

Forthcoming in *The China Quarterly*

**How has Economic Restructuring Affected China's Urban Workers?\***

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First Draft: October 2003

This Draft: November 2004

*Abstract*

Using data from the China Urban Labor Survey conducted in five large Chinese cities at year end 2001, we quantify the nature and magnitude of shocks to employment and worker benefits during the period of economic restructuring from 1996 to 2001, and evaluate the extent to which adversely affected urban workers had access to public and private assistance. Employment shocks were large and widespread, and were particularly hard on older workers and women. During the period of economic restructuring, unemployment reached double digits in all sample cities and labor force participation declined by 8.9 percent. Urban residents faced modest levels of wage and pension arrears, and sharp declines in health benefits. Public assistance programs for dislocated workers had limited coverage, with most job-leavers relying upon private assistance to support consumption, mainly from other household members.

Keywords: labor, unemployment, China, restructuring

\*The authors acknowledge grants to support field research from Michigan State University (Intramural Research Grants Program), the Chinese Academy of Social Sciences, Ford Foundation, and the University of Michigan (Rackham Faculty Research Grant), and support for follow-up research from the Weatherhead Center for International Affairs at Harvard University (Academy Scholars Program) and the W.E. Upjohn Institute for Employment Research. We thank seminar participants at the University of Michigan, Hong Kong University of Science and Technology, the University of Washington, and Stanford University for helpful comments.

## How has Economic Restructuring Affected China's Urban Workers?

### 1. Introduction

Well into the post-Mao reform era, China's socialist government maintained a strong commitment to provide lifetime employment and benefits to urban workers through state-sector employment. In the late 1990s, however, financial insolvency of many state-owned urban enterprises led to aggressive enterprise restructuring that shattered this "iron rice bowl." Implicit lifetime employment was replaced by massive layoffs, widespread unemployment, forced early retirements, and frequent failure to provide promised wage, pension, and health care benefits. According to government statistics, from 1995 to 2001 the number of workers employed in the state-owned sector fell from 113 million to 67 million, a decline of 46 million or 40 percent.<sup>1</sup> During the same period, employment in the urban collective sector fell by 18.6 million, or nearly 60 percent.<sup>2</sup> Over this same period, 43 million workers were officially registered as laid off, or *xiagang*, including 34 million from the state sector.<sup>3</sup> The adjustments show no sign of letting up in light of China's recent entry into the World Trade Organization, which many forecast will cause new episodes of labor dislocation. How Chinese families and public policies respond to these challenges will have a major impact on the welfare of millions of Chinese citizens and could alter the prospects for China's economic reforms.

Although many have voiced concern about the plight facing China's urban labor force, there remains a glaring lack of information on even basic labor market outcomes such as

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<sup>1</sup>*China Statistical Yearbook*, National Statistical Bureau, China Statistical Press, 2002.

<sup>2</sup>Employment in urban collective enterprises peaked in 1991 at 36.3 million, and fell from 31.5 million to 12.9 million from 1995 to 2001. From 1995 to 2001, employment in mixed ownership work units (joint-stock companies, limited liability companies with mixed ownership) increased from 3.2 million to 14.8 million. Thus, employment in work-units of other ownership reforms only absorbed a small share of workers laid off from state and collective sectors.

<sup>3</sup>Ministry of Labor, *China Labor and Social Security Yearbook*, (Beijing: Ministry of Labor and Social Security, 2002).

unemployment, labor force participation, and retirement, let alone systematic analysis of the nature of the shocks, their distribution among China's urban population, or the access of workers to public and private assistance when experiencing hardship. Available survey data have limited spatial or temporal coverage, or fail to measure important dimensions of workers' lives in urban China.

In this paper, we use newly available survey data from the China Urban Labor Survey (CULS) directed by the authors at year-end 2001 in five large Chinese cities (Fuzhou, Shanghai, Shenyang, Wuhan, and Xian) to provide a detailed description of how recent shocks affected China's workers during the critical adjustment period from 1996 to 2001. The paper has two research goals. The first is to assess the extent to which economic restructuring created shocks to employment and benefits for different demographic groups in urban China, and to describe the types of workers who were hit the hardest by economic shocks. The second goal is to evaluate the extent to which adversely affected workers had access to public and private assistance, and to determine which workers and households were most vulnerable in the face of restructuring.

The paper is organized as follows. In Section 2, we describe the recent restructuring of urban enterprises, review the existing literature, and raise specific issues of concern. Section 3 describes the CULS survey data. In section 4, we analyze how economic shocks to employment and to workers' benefits affected different groups of urban workers. In section 5, we describe responses to shocks and evaluate the extent to which workers had access to public and private assistance mechanisms. Section 6 examines subjective welfare assessments to provide further evidence on the vulnerability of different groups of the population to the consequences of economic restructuring. A final section discusses the implications of our findings.

## 2. Economic restructuring in urban China

One distinctive feature of China's economic transition has been the government's gradualist approach to reforming state-owned enterprises (SOEs). Under China's socialist system, government departments and SOEs provided lifetime employment, housing, health care, and pensions to a majority of urban workers. Despite economic reforms, this commitment to safeguarding the welfare of urban workers persisted well into the mid-1990s. The year 1995 was the first year to see no absolute growth in state sector employment.<sup>4</sup>

By the mid-1990s, SOE losses had begun to spin out of control.<sup>5</sup> Soft budget constraints and the government's full employment goals had led to substantial redundant labor in SOEs.<sup>6</sup> In 1994, the government began a policy of privatizing small and medium SOEs while protecting larger enterprises, or "seizing the large and letting go of the small" (*zhuada fangxiao*).<sup>7</sup> By late 1997, the government moved forward with aggressive restructuring of SOEs. The goal was to shut down unprofitable enterprises, to diversify ownership, shift enterprises to modern forms of corporate governance, and to de-link the provision of social services from individual employers by privatizing housing and shifting responsibility for health insurance and pension provision to city or provincial governments.

As in other transition economies in Eastern and Central Europe and the former Soviet Union, restructuring led to widespread labor dislocation, albeit much later in the transition process. In addition to the massive layoffs described earlier, anecdotal reports of wage and

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<sup>4</sup>*China Statistical Yearbook*, National Bureau of Statistics (Beijing: China Statistical Press, 2002).

<sup>5</sup>Nicholas Lardy, *China's Unfinished Economic Revolution* (Washington: Brookings Institution Press, 1998).

<sup>6</sup>Xiaoyuan Dong and Luis Putterman, "The Emergence of Labor Redundancy in China's State Industry: Findings from a 1980-1994 Data Panel," *Comparative Economic Studies*, Vol. 43, No. 2 (2001), pp. 111-128. Xiaoyuan Dong and Luis Putterman, "Soft Budget Constraints, Social Burdens, and Labor Redundancy in China's State Industry," *Journal of Comparative Economics*, Vol. 31, No. 1 (2003) pp. 111-128. Guo Li and Colin Lixin Xu, "State-Owned Enterprises, Labor Redundancy, and Job Creation: the Experience of the Chinese Provinces," *China Economic Quarterly*, Vol. 1, No. 1 (2001), pp. 97-110.

<sup>7</sup>Yuanzheng Cao, Yingyi Qian, and Barry Weingast, "From Federalism, Chinese Style, to Privatization, Chinese Style," *Economics of Transition*, Vol. 7, No. 1 (1999), pp. 103-131.

pension arrears leading to active protests became increasingly common, and health insurance coverage of the population declined.<sup>8</sup> Lacking ability to enforce high mandated benefit contributions from enterprises, cash-strapped municipal governments often were unable to shoulder the responsibility for benefit provision or to maintain equitable access to benefits.

To ease the pain of labor force adjustment, the government established new social welfare programs. After initial experiments in Shanghai as early as 1993, a special policy to support newly laid off (*xiagang*) workers was formally implemented nationwide beginning in 1998. Intended for permanent workers employed before labor contracting began in 1986 or contract workers whose jobs were ended before their contracts expired, the policy provided three years of basic living subsidies, as well as benefits (i.e., health care and pension contributions) based on 60 percent of each worker's final wage.<sup>9</sup> Laid off workers retained formal ties to their former work units until they found a new job, and were expected to register with newly established reemployment centers charged with providing skill training and assistance in searching for new jobs. The *xiagang* subsidies drew upon unemployment insurance funds as well as central and local budgetary expenditures and enterprise contributions, and were intended as a temporary policy to end on January 1, 2001.<sup>10</sup> Official documentation of the implementation and history of

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<sup>8</sup>On the issue of health insurance, see Yuanli Liu, "Health Insurance Reform in China," Report to the Asian Development Bank (2000). For anecdotal evidence of protests caught by the foreign news media in the months just following the CULS, see: David Murphy, "China – Urban Poverty – Nothing More to Lose," *Far Easter Economic Review*, Vol. 165, No 44, (November 7, 2002), pp. 30-34; Dexter T. Roberts, "Days of Rage: Angry Workers Hit the Streets," *Business Week*, Iss. 3777 (April 8, 2002), pp. 50-51. A 1997 survey in 4 cities found that 9 percent of pensioners had arrears; see Yanfeng Ge, "Report on Urban Employment: Survey in Shenyang, Qingdao, Changsha and Chendu," Report to United Nations Development Program (1998). A 1998 survey in Beijing, Wuxi, and Zhuhai found that health insurance and pension coverage of current workers was much lower in Wuxi and Zhuhai where the share of workers in collective and private enterprises was much greater, see Drury, David, and Marie W. Arneberg (eds.), *No More Forevers: The Chinese Labour Force in a Time of Reform* (Norway: Fafo Institute for Applied Social Science).

<sup>9</sup>Benefits often declined over time and subsidies were supposed to be greater than unemployment insurance subsidies. However, actual benefit amounts depended greatly on municipal financial resources.

<sup>10</sup>In practice, many local governments extended benefits to 2003, see Juwei Zhang, "Urban Xiangang, Unemployment and Social Support Policies: A Review of Labor Market Policies in Transitional China," Report to the World Bank (2003).

the *xiagang* program portrays something of a success story.<sup>11</sup> However, our study finds relatively poor performance in terms of both benefit coverage and re-employment.

The government standardized its unemployment insurance program in 1999. The program is financed by payroll charges and provides subsidies for up to two years depending on how long the worker and/or the work unit has participated in the unemployment insurance program. Workers whose three years of *xiagang* subsidies expired become immediately eligible for unemployment benefits.

By 1998, most cities also began providing relief through the minimum living standard program (MLSP) which provided subsidies to households whose income per capita fell below designated urban poverty lines. The MLSP was administered in a relatively *ad hoc* fashion, lacking standardized poverty lines, funding support, administrative apparatus, or supervision. Central government financing began in 1999 and expanded significantly in 2001, when expenditures reached 542 million yuan and the number of beneficiaries reached 1.17 million.<sup>12</sup>

### **3. The China Urban Labor Survey**

The China Urban Labor Survey (CULS) was conducted at year-end 2001 by the Institute for Population and Labor Economics at the Chinese Academy of Social Sciences (CASS-IPS), working with provincial and municipal offices of the National Bureau of Statistics. The authors collaborated in the design and execution of the survey.

The CULS was conducted in five cities: Fuzhou, Shanghai, Shenyang, Wuhan, and Xian. The cities were chosen to provide regional diversity and variation in the size of the state versus private sectors. Fuzhou and Shanghai are coastal cities that have enjoyed outstanding economic

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<sup>11</sup>Zhang, “Urban Xiagang, ...”.

<sup>12</sup>Zhang, “Urban Xiagang, ...”.

performance throughout the reform period, while Shenyang in the northeast, Wuhan in central China, and Xian in northwest China are interior cities with large, struggling state industrial sectors that have experienced painful restructuring. Summary data on each of the five cities are provided in Table 1. Three of the cities are among China's six largest cities by population, and another ranks tenth. Ranked by GDP per capita or by mean wages, the ordering of cities from richest to poorest is Shanghai, Fuzhou, Shenyang, Wuhan, and Xian. Summary statistics for the pooled sample employ weights based on the sampling rate in each city. Thus, Shanghai receives a relatively large weight because of its large population. Roughly half of the weighted sample comes from the two coastal cities, and half from the three interior cities. Our focus on large cities could overstate unemployment problems in urban China, given evidence from census data that our cities have higher unemployment rates than other cities in the same provinces (Giles, Park, and Zhang, forthcoming). On the other hand, the high weight given to Shanghai, where the municipal government is well-financed, could lead to over statement of the provision of benefits in urban China.

