

ECONOMIC CHARACTERISTICS OF THE POPULATION OF VIETNAM
(major findings from an analysis of 1999 Census)

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1. Introduction

In Vietnam, population censuses constitute the major source of data on economic activity of the population. Three national population censuses have been taken, following a ten-year cycle since 1979. The first national population census was conducted in 1979, the second in 1989 and the last census in 1999 was the third.

The measurement of economic activity in the census is extremely complex. While a labor force survey can afford the inclusion of many questions, a census tries to capsule employment experience into very few questions. In the 1999 census, three questions were designed altogether to collect information on economic activities and employment.

The three censuses implemented in Vietnam starting in 1979 have several differences in definitions and in the way information on economic activity has been collected. This causes some difficulties in the comparison of data from the different years. In particular, the lack of clear documentation, and very different classification systems and methodology used in the 1979 census make comparisons with later years invalid. Thus, this paper mainly focuses its analysis on the censuses in 1989 and 1999.

In the 1999 census, the usual activity approach was adopted. The census asked all persons aged 13 years and above for their main activity during the past twelve months. This was used to classify a person into one of the three types of activity – employment, unemployment and the inactive (out of the labor force). If two activities had the same amount of time, the activity involved in at the time of the census would be recorded. The census in 1989 also adopted the usual activity approach, but differences exist in the concepts and definitions used by two censuses.

In the 1989 census, people were classified as employed if they worked 6 or more months of the year, which corresponds to the 1999 census. However, the employed population also included persons who were employed at the time of the census even if they had worked less than 6 months of the year, or had been unemployed for less than 1 month. Consequently, the employed population according to the 1989 definitions will also include some people categorized as unemployed or inactive when using the 1999 definitions.

In the 1989 census, the unemployed population included only persons who were not working at the time of the census, had not worked for the past month, and were available for work. In contrast, in the 1999 census the unemployed population included persons who were available for work but did not work for over 6 months in the 12 months prior to the census. In this case, the unemployed according to the 1989 definition will be lower than with the 1999 definition.

For both the 1989 and 1999 census, the definition of the economically active population is the total of employed and unemployed people. However, because some of the employed category (those working fewer than 6 months of the year) in the 1989 census includes also people who may have been economically inactive during the 6 months they did not work, the total of economically active in 1989 will be slightly higher than it would be with the 1999 definition.

2. The economically active population

Despite the above-mentioned inconsistencies, an attempt can be made to compare the broad picture in 1989 and 1999. As can be seen from Table 2, in 1989 there were more than 38 million persons aged 15 and above, of which 70.4 percent were employed for six months or more in the year preceding the census. The total economically active population amounted to 74.3 percent of the population, which is sometimes referred to as the labor force participation rate (LFPR). Thus the LFPR has fallen slightly since 1989. By 1999, the total population aged 15 and above had grown to more than 50 million, of which 70.6 percent were working, a slight increase over 1989. It is interesting to observe, however, that when unemployment is taken into account, such as in the measure of the economically active population, the figures show a decline since 1989, in this case by almost one percent. The percentage of persons 15 and above, who are economically inactive shows an increase between the censuses from 25.7 percent to 26.5 percent.

Overall, almost 80 percent of males are economically active, compared with less than 68 percent of females. The structure of the labor market differs markedly between rural and urban areas. Agriculture employment still characterizes the rural areas and as a result, economic participation is considerably higher for both rural males and females. However, in rural and urban areas males have higher participation rates. The census shows that 82 percent of rural males are economically active compared with 72 percent of rural women.

Of interest to labor force planners, among others, is the finding that gender differentials are higher still in urban areas. For both men and women economic participation remains lower in urban than in the rural areas. But the differences between the sexes are much wider. Among males, 74.5 percent are economically active. The corresponding rate for women is 56.4 percent. This also means that the percentage of women defined as economically inactive, at 43.6, is approaching twice as high as the corresponding economic inactivity rate for males, at 25.5 percent.

