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FINAL REPORT

THE LABOR MARKET IN EL SALVADOR

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I. Introduction

During recent years, the Unidad de Investigaciones Muestrales of the Direccion General de Coordinacion, MIPLAN, has undertaken a series of multiple purpose household surveys. One of the principal components of these surveys has been an inquiry into the employment status of the population. An extensive series of questions is posed to each household to determine the labor force status and employment conditions of the population of labor force age. In addition, questions are posed with respect to family income and mobility experiences. In short, the questionnaires yield a rich data base for the exploration of the way in which labor markets have functioned in recent years.

Until recently, the surveys have been confined to only the urban areas of the country, though some of the areas defined as urban have strong rural characteristics. Thus, the perspectives to be gained were largely limited to the urban labor market. Beginning with the 1991-92 survey, coverage has become nationwide in scope. The earlier sample is large enough to permit a considerable degree of disaggregation. It included over 6,800 dwelling units. However, not all of these proved to be viable subjects for interviewing. A rather high "no response" rate of 17 to 18 percent has been experienced. The largest proportion of this has been due to sampling errors, e.g., vacant or destroyed property, misspecification of commercial as residential units, etc. A smaller number, about 8 percent, of the sample units failed to respond either because no one could be found at home or because of refusal to participate.

The first comprehensive and reliable urban survey was undertaken in 1986 but was limited to only the metropolitan San Salvador area. Then followed annual nation-wide urban surveys in 1988 and each subsequent year. In the final quarter of 1991, the area sampled was extended to rural zones with interviewing proceeding continuously over a six-month period. We include some provisional findings of that survey. Due to difficulties in adapting that survey's data format to our Stateside computer facilities, we have not been able to exploit it as fully as the earlier tapes. As soon as this problem is overcome, we expect to issue a supplement to this report that will include findings from the 1991-92 and perhaps from the 1992-93 survey as well.

One would expect the surveys to yield fairly stable values for many categories of questions from one survey to another since 75 percent of each survey consists of units surveyed the previous time around. However, some variability is introduced by seasonal

factors that become evident as the survey months vary from year to year. The sampling periods for the surveys included in this analysis were as follows:

1986	October through December
1988	January through June
1989	October '88 through February '89
1990	January through June
1991	October '90 through February '91
1992	October '91 through March '92

The most recent survey was begun in October, 1992 and continued through March, 1993. Processing is currently under way.

On the whole, we would judge the Salvadoran survey to be carefully administered. The interviewing staff is carefully monitored by field supervisors. Completed questionnaires are checked prior to leaving an area in order to ensure the completion and internal consistency of the instrument. Field supervisors are periodically assembled in San Salvador to discuss and resolve conceptual or other questions that have arisen in the course of field work, thus ensuring a higher degree of consistency among interviewing teams than might otherwise have been possible. We consider the results of the surveys to be sufficiently reliable to serve the purposes of economic policy formulation.

This report is organized on a topical basis with each major topic constituting a section. Within each section, significant changes that have occurred over time will be identified. The reader will note that few references are made to the 1990 survey because we have some doubts about its reliability; there appear to be greater departures from trends in that survey than would normally be expected to occur from one survey period to another. Since most of the other surveys evince a high degree of consistency, we will undertake a more searching analysis of the latest survey for which we have complete results, that for 1991. For the sake of consistency we will refer to the surveys by reference to the year in which they were completed.

II. Labor Force Size and Composition

In El Salvador, the population of labor force age is defined as encompassing those individuals who are at least 10 years old. Active labor force status is conferred on those individuals who were employed either in a remunerated or unremunerated activity during the week preceding the survey or who were not employed but actively sought employment during the preceding month. The proportion of the population of labor force age that is in the labor force gives rise to a labor force participation rate that serves as one important measure of labor force size. Table 1 presents labor force participation rates by sex for all the surveyed years.

**Table 1. Labor Force Participation Rates 1986-1991
(Percent)**

	1977	1986*	1988	1989	1991	1992	
1992							
						Urban	Total
Total	51.4	49.9	47.7	51.5	52.7	54.2	51.6
Male		62.5	62.7	65.8	64.2	66.2	70.6
Female		40.2	35.6	40.4	43.1	44.5	35.0

* Metropolitan San Salvador only

Note: The 1977 rate is for urban areas and was reported in Encuesta nacional de presupuestos familiares 1977, Ministerio de Planificacion, Unidad de Investigaciones Muestrales.

The crude rates demonstrate a greater degree of variability than might normally be expected to occur. Some of these can be explained at least in part. For example, the higher values for 1986 as compared to 1988 may be due to the limitation of the 1986 survey to only the metropolitan area of the capital where participation rates are typically higher, especially for women, than in the rest of the country. The higher values for 1989 and 1991 than that for 1988 reflect differences that are likely to have a large seasonal component. The two later surveys were undertaken during the October-February interval during which the three-month annual school vacation occurs. It is also the season that corresponds to the coffee and other harvests and to the Christmas shopping season. Thus, the labor force ranks in these months are augmented by the entry of many young people into active, though temporary, labor force status.

The expansion of the urban sample for the 1992 survey results in significant increase in the urban participation rates of both sexes. How much of this can be attributed to the change in the sample size and how much to real changes in behavior cannot be estimated, though the data for the metropolitan area alone may be suggestive. One would not normally expect so great a change to occur within the short time interval separating the last two surveys. The table also reports in the last column the aggregate participation rate for the whole country, including rural areas. The effect of this extension is to reduce the overall participation rate. Higher male rates in rural areas are more than offset by much lower female rates than obtain in urban areas.

The data for the metropolitan area would appear to confirm a secular trend toward an increase in aggregate participation rates. The increase would appear to be a function of rising participation rates among both men and women of all ages. This can be seen clearly in Table 2 where we compare participation rates of 1986 with those of 1991 and 1992. Since all three of these surveys correspond roughly to the same calendar period,

seasonal biases are minimized. Among males, the increase is most significant among those aged 15 to 24, while rates of the other age groups show only minor variations. Among women, all age groups reveal increases. However, those among the 10-19 year olds in 1992 over 1991 seem too large to be credible.

Table 2. Labor Force Participation Rates by Sex and Age, Metropolitan Area, 1986 and 1991

Age	Males			Females		
	1986	1991	1992	1986	1991	1992
10-14	2.0	7.0	7.0	2.8	4.6	7.9
15-19	28.5	38.2	40.9	24.2	26.9	31.6
20-24	71.0	76.2	77.8	54.8	57.2	57.6
25-29	91.5	94.1	93.7	59.4	67.3	67.1
30-39	95.6	97.0	96.8	60.5	73.6	74.7
40-49	95.3	97.3	97.2	57.8	66.5	69.6
50-59	87.4	91.6	90.7	37.7	56.5	51.1
over 59	50.5	48.2	49.4	18.3	23.8	24.3
Total	62.5	64.2	66.2	40.2	47.4	48.8

We are impressed by the increases in participation rates among women. Female participation rates were high by Latin American standards even before the recent increases. Because these stand out we have undertaken to define the characteristics that are associated with active labor force participation. Models of female participation usually identify a set of variables that might be expected to influence participation. For example, age might be expected to be inversely associated with participation; i.e., younger women might be expected to be more likely candidates for participation. As they age, marriage and family intervene to influence a withdrawal from active employment. Women with greater amounts of schooling can also be hypothesized to be more active than women with lesser amounts. Standard human capital theory would suggest that education raises the value of time spent in employment relative to the value of household activities, thus inducing a greater disposition to seek jobs. On the other hand, a married status might be expected to exert an influence in the other direction, a reflection of the existence of another source of income in the household and the value of household production of women. Typically, the number of young children might also be expected to be a significant factor determining the availability for employment of women. Finally, the size of family income might be expected to be inversely related with participation. Since leisure, broadly defined, represents a normal good in economic theorizing, a higher household income might be expected to allow for the luxury of non-participation by women.

We tested such a model, with some modifications, for the women in the survey sample for 1991, employing multiple regression techniques which allow us to assess the influence of each factor while holding that of all other relevant conditions constant. Since we do not have the number of small children in the household available, we have substituted the number of persons. We also included a variable to distinguish between those living in the metropolitan area and those in the rest of the country on the assumption that employment opportunities were likely to be greater there and hence attract a larger proportion of women to the labor force. We also included as a variable, status as head of household. The regression is of a logit type in which the dependent variable takes the value of 0 if the woman is in the labor force or 1 if she is not in. The regression coefficients of the seven independent variables, their standard errors and t values are as follows:

Variable	Regression Coefficient	Standard Error	t value
Age	-.00978	.00073	-13.406
Education	-.06919	.00314	-22.024
Head of household	-.74780	.03616	-20.683
Number in household	-.41399	.01179	-35.105
Metropolitan area	-.07011	.02563	- 2.735
Family income	.00006	.00001	7.375
Marital status	-.28591	.06934	- 5.970

As can be seen from the t values, all seven independent variables proved to be statistically significant. A negative sign for the coefficient indicates that a higher value for the independent variable is associated with a greater probability of being in the labor force. Thus, there is a greater probability that a woman will be in the labor force the older she gets. This appears to be the case for women up to the age of 50; beyond that, the participation rate begins to decline. This result for El Salvador departs from our expectation of a U-shaped functional relationship and is likely to set El Salvador apart from other countries. Education has the expected sign indicating that the more education a woman has the more likely she is to enter the labor force. Women who are heads of households are also more likely to be active participants since the presumed absence of a male head must cast the primary responsibility for the maintenance of the family on the woman's shoulders. An unusually high proportion of households in urban El Salvador are headed by women, over 29 percent, and this undoubtedly is a factor contributing to the large size of the female labor force.

The larger the number of individuals in the household the greater is the probability of a woman's participation. The size of the household can cut either way. On the one hand, the larger a household the greater may the value of a woman's household production be presumed to be. On the other hand, the larger the number in the household, a greater possibility of work sharing

may relieve a woman of the necessity to stay at home on a full-time basis. Critical in determining which way size of household will cut is likely to be the age and sex composition of the household, information we have not been able to introduce into our analysis.

As expected, residence in the metropolitan San Salvador area increases the probability of participation by women. Also as expected, the higher the family income, the less likely is a woman to be in the labor force, all other things being equal. Finally, an unexpected finding is that being married increases the probability of female labor force participation.

We can only speculate about the factors that underlie this very high incidence of labor force participation among women. Two possible explanations come to mind. As a consequence of the civil conflict of the past decade there has been a substantial outmigration of men, most of whom were of prime labor force age. As a result, employment opportunities that would have been filled by men may have served to attract women into the labor force. The numerical preponderance of women in urban society can be seen in the ratio of women to men older than 14 years of 1.295:1 in 1991.

A second possible explanation may be the very sharp drop in real wages that the available data seem to suggest as having occurred during the decade of the 1980s. The maintenance of living standards in the presence of falling real wages may have induced women to seek remunerative employment. A similar consideration may be associated with the observed increase in participation rates by the teen-aged population. The presence of such a substantial volume of secondary wage earners is reflected in a high 1.76 members per household actively in the labor force. (The average size of urban households is 4.39 persons.)

The high participation rates among women have the effect of raising their numbers in the urban labor force to a proportion unlikely to be matched anywhere else in Latin America. Fully 45.1 percent of the urban labor force was female in 1991, the highest proportion reported for recent years. (The comparable percentage for 1992 was 45.3.) A comparison of the female labor force of just the metropolitan area in 1986 with that of 1991 reveals a small increase from 45.7 to 47.5 percent of the total.

It is worth noting that women in the non-metropolitan urban areas of the country report significantly lower participation rates than those in San Salvador as was indicated by our regression results above. These have shown considerable variation over the 1988-1991 interval, being highest in the most recent year. In 1988, participation rates in the rest of the country ranged from 26.9 percent in the south central region to 32.8 percent in the western region and averaged 30.4 percent. In 1989, the average participation rate in the rest of the urban areas measured 35.5 percent and rose further to 39.4 percent in 1991. The increase between 1988 and 1991 cannot be attributed to seasonal factors associated with the agricultural sector, for

the proportion of women employed in agriculture in the two years is virtually identical at under six percent. At this time, we have no explanation to offer for this measured increase except to observe that the more recent increases have occurred in an economic environment of expanding activity.

This section has discussed changes in labor force participation rates and has avoided mention of absolute measures. This reflects our lack of confidence in such measures. The statistical agency estimates absolute values by applying different factors of expansion to its sample observations from each sub-region. Beginning in 1990, the survey authors began applying higher expansion factors to bring the absolute values more closely in line with new estimates of the size of the total population. Since the absolute values for the earlier years were not similarly adjusted, they are not comparable to those for 1990. A further increase was introduced in 1991 so absolute comparability among the recent surveys is not possible.

The effects of the adoption of larger expansion factors can be illustrated by reference to the reported changes in the absolute size of the urban population of labor force age and of the labor force itself. Between 1988 and 1989, the population of labor force age is reported to have increased by less than one percent. However, over the next two years, this population group is held to have increased at an annual rate of 5.7 percent. The labor force is shown to have increased by 11.7 percent between the 1989 and 1991 survey even though the surveys were only two years apart. Such disparities in rates of increase are, of course not credible. However, while we do not make use of absolute measures of population sizes, we expect that the proportionate distributions of the population between participants and non-participants as well as the distributions within the labor force are unaffected by the change in the expansion factors.

III. The Industrial and Occupational Distribution of the Labor Force

A. The Sectoral Distribution. The distribution of the urban employed labor force over the productive sectors of the economy has remained virtually unchanged over the past few years. Table 3 records that distribution for the period covered by the most recent completed survey, that for the end of 1990 and early 1991. Note that the table includes a distribution by sex and according to whether the activity took place in the formal or informal sector. The informal sector is defined, for purposes of the survey, as consisting of the self-employed, employers, employees, and family workers in establishment with fewer than 5 workers, excepting professional, technical, and administrative occupational groups. We have included the absolute measures of employment by each broad classification, though, as indicated earlier, we have reservations as to their accuracy. Several observations are worthy of note. The aggregate structure of employment in urban El Salvador does not depart significantly from that of other developing countries at a similar stage of

development. The principal sectors of urban employment are the manufacturing, commerce, and service sectors. Together these account for three-fourths of total employment.

A comparison of the sectoral distribution of workers in the formal and informal segments identifies two sectors with sharply contrasting shares of total employment. Commercial activity is preponderantly an informal activity; in 1991, 75 percent of sector employment is in informal establishments. Conversely, if domestics are excluded, the bulk of urban services, in which government services loom large, are delivered through formal channels; formal employment accounts for 75 percent of the total. The inclusion of domestics in informal service employment would reduce the share of the formal in total service employment to about 60 percent.

The distribution of employment by sex reveals some differences. Female employment is more heavily concentrated than male, with 80 percent appearing in manufacturing, commerce and services. Women are underrepresented in agriculture, construction, and transportation while dominating in commerce with almost two-thirds of sector employment. Women are also more heavily concentrated in informal activity; 63 percent of the employed female labor force is informal. (A slightly smaller proportion, 61.4 percent was recorded in the 1992 survey.) Within the informal sector, commercial activities occupy almost half of the women. The inclusion of domestic servants accounts for most of the female informal service sector employment, 78 percent in 1988 and 70 percent in 1991.

While the industrial structure of employment has remained stable over the 1988-91 interval, the weights of the two sectors, formal and informal have changed. Whereas the informal sector accounted for 45.8 percent of employment in the 1988 survey, this proportion had increased to 49.2 and 51.4 percent in the 1989 and 1991 surveys respectively, though the 1992 survey records a decline back to the 1988 level. A comparison between the 1986 and the 1989 and 1991 surveys for the metropolitan region, undertaken in comparable calendar periods, also point to the relative growth of informal activity. Whereas it accounted for only 25.5 percent of total employment in the earlier year, it has expanded to about 40 percent in the most recent years.