Within each city, a proportional population sampling approach was used to sample an average of 15 registered urban households in each of 70 neighborhood clusters. Each household head was asked questions about the family, and then all family members above age 16 who were no longer in school were interviewed individually. We conducted surveys in 3499 households (700 in each city), and completed surveys of 8109 adults over age 16. At the time of the survey, 5787 adults were under mandatory retirement age and 4238 were currently employed. The survey had a non-response rate of 16.5 percent, of which 6.5 percent of households could not be found, 4.9 percent had moved, and 5.1 percent refused to be interviewed.

In this paper, we study individuals living in households with local urban permanent

residence permits only, and do not consider those with temporary residence permits or with no registration status, a group consisting primarily of rural migrants. China maintains a household registration (*hukou*) system that determines access to employment and many social services and benefits. Our goal is to study how recent changes have affected urban workers previously protected under the socialist system, making the focus on urban registered households appropriate. In the 2000 Population Census, registered urban households comprised 76 percent of those living in the five sample cities.

The CULS includes individual calendar-based work histories with detailed questions about job changes, transitions to unemployment or retirement, changes in pension, health care, and housing benefits, and access to government programs since January 1996.<sup>13</sup> Like many multi-purpose household surveys, it also includes a battery of questions on work status, income, expenditure, housing and consumer durables, productive assets and wealth, health, and household demographics.

#### **4. Economic shocks in urban China**

##### **A. Trends in employment status**

We begin by examining key work status outcomes for different demographic groups over time. Specifically, we look at trends in the unemployment rate (UR), the labor force participation rate (LFPR), and the employment rate (ER). We count as unemployed those who report that they were not working at a particular time and who looked for work during the same

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<sup>13</sup>More detailed information on the sampling procedure and English language translations of the CULS instruments can be found at: <http://www.msu.edu/~gilesj/>



non-working spell.<sup>14</sup> Individuals in the labor force are those who were working (employed) or not working but looking for work (unemployed). The UR is the share of the labor force that is unemployed, the LFPR is the share of all working-age adults who are in the labor force, and the ER is the share of all working-age adults who are employed. These definitions imply the following identity:  $ER = (1-UR) \times LFPR$ .

The three work status measures are calculated for each month from January 1996 to November 2001 based on retrospective work histories of urban residents interviewed in late November and December 2001.<sup>15</sup> Overall trends for UR, LFPR and ER are presented in Figure 1, which also plots trends by gender. Table 2 reports UR and LFPR for the initial and ending months of the survey recall period. From January 1996 to November 2001, the UR for working-age adults (those aged 16 to 60) increased from 7.1 to 12.5 percent, the LFPR fell from 83.3 to 74.4 percent, and the ER fell from 77.0 to 64.8 percent. Looking at the breakdowns by gender, we find sharper increases in UR and sharper declines in LFPR for women than for men. At the beginning of the recall period, the unemployment rate already was higher for women than men (8.2 versus 6.1 percent). By the end of the period, women's UR jumped by 6.8 percent to reach 15 percent, while men's UR rose by 4.6 percent to reach 10.7 percent. The scale of female exit from the labor force further underscores the differential impact that transition had on women.

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<sup>14</sup>This definition of the unemployment rate is not fully consistent with ILO standards, which, for example, is based on job search activity in the past 30 days. Our measure is likely to slightly overstate the true unemployment rate if calculated according to the ILO definition, for a discussion see: John Giles, Albert Park, and Juwei Zhang, "What is China's True Unemployment Rate?" *China Economic Review*, forthcoming (2005).

<sup>15</sup>Our calculations assume that recall is accurate and that those interviewed in 2001 are representative of the labor force in earlier years. There could be bias in earlier years if the number of deaths and departures from the city are significant and non-random, but we do not expect such bias to be large. We may underestimate earlier unemployment and overestimate the LFPR if non-working adults were more likely than working adults to migrate or die. However, migration of urban residents is sharply circumscribed by China's residential registration system, and migrants could have more skills and greater job opportunities elsewhere, which would reverse the direction of bias. Because the CULS sample frame excludes students in school who have never entered the labor force, we use the same criteria to adjust the samples reconstructed for previous periods. This does not affect unemployment rates but does create an upward bias in measured LFPR and could understate decreases in LFPR if the share of adults in school increases over time.

Over the recall period, the LFPR of working-age women fell by 11.3 percent, from 74.4 percent to 63.3 percent, while that of men declined by 6.7 percent, to 86.3 percent in November 2001.

Next, we examine trends in work status by demographic group (Table 2). Employment shocks, as measured by increased unemployment or departures from the labor force, appear to be greatest for older workers approaching mandatory retirement age (60 for men, 55 for women). For men, the rise in UR is greatest for those aged 50 to 55 (from 2.4 percent to 11.3 percent), followed by those aged 40 to 50 (from 4.1 to 10.3 percent). The UR was also high and increasing fast for young men in the 16 to 30 age group, rising from 12.9 to 18.3 percent. For women, the increase in UR also was largest for older workers, remarkably more than tripling from 4.6 percent to 17.1 percent for those aged 40 to 50. In contrast, the UR actually fell slightly for women aged 16 to 30 (13.7 to 13.2 percent).

Decreases in labor force participation were most pronounced for individuals approaching mandatory retirement age, and likely reflect aggressive use of early retirement to reduce payrolls in state sector enterprises. For men near retirement (aged 55 to 60), the LFPR fell by nearly 20 percent, from 76.6 to 57.3 percent, and the decline also was substantial for those aged 40 to 50 (97 to 89.0 percent). The LFPR of both young men and women (aged 16 to 30) changed little. The decline in the LFPR of women was greatest for older cohorts, falling from 82.6 to 68.1 percent (a decline of 14.5 percent) for women aged 40 to 50, and from 44.4 to 33.9 percent for those near mandatory retirement age (aged 50 to 55).

Table 2 provides breakdowns of changes in work status by city, educational attainment, and ownership sector of most recent employment. Wuhan had the highest UR (16.8 percent in November 2001) and greatest increase in the UR (8.2 percent). Shanghai had the second greatest increases in the UR (5.0), but the lowest levels. Xian and Shenyang had the lowest UR increases

but in November 2001 still had higher UR levels than the coastal cities. All but Fuzhou had unemployment rates above 10 percent in November 2001. The largest declines in LFPR occurred in Shanghai (13.4 percent), followed by Wuhan (7.6 percent). The other three cities had negligible declines. Overall, it does not appear that restructuring shocks in China were confined to interior cities, but rather affected workers in affluent coastal cities as well.

To investigate the determinants of labor outcomes in a multivariate framework, we use regression analysis to examine how different factors affected the probability of unemployment and labor force participation for both men and women in January 1996 and November 2001. We are particularly interested in assessing the extent to which the greater susceptibility of older workers to employment shocks can be explained by differences in educational attainment. By comparing results for the beginning and end of the recall period, we can see how the importance of different factors changed over time. The independent variables are sets of indicator variables for educational attainment, age group, and city. The results reported in Table 3 are the differences in the probability of the outcome in comparison to the reference categories (age 16 to 30, elementary or lower education, living in Shanghai). They are based on estimation of probit models (see notes to Table 3 for details).

Conditional on being in the labor force, the probability of older workers being unemployed in comparison to younger workers decreased over time, but the differences are never statistically different from zero. The probability of unemployment was more strongly influenced by education. For men, those with post-secondary education were 5.9 percent less likely to be unemployed than those with elementary education or less in 1996, and 6.5 percent less likely in 2001. For women, the importance of education is greater and increasing faster; having post-secondary education rather than elementary education reduced the probability of

unemployment by 7.1 and 17.4 percent in 1996 and 2001. Thus, conditional on being in the labor force, education is more important than age for determining employment outcomes.

Interestingly, unlike for unemployment, age significantly affects labor force participation even after controlling for education. The probability of men in the 50 to 54 and 55 to 59 age groups remaining in the labor force relative to younger workers fell sharply between January 1996 and November 2001. For women, a significant drop in the probabilities of labor force participation compared to younger workers occurs at all older age levels, especially for those aged 40 to 49, who by year-end 2001 were 20 percent less likely to be in the labor force than younger women. Women aged 50 to 54 were already 42.8 percent less likely than young women to be in the labor force in 1996 and were 50.3 percent less likely in 2001. Controlling for age, the positive effect of education on the likelihood of labor force participation also became more significant over time for both men and women. Men and women with post-secondary education were 5.6 and 21.6 percent more likely to be in the labor force than the least educated group in 1996, and 14.1 and 30.3 percent more likely in November 2001. Finally, we note that after controlling for other factors there are no statistically significant differences in the probability of labor force participation of workers from different cities.<sup>16</sup>

To evaluate gender bias, we estimated pooled regressions including data for men and women and adding a dummy variable for sex. We find that after controlling for differences in age, education, and city, women were no more likely than men to be unemployed in January 1996 but 2.7 percent more likely in November 2001. Women were 15.8 percent less likely to be in the labor force at the beginning of the period and 22.8 percent less likely at the end. Thus, evidence suggests that gender bias in employment status increased over time.

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<sup>16</sup>Men in Wuhan and women in Wuhan and Shenyang are more likely to be unemployed or out of the labor force.

### *Are Job Separations Voluntary?*

One of the concerns about substantial declines in LFPR, especially among older workers, is that such workers may not have left the labor force voluntarily. They may have felt discouraged, incapable of finding suitable new work, or more comfortable describing themselves as retired rather than unemployed. Policy makers may be less concerned if newly unemployed workers are those who left jobs voluntarily in search of better work, and so reflect an increase in natural unemployment associated with a more active labor market. This creates considerable interest in understanding whether job separations were voluntary or involuntary.

To investigate this question, we examine self-reported explanations for the end of employment for all job spells ending during the period 1996 to 2001 (Table 4). Enterprise restructuring is considered to be the reason for job loss if the respondent chooses one of the following responses: work unit closed, went bankrupt, or was merged or reorganized. Other involuntary reasons for job separations include forced early retirement and other involuntary dismissals. The remaining reasons for job separations are voluntary departures, mandatory retirement, and “other.” Overall, 60.3 and 64.4 percent of job separations of men and women were involuntary and non-mandatory. These total percentages include 29.0 and 21.8 percent explicitly related to restructuring, 15.6 and 31.1 percent forced early retirements and 15.8 and 11.4 percent other involuntary dismissals. The latter two reasons also could be related to restructuring. Only 25.9 and 19.0 percent of job separations were voluntary. Even allowing for reporting bias by disgruntled workers, China clearly contrasts with other transition economies in the predominantly involuntary nature of job separations.<sup>17</sup>

For men and women aged 30 to 39 and men aged 40 to 49, restructuring was the most

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<sup>17</sup>Tito Boeri and Katherine Terrell, “Institutional Determinants of Labor Reallocation in Transition,” *Journal of Economic Perspectives*, Vol. 16, No. 1 (2002): pp51-76; Tito Boeri, “Transition with Labor Supply,” William Davidson Institute Working Paper, No. 274 (2000).

important reason for involuntary job separation. Further, 57.5 percent of job separations for women aged 40 to 49 and 88.1 percent for women aged 50 to 54 were in the form of early retirement, and the majority of these women reported that retirement was involuntary.<sup>18</sup> The likelihood that early retirement may be unwanted is underscored when we compare average retirement ages of different cohorts of the elderly. Men aged 60 to 65 in 2001, who began the 1996-2001 period near to the official retirement age, had a lower average retirement age, 57.8, than men aged 65 to 70, who had already passed retirement age before widespread restructuring began, and whose average retirement age was 58.3. Similarly, women aged 55 to 60 in 2001 had a mean retirement age of 50.8 compared to 51.6 for the adjacent older cohort. Nearly all of the elderly in both cohorts had retired by the time of the survey.

