APEC Human Resources Development Working Group Network on Economic Development Management

Conference on Linkages between Paid and Unpaid Work in Human Resource Policy Hong Kong, China, May 8, 1999

> A Gender Perspective in Examining Linkages Between Paid and Unpaid Work in Indonesia

> > by

Dr. Mayling Oey-Gardiner and Evelyn Suleeman, MA Insan Hitawasana Sejahtera Jakarta, Indonesia

1. The Indonesian Setting

The debate on unpaid work, especially done by women, sets rich and poor economies apart. Women in rich economies, who are not gainfully employed are therefore invisible (Gibb, 1998). But they are fighting, with some success, for recognition of housework, care for children, sick, and the elderly, voluntary work, and work in political organizations in their national economies. In poor economies such as Indonesia, most women who join the labour market do so for family or household survival. There is a tendency to maximize labour in poor households and as long as the marginal returns are positive, additional labour continues to be added to a household enterprise. Many women simply help fathers, husbands, other relatives, or even neighbours to keep the family enterprise going, whether in subsistence agriculture, cottage industry, or street vending. In other cases, in exchange for their services, they are given free meals. In either circumstance, they receive no actual payment for their services. Statistically, they are referred to as unpaid family workers.

Even when hailed as one of the East Asian miracle countries (World Bank, 1993) before the economic crisis hit in August 1997, Indonesia's labour market was still predominantly non-formal,¹⁾ absorbed in non-legal based businesses. The introduction of numerous deregulation measures during the 1980s, led to structural changes in the labour market. Reliance on agriculture declined and export-led industrialization increasingly expanded employment opportunities in industry and the services sectors, in legal-based enterprises or otherwise referred to as the formal sector. In the meantime, educational opportunities and achievements expanded and rose, and the better educated wanted, and some were getting, jobs in formal sector enterprises where they were paid salaries or at least regular wages. Consequently, the workforce was formalizing, albeit slowly because of Indonesia's enormous population size, already more than 200 million persons living in an archipelago counting some 13,000 islands across the equator. With the economic crisis, the tides have turned and Indonesian workers are increasingly again forced to rely on non-formal sector activities, the traditional cushion in difficult times.

It is within this dichotomy of formal and non-formal sector workers that we shall examine the linkages between paid and unpaid work. More specifically the purpose of this paper is to examine whether there are linkages between paid and unpaid work and if so, why those linkages have surfaced. More specifically, a gender perspective and urban-rural distinctions will also be reviewed.

The distinction between formal and non-formal sector workers is based on a classification of workers by their status. Following ILO recommendations, workers are statistically differentiated into four categories: self-employed; employers; employees; and (unpaid) family workers. While the formal and non-formal sector dichotomy is all inclusive of the work force,²⁾ in examining the relation between paid and unpaid workers, we prefer to rely on a subset only of those who 'work' for others providing their labour only. Among those working for others, some receive payment while others do not. In this framework, paid workers will be regarded as employees and unpaid workers as unpaid family workers.

Another reason for focusing on unpaid family workers is the gender perspective. As described below, unpaid family workers is a category strongly associated with females. The unpaid family worker status for males is usually a classification given when they are young. When they get older and marry, they are usually categorized as self-employed. Besides, on their part, many women continue to perceive themselves as only "assisting" their husbands (*bantu-bantu suami*, Djamal 1996: 232-250) even when they obviously run the business and their husbands are assisting them. This asymmetrical relation is socially accepted and legally supported. According to the 1974 Marriage Law (*UU Perkawinan No. 1/1974*), men are heads of households responsible for the well being of their families (Article 31:3) while women are wives responsible for household management (Article 34) (Luhulima and Ihromi 1998).

2. Data Sources

Independent Indonesia has a fairly long history of macro population and labour force data collection. In fact, the first macro data collection exercise was the 1958 Labour Force survey. This was followed by the 1961 Population Census and the National Socio-Economic Surveys conducted between 1963 and 1970 by the Central Bureau of Statistics (CBS for *BPS*). After the second Population Census of 1971, the CBS has conducted numerous other population-based surveys such as the intercensal population surveys known as *SUPAS*, national socio-economic surveys known by its acronym *SUSENAS* and labour force surveys commonly referred to as *SAKERNAS*. Population censuses are now conducted once every decade in years ending in zero and the *SUPAS* in years ending in five. As the need for statistical data rises, and especially for current information, so have the frequency of the surveys. Today both the *SUSENAS* and *SAKERNAS* are conducted annually in February and August.³

Early macro labour force analyses during the 1970s focussed on size and trends in composition, including distributions by socio-demographic factors distinguishing groups of population. The size of the labour force was an issue due to changes in definition, classification, and also imputation rules during data processing. All these factors have different implications for women and men (Jones, 1974, 1981; Bukit and Bakir, 1984; Bakir and Manning, 1983; World Bank, 1983; Rucker, 1985; Cremer, 1990). The need to distinguish between 'signal' and 'noise' in the labour force, where 'noise' arises from 'erratic' inclusion of 'unpaid family workers' was proposed by Korns (1987), who examined a whole range of different data sources. In addition to the earlier findings of variables affecting labour force data, causing different results in the labour force, instruments, sequence of questions, and size or length of instrument, all appear to also have an impact. For that reason the analysis below shall rely on only one series, the *SAKERNAS*.

3. Definitions

In their labour force data collection procedures for the *SAKERNAS*, the CBS claims to have relied on definitions recommended by the ILO. The following definitions for inclusion in the labour force have been used since 1976:

- **Labour force**: Persons of 10 years old and over who were working, temporarily absent from work but having jobs which are categorized as employed, and those who didn't have work but were looking for work..
- **Working**: All persons who worked for pay or assisted others in obtaining pay or profit for the duration of at least one hour during the survey week.^{5).}
- **Temporarily absent from work, but having jobs**: All persons who had jobs but were temporarily absent from work for some reason during the survey week.
- **Did not have work and looking for work**: All persons who did not have any job but were looking for work during the survey week. This is usually called open unemployment.
- Work Status: is the status of a person at the place/establishment where he/she works.
- Self-employed without assistance of other person(s): is a person who works at his/her own risk without the assistance of his/her family members or employees.
- Self-employed assisted by family members or temporary workers.
- **Employers with permanent workers**: are persons who do their business assisted by paid permanent workers.
- **Employees:** are persons who work for another person or an institution for pay in cash or in kind.
- Unpaid family workers: are persons who work without pay in an economic enterprise operated by other members of the family, relatives, or neighbours.

