Chapter II Recent Developments in China's Labor Economy

Thomas G. RAWSKI

1. Introduction

Recent years have brought major changes in many dimensions of China's large and dynamic economy. Issues of employment and unemployment, labor compensation, wage differentials, working conditions, migration, job mobility, and employment security figure prominently in these developments. This essay reviews recent developments in the Chinese labor scene, focusing successively on demographics, employment, unemployment, migration, productivity, wages, and distribution. The paper concludes with speculation about possible policy responses to China's growing problems of unemployment and excess labor supply.

Data for analyzing Chinese labor issues are often problematic. In addition to the general cautions applicable to any large, low-income nation with a large farm sector, several specific issues merit attention. These include inconsistencies and discontinuities in standard measures, problems arising from declining incentive to cooperate with statistical authorities, and episodic politicization of statistical work.¹

Table 1 illustrates these difficulties. In 1980, total urban employment tallied

,	Table 1	Urban Em	ployme	nt Recor	nciliation	1				
	1980	1990	1995	2000	2001	2002	2003	2004		
Urban formal employment (million)										
State sector	80.19	103.46	112.61	81.02	76.40	71.63	68.76	67.10		
Urban Collective	24.25	35.49	31.47	14.99	12.91	11.22	10.00	8.97		
Cooperatives				1.55	1.53	1.61	1.73	1.92		
Joint ownership		0.96	0.53	0.42	0.45	0.45	0.44	0.44		
Limited liability										
corp.				6.87	8.41	10.83	12.61	14.36		
Shareholding			3.17	4.57	4.83	5.38	5.92	6.25		
Private firms		0.57	4.85	12.68	15.27	19.99	25.45	29.94		
Funded from HK, Macao, Taiwan	1	0.04	2.72	3.10	3.26	3.67	4.09	4.70		
Foreign funding		0.62	2.41	3.32	3.45	3.91	4.54	5.63		
Self-employed individuals	0.81	6.14	15.60	21.36	21.31	22.69	23.77	25.21		
Sum of components (A)	105.25	147.28	173.36	149.88	147.82	151.38	157.31	164.52		
Urban employed persons (B)	105.25	170.41	190.40	231.51	239.40	247.80	256.39	264.76		
Unexplained residual (=B-A)										
Million workers	0.00	23.13	17.04	81.63	91.58	96.42	99.08	100.24		
% of urban employed	0.0	13.6	8.9	35.3	38.3	38.9	38.6	37.9		

Source: Yearbook 2004, p. 122; Abstract 2005, p. 46.

precisely with the sum of components. Recent data show a wide gap between the two figures. The total is reportedly derived with "data obtained from the sample surveys on population changes." This indicates a commendable use of surveys to improve the quality of employment data. The unexplained residual amounting to 100 million workers in 1004 also illustrates the uncertainty surrounding basic data.

2. Labor Supply and Employment

Table 2 summarizes Chinese labor force measures - "economically active population" (*jingji huodong renkou*) and "employed persons" (*jiuye renyuan*). Both series indicate a gradual downward trend of growth in absolute numbers as well as percentage terms. This reflects the impact of population control efforts and of rising incomes on reproductive behavior. Annual increments decline from over 13 million before 1990 to well under 10 million in recent years. Participation rates rose at the start of reform, and then leveled off at 56-57 percent.

Table 3 summarizes the composition and sectoral attachment of China's vast work force. Data for the last decade reflect slowing growth of population, labor force, and employment. The data show an ongoing decline in the share of workers engaged in farming and other primary production work. Beginning in the early 1990s, the absolute number of primary workers now shows a modest downward

Table 2 Population and Labor Force

	POPULATI Year-end	ION FIGUI	RES	Aggregate	e Data	LABOR FO	ORCE Annual	Percent An	nual	PARTICIPATION RATE (%)*
Year	Population	Incremen	RNI	Economic	Employed	Increment	Increment	Increase		
	million	million	percent	Active		million	million			
				[Series A]	[Series B]	[Series A]	[Series B]	[Series A]	[Series B]	
1980	987.0		1.19	429.0	423.6	[Delles 11]	13.4		3.3	42.9
1985	1058.5		1.42	501.1	498.7		16.7		3.9	47.1
1990	1143.3		1.43	653.2	647.5		94.2		17.0	56.6
1991	1158.2	14.9	1.30	660.9	654.9	7.7	7.4	1.2	1.1	56.5
1992	1171.7	13.5	1.16	667.8	661.5	6.9	6.6	1.0	1.0	56.5
1993	1185.2	13.5	1.14	674.7	668.1	6.9	6.6	1.0	1.0	56.4
1994	1198.5	13.3	1.12	681.4	674.6	6.7	6.5	1.0	1.0	56.3
1995	1211.2	12.7	1.06	688.6	680.6	7.2	6.0	1.1	0.9	56.2
1996	1223.9	12.7	1.04	697.6	689.5	9.0	8.9	1.3	1.3	56.3
1997	1236.3	12.4	1.01	708.0	698.2	10.4	8.7	1.5	1.3	56.5
1998	1247.6	11.3	0.91	720.9	706.4	12.9	8.2	1.8	1.2	56.6
1999	1257.9	10.3	0.82	727.9	713.9	7.0	7.5	1.0	1.1	56.8
2000	1267.4	9.5	0.76	739.9	720.8	12.0	6.9	1.6	1.0	56.9
2001	1276.3	8.9	0.70	744.3	730.2	4.4	9.4	0.6	1.3	57.2
2002	1284.5	8.2	0.64	753.6	737.4	9.3	7.2	1.2	1.0	57.4
2003	1292.3	7.8	0.60	760.8	744.3	7.2	6.9	1.0	0.9	57.6
2004	1299.9	7.6	0.59		752.0					

Source: Population and RNI from Abstract 2005, p. 41.

Economically active: Yearbook 2004, p. 120

Employed: Yearbook 2004, p.120; 2004 data from Abstract 2005, p. 44.

There are obvious breaks in the series for employment (1989/90) and for economically active population (1993/94 and 1995/96).

^{*} Participation rate: labor force (series B) as percent of population.

Table 3 Size and Sectoral Attachment of China's Labor Force, 1980-2004 (million persons and per cent)

					Average g	rowth (%)
Category	1980	1990	1995	2004	1980/95	1995/2004
1. Population	987.0	1143.3	1211.2	1299.9	1.4	0.8
2. Increase (per						
cent)	1.2	1.4	1.1	0.6		
Labour force	423.6	647.5	680.6	752.0	3.2	1.1
4. Urban formal						
employees	105.2	170.4	190.4	264.8	4.0	3.7
Labour force composition						
5A. Primary	291.2	389.1	355.3	352.7	1.3	-0.1
5B. Secondary	77.1	138.6	156.6	169.2	4.8	0.9
5C. Tertiary	55.3	119.8	168.8	230.1	7.7	3.5
Shares (per cent) Participation						
rate	42.9	56.6	56.2	57.6*		
Female workers#	35.3	37.6	38.5	37.8*		
Primary	68.7	60.1	52.2	46.9		
Secondary	18.2	21.4	23.0	22.5		
Tertiary	13.1	18.5	24.8	30.6		

Sources: Lines 1-3 and participation rates from Table 2 (using labor force Series B); Line 4 from Table 1; Line 5 from Abstract 2005, p. 45. Data on female employment from Labor 1995, p. 26; Labor 2000, p. 15; and Labor 2003, pp. 13-15.

movement.⁴ Large inflows of foreign investment, most directed towards manufacturing, did not prevent a sharp decline in employment growth among China's secondary industries, a category dominated by manufacturing. Service-sector employment, by contrast, showed continued rapid growth both in terms of numbers of workers and share of total employment. This reflects both the normal process of economic development and the relaxation of long-standing barriers that limit entry of new firms into important service trades.⁵

The share of women in urban employment has remained stable despite reports that layoffs disproportionately target women and that private employers often discriminate against females.

Table 4 summarizes trends in formal employment, including domestic private

^{*}Data for 2002.

[#] Proportion of female workers in urban units under state, urban collective, or "other" ownership. These figures probably exclude self-employed individuals.

							ent annual rease
Year	Urban	Rural	Rural	Rural	National	Urbai	n National
	Total	TVE	private	Total #	Total ##	total	total
1980	105.2	30.0	5.0*	35.0	140.2		
1990	170.4	92.6	16.0	108.6	279.0		
1995	173.4	128.6	35.2	163.8	337.2		
2000	231.5	128.2	40.7	168.9	400.4		
2001	239.4	130.9	38.2	169.1	408.5	3.4	2.0
2002	247.8	132.9	38.8	171.7	419.5	3.5	2.7
2003	256.4	135.7	40.1	175.8	432.2	3.5	3.0
2004	264.8	138.7	42.0*	180.7	445.5	3.3	3.1
Annual growth (percent)							
1980/95	3.4	10.2	13.9	10.8	6.0		
1995/2004	4.8	0.8	2.0	1.1	3.1		

Table 4 Trends in Formal Employment, 1980-2004 (million workers)

Sources:

Urban total: official figures from Table 1, including unexplained residuals.

TVE: Abstract 2005, p. 46.

Rural private: for 1990-2003: sum of workers in private business and individual Enterprises from Yearbook 2004, p. 123.

business.⁶ The national data reflect rapid growth until the mid-1990s, followed by a slowdown in the pace of job creation: the national total rose by six percent annually between 1980 and 1995, but by only three percent during the decade ending in 2004.

The figures in Tables 1 and 4 indicate fundamental changes in China's employment dynamics. Prior to 1995, the rural economy, particularly the TVE sector, provided the biggest source of new employment. The past decade has witnessed a dramatic slowdown in rural employment growth. In the urban sector, the locus of job expansion has shifted from state-owned enterprises and collectives, which have experienced big declines in employment, to domestic private businesses and foreign-linked firms. The overall extent of growth in urban formal employment remains uncertain: if we exclude the large unexplained residual figure shown in Table 1, urban employment was smaller in 2004 than in 1995.

