Appendix A: *Data on China's Labor Markets*

A major difficulty in analyzing China's labor markets is that China lacks a labor force survey that covers the population. In the past when the communes employed those with rural *hukou* and the state sector employed those with urban *hukou*, aggregated employment and earnings statistics were collected via administrative reporting systems. However, economic reform changed employment institutions and thus substantially weakened data collection coverage. Although the *Statistical Yearbooks* still publish aggregated data, the National Bureau of Statistics relies heavily on rules of thumb and assumptions to put data together, and every five to ten years, the population survey or census data are used to make adjustments. Different *Yearbooks,* therefore, often provide different figures and trends.

At the micro level, China's National Bureau of Statistics conducts two major household surveys that are intended to be nationally representative: the Rural Household Survey (RHS) and the Urban Household Survey (UHS). The division is based on *hukou* status and aimed at collecting detailed income and expenditure information. The former has only been made available to a limited number of academics for a few years and a few provinces at a time; while the latter do not include migrant workers in cities. There are also censuses and population survey data, which normally do not have earnings, or detailed labor market information. Thus, labor market analysis based on official data is limited.

There are essentially four major non-official household surveys that have been used for labor market research. First, the China Income Project Surveys (CHIPs) is a series of repeated cross-sections for year 1988, 1995, 1999 (for six provinces only), and 2002. It covers around 15,000 rural and urban households in 11 provinces and in 2002 it also includes 2000 non-random sampling of migrant households. CHIPs essentially use the NBS' RHS and UHS survey samples and the surveys were conducted by NBS. Second, the China Health and Nutrition Survey (CHNS) offers panel data for 1989, 1991, 1993, 1997, 2000, 2002, 2004, and 2006. It covers seven provinces and total of 4400 households, including rural and urban samples, but without migrants. Third, the China Urban Labor Survey (CULS) has repeated cross-sections for 2001, 2005 and 2010. It covers five cities with less than 3000 households, including urban and migrant households. These surveys either ignore or do not have a representative migrant sample (Gong, Kong, Li, and Meng, 2008).

Fourth, in 2008 the Rural-Urban Migration in China and Indonesia (RUMiCI) project was initiated, which comprises three samples in China: 8,000 rural *hukou* households, 5,000 urban *hukou* households, and 5,000 migrant households. The surveys of urban and migrant households are conducted in the same 15 cities, while the rural household surveys are conducted in nine provinces where these 15 cities located. Differing from the previous household surveys, the RUMiCI migrant survey is based on a sampling

frame constructed by the RUMiCI team which conducted census of migrants via workplaces in the survey cities. It closely resembles the labor market characteristics of migrants in the 1% Population Survey of 2005. For detailed information on RUMiCI sampling, sample size, and other related issues, see Gong et. al., (2008); or http://cbe.anu.edu.au/schools/eco/rumici/.