4. The Context of Indonesian Workers

The following discussion will focus on the period between 1986 and 1997, before the crisis. This time frame is partly dictated by data availability and also by the economic dynamism of the period. Regrettably, the detailed impact of the crisis can not be addressed in this paper as the results of the *1998 SAKERNAS* are not yet released (at time of writing).

Between 1986 and 1997 the working age population, here defined as 10+, grew from 123 to 157 million persons (Table 1). Females constitute slightly more than half. Overall labour force participation

remained fairly stable, between 57 and 58 percent, rose slightly for males from 70 to 72 percent, but remained constant for females at around 44 percent.⁶⁾ Overall work force participation (percent for the work force over the working age population) also hardly changed, between 55 and 56 percent. Similarly, for males work force participation varied between 68 and 69 percent, and for females the variation was between 42 and 44 percent.

Open unemployment, however, rose faster for females (from 2.6 to 6 percent) than for males (from 2.6 to 4 percent) since the mid-1990s⁷⁾ (Table 2). These numbers were consistent with the prevailing optimism arising from steady rapid economic growth. More people wanted to join the labour market. Even though we agree with Manning (1998) that those with upper secondary education or more and seeking work or waiting for a "better" job were no longer limited to the elite,⁸⁾ they were still hopeful to obtain better paying jobs in the formal sector labour market. Consequently, the proportion of new entrants into the labour market among the openly unemployed rose substantially, overall from 74 to 82 percent, for males somewhat faster (71 to 79 percent) than for females (from 80 to 85 percent). About three-fifths of the unemployed have completed upper secondary schooling or higher.⁹⁾

The general assumption that formal sector employment is preferred over non-formal sector activity also applies to Indonesian workers. A definite preference for paid work¹⁰⁾ was recorded in favour of unpaid family work. Overall the share of paid workers rose from one-fourth to one-third, among males from three to four out of every 10 workers and among females from 2 to 3 out of every 10 workers (Table 3). Unpaid worker status is quickly deserted when an opportunity comes along. Overall the share of unpaid workers declined from three to two-tenths, among males from 16 to 9 percent and among females from 50 to 37 percent.

These data show an inverse relation between the shares of paid and unpaid workers. The relation is, however, not a straight line. It is not true that those not entering or leaving unpaid jobs necessarily become employees. In fact, other trends also occurred over time and these changes are different for males and females. Earlier we said that with age and marital status, men move into the self-employed status. Yet this category also declined for males from 54 to 50 percent, implying the less desirable nature of the status and therefore also to be left when opportunities become available (Table 4). While most became employees, a smaller proportion became employers (0.8 to 2.2 percent). Women remain at least a step behind. Rejection of unpaid work was accompanied by a rise in the share of self-employed among female workers from 30 to 34 percent, and to a lesser extent also among employers, 0.3 to 0.8 percent.

The implications of these trends are clear. When the opportunity arises, not just men but women too will strike out on their own. They start as self-employed, initially relying on family or household labour and eventually possibly expanding, using hired labour. At times though, women are socially considered by others as well as by themselves as subordinate to men. When their businesses grow, they are often taken over by their husbands. By then they either revert back to being unpaid workers or they exit from the labour market to take care of their families.¹¹⁾ Thus, as the economy continued to grow resulting in a growing middle class, the share of women as housekeepers also rose (from 28 to 32 percent, Table 5). This phenomenon had been observed before based on a slanted **J**-curve, relating education as proxy for social class, with labour force participation. Female labour force participation declines to the lowest point among those with lower secondary schooling and rises rapidly thereafter (Oey-Gardiner, 1991; Rahardjo and Hull, 1984).

Even though no feminization occurred among paid workers over the decade, there was a fairly strong tendency toward feminization among urban paid workers. In other words, paid employment opportunities grew at a similar pace for men and women. Hence the share of women among total paid workers (urban and rural) remained fairly constant at around 30 percent (Table 6). While it is true that among urban paid workers women made significant inroads, in rural areas, women were losing ground. The share of females among urban paid workers rose from 28 to 33 percent, but declined in rural areas from 32 to 29 percent. The decline in the share of females among rural paid workers is attributed to two factors. One was the departure of rural women with potential to enter the formal sector in urban areas, and two, a more rapid increase in rural paid employment opportunities for men.

As men rapidly left unpaid activities, women constituted a rising share among unpaid workers. Overall, the share of women among the total unpaid workers rose from 67 to 71 percent, among urban unpaid workers from 67 to 69 percent, and among rural workers from 67 to 71 percent. This phenomenon is a

function of very different age compositions between male and female unpaid workers. Men perform unpaid work when they are young. Women, especially those with little human capital, are more likely forced to perform unpaid labour throughout their working lives. Consequently most elderly unpaid workers are female.

In sum, as the Indonesian economy grew between 6 to 7 percent per annum from the mid-1980s to before the 1997 financial crisis, workers increasingly were able to obtain paid employment and unpaid work was shunned. The benefits from expanding paid employment opportunities were not only enjoyed by men (30 to 39 percent) but also by women (20 to 29 percent). To take up paid employment they left their unpaid jobs when possible (among men the decline was from 16 to 9 percent and among women from 50 to 36 percent). On the other hand, men were one step ahead of women. Men also left their own 'businesses' where they were self-employed (from 54 to 50 percent). Women, on the other hand, became more independent, establishing their own 'businesses' as self-employed workers (30 to 34 percent). Even though urban paid workers numbered more females, and rural paid workers numbered more males, on average the share of females among paid workers remained fairly stable over the period. On the other hand, women assumed more unpaid work as men abandoned such jobs.

5. Better Educated Workers

The shift from unpaid to paid work occurred as the population and therefore also the work force became better educated. As suggested earlier, unpaid work is to be abandoned for paid work whenever possible. The opportunity to abandon unpaid work comes with education. Due to the size of the Indonesian work force, even during the period of rapid economic growth, paid employment opportunities did not grow as fast as expansion of education opportunities and the output of the system. Paid job seekers exceeded available opportunities. Some of these paid job seekers joined the ranks of unpaid workers while waiting for a 'proper' job to come along.