As mentioned above, the economically active population comprises those who mainly work, the employed population, and the unemployed population. Table 2 shows of more than fifty million persons of working age (defined for the purpose of this report as ages 15 and above), 73.5 are economically active. Of the economically active population, 96 percent are employed and 4 percent unemployed.

3. The economically inactive population

As can be seen in Table 3, 26.5 percent of the population aged 15 and above are not economically active and are thus described as being economically inactive. Of course this does not mean that they did no work during the reference period or that their contribution to their families, communes or to the development efforts of the country were not valuable. It does mean, that using the strict census definitions, the main activities they pursued during the year are not classified as economic. Four major activity categories are provided for this group, housework, education, invalid-unable to work, and other, which largely includes persons who say they do not want to work, for example, because they are retired.

The most important reason for not being economically active is through continuing education at ages 15 and beyond. 32 percent of the economically inactive population claim to be students. An almost equally large number, amounting to about 30 percent, claim to engage most time at home duties.

Even though there is some inconsistency between the 1989 and 1999 censuses, it is nonetheless useful to consider the changing activity structure for the economically inactive population over the past decade. Overall, the patterns appear to be similar. But there are two differences, which are worth commenting on. First, the rising percentage at school at age 15 and above is consistent with the results presented earlier in this report, and points to the improvement in education, especially at the higher levels. Second, the steep decline in the proportion of persons who claim to be invalid and unable to work is striking.

The rise in the population attending school is very steep, amounting to about 10 percent of the economically inactive population since 1989. While sex differentials have narrowed, the 1999 census reveals that about 56 percent of students are male. Continuing school attendance is clearly related to age and is thus concentrated mostly in the younger 15-19 age group. For both males and females, about 85 percent of the population claiming study as their main activity are aged 15-19. Only about 2 percent are aged above 25 years.

Differences also emerge between urban and rural dwellers, although the differences do not appear to be large. In both rural and urban areas, the percentage of economically inactive males who are studying is more than twice the figure for females.

Table 6 also reveals other interesting results for the economically inactive population. Those reporting home duties, as in 1989 and still not surprising perhaps, are predominantly female. Bearing in mind that the figures for invalids refers only to those who give this as a reason for not mainly working last year. It thus excludes persons, who, though they may have some mental or physical handicap, are under age 15 or mainly worked in a job. It also excludes persons who did not work, but engaged in other non-economic activity, such as study, home duties or old age retirement, and referred to these other activities as the main reasons for not working in a job. At face value, the figures in the above table suggest that males are more likely to be invalid than females, about 16 percent of the economically inactive population for males compared with about 10 percent for females. But the percentages are misleading; as females are more likely to be economically inactive than males, the percentages for females are based on larger numbers. In absolute terms, the number of invalid males reported in the census is 784,532 compared to 863,133 females.

The distribution of invalid persons by age illustrates a close relationship. Generally speaking, as age advances, a greater percentage of the economically inactive claim to be invalid. This progression reaches a peak for the age group 55-64, presumably most affected by the wars; more than 35 percent of the economically inactive at these ages report that they are invalid. For ages 65 and above, result of the 1999 census is in contrast to 1989, corresponding to 15 and 46 percent respectively. The reason for this is mainly due to a change in the census instructions: in the 1999 census, those reported as retired or old age should be recorded as “other” (without demand for work), not “invalid”.

4. Employed population

Over the two decades starting with the 1979 census and ending with the 1999 census, many significant changes have taken place in the structure of employment by sex, urban/rural residence, age, sector, industry and occupation. These changes both reflect and influence the policy changes that have taken place over this period.

4.1 Levels and differentials

The census results for Vietnam showed as of the 1st of April 1999, the total employed population aged 15 and over was 35.8 million persons. While the female population at working age is larger than that of males in both rural and urban areas, Table 8 shows that more males are employed than females. Compared with males (about 77 percent), a higher percentage of females is employed in the rural areas (almost 80 percent of the total), reflecting the relatively low labour force participation rate of women in the urban areas.