## B. Changes in wages and benefits

Changes in wages and benefits are important dimensions of shocks that may have affected large numbers of urban workers, even those fortunate enough to keep their jobs. Shocks to wages may take the form of reduced nominal or real wages, or wage arrears. Benefit shocks can take the form of lost health insurance coverage, reduced health insurance benefits and health expenditure reimbursement arrears for those with insurance, reduced pension benefits (for those still working), pension arrears (for retired workers), and changes in housing benefits. In this section, we focus on wage arrears, changes in health insurance coverage, and health expenditure reimbursement arrears of employed working-age individuals, as well as pension and health expenditure reimbursement arrears of retired workers. Wage changes associated with job changes are discussed in the next section on responses to shocks. We believe the other types of

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<sup>18</sup> Women's earlier retirement age also prevents them from earning higher wages from greater seniority, which affects pension amounts.

wage and benefit shocks are less likely to have created immediate, significant hardships for most workers.<sup>19</sup>

Wage, pension, and health expenditure reimbursement arrears are typically related to temporary cash flow problems of employers, reflecting the poor financial health of employers. Overall, 10.6 percent of working-age adults who worked during the 1996 to 2001 period experienced wage arrears at some point during the period (column 1, Table 5). Less than four percent of ever-employed workers (roughly one third of those with arrears) reported wage arrears in default, meaning that the worker did not expect the wages to ever be paid. There is considerable variation in wage arrears across cities. In Shenyang and Xian, about 23 percent of workers experienced wage arrears (7.8 and 6.4 percent in default), followed by Wuhan (13.6 percent), Fuzhou (5.7 percent), and Shanghai (2.1 percent). Wage arrears are spread relatively evenly across demographic groups, with over 10 percent in every group reporting such arrears. Men aged 40 to 50 and women aged 30 to 40 have the highest percentage of wage arrears (13.3 and 14.3 percent). Wage arrears are much more prevalent among less educated workers (14.6 percent for those with lower secondary school education, 10.8 percent for those with upper secondary education, and 5.7 percent for those with post-secondary education). Workers in wholly state-owned, majority state-owned, and collective enterprises were most likely to have experienced wage arrears, and those in government or party organizations or in foreign-invested enterprises were least likely.

To examine changes in health insurance coverage over time, we use the work histories to

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<sup>19</sup>Wage data from the CULS work histories reveal that reductions in nominal wages while staying with the same employer rarely occurred, although our data are not ideal for examining such changes because the survey asks about starting and ending wages for each job spell but does not capture wage reductions that followed wage increases. Inflation was only 0.54 percent per annum from 1996 to 2001 in urban China, making real wage shocks due to inflation inconsequential. In pretests, we found that most workers did not have a good understanding of the details of their pension or health care benefits. It has not been common practice to take housing away from displaced workers, likely because of concern that such changes could be socially and politically explosive.

calculate employer-provided health insurance coverage rates for working adults aged 16 to 60 at the beginning and end of the recall period (columns 2 and 3, Table 5). Overall, coverage fell substantially, from 81.6 percent in January 1996 to 68.7 percent in November 2001. Declines were greater for women (75.7 to 61.0 percent) than men (84.5 to 74.3 percent). They were most dramatic in Shanghai (decline of 17.0 percent) and Xian (16.4 percent), followed by Fuzhou (11.9 percent), Wuhan (8.2 percent), and Shenyang (6.4 percent). However, by the end of the period, Shanghai still had the highest coverage rate (74.6 percent) and Shenyang the lowest (53.5 percent). Declines were very modest in wholly-owned SOEs and in government, but more common in majority-owned SOEs, collective enterprises, and non-public enterprises. The low percentage of workers in the private sector with employer-provided insurance suggests that prospective loss of benefits could be a barrier preventing workers from shifting from the public to private sectors. Most reductions in health insurance coverage appear to be associated with job changes. We found no evidence of large numbers of employees losing insurance outright while working with the same employer. Given that the employment rate declined over time and non-working individuals are less likely to have health insurance, the decline in health insurance coverage for the whole population was surely greater than the decline in insurance coverage of working adults.

In column 5 of Table 5, we report health insurance coverage rates for all individuals aged 16 to 60 in November 2001, whether working or not working, based on responses to a separate question on current health insurance status. Overall, 56.1 percent of working age adults in the five city CULS survey had health insurance, of which 6.1 percent of adults purchased insurance themselves. Shanghai had by far the highest coverage rate (87.4 percent), followed by Xian (57.5 percent), Fuzhou (48.7 percent), Wuhan (46.2 percent), and Shenyang (39.1 percent). The



fact that Shanghai's overall coverage rate is even higher than the employer-provided coverage rate for employed workers in 2001 could reflect both the high coverage rate of early retirees (97.6 percent of retirees in Shanghai report that they have health insurance) and Shanghai's relative success in separating health care provision from enterprises. In general, health insurance is closely tied to employment; 66.7 percent of employed working-age adults had health insurance coverage, compared to only 35.4 percent of those who were not working. In comparing coverage rates of different demographic groups, we find that a higher percentage of men than women in each age category had health insurance coverage. Health insurance coverage was much higher for more educated workers, and in government or publicly owned enterprises.

Those with health insurance may also experience shocks if they have difficulty obtaining promised reimbursements. Health expenditure reimbursement arrears among those with health insurance were more common than wage or pension arrears. Overall, 22.1 percent of working-age adults with health insurance report health expenditure reimbursement arrears (column 2, Table 5). The variation across cities in health expenditure reimbursement arrears is quite different than that for wage and pension arrears, and follows more closely differences in city income per capita. Xian has by far the greatest prevalence, at 38.2 percent, followed by Shenyang (27.7 percent), Wuhan (19.5 percent), Fuzhou (18.9 percent) and Shanghai (18.9 percent). Unlike other types of arrears, we don't see a significant difference in arrears across demographic or education categories conditional on having insurance.

Next, we briefly describe shocks to benefits affecting retired workers (Table 6). While these shocks mainly affected elderly individuals, defined as those aged 60 and older, they also affected some who retired early (28 percent of retirees were below mandatory retirement age at the time of the survey). We find that 10.6 percent of retirees report experiencing pension arrears.

For the most part, the breakdowns by city and educational attainment exhibit the same patterns as for wage arrears. The greatest prevalence of pension arrears is in Shenyang, where 26.4 percent of retirees report arrears. Table 6 also shows that health insurance coverage rates of retired persons were generally higher than those of working-age adults (74.2 percent compared to 56.1 percent), but conditional on having insurance, the incidence of health expenditure reimbursement arrears was greater (29.9 percent compared to 22.1 percent). This latter difference makes sense because the elderly would be expected to have a higher demand for health services.

One of the main goals of labor policy reforms was to “socialize” the work benefit system by shifting responsibility for their provision from enterprises to local governments. Many inequities in benefit access occur because, in the absence of such reforms, workers in poorly performing enterprises became vulnerable to losing promised benefits. The CULS provides information on whether health insurance reimbursements and pension payments were provided by work units or local governments. In January 1996, only 5.6 percent of employed workers with health insurance received socialized benefits, but by November 2001, the share had increased to 55.7 percent. However, progress in socializing health insurance benefits varied dramatically by city. The share of the insured receiving socialized health insurance benefits in 2001 was 88.6 percent in Shanghai, 50.5 percent in Xian, 35.6 percent in Fuzhou, 11.4 percent in Wuhan, and 9.1 percent in Shenyang. Shanghai also led the way in socializing pension benefits. By 2001, 93.9 percent of pensioners in Shanghai received their pension payments from government offices rather than their enterprise, compared to 69.5 percent in Fuzhou, and roughly 60 percent in the other three cities. In 1996, the share of pensioners receiving socialized pension benefits ranged from 15 and 25 percent in different cities.

## 5. Responses to economic shocks

Workers who are adversely affected by economic shocks may reduce the negative impact of lost wages and benefits in several ways. First, workers losing jobs may try to find a new job. If this fails or if they are unwilling to search for new work, they can seek access to government social welfare programs, turn to family and friends, or draw upon their own savings or other assets. Workers who formally retire may be eligible for pension payments. In this section, we evaluate the extent to which workers adversely affected by recent economic shocks have been able to find support through these various mechanisms.

### A. Reemployment

For workers who lose jobs involuntarily, finding new jobs in as short a time as possible may be the best way to avoid large welfare losses associated with lost pay and benefits. However, even if one finds a new job, the extent to which reemployment cushions the original employment shock depends upon the duration of non-employment and the difference in the wages and benefits provided by the new job in comparison to the old job.<sup>20</sup> Access to public and private support or to pension payments also determines the welfare loss associated with non-employment, and may affect the duration of non-employment. Some workers also leave jobs voluntarily in the hopes of finding better jobs or when a better job offer is already in hand. Thus, the dynamics of reemployment may vary considerably depending on the reason for job separation. We are particularly interested in the reemployment of those suffering from employment shocks due to restructuring.

Between January 1996 and November 2001, the CULS documented 2705 job separations

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<sup>20</sup>In the US, individuals who experience layoffs have persistently lower income and lower household consumption per capita. For a review of this literature, see Melvin Stephens Jr. "The Long-Run Consumption Effects of Earnings Shocks," *Review of Economics and Statistics*, Vol. 83, No. 1 (2001), pp. 28-36.

of working-age adults. As shown in Table 7, 34.8 percent of individuals experiencing job separations were employed again within 12 months of leaving their jobs, and 44.7 percent were employed again by November 2001. In Shanghai and Fuzhou, cities hit less hard by restructuring, about 42 percent of individuals were employed again within 12 months. In Shenyang, Wuhan, and Xian, only 29 to 30 percent of workers leaving jobs were employed again within 12 months. Out-of-work duration also differed by gender, age, and education. For all age groups, the share of men reemployed was higher than the share of women. For both men and women, there was a significant decline in the share reemployed for those over age 40. Individuals with more education were more likely to be re-employed.<sup>21</sup>

When we look at the duration of unemployment by reason for job separation, we find, not surprisingly, that those who left jobs voluntarily were much more likely to find new jobs quickly compared to those who left involuntarily. Of those who voluntarily left jobs, 62.3 percent were reemployed within 12 months and 70.7 percent were employed by November 2001. In contrast, of those losing jobs because of restructuring or other involuntary reasons, only 38.0 and 31.7 percent found new jobs within 12 months. The reemployment rate was even lower for those who said they had retired early.

The plight of state-sector employees is highlighted by our finding that only 29.1 percent of individuals leaving state-owned enterprises were employed again within a year, and only 36.8 percent by November 2001. Employees leaving government or party organizations fared relatively better, with 60.3 percent re-employed within a year, followed by individuals working in foreign-invested and private sectors.

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<sup>21</sup>When we analyze out of work duration in a multivariate framework using a duration model, we find that these age, gender and education effects remain significant (see: Fang Cai, John Giles and Albert Park, "The Impact of Institutions, Information and Demographics on the Re-Employment of China's Laid-Off Workers," mimeo, Michigan State University, November 2004).

During the late 1990s, China's policymakers hoped that the demand for labor in the non-state sector would absorb laid-off workers from the state sector. Has labor, in fact, shifted from the state to non-state sector? Table 8 displays a transition matrix with ownership sector of previous job on the vertical axis and ownership sector of new job on the horizontal axis. Of the 944 workers who left state sector jobs, 64.5 percent were still out of work in November 2001. Of the 35.5 percent who found new employment, 8.5 percent, or less than one fourth of reemployed workers, found work in state-owned enterprises, 7.0 percent found jobs in collective enterprises, and 14.2 percent (about 40 percent of the employees who found new jobs) found jobs in the private sector. Similar transitions characterized workers leaving the majority state-owned and collective sectors.

Do workers finding new employment end up taking a cut in pay, or do some workers actually do better with new employers? Again, the answer to this question depends upon the reason for job separation. Columns 3 to 5 of Table 7 provide summary information on changes in nominal wages when individuals change jobs. The first column reports mean percent changes in wages from previous job to new job for individuals who change jobs. The second and third columns report the share of respondents with lower and higher nominal wages, respectively. Workers under age 40 experienced an increase in mean nominal wages, while those over 40 saw average wages decline. The decrease in nominal wages was largest for workers near mandatory retirement. Given that older workers have less human capital and likely found it difficult to learn new skills, this result is not surprising. Overall, job loss did not appear to have a scarring effect for younger workers, but did for older workers. At first blush, this would suggest a conclusion similar to other surveys, which contrasts with findings in many countries that job loss is

associated with a permanent decrease in wages.<sup>22</sup> However, it is important to keep in mind that nearly 60 percent of workers experiencing job separations during this period were still unemployed in November 2001.

The importance of education and prior sector of employment also figure prominently in the changes observed between jobs. Individuals with upper secondary education and above saw positive increases in wages as they shifted between jobs, while workers with lower secondary or primary education saw a drop in their average wage. Similarly, workers formerly in wholly-owned SOEs, majority-owned SOEs, and foreign-invested enterprises witnessed an average decline in nominal wages, while those that had been previously employed in government or party organizations or in the private sector saw an average gain in their nominal wage when changing jobs.