There are some regional differences that can be observed, particularly in comparisons between the metropolitan area and the rest of the urban zones. The most obvious include the larger proportion of the urban labor force outside the metropolitan area engaged in agriculture. On the other hand, manufacturing activity is substantially less important as a source of employment than in the metropolitan area, and most of this is in informal establishments. Commercial activity is relatively less important as are services, but the first is overwhelmingly informal while

Table 3. Distribution of the Employed Labor Force by Productive Sector of Employment and Sex, 1988 and 1991 (per cent)

Sector	1988					1991				
	Total	Modern		Informal		Total	Modern		Informal	
		Male	Female	Male	Female		Male	Female	Male	Female
Agriculture	9.1	9.4	7.6	17.9	2.5	10.4	14.5	11.5	15.4	1.2
Mining	*	0.1	-	0.1	-	*	0.2	-	0.1	-
Manufacturing	21.4	22.8	25.1	22.8	16.0	22.7	23.0	24.1	22.2	22.1
Public Utilities	0.7	1.7	0.2	0.1	*	0.8	2.1	0.8	-	-
Construction	6.8	10.0	1.8	11.7	1.6	5.1	7.7	1.5	10.3	0.1
Commerce	23.8	11.7	18.1	22.3	46.1	25.8	11.8	14.8	24.3	48.9
Transportation and Communications	5.5	7.1	3.1	10.6	0.6	5.4	5.9	1.5	13.8	0.4
Finance	3.0	4.5	6.7	0.5	0.2	2.9	4.8	5.6	1.1	0.7
Services	29.7	32.7	37.5	14.0	33.1	26.9	30.0	40.3	12.8	26.7
Total	100.0	100.0	100.1	100.0	100.1	100.0	100.0	100.1	100.0	100.1
Number	716,473	265,511	122,512	147,386	181,064	890,330	282,001	150,577	202,843	254,909

* less than 0.1 percent

Notes: Totals may not add up to 100.0 percent due to rounding.

The values for the service sector exclude domestic service.

the latter are overwhelmingly formal. As might be expected, domestic service is far less prevalent outside the metropolitan area. As among the various regions, the western comes closer to replicating the employment structure of the metropolitan area, reflecting the greater prosperity of that region in comparison with the central and eastern regions.

B. The Occupational Distribution. Table 4 presents a distribution of the employed labor force by occupational group and sex. As can be seen, the largest occupational groups, each with about 20 percent of the labor force, are sales and production workers encompassing both skilled and semi-skilled workers. Agricultural and non-agricultural laborers, office personnel and service workers (excluding domestics) each account for about ten percent. Professionals account for nine percent of the total while managers constitute the smallest category at one percent.

However, there are substantial differences in the distributions by sex. Men are predominate as managers, artisans and production workers, transport workers, and agricultural laborers. Women, on the other hand, are more heavily represented in sales, service, and office occupations. Interestingly, the proportion of women in the professional category exceeds that of men, probably a reflection of the preponderance of women in the teaching profession. However, it should be recalled that this distribution omits domestic employees who are overwhelmingly female. Their inclusion would have increased the proportion of women in services and reduced slightly the relative importance of the remaining occupational categories.

The occupational structure has remained stable over the past few years for which household surveys have been conducted. Ordinarily, one would not expect significant changes to occur unless the economy has undergone major structural changes.

Reflecting the very substantial differences in the structure of their economies, the non-metropolitan regions report occupational structures significantly different from that of the San Salvador urban area. Agricultural laborers make up from 15 to over 20 percent of the labor force. Professionals are no more than half as prevalent as a proportion of total employment as they are in the capital. The concentration of manufacturing activity in the metropolitan region accounts for a greater concentration there of skilled workers and operatives. Service employment is also more heavily concentrated in San Salvador. Again, as in the case of the industrial structure, the more prosperous western region, with its more diversified occupational structure, stands out from the other outlying regions.

Table 4. Occupational Distribution of the Employed
Urban Labor Force by Sex and Sector, 1991
(per cent)

Occupational Group	Total			Male			Female		
	Total	I	II	Total	I	II	Total	I	II
Professional	8.8	97.1	2.9	8.1	96.6	3.4	9.8	97.7	2.3
Managerial	0.9	98.3	1.7	1.2	97.8	2.2	0.5	100.0	0.0
Office employees	9.8	87.0	13.0	8.5	84.5	15.5	11.5	89.4	10.6
Sales	21.5	18.3	81.7	13.5	30.3	69.7	32.2	11.5	88.5
Services	10.8	61.3	38.7	8.7	84.9	15.1	13.5	40.9	59.1
Agricultural laborers	10.6	61.6	38.4	14.4	55.8	44.2	5.6	81.8	18.2
Non- agricultural laborers	10.4	32.7	67.3	6.9	60.2	39.8	15.1	15.9	84.1
Artisans and operatives	21.0	47.5	52.5	28.7	48.9	51.1	10.7	42.6	57.4
Transport workers	6.1	47.5	52.5	9.9	44.6	55.4	1.1	84.0	16.0
Total	99.9	51.4	48.6	99.9	58.4	41.6	100.0	42.0	58.0

Notes: Domestic workers are excluded. Columns headed I and II refer to the formal and informal sectors respectively. The values in these columns refer to the proportion of each occupational group in each sector.

Table 4 also records the distribution of each occupational category between the formal and informal sectors. The categories that are predominantly in the formal sector include professionals, managers, office employees, services and, surprisingly, agricultural labor. However, there are some significant differences between men and women in the distribution between sectors for some of the occupational fields. For example, men in service occupations are much more likely to be employed in the formal sector than are women. (The inclusion of domestic workers would have increased the weight of informal service employment substantially.) The same is true for non-agricultural laborers and sales workers. Overall, the proportions of men and women employed in the two sectors are almost exactly reversed, as can be seen in the last line of the table.

C. The Distribution by Employment Status. Finally, the labor force can be characterized by its employment status. The data for urban El Salvador for 1991 are presented in Table 5. The self-employed constitute a substantial proportion of the total, over a fourth. Permanent salaried workers are the largest single class, but account for less than 40 percent of the total, while temporary salaried workers make up a fifth. Unpaid family workers constitute only six percent of the total.

The 1991-92 survey reports only marginal changes in most of the employment classifications of Table 5. The proportion of employers almost doubled for both sexes with virtually all of the increase occurring in the informal sector. A rather large change occurred in the division of salaried workers between permanent and temporary workers. The former reported an increase to 45 percent of the labor force while the latter declined to only 12.3 percent. We consider these changes most likely to be due to the vagaries of classification rather than to fundamental changes in status. Note that the total proportion of salaried employees remained virtually unchanged.

The division between formal and informal sector employment, of course, is largely the consequence of the way in which they are defined. Thus, one would interpret salaried employment, both permanent and temporary, as occurring predominantly in establishments with five or more employees. The preponderance of self-employment in the informal sector is again a function of the definition of all self-employment, save that of professional and technical workers, as automatically informal. Unpaid family workers are to be found employed largely in enterprises with fewer than 5 workers. Finally, by definition, all domestic workers are placed in the informal sector. Since these distributions reflect definitional categories, they do not suffice for the purpose of characterizing any of the inherent qualities of employments. Such a characterization will be undertaken at later points in this report.

**Table 5. Distribution of the Urban Employed
Labor Force by Employment Status, Sex, and Sector, 1991
(percent)**

Status	Total			Males			Females		
	Total	I	II	Total	I	II	Total	I	II
Employer	3.1	42.8	57.2	4.5	43.6	56.4	1.5	40.0	60.0
Self-employed	27.5	2.7	97.3	19.3	4.9	95.1	37.3	1.3	98.7
Unpaid family workers	6.3	23.7	76.3	3.8	32.7	67.3	9.2	19.1	80.9
Permanent salaried	37.6	89.2	10.8	43.5	88.4	11.6	30.5	90.6	9.4
Temporary salaried	20.1	57.2	42.8	28.6	54.4	45.6	9.9	85.2	14.8
Domestic service	5.5	0.0	100.0	0.3	0.0	100.0	11.6	0.0	100.0
	100.1	48.6	51.4	100.0	58.2	41.8	100.0	37.1	62.9

Note: The columns headed I and II refer to the formal and informal sectors respectively.

Finally, let it be noted that the different proportional division of workers between the formal and informal sector as compared with Table 4 is due to the inclusion of domestic workers in Table 5. In their absence the division would have been the same.

IV. Underutilization of the Labor Force: Unemployment and Underemployment

A. Open Unemployment. The past few years have seen an encouraging decline in the urban open unemployment rate as measured by the authors of the survey. The surveys since 1988 registered a decline in the rate, from 9.37 in 1988 to 7.53 percent in 1991, but recorded a slight increase to 7.85 percent in the latest expanded survey of 1991-92. Both components of the unemployed, workers who become unemployed by virtue of separation from a previous employment and new entrants into the labor force reflect similar changes. In view of the rise in participation rates and the growth of the labor force, the decline in the open unemployment rate would appear to be a significant achievement. Apparently all of the decline in open unemployment through 1991 occurred in the non-metropolitan regions of the country. For the unemployment rate for the San Salvador region remained virtually constant at 7.7 and 7.6 percent of the labor force over the terminal years, 1988 and 1991. And these rates were only marginally below the 7.9 percent unemployment rate recorded for the metropolitan area in 1986.

However, the 1991-92 survey reports a small decline in this rate to 7.2 percent, while that for the rest of the urban areas stood at 8.5 percent, thus yielding a rate for all urban areas of 7.9 percent. Whether the increase for the non-metropolitan urban areas is due to a deterioration of employment conditions or the expansion of the sample to more adequately cover these areas cannot be determined. We would suspect the latter to be a more likely explanation since it is reasonable to expect employment conditions to change in the same direction throughout the urban sectors of the economy. The rural unemployment rate, newly reported in this survey, exceeds the urban, standing at 9.7 percent. The rates for men and women stood at 9.4 and 10.5 percent respectively. This finding stands in contrast to the experience of most less developed countries where measured rural unemployment rates typically lie below the urban.

It is important to note the categories of individuals that are included in the survey's definition of unemployment, for the unemployment rate may be significantly affected thereby. The usual definition of an unemployed individual is one that is not currently employed but who actively sought employment during the reference period, the month preceding the interview in the case of El Salvador. The sum of such individuals form the body of the

open unemployed. In addition to these, the concept of unemployment is extended to include some who did not search for a job but who responded to a question, "Why did you not search for work?" in one of several ways:

1. I was waiting to be recalled to work.
2. I was awaiting a response from an employer.
3. I was awaiting the renewal of seasonal agricultural activity.
4. I did not think there were any job opportunities available.
5. I didn't know how to search for work.

The obvious purpose of the question is to try to determine the number of individuals that correspond to the "hidden unemployed." In the 1991 survey, 23.4 percent of the reported unemployed were so classified by virtue of their having chosen one of the above responses. In fact, 62.5 percent of these gave the reply in number 5 above while another 24.5 percent gave number 4. It is difficult to evaluate the true intent of those who respond in this fashion. Those who respond to the question posed, may simply find this a convenient or face-saving response rather than one that seriously reflects their interest in employment. It is difficult for us to take seriously those who professed that they did not know how to search for work since they are surrounded by employed people who can offer advice or assistance. Individuals who have a strong commitment to securing employment will generally find ways of searching.

The other response, the belief that no opportunities existed, given by 23.7 percent of this group, is of a similar nature. In an economy with very high rates of open unemployment, such a response might be assigned higher currency. But, in urban El Salvador, open unemployment rates are only moderately high, by developing country standards and do not suggest extreme job scarcity. Ordinarily, we would tend to discount the seriousness of most of such respondents as active labor force participants, for, in response to further probing, most prove to be unavailable for employment if a job were to be proffered on the spot.¹

However, in El Salvador, all respondents offering any one of the five reasons for not seeking employment are recorded as desirous of immediate employment, including those who had responded positively to the first three alternatives listed above. And this holds for each of the survey years. The fact that the entire group is always recorded as being available for immediate employment without exception raises a warning flag since we consider this to be a highly unlikely circumstance.

Thus, we are reluctant to offer a definitive judgment regarding the true labor force status of this group of

respondents. Their exclusion from both the labor force and the ranks of the unemployed would lower the overall rate of unemployment from 7.5 to 5.9 percent. This latter rate would then represent the actual open unemployment rate. To the extent that some of the individuals classified as "hidden unemployed" are actually available for immediate employment, the true aggregate rate of unemployment would fall between these two values. At this time, we are not in a position to hazard a guess as to where such a true rate might fall. Therefore, for purposes of our examination of the characteristics of the unemployed we will employ the broader definition adopted by the survey authors.

As is universally the case, unemployment rates are a decreasing function of age. The young members of the labor force report the highest unemployment rates and account for a disproportionate share of the unemployed. The data for 1991, recorded in Table 6, are representative of all years. The unemployment rate for the youngest group, 10 to 14 years, was reported to be 14 percent, though it should be emphasized that it accounts for only a tiny fraction of the labor force, or two percent. The older teen-agers between 15 and 19 years reported a rate of 19.1 percent. While these two groups together accounted for only 12 percent of the labor force, they accounted for fully 27.6 percent of the unemployed. In most years, among unemployed teenagers, new entrants in search of their first employment have tended to outnumber those separated from previous employments; in 1991, however, the two categories were just about equal. The unemployment rate declines to 11.9 for the next older group, 20 to 24 years, and further to 8.1 percent for those between 25 and 29. Thereafter, the rate declines sharply as can be seen in Table 6-A.

Unemployment rates by sex indicate a lower rate for women in the aggregate. The age profile of unemployment is similar in its general configuration for both sexes. However, unemployment rates are higher than male among women in their 20s but lower than the male in most other age groupings. The lower average female rate of unemployment is largely the product of regional differences. In the metropolitan area, the male and female unemployment rates are identical and are virtually equal to the national urban rate. In the provinces, on the other hand, male unemployment rates are somewhat higher than in the metropolitan area while those for women are 30 percent lower. It is this latter value that is responsible for a national average rate for women below that of men. This lower rate for women in the provinces may reflect more limited employment opportunities there than in the metropolitan area that, in turn, induces a lower labor force participation rate for women there, 39.4 percent against 47.4 percent. It is possible that the lower unemployment rate reflects a perception of greater job scarcity and, therefore, less job search.

In Table 6-B, we present unemployment rates by age and sex for the entire country and for its urban and rural components as recorded by the most recent 1991-92 survey. The general

configuration by age and sex show only marginal differences with the 1991 data in Table 6-A. However, as noted earlier, rural rates are higher than urban for both sexes and for most age groups.

That unemployment rates are highest for the young members of the labor force should come as no surprise, for it is a universal phenomenon in developing and developed countries alike. The young have either no or very limited employment experience and thus appear to be less attractive potential employees than experienced workers in the eyes of most employers. At the same time, the young tend to be less stable in their jobs, that is, they tend to move among jobs more freely than do older workers. This job mobility is in large part the product of a search for a "desirable" job to which a worker will be willing to commit himself or herself for an indefinite period. As the worker gains experience, prospects for improving the job situation lead to quits and renewed job search. Both of these factors mean that the young will spend more time in job search and that at any moment of time, a larger proportion of them will be searching than would be the case for older workers already established in their "permanent" job.

In the aggregate, unemployment rates in El Salvador of individuals with different levels of education also parallel those of other countries in the developing world. (See Tables 7-A and 7-B) Rates appear to be lowest for those with no education and those with post-high school educations, either technical or university. However, when the data are disaggregated by sex, this relationship between education and unemployment is confirmed only among women, though those with advanced education do not seem to gain as much as men in terms of reduced unemployment rates. Among men, the lowest unemployment rates are reported by those with post-baccalaureate education while all the other groups report rates that fall within a very narrow interval.

Regional differences in the relationship between unemployment and education are also apparent, particularly among men. While the most highly educated report lower unemployment rates in both the metropolitan and all other urban areas, there is apparent no systematic relationship for all other educational groups. However, men with advanced education appear to enjoy better employment prospects in the metropolitan area than in the rest of the country. Among women, the relationship in both regions evince that which we characterized above as "typical."

**Table 6-A. Unemployment Rates by Age, Sex and Region, 1991
(percent)**

Age	All Urban			Metropolitan			Other Urban		
	Total	M	F	Total	M	F	Total	M	F
10 - 14	14.0	19.5	4.8	11.3	18.0	0.0	15.2	20.2	7.0
15 - 19	19.1	22.7	14.1	19.0	25.0	12.0	19.2	21.2	15.8
20 - 24	11.9	9.5	14.6	12.5	9.6	15.5	11.1	9.4	13.3
25 - 29	8.1	7.7	8.6	9.0	7.2	10.8	7.1	8.2	5.7
30 - 39	4.7	4.3	5.1	4.9	3.3	6.5	4.4	5.3	3.4
40 - 49	4.0	5.6	2.0	3.6	4.7	2.2	4.3	6.4	1.7
50 and over	3.7	5.9	0.7	3.6	5.7	0.9	3.8	6.0	0.6
Total	7.5	8.3	6.6	7.6	7.6	7.6	7.4	8.9	5.3

**Table 6-B. Unemployment Rates by Age, Sex and Region, 1992
(percent)**

Age	All Areas			Urban			Rural		
	Total	M	F	Total	M	F	Total	M	F
10-14	15.1	15.4	14.3	9.2	11.8	5.3	17.3	16.5	20.2
15-19	14.6	13.9	16.3	15.1	14.7	15.7	14.3	13.4	17.0
20-24	13.7	12.6	15.4	14.7	13.3	16.2	12.5	12.0	13.8
25-29	8.5	8.4	8.7	8.7	8.4	9.0	8.4	8.6	7.9
30-39	5.8	6.0	5.5	5.5	6.0	4.9	6.2	5.9	7.0
40-49	5.0	5.6	4.0	3.9	5.2	2.4	6.4	6.0	7.3
50 and over	5.2	6.3	0.8	4.3	6.4	1.5	6.0	6.3	5.2
Total	8.7	9.0	8.3	7.9	8.4	7.2	9.7	9.4	10.5

Note: Column headings M and F refer to males and females respectively.