Rising education is denoted by the percentage of LSS+ (lower secondary schooling or more). Among the total work force this group made up 17 percent in 1986 and 33 percent in 1997 (Table 7). Of course urban workers are much better educated (rising from 43 to 57 percent) than rural workers (from 11 to 21 percent). Males are better educated (21 to 37 percent) than females (11 to 27 percent). The gender gap is narrowing faster than the urban-rural gap. The urban-rural gap for males remained fairly stable at 35 percentage points but widened for females from 26 to 35 percentage points.

As the education of all workers increased, so did the education of paid and unpaid workers. Paid workers are much better educated (rising from 38 to 54 percent) than unpaid workers (only rising from 9 to 21 percent). Over time the education gap between paid and unpaid workers widened (rising from 29 to 33 percentage points between 1986 and 1997).

But that is not where the story ends. As paid employment is more likely available in urban areas, the urban-rural education gap widened more among paid workers than unpaid workers. Among paid workers the urban-rural education gap rose from 28 (55 - 27 percent) to 34 (70 - 36 percent) percentage points while among unpaid workers the rise was only from 28 (36 - 8 percent) to 30 (47 - 17 percent) percentage points.

There was a noticeable gender difference in the education gap between paid and unpaid workers. For males, the education gap between paid and unpaid workers narrowed from 26 (42 - 16 percent) to 22 (55 - 33 percent) percentage points between 1986 and 1997. For females, the education gap widened, from 24 (30 - 6 percent) to 36 (52 - 16 percent) percentage points.

These patterns are the result of different mobility experiences between men and women in moving out of unpaid work into paid work and from rural to urban areas. For both males and females, the education gap between urban and rural paid workers widened. For male paid workers, the urban-rural gap rose from 29 (58 – 29 percent) to 35 (72 – 37 percent) percentage points and for females from 27 (47 – 20 percent) to 35 (68 – 33 percent) percentage points. Among male unpaid workers, however, the urban-rural gap narrowed from 33 (47 – 14 percent) to 30 (58 – 28 percent) percentage points, while for females the gap widened from 25 (30 – 5 percent) to 28 (40 – 12 percent) percentage points. Most striking is the rapidly narrowing education gap between males and females paid workers from 12 (42 – 30 percent) to 3 (55 – 52 percent) percentage points while widening for unpaid workers from 10 (16 - 6 percent) to 17 (33 – 16 percent) percentage points.

What happened within the context of linkages between paid and unpaid work? While education is increasingly necessary to obtain paid employment, it is not sufficient to obtain paid employment as such opportunities lagged behind educational attainment. Paid jobs are more available in urban than in rural areas, and women had relatively greater access to paid employment openings. Following the patterns in East Asian countries, women have benefited disproportionately from export -led industrialization as paid employment became more accessible to the better educated and those willing to brave the urban labour market. Consequently, the education gap between paid and unpaid workers widened, and between urban and rural workers; but the gender gap in education narrowed. As the period was also characterized by different gender mobility dynamics, the education gap between male and female urban paid workers is rapidly narrowing while widening among unpaid workers.

6. Aging Workforce

Earlier statements of preference for educated youth by employers should be set within the context of an aging work force. One of Indonesia's success stories has been fertility control through extensive provision of family planning services. As a result, the population and by extension the workforce is getting older. As the proportion of youth is declining the proportion of older ages has to rise.

The last decade has seen a fairly sharp decline of new entrants into the labour market. The proportion of workers age 10-24 years declined from one-fourth to one-fifth between 1986 and 1997 (Table 8).¹²⁾ Most of the decline occurred among rural workers (from 27 to 21 percent) while the share of new entrants into the urban workforce remained fairly constant at around one-fifth.¹³⁾ By the time of the crisis there was a convergence in the youthfulness of the urban and rural workforce.

The decline of new entrants was also sharper among females (28 to 22 percent) than males (24 to 20 percent) for reasons already mentioned. As the economy grew, so did the middle class. Some women, who regarded themselves as only "helping" their husbands as secondary earners, became housekeepers when the need to contribute to household resources lessened. The opportunity cost of staying home taking better care of their husbands and children outweighed the benefits from unpaid work, especially among rural women. Most of them would have been involved in agriculture. Over time the farmers' terms of trade worsened, rendering unpaid work in agriculture of little value.

A different picture appears from the relation between paid and unpaid workers in regard to age. Paid workers are older than unpaid workers as the share of new entrants is much lower among paid workers. Overall about one-fourth of paid workers are new entrants and the same is true of urban paid workers. As urban workers dominate the overall numbers of paid workers, the slow decline of the youth among rural paid workers has had little effect on the total. Unpaid workers are mu ch more youthful but are slowly aging as the share of new entrants declined from about one-half to around 40 percent, a trend also experienced by rural unpaid workers. Even though not as pronounced because of fluctuations resulting from rural-urban migration, a decline among young unpaid workers in urban areas had also been revealed, albeit at a much slower pace.

These results support our earlier contention that unpaid work is a temporary status and a stepping-stone while waiting for either an opportunity to obtain paid employment, or to strike out on one's own, as self-employed. Paid employment, however, is a status maintained throughout one's working life.

The gender breakdown shows very different patterns and trends. Among paid workers, women are younger than men are, as the share of new entrants is substantially higher among women (about one-third) compared to men (about one-fifth). The gender differences among urban paid workers are even more pronounced (women around 40 and men less than 20 percent) than among rural paid workers (females one-third and males one-fourth). Again this is a function of the relative recent growth in paid employment created by modern businesses concentrated in and around major cities which tend to favour young and educated women.

The opposite pattern has been recorded among unpaid workers. Male unpaid workers are much younger than female unpaid workers are, even though for both an aging process was occurring, and faster for women. In the mid-1980s one-third of female unpaid workers were age 10-24 years, and before the crisis about one-fourth. Among males the decline was only from 80 to 74 percent. Again the aging process is more a rural than an urban phenomenon.

The following observations have been recorded. First, as the overall workforce is "aging" so too are paid and unpaid workers. Second, the aging process, as measured by a decline in the percentage of new entrants, 10-24 years old, is more a rural than an urban phenomenon. Third, as rural workers were younger than urban workers were, there appears a convergence in the share of new entrants between urban and rural workers. Fourth, unpaid workers are much younger than paid workers are. But, as the better educated youth are more likely to obtain paid employment, the avoidance of unpaid work for paid work among youth has also contributed to an age convergence between paid and unpaid workers. Fifth, as women not only avoid or abandon unpaid work for paid work, but also for household responsibility, the decline in the share of young unpaid workers is faster among women than men.

