Product Market Competition and Informality in Mexico

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Abstract:

Mexico has engaged in many trade agreements that have no affected internal competition, being one of the most trade-opened countries in the world is also one of the most restrictive regarding product market competition. For developing countries, this is a field to study that still need to be undertaken. This paper relates informality in the Mexican labor markets outcomes with market competition. Using microdata from labor surveys and industrial data, we proceeded with a two stage strategy, where in the first stage separate the industry informality differentials for workers, and in a second stage we pooled the data and estimate the effect from market competition and labor reforms. Results show that competition increases informality, but given the labor institutional set a wide reform of the labor market should be undertaken in order to benefit workers.

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1. Introduction

Competition is an important determinant of employment through restricting labor in imperfect competitive markets, and as a reduction in price may follow increasing competition the demand would increase and so the labor demand. If such competition comes in areas where there is a bargaining power from workers and unions, then the mentioned effect on labor will be larger. In addition, real wages may increase through the effect from decreasing prices.

Trade theory considers the case that the greater competition from the rest of the world brings to a more open country improvement in terms of technology and productivity, and as relative prices change due to that competition, the domestic relative price of skilled labor intense products will increase, leading to an increase in the wage gap between skilled and non skilled labor. In fact, competition and trade are complementary issues and although trade openness may be higher, if competition is restricted the impact on welfare will not be as that outlined in theory. Then, it seems plausible that is this link that has led to find mixed evidence on the impact of trade on some aspects of welfares, as is labor, and especially in developing countries (Mitra, 2003). However, an increasing competition may also have adverse effects on the labor market, if not accompanied by labor reforms (Amable and Gatti, 2004).

The aim of this paper is to analyze the effect of market competition in Mexico on those job non covered by social security (informality). This is a relevant question as during the last years informal jobs have increased sharply. We use microdata from the Mexican National Employment Survey, and also market competition data built from industrial surveys, and using a quantitative method in two stages. In the first stage, we calculate the probabilities of being informal in a given sector and controlling for some individual and household characteristics. In a second stage, we take the calculations from the first stage and build a panel of data with which we determine the effect of market competition by sector of activity, and also other factors.

2. Background: Why product competition matters to labor markets?

According to Nickell (1999), there are three main effects through which product competition impacts the labor market. First, a higher product competition leads to more production and labor demand. This happens as the mark-up reduces, increasing labor demand at any wage level. Second, the labor supply elasticity gets smaller as product competition increases, and thus there is a reduction in the real bargaining wage. Third, the reduction in the labor demand elasticity leads to a higher capture of rents by those already in the labor market, which has an incidence in more permanent workers in jobs give a wage level.

Griffith, Harrison and Macartney (2006) used a panel of OECD countries to measure the impact of product market regulation on employment and wages. They find that the deregulation process during the 1990s led to a significant increase in competition, measured through the reduction in markups, and such increase in competition is related to increases in aggregated employment and real wages. However, they also find that the higher the union density, the higher the effect on employment and the lower the effect on real wages. They tried to solve the endogeneity problem between markups and wages using policy reforms as instrument to product market competition. However, to the extent that policy reform may also be related to wages, such instrument is still correlated to the error term of the main wage equation.

Following the Dickens and Katz (1987), Katz and Summers (1989), and Goldberg and Pavnick (2003), Jean and Nicoletti (2002) observe for a set of countries that anticompetitive regulations increase wage premia in all industries, but specifically in the non-manufacturing industries premia decreases as restrictions to the mechanism of market become severe, which is due to the effect of public ownerships. They instrument market power with anticompetitive product market regulation, which suffers the same problem of the instrument than Griffith, Harrison and Macartney (2006).

In Abowd and Lemieux (1993) wages are derived from a partial equilibrium with efficient bargaining between the industry and unions on employment and wages. They find that unions capture about 20 per cent of total quasi-rents per worker. They use as

instrument for quasi-rents and negotiated wages, the price of exports and the price of imports in the industry. Nickell (1999) points that such instrument may be weak as deviation from price-taking by exporting industries would lead to an export price positively affected by wage shocks.

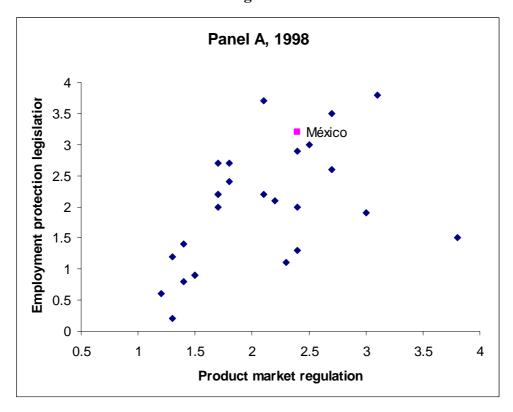
Other evidence finding positive effects of market power on wage include Blanchflower, Oswald and Sanfey (1996), Blanchflower and Machin (1996), and Guadalupe (2005). As Nickell (1999) points out, a big problem when analyzing market power and labor markets is the endogeneity problem and robustness of the models, remaining the problem of the use of instruments to be solved in a more accurate way, using himself lags of market power to alleviate to some extent the problem.

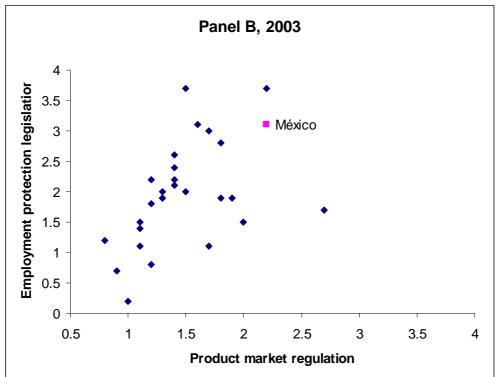
In this paper we approximate to the Amable and Gatti (2004a) model, they show than an increasing competition has a higher incidence in employment, but also on the separation rate and reducing job security. This happens as selection through market competition makes firms less efficient because of the burdens derived from labor regulations. Thus, Amable and Gatti (2004b) also propose that product competition will eventually improve employment, and formality, if a suitable labor policy for employment protection is put on place, that may improve the efficiency of the labor outcomes due to competition; That is, deregulation of product market competition and labor reform are complement to each other.

3 Product Market Competition and Labor Markets in Mexico

Although Mexico is one of the most open to trade countries in the world, according to an OECD report (see Conway, Janod, and Nicoletti, 2005) the country ranks among the most restrictive countries regarding product market competition regulation among the OECD, and although the country experienced an improvement in such regulation index between 1998 and 2003, the advance is not significant, as shown in Figure 1. The report states that although some reforms have been carried out, they obviously have not been enough to close the gap with the liberal countries, which also have reformed their regulatory systems. In addition, the mentioned report links such regulation with labor market policies, where Mexico ranks also among the most restrictive countries in the OECD sample.

Figure 1





Regarding labor reforms, Mexico is still lacking a well coordinated reform in the area. The World Bank (2001) has suggested modifying the labor laws in order to minimize barriers so firms can adjust faster and firms can match better workers; to align explicit

and implicit labor costs with how workers value those benefits; and maintaining the flexibility of wages in the medium term.

Perhaps, the biggest reform in the last years is that of reducing payroll taxes for social security (IMSS) and changing the private system of pension to individual accounts, which started in 1997. However, as seen in Figure 2, there is not a significant change in the increase of covered jobs in the private sector, but rather has been stable during the last years. Instead, the number of informal has grown. And although this reform increased slightly the valuation of workers for the social security benefits (Garro, Melendez, and Rodríguez-Oreggia, 2005), the increase of formal jobs was not significant due to such reform.