Table 7-A. Unemployment Rates by Sex, Education, and Region, 1991
(percent)

Years of schooling	All Urban			Metropolitan			Other Urban		
	Total	M	F	Total	M	F	Total	M	F
0	5.9	9.9	2.5	3.5	4.2	3.2	6.8	11.2	2.3
1 - 3	6.7	9.2	3.9	7.3	11.2	3.8	6.4	8.3	4.0
4 - 6	6.2	7.7	4.2	6.5	8.4	4.4	5.9	7.2	4.0
7 - 9	9.7	9.1	10.6	10.5	9.3	12.2	8.7	8.9	8.2
10 - 12	10.1	9.0	11.4	9.0	7.6	10.5	12.2	11.6	13.0
13 and over	5.6	3.8	7.8	5.2	2.3	8.8	6.5	6.8	6.2
Total	7.5	8.3	6.6	7.6	7.6	7.6	7.4	8.9	5.5

Note: Column headings M and F refer to males and females respectively.

The highest unemployment rates are reported by those with intermediate levels of schooling. Furthermore, the increase in sample size in the 1991-92 survey raised the unemployment rates for women in the non-metropolitan areas, sharply narrowing the sex differences apparent in 1991.

The usual rationale for the "typical" profile of unemployment rates of those with different levels of schooling is that those with little education have very limited opportunities in the labor market. Their expectations are likely to be lower and, thus, are likely to be less fussy in the face of a job opportunity. Conversely, those with more years of schooling do tend to have higher aspirations and to be more demanding. Thus, they tend to do more shopping in search of a job that comes as close as possible to meeting their expectations and to which they might be prepared to commit indefinitely. There may also be another explanation for the persistence of higher rates of unemployment among those with intermediate levels of schooling. To the extent that years of school attendance are associated with class, or family income, those with more education may come from families that are not as financially pressed as those with little or no education. Thus, a more prolonged job search can better be afforded by the former.

The survey reports on the steps the open unemployed have taken to find employment. In 1991, over half, or 53.6 of the total relied on friends for information regarding job opportunities, a rather typical response of the unemployed in developing

countries. Another 32.2 percent applied directly to establishments or to employers. The balance reported having registered with an employment service office or to have responded to a newspaper ad. Women appeared to be more likely than men to seek the assistance of an employment office or to respond to ads while the latter relied more heavily on friends. These tendencies prevailed in both the metropolitan and the outlying areas.

B. Hours of Work and Visible Underemployment. The standard work week in El Salvador is 44 hours. However, the vast majority of workers put in hours that depart from this. By and large, employed individuals work a very substantial number of hours. Fewer than 15 percent worked fewer than 35 hours. 38.3 percent worked between 35 and 45 hours, while the rest, or 46.9 percent worked more than 45 hours. (The 1991-92 survey yielded proportions of 16, 35, and 50 percent respectively.) There appear to be substantial differences in hours of work among different classes of workers. For example, when workers are classified by employment status, domestic servants emerge as the class with the largest proportion, 85 percent, working work weeks of over 45 hours, a finding that should come as no surprise to anyone. Almost two-thirds of those classified as employers also work a similar work week as did 57.4 percent of the self-employed and 53.5 percent of unremunerated family workers. Those holding salaried jobs were the least likely to be working more than 45 hours, only 30.4 percent of permanent and 48.7 percent of temporary employees.

The self-employed, who presumably have the greatest discretion in choosing their hours, also reported the largest proportion working short work weeks of fewer than 35 hours; 23 percent did so. A slightly smaller proportion of family workers were similarly employed. For the other categories, no more than 10 percent worked similarly short work weeks. The 1991-92 data for all urban areas reveal a distribution similar to that for 1991.

There are also some differences between the sexes though they are not very large. A larger proportion of women work fewer than 35 hours than do men, 19 as against 11 percent. A slightly larger proportion also works more than 45 hours, 49 percent against 45 for men; the long hours of domestic servants weigh in heavily here. Exclusion of domestics would yield a distribution of hours worked for women somewhat less skewed than men's toward the high side.

A comparison of regional differences reveals them to be relatively small. Workers in outlying urban areas show larger proportions working fewer than 35 hours than those in the metropolitan region as well as a larger proportion working more than 45. The greater frequency of permanent salaried employment in San Salvador accounts for a greater concentration there of workers working between 41 and 45 hours.

Casual empiricism regarding hours of work in the informal sector is confirmed. There is a larger concentration of individuals at the extremes of the hours distribution in the informal sector than in the formal. 58 percent of the former as against 36 percent of the latter work more than 45 hours a week. And 9 percent of the former as against 2 percent of the latter work fewer than 21 hours. However, within the informal sector, women, exclusive of domestics, are more frequently found working short hours than are men. Within the informal sector the occupational group reporting the highest incidence of long work weeks is that in commerce; over two-thirds reported work weeks in excess of 45 hours.

There is also a clear relationship between the educational level of workers and the hours they work. That relationship is an inverse one, at least insofar as we limit our observation to only the principal employment. A majority of over 55 percent of workers with less than seven years of schooling work over 45 hours. The proportion declines with higher levels of education, so that those with advanced levels report only 18 percent working over 45 hours. Paralleling this relationship is one that associates occupation with hours worked. Confirming the previous observation is the finding that professional workers report the smallest frequency of hours over 45, only 12 percent. Office or clerical employees also report only a small proportion of their number working more than 45 hours, 23.6 percent. At the other extreme, almost two-thirds of workers in sales and half of agricultural and non-agricultural laborers work long hours.

A substantial number of those workers working less than 40 hours have indicated a desire to work longer hours. Such workers represent approximately 3.8 percent of the employed labor force and form that part of the labor force that is labeled as visibly underemployed. However, the survey does not elicit information regarding the number of additional hours desired.

On the other hand, the survey does ask if individuals hold any employment other than their principal job. Only a tiny, and unrealistically small, proportion of the sample does so, less than three percent. Of those reporting a second job, some 55 percent work 16 or fewer hours while another 29 percent reports 17 to 34 hours in that secondary job. What catches the eye about this group is that it is drawn heavily from individuals at the upper end of the earnings distribution. Almost half earn more than 1,500 colones per month in their principal employment, well above the mean monthly earnings of the employed labor force of some 833 colones. (And over two-thirds earn more than 1,000 colones in their principal job.) This suggests that the principal secondary job holders are professionals or technicians for whose skills a ready market exists. For example, it is commonly observed that these classes of employees in the public service frequently hold second jobs either in a self-employed or salaried capacity.

The 1991-92 survey, on the other hand, reports a proportion of the employed holding a second job more than twice as great as that of the previous year, 6.7 to 3 percent. Again, those in higher-wage occupations appeared to be disproportionately represented; an important exception concerns agricultural laborers, a sharply increased proportion of whom reported secondary employments.

However, we would counsel a word of caution here. While it is true that few of those employed at lower wages reported secondary employments, it is doubtful that this should be interpreted to mean that many such workers did not engage in other income-producing activities. Such activity appears to be widespread in Salvadoran society, but it probably is not viewed by the participants as an employment activity. We will return to this theme at a later point in this report. For the moment, let us consider another sub-group of the labor force.

C. Invisible Underemployment. It has become commonplace in Latin America to define some part of the employed labor force as invisibly underemployed. Popularized by the Programa Regional sobre el Empleo en America Latina y el Caribe (PREALC), it refers to that part of the labor force whose earnings are "low." However, what constitutes "low" earnings does not respond to a single objective standard. Rather, one will encounter a variety of standards applied in different settings or even within a single setting. For purposes of their tabulations, the authors of the household survey classify one as invisibly underemployed if he/she is employed for at least 40 hours per week but has gross earnings less than the legal minimum wage.

A review of the results of recent surveys would indicate a decline in the proportion of the employed labor force that is invisibly underemployed. The 1988 survey found 42.2 percent so employed while those for 1989 and 1991 reported 38.6 and 37.9 percent respectively. (The 1991-92 survey reports a sharp decline in the proportion so employed to only 16.5 percent of the urban labor force.) Taking a longer-term perspective for the metropolitan area alone, the 1986 survey found 35.1 percent invisibly underemployed, a proportion that had declined to 30.2 percent by 1991.

How is the decline in the proportion of the employed labor force considered so underemployed to be interpreted? Does this reflect an improvement in the objective condition of workers? Are the "low" wages of the most poorly paid workers less "low" than they were in earlier years?

Regrettably, the answer to these questions is, "It depends." One can conclude nothing about the economic welfare of workers by simple reference to this proportion. This is because the definition of underemployment is an arbitrary one, one that does not necessarily measure the economic welfare of wage earners in a consistent fashion. Consider the Salvadoran case, for example. Invisible unemployment is defined to include all those

receiving less than the minimum wage. What would be effect on the welfare of workers and on the rate of underemployment the day after an increase in the legal minimum wage goes into effect? For those workers previously below the new minimum who are effectively covered by the minimum wage, an improvement in their welfare would be assumed to have occurred. However, we know that there are more workers who are not affected by the legal minimum wage. By virtue of increasing the minimum wage, the proportion of the employed labor force that now earns less than the new minimum wage could increase. A reference to the statistical measure of invisible underemployment might then be interpreted as signalling a worsening of the economic situation of workers even though some have improved their position while others find theirs unchanged.

In the case of the recent trends in this measure in El Salvador, one should not be led to the conclusion that the economic welfare of workers has improved. More likely, the decline in this proportion is traceable to a slower upward adjustment in the legal minimum wage than market or other forces have pushed up nominal wages. In the inflationary environment of the country in recent years, this would not be an unlikely occurrence. In fact, a comparison of the rates of change in minimum wages and average monthly earnings between the 1988 and 1990-91 surveys conforms to this pattern. While the legal minimum wage was adjusted upwards by 16.7 percent, nominal earnings of all urban workers rose by 20.5 percent. A reduction in the rate of invisible underemployment is perfectly compatible with a deterioration in the real wage position of the work force. And, indeed, over recent years, real wages have declined markedly.

It is problems with the concept and its measurement such as these that lead us to minimize its usefulness or importance for purposes of labor market analysis. This is not to deny the importance of studying the phenomenon of low earnings. But having measured the proportion of the labor force earning "low" wages provides no guide to the public policy measures that might serve to improve those earnings. Frequently, one of the implicit or explicit assumptions underlying the concept is that the workers receiving low wages are earning less than they are "capable" of earning. This suggests that the appropriate policy response would be to create new employments in which productivity will be substantially higher and which will convert the currently poorly paid workers into more highly paid. Unfortunately, the assumption that those earning low wages will qualify for the new, more productive jobs is unwarranted. Whether they will or not depends on their human capital endowments and other personal characteristics.

In any case, the capital requirements of the creation of new high-productivity employments in sufficient numbers to absorb all the "low-wage" workers is likely to lie beyond the capability of any society in any foreseeable future. This does not imply, however, that there are no policy measure available that could improve the income-generating capabilities of a large segment of the poorly paid workers and at a cost more modest than that

required for the creation of new employments. An alternative approach would concentrate on determining the correlates of low productivity and earnings and try to direct resources to changing the factors responsible. This could imply the provision of a source of credit, training for improving the technical skills of individuals, provision of an improved piece of equipment, and so on.

In view of these observations, we will not dwell further on measures of invisible underemployment but rather will examine more closely the factors that are associated with different levels of earnings.

V. Earnings

The economic stagnation of the past dozen years has exacted a high cost on workers of all classes. The course of earnings cannot be established on a comparable basis for all years since 1980. Earnings reported for that year were median earnings rather than the average earnings presented here for more recent years. No household surveys were conducted between 1980 and 1985. In the latter year, a national household survey was undertaken, but the results of that survey are problematic and are not reliable. Beginning with the 1986 survey, the survey results appear to be more reliable. However, the survey of that year was limited to only the San Salvador metropolitan area and, thus, provides a base year for subsequent wage changes only for that area. Beginning in 1988, the household survey is initiated again and extends to all urban areas. Thus, national comparisons for all urban workers can be undertaken for only the interval 1988-91. We will be able to provide skeletal data from the 1991-92 survey, but in a preliminary form only. We expect to provide a more substantial analysis of that and the current year survey at a later time.

It is also necessary to point out that the values for the 1988-91 period have recently undergone a revision by the Unidad. Those appearing in Table 8, for example, were the original official values and corresponded to those that we derived from the data tapes. The revised numbers introduce some substantial changes; they range from average increases of 1.5 percent in 1989, to 4 percent in 1988, 4.9 percent in 1990, and 12.3 percent in 1991. We do not have an explanation for the changes and, until we do, we will continue to use the original values.²

In our review of the earnings information, we provide three major groupings, all urban, the metropolitan area, and all other urban. Earnings are recorded for each area as a whole and according to sex. Both nominal and real values are provided (i.e., adjusted for price level changes). The earnings data are summarized in Table 8. Looking first at the data for the metropolitan area, which gives us the longest interval with information, one gets a notion of the severe deterioration in real earnings that has taken place. Between the last quarter of 1986 and the last quarter of 1990 and the first two months of

Table 8. Average Monthly Earnings by Sex
and Region, 1986 - 91
(colones)

	1986	1988	1989	1990	1991	Percent Change	
						1986-91	1988-91
All Urban							
Nominal:							
Total		670.79	712.16	721.49	833.36		24.2
Male		764.87	850.45	850.97	978.58		27.9
Female		543.11	540.41	563.16	660.69		21.6
Real:							
Total		511.66	492.84	476.55	392.91		-23.2
Male		583.42	588.55	562.07	461.38		-20.9
Female		414.19	373.99	371.97	311.50		-24.8
Metropolitan San Salvador							
Nominal:							
Total	743.25	790.53	869.07	878.79	991.63	33.4	25.4 ²
Male	927.69	945.60	1,118.45	1,074.48	1,188.31	28.1	25.7
Female	522.07	607.84	606.34	655.91	774.59	48.4	27.4
Real ¹ :							
Total	743.25	603.00	601.43	580.44	467.53	-37.1	-22.5 ²
Male	927.69	721.28	774.01	709.70	560.26	-39.6	-22.3
Female	522.07	463.65	419.61	433.23	365.20	-30.0	-21.2

	1986	1988	1989	1990	1991	Percent Change	
						1986-91	1988-91
Other Urban							
Nominal:							
Total		557.03	576.05	574.87	686.15		23.2
Male		512.35	648.12	653.67	795.87		30.0
Female		470.97	472.53	471.31	544.87		15.7
Real:							
Total		424.89	398.65	379.70	323.50		-23.9
Male		467.09	448.53	431.75	375.23		-19.7
Female		359.24	327.01	311.30	256.90		-28.5
Minimum Wage ³							
Nominal	15.00	18.00	18.00	18.00	21.00	16.7	40.00
Real	15.00	13.73	12.46	11.89	9.90	-27.9	-34.0
Consumer Price Index 1986 = 100	100	131.1	144.5	151.4	212.1		

- Notes:
1. Real earnings are expressed in constant colones of 1986.
 2. The circumstance of both sex's average change exceeding the total average cannot be explained. The absolute values for the terminal years are identical or consistent with those prepared by the Unidad, the survey's author.
 3. The minimum wage recorded here is that applying to the metropolitan area. However, the rates of change in the other urban minimum wages differ only slightly from those for the metropolitan region; the former exceeds the latter by only a few percentage points.

1991, average real earnings declined by slightly over 37 percent. When it is recalled that earnings by 1986 had already fallen by about a fifth since 1980, it is possible to appreciate the extent of the loss suffered by income earners over the decade, a loss on the order of 50 percent of the 1980 level.³ It is of interest to note that, between 1986 and 1991, earnings of men fell more sharply than those of women. As a result the ratio of men's to women's earnings fell from 1.78 to 1.53 over this interval. However, the rates of change in the other urban minimum wages differ only slightly from those for the metropolitan region; the former exceeds the latter by only a few percentage points.