Table 5 address issues raised by discussion surrounding the decline in manufacturing employment in the United States, Japan, and other nations. Some

^{*}Author's guess. #Sum of rural components. ##Sum of rural and urban components.

Table 5 Employment in Chinese Industry, 1978-200)2
--	----

Table 5 Employment in Clinicse industry, 1976-2002									
				Urban		National			
Year	Manufacturing	Mining	Utilities	Total	TVE	Total			
1978	53.32	6.52	1.07	60.91	17.34	139.16			
1980	58.99	6.97	1.18	67.14	19.42	153.70			
1985	74.12	7.95	1.42	83.49	41.04	208.02			
1990	86.24	8.82	1.92	96.98	55.72	249.68			
1991	88.39	9.05	2.03	99.47	58.15	257.09			
1992	91.06	8.98	2.15	102.19	63.36	267.74			
1993	92.95	9.32	2.40	104.67	72.60	281.94			
1994	96.13	9.15	2.46	107.74	69.62	285.10			
1995	98.03	9.32	2.58	109.93	75.65	295.51			
1996	97.63	9.02	2.73	109.38	78.60	297.36			
1997	96.12	8.68	2.83	107.63	76.35	291.61			
1998*	83.19	7.21	2.83	93.23	73.34	259.80			
1999	81.09	6.67	2.85	90.61	73.95	255.17			
2000	80.43	5.97	2.84	89.24	74.67	253.15			
2001	80.83	5.61	2.88	89.32	76.15	254.79			
2002	83.07	5.58	2.90	91.55	76.68	259.78			
Annual percent increase									
1980/1995	3.4	2.0	5.4	3.3	9.5	4.5			
1995/2002	-2.3	- 7.1	1.7	-2.6	0.2	-1.8			

Source: except as noted, Yearbook 2004, p. 127 Employment for industrial TVEs from TVE Statistics, p. 5.

Note: National and urban totals include mining, manufacturing, and utilities.

observers suggest a large-scale transfer of jobs to China. Table 5 provides time series data on employment in urban manufacturing and nationwide industry (including mining and utilities as well as rural industry). Total industrial employment and its components decline during the late 1990s and into the new century. The current standard measure of industrial employment, which excludes laid-off workers and employees of firms with annual sales under RMB 5 million (equivalent to about US\$0.6 million) dates from 1998. The 2004 year-end total of 60.99 million workers falls short of the 1998 figure by nearly 1 million persons. Even China's automotive boom has not delivered big job growth. Firm-level data covering the decade from 1993 to 2003 show sales rising from RMB137 billion to RMB 810 billion. But with annual sales per worker jumping from 70,000 to 500,000, employment declined from 1.95 million in 1993 to 1.27 million in 2000 before rising to 1.62 million in 2003.

This outcome is not unique to the auto sector: despite recent job growth among

^{*} Beginning in 1998, employment totals include only "on post" workers Workers on furlough (*xiagang*) are excluded from the total.

larger manufacturing firms, ⁹ it is clear that rising productivity, rather than big jumps in employment, has fueled China's current industrial boom. Although international migration of manufacturing employment to China contributes to China's employment dynamics, it is part of a complex process whose overall results include substantial erosion of domestic manufacturing employment.

Table 6 quantifies trends in the absorption of labor into formal employment.

Table 6 Patterns of Labor Absorption, 1980-2004 (million workers)

	1980/90	1990/95	1995/04
Labor Force Increment#	224.2	35.4	72.2
Urban Components			
SOEs	23.3	9.2	-45.5
Collectives	11.2	- 4.0	-22.5
Urban private*	5.9	13.7	34.7
Others	1.6	7.2	24.5
Urban residual	23.1	-6.1	74.4
Rural Components			
TVEs	62.6	62.6	10.1
Rural private	11.0	11.0	6.8
Formal sector total	138.8	93.6	82.4
Of which:			
Urban components	42.0	26.1	-8.8
Urban residual	23.1	-6.1	74.4
Rural components	73.6	73.6	16.9
Increase in informal employment	85.4	-58.2	-10.2
(including farming)			
Annual Averages			
Labor force increment	22.4	7.1	8.0
Formal sector absorption	13.9	18.7	9.2
Urban components	4.2	5.2	-1.0
Urban residual	2.3	-1.2	8.3
Rural components	7.4	14.7	1.9
Increase in informal employment			
Including residual urban absorption	8.5	-11.6	-1.1
Excluding residual urban absorption	10.9	-12.9	7.1

Sources: Tables 1, 2, and 4.

[#] based on Series A, Table 2.

^{*} Sum of private enterprises and self-employed individuals.

During the 1980s, rapid growth created an average of nearly 14 million formal jobs per year. The pace of job creation accelerated sharply during 1990-95, with annual growth of formal jobs outpacing labor force growth by over eleven million persons, allowing millions to shift from farming and other informal occupations into formal employment.

The decade since 1995 has brought a sharp decline in the expansion of formal employment, with annual increases in formal jobs averaging only 9.2 million, or half the corresponding figure for 1990/95. Even this result depends on the large unexplained residual component in the urban employment data, which accounts for 90 percent of reported nationwide growth in formal employment during 1995-2004.

Whatever the validity of the residual component of the urban employment statistics, Table 6 demonstrates a considerable decline in the employment-generating capacity of China's economy during the past decade. Causes of the slowdown in growth of formal-sector labor demand include the slowdown in TVE growth, the collapse of tenure for urban workers, and a sharp decline in the employment elasticity of domestic growth, which arises from strenuous efforts to increase productivity and from the clustering of investment spending on large-scale, capital-intensive projects.

3. Institutional Change, Unemployment, Migration

China is the exemplar of gradualism in the transition from socialism. Transformation of labor markets and employment conditions, especially in cities and in the state sector, was notably absent from early reform initiatives, so much so that reviews of China's first reform decade decried the "failure" of labor reform.¹⁰

Despite limited accomplishments, a coalition favoring meaningful reform gradually emerged. By the end of the 1990s, employment arrangements involved less segmentation, fewer rigidities, and far greater market influence than at the beginning of the decade. Two major changes—the collapse of urban tenure arrangements and large-scale migration of villagers into the cities—and a plethora of important, but less visible reforms contributed to dramatic changes in labor market arrangements. Policy initiatives linked to China's 2001 accession to the World Trade Organization intensified the impact of market forces on employment decisions.

3.1. Collapse of the Urban Tenure System

Despite some evidence of growing links between urban wages and enterprise financial outcomes, 11 officially mandated reforms remained largely ineffectual until the

intensification of competition sparked by increasing entry of TVEs, domestic private firms, and foreign investment. Entry of new firms created growing financial pressure. The dynamic is simple: firms burdened with expensive, poorly motivated workers and costly fringe benefits cannot survive direct competition with rivals whose operations escape these constraints.

Although national and local authorities continue to protect incumbent urban workers and their money-losing employers, traditional tenure arrangements began to crack about 1993, when Shanghai managers were allowed to lay off redundant workers as long as open unemployment remained within specific limits. The tenure system then eroded rapidly, with massive segments of the urban work force shunted into a new arrangement called *xiagang* or furlough. Although the exact terms vary, furloughed employees need not report to work but retain residual ties with their units, from which they are entitled to (but do not always receive) small stipends and fringe benefits.

Since the term *xiagang* has no exact definition, figures indicating cumulative layoffs in excess of fifty million cannot be precise. What is certain is that *xiagang* has effectively shattered China's socialist tradition of lifetime tenure for regular urban workers. This loss of security has imposed high costs: furloughs have disproportionately affected women, workers with limited education, and employees in late middle age. ¹² Many furloughed workers face sharply reduced economic circumstances, and often encounter difficulty in re-entering the urban labor market.

With the spread of *xiagang*, China's cities now confront large-scale open unemployment on a scale unknown since the earliest days of the People's Republic. Official measures, which have crept upward to 4.2 percent at the end of 2004, understate actual unemployment because they cover only registered urban residents, many of whom decline to identify themselves as unemployed. Surveys directed by Professor Cai Fang of the Chinese Academy of Social Sciences, provide a more realistic picture of actual urban employment conditions. These surveys find that jobless rates "in five major cities—Fuzhou, Shanghai, Shenyang, Xi'an and Wuhan... averaged about 8 per cent between September 1996 and January 2002," while subsequent figures in some localities "have even topped 14 percent." 13

Urban unemployment is typically structural rather than transitory. Current unemployment arises from "the mismatch between the new industrial structure and the low labour skills of the workers available." The decline of uncompetitive industries has turned some localities, particularly in the northeast and northwestern regions, into depressed areas with very high rates of unemployment.

Despite extensive layoffs, the urban formal sector still contains substantial pools of redundancy. Commentators regularly point to state-owned industry, where employment has dropped steeply from a 1993 peak of 44.9 million, as sheltering large pockets of disguised unemployment.¹⁵

China's urban work force also includes considerable numbers of jobless rural

migrants. Since migrants rarely qualify for social benefits, such unemployment is mainly transitory. Rural migrants either find work or move on.

Ongoing reform aims to eliminate the former *danwei* system that combined employment with the delivery of social services. Under the emerging system, "the concept of lay-offs [here referring to *xiagang*] will soon disappear, owing to a new labor relationship featured by a contracted one being established catering to the market economy. A socialized social security system will soon be realized." In future, employers will hire and dismiss workers in line with the dictates of market forces. Workers, whether employed or temporarily idle, will access health, pension, unemployment and other benefits through public agencies rather than through employers.

Expansion of the new system promises to relax existing constraints on the spread of market-based allocation of labor. Reform may simplify the reorganization or liquidation of failed enterprises by eliminating head-on conflict between the rights of creditors, who have legal claims over such firms' assets, and the interests of employees. To date, workers typically receive preferred access to such assets at the behest of local officials, who regularly abrogate the legal obligation to compensate creditors.