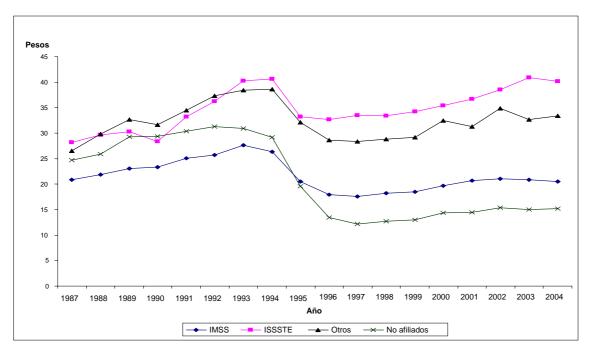
45,000 40,000 35,000 25,000 10,000 10,000 1996 1997 1998 1999 2000 2001 2002 2003 2004

Figure 2
Covered and uncovered workers in Mexico

Source: Data from IMSS, ISSSTE, INEGI and CONAPO.

Furthermore, as in Figure 3, the mean wage for those contributing to the private social security system lag behind those in the public bureaucracy (ISSSTE) and also in the national oil company, PEMEX, and in the secretary of defense (Otros). The uncovered has higher mean wages that the private covered before the crisis, then wages for uncovered falls as the proportion of informal increases during the same period.

Figure 3
Real average wages (pesos 2002)



Source: Own calculation using data from ENEU/T. Other refers to PEMEX, Defense, etc.

Some works have found that before NAFTA wage inequality in Mexico increased due to technological (Cragg and Epelbaum, 1996), while the post-NAFTA effect of trade on the wage gap is nil (Esquivel and Rodríguez, 2003). More evidence for Mexico shows that returns to schooling decreased in the middle of the 1990s and have not recovered to their higher, and this in part has been due to geographical/trade issues but mostly due to labor institutional factors (Rodríguez-Oreggia, 2005). However, there is no clear research linking labor markets and the competitive environment in Mexico. Thus, this paper undertakes the aim of linking informality with market competition.

4. Empirical framework

We are following the two stage methodology first used in Katz and Summers (1989) and popularized in Goldberg and Pavnick (2003). In the first stage, we separate the specific probability of each industry on informality, calculating a linear probability model for informality in this form:

$$Y_{ijt} = H_{ijt}\beta_{Hi} + I_{ijt} * ip_{jt} + \varepsilon_{ijt}$$

Where Y is a dummy taking the value of 1 if the worker i in informally employed in industry j in a year t. H is a vector of socio-demographic and household characteristics of the worker; I is a group of industry dummies where the specific worker is employed; and ip are the coefficients capturing the effect of industry on the probability of being informal and that is not explained by other factors, or industry informality differentials. The coefficients ip are also normalized using the Haisken-DeNew and Schmidt (1997) two stage restricted least squares for each year and clustering standard errors by industry.

Variables to include in the vector H are dummies for levels of age, male, levels of education, married, household head, wage earner, dependency ratios of the households for minors and older than 65 years, other member of the household with social security for her job, and size of the firm, as well as controls for nine geographic regions.

In a second stage, we pooled over time the ip normalized coefficients, relating them to measures of product market competition, and labor reforms through the model:

$$ip_{jt}=T_{jt}\beta_T+D_{jt}\beta_D+u_{jt}$$

where ip are the normalized coefficients from the first stage. T is a vector of measures of product market competition in the industry j at time t. D is a vector of industry and year dummies. We also will account of serial correlation using the panel corrected standard errors with one lag.

We are using in the first stage the National Employment Surveys carried out by the National Institute for Statistics, Geography and Informatics, urban areas, which is a quarterly survey including information on sociodemographic characteristics of the individuals and households as well on all job features such as wage, hours worked, if the job is covered by social security, sector of activity, benefits, type of occupation, etc. A summary of the data is presented in Annex 1. In the second stage, we use also product market competition data built from industrial surveys by INEGI, and unions share data.

5. Results and discussion

First Stage

Table 1 displays results for the first stage of the analysis using microdata from the Mexican National Employment Survey for a sample of workers in manufacturing, with age 18-65 years, urban, in the private sector. During the first years of age, it is less likely that the worker is informal, increasing the probability with age. The male coefficients are no consistently significant. The probability of being informal also decreases with the educational levels. A married worker is less likely to be informal, as well as a household head and a wage earner.

The coefficients for dependency ratio of under 12 in the household are mostly non significant. Those workers with higher dependency rates of older than 65 years at home are less likely to be informal at their job. Workers in medium/large size firms are less likely to be informal. If there is other member of the household with social security for her job, then the worker is less likely to be informal. This last variable may show that having someone else in the house with a covered job it is not necessarily taken as a disincentive to look for a job covered by social security, but rather is possible that a plausible explanation is that this happens due to the information networks operating through formal jobs to get other formal job.

Second Stage

In the second stage of the analysis, we use a pooled base of the industry informality differentials (ip) through years as dependant variable and use a set of variables to determine their effect with a panel corrected standard errors procedure.

The variable Competition is the inverse of the CR4 (market share of the four biggest firms) two digits industry index calculated by INEGI using the Industrial Annual Surveys. Although Nickell (1996) suggests that market shares may no be ideal for measuring concentration as, among other, do not fully reflect foreign competition, and using some industry digits may not represent something like a market. However, he also

suggests that such problems are reduced using panel instead of cross-sections, and lags for the measure for reducing the endogeneity problem.

The variable NAFTA is a dummy accounting for the effect of the North America Free Trade Agreement. Trade opening is supposedly to increase competition, however, there may be an effect of competition coming from foreign competition, and other thing is internal competition, where Mexico is lagging according the above presented indexes. However, this exogenous variation may introduce an effect on internal competition through the effect of reducing the market share of industry. But, on the other hand also may also impact informality, as some precondition needed in a developing country must be required given many industries may be comparative disadvantaged, therefore we include this dummy to capture that effect.

We also include a measure for the unionization share in the industry, data calculated by the Secretariat of Labor of Mexico using the National Surveys on Employment, Wage, Technology and Training, which is carried out unevenly. This variable is interacted with a time trend (Unions*Time) in order to determine the impact along time of the bargaining power of unions on informality, as it is expected that union bargaining power may reduce informality rates in industry. However, more union bargaining power along with more competition can have a mixed effect on informality, as there is no much empirical evidence on this issue, therefore we include an interaction Competition*Union in order to capture such effect.

Other variables are IMSS, a dummy variable accounting the labor reform introduced reducing payroll taxes in order to increase covered jobs, with a news pensions system with individual accounts as well starting in 1997. This variable approach for labor reform in Mexico aimed at increasing labor protection for social security coverage.

Table 2 shows results for the second stage model, where we also include a set of industry and year dummies in the regressions.