The four surveys, 1988 through 1991, record a continuous decline in real earnings of urban labor force members. Over this interval, real earnings on average declined by almost a fourth. In the aggregate, they declined only marginally more in the outlying urban areas than they did in San Salvador so that the earnings differential between these two broad regional groupings changed little. However, the averages conceal a significant difference between the course of earnings by sex. Whereas men in the non-metropolitan urban areas suffered a smaller decline than those in San Salvador, women in the smaller urban areas did significantly worse. Thus, only the male earnings differential between the metropolitan and other areas shrank while that for women increased. Within regions, differences between men's and women's earnings narrowed slightly in the capital but widened in the rest of the urban areas.

The preliminary average urban real wage for 1991-92 appears to have stabilized close to the previous year's level. With an economic recovery under way, it is reasonable to expect real wages to cease falling and to begin a slow recovery toward past levels. Of course, it is possible that the most recent wage data are not wholly comparable to those of the earlier years in view of the large expansion of the urban sample size. In which direction the value might be biased, if at all, cannot be ascertained.

There appears to be rather wide differences among labor force groups in the rates at which wages rose. In Table 9 we present monthly nominal earnings by sector. Leaving aside the extreme case of the tiny mining sector, rates of change range from a low of 12.8 percent in commerce to a high of 41.6 percent for the public utilities sector. The finance sector followed closely behind the utilities while the manufacturing sector lagged well behind all but the commerce sector. Most of the sectors reported rates of change within a rather narrow band of from 30 to 36 percent. We call attention to the inclusion in Table 9 of earnings reported for 1990. The reader will note that in two-thirds of the sectors nominal earnings are reported that lie below those for 1988 in spite of the intervention of a full year between the surveys. Then, a rather sharp increase is

Table 9. Average Monthly Earnings
by Industrial Sector, 1988 - 1991
(colones)

	1988	1989	1990	1991	%Δ
Agriculture	378.96	386.25	380.98	492.49	30.0
Mining	695.44	490.00	785.24	691.65	-0.5
Manufacturing	624.47	681.92	675.58	743.46	19.1
Public utilities	969.05	1,159.42	1,072.03	1,372.47	41.6
Construction	596.36	688.25	687.11	802.02	34.5
Commerce	713.01	697.06	668.78	803.96	12.8
Transportation & Communications	931.33	1,039.10	1,132.41	1,227.55	31.8
Finance	1,078.96	1,338.05	1,253.17	1,510.92	40.0
Services	667.79	736.66	765.55	908.97	36.1
Total	670.78	712.17	720.11	833.75	24.3

reported for the 1991 survey even though the beginning of the latter began only four months after the completion of the 1989 survey. We find it difficult to believe that in the inflationary environment of the country, that absolute earnings could have declined so generally in 1990 even as the consumers price index recorded an increase of 24 percent. It is this observation that, added to other peculiarities of that year's data that lead us to discount its validity.

Earnings comparisons can be made on the basis of the employment status of individuals. In Table 10, earnings for the terminal years of the surveys are presented. In both years, the poorest earnings were reported by temporary salaried workers and domestic servants. The former earned slightly more than half the earnings of permanent workers. The earnings of domestic servants include only cash receipts and, therefore, do not include the value of non-cash income in the form of room and board. What is of greatest interest, however, are the difference in the rates of change of these various groups. The greatest earnings gains appear to have gone to those that earned the least in 1988. These are also groups whose wages are likely to be shaped more by labor market force than by institutional influences. In the case of domestics, the surveys report an absolute as well as a relative decline between 1988 and 1991 in the number so employed, from 51.1 to 48.8 thousand and from 7.1 to 5.4 percent of the employed labor force. The absolute decline is all the more remarkable in view of the application of larger expansion factors which have the effect of exaggerating the increase in the size of the labor force.

One plausible interpretation of the relative gains of those at the bottom of the wage structure is that a "tightening" of labor market conditions is occurring as the economy has begun to register positive growth. Consistent with this interpretation is the significant changes reported by the expanded 1991-92 survey in the proportions of the employed labor force categorized as permanent and temporary salaried. The latter declined from 20.1 to 12.3 percent of the labor force while the former increased from 37.6 to 44.9 percent, suggesting an improvement in the quality of employment. (However, we caution that part of this substantial change may be the result of sampling "errors" in the classification of workers.) The decline in the number of domestic employees and the relatively large increases in their wages also suggests that better employment opportunities have become available in other areas, fueling an exodus from domestic service and more spirited bidding for the services of those that remain. However, it would be best to reserve judgment on the merits of this interpretation until we have seen data for at least an additional subsequent year.

**Table 10. Average Monthly Earnings by
Employment Status and Sex, 1988 - 91
(colones)**

Status	1988			1991			Percent Change		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employer	1,999	2,072	1,837	2,250	2,366	1,838	12.6	14.2	0.0
Self-employed	675	837	579	778	1,020	628	15.2	21.9	8.5
Permanent salaried	808	840	739	1,096	1,140	1,021	35.7	35.7	38.2
Temporary salaried	412	442	302	606	624	548	47.2	41.2	81.5
Domestic Service	197	-	197	301	-	286	52.5	-	45.2
Total	671	765	543	834	979	661	24.3	28.0	21.7

Note: Total averages differ from those in Table 8 due to the omission of unremunerated family workers.

A great deal of interest has surfaced in recent years in the differences that exist in the employment conditions between the formal (or modern) and informal sectors of the economy. The authors of the survey define the informal sector as inclusive of the non-professional self-employed, unremunerated family workers, domestic servants, and workers employed in establishments with fewer than five employees. It is generally believed that earnings are significantly lower in the informal market. The aggregate data for El Salvador confirm this belief. Table 11 records earnings by sex for 1991; even though all domestics are classified as informal sector workers, they are omitted from the table since it is not possible to account for the full value of their earnings because of their large non-monetary component.

As can be seen the differences are hardly trivial. They are greatest as between women employed in the two sectors. Women in the informal sector earn only 56 percent of those in the modern, as compared to 76 percent for men. However, to observe these differences is not to explain them. How can one account for the large differences in the averages? In part, the difference stems from the definition of the informal sector as encompassed by small establishments. But this is a difference that is not unique to El Salvador. Earnings by establishment size in developed countries will also reveal substantially lower earnings in small units, reflecting lower capital-labor ratios and productivity levels. But part of the difference may also be a reflection of differences in the personal characteristics of the workers employed in the two sectors.

Table 11. Average Monthly Earnings by Sex and Sector of Employment, 1991. (colones)

Sex	Modern	Informal	Total
Male	1,087	829	979
Female	955	532	710
Total	1,041	678	865

For example, the very young and the very old are overrepresented in the informal sector as compared to the formal, or modern. In addition, the levels of educational achievement are significantly lower in the former. Whereas only 38 percent of those employed in the modern sector report fewer than seven years of schooling, fully 68 percent of those in the informal sector do so. Given the youth and relative inexperience of part of the informal work force and its low level of educational achievement, lower average earnings would be expected to prevail there. In order to separate out the influence of the sector of employment from the other human capital and personal characteristics that may contribute to earnings differences, we have computed earnings functions for men and women in various groupings by applying multiple regression analysis.

In Table 12 we present the coefficients and t values for the independent variables that are hypothesized as bearing an influence on an individual's monthly earnings. The variables included are those that are standard in analyses of this sort. Education is expected to have a strong direct association with earnings. Years of work experience would be expected to stand in a similar relationship.⁴ Since earnings typically increase in the early years upon entering the labor force, stabilize, and then finally decline toward the end of one's working life, we include the square of the years of experience and expect that to carry a negative sign meaning that the rate of increase declines over time. In many countries, marital status appears as a significant variable and, generally, marriage is positively associated with earnings. Earnings, for this purpose are limited to those originating in workers' principal employment and are drawn from the 1991 survey findings. Because the data are entered in semi-log form, the coefficients indicate the proportional change (in decimal form) in earnings associated with each unit increase in the independent variable.

Table 12. Regression Coefficients of Earnings Functions by Sex and Sector of Employment, 1991

Independent Variable	All Urban	Male		Female	
		Modern	Informal	Modern	Informal
Sex (Female=1)	-.262 (-12.372)	-	-	-	-
Household Head (Head = 1)	.125 (6.788)	.134 (5.060)	.160 (3.487)	.026 (.740)	.142 (3.844)
Marital Status (Married = 1)	.014 (.413)	.032 (.441)	.095 (.922)	-.078 (1.541)	-.021 (-.386)
Education	.069 (26.643)	.073 (22.870)	.055 (8.801)	.065 (13.285)	.054 (8.043)
Experience	.036 (21.834)	.027 (10.395)	.035 (8.783)	.032 (9.905)	.034 (8.591)
Experience ²	-.0005 (-19.699)	-.0003 (-6.678)	-.0005 (-9.557)	-.0005 (-7.422)	-.0005 (-10.049)
Literacy	-.028 (-1.067)	.007 (.155)	.048 (.832)	-.063 (-.938)	-.058 -1.223
Region (Metro. = 0)					
Central I	-.168 (-7.682)	-.079 (-2.723)	-.226 (-4.254)	-.231 (-5.770)	-.199 (-4.291)
Central II	-.263 (-11.855)	-.115 (-3.503)	-.308 (-5.968)	-.298 (-7.081)	-.363 (-8.241)
Western	-.091 (-4.167)	-.114 (-3.890)	-.023 (-0.421)	-.229 (-5.760)	-.123 (-2.697)
Eastern	-.086 (-3.684)	-.071 (1.993)	-.074 (-1.402)	-.244 (-5.775)	-.108 (2.270)
Sector (Modern = 1):					
Modern	.450 (23.056)	-	-	-	-
Occupation (Laborer = 0)					
Managerial	.453 (5.780)	.485 (6.067)	.610 (1.156)	.584 (5.168)	-
Professional	.179 (4.491)	.103 (2.086)	.121 (.628)	.067 (.959)	.410 (1.855)
Sales	.180 (6.211)	.116 (2.118)	.316 (4.143)	-.016 (-.219)	.128 (2.867)

	All Urban	Male		Female	
		Modern	Informal	Modern	Informal
Services	-.259 (-8.075)	.051 (1.053)	-.190 (-1.615)	-.107 (1.594)	-.174 (-2.959)
Operatives & Artisans	.021 (.727)	.082 (1.956)	.131 (1.835)	-.032 (-.481)	-.164 (-2.585)
Office & Clerical	.162 (4.428)	.078 (1.625)	.202 (1.734)	.105 (1.654)	.379 (2.926)
Transport	.237 (6.167)	.141 (2.766)	.394 (4.897)	.035 (.338)	.430 (1.339)
Agricultural	-.392 (-12,277)	-.248 (-5.576)	-.479 (-6.215)	-.162 (-2.352)	-.275 (-2.305)
Hours of Work	.0012 (20.617)	.0007 (6.451)	.0016 (13.206)	.0005 (3.780)	.0014 (14.857)
Sector (Private = 1)	.039 (1.742)	-.052 (-.183)	-.121 (.722)	-.183 (-5.307)	.511 (8.591)
Constant	5.273 (73.393)	5.490 (52.784)	5.040 (22.616)	5.916 (46.488)	4.507 (37.943)
N	8,099	2,571	2,005	1,277	2,246
Adjusted R ²	.447	.443	.406	.475	.306

(Numbers in parentheses represent t values.)

Finally, regressions that are drawn from the entire urban population also include a variable that permits us to estimate the difference in earnings associated with employment in the formal or informal sectors. The relationship of the independent variables to earnings is also explored within each of these sectors as well as by sex, regional, and specific occupational categories.

Consider first the coefficients in Column 2 which are derived from an earnings function for all urban workers reporting monthly earnings greater than zero. Among the personal characteristics, both sex and head of family are significant. When all other factors are held constant, being a woman in the labor force is associated with earnings 26 percent below those of a man. A head of family may be expected to earn 12.5 percent more than a non-head. Marital status proved insignificant as a correlate of earnings.

As in all societies in which earnings functions have been evaluated, critical factors in the determination of earnings are one's educational background and work experience. El Salvador is no exception, and the findings conform to our expectations. Higher earnings are very closely related to education. The coefficient of the education term can be interpreted to mean that each additional year of schooling adds 6.9 percent to one's expected earnings. As can be seen from the t value, this coefficient enjoys a very high level of statistical significance. Literacy proved statistically insignificant, probably because of the presence of the schooling variable.

Another source of increased human capital is the work experience of an individual. The longer one's employment experience, the greater his/her skill and productivity, and thus, his/her value to an employer or in self-employment. For purposes of the regression we employ a conventional measure for approximating work experience, namely, age minus years of schooling plus 5 pre-school years. (In a society like El Salvador where a large proportion of the population has little or no schooling, this conventional measure probably overstates the years of experience for many; e.g., a person with no education would be assumed to have been employed since age six. However, we would not expect this to introduce a serious bias in the results.) As can be seen, experience is a significant and important source of increased earnings. Each year of experience is associated with a 3.6 percent increase in earnings.

The region of employment also proved to be significantly associated with earnings. Earnings in metropolitan San Salvador are adopted as the base, and earnings in urban centers of the other regions are measured in terms of departure from the base. As can be seen, employment in any of the other regions implies a lower rate of nominal earnings for persons with similar personal

and occupational characteristics than are obtainable in the capital. The greatest departure occurs in the Central Region II that encompasses the departments of San Vicente, La Paz, and Cabañas. An individual employed in that region earns, on average some 26 percent less than one similarly employed in the capital. An almost 17 percent differential exists in the Central Region I, encompassing La Libertad, Chalatenango, Cuscatlan, and those municipios of San Salvador that lie outside the metropolitan area.

The smallest differentials appear in the Western and Eastern regions, about 9 percent. It should be kept in mind that these measured differences are only in nominal terms and do not reflect real differences that may be associated with regional differences in the cost of living.

As expected, the regression coefficient for sector of employment confirms the existence of a sizable differential between informal and formal, or modern, sector employment. The coefficient indicates a margin of 45 percent by which earnings in the formal sector exceed those in the informal. However, when the data are segregated by sex, the differential appears to increase to about 50 percent for men and 66 percent for women (not shown here).

Also included as an independent variable is the occupational classification of individuals. A non-agricultural laborer is adopted as the base occupational group and all others are measured relative to it. Only two occupational groups evince lower earnings than the base group, service workers and agricultural laborers. Those of production workers and artisans prove to be not significantly different from those of laborers. All other occupational groups evince a positive differential. The largest is associated with a managerial status, yielding earnings some 45 percent greater than those of an urban laborer. Transportation workers are the next most favored workers with a 24 percent advantage. Surprisingly, professionals report an advantage no greater than that of sales and clerical occupational groups. This may be due to the fact that the earnings function included only earnings from individuals' principal employment. Since professionals frequently hold multiple appointments, their total earnings are probably understated. (Recall that we found the holding of secondary employments to be most common among those with university education.) It also suggests that earnings differences have already been captured by the education variable, indicating that individuals with advanced education earn similar incomes even though they are engaged in different kinds of economic activity.

A small but statistically significant part of the difference in earnings is attributable to the length of the work week. Finally, whether or not one is employed in the public or private

sector makes a small difference, though it should be noted that the coefficient is statistically significant at only the 10 percent level. From supplementary regressions on employment in the public and private sectors, not shown here, it appeared that the returns to education and work experience were lower in the public sector than in the private. This is consistent with the conclusion reached in an earlier study on the efficiency of the public sector in which it was held that public sector overpaid low-skill employees and underpaid the high-skilled relative to wages in the broader labor market. This suggests that the wage structure in the public sector may have rather perverse effects on incentives and efficiency in public employment.

The table also explores earnings functions by sex of individuals employed in the modern and the informal sectors. The coefficients for men appear in columns 3 and 4. The reader will note the very close resemblance in the configuration of the functions. While employment in the informal sector does imply, on average, lower earnings, the determinants of earnings within each sector appear to be the same though their strength may vary as between the two sectors. For example the rewards to education are positive in both sectors but are larger in the modern. On the other hand, returns to experience appear to be slightly greater in the informal. Modern sector earnings in the provinces depart from those in San Salvador by between 7 and 12 percent. In the informal sector, provincial wages are statistically different from (and below) those in the metropolitan area only in the Central I and II regions. The coefficients of the occupational groups suggest that earnings differentials relative to urban laborers are wider within the informal than within the formal sector. Private and public sector earnings reveal insignificant differences in both the formal and informal sectors, though one would not generally expect public sector employees to be classified as informal sector workers.