Table 9 provides a distribution of the employed population by broad age group for 1989 and 1999. There has been a clear ageing of the work force during the past ten years. One important reason has been the effect of continuing education, resulting in the delay in entry to the work force by young people. But the major reason is demographic. The large

cohort aged 25-34 in 1989, too young to have played a large part in the wars, have reached the ages 35-44 in 1999 and contribute about one quarter of the employed population. In 1989, however, the population aged 35-44 had suffered heavy wartime mortality and contributed a little over 17 percent to the employed population. Although some differences exist in the sex differentials, they are relatively small. Noticeable, is the higher participation of females at ages 15-24, suggesting that they are not taking advantage of the growing opportunities in education to the same extent as their male counterparts.

4.2 Economic sector

Table 10 has several points of interest and shows the way in which the economy is developing. In the ten year period, 1979-1989, very little change occurred. Between 1989 and 1999, by contrast, the changes are very apparent. Until 1989, the collective sector accounted for more than half of the employed population. Of the remainder, state owned organisations accounted for about one-third while other kinds of organisation accounted for the other two thirds. In 1999, employment in collectives has declined to about half the 1989 level, now accounting for 27 percent of the employed population. Employment in state owned enterprises has similarly declined, accounting in 1999 for 10 percent. These losses have been achieved at the expense of the *other* category that has roughly doubled to 63 percent.

As noted in Table 11, the state and collective sectors account for 37 percent of the employed population. By far the largest sector outside of these two is the private, which alone accounts for 61 percent of the work force and has clearly made the greatest absolute gains since 1989. The other sectors, including capital, mixed and 100% foreign capital remain relatively small but have no doubt also increased their share since 1989. Rural/urban differences are quite marked. Not surprisingly, the collective sector is concentrated in the rural areas, accounting for about a third of rural employment. The private sector, at a little over 60 percent, shows little variation in between rural and urban areas. All other sectors contribute a higher share of employment in the urban areas. The state sector accounts for 27 percent of employment in the urban areas compared with about 5 percent in the rural areas. Employment in the mixed sector is similarly concentrated in the urban areas.

The distribution of employment by age group across sectors reveals some interesting findings. Overall, more males are employed than females. This is illustrated potently in the state sector. In total, male employment in the sector exceeds female employment. But there are striking differences by age. At the older ages above 45 (and even more particularly at ages 55 and above) male employment considerably outstrips female employment, accounting for more than 60 percent of the total. However, the pattern reverses itself at younger ages. Thus, for the 15-29 age group over 54 percent of employees are female. To some extent, this reversal is a direct result of the narrowing of the gender gap in education. But there are other possible explanations, including the shift of males to the private sector and changes in the recruitment policies of government. The employment situation in the collectives reflects the contribution that women are making

to the work force in rural areas. Indeed, at all ages the percentage of female employees exceeds that for men. Growth in the private sector has been rapid in the past ten years. Significantly, in all age groups, the capital/private sector absorbs a majority of males.

A rather different situation exists in the remaining sector, described as other, that includes mixed and 100% foreign capital enterprises. To an extent even more striking than the state sector, the gender distribution varies considerably with age. At ages of 45 and above, almost three-quarters of people employed in this sector are males. Even at ages 30-44, though less pronounced, a clear majority is still male. By contrast, more than two-thirds of persons employed in this sector aged 15-29 are female. This table thus illustrates the importance of analysing the structure of the labour market by age to understand the fundamental changes that are occurring.

4.3 Industrial structure

This analysis limits itself to three broad industrial sectors because the 1999 figures are based on sample results and many of the detailed categories are very small and also to allow comparison between 1989 and 1999 as detailed categories are not strictly comparable. The three sectors are: i) Sector I which includes agriculture, forestry and aqua-culture; ii) Sector II which includes mining, energy and water supply, industry, construction and transportation; iii) and Sector III which consists of different types of service industries.