Table 2

]	Results 2 nd sta	ge			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Competition	0.0165**	0.0165**	0.0215***	0.0195***	0.0262***	0.0270***	()
	(0.0080)	(0.0080)	(0.0081)	(0.0076)	(0.0066)	(0.0064)	(-)
IMSS	()	-0.0222***	0.0133	0.0043	()	0.0071	-0.0067***
	(-)	(0.0015)	(0.0161)	(0.0066)	(-)	(0.0084)	(0.0015)
NAFTA	()	-0.0025	0.0215*	0.0203***	0.0517**	0.0228***	-0.0124***
	(-)	(0.0025)	(0.0112)	(0.0063)	(0.0261)	(0.0083)	(0.0021)
Unions * time	(-)	()	-0.0072**	-0.0055***	-0.0090***	-0.0063***	()
	(-)	(-)	(0.0032)	(0.0015)	(0.0034)	(0.0019)	(-)
Competition * unions	(-)	(-)	()	(-)	()	()	0.0436*
	(-)	(-)	(-)	(-)	(-)	(-)	(0.0240)
Year dummies	Yes	Yes	Yes	No	Yes	No	Yes
Industry dummies	Yes	Yes	Yes	Yes	No	No	Yes
X	2380.04***	2380.04***	1950.67***	6619.78***	23.70***	38.38***	1950.67***
N=882; *, **, *** signific	ant at 10, 5 and	1 1%. Panel co	orrected stand	ard errors witl	h one lag	•	

The variable Competition is positive and significant. This support the Amable and Gatti (2004a, 2004b) model where competition may exert a negative effect on the labor markets if labor reforms are not addresses to protect workers. To the extent that Mexico lack of unemployment benefits and the enforcement of the law is weak, there is a reason to believe that industry can shift reductions in cost derived from competition through avoiding regulations for social security. These findings suggest that competition may be complemented with labor reform.

But, what labor reform? The World Bank (2001) suggests to increase flexibility and reduce the costs burden in employment in order to increase formal jobs. Levy (2006) suggests that the current social security system forces employers and employees to pay for something they value less, then they will do something else, like avoiding such regulations, affecting also the productivity of labor. In addition, the World Economic Forum Report (2007) and the OECD (2004) have noted that the weak and complex tax legal system fosters informality.

We included a variable IMSS, taking the value of 1 after the reform of the social security system (the private). Results for this coefficient shows that is not always significant, and also it changes sign. Therefore it is difficult to draw some conclusion about this effect. Garro, Meléndez and Rodríguez-Oreggia (2005) for example, studied the impact of this reform on the labor market, finding that the effect on formal jobs was minimal, which is also related to how workers and employers value the benefits they are paying for with their contributions.

The effect of NAFTA is also mixed, as it also change sign and significance according to the set of variables included in the regression. When we include the Union*Time variable NAFTA is significant and positive, but when including Competition*Unions, it is significant but with a negative sign.

The variable Unions*Time is negative and significant. This shows that the more bargaining power by unions has had along the period under analysis a decreasing negative effect on informality. This is consistent with what Fairris (2003) found for Mexico, where Unions have decreased during the last decade. However, when including the interaction Competition*Unions, we get a positive effect, therefore, the higher the competition in an industry with higher bargaining power. This may happen as both, firms facing more competition, and unions with bargaining power, are constrained in their behavior by the elasticity of labor demand, so on the one hand if competition increase the elasticity, along with the pressure on reducing costs, firms will seek to cut some formal jobs, but together with more bargaining power from unions, such effect increases, as the likely increase in output by the firm may lead the unions to dismiss some requirements. If more competition reduces the rents, then unions may not be interested in appropriating more rents.

6. Conclusions

Although Mexico is one of the most open-to-trade countries in the world, several indicators, like those from the OECD, show that the country has strong restrictions regarding market competition. Market competition is widely linked to labor markets as it restricts non competitive markets affecting employment. If market competition restrictions take place in sector with higher negotiation power by unions, then the effect on employment can be larger. On the other hand, it can also be argued that higher market competition, in addition to affect employment, can also influence the dismissal rate and reduce the rate of social security coverage in the search for a cost reduction to compete in the market.

The aim of this paper was to analyze the effect of market competition in Mexico on the non covered by social security jobs (informality). This is a relevant question as during

the last year informal jobs have increased sharply. We use microdata from the National Employment Survey and also market competition data build from industrial surveys, and using a quantitative method in two stages. In the first stage we calculated the probabilities of being informal in a given sector and controlling for some individual and household characteristics from 1987 to 2004. In a second stage, we take the calculations from the first stage, the industry specific effect on the probability of informality, and built a panel of data with which we determine the effect of market competition by sector of activity, and also other factors, and for the effect of changes due to the NAFTA entrance, and social security reform, on competition.

Results show that Competition increases informality, and the more competition in the industry along with more bargaining power from unions, the effect is larger, while from the effect of NAFTA and the reform to the pension system (IMSS) in 1997 is difficult to draw conclusions. This significantly points towards the necessity to undertake a wide labor reform where the incentives are aligned with the economy, and then the effect from competition should be positive on the labor welfare. Simple deregulation of the economy increasing competition may increase informality if a labor reform is not clearly-cut outline and approved. If we consider that informality has a negative impact on the aggregate productivity, the welfare loss of workers could be much higher than that benefit coming from the reduction in prices through competition.

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				OLS Results					
	1987	1988	1989	1990	1991	1992	1993	1994	1995
Age 26-35	-0.0406**	-0.0292*	-0.0499***	-0.0734***	-0.0518***	-0.0273*	-0.0164	-0.0376***	-0.0640***
	(0.0189)	(0.0168)	(0.0130)	(0.0162)	(0.0169)	(0.0145)	(0.0182)	(0.0108)	(0.0151)
Age 36-45	0.0037	0.0125	-0.0003	-0.0074	-0.0369*	0.0225	0.0286	-0.0329***	-0.0518***
	(0.0274)	(0.0274)	(0.0183)	(0.0184)	(0.0207)	(0.0175)	(0.0227)	(0.0111)	(0.0160)
Age 46-55	0.1218***	0.0916***	0.0535***	0.0671***	0.0004	0.0370*	0.1288***	-0.0098	-0.0422
	(0.0291)	(0.0313)	(0.0201)	(0.0166)	(0.0250)	(0.0199)	(0.0237)	(0.0167)	(0.0255)
Age 56-65	0.1357***	0.1138***	0.1173***	0.1233***	0.0409	0.1617***	0.2121***	0.0390	-0.0280
C	(0.0376)	(0.0321)	(0.0357)	(0.0245)	(0.0473)	(0.0274)	(0.0324)	(0.0280)	(0.0268)
Male	-0.0409	-0.0377**	-0.0751***	-0.0595***	-0.0263	-0.0612***	-0.0421**	0.0131	0.0155
	(0.0260)	(0.0153)	(0.0201)	(0.0187)	(0.0161)	(0.0173)	(0.0178)	(0.0151)	(0.0140)
Primary	-0.0625**	-0.0224	-0.0888**	-0.0530	-0.0225	-0.0254	-0.0042	-0.0364**	-0.0412*
•	(0.0267)	(0.0199)	(0.0411)	(0.0349)	(0.0379)	(0.0303)	(0.0257)	(0.0192)	(0.0233)
Secondary	-0.0819***	-0.0423*	-0.1133***	-0.0711*	-0.0517	-0.0429	-0.0136	-0.0606***	-0.0528**
•	(0.0304)	(0.0233)	(0.0395)	(0.0364)	(0.0353)	(0.0326)	(0.0297)	(0.0194)	(0.0258)
Upper secondary	-0.0681	-0.0220	-0.0820**	-0.0577	-0.0528	-0.0267	-0.0072	-0.0795***	-0.0657***
•	(0.0419)	(0.0237)	(0.0409)	(0.0384)	(0.0428)	(0.0344)	(0.0341)	(0.0216)	(0.0252)
University	-0.0464	-0.0018	-0.0675	-0.0399	-0.0826**	-0.0224	0.0075	-0.0350	-0.0456
,	(0.0344)	(0.0263)	(0.0420)	(0.0406)	(0.0413)	(0.0342)	(0.0387)	(0.0227)	(0.0284)
Married	0.0303*	0.0331*	0.0242	0.0326**	0.0476***	0.0400***	0.0263*	-0.0442***	-0.0346***
	(0.0156)	(0.0183)	(0.0253)	(0.0137)	(0.0132)	(0.0141)	(0.0146)	(0.0097)	(0.0086)
Household head	-0.1740***	-0.1648***	-0.1208***	-0.1402***	-0.1608***	-0.1332***	-0.1811***	-0.0768***	-0.0735***
	(0.0174)	(0.0123)	(0.0140)	(0.0196)	(0.0200)	(0.0193)	(0.0205)	(0.0135)	(0.0145)
Wage earner	-0.1385***	-0.0203	-0.1600**	-0.1525*	-0.5222***	0.2697**	0.0496	-0.5209***	-0.4984***
	(0.0338)	(0.1662)	(0.0735)	(0.0878)	(0.0163)	(0.1188)	(0.1065)	(0.0360)	(0.0334)
Dependency ratio under 12	0.0099	0.0226	0.0207*	0.0077	-0.0016	-0.0037	0.0137	0.0124	0.0154
	(0.0133)	(0.0147)	(0.0122)	(0.0092)	(0.0047)	(0.0063)	(0.0089)	(0.0102)	(0.0094)
Dependency ratio +65	-0.0696	-0.1123***	-0.0268	-0.0848**	-0.0713**	-0.0951***	-0.0738***	-0.0595***	-0.0444*
	(0.0486)	(0.0367)	(0.0233)	(0.0381)	(0.0296)	(0.0253)	(0.0273)	(0.0160)	(0.0251)
Other HH member with SS	-0.0965***	-0.1060***	-0.0849***	-0.1135***	-0.0782***	-0.1066***	-0.0958***	-0.0919***	-0.0813***
	(0.0171)	(0.0159)	(0.0189)	(0.0144)	(0.0160)	(0.0128)	(0.0121)	(0.0171)	(0.0151)
Medium-large size	-0.2873***	-0.3435***	-0.3078***	-0.3130***	-0.2039***	-0.3250***	-0.3307***	-0.2551***	-0.2898***
<u> </u>	(0.0293)	(0.0288)	(0.0253)	(0.0286)	(0.0183)	(0.0273)	(0.0308)	(0.0271)	(0.0308)
Constant	0.9498***	0.9915***	0.9673***	0.9674***	1.2201***	0.8951***	0.8566***	1.2486***	1.2320***
	(0.0409)	(0.0289)	(0.0448)	(0.0394)	(0.0472)	(0.0356)	(0.0350)	(0.0249)	(0.0311)
N	14456	14819	15004	15702	15579	23445	24008	24324	25241
R^2	0.2450	0.2733	0.2727	0.2524	0.3418	0.2642	0.2784	0.5419	0.5429
*,**,*** significant at 10, 5,			phical regions a	nd women illi		nd employer	1		