The earnings functions for women display characteristics similar to those for men. As in the case of men, marital status does not seem to be significantly associated with earnings. However, status as head of household is significant, but only for women employed in the informal sector. The education and experience variables carry values very close to those of men, though the differences as between the formal and informal sector are narrower than for men. Modern sector earnings of women in the provinces depart from those in the metropolitan area more widely than was the case for men. While women's earnings in the informal sector in the provinces also lie below those in the capital, the differential is smaller than the regional differential in modern sector earnings.

The occupational variables suggest less dispersion across occupational groups in the earnings of women employed in the modern sector than we observed among men. As before, the base

earnings against which other occupational earnings are evaluated are those of unskilled urban labor. Only two formal sector occupational groups report earnings significantly different from those reported by laborers. Managerial personnel earn significantly higher wages and agricultural workers significantly lower wages than do urban laborers. While these results may seem surprising, it should be kept in mind that it is likely that most earning differences are a function of different levels of education and experience and that the effect of these variables has already been measured. Thus, if education and experience are held constant, the occupational group differences may be substantially reduced or negligible. As expected, hours worked prove to be a significant determinant of earnings. In contrast to the case of men, women employed in the private sector earn less than those in the public.

The occupational variables for women employed in the informal sector suggest a greater dispersion than is observed in the formal. Earnings in services, goods production, and agriculture suffer relative to unskilled labor. All other occupational groups, save those in transportation, report significantly higher earnings. Hours of work are again a significant and positive contributor to earnings. The sector of employment proves significant; in contrast to the formal sector, private sector employment appears more rewarding than public (though we retain our reservations regarding the nature of public employment that appears classified as informal in nature).

The adjusted R-squares range between .406 and .475 except for that for women employed in the informal sector at .306. This datum provides a measure of the proportion of the variance in earnings that is "explained" by the independent variables included in the regression equation. In comparison with values of R-squares generally yielded by cross-section studies, the ones reported here would be considered to be very respectable.

While it is clear that the sector of employment, formal or informal, does play a role in determining the earnings of an individual, the earnings functions presented above emphasize that it would be a mistake to think of the two sectors as simply a high- and a low-wage sector. Within each sector there is a wide distribution of earnings as can be seen in the data for 1991 as recorded in Table 13. And as we noted above, the same variables come into play in explaining the differences in earnings realized within each sector. Finally, it should be noted that for those individuals who remain employed in the informal sector for extended periods, the general shape of the time profile of their earnings curve does not depart much from that of formal sector workers. In both, earnings rise with length of experience and eventually level off much as they do in more developed economies

**Table 13. Distribution of Employed Labor Force by Monthly Earnings,
Sex, and Sector of Employment, 1991**

Sector and Sex	Total Employed	Monthly Earnings (colones)										Not Reported
		None	1 - 199	200 - 499	500 - 699	700 - 999	1000 - 1499	1500 - 1999	2000 - 2499	2500 - 2999	3000 and over	
Total	841,574	55,657	47,074	180,976	147,406	166,826	142,353	47,114	20,746	7,463	25,031	928
Modern	432,578	13,171	5,991	55,845	88,733	102,565	107,232	27,492	10,350	5,193	15,556	450
Informal	408,996	42,486	41,083	125,131	58,673	64,261	35,121	19,622	10,396	2,270	9,475	478
Males	483,204	18,550	21,467	89,001	87,600	107,413	85,769	31,897	14,473	6,029	20,342	663
Modern	282,001	6,069	4,153	37,351	56,370	246	62,210	19,209	7,723	4,273	13,105	292
Informal	201,203	12,481	17,314	51,650	31,230	36,167	23,559	12,688	6,750	1,756	7,237	371
Females	358,370	37,107	25,607	91,975	59,806	59,413	56,584	15,217	6,273	1,434	4,689	265
Modern	150,577	7,102	1,838	18,494	32,363	31,319	45,022	8,283	2,627	920	2,451	158
Informal	207,793	30,005	23,769	73,481	27,443	28,094	11,562	6,934	3,646	514	2,238	107

Note: Excludes domestic service employment.

In Table 14, we present average earnings by modern and informal sectors by sex over the 1988-91 interval. The survey data suggest a considerable contrast in the course of wages in the two sectors, particularly for women. According to these data, men in the two sectors realized a rate of increase in nominal earnings that is roughly comparable. But whereas women's earnings in formal employments increased more rapidly than those of men, they rose much more slowly in the informal sector. However, we find the course of informal women's earnings to be very strange. Note the decreases in absolute earnings reported for 1989 and 1990 followed by a sharp increase for 1991. (Note that informal men's earnings also declined sharply in 1990 only to rise by over 30 percent a few months later.) One might expect a somewhat greater variability in informal earnings as compared to those in the modern sector, but the changes recorded here are too large to be deemed credible, particularly in view of the short intervals between surveys and the constancy of 75 percent of the sample from one survey to the next.

Because of the great interest in employment conditions in the informal sector and of the relative absence of firm empirical data on the subject, we have undertaken to explore some additional aspects of employment there. Of particular interest in the economic status of the self-employed, a category that is particularly prevalent in the definition of the informal sector. Frequently, self-employment in the informal sector is viewed as a "survival" alternative, forced on individuals by the scarcity of wage employment.

In Table 15, we explore the validity of this view. An earnings function is defined for workers in the informal sector in which self-employment appears as an independent variable; the coefficient of this term measures the earnings of this group relative to the earnings of wage workers within the same sector. If one observes the coefficients in the first column which refer to all workers in the informal sector without regard to sex, it would appear that self-employment is, indeed, an inferior status. It indicates that self-employment yields earnings 6 percent below those obtainable in wage employment.

However, when the functions are run for men and women separately, the sign of the self-employment term is reversed. The differential in earnings now favors the self-employed. Among men, the differential is substantial at almost 38 percent, while for women it is over 20 percent. Otherwise, the coefficients for the other variables reveal only small differences between the sexes. In the separate regressions by sex, marital status proves insignificant in contrast to the sexless regression. Employment in the metropolitan area yields a positive differential in earnings over the provinces of 14 to 16 percent.

Table 14. Average Monthly Earnings by Sex
and Sector of Employment 1988 - 91

Sector	Year				Percent change 1988 - 91
	1988	1989	1990	1991	
Modern Sector	796.17	914.64	969.18	1,040.72	29.0
Male	832.05	975.05	1,011.66	1,086.50	27.5
Female	718.38	792.24	884.05	954.97	33.5
Informal Sector	523.10	531.28	504.55	638.27	22.0
Male	644.00	685.10	636.26	828.55	28.7
Female	425.01	404.98	397.81	486.86	14.6

Table 15. Earnings Functions of Informal Sector Workers by Sex

Independent Variable	All Workers	Men	Women
Education	.067 (15.73)	.057 (11.99)	.053 (8.39)
Experience	.038 (13.27)	.033 (12.18)	.028 (6.44)
Experience Squared	-.0005 (-12.69)	-.0005 (-12.46)	-.0004 (-6.70)
Hours	.002 (22.18)	.002 (22.76)	.002 (17.89)
Marital status	.119 (2.37)	.049 (1.00)	-.028 (-.496)
Self-employed	-.067 (-1.96)	.379 (11.99)	.204 (3.46)
Metropolitan	.145 (5.05)	.142 (5.03)	.160 (4.01)
Adjusted R ₂	.240	.273	.223

We also explored the status of informal sector employers relative to wage and salaried workers within the sector. The literature on this subject suggests that such employers do enjoy higher earnings than their employees but that the advantage is only a modest one. Our data seem to confirm this finding. In Table 16 we present earnings functions similar to those for the self-employed except that the status of employer is compared to that of wage employees. We do so in two ways. First, we explore the differential in employer earnings over all wage workers regardless of sex in the first two columns. Then we record the differential of male employers over male wage earners and female employers over female wage employees in the last two.

When the earnings of employers are measured against those of all wage workers within the informal sector, they enjoy a positive differential of 68 and 60 percent for male and female employers respectively. The values of the other coefficients are similar for the two sexes with the exception of marital status. For females, being married is associated with higher earnings.

However, when employer earnings are compared with those of wage earners of the same sex, substantial differences emerge. For male employers the differential over male wage employees declines, apparently reflecting the removal of lower-waged female workers from the area of comparison. For female employers, a much larger differential emerges over female wage workers. Employers report earnings more than double those of their female employees. However, it should be kept in mind that the employers' earnings probably include returns that should more properly be assigned to any capital resources used in production. As a result the data probably exaggerate the true differential in earnings between these two groups.

One of the interesting implications of this finding is its relevance to any attempt to extend to the informal sector the prevailing legal employment requirements of employment. There simply is no scope for the absorption of the increased cost of employing workers at the expense of returns to employers. Enforcement of those requirements in the informal sector would probably imply negative returns to employers and, consequently, the disappearance of those enterprises.

Finally, we explored one aspect of workers with low levels of formal education, those with 6 or fewer years of schooling. The earnings functions for such workers were structured in order to determine the differential, if any, employment in a non-agricultural laborer status yielded over that of an agricultural laborer. The results are presented in Table 17. First, some general observations. Even within this group with low education, the years of schooling does make a difference in earnings, though less so for women than for men. Experience contributes less to earnings for this group than was observed for the labor force as

Table 16. Earnings Functions of Informal Sector Workers by Sex

Independent Variable	Employers			
	Male ¹	Female ¹	Male ²	Female ²
Education	.064 (10.27)	.074 (11.84)	.056 (8.44)	.088 (6.74)
Experience	.050 (10.87)	.054 (11.33)	.047 (9.70)	.039 (3.97)
Experience Squared	-.0007 (-8.99)	-.0007 (-8.86)	-.0007 (-8.20)	-.0005 (-3.51)
Hours	.002 (10.10)	.002 (10.54)	.002 (10.64)	.0008 (2.38)
Marital Status	.138 (1.23)	.277 (2.39)	-.037 (-0.24)	.112 (0.728)
Employer	.681 (9.58)	.601 (4.77)	.615 (9.24)	1.156 (8.76)
Metropolitan	.155 (3.62)	.148 (3.35)	.141 (3.11)	.335 (4.06)
Adjusted R ²	.328	.286	.366	.470

Notes:

1. The coefficient of the employer term captures the earnings differential

over all wage worker regardless of sex.

2. The coefficient of the employer term captures the earnings differential

over wage workers of the same sex as that of the employer.

Table 17. Earnings Functions of Workers with Six or Fewer Years of Schooling by Sex

Independent Variable	Men	Women
Education	.054 (4.17)	.039 (2.59)
Experience	.031 (5.75)	.023 (3.58)
Experience Squared	-.0004 (-5.30)	-.0003 (-4.11)
Hours	.002 (6.85)	.002 (9.39)
Marital Status	.076 (0.447)	.161 (1.72)
Non-agricultural Laborers	.462 (7.22)	-.013 (-0.20)
Metropolitan	.172 (1.54)	.249 (3.36)
Adjusted R ²	.165	.201

a whole. For men, employment as a laborer in the non-agricultural sector implied a substantial positive differential in earnings over those in agriculture of 46 percent. Because the agricultural workers in this sample are drawn from areas that are classified as urban, one might have expected the differential in earnings to be rather narrower since the opportunity cost of labor to the non-agricultural sector is defined by the returns to labor in agriculture.

For women, this expected relationship was confirmed, for the difference in earnings as between the two broad sectors was statistically insignificant. Underlying the contrasting results for the two sexes is the existence of little difference in the earnings of male and female laborers in agriculture; apparently they are viewed as close substitutes for each other. In the non-agricultural sector, however, female unskilled earnings lie well below those of men, suggesting less substitutability and that the large supply of women to the urban labor market that we noted early on in this report has served to depress their earnings.

For these low-skilled workers, employment in the capital has different consequences for the two sexes. For men, there is no statistically significant difference in earnings as between the metropolitan and other urban centers. On the other hand, for women, employment in the capital yields earnings almost 25 percent greater than in the provinces.

In short, the earnings data for our El Salvador urban sample appear to conform closely to our expectations. The labor market produces outcomes that are similar to those in other countries. In spite of a decade of internal conflict, the labor market appears to have left in place "normal" wage relationships. The most important consequence of a decade of instability appears to have been the stagnation of the economy and the consequent decline in real earnings.

VI. Migration

The household surveys also address the question of changes of residence. Households are asked where they were domiciled five years previous to the interview. They are asked to indicate multiple moves and to relate the reasons motivating the move. For purposes of this report we discuss only the responses given during the 1989 survey.

Out of a total estimated urban population of 2.256 millions at the time of the 1989 survey, only 106,976 household members were involved in moves, or 4.7 percent. Given the disruptions associated with the civil conflict in the country, this strikes us as a smaller proportion than we would have expected. Population movements apparently involved entire households, for a

very substantial proportion, 46 percent, were 15 years or younger five years prior to the interview, and a third were under ten. And, as is typical in migrations throughout the world, they are a phenomenon typically associated with the young. In the Salvadoran case, only 15 percent of the migrants were older than 35 years five years prior to the interview. A striking characteristic of the migrant flow is the predominance of females; they outnumbered males in a ratio of about 1.5 to 1.

Most of the changes in residence captured by the survey involved moves either within or between urban areas. Only 20 percent of the movers had been living in rural areas in the reference year. (Note that any urban-rural migration would not be captured by the survey since it is undertaken only in urban areas.) A substantial proportion of the moves proved to be intra-regional, though only the metropolitan area reported over half of the moves as remaining within the area. In Table 18, we present the different patterns of move by region. As is evident, two of the five regions reported a net exodus, Central Region I (west-central El Salvador) and the Eastern Region, both areas containing significant conflictive zones and large pockets of poverty. The largest number of moves originated in the Metropolitan region, but almost 70 percent of these were intra-regional. Even these figures for the capital are misleading, since half of all moves originating in the area were forced by the destruction of homes during the earthquake of 1986. The moves out of the metropolitan area were to the neighboring central regions to the west and east, probably within easy reach of the capital.

A high ratio of moves out of the region to intra-regional moves is recorded by the Eastern and west-central (Central I) regions, both significantly affected by the insurgency. But even there, the conflict was given as a cause for moving by only 22 percent of the movers in the Eastern Region and 11 percent in the west-central, predominantly among those with rural residences in the reference year.

In both regions, a frequently offered reason for moving was a desire to seek improved employment opportunities. Surprisingly, only 20 percent of the moves of all movers were employment motivated even if we eliminate from consideration the moves occasioned by the earthquake. By far the most important justification for moving was family considerations. Fully 57 percent of the population was involved in such moves, again ignoring the earthquake-motivated moves. Moves in search of educational opportunities accounted for only 5.7 of the migrant population. No other reason was offered by a significant number.

It should be kept in mind that these measures are based on the entire population involved in moves rather than on only the actual decision makers, such as heads of households or single

Table 18. Migration Flows by Region

Region	Intra-Region	Outmigration	Immigration	Net Change
Metropolitan	39,881	17,657	24,480	+6,823
Western	3,919	5,437	5,954	+517
Central I	4,642	11,691	10,730	-961
Central II	2,091	4,685	5,913	+1,228
Eastern	6,714	9,459	1,852	-7,607

individuals. The survey captures a small amount of information regarding the labor force status of respondents prior to the move. However, the interviewers apparently had a difficult time determining the true labor force status of individuals. For example, almost 75 percent of the population is shown to have been employed prior to their move. This would imply the inclusion in the labor force of practically everyone who was aged 5 years or over in the reference year. The problem appears to lie in the classification of 46 percent of the migrants as domestic servants prior to the move. Clearly, this is an unlikely circumstance and probably reflects some confusion between the performance of household chores with being employed as a domestic. Reinforcing this evaluation of the unlikelihood of this datum is the report that fully two-thirds of those classified as domestics prior to the move were not in the labor force at the time of the survey in 1989. In any case, of the migrant population, fully 60 percent was not employed at the time of the survey.

Unfortunately, the survey does not collect information regarding the nature or sector of employment prior to the move but only the status in employment, i.e. employer, self-employed, permanently salaried, etc. Interestingly enough, the largest category, by far, is that of the permanently salaried, presumably the most stable and often the better remunerated type of employment. It equals the sum of those reporting either a self-employed or temporary salaried status. It is also interesting to note that following the move, the majority tend to be employed in a status identical to that held prior to moving.