Despite important moves to separate employment ties from social safety net provisions, traditional arrangements often remain in force. Thus "enterprises on the edge of bankruptcy will have to submit a clear scheme on how they plan to arrange for their employees to set aside enough funds for such arrangements [i.e. to limit unemployment] before they are allowed to begin bankruptcy proceedings."¹⁷

3.2. Domestic Migration

The People's Republic of China, established in 1949, inherited an economy with large regional differences in per capita incomes. Subsequent egalitarian reforms reduced inequality within the urban economy and within local village communities. Chinese socialism quickly developed a strong urban bias. To preserve urban amenities for the intended beneficiaries and to limit costs, the state established barriers between the urban and rural sectors that permitted a large expansion of the income gap between urban and rural residents. In the meantime, China's communes, which managed the rural economy from 1958 to the late 1970s, were expected to employ all able-bodied members. This created an immense reservoir of underutilized rural labor.

Once reform began, the combination of large urban-rural income differentials and the sudden release of labor from farming created strong incentives for migration of villagers to China's towns and cities. Long-standing underdevelopment of the urban service sector and rapid urban growth intensified these pressures. The result was a growing exodus from rural villages. Fast-growing TVEs provided the

initial destination for migrant workers. Subsequently, the slowdown of TVE growth, the creation of networks linking would-be village migrants to urban employment, ¹⁸ rapid improvement of interregional transport and communication, the erosion of urban control systems that had formerly obstructed migrants' access to grain and housing, ¹⁹ and further expansion of urban-rural income differentials channeled growing numbers of migrants to urban destinations.

Although there are no precise estimates of the numbers leaving the villages or working in urban areas, the scale of domestic labor movement is enormous, no doubt the largest in human history. "By 1997, the Ministry of Public Security estimates that the floating population had grown to 100 million." Migration continues to grow despite rising urban unemployment, imposition of regulations and fees intended to limit the influx of rural migrants, ²¹ and the growth slowdown of the late 1990s. Survey data show a rising proportion of villagers leaving the farm sector and finding employment far from their home. ²²

3.3. Growing Penetration of Market Forces

In 1990, dismissal of regular urban workers was almost unknown. By the end of the decade, large-scale layoffs were widely seen as both necessary and beneficial. Published reports benchmark the change. In 1995, Wu Bangguo, China's Vice-premier in charge of industry, "urged enterprises to cut their surplus staff." Official emphasis on the employers' responsibility for securing new positions before dismissing redundant workers has declined steadily. In 2001, Premier Zhu Rongji, displaying his customary bluntness, "encouraged laid-off workers. . . to find jobs on the private labour market." ²⁴

Premier Zhu's comment highlights the growing role of private business. During the first reform decade, many private entrepreneurs felt obliged to operate under the "red hat" of fictive collective ownership. Rapid expansion of private business alerted the policy community to the potential importance of private employment. Local governments began to follow the lead of provincial officials in Guangdong and Zhejiang by encouraging private business. National leaders, acting with great deliberation in the face of considerable opposition, reinforced this trend with a constitutional amendment endorsing private business, a law governing "solely-invested enterprises," a decision to open the Communist Party to private entrepreneurs, increasingly specific promises to curtail discrimination against private enterprise, and exhortations supporting "small and medium enterprises" — i.e. private business.

In 1990, new employment typically resulted from job assignments in which local labor bureaux matched applicants to requests submitted by potential employers. Voluntary job transfers were unusual, often stalled by employers, and, when successful, widely remarked. This changed rapidly. A 1993 report noted that "man-

agers are often helpless with the employees who break contracts. . . . many workers are ready to leave for more lucrative jobs." Employers now complain about "job hopping" by ambitious employees. College graduates, formerly assigned jobs upon graduation, now routinely seek employment on their own. Thus, "students from outside the city who swarm into Shanghai are challenging local graduates in the local job market."

Early studies of wage determination found unusually low returns to education, with college graduates sometimes earning lower incomes than less-educated colleagues. This changed rapidly during the 1990s.²⁷ Ambitious and talented individuals sought risky but rewarding new careers in the new Special Economic Zones. Foreign-invested firms bid up the wages of highly educated workers. Some state enterprises have taken up the challenge: in 2001, representatives of Shanghai-based Baosteel visited overseas university campuses in search of "high-level professionals" for positions paying over US\$70,000.²⁸ The same trend appears in studies of rural migrants: comparing 1990 and 2000, deBraauw et al find that "the evolution of China's labor markets" for village migrants "increasingly has rewarded formal education."

Despite these changes, movement toward a market-based system remains far from complete. Government agencies and party offices continue to appoint senior executives, and sometimes even mid-level managers of large enterprises in industry and finance, particularly (but not exclusively) in the state sector. Government agencies still establish (and perhaps enforce) wage guidelines for state, collective and even for foreign-invested enterprises.³⁰ The slow pace of change is evident in a December 2000 report that the Ministry of Labor and Social Security "has suggested a salary system that is based on actual work performed by different workers" in state enterprises.³¹ There is continuing resistance to special compensation for managers: efforts to reward corporate leaders with stock options have encountered stiff opposition.

3.4. China's Entry into the World Trade Organization

China's 2001 accession to the World Trade Organization has produced a succession of market-enhancing laws, regulations, and administrative measures that enlarge the share of China's work force whose income and employment prospects respond to domestic and global market forces, with further increases to come. Although the estimated net employment impact of WTO entry represents only a tiny fraction of total employment, adjustments imposed on specific sectors may be large.

WTO entry seems likely to reinforce structural changes already underway, including further decline in farm labor requirements, fresh employment opportunities for younger, better-educated workers, reduced growth or even contraction in openings for older, less adaptable workers, and a continued tilt of employment

opportunities toward trade-oriented coastal regions.

4. Wages and Employment Conditions

4.1. Wage Patterns

Wage behavior reflects this pattern of considerable, but incomplete transition to a system governed primarily by market forces. The new prominence of market forces is readily apparent from data showing wide dispersion of wage movements across cities and occupations.³² Table 7 summarizes wage trends for the formal (mainly urban) sector. With the exception of urban collectives, all sectors show a strong upward trend in both money and real wages. Surprisingly, real wage gains accelerate during the second half of the 1990s and into the current decade despite slow job

Table 7 Nominal and Real Wages for Urban Formal Employees and TVE Workers

	Nominal	wages, a	annual fig	ures		Real wages, annual per cent increase			
Year	All staf	fState	Urban	Other	TVE	All staff	State	Urban	Other
	& work	ers	collectiv	e ownersh	ip worker	s & workers	sector	collectiv	e ownership
1980	762	803	623		398	6.1	6.0	6.9	n.a.
1985	1148	1213	967	1436		5.3	4.8	6.6	22.5
1990	2140	2284	1681	2987	676	9.2	9.7	6.6	8.9
1991	2340	2477	1866	3468		4.0	3.2	5.5	10.5
1992	2711	2878	2109	3966		6.7	7.0	1.6	5.3
1993	3371	3532	2592	4966		7.1	5.7	-2.1	7.9
1994	4538	4797	3245	6303		7.7	8.7	-6.1	1.5
1995	5500	5625	3931	7463	3618	3.8	0.4	6.6	1.4
1996	6210	6280	4302	8261	4195	3.8	2.6	5.6	1.7
1997	6470	6747	4512	8789	4465	1.1	4.2	4.1	3.2
1998	7479	7668	5331	8972	4987	7.2	6.7	5.9	-1.7
1999	8346	8543	5774	9829	5193	13.1	12.9	0.2	11.0
2000	9371	9552	6262	10984	5507	11.4	10.9	3.7	10.9
2001	10870	11178	6867	12140	5909	15.2	16.2	8.9	9.7
2002	12422	12869	7667	13212	6418	15.5	16.3	12.7	9.9
2003	14040	14577	8678	14574		12.0	12.3	12.2	9.3
2004	16024	16729	9814						

Sources: urban nominal and real wages: Yearbook 2004, p. 153; Abstract 2005, p. 47. TVE nominal wages (for all enterprises, not limited to industry)1980-1996: Rawski 1999, p. 10; 1997-2002: TVE Statistics, pp. 5, 360.

TVE wages for 1999: "Influence of TVE Development on the Growth of Farm Incomes," Chinese-language document consulted 12 December 2001 at http://www.agri.ac.cn/agri_net/02/2-11/0141.htm

TVE wages for 2000: "Overview of TVE Development Under the 9th Five-Year Plan," Chinese-language document consulted 12 December 2001 at http://www.cte.gov.cn/zw/tjxx/readxx.asp?idd=26

growth, extensive layoffs, and a modest deflationary trend. Wage behavior in the state sector is particularly noteworthy for the unusual combination of large pay increases and massive layoffs visible beginning in the late 1990s.

The figures in Table 7 point to wage indiscipline, an issue raised by W.T. Woo and others,³³ as a possible obstacle to improved performance, especially in the state sector, where the ratio of wage costs to gross output value for state-owned firms reached a 1997 peak of triple the figure for other types of firms.³⁴

China's historic legacy of egalitarianism makes it difficult for managers to impose large pay differentials. In banking, for example, egalitarianism "is still often seen in the salary and housing distribution, making it difficult to offer effective incentive to the staff." Managers may feel obliged to grant broad wage increases in the hope of retaining key employees. Since private and foreign-linked firms enjoy far greater flexibility in wage setting, such efforts may not succeed. In addition, state sector pay has recently become an instrument of expansionary macro-policy.

Chinese sources rarely publish detailed comparisons of men's and women's wages. Studies based on small data samples show mixed results, with some finding a considerable gap between men's and women's wages and others indicating small and declining gender pay differentials. An econometric study based on indirect inference from 1988-94 data involving most of the urban labor force (but without information on specific individuals) found that China's urban employment system includes large gender pay differences that parallel conditions observed elsewhere in East Asia. A "Report on the Social Status of Women" issued in September 2001 found that "the average yearly income. . . of urban women was only 70.1 per cent of that of urban men."