				esults (continua					
	1996	1997	1998	1999	2000	2001	2002	2003	2004
Age 26-35	-0.0403***	-0.0467***	-0.0508***	-0.0455***	-0.0266***	-0.0359***	-0.0323***	-0.0410***	-0.0646***
_	(0.0148)	(0.0137)	(0.0132)	(0.0116)	(0.0088)	(0.0085)	(0.0099)	(0.0126)	(0.0118)
Age 36-45	-0.0209	-0.0159	-0.0206	-0.0218	-0.0301***	-0.0357***	-0.0246*	-0.0502***	-0.0438***
	(0.0143)	(0.0196)	(0.0202)	(0.0150)	(0.0105)	(0.0093)	(0.0128)	(0.0100)	(0.0142)
Age 46-55	0.0105	-0.0079	-0.0094	-0.0152	-0.0421***	-0.0211*	-0.0227	-0.0350***	-0.0411***
	(0.0158)	(0.0190)	(0.0174)	(0.0166)	(0.0108)	(0.0111)	(0.0143)	(0.0125)	(0.0154)
Age 56-65	-0.0022	0.0029	0.0574*	0.0082	-0.0196	-0.0349***	-0.0461**	-0.0421***	-0.0429*
	(0.0219)	(0.0254)	(0.0229)	(0.0268)	(0.0127)	(0.0111)	(0.0182)	(0.0154)	(0.0249)
Male	.0289**	-0.0086	-0.0143	-0.0031	0.0203	0.0061	0.0141	0.0189	0.0018
	(0.0135)	(0.0141)	(0.0105)	(0.0138)	(0.0121)	(0.0110)	(0.0138)	(0.0134)	(0.0178)
Primary	-0.0406	-0.0094	-0.0173	-0.0987***	-0.0484**	-0.0353**	-0.0694***	-0.0515***	-0.0278
•	(0.0293)	(0.0247)	(0.0251)	(0.0204)	(0.0191)	(0.0176)	(0.0155)	(0.0121)	(0.0275)
Secondary	-0.0410	-0.0271	-0.0271	-0.1128***	-0.0940***	-0.0784***	-0.1154***	-0.0947***	-0.0693**
•	(0.0360)	(0.0265)	(0.0323)	(0.0165)	(0.0200)	(0.0210)	(0.0156)	(0.0184)	(0.0327)
Upper secondary	-0.0447	-0.0337	-0.0319	-0.1111***	-0.0939***	-0.0708***	-0.1092***	-0.1142***	-0.0867***
11 ,	(0.0348)	(0.0272)	(0.0346)	(0.0201)	(0.0215)	(0.0197)	(0.0184)	(0.0191)	(0.0314)
University	-0.0348	-0.0232	-0.0246	-0.1189***	-0.1047***	-0.0809***	-0.1241***	-0.1202***	-0.1100***
•	(0.0388)	(0.0255)	(0.0324)	(0.0180)	(0.0207)	(0.0220)	(0.0176)	(0.0169)	(0.0334)
Married	-0.0188	-0.0301***	-0.0292***	-0.0164**	-0.0032	-0.0212***	-0.0171***	-0.0185*	-0.0094
	(0.0123)	(0.0083)	(0.0084)	(0.0081)	(0.0065)	(0.0081)	(0.0064)	(0.0105)	(0.0085)
Household head	-0.0945***	-0.0667***	-0.0494***	-0.0647***	-0.0615***	-0.0409***	-0.0480***	-0.0529***	-0.0667***
	(0.0089)	(0.0140)	(0.0152)	(0.0108)	(0.0114)	(0.0094)	(0.0073)	(0.0079)	(0.0111)
Wage earner	-0.4945***	-0.4870***	-0.4924***	-0.5120***	-0.4608***	-0.4629***	-0.4415***	-0.3873***	-0.4382***
S	(0.0360)	(0.0300)	(0.0401)	(0.0436)	(0.0277)	(0.0352)	(0.0281)	(0.0339)	(0.0238)
Dependency ratio under 12	0.0158	0.0086	0.0094	0.0101*	0.0877	0.0373	0.0106	0.0085	0.0193***
1 2	(0.0098)	(0.0071)	(0.0087)	(0.0057)	(0.0767)	(0.0489)	(0.0077)	(0.0064)	(0.0073)
Dependency ratio +65	-0.0466**	-0.0839***	-0.0387**	-0.0219	-0.0101	-0.0598***	-0.0389***	-0.0319	-0.0342*
1	(0.0217)	(0.0293)	(0.0155)	(0.0239)	(0.0110)	(0.0152)	(0.0134)	(0.0190)	(0.0195)
Other HH member with SS	-0.0876***	-0.0889***	-0.0771***	-0.0745***	-0.0743***	-0.0773***	-0.1084***	-0.1191***	-0.1239***
	(0.0132)	(0.0163)	(0.0134)	(0.0173)	(0.0097)	(0.0106)	(0.0167)	(0.0153)	(0.0180)
Medium-large size	-0.2930***	-0.3114***	-0.2988***	-0.2755***	-0.3577***	-0.3415***	-0.3752***	-0.3982***	-0.3491***
0	(0.0304)	(0.0280)	(0.0294)	(0.0325)	(0.0295)	(0.0319)	(0.0322)	(0.0365)	(0.0297)
Constant	1.1885***	1.2005***	1.1463***	1.2778***	1.2003***	1.1970***	1.2080***	1.1614***	1.1721***
	(0.0357)	(0.0268)	(0.0404)	(0.0311)	(0.0292)	(0.0252)	(0.0246)	(0.0240)	(0.0337)
N	26443	29200	32161	36801	44673	42887	39389	33210	23028
R^2	0.5412	0.5523	0.5421	0.5539	0.5961	0.6283	0.6052	0.6221	0.5611
*,**,*** significant at 10, 5,							0.0052	0.0221	0.5011