The above analysis has provided some flavour of the complexity of the relationship. This serves as a warning that no simple solutions can solve complex problems, especially not those caused by the economic crisis.

7. The Aftermath of the Crisis

Indonesia is suffering an economic and financial crisis of unprecedented magnitude. After achieving decades of rapid growth¹⁴⁾ and reducing the incidence of poverty from 40.1 percent in 1976 to 11.3 percent in 1996 (BPS, 1996), the economy is now near collapse. Eighteen months after the crisis began, the Indonesian currency has lost more than 70 percent of its value against the US dollar.¹⁵⁾ Inflation has soared to 77.63 percent for the calendar year 1998 (*Suara Pembaruan* February 1, 1999). The economy has swung from rapid growth to even more rapid contraction, and the stock exchange has lost much of its value.¹⁶⁾ Capital and entrepreneurs have fled following racial riots in mid-May 1998. Foreign creditors have withdrawn their funds and practically no new investments have been made. Unfortunately, the crisis was exacerbated by the worst drought in 50 years, and international oil prices registered a sharp decline. Businesses have had to rationalize and open and under-employment is rapidly expanding, leading to widespread poverty. In response a variety of social safety net programs have been introduced.

Mass retrenchments were one of the most widely discussed consequences of the crisis. Starting with construction sector workers in late 1997, as the Rupiah continued to weaken there followed retrenchments in textiles, garments and leather goods, electronics, metal products, automobile and machinery manufacturing. Young and relatively well educated women lost their jobs as a result of closure of numerous factories, especially in the foot-loose and export oriented industries (textiles, garments and leather goods, and electronics). While some returned to their home villages toiling on the land, others tried to make ends meet while staying in the city. Whatever their circumstances, many of these workers are experiencing a downward spiral in their standard of living as prices of goods and services continue to rise.

In early March 1999, the discourse focused on the liquidation of some 30 to 40 private banks and the merger of four state banks, causing massive retrenchments of some 33,000 skilled workers among whom a substantial proportion are women. Most of the financial sector workers are well educated. A good proportion had completed some sort of post-secondary education. During the boom years, when managers were in short supply, bankers were better paid than other occupations. Retrenchment for bankers carried very different meaning from that of factory workers. It can be anticipated that while waiting for another job to come along, these well-educated workers will turn to further invest in their human capital by attending school or other training programs.

7.1 Estimating the Impact on Unemployment

In early 1999, as the impact of the crisis unfolds, disaster and hardship estimates are being questioned. As the crisis wore on, a number of agencies produced estimates, apparently rather exaggerated but in line with the politics of poverty. The Ministry of Manpower (MOM) announced in April 1998 that there were to be 13.4 million unemployed (*Suara Pembaruan*, 4 April 1998). By July the estimate had further escalated to 15.4 million and was feared that it could reach 18-20 million (*Kompas* 21 July 1998). More recently, MOM estimated 13.7 million unemployed for 1998 and 16.86 for 1999 (*Kompas*, 19 February 1999). The National Planning Board (*BAPPENAS*) arrived at 12.4 million for 1998, and the ILO task force claimed 9 million unemployed in 1998 (1998).

7.2 Data Based Measures of the Crisis Impact

Preliminary tabulations from the latest *1998 SAKERNAS* show far lower numbers of unemployed. Based on preliminary tabulations for the population 15+,¹⁷⁾ BPS recorded the unemployed to number only 4.2 million persons or 4.7 percent in 1997, and 5.1 million persons or 5.5 percent of the labour force in 1998. In urban areas there was an increase of 3.2 percent and in rural areas 2.4 percent. Women recorded a much stronger increase in the workforce than men, not only in relative but also in absolute terms. The female workforce expanded by 1.4 million persons or 4.2 percent while among males the increase was only 900,000 or 1.7 percent. Fewer women could remain as housekeepers, which declined by almost 700 thousand persons or 2.7 percent between August 1997 and 1998.

Besides unemployment, the impact of the crisis is also reflected by paid workers. Men have borne the brunt of the crisis. Of the net decline in paid workers of 1,472,400 only 33,500 or 2 percent were females. In an economy like Indonesia, the loss of paid employment is of course compensated by a return to unpaid work and also self-employment, basically the categories associated with non-formal sector activities. As the loss of paid employment was more severe among men than women, the rise in unpaid workers and the self-employed was much sharper among men than women. Male unpaid workers expanded by 12.1 percent and female unpaid workers by 6.9 percent. Among the self-employed, males expanded by 6.6 percent and females by 5.5 percent.

In contrast to times of rapid economic growth when people were deserting unpaid jobs for paid employment or housekeeping, in response to the crisis unpaid activities serve as a cushion in facing hardship.

8. Dealing with Poverty

If any notice has been taken of unpaid workers it is in the context of informal sector workers and poverty reduction or amelioration policies. Every now and then it is realized that the informal sector serves as a cushion against hardship experienced by the less well off. More frequently mentioned is the issue of underemployment related to low hours of work, usually referring to those working less than 35 hours a week. As the impact of the crisis has resulted in widespread suffering and expanding poverty due to massive lay-offs, declining purchasing power, and the absence of social safety nets, public responses have focused on developing social safety net programs. These programs are designed to directly deal with poverty and less on human resources development. Thus there have been food distribution programs for the poor known as *sembako*. Then there are four types of labour intensive programs organized by the Minister of Manpower: (1) in urban areas; (2) in rural areas; (3) in forestry; and (4) in skilled programs. While urban programs are basically of the public works type, rural programs have focused on repairs to or improvement of irrigation systems. Under the forestry program, the plan calls for reforestation with mixed cropping. The fourth component is to address the needs of skilled labour, including bankers, a good proportion of whom are women. They are to be trained or integrated into small-scale industries with some credit/capital support schemes. Then there is the program introduced by the coordinating Minister for People's Welfare and Poverty Alleviation, the former Minister for Population and Head of the National Family Planning Coordinating Board, the KPKU-Prokesra (Kredit Pembangunan Kemitraan Usaha Program Keluarga Sejahtera), a small business partnership credit scheme for the family welfare program. The loans extended through this program are very small and usually directed at women who are also the target of the family planning program.