4.2. Employment Conditions

Information on wages, hours of work, industrial safety, and working conditions reveals a combination of vigorous effort to establish suitable standards and limited success in enforcing official policy.

Wages. China's provinces and cities have now legislated minimum wage standards geared to local income levels and market conditions. Enforcement is far from complete. In Shajing (near Shenzhen in Guangdong province), an executive of a (probably typical) Taiwan-owned firm reports that "though the city's minimum wage is about \$56 a month, Ching Hai starts recruits at. . . \$32. . . and promises subsidies for food and lodging to make up the difference.³⁹

The same firm reports that "amid intense price pressure," management "has even increased wages by about 5% in the past two years." This illustrates the dual nature of China's urban wage markets, which in recent years have delivered multiple wage increases for skilled and educated employees and for workers in government and state enterprise. At the same time, wages for unskilled workers "for whom

the only requirements. . . are a tolerance for long hours and low pay" have stagnated under the twin pressures of heavy migration from China's villages and intense pursuit of cost advantage from overseas buyers of labor-intensive goods.

Duality in urban labor markets appears widespread. Qin Hui writes that despite tenfold GDP growth, wages paid to several hundred thousand migrant workers in Dongguan (Guangdong) have hardly risen in the past decade. Large gaps between standard wage measures for coastal and interior regions, which suggest that laborusing industries should quickly move away from the coast, are misleading because official wage statistics focus only on the upper strata of urban labor markets and therefore "cannot reflect changes in wages and labor cost conditions for labor-intensive industries in China's developed regions."

Hours of work. The standard working week changed from 48 to 44 hours in 1994, and then to 40 hours in 1995. ⁴⁴ These provisions are widely implemented in the public sector and in northern cities. There are, however, many reports of long hours. At the Taiwan-owned firm cited earlier, workers routinely put in 14-hour shifts and "say they are sometimes asked to work as long as 18 hours." Similar circumstances are common among small private and exporting firms.

Industrial safety. As in many developing nations, industrial safety is a long-standing problem. Accident statistics, formerly shrouded in secrecy, are now routinely available.

Safety concerns have figured prominently in the recent closure of large numbers of small-scale coal mines. Wonacott offers one of many reports that confirm high rates of accidents and worker injury in specific enterprises and localities.⁴⁶

Working conditions. In theory, trade unions, as guardians of worker interests, are both qualified and empowered to campaign against unsatisfactory working conditions. However, theory and reality need not coincide. Historically, trade unions have enjoyed limited independence and have often acted more as agents of the government than as representatives of the workers. More recently, the growing role of market forces has created conflicts between employers' efforts to limit costs and raise productivity and employees' concerns about workplace hazards, excessive discipline, and fair compensation. The result is a transitional situation in which the rights and obligations of workers and employers, as well as the role of government regulation and trade union advocacy are neither clearly defined in law nor clearly understood in everyday practice. Rapid clarification of these issues seems unlikely, especially because ongoing institutional change will continue to inject elements of novelty and uncertainty into the employment nexus.⁴⁷

Workers' complaints and protests arise in part from the consequences of economy-wide changes, including abolition of tenure and abrogation of official safety-net provisions that are largely unrelated to conditions in specific workplaces. In addition, there are numerous reports of employer abuse, particularly in the south and in rural areas. Detailed accounts from Chinese sources⁴⁸ show that workers

often face hazardous conditions, harsh discipline, and financial malpractice on the part of hard-driving employers. In extreme cases, these reports describe circumstances tantamount to indentured servitude.⁴⁹

Chinese authorities are well aware of such episodes. In supporting provisions stipulating that "all workers and employees are authorized to join trade unions" and forbidding interference "with the act of joining a trade union," Liu Heng, Vice-Chairman of the All-China Federation of Trade Unions, speaks publicly of "rampant infringement of workers' legal rights." Migrant workers, for whom "legal protection. . . remains woefully absent," became eligible to join trade unions in 2003. Hu Min, a national legislator, pinpoints the chief violators of worker rights: "working conditions and social security are not so ideal in some private, joint-owned [(i.e. with foreign investment] and township enterprises. . . . Overtime work. . . [may provide] no extra pay, and. . . some employers go too far by conducting body searches of workers [to prevent theft of materials]. . . . workers are really the ones we should place priority on." 51

In reality, there is no agreement on where China "should place priority." Local and provincial officials are expected to deliver high growth of output and exports and to limit unemployment. With labor in excess supply, official sentiment easily tilts toward employers. Since one major segment of foreign investment clusters in industries in which low labor costs are important sources of competitive advantage, local officials may feel obliged to tolerate harsh treatment of workers.

5. Productivity

Aggregate output per worker provides the broadest measure of labor productivity. With labor force participation rates virtually constant since 1990 (Table 2), the path of output per head will parallel the behavior of output per worker. Table 8 shows an index of GDP per person derived from official figures. These data, which can be interpreted as a crude index of aggregate output per worker, accelerate from a 7.7 per cent annual growth rate during 1980/90 to 10.7 percent annual growth rate during 1990/95 before slipping back to 7.5 percent during 1995/2004. Even though possible understatement of population growth and overstatement of output growth during 1998-2001 and again in 2003 lends an upward bias to these figures, we cannot doubt the reality of ongoing growth in aggregate output per worker.

6. Distribution

Prior to the start of economic reform in the late 1970s, modest income dispersion within urban organizations and model rural communities gave outsiders a distorted

Year	Index of real GDP per
	person (1978=100)
1980	113.0
1990	237.3
1995	394.0
1996	427.1
1997	460.3
1998	491.5*
1999	521.8*
2000	559.2*
2001	596.7*
2002	642.0
2003	697.9*
2004	757.6
Average annual growth of real	
GDP per person (percent)	
1980-1990	7.7
1990-1995	10.7
1995-2004	7.5

Table 8 Growth of Real GDP per Person, 1980-2004 (1978=100)

Source: Yearbook 2004 p. 56. I obtain the figure for 2004 by using the officially estimated 9.2 percent real GDP growth for 2003/04 (Communique 2005) and applying population growth of 0.59 percent (Table 2).

image of China as a highly egalitarian society. In reality, China's pre-reform economy harbored a wide income gap between privileged urbanites and the rural majority, as well as large spatial differentials, with higher incomes concentrated in the coastal east and low incomes clustered in the western, interior regions. One survey concluded that, at the beginning of reform, rough measures of Chinese distributive equity looked "not unlike those for India and Pakistan" and that "important features of China's income distribution" had "not improved significantly since the 1950s." ⁵³

Reform induced steep increases in rural incomes that diminished the urbanrural gap, while rapid growth along China's southeastern coast boosted incomes in provinces formerly starved of investment funds. By the late 1980s, however, growth began to enlarge rather than diminish inequality. Two large surveys show that: "Between 1988 and 1995 income inequality increased sharply in China, making it one of the more unequal of Asian developing countries."⁵⁴

The dispersion of incomes continues to expand, with differential income growth favoring urbanites, educated workers, skilled and white-collar workers associated with foreign-linked firms, and employees in sectors (finance, telecommunications, tobacco, electric power, aviation) where steep entry barriers enable high profits that are partly used to fund generous pay increases.⁵⁵

^{*}The author believes that official data substantially overstate GDP growth for these years (Rawski 2001b, 2002a, 2005).

High and rising inequality shows signs of becoming embedded in China's social structure. In Anhui province, for example, high tuition costs at all levels ensure that "the number of sons and daughters of farmers and laid-off urban workers who leave school is rising year by year, and the number of illiterates in the villages has begun to rise." Evidence of income concentration abounds: China Daily reports that 8.7 percent of the population holds 60 per cent of bank deposits. ⁵⁷

7. Summary, Prospects, and Policy Directions

This study reviews recent developments affecting China's labor markets. Quantitative appraisal is complicated by an apparent deterioration in the quality of Chinese economic statistics. Difficulties arise from technical issues, notably the growing institutional complexity of China's economy and the reduced willingness of respondents to provide timely, complete, and reliable information; and also from the politicization of economic data, especially at the local and provincial levels. Nevertheless, the broad contours of recent developments in China's labor economy are clear.

Population and labor force continue to grow, but at declining rates. Trends in the sectoral attachment of China's immense work force have unfolded along familiar lines, with the number and proportion of workers in farming declining and the size of the work force in tertiary occupations increasing substantially.

Growth of formal employment has declined sharply during the past decade. Annual absorption of workers into formal employment dropped from 13.9 million during 1980/90 and 18.7 million during 1990/95 to a maximum of 9.2 million during 1995/2004 (and perhaps much less if the large residual component shown in Table 1 does not correspond to actual employment).

In view of complaints surrounding the loss of manufacturing employment in the United States, Japan, Mexico and other nations, it is essential to note the absence of employment growth in China's industrial sector during the past decade (Table 5).

The locus of job creation has moved from SOEs and TVEs, prominent during the 1980s, to employers in what Chinese sources describe as "other ownership arrangements," including domestic private firms, shareholding entities, and foreign-linked businesses.

Large-scale layoffs of redundant workers, mainly in the state enterprise sector, but also in urban collectives, services (banks, railways), and government agencies (including the military), have reinforced the effect of slow employment growth. The exact numbers are unclear, but the total of dismissed workers appears to exceed 50 million.

The combination of massive layoffs and slow job creation has resulted in sub-

stantial open unemployment among China's urban populace. Official figures showing unemployment rates of approximately 4 per cent understate the extent of joblessness. Chinese researchers provide more plausible estimates showing national urban unemployment rates of at least 6-8 percent during 1995-2002. Unemployment rates among urban residents appear to have risen in recent years.