New jobs may also restore employment-related benefits, unless new employers tend to be foreign or private firms that provide fewer benefits than SOEs. Take the case of health insurance. Of the 1120 workers in the CULS who found new jobs after ending job spells, 80 percent did not receive health insurance benefits in their new jobs. For individuals with employer-provided health insurance in their previous job, 73 percent did not receive health insurance benefits in their next job. Thus, even when reemployment restored wage income, it often did not reverse lost benefits associated with departures from state-sector employment.

## B. Access to Public Support

The three main social insurance programs designed to help workers adversely affected by economic shocks are *xiagang* subsidies, unemployment subsidies, and MLSP payments.

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<sup>22</sup>See Simon Appleton, John Knight, Lina Song and Qingjie Xia, "Labor Retrenchment in China: Determinants and Consequences," *China Economic Review*, Vol. 13, pp. 252-275.

Publicly funded pension payments, especially for those who retire early, can also be considered a form of public support. Whether or not and to what extent dislocated workers had access to these different forms of public support is an important but poorly understood policy question.

Figure 2 plots unemployment rates by demographic group, and breaks down the unemployed into three categories: the share with access to *xiagang* or unemployment insurance subsidies (shaded in gray); the share receiving pension payments (white); and the share lacking access to public support (black). Because MLSP payments are targeted to the household, they are not considered here. Fewer than 20 percent of unemployed workers under age 30 had access to public subsidies, and even for those aged 30 to 40, fewer than 30 percent of unemployed men and 25 percent of unemployed women had access to subsidies. For men aged 40 to 55 and women aged 40 to 50, coverage was better, with over half of the unemployed receiving subsidies. For those near retirement age, pensions became an important source of support. For men aged 50 to 55 and women aged 40 to 50, about one fifth of the unemployed receive pensions, and for men aged 55 to 59 and women aged 50 to 59, the vast majority of the unemployed received pensions.

The importance of pensions as a source of support for older working age adults becomes more evident when we look at public support for those who are out of the labor force, again broken down by gender and age group (Figure 3). For women over 40 and men over 50, large majorities of those out of the labor force received pensions. Otherwise the patterns of support are similar to those for the unemployed. Considering all forms of public support, including pensions, we find that the coverage of public support increased monotonically with the age of the worker. However, for all age groups, there remained substantial shares of dislocated workers who received no public support at all, including one third to one half of the unemployed aged 40

to 50, the group experiencing the greatest employment shocks due to restructuring.

Even for those who received public support, the magnitude of support and its importance relative to private sources of support may have been limited. In the work histories, we directly asked respondents to report the most important source of financial support during each non-working spell. Table 9 reports these responses by sex and reason for job separation. For those experiencing involuntary job separations, the most frequent main source of support was income from other household members (33.7 percent for men, 54.4 percent for women). Forms of public support were cited by 33.5 percent of men and 26.3 percent of women, the most common choice being *xiagang* subsidies (24.7 percent of men and 21.5 percent of women). For those reporting voluntary separations, only 13.8 percent of men and 12.9 percent of women reported public support as the main source of support while not working. For retired workers, nearly all reported primary reliance on pensions.

Another way to examine the relative importance of public versus private support is to compare the level and composition of household income (including public and private transfers) and consumption per capita for households with fully employed members and those with non-working members (Table 10). All income components are annualized and household per capita averages are calculated for each of the following components: earned income (from wages and bonuses); pension income; public subsidies (*xiagang* subsidies, unemployment subsidies; and MLSP payments); lump-sum severance payments;<sup>23</sup> and private transfers from individuals outside the household. Income per capita is listed both with and without lump sum severance

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<sup>23</sup>While there are just over 100 individuals reporting lump sum payments, some of them are quite large. Since these payments are often in lieu of any future pension or health benefit, it is also difficult to think of them as part of annual salary. It is likely that these large payments reflect the unsanctioned practice of “buying up working years” in which workers receive a lump-sum payment and forsake future employment or benefit claims from the employer. For more information see Zhang, “Urban *Xiagang*, ...”.



payments. We also present data on household consumption per capita.<sup>24</sup> In households with non-working members, public subsidies were still only a small fraction of per capita income. With one male not working, earned income per capita, presumably earned by other household members, was still more than five times the value of *xiagang* subsidies, unemployment subsidies, and MLSP payments combined, and for those with one woman out of work earned income per capita was nearly 20 times as great as the public subsidy per capita. For households with two or more adults out of work, subsidies were still less than one third of earned income per capita earned by other adults in the household, while nearly fifty percent of total income was from pension funds or disability payments.

Further appreciation of the coverage and leakage of the *xiagang* and registered unemployment programs can be drawn from information describing both the benefits received and current work-status of *xiagang* and registered unemployed workers. The CULS contains information on 969 workers who reported that they were current or former *xiagang* workers. Of this group, 83.9 percent were still *xiagang* in November 2001. Only 42.3 percent of self-described *xiagang* workers actually received formal *xiagang* registration certificates, and 35.1 percent did not receive any living support subsidies (24.6 percent of registered and 44.4 percent of non-registered *xiagang* workers). Self-reported *xiagang* workers may be un-registered if they are not strictly eligible for *xiagang* status but prefer using the word to describe their situation, or if they are qualified but work units are unwilling to grant registered status because of the financial responsibilities entailed. The flipside of the incomplete coverage problem is leakage. We find that 17.4 percent of *xiagang* workers received *xiagang* or unemployment living allowances while also working.

There is some overlap in the targeting of *xiagang* and unemployment subsidies. Some

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<sup>24</sup>We do not include expenses on housing or education of children in the consumption measure listed in Table 12.

*xiagang* workers were registered as unemployed (15.1 percent) and received unemployment benefits (7.7 percent). Some *xiagang* workers were even able to receive both *xiagang* and unemployment subsidies at the same time (3.1 percent). The new unemployment subsidies also have problems of incomplete coverage and leakage. Many unemployed workers were not officially registered as such, and of those who registered, 40.6 percent received no subsidies. But 18.2 percent of registered unemployed workers received some type of subsidy while working. Those receiving both *xiagang* and unemployment subsidies accounted for 7.1 percent of the registered unemployed.

According to official guidelines, *xiagang* workers were required to enroll at re-employment centers, and the centers were required to provide a basic living allowance; make contributions on behalf of workers to pension, medical insurance, unemployment insurance and other social security pools; and organize re-training and provide referrals for re-employment.<sup>25</sup> In fact, only 23.8 percent of self-reported *xiagang* workers had medical insurance, and 18.9 percent of those with insurance experienced reimbursements arrears. Moreover, only 39.0 percent of workers with a *xiagang* certificate and 27.5 percent without believed that they would ever receive a pension, let alone benefit from employer pension contributions. Finally, in practice, access to retraining programs was far from complete. Only 12 percent of self-described *xiagang* workers reported that participation in retraining programs was mandatory and an even lower percentage reported actually participating in a training program.<sup>26</sup>

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<sup>25</sup>Ministry of Labor and Social Security, *Selected Important Documents on Labor and Social Security in the New Period*, (Beijing: Document Research Office of the Central Committee of the Communist Party of China, China Labor and Social Security Publishing House and Central Document Publishing House, 2002).

<sup>26</sup>This calls into question the findings of Bidani, Goh, and O’Leary, which looks at the effectiveness of retraining programs in Wuhan and Shenyang based on surveys of workers who showed up at retraining centers, since such a sample would clearly suffer from selection bias. See: Benu Bidani, Chorching Goh, and Christopher O’Leary, “Has Training Helped Employ *Xiagang* in China? A Tale from Two Cities,” mimeo, World Bank (2002).

## B. Access to Private Support

Evidence presented in Tables 9 and 10 suggests that pooling of income within households was an important source of insurance against job loss. After the income of other household members, the next most frequent source of private support for individuals experiencing involuntary job separations was own savings (23.0 percent for men and 12.4 percent for women). Loans and private transfers were the main source of support for only a tiny fraction of such individuals. The low amount of transfers and lack of correlation between transfer amounts and the work status of family members reported in Table 10 reinforces the point that private transfers from non-household members did not provide significant relief to those experiencing adverse shocks to employment.

Can household composition itself be an important source of insurance against negative income shocks? For all working age adults between 16 and 60, only 38 percent of unemployed adults and 32 percent of those out of the labor force lived in households with two or fewer adults, which we define to be “nuclear”, while 45 percent of working individuals lived in nuclear households. This strong correlation between living arrangement and work status may reflect a greater willingness of those living in extended families to leave jobs, or the responsiveness of living arrangements to shocks.

## 6. Has Economic Restructuring Got You Down?

Finally, we examine subjective evaluations of well-being based on the answers to two questions. The first measures perceptions about shocks. It reads, “How does your economic condition compare with five years ago?” Possible responses are “much better,” “better,” “the same,” and “worse.” The second question is, “Are you satisfied with your current standard of living?,” a measure of perceived welfare. Possible responses are “very satisfied,” “somewhat

satisfied,” “somewhat dissatisfied,” and “very dissatisfied.”

In Table 11, we report the percentage of respondents who answered “worse” to the first question. For the full sample and separately for working, unemployed, and out of the labor force workers, we break down the subjective shock assessment by city, demographic group, education level, and sector of employment. Overall, 25.5 percent of respondents reported a worsening of their economic condition. The percentage perceiving negative shocks was highest for the unemployed (51.2 percent), followed by those out of the labor force (28 percent) and those working (20.8 percent). Those answering “worse” was highest in Wuhan (31.5 percent), but also accounted for about 20 percent of respondents in Shanghai and Fuzhou. The worst hit demographic group was older unemployed men aged 40 to 55. In general, older workers were most affected, while younger workers and those very near to retirement were less affected. Men who were unemployed or out of the labor force were more likely to report declines in economic conditions than women. Shocks also hit the less educated harder. Among ownership sectors, worsening economic conditions were widespread, except for those working in the government or party, or in foreign-invested enterprises. All of these results are consistent with earlier findings.

Responses to the question on current standard of living reveal relatively widespread dissatisfaction. Table 12 reports the percentage who felt “unsatisfied” or “very unsatisfied,” broken down just as in Table 11. Over half of all respondents (52.3 percent) reported dissatisfaction with their living standards at the time of the survey. Many patterns in the responses mirror those for the question on change in economic conditions. For instance, Wuhan workers were the most dissatisfied (63.8 percent), workers aged 40 to 50 were the most dissatisfied. Those near retirement were the most satisfied, those with greater education were more satisfied, and those working for the government or party, or foreign-invested enterprises

were more satisfied. Nearly all of the correlations suggested in Tables 11 and 12 hold up when we estimate the effect of different determinants of subjective assessments in a multivariate framework.

## **7. Conclusions**

The period 1996 to 2001 was a time of tumultuous change for many of China's urban workers. In this paper, we have used new evidence from surveys of working-age individuals in five large Chinese cities to examine how negative shocks to employment and benefits affected different groups of Chinese workers and how workers coped with these shocks through public and private means.

Employment shocks were large and widespread, with unemployment reaching double digits in all sample cities and labor force participation declining by 8.9 percent over the period. These changes were similar to those experienced by some of the transition countries in Eastern and Central Europe, where, like China, labor market adjustments were primarily accomplished through changes in employment rather than real wages. China's experience was distinctive in that most job separations were involuntary, which raises the concern that workers may have had difficulty coping with shocks. Older workers and women were particularly likely to lose jobs and become unemployed or leave the labor force.

Shocks to benefits were also important. We found evidence of modest amounts of wage and pension arrears, spread relatively evenly across demographic groups. The problem was relatively more severe in Shenyang, particularly for pensions, and Xian, but did not come close to reaching the same crisis proportions as in places like Russia. Declines in health benefits, which have received little previous attention, probably affected many more individuals. The health insurance coverage rate of employed workers declined by 12.9 percent over the period.

With much poorer coverage among those not working (except the retired), overall health insurance coverage rates for the urban population were surprisingly low by 2001 (56.1 percent overall and less than 50 percent in three of the five cities). And among those with insurance, health expenditure reimbursement arrears occurred more frequently than wage or pension arrears. Falling health care benefits were related to but not simply a problem of lost jobs. New employers in the nonstate sector were much less likely to provide health insurance than SOEs. Difficulty in maintaining benefit coverage is likely related to the mixed success of socializing benefit provision by shifting responsibility for program management from enterprises to municipal governments.