9. Beyond the Crisis: Developing Human Resources

As we are living in the aftermath of the crisis and considering the extent of the poverty problem and the severity of the problems for the poor, it is the needs of the poor that deserve priority attention. Thus the following recommendations focus on training for self-employment and micro-enterprise development, some of which have been forwarded in the ILO report (1998):

1. The neediest should be the focus for poverty alleviation and training for self-employment and micro-enterprise development.

- 2. Employment and training programs should be selective, carefully targeting poor individual households, household groups, and geographical areas. The programs should include provision for training and technical and marketing assistance, together with credit-based programs for self-employment. Credit should be advanced at near market rates and recourse to subsidy should be avoided to minimize leakage to non-target groups.
- 3. The Government should resist calls to assist the educated unemployed, particularly university graduates, in establishing small businesses. Experience suggests that fresh university graduates without work experience and networks are not likely to succeed in business and create additional employment.
- 4. As there is a gender bias in the labour market, it is necessary to have a gender focus in program design and development. Unlike available micro-credit programs directed at women, mostly limited to traditional women's activities, gender stereotyping should be avoided. Gender sensitive projects should take care to identify viable activities and new occupations in growth sectors to diversify women's skills development.
- 5. An important component of training programs for the poor is the inclusion of literacy training to impart basic cognitive skills that are needed alongside more specialized skills training. The difficulty in training of inexperienced poor for self-employment should not be underestimated; instead special efforts should be built into the design.
- 6. As the crisis progresses the Government has introduced a variety of social safety net programs, including paid employment creation, credit schemes, and rice distribution. Usually the poor, and poor women in particular, have little access to information. Special efforts should therefore be made within the scheme of these programs to reach poor women.

	Р	op. 10+ (m	l)	%]	Labour Fo	orce	% Work Force			
Year	Μ	F	Т	Μ	F	Т	Μ	F	Т	
1986	60.3	62.2	122.5	70.5	44.4	57.3	68.6	43.3	55.8	
1987	62.0	63.8	125.9	70.3	44.8	57.4	68.5	43.7	55.9	
1988	63.9	65.5	129.4	69.7	45.8	57.6	67.8	44.6	56.0	
1989	65.9	67.0	132.9	68.8	45.0	56.8	66.9	43.7	55.2	
1990	67.1	68.6	135.7	70.9	44.0	57.3	69.2	42.9	55.9	
1991	67.9	69.4	137.3	71.2	43.4	57.1	69.5	42.1	55.7	
1992	69.7	71.1	140.8	71.0	44.0	57.3	69.2	42.7	55.8	
1993	70.9	72.9	143.8	70.6	43.1	56.6	68.7	41.8	55.1	
1994	72.7	75.1	147.8	72.0	44.5	58.0	69.2	42.2	55.5	
1996	76.5	77.9	154.4	72.3	44.6	58.3	69.3	42.0	55.5	
1997	77.9	79.5	157.4	72.3	44.1	58.0	69.3	41.6	55.3	

Table 1 Population, Labour and Work Force by Sex, Indonesia 1986-1997

Sources: Biro Pusat Statistik, *SAKERNAS* for several years. Notes: Pop. = population; the Labour force consists of the working population or work force and those looking for work or the unemployed; the Work force consists of the working population. In both the % labour force and % work force, the denominator is the working-age population or age 10+. M = Males, F = Females.

Table 2 Unemployment rates and percentage of new entrants among the unemployed, Indonesia1986-1997

	Une	employment Ra	ites	% New Entrants					
Year	Males	Females	Total	Males	Females	Total			
1986	2.6	2.6	2.6	70.7	79.5	74.2			
1987	2.6	2.4	2.6	71.6	81.7	75.4			
1988	2.8	2.8	2.8	72.9	81.8	76.8			
1989	2.8	2.8	2.8	72.6	82.7	76.7			
1990	2.4	2.6	2.5	72.7	80.4	75.9			
1991	2.4	2.9	2.6	72.9	81.5	76.6			
1992	2.6	2.9	2.7	69.4	81.2	74.4			
1993	2.6	3.0	2.8	70.2	82.4	75.3			
1994	3.9	5.1	4.4	68.2	75.5	71.6			
1996	4.2	6.0	4.9	79.2	85.6	82.2			
1997	4.1	5.6	4.7	79.0	85.1	81.8			

Sources: Biro Pusat Statistik, SUSENAS for several years.

Table 3 Percent Paid and Unpaid Workers of Total Workers by Sex, Indonesia 1986-1997

	%	6 Paid Workers	5	% Unpaid Workers					
Year	Males	Females	Total	Males	Females	Total			
1986	29.6	19.7	25.7	15.8	49.9	29.2			
1987	30.5	20.6	26.5	16.3	50.5	29.8			
1988	30.3	20.7	26.4	16.9	50.6	30.5			
1989	30.6	21.4	26.9	16.7	48.6	29.4			
1990	31.1	22.5	27.8	15.7	47.7	28.1			
1991	32.5	24.1	29.3	14.4	46.7	26.7			
1992	32.3	24.5	29.3	14.3	45.9	26.5			
1993	34.1	25.7	30.9	12.9	43.6	24.7			
1994	37.2	26.4	33.0	11.4	40.7	22.8			
1996	37.9	27.2	33.8	9.0	34.1	18.6			
1997	38.9	28.7	35.0	9.2	36.5	19.6			

Sources: Biro Pusat Statistik, SAKERNAS for several years.

Notes: Paid workers = employees and Unpaid workers = Unpaid Family Workers

		% Employers		% Self-employed				
Year	Males	Females	Total	Males	Females	Total		
1986	.8	.3	.6	53.6	29.8	44.2		
1987	.8	.4	.6	52.5	28.5	43.0		
1988	.9	.3	.7	51.8	28.4	42.4		
1989	.9	.3	.7	51.8	29.6	43.0		
1990	1.1	.3	.8	52.1	29.4	43.3		
1991	1.1	.4	.8	52.0	28.9	43.2		
1992	1.1	.4	.8	52.2	29.2	43.3		
1993	1.2	.4	.9	51.8	30.2	43.5		
1994	1.3	.4	1.0	50.1	32.5	43.3		
1996	1.8	.8	1.4	51.4	37.9	46.3		
1997	2.2	.8	1.7	49.7	33.9	43.7		

Table 4 Percent Employers and Self-employed of Total Workers, Indonesia 1986-1997

Sources: Biro Pusat Statistik, SAKERNAS for several years.