Table 13 presents data on the change in industrial structure between 1989 and 1999. Note, the increase shown here is an underestimate of the true increase because in 1989 those employed less than 6 months are included while in 1999 they are not. The industrial structure of temporary employment in 1989 is unknown. As is evident in Table 13, Vietnam is still primarily an agricultural country in terms of the employment structure. The biggest absolute increase in employment between 1989 and 1999 was in sector I, but in relative terms, because of their large base, sectors II and III grew at a faster rate. Out of the total increase in jobs between 1989 and 1999, over half were in sector I, one third in sector III and the rest in sector II.

The increase in the number of service and industrial sector jobs is a positive development yet, the large size of the workforce in agriculture as observed in Table 14 means industry and services will have to create even more jobs to not only continue absorbing the large number of workers newly entering the workforce, but to increase the pace of shifting agricultural workers into other sectors as well. Between 1989 and 1999, the share of workers in agriculture declined as we saw a small shift into industry, and a larger shift into services.

Among both male and female employed individuals, the agricultural sector accounted for the largest proportion by far, averaging around 70 percent. Service sectors were more important for women's employment than industry, while the opposite was true for men.

Agriculture accounted for about one fifth of employment in urban areas, with services and industry about equal around 40 percent. In urban areas, over half of women were employed in services, compared to less than one third of men. On the other hand, men accounted for a significantly larger share of industrial employment than women.

In rural areas, agriculture remains the main creator of jobs. Over 80 percent of jobs held by men and women were in agriculture. Although industry and services accounted for a small share of rural employment, as in urban areas, men relied more on industry and women more on services for employment. Given the severe land constraints in rural areas, without greater job creation in non-agricultural sectors in rural areas, we are likely to see a greater migration of workers to urban areas in search of higher productivity jobs in industry and services.

4.4 Occupational structure

The study of the occupational structure of employment is not straightforward. One of the main problems is the definition of different classifications of occupations. The more complex and detailed, the more difficult it is to collect the information and ensure comparability. Also, occupations change over time requiring updating of classification systems. In the 1989 census, a list of 34 occupations was used. In 1999, the occupational classification was broken down by different levels, of which the first level contained nine main occupational groups as follows:

1. Legislators, senior officials and managers
2. Professionals
3. Technicians and associate professionals
4. Office workers
5. Services workers and shop and market sales workers
6. Skilled agricultural and fishery workers
7. Craft and related trades workers
8. Plant and machine operators and assemblers
9. Unskilled occupations

Since the 34 occupation categories in 1989 could not be re-grouped into the nine main categories used in 1999, we cannot trace the change in occupational structure of employed persons over the years between 1989 and 1999.

As shown in the Table 15, the occupational structure of employment stills leans heavily towards unskilled, low productivity occupations. Those doing unskilled jobs, account for

almost 70 percent of total employment. Skilled industrial workers make up the next largest category with only 9 percent of the total.

The occupational patterns differ along traditional lines by sex. Females account for a higher share than men in mid-level professionals (including teachers and nurses/midwives), office work, services and sales and unskilled occupations. Men, on the other hand, dominate in management, high level professions, skilled agriculture and skilled industrial jobs.

Urban rural differences in the occupational distribution are striking. In urban areas, unskilled occupations only account for less than 30 percent of the total compared to over 80 percent in rural areas. Services and sales, skilled industrial work account for a relatively large share in urban areas, but are only minor employers in rural areas.

Studying the urban-rural differentials in occupations illustrates again how much more diversified the economies of urban areas are compared to rural (see Table 4.16). Urban areas account for more than half of employment in almost all occupations with the exception of mid-level professionals, skilled agricultural workers and unskilled occupations.

Study of sex differentials within each occupation gives a clearer picture of the gender gap in qualifications and the nature of work. The occupation requiring the highest level of skills or education is only 19 percent female. High level professionals have a lower share than mid-level professionals. Women have lower employment in industry, and the low share of women in skilled industry and machine operators reflects this. But in agriculture too, women account for only 37.6 percent of those employed in skilled agricultural occupations.

5. Unemployed population

Unemployment is a key economic indicator to assess the health of an economy and society. In Vietnam, a poor country with an underdeveloped economy and rapid population growth over several previous decades, unemployment is a pressing issue of great concern to policy makers.