VII. Concluding Comments

The analysis undertaken to date has identified a few features that may set El Salvador's urban labor markets apart from those of other Latin American economies. We commented on the high labor force participation rates of women, and suggested that it might reflect a response to a "shortage" of men of labor force age in the population, either as a result of migration out of the

country or of service in the armed forces of both contending sides. We also commented on the large size of the informal sector. In part, this may be attributable to the small size of many urban centers, a characteristic that would favor the existence of small-scale operations in production, sales, and services. Its large size may also be the product of the more rapid growth of employment there as compared to the modern or formal sector. This, in turn, could follow from the sharp drop in investment in the country in response to the political and economic uncertainties that dominated the past decade. Indeed, given these conditions, it is remarkable that the labor market does not appear to show evidence of major dislocations.

Perhaps the most striking fact to emerge from our study has been the sharp decline in real earnings over the past decade, on the order of 50 percent. However, even this development is not one that is unique to El Salvador. The past decade has seen severe declines in real earnings throughout Latin America, some greater than those experienced in El Salvador, e.g. Peru. Virtually every country has seen a decline in modern sector earnings during the 1980s. Colombia and the Sao Paulo and Rio de Janeiro metropolitan areas of Brazil stand out as exceptions, rather lonely figures among the major Latin American countries. (In Central America, Costa Rica appears to have enjoyed relative wage stability.) However, we know little about earnings trends in informal sector activities generally.

One of the phenomena that has caught our eye and that cries for analysis is the disparity between the sharp decline in reported real earnings and the fall in real per capita income during the decade of the 1980s. As noted above, reported earnings appear to have fallen by about 50 percent. Yet, the national income statistics for El Salvador register a drop in per capita income of something on the order of only 17 percent. How can such a huge disparity be explained? We posed this question to various economists in El Salvador and found that no one had been conscious of this observation and hence had no explanation to offer.

One can speculate on conditions that could give rise to such a disparity. For example, it could reflect a dramatic shift in the terms of trade between agriculture and the urban sectors in favor the former. In view of the decline in coffee prices during the decade this would seem to be an unlikely explanation. Alternatively, shifts in the distribution in favor of other forms of income could be hypothesized. However, given the economic stagnation of the past decade it is difficult to imagine the share of property incomes as having increased significantly; in developed economies, the profit share generally declines during recessions and increases during periods of economic expansion. This simply reflects the fact that profits are more volatile than are wages. It is possible that the share of interest has

increased as the size of the public debt increased, though for much of the decade, interest rates were subject to government control and were negative in real terms. Unfortunately the national income accounts are derived only from the side of output and not from that of factor incomes, so one cannot resort to aggregate statistics to seek an answer.

To us, the most plausible explanation lies in the underreporting of household earnings. The household survey we have been analyzing appears to do a good job of capturing the earnings flows from the principal economic activities of labor force members. However, it appears that a considerable share of household income goes unreported. We remarked earlier on the small proportion of the labor force that reported secondary employments or sources of earnings. Yet, casual empiricism would suggest that there is a great deal of secondary economic activity in which regular wage earners are involved. Much of it involves petty trade, selling food, cosmetics, or other articles to co-workers while on-the-job. A foreigner ambling through the streets in obviously middle-class neighborhoods is struck by the frequency one encounters signs on homes offering a variety of services or goods. (Whether this phenomenon is duplicated in working class neighborhoods, we cannot say.) We speculate that much of this ancillary activity is not viewed as giving rise to employment or to "earned income" as defined by the survey in spite of the efforts of the questionnaire to uncover all sources of income of households. Certainly, measured labor force participation rates do not reflect an increase over pre-insurgency levels in the proportion of the population engaged in fruitful employment.

A further hint that the survey does not manage to capture all of the earnings of households is to be found in the income and expenditure study undertaken in 1990. Our analysis of that survey's findings revealed a substantial excess of expenditures over earnings in all but the top decile and particularly among households at the lower end of the income distribution. Of course, it is not unusual to find underreporting of income at the two extremes of the income distribution. However, the discrepancies between reported incomes and recorded expenditures in El Salvador are significantly greater than those one would expect to find.

Except for this consideration, the labor market data for El Salvador appear to be remarkably "well behaved." That is, they conform closely to results common to other countries. One might have thought that a decade of internal armed conflict might have disrupted the normal operation of labor markets. Yet there is little in the measures we have reported that suggests significant disruptions. Unemployment rates have been moderate. Wage relationships conform to those found in countries under more normal conditions. Perhaps the one condition that distinguishes

El Salvador from other Latin American countries is the extent to which real earnings levels declined over since 1980. Economic stagnation traceable to the unstable political conditions of the country appears to have exacted a heavier cost on labor force members than has been the case elsewhere. We can only hope that the return of peace and the renewal of the growth process will be reflected in early improvements in the returns to labor.

Endnotes

1. PREALC, for example, concluded on the basis of intensive interviewing in several urban settings throughout Latin America that the number of "discouraged workers" that were actually available for employment was very small.
2. Since the upward adjustment in earnings is greater in the most recent year, this would reduce substantially the extent of the decline in real earnings over the 1988-91 interval that is recorded in Table 8, from 24 to 17 percent.
3. The household survey for 1980 reported a median level of remuneration of 300.68 colones for the urban areas of the country. We do not have an urban median for the entire urban economy for 1986 but only a mean value for the metropolitan area. Our best estimate for the decline in real earnings between 1980 and 1986 is on the order of 20 percent. This was approximated as follows: A comparison of median earnings for 1980 with mean earnings for 1988 finds the latter to lie 34.7 percent below the former. If all urban earnings changed in the same proportion as did those in the metropolitan area, this would yield earnings for the entire urban area of 250.47 colones of 1980 for a decline of 16.7 percent. However, this is likely to understate the decline by a small margin because median earnings tend to lie below the mean. Thus the base value for 1980, a median value, may be expected to have understated the mean value for that year. Hence, we suggest a decline on the order of perhaps 20 percent.
4. In the absence of actual years of experience we have followed common practice in deriving an estimate. From an individual's age we subtract his/her years of schooling plus 6 pre-school years. Implicit assumptions underlying this estimate include: 1) the individual started school at age 6; did not repeat any grades; and that he/she entered the labor force upon completion of schooling. Obviously, this will not yield a value identical to actual years of experience, but the estimate is not likely to prove so biased as to be misleading.

ADDENDUM

THE LABOR MARKET IN EL SALVADOR

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THE LABOR MARKET IN EL SALVADOR: ADDENDUM

I. Introduction

This Addendum is intended to supplement an earlier report, "The Labor Market in El Salvador." that was completed in May, 1993. It includes an update of statistics to include the household surveys undertaken by the Unidad de Investigaciones Muestrales during October 1991-March 1992 and April-September 1992. The report will review the course of several variables over the years since the household surveys were instituted in 1988. In addition, we will report on the results of some additional analyses that will permit a fuller evaluation and interpretation of the employment data.

The reader should be advised that some question arises regarding the comparability of the data over time. The last two surveys were undertaken with a greatly expanded sample, and it would appear that some of the changes that are recorded are due to this methodological consideration rather than to "real world" changes. In addition, the way in which some of the variables have been defined has changed, thus rendering some of the earlier published data not comparable with the more recent. Thus extreme care is advised to any users of the household survey data who wish to trace labor force phenomena over time.

II. Report of Findings

A. Labor Force Participation Rates. We have commented in our previous reports on the notable increases in participation rates that have characterized the urban population of labor force age, particularly in the case of women. The addition of two more surveys confirms this finding. The increase in the sample size for the 1991-92 survey appears to be associated with a rather sharp increase in the male participation rate and a more modest one in the female. (See Table 1) The timing of this survey to correspond to the harvesting season in agriculture cannot be the sole factor explaining these increases, for the preceding survey was completed within virtually the same time frame, October 1990-March 1991. In any case, the participation rates recorded in 1992 return to values only slightly higher than those reported in 1991.

However, there is one additional observation that is worthy of comment. Ordinarily, one would expect participation rates to change only gradually over time. Thus, sharp changes in either direction should be viewed with suspicion unless they can clearly be attributed to seasonal factors. For example, observe the changes recorded for young males in Table 1. If one were to accept the 1988 participation rate for the two youngest age groups, one might be tempted to conclude that youngsters were abandoning school in order to seek employment as part of a survival strategy. However, note

that the participation rates vary within only a narrow range of the published values for 1989, except for a sharp jump in 1991-92, one that is not sustained since the rates return to their customary values in 1992. In short, the low value for 1988 would appear to be the product of sampling or processing aberrations rather than a reflection of reality. We would speculate that the sharply higher values for 1991-92 males aged 10 through 19 are also aberrations associated with the expansion of the survey sample. One might argue that, in view of the reports of labor shortages during the harvest season, boys entered the labor force temporarily and that this explains the sharply higher rate. However, note that the rates for all other age groups reveal small declines, something that would not be expected to coincide with reports of labor shortages.

In the case of females in the two youngest age groups, 10 through 19 years, the same comments would hold with respect to the peaking of participation rates in 1991-92. However, with respect to the strong increasing trend in female participation rates since 1988, it would appear that most of that increase is attributable to a significant undercounting of female labor force members in 1988. The reader will note the very great discontinuity in rates for adult women between the 1988 and 1989 surveys. Since the latter was begun just four months after the conclusion of the former, it would be unreasonable to expect such a radical change in the labor force attachment of women. Nevertheless, subsequent years do demonstrate a steady increase in participation that is quite believable.

B. Sectoral Distribution of the Labor Force. One would not expect substantial changes to occur in the sectoral distribution of the labor force over such a short period of time, and the data for El Salvador are consistent with this expectation. As can be seen in Table 2, only minor changes are observable. The share of manufacturing revealed an increase of almost two percentage points, while that of commerce declined by almost two points. All other changes fell within a fraction of a single percentage point.

C. Distribution of the Labor Force by Employment Status. The period of our study reveals some substantial changes in the employment status of the labor force. Table 3 presents the relevant data. As can be seen, the greatest increase in the share of total employment occurs in the status of self-employed. This probably reflects the slow rate of economic expansion and an associated lag in the growth of salaried employment. On the other hand, favorable indicators would be the growth for both sexes in the share of employers. Among women, the decline in the relative importance of domestic service suggests that women faced more favorable employment opportunities. Both sexes record a significant decline in a temporary status in wage employment. This would ordinarily be interpreted as a favorable development if it had been accompanied by a corresponding increase in a permanent wage status. However, the survey reveals a small decline in the relative importance of that status among men and insignificant change among women.

The reader should be cautioned that the published measures of permanent and temporary salaried employment fluctuate widely during the intervening years. For example, permanent wage employment among men accounted for 47 percent of total employment in 1989 and 43.5 percent in 1991. Lower proportions were likewise recorded for women in those two years, 32.9 and 30.5 percent respectively. The classification of workers has been based solely on the responses of the interviewees rather than on any formally defined criterion. I suggested to the Unidad last year that the classification be based on the length of employment in the present job as a preferable way to define status. I suggested that anyone employed in his/her current job for three or more months be classified as permanent. After all, this would be more closely consistent with the labor code that provides for permanent status after only one month's employment. If this suggestion was adopted by the Unidad in the tabulations for the last two surveys, this might explain part of the increase in the proportion in the permanent salaried statuses over recent years.

In the light of the increase in self-employment, it is encouraging to note that there has been no significant change in the proportion of the employed labor force in the status of unremunerated family worker. One might have expected to see a growth in this status if a significant deterioration had occurred in the quality of available employment opportunities.

In short, the data present a mixed picture with respect to changes in the quality of employment as defined by reference to employment status. While the rising concentration of workers in self-employment may be interpreted as an unfavorable development, the course of other statuses suggest some offsetting adjustments.

D. Unemployment. In Table 4, we present data on urban unemployment rates over the period since 1988. The definition of unemployment used by the Unidad includes those openly unemployed, that is, actively occupied in search of employment during the reference period, as well as those who are considered "hidden unemployed," those who did not actively search for jobs for any one of six reasons. The overall rate would appear to have declined from 1988 to 1991 (the data for 1990 are deemed unreliable and, therefore, are omitted). Since 1991, the rates have shown an increase, particularly for men, though they remain below earlier levels. This increase coincides with an increase in the sample size. Therefore, it is not clear whether the increase represents a real change in unemployment or the result of a more inclusive coverage. Among women, the increase in 1991-92 is only temporary, and the unemployment rate returns to the 1990-91 level in the most recent survey.

The incidence of unemployment by age in the most recent survey demonstrates a pattern consistent with that of the past. Disproportionately high rates are associated with youth, and the

rate falls steadily with advancing age.

Keep in mind that the measured unemployment rate of the Unidad includes the "hidden unemployed," a group that in our May, 1993 report we considered to have an ambiguous status. We noted that in studies of PREALC, individuals who did not actively seek work but explained that they did not do so either because they believed no jobs existed or because they did not know how to search, on further examination proved not to be actually available for employment. It was found that such individuals had only a very weak attachment to the labor market, either because they had never been employed or had held a job in the distant past. We decided to examine this particular component of the measured unemployed to determine if its true status could be more clearly delineated. We undertook our analysis using the 1990-91 survey data.

According to special tabulations prepared by the Unidad, some 16,965 individuals, 13,478 men and 3,487 women were deemed to qualify as "hidden unemployed." However, in our own tabulation of the raw data, we could only find 11,031 men and 2,719 women in this status, and the reported results that follow refer only to these. (See Table 5) As expected, a substantial proportion of these had either no previous work experience or had been employed more than 5 years ago. Fully 32 percent of the men and 41 percent of the women had no prior work experience. An additional 5 or so percent of each sex had not been employed during the previous 5 years. It is these two groups that would appear to have only a tenuous attachment to the labor force and are likely actually to be out of the labor force. However, a substantial proportion of the "hidden unemployed" had been employed during the year preceding the survey, 48 percent of the men and 34 percent of the women. While they did not actively seek work, we consider it reasonable to give them the benefit of the doubt and accept their classification as unemployed.

The omission of those without work experience or with only experience in the distant past, would reduce the count of the unemployed in 1991 from 72,471 to 67,194, and the unemployment rate would decline to 7.0 percent as compared to the 7.5 percent rate reported.

We also wished to examine the reasons for separation from the last employment of the "hidden unemployed" with prior work experience. Almost two-thirds of the men and a third of the women indicated involuntary separation, the result of the closing of the establishment, a decline in business, or discharge. As might be expected, women accounted for a higher frequency of voluntary withdrawal, as can be seen in Table 6.

Among those workers actively seeking employment, the reasons for separation from their most recent employment reflected the importance of employer initiatives. 70 percent of the men and 41 percent of the women reported discharges, closings, or business

declines as the reason for their unemployment. Women were more likely than men to have left jobs on their own initiative; 47 percent reported they had quit or had done so for personal or family reasons. Among men, these two responses came from only 18 percent. Thus, the reasons given for separation by both groups of unemployed, "hidden" and active job seekers, are roughly comparable in their relative importance. The relatively small proportion of quits suggests that workers are reluctant or do not find it easy to move among employers.

We have been inclined to place a heavy emphasis on the length of unemployment rather than the unemployment rate alone as an indicator of the severity of unemployment. A high rate of measured unemployment would be considered to be of reduced significance if the duration of unemployment were very short. Such a finding would suggest that job opportunities were not scarce and that the unemployment represented primarily mobile workers between jobs. Therefore, we undertook to examine the duration of unemployment suffered by unemployed Salvadoran workers. Table 8 provides the relevant data.

The table distinguishes between those workers with previous work experience and new entrants to the labor market. As might be expected, the latter report longer durations of job search. This can be explained in two ways. From the point of view of an employer, a worker with previous experience is likely to be preferred to one with none since he/she may require less training and/or acclimitization to the work place. From the point of view of the new entrants, they may be undergoing a "shopping" experience, that is, exploring the range of employment opportunities available with an eye to landing one that meets their preferences or aspirations. Particularly since most of the new entrants are young people on whom families are not dependent for their sustenance, the longer search period we observe in El Salvador is consistent with long-term income maximization behavior and with experience elsewhere in the world.

The differences in the duration between the sexes are notable only at the extremes. A smaller proportion of women than men report an interval under a month and a larger proportion report one of over a year. Among men with previous work experience, over half, or 62 percent report durations of search of under four months. The corresponding proportion for women is 50 percent.