Table 5 The share of housekeepers among the working age population by gender and residence,Indonesia 1986-1997

		Males			Females		Total			
Year	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	
1986	0.4	0.2	0.2	35.7	25.3	28.1	18.2	12.9	14.4	
1987	0.5	0.2	0.3	34.4	24.5	27.3	17.7	12.6	14.0	
1988	0.4	0.2	0.3	33.8	23.1	26.2	17.3	11.8	13.4	
1989	0.5	0.3	0.4	34.7	23.7	27.0	17.7	12.1	13.8	
1990	0.5	0.3	0.4	34.3	26.4	28.8	17.6	13.5	14.8	
1991	0.6	0.4	0.5	35.1	27.4	29.9	18.0	14.1	15.4	
1992	0.6	0.3	0.4	34.4	27.2	29.6	17.8	13.9	15.2	
1993	0.6	0.4	0.5	34.6	27.6	30.3	17.8	14.2	15.4	
1994	0.5	0.3	0.4	33.7	27.1	29.4	17.3	14.0	15.2	
1996	0.6	0.4	0.5	34.9	28.1	30.6	17.9	14.4	15.7	
1997	1.0	0.6	0.8	35.3	30.4	32.3	18.3	15.6	16.7	

Sources: Biro Pusat Statistik, *SAKERNAS* for several years.

Table 6 Share of Females among Paid and Unpaid Workers by Residence, Indonesia 1986-1997

		Paid Workers		Unpaid Workers				
Year	Urban	Rural	Total	Urban	Rural	Total		
1986	28.0	31.7	30.2	67.0	67.2	67.2		
1987	29.4	31.8	30.7	65.5	67.3	67.1		
1988	29.9	32.7	31.5	65.4	66.9	66.8		
1989	29.8	33.3	31.8	65.0	66.1	66.0		
1990	31.2	31.6	31.4	64.8	66.0	65.9		
1991	32.0	30.8	31.4	65.9	66.8	66.7		
1992	32.3	32.4	32.3	66.7	66.9	66.9		
1993	32.4	31.6	32.0	66.9	68.0	67.9		
1994	32.4	29.4	30.9	67.5	69.4	69.2		
1996	32.0	29.2	30.7	68.7	70.4	70.1		
1997	32.8	29.3	31.1	69.3	71.1	70.8		

Sources: Biro Pusat Statistik, SAKERNAS for several years.

Notes: Paid workers = employees and Unpaid workers = Unpaid Family Workers

Status and		Males			Females			Total	
Year	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Paid Workers									
1986	58.3	29.5	41.8	46.8	20.1	30.3	55.1	26.5	38.3
1987	60.1	28.9	42.7	50.4	19.4	32.2	57.3	25.9	39.5
1988	60.9	30.1	43.6	50.2	20.2	32.4	57.7	26.9	40.1
1989	61.1	30.2	44.0	52.2	22.3	34.5	58.4	27.6	41.0
1990	63.9	30.1	46.1	52.0	21.8	35.9	60.2	27.5	42.9
1991	64.1	32.0	47.7	51.3	24.2	37.8	60.0	29.6	44.6
1992	65.9	32.8	49.2	56.5	23.1	39.6	62.9	29.7	46.1
1993	65.9	31.9	48.7	57.7	24.9	41.4	63.2	29.7	46.4
1994	67.3	32.9	49.6	59.5	27.3	44.0	64.8	31.2	47.9
1996	71.7	37.0	54.9	65.6	30.3	49.7	69.7	35.0	53.3
1997	71.6	37.4	55.1	67.8	32.8	52.3	70.4	36.1	54.3
Unpaid Workers									
1986	47.2	13.6	15.8	29.8	4.6	6.2	35.5	7.5	9.4
1987	44.0	17.5	19.6	27.3	5.8	7.4	33.1	9.6	11.4
1988	46.4	18.1	20.4	30.7	6.3	8.2	36.1	10.2	12.3
1989	51.0	21.0	23.5	32.9	6.9	8.9	39.2	11.7	13.8
1990	50.8	21.2	23.9	29.9	7.4	9.3	37.3	12.1	14.3
1991	52.0	23.8	26.7	32.4	9.1	11.3	39.1	14.0	16.4
1992	51.5	23.5	26.4	31.4	8.5	10.9	38.1	13.5	16.0
1993	52.2	23.4	26.7	33.9	9.0	11.7	40.0	13.6	16.5
1994	51.7	24.8	28.2	34.6	9.9	12.8	40.1	14.5	17.6
1996 1997	60.3 58.4	28.5	32.9	40.1	12.0	15.6	46.4	16.9	20.7
	58.4	27.9	32.7	40.1	11.9	16.1	46.6	16.5	20.9
Total Workers 1986	17.6	12.4	20.0	20.5	C7	11.1	10 (107	17.0
1986 1987	47.6 49.0	13.4 14.4	20.9 22.5	32.5 34.5	6.7 7.5	11.1 12.5	42.6 44.0	10.7 11.6	17.0 18.5
1987	49.0 48.8	14.4 15.0	22.3 23.1	34.3 34.6	7.5 8.1	12.5	44.0 43.8	11.0	18.5
1988	48.8 49.5	15.8	23.1 23.9	34.0 36.6	8.1 8.9	13.2	45.0	12.2	20.0
1989	49.3 51.8	15.8	25.9 25.6	36.9	8.9 9.1	14.2	45.0	12.9	20.0 21.6
1990	52.7	18.8	23.0	38.0	10.7	17.3	47.6	15.6	21.0
1991	53.0	18.7	28.2 28.5	40.1	10.7	17.5	48.4	15.5	24.0 24.4
1992	53.9	19.0	28.3 29.4	40.1	11.3	17.3	49.7	16.0	24.4 25.5
1994	55.0	20.4	31.2	44.2	12.4	21.1	51.2	17.2	25.5
1996	60.1	23.1	35.5	49.0	14.4	24.8	56.2	19.6	31.4
1997	60.3	24.2	36.8	51.2	16.1	27.4	57.0	21.0	33.2

Table 7 Percent with LSS+ among Paid and Unpaid Workers by Sex and Residence, Indonesia1986-1997

Sources: Biro Pusat Statistik, *SUSENAS* for several years. Note: LSS+ refers to those who completed/graduated from Lower Secondary School, total of 9 years of schooling.