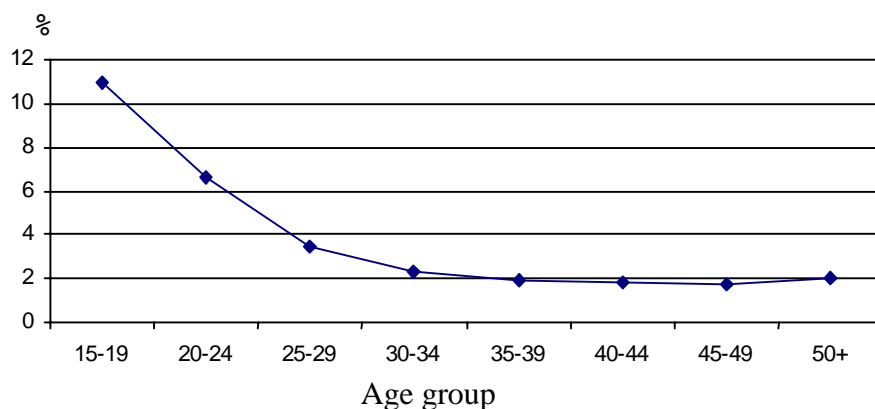
As defined at the first page, this group comprises those who mainly did not have a job during the reference year, and claimed they were available for work.

Unemployment accounts for 4 percent of the economically active population. But the structure of unemployment is complex, accounting for skewing in the various distributions analysed. The urban unemployment rate is more than three times the rural rate. The concept of unemployment is less clearly applicable to an agrarian culture than to wage employment more common in urban areas. Gender differences are less wide than

the influence of rural/urban residence, but they do exist, and rates for males are notably higher than those for females.

Age plays a very strong role in unemployment. Generally, unemployment is negatively associated with age, the older the person the less likely to be unemployed.

Percent distribution of the unemployed population by age, Viet Nam 1999



The graph above demonstrates this relationship. For Viet Nam as a whole, the unemployment rate is 4 percent. But for the youngest age group, 15-19, the rate is close to 11 percent. As age advances, it is also clear that the rate falls. The exception to this observation is in the oldest age group, 50 and above, where perhaps there is some resistance to forced retirement and the problems of re-employment.

The interaction of urban/rural and age differentials provides very relevant data to labour force planners, suggesting that the national average may be misleading and identifying pockets of high unemployment will be important.

It is most apparent that unemployment is a greater problem for young urban males than any other group identified in this brief analysis. Indeed, the census shows that more than one-quarter of economically active 15-19 year-old are unemployed. The figure for 20-24 year-old urban-dwellers remains high at more than 15 percent. While rural figures lag behind urban figures, the age pattern of unemployment is very similar. Nearly 26 percent of 15-19 year-old economically active urban-dwellers are unemployed, more than three times the rate for all rural-dwellers.

Understanding the nature of unemployment requires analysis of the qualifications of the unemployed. Are people unemployed because they have no skills, or are skilled people also unemployed as there is a mismatch between training and the needs of the labour market?

Overall, Table 18 shows unemployment rates are lowest among those with secondary vocational or undergraduate diplomas. This is true for both urban and rural areas. In

rural areas unemployment is also low for those with no qualifications or certificate whereas in urban areas, those people apparently have the hardest time finding a job. This reflects the fact that urban labour markets tend to be more formal and require more formal training and qualifications than rural areas. In rural areas primarily the highly educated suffer from unemployment as they tend to be overqualified for the type of work found there.

Although the group is small, people with college/university degrees have relatively high unemployment rates suggesting that the need for such high levels of education in Vietnam's economy is not high, or the fields they study do not match the current demand of the Vietnamese labour market. Relatively higher unemployment rates among technical workers with certificates also suggests a problem with the quality or content of technical training which is perhaps not meeting the needs of employers.

As with overall unemployment, in all qualification categories under analysis, men have higher unemployment rates.