ANNEX I

						F	ormal and	informal v	worker cha	racteristic	es							
	198	87	19	88	19	89	19	90	19	91	19	92	19	93	19	94	19	95
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	formal	Informal	Formal	Informal	formal	Informal	Formal	Informal	Formal	Informal
Man	0.7200	0.6628	0.7149	0.6735	0.7198	0.6555	0.7091	0.6593	0.7016	0.6581	0.7277	0.6610	0.7399	0.6442	0.7029	0.6751	0.6916	0.6633
	(0.4490)	(0.4728)	(0.4515)	(0.4690)	(0.4491)	(0.4753)	(0.4542)	0.4740	(0.4576)	(0.4744)	(0.4452)	(0.4734)	(0.4387)	(0.4788)	(0.4570)	(0.4684)	(0.4618)	(0.4726)
Age 26-35	0.3190	0.2398	0.3195	0.2575	0.3140	0.2520	0.3187	0.2454	0.3139	0.2471	0.3222	0.2573	0.3312	0.2513	0.3328	0.2465	0.3393	0.2456
	(0.4661)	(0.4270)	(0.4663)	(0.4373)	(0.4642)	(0.4342)	(0.4660)	0.4304	(0.4641)	(0.4314)	(0.4673)	(0.4372)	(0.4706)	(0.4338)	(0.4712)	(0.4310)	(0.4735)	(0.4304)
Age 36-45	0.1759	0.1882	0.1695	0.1878	0.1706	0.1850	0.1706	0.1910	0.1725	0.1988	0.1764	0.2061	0.1954	0.2017	0.1823	0.2172	0.1869	0.2196
	(0.3807)	(0.3909)	(0.3752)	(0.3906)	(0.3762)	(0.3884)	(0.3762)	0.3931	(0.3778)	(0.3991)	(0.3812)	(0.4045)	(0.3965)	(0.4013)	(0.3861)	(0.4124)	(0.3899)	(0.4140)
Age 46-55	0.0762	0.1264	0.0779	0.1231	0.0756	0.1199	0.0806	0.1165	0.0803	0.1299	0.0811	0.1267	0.0814	0.1293	0.0819	0.1498	0.0777	0.1413
	(0.2653)	(0.3324)	(0.2680)	(0.3285)	(0.2644)	(0.3249)	(0.2723)	0.3209	(0.2718)	(0.3362)	(0.2729)	(0.3327)	(0.2735)	(0.3356)	(0.2742)	(0.3569)	(0.2677)	(0.3484)
Age 56-65	0.0336	0.0754	0.0315	0.0704	0.0295	0.0745	0.0275	0.0683	0.0318	0.0723	0.0285	0.0749	0.0261	0.0773	0.0251	0.0802	0.0275	0.0820
	(0.1802)	(0.2641)	(0.1747)	(0.2558)	(0.1693)	(0.2626)	(0.1636)	0.2523	(0.1755)	(0.2590)	(0.1664)	(0.2633)	(0.1595)	(0.2671)	(0.1563)	(0.2717)	(0.1637)	(0.2744)
Primary	0.4283	0.5009	0.4056	0.4976	0.3862	0.4700	0.3741	0.4524	0.3638	0.4424	0.3398	0.4268	0.3279	0.4065	0.3114	0.4135	0.3008	0.4163
	(0.4949)	(0.5001)	(0.4910)	(0.5000)	(0.4869)	(0.4992)	(0.4839)	0.4978	(0.4811)	(0.4967)	(0.4736)	(0.4946)	(0.4695)	(0.4912)	(0.4631)	(0.4925)	(0.4586)	(0.4930)
Secondary	0.2619	0.2232	0.2702	0.2229	0.2815	0.2331	0.2881	0.2512	0.2959	0.2652	0.2891	0.2516	0.2919	0.2537	0.3080	0.2555	0.3106	0.2479
	(0.4397)	(0.4164)	(0.4441)	(0.4163)	(0.4497)	(0.4229)	(0.4529)	0.4337	(0.4565)	(0.4415)	(0.4534)	(0.4340)	(0.4546)	(0.4352)	(0.4617)	(0.4362)	(0.4628)	(0.4318)
Upper secondary	0.1713	0.1294	0.1794	0.1357	0.1860	0.1496	0.1891	0.1493	0.1900	0.1520	0.2012	0.1600	0.2037	0.1712	0.2033	0.1598	0.2071	0.1654
	(0.3768)	(0.3357)	(0.3837)	(0.3425)	(0.3891)	(0.3567)	(0.3916)	0.3565	(0.3923)	(0.3591)	(0.4009)	(0.3666)	(0.4027)	(0.3767)	(0.4024)	(0.3664)	(0.4052)	(0.3715)
University	0.1094	0.0761	0.1193	0.0797	0.1239	0.0971	0.1275	0.0942	0.1305	0.0940	0.1517	0.1112	0.1589	0.1200	0.1594	0.1154	0.1652	0.1141
, and the second	(0.3122)	(0.2652)	(0.3241)	(0.2709)	(0.3295)	(0.2961)	(0.3335)	0.2921	(0.3369)	(0.2919)	(0.3588)	(0.3144)	(0.3656)	(0.3249)	(0.3661)	(0.3195)	(0.3713)	(0.3179)
Married	0.5844	0.5764	0.5674	0.5787	0.5577	0.5677	0.5542	0.5599	0.5487	0.5882	0.5748	0.6043	0.6023	0.5938	0.5975	0.6085	0.6006	0.6035
	(0.4929)	(0.4942)	(0.4955)	(0.4938)	(0.4967)	(0.4954)	(0.4971)	0.4964	(0.4976)	(0.4922)	(0.4944)	(0.4890)	(0.4894)	(0.4912)	(0.4904)	(0.4881)	(0.4898)	(0.4892)
Household head	0.5024	0.4329	0.4873	0.4369	0.4807	0.4271	0.4785	0.4227	0.4672	0.4259	0.4928	0.4535	0.5185	0.4265	0.4877	0.4730	0.4857	0.4543
	(0.5000)	(0.4955)	(0.4999)	(0.4961)	(0.4997)	(0.4947)	(0.4996)	0.4940	(0.4989)	(0.4945)	(0.5000)	(0.4979)	(0.4997)	(0.4946)	(0.4999)	(0.4993)	(0.4998)	(0.4979)
Dependency ratio	0.6989	0.6490	0.4315	0.4270	0.4107	0.4000	0.6448	0.6207	1.3299	1.2883	1.2890	1.2652	0.7460	0.6852	0.4209	0.3988	0.4197	0.4011
under 12 years	(0.6554)	(0.6328)	(0.5214)	(0.5404)	(0.5014)	(0.5108)	(0.6164)	0.6162	(1.1670)	(1.1487)	(1.2253)	(1.2397)	(0.5865)	(0.5597)	(0.4848)	(0.4975)	(0.4699)	(0.4919)
Dependency ratio	0.0344	0.0422	0.0394	0.0414	0.0388	0.0493	0.0389	0.0432	0.0445	0.0432	0.0408	0.0441	0.0379	0.0416	0.0404	0.0461	0.0398	0.0458
over 65 years	(0.1428)	(0.1638)	(0.1647)	(0.1669)	(0.1617)	(0.1903)	(0.1610)	0.1658	(0.1808)	(0.1757)	(0.1686)	(0.1743)	(0.1604)	(0.1780)	(0.1733)	(0.1899)	(0.1735)	(0.1790)
Other HH	0.4927	0.4093	0.5150	0.3867	0.5153	0.3997	0.5241	0.4083	0.5307	0.4380	0.5163	0.3872	0.4913	0.3995	0.3078	0.1321	0.3078	0.1428
member with SS	(0.5000)	(0.4918)	(0.4998)	(0.4870)	(0.4998)	(0.4899)	(0.4994)	0.4916	(0.4991)	(0.4962)	(0.4998)	(0.4871)	(0.4999)	(0.4898)	(0.4616)	(0.3386)	(0.4616)	(0.3499)
													•			•		
Average wage	21.20	18.53	20.52	31.39	22.17	23.35	22.48	25.68	22.94	25.00	24.24	25.77	24.80	25.90	24.88	25.24	20.64	16.88
	(16.02)	(20.91)	(34.16)	(37.41)	(26.57)	(33.29)	(22.17)	47.38	(25.86)	(54.53)	(28.36)	(51.34)	(28.85)	(52.06)	(30.49)	(240.78)	(27.41)	(28.48)
Average hours	43.32	31.44	43.32	20.96	44.17	31.95	44.05	30.78	44.10	30.58	44.58	31.88	44.97	30.04	46.64	42.18	46.68	41.99
	(10.44)	(21.46)	(10.01)	(21.35)	(8.90)	(21.46)	(9.37)	22.26	(9.60)	(22.20)	(11.14)	(22.79)	(11.13)	(22.98)	(7.13)	(16.73)	(7.66)	(17.24)
Wage earner	0.0038	0.0013	0.0017	0.0014	0.0018	0.0006	0.0012	0.0004	0.9916	0.6212	0.0011	0.0025	0.0004	0.0008	0.9455	0.3306	0.9445	0.3354
	(0.0613)	(0.0355)	(0.0416)	(0.0377)	(0.0422)	(0.0249)	(0.0340)	0.0196	(0.0915)	(0.4851)	(0.0334)	(0.0504)	(0.0205)	(0.0287)	(0.2271)	(0.4704)	(0.2289)	(0.4721)
Sizo mioro emall	0.3492	0.8350	0.3429	0.8379	0.3355	0.8193	0.3315	0.8040	0.3441	0.8067	0.3472	0.8410	0.3520	0.8480	0.3413	0.9437	0.3383	0.9462
Size micro small	0.3492	0.6550	0.3429	0.8379	0.5555	0.0193	0.5515	0.8040	0.3441	0.8007	0.3472	0.8410	0.3320	0.0400	0.3413	0.945/	0.3363	0.9402