China's urban labor arrangements are moving in toward new structures in which relations between employers and workers will focus on contractual exchange of labor services for money wages, with social benefits increasingly managed and funded by public agencies rather than work units.

Out-migration of villagers seeking work in China's towns and cities has become a major feature of China's labor scene. The number of migrants continues to increase, probably to well above 100 million.

The past decade has brought growing penetration of market forces into China's labor economy. In addition to increased domestic migration and large-scale layoffs of redundant workers, important new developments include the emergence of private business as the leading source of new jobs, the gradual replacement of official job assignments with competitive recruiting, and increased job mobility, especially among younger and well-educated workers.

Wage data display growing differentials among different trades, localities, and job categories, a new pattern that reflects the rising impact of market forces. Nonetheless, official interventions continue to affect urban wages. Inappropriately high wages contribute to poor financial performance, especially in the state sector. Beginning in 1998, official policy has mandated large increases in urban wages as part of expansionary macroeconomic policy designed to raise consumer spending. As in other East Asian nations, male workers earn considerably more than females. Urban labor markets display a dual structure in which product-market competition and labor supply pressure maintain low wage structures in labor-intensive industries staffed mainly by migrants from rural areas, while officially influenced wages attached to formal jobs staffed by regular urban residents have risen steeply despite layoffs and redundancy.

Working hours, industrial safety, and working conditions are areas in which we observe a substantial official effort to legislate standards combined with uneven enforcement.

Despite problems of measurement, output per worker appears to have increased rapidly throughout the reform period.

Chinese and international observers agree that income inequality increased rapidly during the 1990s. Available data, which probably understate the degree of income inequality, suggest that China is rapidly emerging as an exemplar of disequalizing development.

The changes reviewed in this study, particularly the slowdown in job creation since 1995 and the emergence of substantial open unemployment in the cities, have

propelled employment issues to the top of China's national agenda.

Despite the current growth boom, short- and medium-term prospects for rapid expansion of employment opportunities appear poor. The employment elasticity of economic growth (i.e. the percentage increase in employment linked to a 1 percent increase in GDP) remains low, fluctuating between 0.1 and 0.2 during 1990-2001. Few groups seem exempt from the consequences of overabundant labor supply: the Ministry of Education reported that one-fifth of China's 2002 college graduates remained jobless in March 2002 and predicted that prospects for 2003 "look even worse." Even optimistic accounts, such as an October 2003 report announcing that "an additional 8.12 million workers found jobs in. . . the first nine months" of 2003, include somber predictions that the number of job-seekers will exceed prospective employment by a wide margin. 60

Political leaders and economic policy-makers recognize the gravity of China's labor situation. In 2002, Premier Zhu Rongji "pointed out that supply surpassing demand in the labor force is going to be a long-term phenomenon during the country's modernization process." Ministry of Labor and Social Security Zhang Zuoji predicted that "about 22-23 million workers will be searching for jobs in urban areas during the next three to four years, with around 8-9 million openings forecast to be available."

Despite the current government's focus on employment, it will not be easy to design and implement an effective policy response. If, as this survey maintains, China's labor market difficulties arise from a structural mismatch between the supply of and demand for workers, quick policy adjustments cannot ameliorate rising unemployment. Resolution of problems arising from slow employment growth will depend on structural changes that are likely to be slow and painful.

Thus, we see no menu of obvious measures to reverse the recent slowdown of formal employment growth. Instead, we can point to policy directions that could help to accelerate the creation of new jobs, recognizing that initiatives in these areas are likely to conflict with existing structures, policies, and objectives, including many that are deeply embedded in China's political economy.

Promote private business. Expanding China's private business sector, which has now become the largest source of new employment, is perhaps the most obvious employment-enhancing policy. Private business has grown rapidly, in part because of supportive policy changes. Despite these initiatives, artificial barriers continue to restrict the expansion of private business. Chinese commentators complain that private firms "need national treatment" and that since "some government departments have focused on revenue collection," there is "little space for private enterprises to thrive. . . . especially in their initial stage of development." During 2000, for example, private businesses "accounted for about 30 per cent of the value of China's total industrial output" as well as substantial shares of activity in commerce, construction, and transport, but "received less than 1 per cent of total cred-

it issued by banks."64

Expand the service sector, which became "the main employment channel" during the 1990s and holds the potential for further employment growth. Even though China has moved away from past "policy discrimination against the service sector," its share of overall employment remains low in comparison with both developed and developing nations, in part because "monopoly has been commonplace inside service trades in China." ⁶⁵

Requiring that the state sector "takes the lion's share in key fields" leads to high entry barriers, high prices, restrictions on output, and low employment growth (Non-State 2002).

Promote rural development. The rural sector has demonstrated its employment-creating potential in Japan and Taiwan. China's urban-oriented policy bias has overlooked opportunities for creating rural employment. Both the fiscal and financial systems transfer resources from village to city. Calculations of "effective salesrelated tax rate on added value" during the 1990s, for example, show that taxes levied on "light industry using farm products as raw material" exceed every major category other than "petroleum processing and coke refinery" and consistently run 10 percentage points above the industry-wide average. Although no quick turnaround is possible as long as "the economy below county level is generally lacking growth momentum," an increase in resources applied to rural development could pay handsome employment dividends within a few years. Current efforts to cut agricultural taxes, trim bloated local administrations and roll back the fees and informal levies imposed on villagers and rural businesses represent potentially valuable initiatives that may accelerate rural development and employment growth.

Avoid artificial increases in the cost of hiring workers. Recent labor market developments include an astonishing combination of excess labor supply with steep wage increases in the urban formal sector. Although some wage increases reward employees with special skills, most do not. Recent use of public sector wage increases as part of expansionary macro-policy seems ill advised. As the effects of these measures spread across (and perhaps beyond) the state sector, increases in absolute and relative labor costs threaten to erode the viability of labor-intensive industries and technologies.

Even if the dual nature of China's labor markets acts to insulate low-skill industries from upward pressure on wages, excessive labor costs in the organized sector threaten to limit employment growth by steering investment choices toward alternatives that substitute capital, energy, materials, or technology for labor. There is also an indirect effect: high and rising wages intensify financial pressures on state enterprises and state-related entities. The resulting diversion of budgetary appropriations, bank lending, and capital market access contributes to a "crowding out" phenomenon that further limits the funding available to private businesses, the main source of recent employment growth.

36 CHAPTER II

Limit the growth of social safety net programs. China's ambition to create universal (at least for urban residents) programs for unemployment insurance, retirement pensions and other social security provisions may be premature. Pension, health care, and other social insurance arrangements cover larger proportions of the populace in China than in many nations of comparable or higher wealth. Public pension spending, for example, amounted to 2.7% of China's GDP in 1996, a figure that exceeded comparable totals for eight Asian nations, including South Korea, Singapore, and Malaysia, often by substantial margins. Data for 1995 show that, with the sole exception of Singapore, China's ratio of social insurance taxes to gross wages (36.0%) and to total labor costs (27.0%) is higher, often much higher, than in a long list of Asian economies including Korea (8.4 and 8.0%), Malaysia (24.3 and 21.3%) and Taiwan (12.4 and 11.1%). 68 Efforts to implement social programs that exceed the financial capacity of China's economy will reduce the growth of employment directly, by forcing up labor costs, and indirectly, by intensifying pressure on government budgets and financial institutions, thus expanding the risk of financial instability.

Expand the role of market forces in determining the allocation of capital. Investment decision-making is a weak link in China's political economy, with many aspects displaying little change from circumstances under the pre-reform plan system. Inefficient allocation of capital creates low returns and excess capacity. Recent efforts to boost economic growth by expanding public infrastructure spending and initiating a major program to develop China's relatively poor western provinces bring unfortunate side effects. These include conflicts with (already weak) efforts to reform investment behavior, crowding out investment in the (mainly private) small business sector, and further reduction in investment returns. Excessive official involvement in investment decisions is a long-standing problem that continues to undercut the employment-generating capacity of China's economy. With officials making investment decisions, "many places are curtailing labour-intensive trades to upgrade their industrial structure, which is another reason why the employment rate is down compared to the GDP increase."

Reduce subsidies to capital-intensive undertakings. Chinese policy heavily subsidizes capital-intensive activity, mainly by steering investment resources towards capital-using state enterprises, which receive the overwhelming share of bank loans and enjoy nearly exclusive access to domestic and overseas stock and bond markets. The need to nurture state firms forms an explicit rationale for low interest rates. In addition, state firms working in "key sectors" or developing new technology may receive partial or complete exemption from interest costs. Finally, debt avoidance is commonplace. The rate of interest repayment (shouxilii) on loans held by China's four big state-owned commercial banks dropped from 84 per cent in 1994 to less than 60 per cent in 1998 and under 50 per cent in 1999. The say avoidance of repayment persists.

Preferential funding to large, state-owned firms at low nominal cost and (because of lenient treatment of defaulters) at even lower actual cost encourages China's largest users of capital to emphasize investments with limited employment creation potential. As a result, "the same volume of capital hires less labour in China than in other developing countries." Reports criticizing Chinese firms for failing to follow the example of "developed countries [where] large companies will put between 8 and 10 per cent of. . . overall assets into IT" and other expensive hardware push investment decisions in directions that seem likely to limit employment creation.

Avoid gigantism; avoid imitating the attempts of Japanese and Korean official agencies to "pick winners." China has announced plans to create "up to 50 giant State-owned enterprises" in the wake of its entry into the World Trade Organization. These firms, situated in sectors like coal, steel, aluminum, shipbuilding, and engineering, receive "preferential policies," including "governmental financial support" and special access to loans and equity markets. The goal is "to increase competitiveness of Chinese industry in the globalized market." This initiative, which has drawn sharp commentary from critics who insist that successful enterprises "are not born by nature, self-styled or designated by the government," illustrates the conflict between employment promotion and other official objectives. A government economist finds that, on average, investment outlays per new job amount to RMB220,000 in large enterprises, RMB120,000 in medium-sized firms, but only RMB80,000 at small companies (SMEs), so that "promoting SMEs will be more cost effective in job creation."