Table 19 shows quite clearly that the largest share of the unemployed have only primary education. In rural areas, the vast majority of the unemployed have primary or lower education. In urban areas, those with secondary education account for a substantial share of the unemployed. Unemployed women tend to be slightly disadvantaged in terms of education compared to their male counterparts, but not significantly so.

Thus, it appears that unemployment is both a problem among the less educated who are likely to have few choices in the type of employment they seek and among the better educated, who may be taking time to find the most appropriate jobs.

Appendix: Economic Characteristics of the Population of Vietnam.

Table 1: Differences in definition of economically active population 1989-1999

<i>Definition</i>	<i>1989 Census</i>	<i>1999 Census</i>
People working 6 or more months in the 12 months prior to the census.	Employed	Employed
People employed (or unemployed for less than one month) at the time of the census who had worked fewer than 6 months in the previous 12 months and were without work but available for work for the remainder of the year.	Employed	Unemployed
People employed (or unemployed for less than one month) at the time of the Census who had worked fewer than 6 months in the previous 12 months and were without work but not available for work for the remainder of the year.	Employed	Inactive
People without work but in need of work for the greater part of the 12 months prior to the Census and not working in the month prior to the Census.	Unemployed	Unemployed

Table 2: Economic activity status for persons aged 15 and above, 1989 and 1999

<i>Main activity</i>	<i>1989</i>		<i>1999</i>	
	<i>Persons ('000)</i>	<i>%</i>	<i>Persons ('000)</i>	<i>%</i>
Economically active	(28,420)	(74.3)	(37,324)	(73.5)
-Employed	26,918	70.4	35,847	70.6
-Unemployed	1,502	3.9	1,477	2.9
Economically inactive	9,822	25.7	13,442	26.5
<i>Total</i>	<i>38,242</i>	<i>100.0</i>	<i>50,766</i>	<i>100.0</i>

Table 3: Percentage of economic activity, by sex and rural/urban residence,
Viet Nam 1999

<i>Economic activity status</i>	<i>Rural</i>		<i>Urban</i>		<i>Total</i>		
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Both sexes</i>
Economically active	81.6	71.7	74.5	56.4	79.8	67.8	73.5
Economically inactive	18.4	28.3	25.5	43.6	20.2	32.2	26.5

Table 4: Main non-economic activities, Viet Nam 1989-1999

<i>Main non-economic activity</i>	<i>1989</i>	<i>1999</i>
Home duties	29.3	29.9
Study	22.2	32.0
Invalid-unable to work	27.1	12.2
Other	21.4	25.9
<i>Total</i>	<i>100.0</i>	<i>100.0</i>

Table 5: Persons aged 15 and above studying as main activity by age and sex,
Viet Nam 1999

<i>Age group</i>	<i>Percent of student population</i>		
	<i>Males</i>	<i>Females</i>	<i>Total</i>
15-19	84.6	85.2	84.9
20-24	13.2	13.1	13.2
25 and above	2.2	1.7	1.9
<i>All ages</i>	<i>100</i>	<i>100</i>	<i>100</i>

Table 6: Percent economically inactive by sex and rural/urban residence, Viet Nam 1999

<i>Main activity</i>	<i>Urban</i>		<i>Rural</i>		<i>Total</i>
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	
Home duties	3.4	50.0	4.5	41.8	29.9
Study	52.8	25.8	47.8	20.0	32.0
Invalid	12.2	6.0	17.7	12.3	12.2
Other	31.6	18.2	30.0	25.9	25.9
<i>Economically inactive total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Table 7: Invalidity as a percentage of the economically inactive population by age, Viet Nam 1999

<i>Age group</i>	<i>Percent</i>
15-24	1.7
25-34	7.8
35-44	12.0
45-54	21.0
55-64	35.2
65+	14.8
<i>All ages</i>	<i>12.2</i>

Table 8: Distribution of employed population aged 15 and above by rural/urban residence and sex, Viet Nam 1999