Our distribution of job seekers by duration departs very substantially from that reported by the Unidad in Table D16 of the 1990-91 report. For example, the Unidad reports that half of the job seekers with previous experience were unemployed for less than a month; our tabulation reported in Table 8 yields only 14.6 percent. Our analysis of the data provided an explanation that indicates a programming lapse at the Unidad. The difference is explained, in part, by the inclusion in the "under one month"

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interval of individuals who apparently did not indicate a duration and were coded in the undefined category "0". Since this category of non-responses constituted one-fourth of the Unidad's total included in its table, it distorts the proportion of the population with this shortest of unemployment durations. Furthermore, we found that the number that had reported 12 or more months of unemployment were not included in the Unidad's table in the "four and over four months" category but rather had been assigned to the shortest category, "under one month." Apparently, the same program was used to process the 1991 survey, for similar values are produced.

The processing error of the Unidad clearly distorts the interpretation of unemployment. A predominance of individuals in the shortest interval, as appears in the Unidad publications, would downplay the seriousness of unemployment. It could be interpreted to mean that jobs were easy to find, and one might have expected to observe a good deal of voluntary mobility of workers between jobs. On the other hand, the corrected distribution of Table 8 suggests that the search for employment is more difficult, though not extraordinarily so, for those with previous experience. This revised distribution would appear to be more consistent with the finding reported earlier, that a relatively small number of workers, especially among men, become unemployed as a result of voluntary quits, especially among men. With respect to new entrants to the labor market, a substantial proportion, over a third, report long-term unemployment of over a year.

The Unidad has apparently become aware of the programming error, for the recently published findings of the survey for October 1991-March 1992 yields a distribution almost identical to that in our Table 8.

A more detailed analysis was undertaken of the characteristics of the experienced unemployed active job seekers, by age and education. It is difficult to distinguish a strong and consistent relation between age and length of job search over the entire range of intervals. However, if we group data into a short unemployment category of under two months and a longer period of four or more months, there does emerge a clearer association. Duration is revealed to be an increasing function of age. We also include in Table 9 the median number of months duration by age and sex. (The 12-14 year olds are excluded in view of their very small numbers.) As can be seen, the medians evince a rather irregular pattern with respect to age.

With respect to education, the most favorable experience is reported by those with no education. Among the unschooled of both sexes, half of the job seekers had been looking for less than 2 months. This may simply reflect the fact that such individuals have little choice in the jobs open to them; therefore, they accept any job they can get. Among job seekers with different positive levels of schooling, we observe an irregular pattern. We expected to find

sharper differences than were evidenced. In most of the educational categories, the median length of search did not exceed 4 months. (See Table 9)

The observations made thus far seem to indicate that the little visible change in employment conditions has occurred over the past five years. While the unemployment rate is marginally lower, jobs are not easy to come by if one is to judge by the reported length of job search. On the other hand, the situation is far from being hopeless. After all, for most active job searchers with prior experience, jobs can be secured in under 3 months for men and under 4 for women. However, the quality of the available jobs continues to be problematic. The data have yet to register a broad and significant improvement in real wages, though sustained growth should begin to be reflected both in the distribution of the labor force by employment status (more growth in wage- than in self-employment) as well as in earnings. There are signs that improvement in employment opportunities may already be in sight.

It is notable that there seems to be very little in the way of voluntary job mobility if one is to judge by the low frequency of voluntary quits. This may simply reflect a perception of limited alternatives. But it also may reflect the result of legal provisions designed to protect tenure of employment. It will be interesting to see whether sustained economic growth is accompanied by a greater willingness of workers to move to the expanding sectors. We would expect that there are enough workers in inferior jobs in which they do not, in fact, enjoy the protection of these legal provisions who will willingly shift to jobs offering material improvements in the terms of employment.

E. Remunerations. We wish we could affirm our confidence in the reliability of the responses captured by the Unidad on the subject of remunerations. The course of real remunerations along with the rate of unemployment provides one of the most important indicators of the state of the labor market. Unfortunately, the doubts that we have expressed on previous occasions persist. The erratic course of reported earnings and evidence of significant underreporting lead us to advise users to treat earnings data with considerable caution. The available data probably do reflect the general course of earnings in a rough way, but the true values for any particular year may depart from the reported values by some unknowable margin.

We have prepared Table 10 to record the course of earnings over the entire period since the initiation of the surveys in 1988. (The data for 1990 are omitted because we judged them to be of even less merit than those for the other years.) The data presented here reflect the change in the method used to calculate average earnings that was adopted in 1991. Prior to then, average earnings were derived by dividing the total wage bill by the total number of employed individuals, including unpaid family workers. Beginning in

1991, the divisor excluded this category of workers with the result that average earnings are increased. The data for the earlier years were also recalculated to yield a series consistently measured. Table 10 presents earnings as currently measured by the Unidad.

As we have reported earlier, the data record a decline in real average monthly earnings on the order of 19 percent, with the decline among female workers twice as great as that among males. The data reinforce the common perception among economists that inflation is the greatest enemy of the worker. The sharp increase in the rate of inflation in 1990 took its toll in the form of a sharp decline in real earnings from which only a partial recovery has been achieved.

The plausibility of the wage series can be judged by observing the nominal wage series over the period. The data from the 1991-92 survey reveal a sharp increase over those of only six months earlier. Then, those for the 1992 survey six months later evince a decline in nominal earnings, an unlikely event in the presence of continued inflation. The sharp decline in the earnings of female workers is particularly suspect. One possible interpretation of these abrupt changes may lie in an overstatement of earnings in the 1991-92 survey relative to the other surveys, even though it may have been closer to the actual level, that is, reflected less underreporting than usual.

We have disaggregated the earnings data to reflect the course of earnings of two categories of workers whose earnings are least likely to be affected by the contribution of unpaid family workers, permanent and temporary salaried employees. These two categories reveal some striking contrasts. The permanent salaried status is likely to be considered the most coveted in El Salvador since it promises the highest degree of job security. While it may offer greater security, the reported data suggest that it has done rather poorly in maintaining the real value of workers' earnings. Male workers reported a decline in earnings greater than that for all males while women reported a decline greater than that of men but smaller than that of all women.

In contrast, temporary workers reported a much smaller decline for men and a significant increase for women. If employment conditions in the market at large were deteriorating, one would have expected this to be reflected in a sharper decline in the earnings of temporary workers, for their wages are the most likely to be market determined. The observation of an improvement relative to the permanent workers suggests some tightening in the labor market. The tightening need not be reflected in a response in the earnings of permanent salaried workers as long as their absolute earnings remain well above those of temporary workers as they still do. Furthermore, the prospects of job security in their current employment discourages voluntary quits. Thus, employers may feel little urgency to adjust the salaries of such workers. We consider

the increase in the real earnings of temporary female workers to be potentially the most revealing. Taken into consideration with the our earlier observation of a decline in the importance of female domestic servants in the labor force, this improvement in temporary worker earnings suggests that the quality of employment opportunities may be beginning to improve, at least for women.

On numerous occasions we have expressed reservations with respect to the accuracy of the earnings data compiled by Unidat's household survey. Until recently, we had no way of testing the validity of our doubts. However, a new source of information has now become available that permits us to make some comparisons, i.e., FUSADES' Encuesta Mercado de Trabajo. In order to restrict the comparison of earnings to a population as similar as possible to that of the FUSADES sample we have drawn on the earnings of only the permanent salaried workers residing in the metropolitan San Salvador region from the household survey. These represent in their virtual entirety workers in larger formal sector firms. The FUSADES sample is likewise drawn from formal sector firms located in or surrounding the metropolitan region. In Table 11 we present our findings for the totality of included workers and for several economic sectors. Earnings by sex are distinguished.

As can be seen, the earnings reported by FUSADES' establishments exceed those from the household survey by a considerable margin in all sectors except for males in construction. In the others, the margin ranges from 22 to 69 percent. It comes as no surprise to note that the margin is greater in the case of male earnings than of female. (The exception, construction, should not be given much weight; the number of female employees captured by the survey is very small so the sampling error is likely to be very large.) We have long suspected that female informants may not be fully informed of the true earnings of male household members, thus inadvertently underreporting those earnings. However, we should note that there is one source of possible bias that may result in an overstatement of the differential. The data for the FUSADES report date from July 1992 while those of the household survey were drawn over a six month interval, October 1991-March 1992. One would normally expect some upward wage adjustments to have been received by Unidat sampled workers between the date of their interview and July 1992. However, the differentials are so large that they would be likely to remain significantly large (e.g., in excess of 25 percent) even after any wage changes were accounted for.

It would be advisable to continue to follow the earnings as reported by these two sources over time. It is important to determine whether or not the degree of underreporting is constant over time or, if not, by how much it varies. If it varies, the household survey data may not provide an accurate reflection of the rate of change in remunerations over time.

The implications of the existence of underreporting of earnings are very serious. The government should not take at face value reported earnings and income data from the household survey as the sole basis for estimating the extent of poverty. To accept the survey information at face value is likely to result in a considerable overestimation of the number of households in poverty. It will recalled that our analysis of the 1991-92 income and expenditures study reached a similar conclusion. The extent of underreporting of earnings and income appears to be sufficiently large as to counsel the development and use of supplementary indices of economic and social welfare.

Finally, we have examined the correlates of earnings using a Mincer-type earnings function. The results are reported in Table 12. The coefficients are in semi-log form and measure the percentage increase in earnings associated with a one-unit increase in the value of the independent variable. For the variables "married" and "metropolitan," the coefficients measure the change in earnings attributable simply to positive values for these.

Education is universally acknowledged to be a significant determinant of earnings, and the data for El Salvador are consistent with that expectation; for each additional year of schooling men realize a 8.7 and women a 8.1 percent increase in earnings. Experience also contributes to earnings; each additional year adds 4.5 percent to earnings for men and 3.5 percent for women. As expected, the rate of increase falls with additional experience as revealed by the experience-squared term. Each additional hour worked adds .16 and .17 percent to the monthly earnings of men and women respectively. Employment in the formal sector adds 25 percent to the earnings of men and 41.3 percent to those of women. Employment in the metropolitan San Salvador region also is associated with a positive effect on earnings, 21.4 and 18.6 percent for men and women respectively. A married status proves significant for men, adding 14.1 percent to earnings, but insignificant for women.

The results of the regression appear to be very well behaved, that is, conform closely to expectation. They suggest that, to the extent that there is underreporting of earnings, the degree of underreporting does not vary so greatly across individuals as to yield unconventional coefficients.

The results of the regression equation point to some important observations. In spite of the less-than-satisfactory evolution of the economy over the past decade, earnings differentials deriving from higher levels of education have survived at high levels. The high returns to schooling would seem to offer strong support for increased investment in education as a way of improving the economic welfare of the population. Significantly, the proportional rates of return were equally high for women as for men, even though the absolute level of female remuneration is lower.

The regression confirms what is already widely known, that employment in the formal sector carries with it an earnings premium. In an earlier report, a regression which pooled workers of both sexes found formal sector employment to carry with it a premium of 45 percent after taking into consideration various characteristics and location of workers. When the data are disaggregated on the basis of sex, however, a rather different picture emerges. For men, employment in the formal sector carries a smaller premium over employment in the informal than is the case for women, 25 versus 41 percent. The poorer evolution of women's wages in the informal sector may be explained by the faster growth of the female labor force with a subsequent "overcrowding" in the informal sector that restrained increases in earnings. While earnings in the informal sector are lower than those in the formal for individuals with similar personal characteristics they are not static. It should be recalled from the April, 1993 report that, within the informal sector, earnings respond to the various personal attributes in a way similar to that in the formal sector, i.e., employment in the informal does not imply a "dead end job;" education and experience count there as they do in the formal.

Employment in the metropolitan region also bestows higher earnings as compared to the rest of the country. Of course, earnings here are measured in nominal terms only. To the extent that the cost of living in San Salvador exceeds that in the provinces, the differential in real earnings may be smaller. If the perceived difference in the cost of living is less than the difference in nominal wages, one would expect the metropolitan area to exert a continued strong attraction to migrants from other regions.

Finally, the coefficient of the marital status term holds some interest because of its difference with the findings in other countries. Earnings are generally found to be positively associated with a married status. In El Salvador, this remains true for men but not for women. In the case of women, the coefficient carries a negative sign, but the coefficient is not statistically significant. In other words, earnings differences among women appear to be unrelated to their marital status.

III. The Rural Labor Market

Beginning with the 1991-92 household survey the sampling frame was extended to include the rural areas of the country. As of now, we, therefore, have the results of two surveys on which to base some observations. The two surveys cover an entire twelve-month period, October 1991-March 1992 and April 1992-September 1992. It is thus possible to observe some of the seasonal variations in employment that originate in the agricultural sector.

As might be expected, the rural economy is dominated by the agricultural sector. Fully two-thirds of the labor force is

employed there according to the 1991-92 survey. Another 10.6 percent is in industry while commerce and services account for another 9.8 and 8.1 percent. These four sectors account for almost 95 percent of the employment.

The two surveys suggest that there is a seasonal variation in the size of the labor force, though it proves to be much smaller than one might have expected. The October-March survey coincides with the peak of the harvest season during which agricultural employment is at its maximum, 834,417 individuals. During the succeeding 6 months, the labor force records a decline of only 11,083 or slightly more than one percent. Agricultural employment declines by almost 14,000 and industrial employment by 4,500. However, these declines are partially offset by increases in commerce and services. Male employment records a decline while female employment increases.

Within the agricultural sector there are major shifts in the employment status of the labor force as one moves from the peak season to the less active part of the year. In the former, salaried employment, both permanent and temporary, is at its peak. With the completion of the harvest, hired hands revert to self-employment or to an unpaid-family-worker status. The number of employers declines slightly while the number of members employed in cooperative ventures changes little. (See Table 13)

One might expect the unemployment rate to record a significant increase after the completion of the harvest. In fact, the overall rate changed by less than one percentage point over the two periods, from 9.67 to 10.59 percent of the labor force. The rate for men increased from 9.38 to 10.81 while that for women declined from 10.51 to 9.92 percent. The true significance of the recorded unemployment rate is not clear, however. While the 1991-92 survey classified 89,372 individuals as unemployed, it recorded only 31,492 as actively seeking employment during the reference period of the preceding month. This suggests that almost two-thirds of the unemployed were "hidden unemployed," a status that frequently overstates the true number of persons available for employment. Of those actively seeking employment, most had previously been employed in a temporary salaried status. Surprisingly, the duration of employment reported by this group was far shorter than that reported by the urban labor force. It will recalled from Table 8 that only 18.4 and 25.1 percent of experienced workers reported durations of job search of under one and two months respectively. In contrast, fully 42.1 percent of the rural job searchers had been looking for less than one month while another 26.1 percent had been looking between one and two months. Only a fifth of the total had been searching for more than four months. There were only minor differences in the duration of the job search between the sexes.

While the rural labor force appears to be almost as fully employed as the urban, it is clear that the returns to labor are

considerably poorer in the countryside. Table 14 compares the earnings of men and women by economic sector and location. In the sectors that occupy the bulk of the rural labor force earnings are about 60 percent of the urban for men. Rural women realize relative earnings greater than those of men in agriculture, commerce and industry while rural earnings in services are lower relative to those in urban areas.

Part of the observed differences in earnings between the urban and rural sector are likely to be traceable to the smaller size of productive units and to less sophisticated and less skilled nature of production. However, the data of Table 14 overstate the difference in the total income flowing to rural workers. Table 15 records the earnings from the principal employment and total earnings of males by sector of employment in urban and rural areas. Whereas total income averages almost 50 percent greater than earnings from the principal employment in rural zones, it averages only 14 percent in urban areas. The difference between the two measures of monetary returns reflects earnings from secondary activities, remittances, and other sources. Note that the difference is greatest for men engaged in agriculture where income is 80 percent greater than earnings in the principal employment. The large difference may reflect returns to own-account cultivation and sale of crops.

Thus, even after accounting for all sources of income to individuals, the differential between rural and urban incomes remains large. (However, a caveat should be entered at this point. data here refer only to cash earnings and income. Rural residents, especially farmers may also have substantially incomes from home production that are not reflected here.) One of the more meaningful comparison of income is by level of schooling. Table 16 offers such a comparison. Among men, the differential is smallest for those without any education. In general, the differential increases as the level of schooling increases (i.e., rural incomes as a proportion of the urban declines). A similar pattern is visible among women except for those with more than a secondary school education. This may simply reflect the importance in this group of teachers who are governed by the same wage structure. The significance of these differences lies in their implications for migration. Given returns to labor that are a third to a half greater than in rural areas, the incentives to migrate to urban areas must be strong. And as greater educational opportunities are extended to rural areas, the greater will be the number of individuals with an incentive to migrate to the cities.