Promote resource mobility. China's current unemployment problem is exacerbated by institutional impediments to the matching of workers with complementary resources needed to provide productive employment. Obstacles to the activation of idle state-sector facilities and equipment via merger, acquisition or bankruptcy, while much reduced, remain formidable. Such restrictions reduce the effective stock of capital, and hence the growth of both output and employment. Barriers to interprovincial trade, restrictions associated with China's system of residence permits (*hukou*), and other policies that limit the free flow of commodities and resources limit the growth of productive employment, as do restrictions that prevent companies from using market criteria to select and compensate managers and workers.⁸⁰

Reduce unproductive regulation; avoid re-regulation of economic activity. Even after a quarter-century of reform, China's economy remains burdened by counterproductive regulation. Reform is complicated by the regulators' desire to preserve their own power and by the need to identify and preserve (or expand) the beneficial regulation that effective markets require. Unproductive regulation, including the declining, but still costly and corrupt system of examination and approval (pizhun) and China's vast web of semi-legal fee collection, imposes immense costs

on Chinese business, and extracts a high price in terms of foregone employment. Given the inevitable difficulty of piece-by-piece deregulation, major downsizing of public agencies following the example of the central government's recent 50 per cent staff reduction appears to promise substantial benefits, 81 not least a possible reduction in the magnitude of corruption and malfeasance. 82

Re-regulation is particularly visible in the expanded scope of economic intervention by economic work commissions associated with the Chinese Communist Party, by the State Development Planning Commission, and by the Ministry of Finance. These developments threaten to impede beneficial reform efforts.⁸³

China's economists and policy-makers understand that their nation faces a difficult employment situation. Current labor market problems arise from long-standing and deeply rooted structural imbalances that are not amenable to rapid or easy correction. Short-term expansion of the already large gap between the supply of labor and the demand for workers appears likely. As a result, accelerating the growth of job opportunities now stands near the top of China's economic and political agenda. Achieving the goal of enlarged employment growth will not be easy. There are many feasible policy initiatives, but also many conflicts with competing objectives and with long-standing policy preferences and institutional arrangements. These circumstances ensure that employment concerns and labor market issues will remain close to the centre of China's economic and social policy agenda for the next decade.

The author has benefited from Yifan Zhang's expert research assistance and from the generosity of numerous colleagues, including Fang Cai, Richard Jackson, Margaret Maurer-Fazio, Dorothy Solinger, Loraine West, Haihui Zhang, and Yaohui Zhao.

Notes

- 1 See Rawski and Xiao (2001) and the accompanying symposium on Chinese economic statistics.
- 2 Zhongguo tongji nianjian 2001 [China Statistics Yearbook]. Beijing: Zhongguo tongji chubanshe, 2001, p. 107.
- 3 Job Figures (2005), posted on the website of People's Daily, suggests possible exaggeration of employment totals: "Employment figures should be accurate and. . . . should not be massaged to make officials look good. . . . employment rates should not be used to evaluate officials' work."
- 4 Official data appear to overstate China's farm work force. Rawski and Mead (1998) conclude that the number of "phantom farmers" actually working outside agriculture may be as high as 100 million. They argue that the decline in the absolute number of farm workers began in the 1980s.
- 5 Guo Kesha, "Aggregate Demand or Structural Problems? How Distorted Economic

- Structure Constrains China's Economic Growth." *Jingji yanjiu* [Economic Research] no. 9 (1999): 15-21.
- 6 Private sector employment includes two components: private companies employing eight or more workers and self-employed or individual workers (including businesses with fewer than eight employees).
- 7 Zhongguo tongji zhaiyao 2005 [China Statistical Abstract]. Beijing: Zhongguo tongji chubanshe, 2005, p. 134.
- 8 Results based on tabulation in author's file auto industry. 060705.xls.
- 9 Industrial employment in state-owned firms and enterprises outside the state sector with annual sales above RMB5 million declined during 1998/2001, then rose from 54.4 million in 2001 to 55.2, 57.5, and 61.0 million in the following years (Abstract 2005, p. 134).
- 10 Korzec, Michael. Labour and the Failure of Reform in China. New York: St. Martin's, 1992.
- 11 Rawski, Thomas G. "Progress Without Privatization: The Reform of China's State Industries." In *The Political Economy of Privatization and Public Enterprise in Post-Communist and Reforming Communist States*, edited by V. Milor. Boulder CO: Lynne Rienner, 1994.
- 12 Surprisingly, the share of female employees in the urban formal work force (Table 3) has not declined despite the well-documented tendency of women workers to suffer a disproportionate share of layoffs (Appleton et al 2001).
- 13 See www.chinagate.com.cn/english/4664.htm, consulted 13 November 2003.
- 14 "What They Are Saying: Towns Offer More Jobs." China Daily, 2 January 2002, p. 4.
- 15 For example, Sun (2005) reports expectations that 2,167 "debt-ridden... SOEs... will be closed down or go bankrupt during the next four years.... [which] will leave 3.66 million employees needing reallocation."
- 16 Hua, Hua, "Cutting Numbers of Lay-offs." China Daily, 31 October 2003, p. 4.
- 17 Wu, Yan, "Steps to Ease Unemployment." China Daily, 28 October 2002, p. 2.
- 18 See Solinger 1999, p. 180, on the commercialization of domestic labor export.
- 19 Solinger 1999, p. 65 (housing) and pp. 129, 263 (grain).
- 20 Goodkind, Daniel, and Loraine A. West, *China's Floating Population Definitions, Estimates, and Implications for Urbanization*. Ms. Washington DC, 2001.
- 21 Ministry of Labor surveys indicate that "the demand increase [for rural migrants seeking work in urban areas during 2003] is slight compared with past years" (Jia Heping 2003, p. 1). On regulations, see for example, Lu et al. 2001. However, critics insist that such regulations "have no effect in reality, but only contribute to arbitrary collection of fees on farmers who look for work in cities" (Chen 2001, p. 15).
- 22 deBrauw, Alan, Jikun Huang, Scott Rozelle, Linxiu Zhang, and Yigang Zhang, "The Evolution of China's Rural Labor Markets During the Reforms." Department of Agricultural & Resource Economics, UC Davis, Working Paper Series 1005, 2002.
- 23 Sun, Shangwu, "State Firms Urged to Focus Reforms." China Daily 23 February 1995, p. 2.
- 24 Zhu Qiwen, "Domestic Market Fuels Growth." China Daily, 6 August 2001, p. 4.
- 25 "New Employment System Not Yet Perfect." China Daily, 28 October 1993, p. 4.
- 26 "City Lacks High-Tech Recruits." *China Daily*, 22 February 2000. Accessed from http://www.chinadaily.com.cn/star/history/00-02-22/c04-city.html, 23 December 2001.

- 27 Lee (1999) finds that "the average wage for college graduates [working in state-owned industrial units] has increased dramatically since the late 1980s" (p. 713).
- 28 Xiao Mi, "Baosteel Set to Steal Talent." *China Daily Business Weekly*, 20-26 November 2001, p. 17.
- 29 deBrauw, et al 2002.
- 30 Peking University Professor Zhang Weiying displayed a chart showing the Beijing municipal government's wage guidelines at a May 2000 conference attended by the author.
- 31 "SOE Pay Revamp for Jobs Well Done," China Daily 21 December 2000.
- 32 Chen, Gang et al, Zhongguo dazhong chengshi laodongli shichang gongzi jiawei [Labor Market and Wages in China's Large and Medium Cities]. Beijing: Laodong he shehui baozhang chubanshe, 1999.
- 33 See Woo *et al*, 1993. More recently, Yan and Chen (2001, p. 39) note that "the phenomenon of 'many people assigned to do a single person's task'" still exists, and criticize inadequate pay differentials within state firms, which leave technical workers underpaid, while unskilled workers receive high wages for performing tasks that command lower wages outside the state sector.
- 34 See worksheet giov2. 111603. Fig2, available from the author.
- 35 Mi, Jianguo, Yang Li, and Jinlao Huang, "The Challenges from the Opening of Banking Service Market in China." *China Development Review* 3.4 (2001): 91.
- 36 Fleisher and Wang (2001) "find evidence of productivity-enhancing wage effects in Chinese enterprises." They also find that "technical and administrative workers are consistently underpaid. . . relative to production workers."
- 37 Maurer-Fazio, Margaret, Thomas G. Rawski, and Wei Zhang, "Inequality in The Rewards for Holding up Half The Sky: Gender Wage Gaps in China's Urban Labor Markets, 1988-1994." *China Journal* 41 (1999): 55-88.
- 38 Tang, Min, "Long Way to Go to Gain Gender Equality." *China Daily*, 24 September 2001, p. 4.
- 39 Wonacott, Peter, "Beyond China's Export Boom, Heated Battle Among Factories." *Wall Street Journal*, 13 November 2003, A1, A10.
- 40 *ibid*.
- 41 *ibid*.
- 42 Qin, tlui, "Freedam of Movement and Population Segregation". 2003. See also Zhao, Xiao, "Increasing the price of labour." *China Daily*, 12 October 2004, p. 6.
- 43 Qin, tlui. 2003, p. 57.
- 44 Jefferson, Gary H., Thomas G. Rawski, Li Wang, and Yuxin Zheng. 2000. "Ownership, Productivity Change, and Financial Performance in Chinese Industry." *Journal of Comparative Economics* 28 (4), p. 809.
- 45 Wonacott, Peter. 2003.
- 46 Wonacott, Peter. 2003.
- 47 The following sequence of reports illustrates the uncertainty surrounding labour issues. A Chinese report summarizes Vice-President Hu Jintao's address to a national trade union conference, in which Vice-President Hu said that unions should "focus on safeguarding the interests and rights of workers" and that workers' congresses "should be given more say in management and decision-making." The next day, the *New York Times* noted that workers in a state-owned silk factory found themselves "in a tense

standoff with the authorities over their daring proposal to form a worker-run trade union in place of the official body that they say has failed to defend their interests." The group's leader "was detained by the police . . . and involuntarily committed to a psychiatric hospital. . . one day after he spoke with Western reporters about the workers' grievances." (See Eckholm 2000; Seized 2000; H. Zhao 2000).