Appendix B: Additional Tables

Table B1: Probit estimation of whether an individual is employed in the state or a non-state sectors (margeinal effects)										
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Age	0.004***	0.005***	0.006***	0.004***	0.011***	0.013***	0.019***	0.020***	0.021***	0.024***	0.029***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
$Age^2/1000$	-0.062***	-0.076***	-0.077***	-0.061***	-0.151***	-0.177***	-0.257***	-0.270***	-0.282***	-0.315***	-0.379***
	[0.006]	[0.006]	[0.006]	[0.005]	[0.008]	[0.009]	[0.010]	[0.011]	[0.011]	[0.013]	[0.015]
Female	-0.007***	-0.007***	-0.008***	-0.008***	-0.018***	-0.019***	-0.022***	-0.024***	-0.021***	-0.018***	-0.018***
	[0.001]	[0.002]	[0.002]	[0.001]	[0.002]	[0.002]	[0.003]	[0.003]	[0.003]	[0.003]	[0.004]
College	0.014***	0.017***	0.014***	0.012***	0.021***	0.026***	0.047***	0.047***	0.050***	0.070***	0.085***
	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.002]	[0.003]	[0.003]	[0.003]	[0.004]	[0.005]
Senior high	0.017***	0.021***	0.018***	0.017***	0.020***	0.028***	0.048***	0.052***	0.051***	0.078***	0.083***
	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.003]	[0.005]	[0.005]	[0.005]	[0.006]	[0.008]
Junio high	0.010***	0.010***	0.009***	0.006***	0.011***	0.018***	0.029***	0.030***	0.028***	0.042***	0.040***
	[0.002]	[0.002]	[0.002]	[0.001]	[0.002]	[0.002]	[0.004]	[0.004]	[0.004]	[0.005]	[0.007]
Province dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.212	0.226	0.258	0.245	0.329	0.308	0.234	0.244	0.208	0.153	0.14
Obs.	16,052	14,449	15,170	15,110	19,877	19,041	18,946	18,734	18,748	18,619	18,212
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Age	0.037***	0.042***	0.040***	0.036***	0.035***	0.037***	0.036***	0.034***	0.036***	0.029***	0.034***
	[0.001]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]	[0.002]
$Age^2/1000$	-0.465***	-0.514***	-0.475***	-0.388***	-0.366***	-0.383***	-0.363***	-0.335***	-0.352***	-0.233***	-0.294***
	[0.019]	[0.023]	[0.026]	[0.020]	[0.021]	[0.022]	[0.023]	[0.023]	[0.025]	[0.022]	[0.022]
Female	-0.027***	-0.026***	-0.029***	-0.042***	-0.053***	-0.062***	-0.064***	-0.066***	-0.064***	-0.052***	-0.058***
	[0.005]	[0.006]	[0.006]	[0.004]	[0.004]	[0.004]	[0.005]	[0.005]	[0.005]	[0.004]	[0.004]
College	0.124***	0.182***	0.194***	0.306***	0.339***	0.338***	0.434***	0.433***	0.456***	0.540***	0.561***
	[0.006]	[0.008]	[0.009]	[0.007]	[0.008]	[0.009]	[0.010]	[0.011]	[0.013]	[0.010]	[0.011]
Senior high	0.114***	0.166***	0.160***	0.212***	0.234***	0.216***	0.266***	0.255***	0.260***	0.325***	0.343***
	[0.010]	[0.011]	[0.014]	[0.010]	[0.011]	[0.012]	[0.012]	[0.013]	[0.015]	[0.012]	[0.013]
Junio high	0.061***	0.084***	0.083***	0.119***	0.119***	0.093***	0.134***	0.117***	0.116***	0.158***	0.173***
	[0.009]	[0.010]	[0.013]	[0.010]	[0.010]	[0.012]	[0.013]	[0.014]	[0.016]	[0.014]	[0.015]
Province dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.114	0.0926	0.081	0.0903	0.0994	0.0919	0.114	0.113	0.114	0.123	0.125
Obs.	17,997	17,081	16,630	40,994	46,483	48,904	49,970	50,512	46,163	61,666	60,572
Standard errors in brackets											
* significant at 10%; ** significant at 5%; *** significant at 1%											