One last observation regarding the possible impact of seasonal factors on rural sector incomes. The two surveys report average monthly household income, and both urban and rural households are recorded as suffering a decline. While the urban fell by 5 percent, that of rural households fell by 14.2 percent. Ordinarily, one would not expect urban household incomes to decline over a six

month interval, so part of the decline recorded may be the product of sampling errors. Within the rural sector, one would expect much of this decline to be accounted for agricultural households that had completed the harvest and sale of annual crops. However, we are not yet able to break out households by the sector of employment in order to observe the full seasonal swing in agricultural.

IV. Conclusion

While the developments in the labor market over the years covered by the Unidad's household surveys do not present a perfectly rosy picture, there are signs that the worst is past and that improvements in employment conditions can be expected as long as the economy can be kept on an expansion path. While unemployment rates have fluctuated within a narrow range they are typically lower at the end of the period than at the beginning. That this should be so in the light of the substantial growth in the labor force is heartening. On the other hand, the monetary returns to labor remain below levels of 1988. However, after hitting bottom at the end of 1990, real earnings have been recovering and may be expected to continue to do so as long as reasonable price level stability can be maintained.

In the coming months, improving employment conditions may be most visible in the female work force just as they have been in the recent past. The entry of new foreign firms in the light manufacturing sector is resulting in the creation of new job opportunities largely for women. This should facilitate the movement of women from inferior to more productive and better remunerated jobs. The prospects for men should also improve. The large anticipated investment in infrastructure should favor them. However, peace is bringing with it a "once-and-for-all" increase in the male civilian labor force as demobilization of the armed forces of both sides proceeds. Unless the reconstruction effort gets under way quickly, we may see an increase in male unemployment rates in the short run.

One of the imponderables is the response to peace of those Salvadorans that left the country to escape the violence. Their return could have either favorable or unfavorable implications for open unemployment. On the one hand, many of those who have been abroad have accumulated savings that may be invested in productive activities in El Salvador, thus creating new job opportunities. On the other, the return of large numbers of migrants may lead to increases in the labor force that will restrain increases in real wages and postpone a decline in the unemployment rate.

At this juncture, the government of El Salvador would be well advised to maintain conditions favorable to investment and the creation of expanded employment opportunities. Maintenance of price stability is important to the safeguarding of the real earnings of the labor force. Reliance on markets to allocate resources is

likely to result in their more productive use. Reform of the labor code that imposes increased burdens on employers and/or increases the already exaggerated rigidities governing employment relationships should be avoided or attenuated if possible. Investment in human capital is an essential ingredient to the improvement of the economic welfare of the labor force in the long run. Not only must wider access to education be assured but its quality must also be improved. Joint efforts with the private sector should be encouraged to assure the creation of an adequate supply of skilled workers for industry. Finally, of course, the maintenance of a stable political environment is critical to the realization of the country's hopes for an early and sustained economic recovery.

Table 1.
Age Specific
Labor Force Participation Rates of the Urban Population
by Sex, 1988-92

Age	Males				Females					
	1988	1989	1991	1991-92	1991	1988	1989	1991	1991-92	1992
10-14	5.6	9.4	9.1	13.2	8.8	3.8	4.3	5.8	8.9	5.0
15-19	39.8	43.4	42.8	45.9	42.3	22.5	26.1	26.4	28.6	25.0
20-24	80.3	78.7	78.4	77.9	76.5	42.4	48.2	51.3	52.4	52.3
25-29	91.5	95.1	94.1	93.2	93.5	51.1	59.6	60.9	61.6	62.9
30-39	96.4	98.1	96.3	95.9	96.4	57.5	64.7	67.4	68.9	69.0
40-49	94.5	96.2	95.9	96.1	95.7	55.8	58.9	65.7	65.8	65.9
50-59	88.2	91.6	91.6	89.9	90.6	38.1	44.0	52.1	49.7	47.7
60 & over	51.8	58.0	55.1	55.0	55.6	18.9	23.5	24.9	26.7	27.3
Totals	62.7	65.8	64.2	66.2	64.7	35.6	40.4	43.1	44.5	43.5

Source: Departamento de Investigaciones Muestrales, Encuesta de Hogares de Propósitos Múltiples, various issues.

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Table 2.
Sectoral Distribution of the Urban Labor Force, 1988 and 1992

Sector	1988		1992	
	Number	Percent	Number	Percent
Agriculture	57,814	8.1	74,164	8.0
Mining	342	0.1	700	0.1
Manufacturing	155,415	21.7	218,932	23.5
Electricity & gas	5,157	0.7	8,572	0.9
Construction	44,177	6.2	53,810	5.8
Commerce	175,211	24.5	228,298	24.6
Transportation & Communication	39,076	5.5	48,639	5.2
Finance	21,679	3.0	20,822	2.2
Services	217,602	30.4	275,876	29.7
Totals	716,473	100.2	929,813	100.0

Source: ibid.

Table 3.
**Distribution of the Urban Labor Force by
Employment Status and Sex, 1988 and 1992**

Status	Males		Females	
	1988	1992	1988	1992
Employer	3.8	8.3	2.3	3.4
Self-employed	12.6	18.3	28.8	37.3
Unremunerated Family Worker	3.0	3.4	6.3	5.7
Permanent Salaried	56.7	53.5	37.2	37.0
Temporary Salaried	23.8	14.0	8.8	4.8
Domestic Service	0.1	0.5	16.6	11.5
Other	-	1.9	-	0.3
Totals	100.0	99.9	100.0	100.0

Source: ibid.

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Table 4.
Urban Unemployment Rates 1988 - 1992

	1988	1989	1990	1991	1991-92	1992
Totals	9.4	8.4	10.0	7.5	7.9	8.2
Males	11.0	9.5	10.1	8.3	8.4	9.5
Females	7.1	6.8	9.8	6.6	7.2	6.6

Source: ibid.

Table 5.
Time Elapsed Since Last Employment
of the "Hidden Unemployed" by Sex,
October 1990 - February 1991

Time Elapsed	Males	Females
Less than 1 year	47.9	34.4
One to 5 years	15.8	18.8
More than 5 years	4.5	5.8
Never Employed	31.8	41.0
Totals	100.0	100.0

Table 6.
"Hidden Unemployed" by Reasons for Separation
from Previous Employment by Sex, 1990 -91

Reason	Males		Females		Totals
	Number	Percent	Number	Percent	
Establishment closed	338	4.4	39	2.4	
Discharge	627	8.2	229	19.3	
Decline in business	3,969	52.1	259	16.2	
Quit	475	6.2	373	23.3	
Personal or family obligations	664	8.7	243	15.2	
Illness or accident	274	3.6	-		
Totals	7,622	99.9	1,603	100.1	9,225
Had no prior work experience	3,507		1,116		
Grand Totals	11,129		2,719		13,848

Note:

Our tabulations yielded only 13,848 individuals as "hidden unemployed." This number falls short of the 16,965 so classified by the Unidad. We have been unable to account for the difference of 3,215.

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Table 7.
Reasons Given for Separation from Most Recent Employment
by Active Job Seekers by Sex, 1990 - 91

Reason	Males		Females	
	Number	Percent	Number	Percent
Establishment closed	798	3.3	1,137	7.3
Labor conflict	144	0.6	229	1.5
Discharge	6,951	28.8	3,479	22.3
Business slowdown	9,052	37.5	1,822	11.7
Quit	2,106	8.7	2,492	16.0
Personal or family obligations	1,976	8.2	4,702	30.1
Illness or accident	1,163	4.8	639	4.1
Incapable of working	89	0.4	-	-
Other	1,834	7.6	1,120	7.2
Totals	24,113	99.9	15,620	100.2

Table 8.
Distribution of Unemployed Workers
by Duration of Job Search
by Sex 1990 - 91
(percent)

Duration in Months	Workers with Prior Work Experience		Workers without Prior Work Experience	
	Males	Females	Males	Females
Less than 1	18.4	8.7	9.1	5.7
1 but less than 2	25.1	25.1	12.3	18.1
2 but less than 4	18.5	16.5	14.0	14.2
4 but less than 12	21.3	20.3	27.6	21.0
12 or more	16.7	29.4	36.9	40.9
Totals	100.0	100.0	99.9	99.9

Table 9.
Distribution of Unemployed Workers with Prior Work Experience
by Age, Education, Duration of Job Search, and Sex (percent)
1990 - 91

Age	Duration of Job Search			
	Less than two months		More than four months	
	Males	Females	Males	Females
12 - 14	74.9	-	0	-
15 - 19	52.6	44.7	21.0	33.1
20 - 24	46.6	35.3	38.3	43.6
25 - 34	37.2	28.1	46.8	62.1
35 - 44	45.2	23.0	30.1	46.3
45 - 54	32.0	27.4	54.3	65.9
≥ 55	37.1	100.0	34.3	-
Years of Schooling				
None	54.3	59.2	21.6	37.2
1 - 3	37.1	30.3	41.5	69.7
4 - 6	38.3	22.7	28.5	42.6
7 - 9	35.4	36.5	38.5	42.5
10 - 13	41.0	32.6	47.2	49.9
University/ incomplete	13.9	39.2	72.3	60.7
University/ completed	19.7	-	60.0	-
Other	51.4	26.6	48.6	73.5

Table 10.
Nominal & Real
Average Earnings of Urban Workers
by Sex, 1988-1982
(colones)

Nominal:	1988	1989	1990-91	1991-2	1992	Percent Change 1988-1992
Total	725.03	722.60	889.40	1,137.09	1,115.94	53.9
Males	812.36	860.62	1,017.57	1,335.48	1,344.10	65.5
Females	606.25	551.14	727.29	894.12	857.90	41.5
Real (Pesos of 1988)						
Totals	725.03	655.60	549.76	635.42	587.09	-19.0
Males	812.36	780.82	628.98	746.29	707.12	-13.0
Females	606.25	500.04	449.55	499.65	451.34	-25.6
Consumer Price Index	100.0	110.2	161.8	179.0	190.1	90.1
Permanent Salaried Nominal						
Totals	807.55	916.21	1,095.68	1,286.44	1,283.81	59.0
Males	840.49	979.62	1,275.85	1,368.23	1,347.56	60.3
Females	739.34	801.22	1,189.28	1,147.23	1,148.00	55.3
Real						
Totals	807.55	831.41	677.18	718.68	675.69	-16.3
Males	840.49	888.95	788.54	764.37	708.87	-15.7
Females	739.34	727.06	735.03	640.35	603.89	-18
Temporary Salaried Nominal						
Totals	412.03	445.04	606.49	683.90	754.98	83.2
Males	441.93	467.12	623.52	730.38	786.64	78.0
Females	302.01	376.09	547.70	548.84	647.43	114.4
Real						
Totals	412.03	403.83	374.84	382.06	397.36	-3.7
Males	441.93	423.88	385.36	408.03	414.02	-6.3
Females	302.01	341.28	338.50	306.61	340.86	12.9

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Table 11.
Comparison of Monthly Earnings as Compiled
from the Unidad Household Survey and FUSADES's
Establishment Survey
(colones)

Sector	EHPM	FUSADES	<u>FUSADES</u> EHPM
Totals	1,452.62	1,939.90	1.34
Males	1,591.91	2,185.00	1.37
Females	1,238.67	1,508.50	1.22
Manufacturing	1,292.31	1,763.20	1.36
Males	1,502.84	2,141.30	1.42
Females	979.63	1,229.30	1.25
Construction	1,463.80	1,719.50	1.17
Males	1,483.79	1,687.20	1.17
Females	1,266.79	2,080.50	1.64
Commerce	1,300.88	2,063.40	1.59
Males	1,362.45	2,299.00	1.69
Females	1,199.70	1,651.10	1.38
Services	1,481.89	2,259.10	1.52
Males	1,617.19	2,479.50	1.53
Females	1,330.49	1,951.30	1.47

Notes:

The comparison groups are Metropolitan San Salvador permanent salaried workers for the Unidad's household survey (EHPM) and all employees for FUSADES. Hourly earnings reported by FUSADES were converted to monthly earnings by multiplying by 190 (i.e. 44 hrs. x 4.3 weeks)

Sources:

Unidad de Investigaciones Muestrales, Encuesta de Hogares de Propósitos Múltiples Urban y Rural, October 1991 - March 1992, Vol. I, Table E 03, p. 319.

FUSADES, Encuesta Mercado de Trabajo, July 1992, Table 9.

Table 12.
Regression Coefficients of an Earnings Function
by Sex

Independent Variable	Males	Females
Education	.087047 (.002522)	.080811 (.003477)
Experience	.045499 (.002053)	.034509 (.002587)
Experience squared	-.000566 (.000031)	-.000410 (.000036)
Hours worked	.001562 (.000088)	.001676 (.000086)
Formal	.249525 (.020640)	.413308 (.029216)
Married	.141234 (.067061)	-.039196 (.040732)
Metropolitan	.214659 (.021794)	.186406 (.025883)
Constant	4.541256 (.082543)	4.584687 (.075625)
Adjusted R ²	.3695	.36609
F	371.9346	248.00499

Note: Values in parentheses are standard errors.

Table 13.
Labor force Employment Status in Agriculture,
October 1991 - March 1992 and April-September 1992

Status	Employment	
	October-March	April-Sept.
Employer	64,489	62,503
Self-employed	112,560	153,513
Unremunerated family worker	112,562	126,209
Cooperativist	7,486	7,051
Permanent salaried	81,516	74,876
Temporary salaried	171,195	110,933
Other	-	898
Totals	549,808	535,983

Source: Departamento de Investigaciones Muestrales, Encuesta de Hogares de Propósitos Múltiples Urbano y Rural, October 1991- March 1992, Table D 05, p.240 and ibid., Preliminary tabulations from the April - September 1992 survey

Table 14.
Average Monthly Cash Earning by Sector of Employment
Urban and Rural, by Sex,
October 1991 - March 1992

Sector	Males			Females		
	Urban	Rural	Percent 1.	Urban	Rural	Percent 1.
Agriculture	797.71	498.77	62.5	614.52	436.44	71.0
Mining	3,706.14	802.74	21.7	672.79	300.00	44.6
Industry	1,245.01	745.63	59.9	802.66	511.14	63.7
Public Utilities	1,680.93	1,164.86	69.3	1,518.86	370.27	24.4
Construction	1,058.83	726.44	68.6	1,104.80	616.67	55.8
Commerce	1,461.06	881.11	60.3	963.10	609.24	63.3
Transport & Communications	1,708.09	1,028.58	60.2	1,443.57	572.96	39.7
Finance	2,218.30	797.58	36.0	1,635.30	800.00	48.9
Services	1,479.67	801.52	54.2	866.35	403.70	46.6
Totals	1,335.48	583.82	43.7	894.12	493.12	55.2

Note: 1. Rural earnings as a percent of urban

Source: ibid. 1991-92, Table E 03, p. 195 and p. 252

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Table 15.
Average Monthly Cash Earnings from Principal Employment
and Totals Income of Urban and Rural Males by Sector,
October 1991 - March 1992

Sector	Urban		Rural	
	Earnings	Income	Earnings	Income
Agriculture	797.71	1,467.57	498.77	847.32
Mining	3,706.14	3,723.59	802.74	890.48
Industry	1,245.01	1,310.54	745.63	875.57
Public Utilities	1,680.93	1,790.55	1,164.86	1,215.27
Construction	1,058.83	1,134.97	726.44	829.14
Commerce	1,461.06	1,562.73	881.11	1,008.67
Transportation & Communications	1,708.09	1,853.64	1,028.58	1,095.31
Finance	2,218.30	2,632.74	797.58	867.09
Services	1,479.67	1,656.06	801.52	900.22
Totals	1,335.48	1,524.08	583.82	866.25

Note: Includes only employed individuals

Source: ibid. Table E 07, p.197 and p. 254.

Table 16.
Average Monthly Income by Education, Urban and Rural By Sex, October 1991 - March 1992

Years of School Completed	Males			Females		
	Urban	Rural	Percent 1.	Urban	Rural	Percent 1.
None	924.66	791.10	85.6	618.74	446.20	72.1
1 - 3	1,091.86	857.09	78.5	658.16	524.65	79.7
4 - 6	1,198.94	855.26	71.3	774.87	556.62	71.8
7 - 9	1,159.32	764.98	66.0	870.51	459.77	52.8
10 - 12	1,625.74	1,182.27	72.7	1,261.99	746.33	59.1
13 or more	2,979.14	1,448.54	48.6	1,617.60	1,160.88	71.8
Other	1,008.89	1,120.73	111.1	854.45	-	-
Totals	1,460.09	835.05	57.2	927.77	502.43	54.2

Note: All those reporting income are included here.

1. Rural income as a percent of urban

Source: ibid. Table E 06, p. 197 and p. 254

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