<i>Rural/Urban</i>	<i>Males</i>		<i>Females</i>		<i>Total</i>	
	<i>Number('000)</i>	<i>%</i>	<i>Number ('000)</i>	<i>%</i>	<i>Number ('000)</i>	<i>%</i>
Rural	14,330	77.4	13,796	79.6	28,126	78.5
Urban	4,178	22.6	3,543	20.4	7,721	21.5
<i>All areas</i>	<i>18,508</i>	<i>100</i>	<i>17,339</i>	<i>100</i>	<i>35,847</i>	<i>100</i>

Table 9: Percent distribution of the employed population, 1989 and 1999

<i>Age group</i>	<i>1989</i>	<i>1999</i>		
		<i>Males</i>	<i>Females</i>	<i>Total</i>
15-24	30.5	24.2	27.1	25.6
25-34	32.6	31.9	29.6	30.8
35-44	17.4	24.8	24.9	24.9
45-54	10.8	11.4	11.5	11.4
55+	8.7	7.7	6.9	7.3
<i>All ages</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Table 10: Percent distribution of the employed population by economic sector, 1979-1999

<i>Sector</i>	<i>Percent of employed persons</i>		
	<i>1979</i>	<i>1989</i>	<i>1999</i>
State	17	15	10
Collective	51	55	27
Other	32	30	63
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>

Table 11: Percent distribution of the employed population by economic sector and residence, Viet Nam 1999

<i>Residence</i>	<i>Economic sector</i>						
	<i>State</i>	<i>Collec- tive</i>	<i>Capital</i>	<i>Private</i>	<i>Mixed</i>	<i>100% foreign capital</i>	<i>All sectors</i>
Urban	27.0	5.8	1.9	60.7	3.3	1.3	100
Rural	5.1	32.8	0.4	61.1	0.3	0.3	100
<i>Total</i>	<i>9.8</i>	<i>27.0</i>	<i>0.7</i>	<i>61.0</i>	<i>1.0</i>	<i>0.5</i>	<i>100</i>

Table 12: Percent distribution of the employed population by age group and sex, Viet Nam 1999

Age group	State		Collective		Capital/private		Other		All sectors	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
15-29	45.6	54.4	45.0	55.0	53.9	46.1	32.1	67.9	50.5	49.5
30-44	53.8	46.2	46.2	53.8	54.8	45.2	58.8	41.2	52.4	47.6
45+	62.1	37.9	46.0	54.0	54.4	45.6	73.9	26.1	52.6	47.4
<i>Total</i>	<i>52.9</i>	<i>47.1</i>	<i>45.7</i>	<i>54.3</i>	<i>54.3</i>	<i>46.7</i>	<i>40.8</i>	<i>59.2</i>	<i>51.6</i>	<i>48.4</i>

Table 13: Inter-censal change in the number of employed persons by industrial sector, 1989 to 1999

Sectors of employment	Industrial of distribution of employment (%)		Inter-censal of increase (million persons)	Annual growth rate ^b	Distribution of increase (%)
	1989 ^a	1999	1989-99	1989-99	1989-99
	Sector I	73.9	69.4	4.2	1.9
Sector II	14.3	14.9	1.3	2.9	16.9
Sector III	11.9	15.7	2.3	5.3	29.5
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>7.9</i>	<i>2.5</i>	<i>100.0</i>

Source: The 1989 data were calculated from: Vietnam Population Census 1989, Completed Census Results, Volume IV, Hanoi-1991. Table 5.7

a/ 1989 figures include those employed less than 6 months who were employed at the time of the census.