- 48 Chan 2001, Thireau and Hua 2003.
- 49 Gilley (2001, p.51) reports that debt bondage and other exploitative employment relations are "on the rise in China as migration flows grow and private business blossoms."
- 50 Guo, Zi, "Pay Workers On Time, Every Time." *China Daily*, 30 October 2003, p. 4; "Union Accepts Migrant Workers," *China Daily*, 3 September 2003, p. 3.
- 51 "Trade Union Law Amended," China Daily 5 November 2001, p. 3.
- 52 Calculation of growth rates after 1997 is omitted because the official reports appear to substantially exaggerate actual GDP outcomes.
- 53 Rawski, Thomas G., "The Simple Arithmetic of Chinese Income Distribution." *Keizai kenkyu* [Economic Research, Tokyo] 33.1 (1982): 25-26.
- 54 Khan, Azizur Rahman, and Carl Riskin. "Income and Inequality in China: Composition, Distribution and Growth of Household Income, 1988 to 1995." *China Quarterly*. no. 154 (1998): 221-253.
- 55 In Guangzhou, for example, "monopoly has resulted in large income gaps" with salaries in tobacco processing (RMB4,461), postal and telecom services (RMB3,265), and aviation (RMB14,200) running far above the city-wide average of RMB1,693 (Monopoly 2001).
- 56 Lin 2001, p. 18. The author notes that annual tuition at village primary schools is RMB400. Per capita net income of Anhui rural households in 2000 averaged RMB1,935 (Yearbook 2001, p. 324).
- 57 Chandler, Clay, "In China, the Rich Keep Getting Richer." Washington Post Foreign Service, 1 November 2001. Available from http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId =A21307-2001Oct31 [consulted II December 2001].
- 58 Wang, Cheng, "New Views on China's Employment Development." *Jingji yanjiu* [Economic Research] no. 12 (2002): 79-87.
- 59 Hu, Qihua, "Tough Times Continue in Job Market." China Daily, 11 March 2003, p. 2.
- 60 Xiao, Li, "8 Million Find Jobs." China Daily, 27 October 2003, p. 2.
- 61 Dian, Tai, "Zhu Talks More Jobs." China Daily, 14-15 September 2002, p. 1.
- 62 Fu, Jing, "Jobless Rate Rises to 4.2%." China Daily, 30 July 2003, p. 1.
- 63 Zhang, Chenghui, "Research Report on the Current Financing Situation of Privatelyowned Enterprises." *China Development Review* 3.3 (2001), p. 82; Wang, Ying, "Beijing Government Slices Workforce to Raise Efficiency." *China Daily*, 3 January 2000, p. 2.
- 64 Leggett, Karby, "Foreign Investment Not a Panacea in China." *Wall Street Journal*, 14 January 2002, A1.
- 65 Li, Shantong, and Yongzhi Hou, "Third Strategic Objective of Modernization Drive Calls for Rapid Expansion of Service Trade." *China Development Review* 3.4 (2001): 37-50.
- 66 Lu, Ding, "Revamping the Industrial Policies." In *The Globalization of the Chinese Economy*, edited by S.-j. Wei, G. J. Wen and H. Zhou. Cheltenham: Edward Elgar 2002,

- pp. 26-27.
- 67 Xie, Fuzhan, and Bin Yu, "A Basic Judgment Over the Current Economic Situation." *China Development Review* 3.4 (2001), p. 4.
- 68 Palacios, Robert, and Montserrat Pallares-Miralles, "International Patterns of Pension Provision." Unpublished manuscript, 2000.
- 69 Rawski, Thomas G., "Will Investment Behavior Constrain China's Growth?" *China Economic Review* 13.4 (2002): 361-372.
- 70 Macro. "With Continued Improvement in China's Macroeconomy, Don't Curtail Expansionary Fiscal Policy." *Guoyou zichan guanli* [State Asset Management] no. 9 (2001):4-7; Xu, Dashan, "Overall Tax Cut Unlikely." *China Daily*, 10 January 2002, p. 5.; Zhang, Chenghui, "Research Report on the Current Financing Situation of Privately-owned Enterprises." *China Development Review* 3.3 (2001): 78-82.
- 71 "Employment Needs More Attention as Growth Sought." *China Daily*, 15 May 2003, p. 4.
- 72 Lee (1999, p. 720) describes state-owned industry as operating under conditions of "extreme capital intensity."
- 73 Qiu, Yuemin, Bing Li, and Youcai Cai, "Losses of State-owned Commercial Banks: Causes and Policy Suggestions." *Jingji gongzuozhe xuexi ziliao* [Study Materials for Economic Workers] no. 44 (2000): 18-26.
- 74 "Financial institutions are willing to grant loans to large-sized enterprises or enterprise groups that enjoy good reputation. But these enterprises put the money into stock market because they cannot find good investment projects immediately" (Xie and Yu 2001, p. 6).
- 75 Zi, Xun, "Enterprise Overhaul Needed to Rise to WTO Challenge." *China Daily Business Weekly*, 27 November 3 December 2001, p. 15.
- 76 Fu, Jing. "Chinese enterprises invest just 0.21% of assets in IT," *China Daily*, 21 December 2001 [http://www2.chinadaily.com.cn/en/doc/2001-12/20/content_98725. htm], accessed 6 June 2005.
- 77 *Ibid.* and "What They Are Saying: Enterprise Groups Needed." *China Daily*, 10 December 2001, p. 4.
- 78 "Options for the Development Pattern of China's Automobile Industry," http://www.lunwenwang.com/Article/eng/xs/200510/26480.html [consulted 2 March 2006].
- 79 Zhao, Xiao, "Unemployment Aid Needed." China Daily, 31 October 2002, p. 4.
- 80 The suggestion that preferential treatment for large enterprise groups should include "the right to distribute wages in line with. . . economic returns" illustrates the tentative approach to full wage liberalization (Groups 2001).
- 81 Responding to "the call of the central government, [Beijing municipality] intend [ing] to slice the municipal government workforce in half" has laid off "tens of thousands of city employees. . . in a two-year-long reorganization" (Wang 2002).
- 82 An experienced Chinese civil servant advises the author that the conduct of central and provincial officials is "relatively good," with only about half engaging in "dirty" behavior; at the local level, such behavior is far more prevalent.
- 83 Rawski, Thomas G., "China Reform Watch: Turning Point Looming." *China Perspectives* no. 3 (2001), pp. 28-35; Rawski, Thomas G., "What's Happening to China's GDP Statistics?" *China Economic Review* 12.4 (2001): 347-354, pursues this theme.

References

Abstract. Zhongguo tongji zhaiyao [China Statistical Abstract]. Beijing: Zhongguo tongji chubanshe, annual.

Appleton, Simon, John Knight, Lina Song, and Qingjie Xia

2001 "Towards a Competitive Labour Market? Urban Workers, Rural Migrants, Redundancies and Hardships in China." http://www.cerdi.org/Colloque/IDREC2001/Songlina.pdf. (Accessed 6 June 2005).

Chan, Anita

2001 China's Workers Under Assault. Armonk NY: Sharpe.

Chandler, Clay

2001 "In China, the Rich Keep Getting Richer." Washington Post Foreign Service, 1 November. Available from http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&node=&contentId= A21307-2001Oct31.

Chen, Gang et al.

1999 Zhongguo dazhong chengshi laodongli shichang gongzi jiawei [Labor Market and Wages in China's Large and Medium Cities]. Beijing: Laodong he shehui baozhang chubanshe. (in Chinese)

Chen, Xiwen

2001 "Analysis of the Situation of Agriculture and Rural Economy in the First Half of 2001." *China Development Review* 3 (4): 7-18.

Communique

2004 "Statistical Communique of National and Social Development in 2004," *China Daily*, 1 March 2005.

deBrauw, Alan, Jikun Huang, Scott Rozelle, Linxiu Zhang, and Yigang Zhang

2002 "The Evolution of China's Rural Labor Markets During the Reforms." Department of Agricultural & Resource Economics, UC Davis, Working Paper Series 1005.

Dian, Tai

2002 "Zhu Talks More Jobs." China Daily, 14-15 September, p. 1.

Eckholm, Erik

2000 "Silk Workers in Standoff With Beijing Over Union." *New York Times*, 15 December: A6.

Employment

2003 "Employment Needs More Attention as Growth Sought." *China Daily*, 15 May, p. 4. Fleisher, Belton M., and Xiaojun Wang

2001 "Efficiency Wages and Work Incentives in Urban and Rural China." *Journal of Comparative Economics*, vol. 29(4): 645-662.

Fu, Jing

2001a "Chinese Enterprises Invest Just 0.21% of Assets in IT," China Daily, 21 December [http://www2.chinadaily.com.cn/en/doc/2001-12/20/content_98725.htm], (accessed 6 June 2005).

2001b "Colossal SOEs to Advance WTO Role." China Daily, 8-9 December, p. 1.

2003 "Jobless Rate Rises to 4.2%." China Daily, 30 July, p. 1.

Gilley, Bruce

2001 "Toil and Trouble." Far Eastern Economic Review. 16 August: 50-53.