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Table B2: Selected OLS results from the log annual wage regressions											
Experience	0.060***	0.055***	0.054***	0.047***	0.046***	0.046***	0.044***	0.042***	0.038***	0.038***	0.038***
	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.002]
Experience2	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
College	0.133***	0.159***	0.180***	0.176***	0.211***	0.266***	0.339***	0.303***	0.315***	0.293***	0.357***
	[0.015]	[0.016]	[0.014]	[0.014]	[0.013]	[0.015]	[0.018]	[0.019]	[0.020]	[0.022]	[0.024]
Senior high	0.095***	0.110***	0.140***	0.119***	0.135***	0.174***	0.230***	0.217***	0.220***	0.211***	0.239***
	[0.011]	[0.012]	[0.011]	[0.011]	[0.011]	[0.013]	[0.016]	[0.017]	[0.018]	[0.020]	[0.022]
Junior high	0.061***	0.064***	0.091***	0.065***	0.073***	0.085***	0.125***	0.114***	0.120***	0.101***	0.117***
	[0.011]	[0.011]	[0.010]	[0.011]	[0.011]	[0.013]	[0.016]	[0.017]	[0.018]	[0.020]	[0.022]
State sector	-0.094***	-0.475***	-0.431***	-0.409***	-0.169***	-0.252***	-0.232***	-0.171***	-0.219***	-0.230***	-0.194***
	[0.029]	[0.035]	[0.033]	[0.034]	[0.018]	[0.019]	[0.019]	[0.018]	[0.018]	[0.018]	[0.018]
Female	-0.086***	-0.092***	-0.088***	-0.079***	-0.099***	-0.098***	-0.121***	-0.110***	-0.131***	-0.146***	-0.149***
	[0.007]	[0.007]	[0.006]	[0.006]	[0.005]	[0.006]	[0.007]	[0.007]	[0.007]	[0.008]	[0.008]
Occupation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Provinces	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,453	13,896	14,557	14,561	19,019	18,181	18,053	17,836	17,874	17,765	17,327
Adjusted R-squa	0.419	0.429	0.467	0.434	0.443	0.417	0.411	0.381	0.373	0.356	0.33
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Experience	0.033***	0.030***	0.028***	0.034***	0.034***	0.030***	0.031***	0.031***	0.029***	0.031***	0.029***
	[0.002]	[0.002]	[0.002]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
Experience2	-0.000***	-0.000***	-0.000***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
College	0.379***	0.405***	0.404***	0.435***	0.528***	0.545***	0.540***	0.572***	0.551***	0.485***	0.493***
	[0.026]	[0.027]	[0.028]	[0.017]	[0.018]	[0.017]	[0.017]	[0.017]	[0.019]	[0.015]	[0.015]
Senior high	0.239***	0.234***	0.240***	0.236***	0.299***	0.306***	0.303***	0.323***	0.272***	0.218***	0.222***
	[0.024]	[0.025]	[0.026]	[0.016]	[0.017]	[0.016]	[0.016]	[0.017]	[0.018]	[0.015]	[0.015]
Junior high	0.107***	0.092***	0.093***	0.098***	0.171***	0.181***	0.175***	0.202***	0.153***	0.104***	0.101***
	[0.024]	[0.025]	[0.026]	[0.016]	[0.017]	[0.016]	[0.016]	[0.017]	[0.018]	[0.015]	[0.015]
State sector	-0.103***	-0.079***	-0.060***	0.106***	0.131***	0.153***	0.164***	0.152***	0.156***	0.122***	0.142***
	[0.016]	[0.015]	[0.015]	[0.007]	[0.007]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]	[0.005]
Female	-0.157***	-0.164***	-0.180***	-0.182***	-0.195***	-0.217***	-0.219***	-0.220***	-0.237***	-0.221***	-0.217***
	[0.008]	[0.009]	[0.009]	[0.005]	[0.005]	[0.005]	[0.005]	[0.005]	[0.005]	[0.005]	[0.005]
Occupation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Provinces	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	17,126	16,353	15,927	39,024	44,308	46,606	47,625	48,079	44,633	59,661	58,582
Adjusted R-squa	0.322	0.318	0.319	0.327	0.327	0.341	0.328	0.321	0.333	0.302	0.317
Standard errors in brackets											
* significant at 10%; ** significant at 5%; *** significant at 1%											

Table B3: Linear probability of whether having a skilled job

	Total	Males	Females
Migrant dummy	-0.208***	-0.240***	-0.161***
	[0.009]	[0.012]	[0.014]
Age	0.002***	0.002***	0.002***
	[0.000]	[0.000]	[0.001]
Junior high school	0.027**	0.010	0.042**
	[0.012]	[0.017]	[0.018]
Senior high school	0.135***	0.095***	0.188***
	[0.013]	[0.018]	[0.020]
3-year college	0.422***	0.381***	0.474***
	[0.016]	[0.021]	[0.024]
University and above	0.586***	0.533***	0.657***
	[0.018]	[0.023]	[0.028]
Males	-0.010		
	[0.007]		
City dummies	Yes	Yes	Yes
Observations	12,648	7,395	5,253
Adjusted R-squared	0.327	0.334	0.319

Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1

Note: The dependent variable equals 1 if the individual is either having a professional, managerial, or clerical job