Formal a	and informal worker	characteristics (conti	nuation)
n.	1000	1001	1002

	198	37	198	88	198	89	19	90	19	91	19	92	19	93	19	94	19	95
	Formal	Informal																
	(0.4767)	(0.3712)	(0.4747)	(0.3686)	(0.4722)	(0.3848)	(0.4708)	0.3970	(0.4751)	(0.3949)	(0.4761)	(0.3657)	(0.4776)	(0.3590)	(0.4742)	(0.2305)	(0.4731)	(0.2256)
Size medium	0.6508	0.1650	0.6571	0.1621	0.6645	0.1807	0.6685	0.1960	0.6559	0.1933	0.6528	0.1590	0.6480	0.1520	0.6587	0.0563	0.6617	0.0538
large	(0.4767)	(0.3712)	(0.4747)	(0.3686)	(0.4722)	(0.3848)	(0.4708)	0.3970	(0.4751)	(0.3949)	(0.4761)	(0.3657)	(0.4776)	(0.3590)	(0.4742)	(0.2305)	(0.4731)	(0.2256)
Frontier	0.4362	0.3383	0.4617	0.3330	0.4664	0.3329	0.4767	0.3633	0.4541	0.3445	0.4148	0.2502	0.3990	0.2640	0.4315	0.2097	0.4229	0.2049
	(0.4959)	(0.4732)	(0.4986)	(0.4713)	(0.4989)	(0.4713)	(0.4995)	0.4810	(0.4979)	(0.4753)	(0.4927)	(0.4331)	(0.4897)	(0.4408)	(0.4953)	(0.4071)	(0.4940)	(0.4037)
North Pacific	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0236	0.0416	0.0235	0.0355	0.0241	0.0387	0.0240	0.0397
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	0.0000	(0.0000)	(0.0000)	(0.1519)	(0.1996)	(0.1516)	(0.1851)	(0.1535)	(0.1929)	(0.1530)	(0.1954)
Gulf center	0.0738	0.0807	0.0549	0.0901	0.0531	0.0836	0.0504	0.0739	0.0567	0.0719	0.0545	0.0829	0.0507	0.0856	0.0449	0.0790	0.0417	0.0791
	(0.2614)	(0.2724)	(0.2277)	(0.2864)	(0.2242)	(0.2768)	(0.2188)	0.2616	(0.2312)	(0.2583)	(0.2270)	(0.2758)	(0.2194)	(0.2797)	(0.2071)	(0.2698)	(0.1998)	(0.2699)
Center pacific	0.0900	0.1252	0.0836	0.1200	0.0788	0.1130	0.0725	0.0899	0.0840	0.1104	0.0764	0.1362	0.0718	0.1149	0.0591	0.1199	0.0657	0.1155
	(0.2862)	(0.3310)	(0.2768)	(0.3250)	(0.2694)	(0.3167)	(0.2594)	0.2861	(0.2774)	(0.3134)	(0.2656)	(0.3431)	(0.2581)	(0.3189)	(0.2358)	(0.3248)	(0.2477)	(0.3196)
Center	0.1943	0.2266	0.1878	0.2189	0.1814	0.2178	0.1730	0.2362	0.1837	0.2199	0.1434	0.1634	0.1470	0.1474	0.1610	0.2023	0.1875	0.2647
	(0.3957)	(0.4186)	(0.3906)	(0.4135)	(0.3854)	(0.4128)	(0.3783)	0.4248	(0.3872)	(0.4142)	(0.3505)	(0.3697)	(0.3541)	(0.3545)	(0.3675)	(0.4018)	(0.3903)	(0.4412)
North center	0.0694	0.0601	0.0742	0.0643	0.0767	0.0653	0.0781	0.0608	0.0708	0.0612	0.1127	0.1014	0.1087	0.0944	0.1054	0.0974	0.0973	0.0805
	(0.2541)	(0.2376)	(0.2622)	(0.2453)	(0.2661)	(0.2471)	(0.2684)	0.2389	(0.2565)	(0.2398)	(0.3162)	(0.3019)	(0.3113)	(0.2924)	(0.3070)	(0.2965)	(0.2963)	(0.2721)
Peninsula	0.0233	0.0540	0.0243	0.0427	0.0238	0.0330	0.0308	0.0382	0.0288	0.0409	0.0334	0.0423	0.0695	0.0748	0.0678	0.0715	0.0625	0.0691
	(0.1510)	(0.2259)	(0.1539)	(0.2022)	(0.1524)	(0.1786)	(0.1727)	0.1917	(0.1671)	(0.1980)	(0.1796)	(0.2014)	(0.2542)	(0.2630)	(0.2514)	(0.2577)	(0.2421)	(0.2536)
South pacific	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0150	0.0758	0.0152	0.0731	0.0119	0.0774	0.0119	0.0677
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	0.0000	(0.0000)	(0.0000)	(0.1215)	(0.2647)	(0.1223)	(0.2603)	(0.1083)	(0.2673)	(0.1085)	(0.2512)