Public assistance programs for dislocated workers achieved mixed success. The *xiagang* subsidy program reached many more people than the nascent unemployment insurance program or the MLSP. Younger workers received few subsidies despite exhibiting relatively high rates of unemployment. A substantial percentage of older workers out of work received subsidies. Most retirees, including those forced to retire early, received pension payments. But there were numerous problems with the *xiagang* program as well. Even among the targeted group of older workers, most of the unemployed or out-of-the-labor-force individuals did not receive any subsidies. Most self-described *xiagang* workers were not registered as such, and one fourth of the registered received no *xiagang* subsidies. There were also problems of leakage, with 20.7 percent of self-described *xiagang* workers receiving subsidies while working. Most *xiagang* workers did not receive other benefits (i.e., health insurance, pension contributions) as promised, and most received no help from reemployment centers in learning new skills or finding new jobs. Even for workers lucky enough to receive subsidies, the amounts received were often relatively small.

Not surprisingly, most job-leavers reported that they relied primarily upon private assistance to support consumption when not working. By far the most important form of support was from co-resident family members, followed by own savings. Private transfers from relatives and friends outside the household were relatively unimportant. While these mechanisms reduced the effect of employment shocks on individual consumption, they only partly cushioned the negative shocks. A better understanding of private support mechanisms is an important agenda item for future research.

Overall, older workers, who were in their prime earning years and often played key breadwinning roles for their families, were most adversely affected by shocks. Often lacking marketable skills, they weathered the largest employment shocks, were least likely to find new jobs, and if they found new jobs the pay was lower. Many received little or no help from public subsidies. In subjective assessments, they were most likely to report declines in living standards and most likely to report being dissatisfied. Younger workers, who typically are less settled in their careers, were not hit as hard in terms of changes in employment, but many were unemployed, few received public benefits, and most were dissatisfied with their standard of living. Retired workers were relatively well-supported by pension payments and reported being most satisfied with their living standards. Women were hit harder by employment shocks, were less likely to find new jobs, but had stronger financial support from other household members. Finally, recent changes in the labor market have privileged better educated workers. Those with post-secondary education saw little change in unemployment or labor force participation, limited shocks to benefits, were least likely to be laid off and most likely to find new jobs, often at higher wages, and reported the highest rates of satisfaction.

Urban families in China weathered significant adversity during the period 1996 to 2001.

Since the time of our survey in 2001, the number of officially laid off (*xiagang*) workers from SOEs declined from 5.2 million to 2.6 million in 2003, which suggests that the most painful period of restructuring may be over. However, from 2001 to 2002, the registered unemployed increased from 6.8 million to 8.0 million, and the unemployment rate as measured by survey data continued to increase through 2002.<sup>27</sup> These shifts also reflect government efforts to phase out the *xiagang* subsidy program and strengthen the unemployment insurance system and the MLSP. Many cities have closed down re-employment centers altogether. Unemployment insurance coverage was expanded to include older workers.<sup>28</sup> Under China's new leadership, government spending on the MLSP increased from 5.4 billion yuan in 2001 to 15.0 billion yuan in 2003. As China's urban workers continue to confront new challenges, effective government policies and programs will require ongoing monitoring and analysis of the nature of economic difficulties and the functioning of public and private support mechanisms.

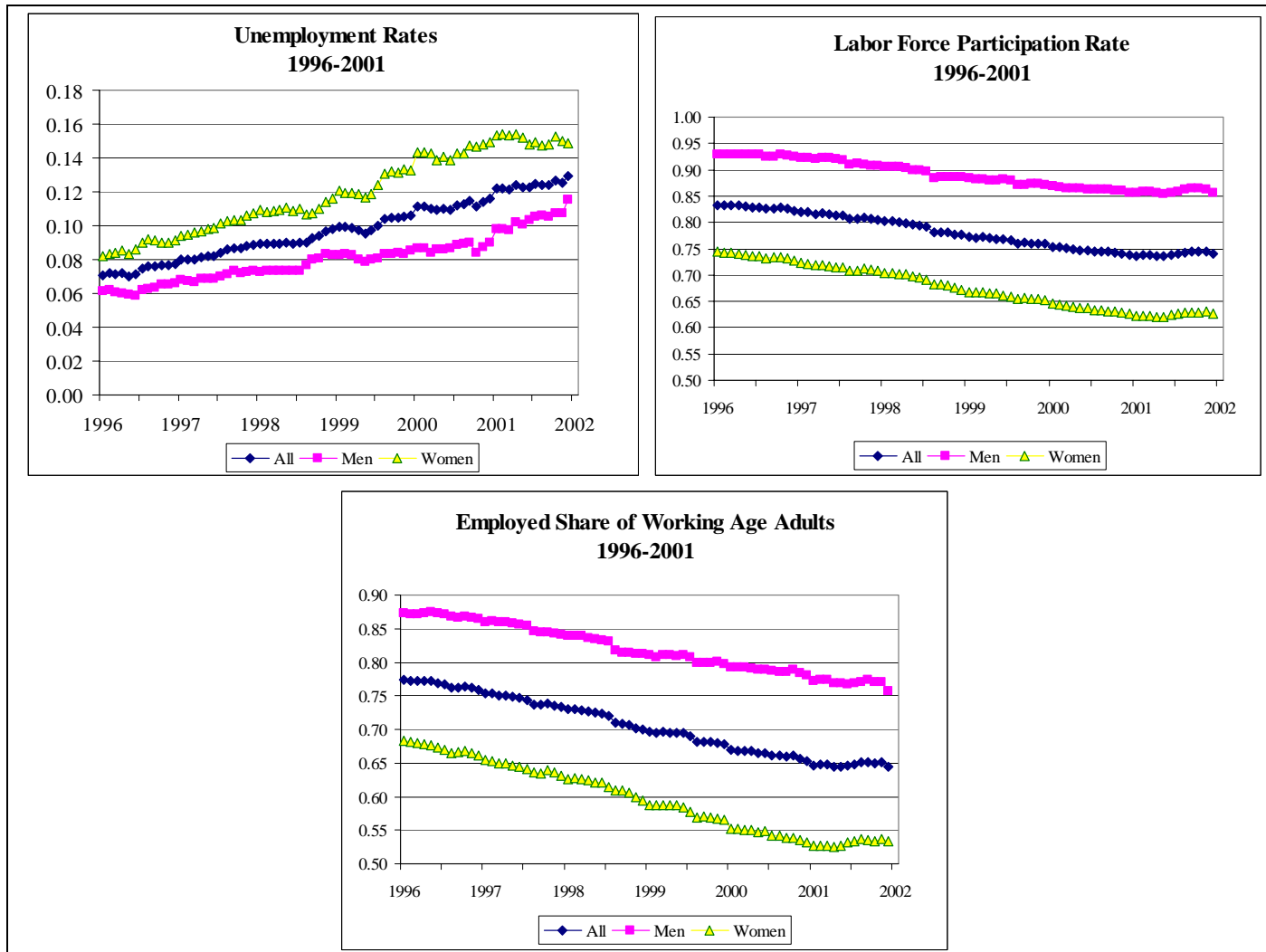
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<sup>27</sup>See John Giles, Albert Park and Juwei Zhang, "What is China's True..."

<sup>28</sup> The maximum age of coverage increased from 45 to 50 for females and from 50 to 55 for males.

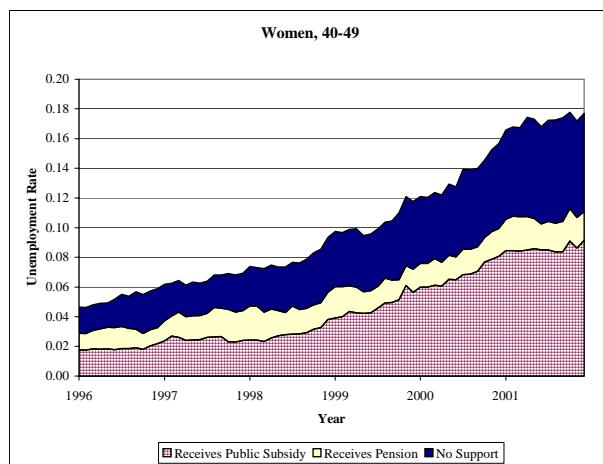
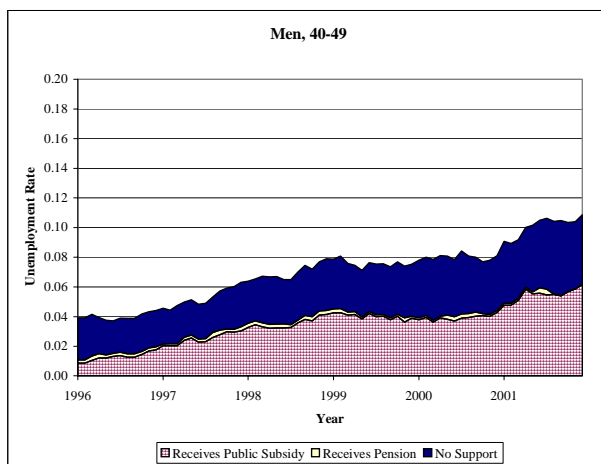
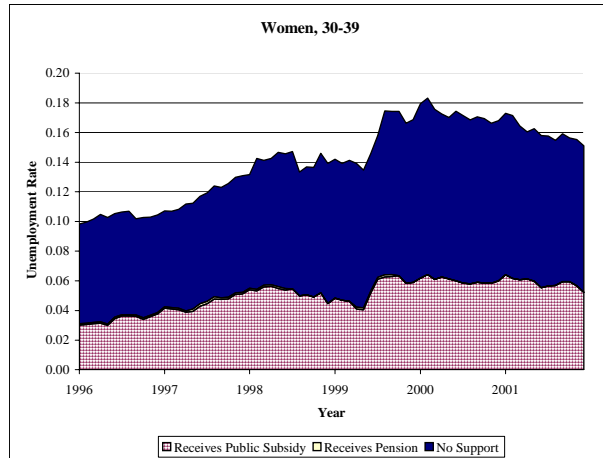
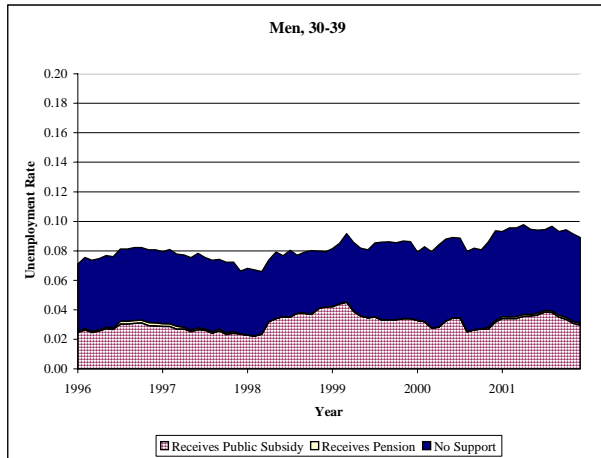
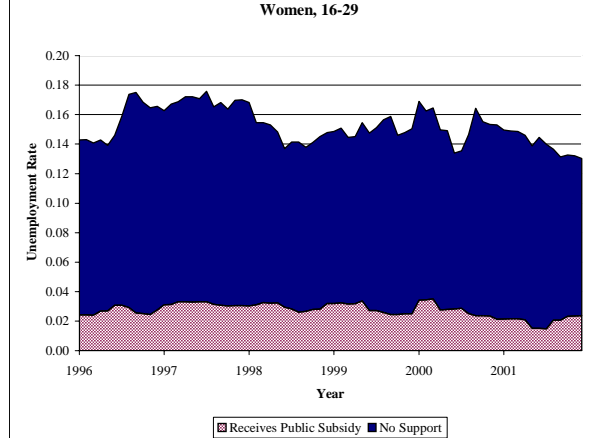
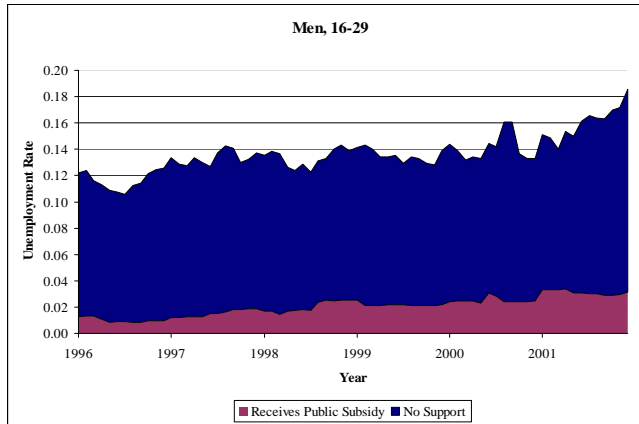