Status and		Males			Females			Total	
Year	U	R	Т	U	R	Т	U	R	Т
Paid Workers									
1986	17.3	25.5	22.0	37.1	36.1	36.5	28.8	28.9	26.4
1987	15.9	25.7	21.3	35.6	34.4	34.9	21.7	28.4	25.5
1988	16.2	25.9	21.6	36.7	33.6	34.9	22.3	28.4	25.8
1989	16.4	25.2	21.3	40.2	32.1	35.9	22.7	28.3	25.9
1990	18.1	26.1	22.3	42.2	34.8	38.5	25.0	28.0	26.6
1991	19.0	25.4	22.3	42.2	34.8	38.5	26.4	28.3	27.4
1992	19.0	25.8	22.4	40.4	32.7	36.5	25.9	28.0	27.0
1993	18.3	24.4	21.4	40.1	32.2	36.1	25.3	26.8	26.1
1994	19.2	25.0	22.2	41.2	33.3	37.4	26.4	27.4	26.9
1996	18.5	24.2	21.3	38.0	30.8	34.8	24.8	26.1	25.4
1997	18.5	23.5	20.9	37.5	29.5	34.0	24.7	25.3	25.0
Unpaid Workers									
1986	68.8	80.8	80.0	31.3	34.3	34.1	43.6	49.5	49.2
1987	63.4	79.6	78.4	30.2	33.0	32.8	41.7	48.2	47.7
1988	63.5	78.7	77.4	32.4	31.7	31.8	43.2	47.3	46.9
1989	60.2	79.1	77.6	29.2	30.6	30.5	40.0	47.1	46.5
1990	67.6	77.9	77.0	31.5	30.2	30.3	44.2	46.4	46.2
1991	64.1	77.0	75.7	30.6	29.8	29.8	42.0	45.5	45.1
1992	65.4	78.5	77.1	30.6	29.5	29.6	42.2	45.7	45.3
1993	68.2	78.0	76.9	30.6	29.5	29.6	42.4	44.6	44.3
1994	65.6	76.0	74.7	32.4	28.1	28.6	43.2	42.8	42.8
1996	65.0	79.2	77.3	30.5	27.2	27.7	41.3	42.7	42.5
1997	62.5	76.1	74.0	27.0	25.3	25.5	37.9	40.0	39.7
Total Workers									
1986	16.3	26.0	23.9	26.3	28.4	28.0	19.7	27.0	25.5
1987	15.6	25.9	23.5	25.1	27.5	27.1	18.9	26.6	24.9
1988	15.6	25.9	23.4	25.6	26.4	26.3	19.1	26.1	24.6
1989	15.2	25.7	23.1	24.7	25.3	25.2	18.5	25.5	23.9
1990	17.2	25.6	23.4	27.5	25.0	25.6	20.8	25.4	24.3
1991 1992	17.5	24.6	22.7 22.7	29.2	25.3	26.2	21.6	24.9	24.0
1992	17.3 16.9	24.9 23.9	22.7 21.8	27.5 27.7	24.7 23.9	25.4 24.9	21.0 20.7	24.8 23.9	23.8 23.0
1993	16.9 17.5	23.9 23.1	21.8 21.4	27.7 29.0	23.9 23.2	24.9 24.8	20.7 21.6	23.9 23.2	23.0 22.7
1994	17.3	23.1 22.5	21.4 20.4	29.0 26.4	23.2 21.9	24.8 23.2	21.0 19.9	23.2 22.2	22.7
1996	16.5 16.5	22.5 21.2	20.4 19.5	26.4 25.4	21.9 20.8	23.2 22.3	19.9 19.7	22.2 21.0	21.5 20.6
1997	10.3	21.2	19.3	23.4	20.8	22.3	19./	21.0	20.6

Table 8 Percent New Entrants of Paid and Unpaid Workers by Sex and Residence, Indonesia1986-1997

Sources: Biro Pusat Statistik, SUSENAS for several years.Note:New entrants are here defined as those aged 10-24 years.

References

Asian Development Bank (1997), Asian Development Outlook 1997. Oxford: Oxford University Press.

- Bakir, Zainab and Chris Manning eds. (1984), Partisipasi Angkatan Kerja, Kesempatan dan Pengangguran di Indonesia (Labour Force Participation, Employment Opportunities and Unemployment in Indonesia). Jakarta: CV Rajawali.
- Biro Pusat Statistik (BPS), (various years), *Keadaan Angkatan Kerja di Indonesia* (The Labour Force Situation in Indonesia).

(1983), *Proyeksi Angkatan Kerja Indonesia 1983-2001* (Indonesian Labour Force Projections, 1983-2001).

- Bukit, Dollar and Zaenab Bakir (1984), 'Partisipasi angkatan kerja Indonesia: Hasil sensus 1971 dan 1980 (Labour force participation in Indonesia: the results of the 1971 and 1980 Censuses), in *Partisipasi Angkatan Kerja, kesempatan Kerja dan Pengangguran di Indonesia* (Labour Force Participation, Employment Opportunities and Unemployment in Indonesia), ed. by Zainab Bakir and Chris Manning. Jakarta: Rajawali, pp: 29-78.
- Cremer, George (1990), "Who Are Those Misclassified as 'Others'?, A Note on Indonesian Labour Force Statistics.' *Bulletin of Indonesian Economic Studies* 26(1), April: 69-90.
- Djamal, Chamsiah (1996), 'Membantu suami, mengurus rumah tangga: perempuan di sektor informal' (Helping husbands, housekeeping: women in the informal sector) in *Perempuan Indonesian: Dulu dan Kini* (Indonesian Women: Then and Now), Mayling Oey-Gardiner et al.eds. Jakarta: Gramedia Pustaka Utama, pp. 232-250.
- Gibb, Heather (1998), "APEC Human Resource Development Working Group Network on Economic Development Management. Linkages Between Paid and Unpaid Work in Formulating Human Resource Development Policy (Draft)." (Ottawa: The North-South Institute).
- Insan Harapan Sejahtera (1992), A Statistical Analysis on Characteristics, Patterns and Trends in Female Non-Formal Sector Workers: Indonesia during the Latter 1980s. A report submitted to the World Bank.

(1993), A Study of Women's Issues in Agricultural Transformation. A study conducted for the World Bank.

- ILO (1998), Employment Challenges of the Indonesian Economic Crisis. Jakarta: International Labour Organization, Jakarta Office, United Nations Development Programme.
- Islam, Rizwanul (1998), *Indonesia: Economic Crisis, Adjustment, Employment and Poverty*, Issues in Development, Discussion paper 23, Development Policies Department, ILO, Geneva.
- Jones, Gavin (1974), 'What Do We Know About the Labour Force in Indonesia,' in *Majalah* Demografi Indonesia 1(2): 7-36.