Goodkind, Daniel, and Loraine A. West

2001 China's Floating Population - Definitions, Estimates, and Implications for Urbanization. Ms. Washington DC.

Groups

2001 "What They Are Saying: Enterprise Groups Needed." *China Daily*, 10 December, p. 4. Guo, Kesha

1999 "Zong lizng Wenti Haishi Jiegou Wenti? Changye Jiegou Biencha Dui Woguo Jingji Zengchang de Zhiyue ji Silü [Aggregate Demand or Structural Problems? How Distorted Economic Structure Constrains China's Economic Growth.]" *Jingji yanjiu* [Economic Research] (9): 15-21. (in Chinese)

Guo, Zi

2003 "Pay Workers On Time, Every Time." China Daily, 30 October, p. 4.

Hu, Qihua

2003 "Tough Times Continue in Job Market." China Daily, 11 March, p. 2.

Hua, Hua

2003 "Cutting Numbers of Lay-offs." China Daily, 31 October, p. 4.

Jefferson, Gary H., Thomas G. Rawski, Li Wang, and Yuxin Zheng

2000 "Ownership, Productivity Change, and Financial Performance in Chinese Industry." *Journal of Comparative Economics* 28 (4): 786-813.

Jia, Heping

2003 "Rocky Road Leads from Farms to Cities." *China Daily* Business Weekly, 11-17 February, pp. 1, 3.

Job Figures

2005 "Need True Job Figures." China Daily, 6 April, p. 6.

Khan, Azizur Rahman, and Carl Riskin

1998 "Income and Inequality in China: Composition, Distribution and Growth of Household Income, 1988 to 1995." *China Quarterly* (154): 221-253.

Korzec, Michael

1992 Labour and the Failure of Reform in China. New York: St. Martin's.

Labor. Zhongguo laodong tongji nianjian [China Labor Statistics Yearbook]. Beijing: Zhongguo tongji chubanshe, annual.

Lee, Young

1999 "Wages and Employment in China's SOEs, 1980-1994: Corporatization, Market Development, and Insider Forces." *Journal of Comparative Economics* 27: 702-729.

Leggett, Karby

2002 "Foreign Investment Not a Panacea in China." Wall Street Journal, 14 January, A1.

Li, Shantong, and Yongzhi Hou

2001 "Third Strategic Objective of Modernization Drive Calls for Rapid Expansion of Service Trade." *China Development Review* 3 (4): 37-50.

Lin, Jiang

2001 "Xuexiao Luanshoufei de Yuanyin yu Duice [Chaotic School Fees: Causes and Response.]" *Jiage lilun yu shijian* [Price Theory and Practice] (8): 18. (in Chinese)

Lu, Ding

2002 "Revamping the Industrial Policies." In *The Globalization of the Chinese Economy*, edited by S.J. Wei, G. J. Wen and H. Zhou. Cheltenham: Edward Elgar.

Lu, Mai, Shukai Zhao, Nansheng Bai, Yang Xie, Huabo Huang, and Yijun Han

2001 Retrospect and Prospect of Issues Related to Rural Labor Migration in China.

Unpublished report to Ford Foundation, Beijing.

Macro

2001 "Hongguan Jingji Jixu Xianghao, Caizheng Zhengce Buyi Tanchu [With Continued Improvement in China's Macroeconomy, Don't Curtail Expansionary Fiscal Policy.]" *Guoyou zichan guanli* [State Asset Management] (9): 4-7. (in Chinese)

Maurer-Fazio, Margaret, Thomas G. Rawski, and Wei Zhang

1999 "Inequality in The Rewards for Holding up Half The Sky: Gender Wage Gaps in China's Urban Labor Markets, 1988-1994." *China Journal* 41: 55-88.

Mi, Jianguo, Yang Li, and Jinlao Huang

2001 "The Challenges from the Opening of Banking Service Market in China." *China Development Review* 3 (4): 83-96.

Monopoly

2001 "Breaking Monopoly is a Must." China Daily, 10-11 November, p. 4.

Non-State

2002 "Non-State Economy Plays Big Role." China Daily, 9 January, p. 4.

Palacios, Robert, and Montserrat Pallares-Miralles

2000 "International Patterns of Pension Provision." Unpublished manuscript.

Qin, Hui

2003 "Freedom of Movement and Population Segregation." http://www. yangzhizhu.com/qin-hui102.htm, accessed 19 November 2003.

Oiu, Yuemin, Bing Li, and Youcai Cai

2000 "Losses of State-owned Commercial Banks: Causes and Policy Suggestions." *Jingji gongzuozhe xuexi ziliao* [Study Materials for Economic Workers] (44): 18-26.

Rawski, Thomas G.

2005 "SARS and China's Economy." In *SARS in China: Prelude to Pandemic?* Ed. Arthur Kleinman and James L. Watson. Stanford: Stanford University Press.

1982 "The Simple Arithmetic of Chinese Income Distribution." *Keizai kenkyu* [Economic Research, Tokyo] 33 (1): 12-26.

1994 "Progress Without Privatization: The Reform of China's State Industries." In *The Political Economy of Privatization and Public Enterprise in Post-Communist and Reforming Communist States*, edited by V. Milor. Boulder CO: Lynne Rienner.

1999 China: Prospects for Full Employment. Geneva: International Labour Office.

2001a "China Reform Watch: Turning Point Looming." China Perspectives (38), pp. 28-35.

2001b "What's Happening to China's GDP Statistics?" China Economic Review 12 (4): 347-354

2002a "Measuring China's Recent GDP Growth: Where Do We Stand?" *Jingjixue jikan* [China Economic Quarterly] 2 (1): 53-62.

2002b "Will Investment Behavior Constrain China's Growth?" *China Economic Review* 13 (4):361-372.

Rawski, Thomas G., and Robert W. Mead

1998 "On the Trail of China's Phantom Farmers." World Development 26 (5): 767-81.

Rawski, Thomas G., and Wei Xiao

2001 "Symposium on Chinese Economic Statistics - Introduction." *China Economic Review* 12.4 (2001): 298-302.

Recruits

2000 "City Lacks High-Tech Recruits." China Daily, 22 February. Accessed from

http://www.chinadaily.com.cn/star/history/00-02-22/c04-city.html, 23 December 2001. Seized

2000 "China Labor Figure Seized." New York Times, 16 December, A16.

"SOE Pay Revamp for Jobs Well Done," *China Daily*, 21 December 2000, see www.china.org.cn/english/5586.htm accessed 2 March 2006.

Solinger, Dorothy J.

1999 Contesting Citizenship in Urban China. Berkeley: University of California Press.

Sun, Min

2005 "Bankrupt SOEs Face Final Curtain." China Daily 12 May, p. 9.

Sun, Shangwu

1995 "State Firms Urged to Focus Reforms." China Daily 23 February, p. 2.

System

1993 "New Employment System Not Yet Perfect." China Daily, 28 October, p. 4.

Tang, Min

2001 "Long Way to Go to Gain Gender Equality." China Daily, 24 September, p. 4.

Thireau, Isabelle, and Linshan Hua

2003 "The Moral Universe of Aggrieved Chinese Workers: Workers' Appeals to Arbitration Committees and Letters and Visits Offices." *China Journal* (50): 83-103.

Towns

2002 "What They Are Saying: Towns Offer More Jobs." China Daily, 2 January, p. 4.

TVE Statistics

2003 Zhongguo xiangzhen qiye tongji ziliao (1978-2002 nian) [Statistical materials for China's township and village enterprises, 1978-2002]. Beijing: Zhongguo nongye chubanshe.

Union

2003 "Union Accepts Migrant Workers." China Daily, 3 September, p. 3.

Wang, Cheng

2002 "New Views on China's Employment Development." *Jingji yanjiu* [Economic Research] (12): 79-87.

Wang, Xin

2005 "Measures to Boost Private Sector." China Daily 30 April-1 May, p. 5.

Wang, Ying

2002 "Beijing Government Slices Workforce to Raise Efficiency." *China Daily*, 3 January, p. 2.

Wonacott, Peter

2003 "Beyond China's Export Boom, Heated Battle Among Factories." *Wall Street Journal*, 13 November, A1, A10.

Woo, Wing Thye, Gang Fan, Wen Hai, and Yibiao Jin

1993 "The Efficiency and Macroeconomic Consequences of Chinese Enterprise Reform." *China Economic Review* 4 (2): 153-168.

Wu, Yan

2002 "Steps to Ease Unemployment." China Daily, 28 October, p. 2.

Xiao, L

2003 "8 Million Find Jobs." China Daily, 27 October, p. 2.

Xiao, Mi

2001 "Baosteel Set to Steal Talent." China Daily Business Weekly, 20-26 November, p. 17.

Xie, Fuzhan, and Bin Yu

2001 "A Basic Judgment Over the Current Economic Situation." *China Development Review* 3 (4): 1-6.

Xu, Dashan

2002 "Overall Tax Cut Unlikely." China Daily, 10 January, p. 5.

Yan, Tingbiao, and Hong Chen

2001 "Xin xingshixia Guoqigaige de Zhongdian yu Silu [Major Issues and Ideas About State Enterprise Reform Under Present Conditions.]" *Guoyou zichan guanli* [Management of State Assets] (9): 37-39 (in Chinese).

Yearbook. Zhongguo tongji nianjian [China Statistics Yearbook]. Beijing: Zhongguo tongji chubanshe, annual (in Chinese).

Zhang, Chenghui

2001 "Research Report on the Current Financing Situation of Privately-owned Enterprises." *China Development Review* 3 (3): 72-82.

Zhao, Huanxin

2000 "Unions Vital to Workers' Rights." China Daily, 14 December, p. 1.

Zhao, Shaoqin

2000 "State Eyes Job Pinch." China Daily, 8 March, p. 1.

Zhao, Xiao

2002 "Unemployment Aid Needed." China Daily, 31 October, p. 4.

2004 "Increasing the Price of Labour." China Daily, 12 October, p. 6.

Zhu, Oiwer

2001 "Domestic Market Fuels Growth." China Daily, 6 August, p. 4.

Zi, Xun

2001 "Enterprise Overhaul Needed to Rise to WTO Challenge." *China Daily Business Weekly*, 27 November - 3 December, p. 15.