**Figure 1**  
**Trends in Urban Employment Status**  
**In the CULS, 1996-2001**



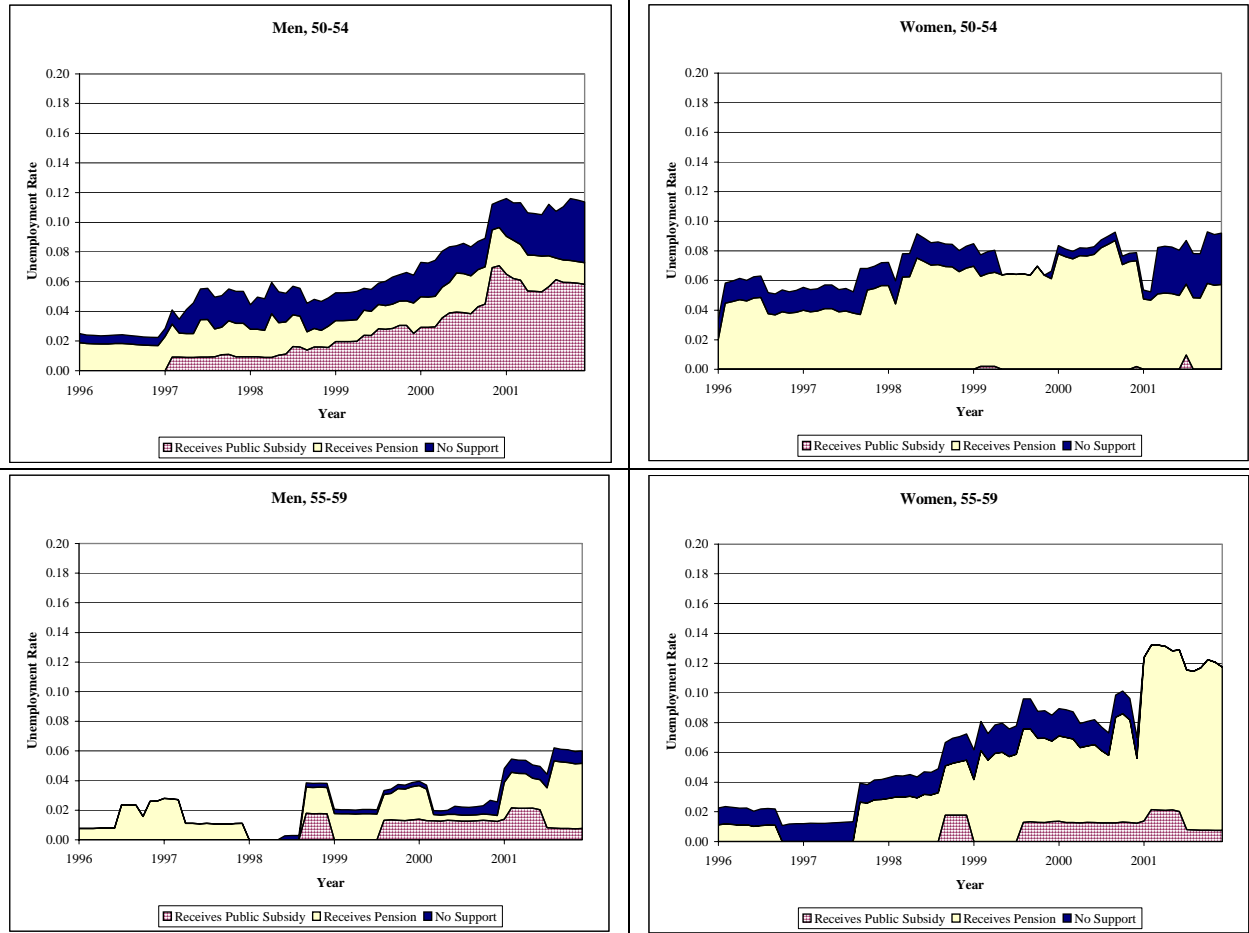
Source: China Urban Labor Survey. Trends reflect respondents with contemporaneous age 16 to 60.

**Figure 2**  
**Share of Unemployed Receiving Public Subsidies and Pensions**  
**By Gender and Age Cohort**



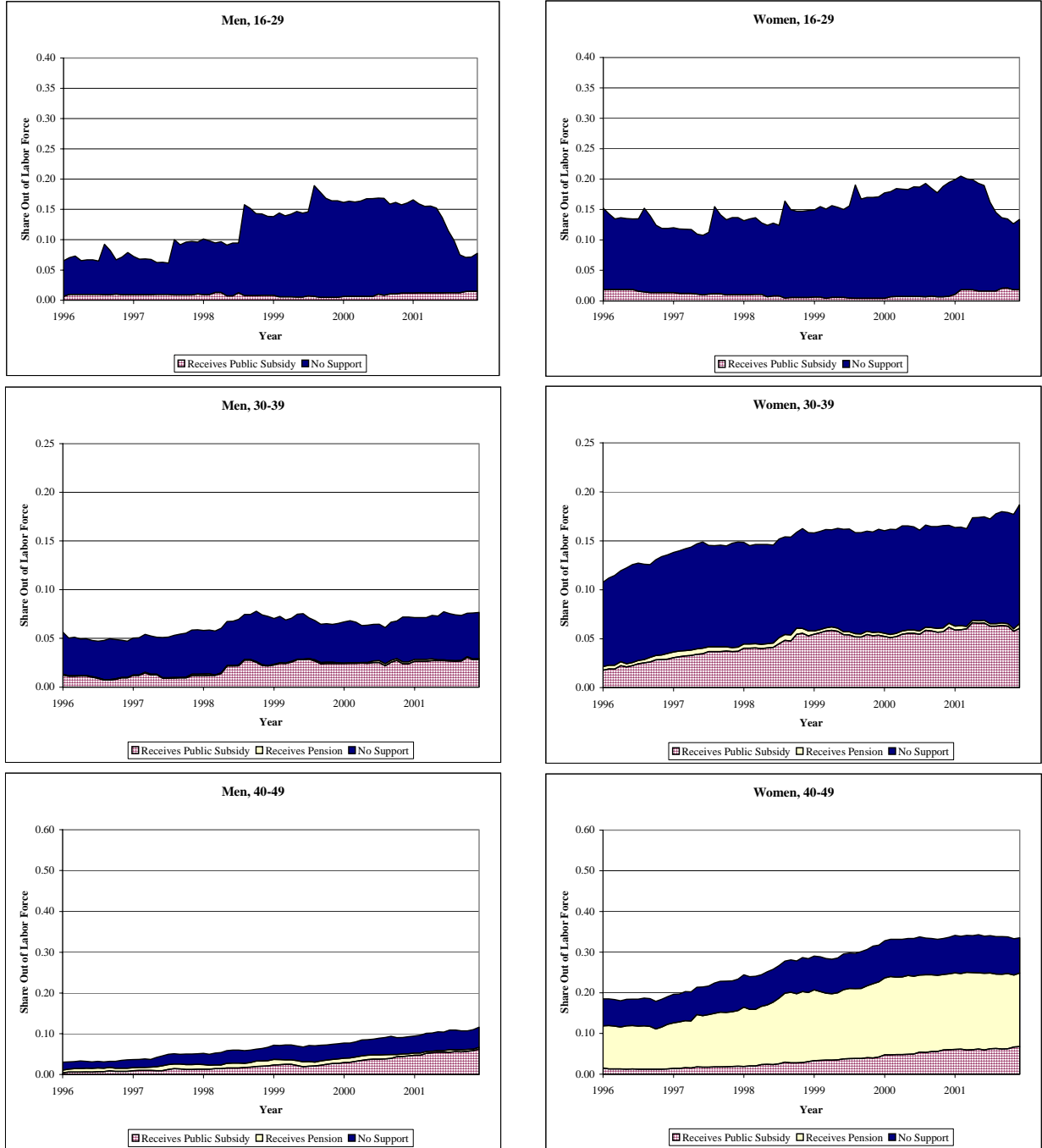
Source: China Urban Labor Survey (Five City Urban Hukou Sample).

**Figure 2 (Continued)**  
**Share of Unemployed Receiving Formal Support**  
**By Gender and Age Cohort**



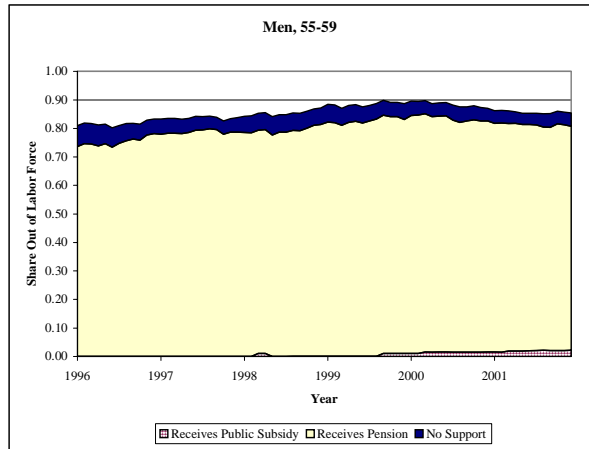
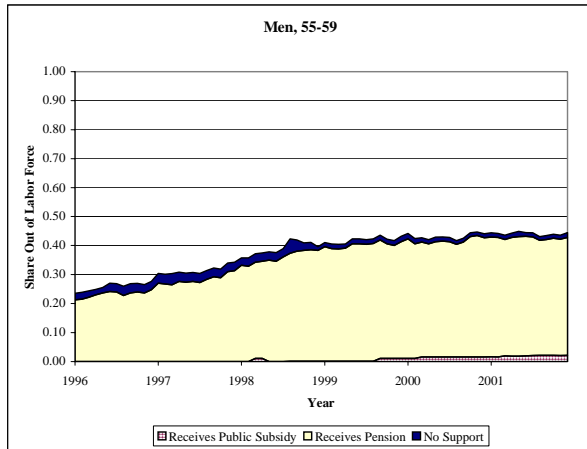
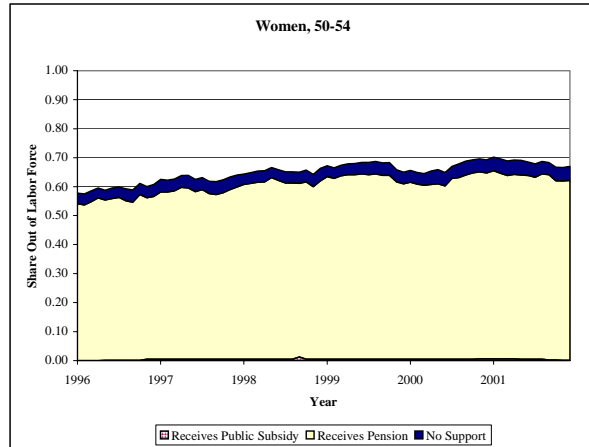
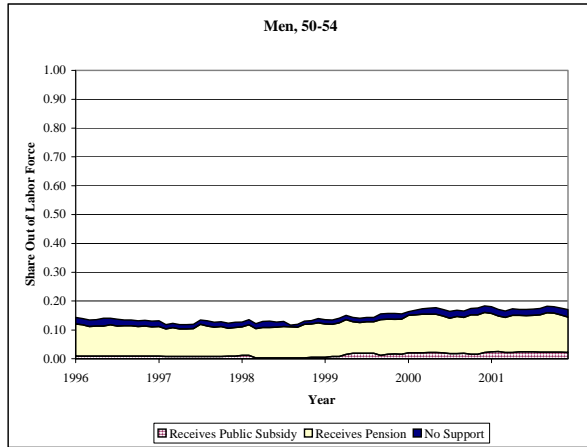
Source: China Urban Labor Survey (Five City Urban Hukou Sample).

**Figure 3**  
**Share of Out-of-the-Labor-Force Receiving Public Subsidies and Pensions**  
**By Gender and Age Cohort**



Source: China Urban Labor Survey (Five City Urban Hukou Sample).