(1981), 'Labour force developments since 1961, in *The Indonesian Economy During the Soeharto Era*, ed. by Anne Booth and Peter McCawley. East Asian Social Science Monographs. Kuala Lumpur: Oxford University press.

Kompas daily (21 July 1998), PHK sudah mencapai 15.4 juta orang (Retrenchments have reached 15.4 million people).

(19 February 1999), *Pengangguran mencapai 16,86 juta orang* (Unemployment reached 16.86 million people).

Korns, Alex (1987), 'Distinguishing Signal from Noise in the Labour Force Data in Indonesia,'

- Luhulima, Achie and T.O. Ihromi (1998), Sociolegal Status of Women in Selected DMC's, Country Study: Indonesia. Jakarta, Insan Harapan Sejahtera.
- Manning, Chris (1998), Indonesian Labour in Transition, An East Asian Success Story? Cambridge University Press.
- Oey-Gardiner, Mayling (1991), 'Policies Affecting Female Employment in Indonesia.' Report prepared for the International Labour Office.
- Oey-Gardiner, Mayling and Evelyn Suleeman (1997), *Gender Differentials in Schooling and Labor Market Implications*. Jakarta, Insan Harapan Sejahtera, project for the Asian Development Bank.
- Raharjo, Yulfita and Valerie Hull (1984), 'Employment Patterns of Educated Women in Indonesian Cities' in Women in the Urban and Industrial Workforce, Southeast and East Asia, ed. by Gavin W. Jones. The Australian National University, Development Studies Centre Monograph No. 33.
- Rucker, Robert L. (1985), 'A Preliminary View of the Employment Problem: Indonesian Options and Realities', United States Agency for International Development, Jakarta.
- Suara Pembaruan daily (4 April 1998), Ketenagakerjaan: 'Krisis dalam krisis' (Labour market: crisis within a crisis).

(February 1, 1999), *Di atas kertas inflasi bisa 15 persen* (On paper inflation can reach 15 percent).

World Bank (1983, July 19), Wages and Employment in Indonesia, Report No. 3586-IND.

World Bank (1993), *The East Asian Miracle, Economic Growth and Public Policy*, published for the World Bank by Oxford University Press.

(1997), World Development Report 1997.

NOTES

¹⁾ Non-formal is used here in contrast to formal, meaning legal. The non-formal sector includes the informal sector associated with urban economic activities.

²⁾ It is important to note our distinction between the labour force and the work force. The labour force consists of the work force and those looking for work or the unemployed. The work force consists of only those actually recorded as 'working' during the reference period.

³⁾ From the introduction of the *SAKERNAS* in 1976, data was collected on a quarterly basis to capture the effects of the agricultural cycle on labour utilization. As agricultural technology has changed, so has the nature of labour utilization changed. Harvest frequency is no longer a function of seasonality but rather determined by soil quality and inputs, and therefore reducing the need for quarterly data collection. Starting in 1994, *SAKERNAS* data is now collected only annually with a reference month of August.

⁴⁾ As *SUPAS* was conducted in 1995, *SAKERNAS* was not conducted in that year. Because *SUPAS* produces rather different results from other surveys, including *SAKERNAS*, we shall omit data for that year.

⁵⁾ This one-hour reference period has often incited hectic debates (Oey-Gardiner and Suleeman, 1997), but not since the crisis until recently when the over-riding issue is open unemployment.

⁶⁾ This stability among females is contrary to earlier data when comparisons extended from 1961 to the early 1980s, based on various sources. As mentioned earlier, differences in data collection procedures resulted in different records of the labour force. These results, however, led to inferences of continuing rising female labour force participation (BPS 1983), which are today not fulfilled.

⁷⁾ Even though part of the rise may well be a statistical artifact. The rise in unemployment is first recorded in 1994 when data collection for the *SAKERNAS* became annual and was conducted in August, only one to two months after school is out and there is an upsurge of new entrants into the labour force (Table 2).

⁸⁾ As a result of rapidly expanding education opportunities, the less well off were also increasingly benefiting from the available services.

⁹⁾ The poor with little or no education can hardly afford the 'luxury' of being unemployed.

¹⁰⁾ From here on based on employees.

¹¹⁾ As the crisis wears on and women are the responsible party for household welfare, increasingly women have had to return to the labour market, even at poor levels of returns. Women can no longer afford to only be responsible for housekeeping. Instead, increasing numbers of women have had to combine household duties and participating in economic activities, even at very meager returns.

¹²⁾ This decline can not be fully attributed to an aging population. Instead, aging of the workforce is also affected by withdrawal from the workforce by women. Rapid economic growth spurred the rise of housekeepers among women.

¹³⁾ There are three contributing factors to this decline. First is the slowdown in overall population growth resulting from declining fertility affecting the cohort of new entrants. Second, is the withdrawal or non-entrance of young, and particularly rural, mothers whose wage levels are too low to make it worth their while to join the labour market. They are better off taking care of their families as homemakers. Third, urbanization of young women into paid employment in urban areas resulting in constant shares of new entrants among urban workers in general and female workers in particular.

¹⁴⁾ GDP was growing at 6.1 percent per annum during the 1980s and rose to 7.6 percent during the first half of the 1980s and even reached 7.8 percent in 1996. This high growth has been associated with a structural shift in favour of manufacturing, which grew at an impressive average rate of 10 percent per annum between 1985 and 1995, and accounted for a quarter of the nation's GDP. Indonesia's gross

investment rate rose from 24 to 32 percent of GDP between 1980 and 1996. Domestic savings had also grown to 31 percent of GDP in 1996 (World Bank 1997, Asian Development Bank 1997 and ILO 1996, cited in Islam 1998).

¹⁵⁾ Between July 1997 and July 1998, the exchange rate deteriorated from around Rp.2,400 to Rp.15,300 per US dollar. In late February 1999, the exchange rate was approximately Rp.9,000 to US\$1.

¹⁶⁾ In July 1997, the Jakarta Stock Market Index stood at more than 700. By January 1998 it had reached its lowest point at around 350, and by mid-July it had risen again to 470. In late February 1999 it hovers around 400.

¹⁷⁾ As earlier tabulations were based on the population 10+, these preliminary figures are not comparable to the data used in this paper.