	Formal and informal worker characteristics (continuation)																	
	19	96	19	97	19	98	19	99	20	00	20	01	20	02	20	03	20	004
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Inform
Man	0.6843	0.6552	0.6777	0.6460	0.6645	0.6443	0.6689	0.6505	0.6483	0.6344	0.6525	0.6223	0.6640	0.6425	0.6691	0.6418	0.6680	0.6261
	(0.4648)	(0.4753)	(0.4674)	(0.4782)	(0.4722)	(0.4787)	(0.4706)	(0.4768)	(0.4775)	(0.4816)	(0.4762)	(0.4848)	(0.4724)	(0.4793)	(0.4706)	(0.4795)	(0.4710)	(0.4839
Age 26-35	0.3365	0.2519	0.3382	0.2505	0.3528	0.2581	0.3500	0.2562	0.3489	0.2599	0.3534	0.2630	0.3485	0.2604	0.3439	0.2511	0.3514	0.2541
	(0.4725)	(0.4341)	(0.4731)	(0.4333)	(0.4779)	(0.4376)	(0.4770)	(0.4365)	(0.4766)	(0.4386)	(0.4780)	(0.4403)	(0.4765)	(0.4389)	(0.4750)	(0.4336)	(0.4774)	(0.4354
Age 36-45	0.1813	0.2202	0.1848	0.2248	0.1830	0.2249	0.1929	0.2333	0.1910	0.2317	0.1991	0.2332	0.2192	0.2397	0.2212	0.2319	0.2211	0.2324
_	(0.3853)	(0.4144)	(0.3881)	(0.4175)	(0.3867)	(0.4175)	(0.3946)	(0.4230)	(0.3931)	(0.4220)	(0.3993)	(0.4229)	(0.4137)	(0.4269)	(0.4151)	(0.4220)	(0.4150)	(0.4224
Age 46-55	0.0794	0.1396	0.0757	0.1424	0.0672	0.1516	0.0760	0.1520	0.0768	0.1616	0.0810	0.1644	0.0886	0.1680	0.0963	0.1716	0.0963	0.1621
	(0.2704)	(0.3466)	(0.2645)	(0.3494)	(0.2503)	(0.3586)	(0.2651)	(0.3590)	(0.2663)	(0.3681)	(0.2729)	(0.3707)	(0.2841)	(0.3738)	(0.2949)	(0.3771)	(0.2949)	(0.3686
Age 56-65	0.0265	0.0853	0.0239	0.0784	0.0200	0.0776	0.0216	0.0785	0.0214	0.0819	0.0258	0.0860	0.0269	0.0956	0.0306	0.1028	0.0320	0.0971
	(0.1608)	(0.2793)	(0.1527)	(0.2688)	(0.1401)	(0.2675)	(0.1455)	(0.2690)	(0.1446)	(0.2742)	(0.1584)	(0.2804)	(0.1619)	(0.2941)	(0.1722)	(0.3037)	(0.1759)	(0.296)
Primary	0.2910	0.4088	0.2748	0.3984	0.2720	0.4023	0.2632	0.3950	0.2582	0.4028	0.2467	0.4010	0.2457	0.3939	0.2519	0.4253	0.2371	0.3852
•	(0.4543)	(0.4916)	(0.4464)	(0.4896)	(0.4450)	(0.4904)	(0.4404)	(0.4889)	(0.4377)	(0.4905)	(0.4311)	(0.4901)	(0.4305)	(0.4886)	(0.4341)	(0.4944)	(0.4253)	(0.4867
Secondary	0.3246	0.2506	0.3262	0.2579	0.3426	0.2587	0.3502	0.2717	0.3511	0.2629	0.3548	0.2691	0.3525	0.2752	0.3647	0.2601	0.3667	0.2875
·	(0.4683)	(0.4334)	(0.4689)	(0.4375)	(0.4746)	(0.4379)	(0.4771)	(0.4448)	(0.4773)	(0.4402)	(0.4785)	(0.4435)	(0.4778)	(0.4466)	(0.4814)	(0.4387)	(0.4819)	(0.4526
Upper secondary	0.2028	0.1647	0.2136	0.1734	0.2103	0.1680	0.2057	0.1650	0.2040	0.1591	0.2068	0.1545	0.2043	0.1553	0.1990	0.1373	0.2283	0.1686
	(0.4021)	(0.3709)	(0.4099)	(0.3786)	(0.4075)	(0.3739)	(0.4042)	(0.3712)	(0.4030)	(0.3657)	(0.4050)	(0.3614)	(0.4032)	(0.3622)	(0.3992)	(0.3442)	(0.4198)	(0.3744
University	0.1652	0.1232	0.1703	0.1233	0.1615	0.1195	0.1679	0.1179	0.1729	0.1129	0.1786	0.1134	0.1852	0.1114	0.1712	0.0973	0.1549	0.0982
	(0.3714)	(0.3287)	(0.3759)	(0.3288)	(0.3680)	(0.3244)	(0.3738)	(0.3225)	(0.3782)	(0.3164)	(0.3830)	(0.3170)	(0.3884)	(0.3146)	(0.3767)	(0.2963)	(0.3618)	(0.2976
Married	0.5941	0.6100	0.5984	0.6061	0.6014	0.6225	0.6027	0.6292	0.5975	0.6421	0.6066	0.6456	0.6111	0.6415	0.6096	0.6451	0.6049	0.6308
	(0.4911)	(0.4878)	(0.4902)	(0.4886)	(0.4896)	(0.4848)	(0.4893)	(0.4830)	(0.4904)	(0.4794)	(0.4885)	(0.4784)	(0.4875)	(0.4796)	(0.4879)	(0.4785)	(0.4889)	(0.4826
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Household head	0.4731	0.4466	0.4645	0.4444	0.4622	0.4563	0.4649	0.4722	0.4530	0.4654	0.4614	0.4653	0.4799	0.4761	0.4794	0.4671	0.4795	0.4570
	(0.4993)	(0.4972)	(0.4988)	(0.4969)	(0.4986)	(0.4981)	(0.4988)	(0.4992)	(0.4978)	(0.4988)	(0.4985)	(0.4988)	(0.4996)	(0.4994)	(0.4996)	(0.4989)	(0.4996)	(0.4982
Dependency ratio	0.4069	0.3827	0.3972	0.3696	0.4211	0.3831	0.4085	0.3744	0.0004	0.0006	0.0007	0.0007	0.3790	0.3606	0.3795	0.3677	0.3743	0.3592
under 12 years	(0.4693)	(0.4781)	(0.4673)	(0.4806)	(0.4759)	(0.4840)	(0.4728)	(0.4762)	(0.0211)	(0.0258)	(0.0284)	(0.0277)	(0.4538)	(0.4692)	(0.4533)	(0.4741)	(0.4425)	(0.4676
Dependency ratio	0.0420	0.0479	0.0388	0.0467	0.0352	0.0472	0.0379	0.0436	0.0396	0.0501	0.0419	0.0531	0.0430	0.0563	0.0471	0.0592	0.0461	0.0571
over 65 years	(0.1697)	(0.1780)	(0.1678)	(0.1748)	(0.1562)	(0.1847)	(0.1621)	(0.1763)	(0.1695)	(0.1901)	(0.1777)	(0.2119)	(0.1825)	(0.2118)	(0.1891)	(0.2132)	(0.1756)	(0.2034
Other HH	0.3196	0.1372	0.3368	0.1460	0.3595	0.1497	0.3548	0.1464	0.3556	0.1398	0.3470	0.1298	0.3274	0.1166	0.2946	0.0952	0.3017	0.1123
member with SS	(0.46649	(0.3440)	(0.4726)	(0.3531)	(0.4799)	(0.3568)	(0.4785)	(0.3536)	(0.4787)	(0.3468)	(0.4760)	(0.3361)	(0.4693)	(0.3209)	(0.4559)	(0.2935)	(0.4590)	(0.315
	•	·					•	·	· · · · · ·		•	·	•	·		•	•	
Average wage	18.38	15.56	18.05	15.23	18.44	14.31	18.80	14.49	20.68	17.49	21.52	17.15	21.81	17.16	21.09	15.39	20.71	16.87
5 5	(33.87)	(92.50)	(20.91)	(108.04)	(19.77)	(28.29)	(21.13)	(21.38)	(23.65)	(34.97)	(20.86)	(25.17)	(20.91)	(24.93)	(20.11)	(23.82)	(19.89)	(24.19)
Average hours	46.95	42.54	47.15	42.95	46.62	42.54	46.59	42.94	42.91	38.34	41.86	37.86	42.23	37.67	42.45	37.14	43.31	37.98
9	(7.58)	(16.96)	(7.63)	(17.24)	(7.00)	(16.39)	(6.98)	(15.96)	(14.91)	(20.25)	(15.61)	(20.22)	(14.92)	(19.88)	(15.53)	(20.21)	(15.15)	(20.63)