**Figure 3 (Continued)**  
**“Out of the Labor Force”**  
**By Type of Formal Support**



Source: China Urban Labor Survey (Five City Urban Hukou Sample).

**Table 1**  
**Summary Statistics for CULS Sample Cities (2001)**

	Unit	Shanghai	Wuhan	Shenyang	Xian	Fuzhou
Urban population (rank)	million	9.8 (1)	4.5 (4)	4.0 (6)	2.6 (10)	1.2 (32)
GDP per capita	Yuan	40788	17882	21736	13409	30776
Population density	persons/km <sup>2</sup>	2382	893	1395	2037	1474
SOE share of industrial output <sup>a</sup>	percent	52	63	67	78	33
SOE profitability <sup>b</sup>	Yuan	16	11	7	6	17
Mean annual wage	Yuan	26169	11314	11615	11164	13511

Unless otherwise noted, data are for residents of urban districts only.

<sup>a</sup>Provincial aggregate for industrial enterprises with annual sale of over 5 million yuan in 2000; <sup>b</sup>1991-1997 provincial average profits per 100 yuan assets.

Sources: SSB, *China Urban Yearbook 2002*; SSB, *China Statistical Yearbook 2002*.

**Table 2**  
**Labor Market Status by Demographic Group and Education Level**  
 (All Individuals Age 16 to 60)

	Unemployment Rate (%)			Labor Force Participation Rate (%)		
	Jan-96	Nov-01	Change	Jan-96	Nov-01	Change
Full Sample	7.1	12.5	5.5	83.3	74.4	-8.9
<i>By City:</i>						
Shanghai	5.3	10.4	5.0	86.5	73.1	-13.4
Wuhan	8.5	16.8	8.2	82.3	74.8	-7.6
Shenyang	10.3	14.2	3.9	79.7	74.1	-5.6
Fuzhou	5.4	9.5	4.1	81.4	78.2	-3.2
Xian	6.6	10.8	4.3	81.4	76.7	-4.7
<i>By Demographic Group:</i>						
Men (16 to 60)	6.1	10.7	4.6	93.0	86.3	-6.7
<30	12.2	17.2	5.0	93.6	92.8	-0.8
30 to 40	7.2	8.1	0.9	94.7	92.8	-1.9
40 to 50	4.1	10.3	6.2	97.0	89.0	-7.9
50 to 55	2.4	11.3	8.9	86.0	83.7	-2.3
55 to 60	1.0	5.0	3.9	76.6	57.3	-19.3
Women (16 to 60)	8.2	15.0	6.8	74.4	63.1	-11.3
<30	13.7	13.2	-0.5	83.7	86.5	2.8
30 to 40	10.2	15.8	5.6	88.7	81.2	-7.5
40 to 50	4.6	17.1	12.5	82.6	68.1	-14.5
50 to 55	3.3	7.8	4.4	44.4	33.9	-10.5
55 to 60	2.6	9.2	6.6	19.0	16.1	-2.9
<i>By Education Level:</i>						
Elementary and below	6.7	18.0	11.3	47.7	45.4	-2.3
Middle school	10.5	17.7	7.2	79.0	63.2	-15.8
High school	7.1	13.9	6.8	88.4	78.4	-10.1
College and above	1.7	4.5	2.8	92.9	89.5	-3.4

**Table 3**  
**Determinants of Unemployment and Labor Force Participation by Gender,**  
**January 1996 and November 2001**

(Marginal Effects on Probability from Probit Model Estimation)

Gender Model Month-Year DepVar	Men				Women			
	1 Jan-96 In LF?	2 Nov-01 In LF?	3 Jan-96 Unemp?	4 Nov-01 Unemp?	5 Jan-96 In LF?	6 Nov-01 In LF?	7 Jan-96 Unemp?	8 Nov-01 Unemp?
30<=Age<40	0.011 (0.014)	0.011 (0.026)	-0.032 (0.009)	-0.079 (0.016)	0.067 (0.028)	-0.039 (0.042)	-0.030 (0.013)	0.004 (0.027)
40<=Age<50	0.041 (0.013)	-0.023 (0.024)	-0.060 (0.010)	-0.082 (0.018)	-0.006 (0.031)	-0.190 (0.039)	-0.076 (0.014)	0.001 (0.026)
50<=Age<55	-0.070 (0.030)	-0.089 (0.036)	-0.046 (0.008)	-0.062 (0.018)	-0.428 (0.045)	-0.503 (0.038)	-0.054 (0.012)	-0.061 (0.035)
55<=Age<60	-0.159 (0.042)	-0.378 (0.050)	-0.051 (0.006)	-0.079 (0.020)	-0.618 (0.037)	-0.647 (0.027)	-0.058 (0.009)	-0.045 (0.054)
Lower Secondary School	0.005 (0.018)	0.035 (0.031)	0.005 (0.022)	0.065 (0.044)	0.069 (0.036)	0.003 (0.060)	0.025 (0.028)	-0.046 (0.047)
Upper Secondary School	0.028 (0.017)	0.088 (0.031)	-0.026 (0.019)	0.015 (0.037)	0.184 (0.034)	0.159 (0.057)	-0.018 (0.025)	-0.087 (0.050)
Post-Secondary School	0.056 (0.012)	0.141 (0.022)	-0.059 (0.013)	-0.065 (0.031)	0.216 (0.023)	0.303 (0.041)	-0.071 (0.014)	-0.174 (0.031)
Wuhan	-0.056 (0.018)	-0.064 (0.022)	0.001 (0.012)	0.056 (0.022)	-0.075 (0.030)	-0.011 (0.031)	0.060 (0.021)	0.059 (0.028)
Shenyang	-0.049 (0.019)	-0.020 (0.022)	0.019 (0.014)	0.002 (0.021)	-0.090 (0.030)	-0.020 (0.033)	0.055 (0.023)	0.065 (0.031)
Fuzhou	-0.013 (0.017)	0.046 (0.017)	-0.011 (0.012)	-0.009 (0.020)	-0.131 (0.033)	-0.011 (0.033)	0.004 (0.018)	-0.028 (0.025)
Xian	-0.008 (0.016)	-0.002 (0.020)	-0.001 (0.013)	0.019 (0.022)	-0.080 (0.031)	0.003 (0.033)	0.042 (0.022)	-0.019 (0.026)
Model Chi-Square	226.5	201.3	74.9	69.3	496.1	469.3	95.6	78.1
Observations	3144	2945	2787	2565	3417	3121	2397	2026
Pseudo-R2	0.135	0.147	0.103	0.067	0.202	0.222	0.091	0.074

<sup>a</sup>Marginal effects are the change in probability of the outcome variable given a change in the independent variable, evaluated at sample means using coefficients from maximum likelihood estimation of probit models, which relate the probability of a discrete outcome ( $y=1$ ) to a set of covariates  $X$ :  $\Pr(y=1) = \Phi(X\beta)$ , where  $\Phi$  is the cumulative normal distribution.



**Table 4**  
**Are Job Separations Voluntary?**

Reason for Job Separation		Reasons for Job Separation by Gender and Age (in Percent)					Total
		GTE 16 & LT 30	GTE 30 & LT 40	GTE 40 & LT 50	GTE 50 & LT 55	GTE 55 & LT 60	
Men	Enterprise Restructuring	18.3	37.7	46.6	16.4	0.7	29.0
	Other Involuntary Separations	17.8	23.1	17.9	10.0	2.7	15.8
	Voluntary Separations	53.0	29.7	23.9	10.7	2.7	25.9
	Retired	1.0	3.8	9.7	61.4	93.9	25.5
	Of Which: Early Retirement	1.0	4.2	9.4	59.3	72.1	22.1
	Of Which: Involuntary	1.0	3.3	6.5	39.3	52.4	15.6
	Other	9.9	5.7	2.0	1.4	0.0	3.9
	<i>Non-Voluntary Non-Mandatory Job Separation</i>	37.1	64.2	71.0	65.7	55.8	60.3
Women	Enterprise Restructuring	18.1	47.3	21.3	0.5	0.0	21.8
	Other Involuntary Separations	12.7	23.1	10.7	0.5	0.0	11.4
	Voluntary Separations	66.1	23.5	7.7	0.5	0.0	19.0
	Retired	0.0	2.4	59.4	98.0	96.8	45.7
	Of Which: Early Retirement	0.0	2.4	57.5	88.1	34.0	39.1
	Of Which: Involuntary	0.0	1.7	43.2	77.7	25.5	31.1
	Other	3.2	3.7	0.9	0.5	3.2	2.0
	<i>Non-Voluntary Non-Mandatory Job Separation</i>	30.8	72.1	75.2	78.7	25.5	64.4

Enterprise restructuring: worker lost job after work-unit closed, went bankrupt, was merged with another firm or reorganized.

Other involuntary: involuntarily dismissed or laid-off for reasons other than restructuring of the firm.

Early retirement: worker retired through an early-retirement program at the firm. Early retirement is involuntary if the worker's choice was to retire or be fired.

Non-mandatory job separation refers to loss of a job not subject to mandatory retirement provisions.

**Table 5**  
**Wage and Health Arrears of Employed Workers Age 16 to 60**  
(as a Percent of Workers in Each Category)

	Wage Arrears	Health Insurance Arrears	Employer Provided Health Insurance		Percent of All Individuals Age 16 to 60 w/Health Insurance in 2001
			in Jan 96	in Nov 01	
<b>Total</b>	10.6	22.1	81.6	68.7	56.1
<i>By City</i>					
Shanghai	2.1	18.9	91.6	74.6	87.4
Wuhan	13.6	19.5	76.9	68.7	46.2
Shenyang	23.1	27.7	59.9	53.5	39.1
Fuzhou	5.7	18.9	79.5	67.6	48.7
Xian	23.3	38.2	81.0	64.6	57.5
<i>Men</i>					
Men (16 to 60)	11.1	20.3	84.5	74.3	46.4
<30	10.1	16.0	77.8	66.3	57.4
30 to 40	10.0	21.1	81.7	76.3	59.9
40 to 50	13.3	22.8	87.0	72.7	73.2
50 to 55	11.2	17.3	92.3	82.2	73.1
55 to 60	7.5	24.4	90.1	79.0	60.3
<i>Women</i>					
Women (16 to 60)	12.3	26.2	75.7	61.0	45.3
<30	11.0	21.1	64.0	64.7	45.6
30 to 40	14.3	25.7	77.0	67.8	54.5
40 to 50	12.0	30.9	82.4	61.4	59.7
50 to 55	10.7	24.6	75.6	42.2	61.4
55 to 60	1.7	21.1	55.8	24.8	52.2
<i>By Education Level:</i>					
Primary school	11.8	24.5	70.3	49.0	28.3
Lower secondary school	14.6	26.6	76.1	54.0	45.8
Upper secondary school	10.4	22.4	81.6	68.3	58.0
Post-secondary education	5.7	18.1	90.8	82.3	79.4
<i>By Ownership Sector:<sup>1</sup></i>					
Government or Party	1.9	22.8	89.7	78.9	82.3
Wholly state-owned	13.8	23.8	88.3	82.2	77.5
Majority state-owned	9.2	31.1	87.6	80.8	68.5
Collective	11.7	22.9	78.5	66.7	67.0
Foreign-invested	1.3	14.0	72.2	73.0	52.5
Private	6.3	11.3	35.1	25.1	19.2
Other	17.2	24.3	75.5	42.4	27.6

Note: In the first two columns we report the percent of individuals employed between 1996 and 2001 who report wage arrears and the percent of individuals who have ever had health insurance who report health insurance arrears. For those individuals whose