B/Average annual inter-censal growth rates (%)

Table 16: Occupational structure, share urban and share female by occupation, 1999

	<i>Number employed</i>	<i>Share urban</i>	<i>Share female</i>
	<i>(thousands)</i>		
Leaders/managers	203	53.4	19.0
High level Professionals	679	78.5	41.5
Mid-level professionals	1,259	44.9	58.5
Office workers	287	72.7	53.1
Service, sales	2,397	60.3	68.7
Skilled agricultural workers	1,768	13.9	37.6
Skilled industrial workers	3,250	50.0	34.7
Machine operators and assemblers	1,131	67.6	26.9
Unskilled occupations	24,874	9.0	49.8
<i>Total</i>	<i>35,847</i>	<i>21.5</i>	<i>48.4</i>

Table 17: Unemployment rates by sex and urban/rural residence, Viet Nam 1999

<i>Urban/ Rural</i>	<i>Males</i>		<i>Females</i>		<i>All persons</i>	
	<i>('000)</i>	<i>%</i>	<i>('000)</i>	<i>%</i>	<i>('000)</i>	<i>%</i>
Urban	427	9.3	277	7.3	704	8.4
Rural	419	2.8	354	2.5	773	2.7
<i>Total</i>	<i>846</i>	<i>4.4</i>	<i>631</i>	<i>3.5</i>	<i>1477</i>	<i>4.0</i>

Table 17: Unemployment rates by rural/urban and age, Viet Nam 1999

<i>Age group</i>	<i>Urban (%)</i>	<i>Rural (%)</i>	<i>Total (%)</i>
15-19	25.8	8.4	10.9
20-24	15.1	4.3	6.6
25-29	7.9	2.1	3.5
30-34	5.6	1.3	2.3
35-39	4.6	1.0	1.9
40-44	4.3	0.9	1.8
45-49	3.7	1.0	1.7
50+	4.7	1.3	2.0
<i>All ages</i>	<i>8.4</i>	<i>2.7</i>	<i>4.0</i>

Table 18: Unemployment rates by level of qualification, urban-rural residence and sex, 1999

<i>Educational/ training level</i>	<i>Total</i>			<i>Urban</i>			<i>Rural</i>		
	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Illiterate	3.4	4.0	3.0	8.7	9.8	7.7	2.8	3.3	2.5
Less than primary	3.3	3.3	3.4	7.5	7.7	7.3	2.7	2.6	2.8
Primary	3.2	3.5	2.8	8.8	10.1	7.3	2.1	2.2	2.0
Lower secondary	5.6	6.1	5.0	10.2	11.7	8.3	3.7	3.8	3.5
Secondary	7.5	7.9	6.8	11.9	13.2	10.3	4.5	4.8	4.1
Technical worker	4.3	4.6	3.5	5.1	5.2	4.7	3.4	3.8	2.1
Professional tech	3.6	4.7	2.7	4.7	6.3	3.4	2.7	3.4	2.1
College/university	4.5	4.5	4.4	4.8	4.7	5.1	3.6	4.1	2.9
<i>Total</i>	<i>4.0</i>	<i>4.4</i>	<i>3.5</i>	<i>8.4</i>	<i>9.3</i>	<i>7.3</i>	<i>2.7</i>	<i>2.8</i>	<i>2.5</i>

Table 19: Distribution of educational attainment among the unemployed by urban/rural and sex, 1999

<i>Educational/ training level</i>	<i>Total</i>			<i>Urban</i>			<i>Rural</i>		
	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Illiterate	6.0	5.1	7.2	3.1	2.8	3.7	8.6	7.5	9.9
Less than primary	13.4	11.1	16.5	8.2	6.9	10.2	18.1	15.3	21.3
Primary	37.9	37.0	39.1	34.2	34.2	34.3	41.2	39.8	42.8
Lower secondary	18.2	19.6	16.3	20.7	21.8	19.1	15.9	17.4	14.1
Secondary	14.8	16.0	13.2	19.9	19.7	20.0	10.3	12.3	8.0
Technical worker	3.1	4.4	1.4	4.3	5.5	2.4	2.1	3.2	0.7
Professional tech	3.2	3.3	2.9	4.1	4.1	4.2	2.3	2.6	2.0
College and higher	3.5	3.5	3.4	5.5	5.1	6.1	1.6	1.9	1.3
<i>Total</i>	<i>100.</i>	<i>100.</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.</i>	<i>100.</i>	<i>100.0</i>
	<i>0</i>	<i>0</i>					<i>0</i>	<i>0</i>	