Formal and informal worker characteristics (continuation)

	19	96	19	97	19	98	19	99	20	00	20	01	20	02	20	03	20	004
	Formal	Informal																
Wage earner	0.9435	0.3328	0.9441	0.3329	0.9531	0.3459	0.9559	0.3500	0.9982	0.4676	0.9677	0.3475	0.9986	0.4566	0.9972	0.4371	0.9972	0.4889
	(0.2308)	(0.4712)	(0.2297)	(0.4713)	(0.2114)	(0.4757)	(0.2053)	(0.4770)	(0.0422)	(0.4990)	(0.1769)	(0.4762)	(0.0375)	(0.4981)	(0.0530)	(0.4960)	(0.0528)	(0.4999)
Size micro small	0.3000	0.9494	0.2988	0.9460	0.2580	0.9383	0.2634	0.9394	0.2464	0.9409	0.2430	0.9466	0.2553	0.9560	0.3170	0.9642	0.3086	0.9494
	(0.4583)	(0.2192)	(0.4578)	(0.2260)	(0.4375)	(0.2406)	(0.4405)	(0.2386)	(0.4309)	(0.2359)	(0.4289)	(0.2248)	(0.4360)	(0.2050)	(0.4653)	(0.1858)	(0.4619)	(0.2191)
Size medium	0.7000	0.0506	0.7012	0.0540	0.7420	0.0617	0.7366	0.0606	0.7536	0.0591	0.7570	0.0534	0.7447	0.0440	0.6830	0.0358	0.6914	0.0506
large	(0.4583)	(0.2192)	(0.4578)	(0.2260)	(0.4375)	(0.2406)	(0.4405)	(0.2386)	(0.4309)	(0.2359)	(0.4289)	(0.2248)	(0.4360)	(0.2050)	(0.4653)	(0.1858)	(0.4619)	(0.2191)
Frontier	0.4271	0.1916	0.4166	0.1810	0.4548	0.1714	0.4463	0.1642	0.4693	0.1693	0.4609	0.1614	0.4528	0.1690	0.3136	0.1255	0.3333	0.1272
	(0.4947)	(0.3936)	(0.4930)	(0.3850)	(0.4980)	(0.37689	(0.4971)	(0.3704)	(0.4991)	(0.3750)	(0.4985)	(0.3679)	(0.4978)	(0.3748)	(0.4640)	(0.3313)	(0.4714)	(0.3332)
North Pacific	0.0265	0.0560	0.0263	0.0545	0.0242	0.0566	0.0247	0.0566	0.0252	0.0610	0.0264	0.0589	0.0259	0.0622	0.0329	0.0716	0.0308	0.0703
	(0.1608)	(0.2300)	(0.1600)	(0.2269)	(0.1538)	(0.2310)	(0.1552)	(0.2311)	(0.1568)	(0.2393)	(0.1604)	(0.2355)	(0.1588)	(0.2415)	(0.1783)	(0.2579)	(0.1728)	(0.2557)
Gulf center	0.0389	0.0848	0.0358	0.0825	0.0320	0.0840	0.0308	0.0818	0.0274	0.0722	0.0322	0.0901	0.0307	0.0920	0.0206	0.0700	0.0162	0.0469
	(0.1933)	(0.2786)	(0.1858)	(0.2751)	(0.1761)	(0.2774)	(0.1729)	(0.2740)	(0.1632)	(0.2589)	(0.1764)	(0.2864)	(0.1724)	(0.2891)	(0.1420)	(0.2551)	(0.1261)	(0.2114)
Center pacific	0.0657	0.1099	0.0609	0.1068	0.0558	0.1091	0.0597	0.1146	0.0638	0.1133	0.0638	0.1138	0.0619	0.0982	0.0769	0.0985	0.0759	0.0987
	(0.2477)	(0.3128)	(0.2392)	(0.3089)	(0.2295)	(0.3118)	(0.2370)	(0.3185)	(0.2444)	(0.3169)	(0.2443)	(0.3176)	(0.2409)	(0.2976)	(0.2665)	(0.2979)	(0.2648)	(0.2983)
Center	0.1872	0.2633	0.2066	0.2678	0.1946	0.2611	0.2054	0.2644	0.1812	0.2732	0.1813	0.2657	0.1861	0.2572	0.2429	0.2713	0.2324	0.2832
	(0.3901)	(0.4404)	(0.4049)	(0.4428)	(0.3959)	(0.4392)	(0.4040)	(0.4410)	(0.3852)	(0.4456)	(0.3852)	(0.4417)	(0.3892)	(0.4371)	(0.4288)	(0.4447)	(0.4224)	(0.4506)
North center	0.1045	0.0907	0.1035	0.0817	0.0975	0.0788	0.0928	0.0770	0.0957	0.0715	0.0924	0.0764	0.0955	0.0798	0.1140	0.0910	0.1196	0.0916
	(0.3059)	(0.2872)	(0.3046)	(0.2740)	(0.2967)	(0.2695)	(0.2902)	(0.2666)	(0.2942)	(0.2576)	(0.2897)	(0.2656)	(0.2939)	(0.2709)	(0.3178)	(0.2876)	(0.3245)	(0.2884)
Peninsula	0.0544	0.0651	0.0645	0.0778	0.0564	0.0797	0.0570	0.0855	0.0620	0.0914	0.0659	0.0899	0.0680	0.0932	0.0950	0.1025	0.0888	0.0990
	(0.2268)	(0.2468)	(0.2457)	(0.2678)	(0.2308)	(0.2708)	(0.2319)	(0.2796)	(0.2411)	(0.2882)	(0.2482)	(0.2860)	(0.2517)	(0.2907)	(0.2932)	(0.3033)	(0.2844)	(0.2986)
South pacific	0.0120	0.0627	0.0112	0.0670	0.0094	0.0781	0.0090	0.0759	0.0093	0.0823	0.0106	0.0811	0.0108	0.0846	0.0171	0.1042	0.0154	0.1036
	(0.1090)	(0.2425)	(0.1053)	(0.2500)	(0.0963)	(0.2684)	(0.0942)	(0.2648)	(0.0961)	(0.2748)	(0.1024)	(0.2729)	(0.1033)	(0.2783)	(0.1296)	(0.3055)	(0.1232)	(0.3047)