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89 3,13 6,89 21,55	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85 2,31 10,73	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95 28,65 22,46	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43 84,32 6,29
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed Inactive 4th to 5th quarter Informal Employer/professional	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60 11,06 61,75 7,13	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89 3,13 6,89 21,55 59,21	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85 2,31 10,73 1,41	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95 28,65 22,46 3,86	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43 84,32 6,29 0,91
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed Inactive 4th to 5th quarter Informal Employer/professional Salaried Salaried	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60 11,06 61,75 7,13 13,76	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89 3,13 6,89 21,55 59,21 7,95	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85 2,31 10,73 1,41 80,04	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95 28,65 22,46 3,86 14,74	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43 84,32 6,29 0,91 2,72
Informal Employer/professional Salaried Unemployed Inactive 2nd to 3rd quarter Informal Employer/professional Salaried Unemployed Inactive 3rd to 4th quarter Informal Employer/professional Salaried Unemployed Inactive 4th to 5th quarter Informal Employer/professional Salaried Unemployed Inactive 4th to 5th quarter	49,81 5,60 11,32 4,20 9,86 61,73 7,31 13,45 7,06 10,44 60,11 6,33 13,89 8,60 11,06 61,75 7,13 13,76 6,39	22,45 45,95 5,82 3,12 5,20 22,71 59,39 4,15 3,93 9,83 26,10 56,99 6,89 3,13 6,89 21,55 59,21 7,95 2,72	9,74 0,83 61,21 4,37 2,93 10,71 1,94 78,04 6,26 3,06 10,60 1,16 82,08 3,85 2,31 10,73 1,41 80,04 4,50	10,77 1,28 10,26 29,23 27,95 15,17 2,40 15,17 35,33 31,94 17,52 4,20 13,69 35,95 28,65 22,46 3,86 14,74 31,93	5,34 1,20 2,15 3,56 71,32 6,90 0,88 2,90 3,57 85,75 6,78 1,16 3,30 4,43 84,32 6,29 0,91 2,72 4,11

Table A3 Transition table for all employment categories and inactivity. Source: ENEU, 1992-93 and 1994-95 Panel.

Table A4 Transition table for al	l employment categorie	s and inactivity if head of
household is informal, including	inactivity. Source: EN	EU, 1992-93 and 1994-95
Panel.	-	
	1000	100.

1st to 2nd quarter	1992	1995
Informal	31,25	46,87
Employer/professional	5,36	10,48
Salaried	17,86	20,38
Unemployed	8,93	3,49
Inactive	36,61	18,78
2nd to 3rd quarter		
Informal	28,57	45,41
Employer/professional	0,89	8,15
Salaried	20,54	20,23
Unemployed	3,57	5,39
Inactive	33,04	20,38
3rd to 4th quarter		
Informal	29,46	44,40
Employer/professional	1,79	8,59
Salaried	22,32	18,49
Unemployed	2,68	5,24
Inactive	31,25	23,14
4th to 5th quarter		
Informal	26,79	40,32
Employer/professional	3,57	9,90
Salaried	18,75	20,52
Unemployed	3,57	4,22
Inactive	50,00	25,04