**Table 6**  
**Benefits Shocks Experienced by Retired Workers**

	Number Who are Formal Retirees	Individuals Not Working Who Are Formally Retired (Percent)	Retired Experiencing Positive Pension Arrears (Percent)	Health Insurance Coverage Rate (Percent of Formally Retired)	Of Which, Percent Experiencing Health Expenditure Reimbursement Arrears
Full Sample	2532	74.7	10.6	73.9	29.9
<i>By City</i>					
Shanghai	672	82.5	4.7	97.6	18.1
Wuhan	491	74.1	12.8	38.4	60.4
Shenyang	489	75.8	26.4	42.8	77.6
Fuzhou	380	68.3	4.5	57.9	42.5
Xian	500	73.9	15.9	71.6	34.8
<i>Total Men (Retired and Over 40)</i>					
Age GTE 40 & LT 50	9	4.1	5.0	50.4	29.0
Age GTE 50 & LT 55	53	51.5	15.3	66.4	38.1
Age GTE 55 & LT 60	110	82.1	15.3	70.9	18.6
Age GTE 60 & LT 70	469	97.9	10.2	79.7	26.6
Age GTE 70	379	97.9	7.8	78.0	26.5
<i>Total Women (Retired and Over 40)</i>					
Age GTE 40 & LT 50	169	34.8	6.3	80.5	21.9
Age GTE 50 & LT 55	254	87.9	11.1	73.6	26.0
Age GTE 55 & LT 60	242	92.7	13.3	74.9	34.7
Age GTE 60 & LT 70	545	89.2	12.7	66.5	40.8
Age GTE 70	302	71.7	8.5	71.2	35.0
<i>By Education Level</i>					
Primary school	529	80.5	12.6	67.6	38.2
Lower secondary school	1078	71.5	11.3	70.4	33.9
Upper secondary school	542	67.4	9.8	80.2	23.4
Post-secondary education	383	90.8	6.8	83.6	19.6

**Table 7**  
**Job Separations, Unemployment Spell Duration, and Changes**  
**in Nominal Wages of Re-Employed**

(For Individuals Between 16 and 60 Years of Age)

	As a Percent of All Job Separations		As a Percent of Re-Employed Nominal Wage Comparison		
	Employed Within 12 Months	Employed by Nov. 2001	Mean Percent Change	Percent Lower	Percent Higher
Total	34.8	44.7	2.1	39.2	55.0
<i>By City</i>					
Shanghai	42.1	49.7	0.3	42.9	52.9
Wuhan	28.6	38.3	2.6	35.1	56.0
Shenyang	28.5	39.6	0.9	41.3	53.7
Fuzhou	41.8	51.4	19.3	34.0	59.9
Xian	30.2	42.8	3.6	40.9	52.8
<i>By Demographic Group:</i>					
Men (16 to 60)	42.1	52.2	4.6	36.3	58.7
<30	53.4	68.7	20.1	22.1	71.4
30 to 40	51.5	65.6	7.0	32.8	61.6
40 to 50	44.3	52.4	-5.8	44.4	52.1
50 to 55	27.8	31.9	-13.3	52.4	42.9
55 to 60	12.2	15.5	-14.6	52.2	43.5
Women (16 to 60)	29.0	38.7	-0.4	42.4	51.4
<30	44.1	63.4	9.1	32.0	60.5
30 to 40	36.8	49.7	9.7	37.5	55.9
40 to 50	22.1	28.4	-5.4	48.9	45.3
50 to 55	22.0	24.4	-38.0	63.3	34.7
55 to 60	9.4	10.4	-5.6	70.0	20.0
<i>By Reason for Job Separation</i>					
Restructuring	38.0	50.5	16.7	36.4	62.1
Other Involuntary	31.7	43.5	-2.8	52.2	44.8
Voluntary Separation	62.3	70.7	25.6	24.4	69.7
Retirement	17.2	20.4	-22.3	54.5	44.7
Other	57.4	67.6	39.6	33.3	61.9
<i>By Education Level:</i>					
Primary school	24.7	32.7	-33.0	59.5	33.3
Lower secondary school	27.7	36.8	-2.2	42.7	51.5
Upper secondary school	37.9	48.7	5.3	38.7	55.8
Post-secondary education	51.6	60.9	7.9	28.7	64.9
<i>By Ownership Sector:<sup>1</sup></i>					
Government or Party	60.3	61.9	36.6	27.0	64.9
Wholly state-owned	29.1	36.8	-3.8	46.9	50.9
Majority state-owned	30.6	41.4	-1.4	43.8	52.8
Collective	31.3	38.8	10.1	37.6	59.0
Foreign-invested	57.4	66.2	-15.5	41.5	48.8
Private	51.2	59.9	2.9	30.6	55.3
Other	23.5	40.0	7.2	14.3	57.1

**Table 8**  
**Mobility Across Ownership Sectors Among Job Changers (January 1996 to November 2001)**

**New Sector (As a Percent of Separations from Previous Sector)**

	Number of Job Separations (percent employed in sector)	Government or Party	Wholly-State-Owned Enterprise	Majority-State-Owned Enterprise	Collective Enterprise	Foreign Invested Enterprise	Individual or Private Enterprise	Other	Still Out of Work in November 2001
<b>Previous Sector</b>									
Government or Party	68 (30)	26.5	4.4	4.4	10.3	2.9	8.8	1.5	41.2
Wholly-State-Owned Enterprise	944 (50)	1.8	8.5	1.2	7.0	1.8	14.1	1.2	64.5
Majority-State-Owned Enterprise	247 (51)	0.8	2.0	11.7	6.9	2.4	14.2	0.4	61.5
Collective Enterprises	673 (45)	1.3	1.2	0.4	14.7	1.3	16.9	1.8	62.3
Foreign Invested Enterprise	66 (71)	0.0	4.5	0.0	6.1	33.3	16.7	0.0	39.4
Individual or Private Enterprise	427 (72)	0.9	3.5	0.9	4.7	1.9	41.2	0.9	45.9
Other	45 (34)	0.0	0.0	4.4	4.4	0.0	17.8	20.0	53.3
Total	2470 (50)	2.0	4.6	2.1	8.7	2.6	19.6	1.5	58.9

**Table 9**  
**Primary Means of Support When Not Working**  
**By Reason for Leaving Previous Job**

Share Using Each Type of Support for Each Job Separation Reason	Involuntary	Voluntary	Retired	Total
<i>Men</i>				
Total Job Separations	368	128	231	727
Pension	0.8	0.0	93.5	30.1
Xiagang Subsidy	24.7	7.0	1.7	14.3
Unemployment Payment	6.3	1.6	0.0	3.4
Social Welfare Funds	1.6	4.7	0.0	1.7
Savings	23.1	25.8	2.2	16.9
Income of Other HH Member	33.7	53.9	1.3	27.0
Help from Other Friends and Family	2.7	2.3	0.4	1.9
Income from Temporary Job	6.3	3.1	0.4	3.9
Loans	0.5	0.0	0.4	0.4
Other	0.3	1.6	0.0	0.4
<i>Women</i>				
Total Job Separations	387	154	584	1125
Pension	1.0	0.0	92.1	42.7
Xiagang Subsidy	21.5	5.3	2.0	10.1
Unemployment Payment	2.3	2.0	0.0	1.2
Social Welfare Fund	1.3	5.3	0.2	1.4
Savings	12.4	7.3	0.9	6.4
Income of Other HH Member	54.4	70.0	3.9	33.6
Help from Other Friends and Family	1.8	4.7	0.2	1.5
Income from Temporary Job	4.9	4.7	0.7	2.9
Loans	0.3	0.0	0.0	0.1
Other	0.0	0.7	0.0	0.1

Note: We show results for adults who have not yet reached mandatory retirement age. We only report information on individuals who had non-work spells of greater than one month.

**Table 10**  
**Household Annual Per Capita Income and Consumption By Demographic Group of**  
**Oldest Working Age Adult and Number of Working Age Household Members Out of Work**

Income Components (Per Capita)	Number and Gender of Current Out-of-Work Working-Age Household Members				
	0	1 Man	1 Woman	Two or More	All
Earned Income (Salaries + Bonus)	6174	3193	5461	1752	5267
Pension and Disability Income (Monthly)	3449	2172	1763	2345	2816
Unemployment Subsidies and MLSS	144	607	374	566	286
Lump Sum Severance	69	144	180	286	125
Net Private Transfers	5	30	-49	42	-2
IPC (Excluding Lump Sum Severance)	9771	6001	7549	4705	8367
IPC (Including Lump Sum Severance)	9840	6145	7729	4991	8492
Non-Housing Consumption	7893	5753	7187	5005	7226
Number of Households	2023	311	811	353	3498

**Table 11**  
**How Does Your Economic Condition Compare with Five Years Ago?**  
 Percent of Working Age Adults (16 to 60) Answering "Worse"

	Work Status in November 2001			
	Working	Unemployed	Out	All
<i>Total</i>	20.8	51.2	28.0	25.5
<i>By City</i>				
Shanghai	19.6	50.0	22.9	22.8
Wuhan	26.1	54.4	33.1	31.5
Shenyang	19.5	48.3	31.4	25.6
Fuzhou	15.7	56.2	25.7	20.9
Xian	19.7	48.4	32.6	25.1
<i>Men</i>				
Men (16 to 60)	20.3	53.8	39.0	25.9
Age>16_&_<=30	13.5	33.3	43.8	18.8
Age>30_&_<=40	14.6	54.5	49.0	19.9
Age>40_&_<=50	28.5	66.4	55.9	35.1
Age>50_&_<=55	21.8	60.0	32.9	27.0
Age>55_&_<=60	8.4	28.6	21.4	14.6
<i>Women</i>				
Women (16 to 60)	20.0	49.7	25.0	24.6
Age>16_&_<=30	6.1	30.8	22.7	11.2
Age>30_&_<=40	19.1	51.0	33.1	25.6
Age>40_&_<=50	29.6	57.6	35.8	34.8
Age>50_&_<=55	13.5	40.0	17.7	16.9
Age>55_&_<=60	22.0	25.0	13.6	14.9
<i>By Education Level</i>				
Elementary or Less	21.2	50.0	21.6	23.8
Some Lower Middle School	27.9	52.3	29.1	31.2
Some Highschool	22.7	53.5	32.6	28.1
Some Post-Highschool Education	9.8	40.0	20.9	12.0
<i>By Current or Prior Sector of Employment</i>				
Government or Party	8.2	--	11.1	8.5
State-Owned Enterprise	20.3	55.0	30.0	26.7
State-Controlled Enterprise	22.0	69.6	32.1	29.1
Collective Enterprise	13.6	56.7	25.4	21.2
Foreign Invested Enterprise	9.4	40.0	28.6	14.2
Private or Individual Enterprise	21.7	51.2	37.4	26.9
Other	32.9	20.0	28.6	31.4

Sectors of employment are current sectors for currently employed individuals and most recent sector for individuals who are not currently working.



**Table 12**  
**Are You Satisfied with Your Current Standard of Living?**  
 Share of Working Age Adults (16 to 60) Answering "Unsatisfied" or "Very Unsatisfied"

	<b>Work Status in November 2001</b>			
	Working	Unemployed	Out	All
<i>Total</i>	48.0	83.2	51.9	52.3
<i>By City</i>				
Shanghai	41.6	79.2	42.9	44.8
Wuhan	59.8	88.9	61.0	63.8
Shenyang	50.5	82.2	62.1	56.8
Fuzhou	30.7	77.5	42.5	36.7
Xian	54.3	83.9	55.9	57.1
<i>Men</i>				
Men (16 to 60)	47.1	84.2	63.5	52.7
Age>16_&_<=30	46.8	73.9	81.3	53.5
Age>30_&_<=40	44.8	87.3	71.4	49.9
Age>40_&_<=50	53.9	90.7	83.1	60.6
Age>50_&_<=55	41.3	82.9	58.6	47.9
Age>55_&_<=60	29.2	71.4	40.5	35.2
<i>Women</i>				
Women (16 to 60)	47.2	82.3	48.2	50.9
Age>16_&_<=30	42.9	75.0	51.5	47.7
Age>30_&_<=40	49.5	83.3	65.6	56.7
Age>40_&_<=50	51.7	85.6	63.4	59.4
Age>50_&_<=55	30.1	90.0	37.6	36.5
Age>55_&_<=60	39.0	25.0	27.1	28.7
<i>By Education Level</i>				
Elementary or Less	54.2	80.8	46.1	52.1
Some Lower Middle School	54.7	85.1	53.7	57.8
Some Highschool	49.9	82.4	54.9	54.5
Some Post-Highschool Education	36.1	80.0	42.4	38.3
<i>By Sector of Employment</i>				
Government or Party	26.0	--	37.0	27.4
State-Owned Enterprise	47.8	86.7	51.7	52.8
State-Controlled Enterprise	44.3	89.1	51.1	50.3
Collective Enterprise	39.4	82.8	52.1	47.3
Foreign Invested Enterprise	34.4	60.0	57.1	39.2
Private or Individual Enterprise	54.7	89.3	62.6	59.4
Other	64.5	80.0	57.1	63.7

Sectors of employment are current sectors for currently employed individuals and most recent sector for individuals who are not currently working.