## A LABOR MARKET WITH CHINESE CHARACTERISITCS

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# **ABSTRACT:**

Prior to its economic reforms, China did not have an operating labor market. The government assigned workers to firms rather than allowing them to choose their own place of work and used *hukou* residency policies to keep rural people from migrating to cities. Firms hired workers that government labor bureaus assigned to them regardless of economic need and paid the workers according to a national wage grid from a payroll budget set by the government. As China reformed its urban economy from the 1980s through the 2000s, the government relaxed its control of workers and firms and gave greater leeway to supply and demand to set employment, wages, and working conditions. This essay tells how China moved from state determination of labor outcomes to a genuine labor market and how the new labor market with Chinese characteristics has operated. It examines three big labor problems that face China on its path of continued economic growth: labor-management conflict; absorbing millions of university graduates into fruitful jobs; and bringing rural persons and informal sector workers fully into the modern economy.

Prior to its economic reforms, China did not have an operating labor market. The government assigned workers to firms rather than allowing them to choose their own place of work and used *hukou* residency policies to keep rural people from migrating to cities. Firms hired the workers assigned by the labor bureaus regardless of economic need and paid them according to a national wage grid from a payroll budget set by the government.

Bureaucratic allocation of labor and determination of pay may work well in a single firm or government agency but is inconsistent with a market economy where hundreds of millions of workers and consumers and millions of firms interact in multiple economic transactions. As China reformed its urban economy from the 1980s through the 2000s, the government relaxed its control of workers and firms. It gave greater leeway to supply and demand to set employment, wages, and working conditions, producing the labor market with Chinese characteristics of the chapter's title.

This essay tells how China moved from state determination of labor outcomes to a genuine labor market and how the new labor market has operated. It then examines three big labor problems that face China on its path of continued economic growth: labor-management conflict; absorbing millions of university graduates into fruitful jobs; and bringing rural persons and informal sector workers fully into the modern economy.

## STARTING POINT: STATE DETERMINATION OF LABOR OUTCOMES?

Before its economic reforms, China relied on administrative ruling to set employment, wages, and conditions of work. State owned enterprises (SOEs) were the predominant business organization. Government labor bureaus decided how many workers the SOEs hired. Managers did not have the authority to lay off workers nor to alter wages in ways they thought would benefit the firm. Workers could not move from their assigned firm without government approval. Viewing workers as cadres whose function was to follow orders (much as an army views conscripts), government labor bureaus assigned workers to jobs to further the government's Five Year Plan. <sup>1</sup>

In this administered labor system, firms set wages according to a government wage grid. The grid had 8 grades for blue-collar workers and 24 grades for white-collar workers, including professional, technical, and managerial employees. To keep inequality low, the grid allowed for only small differences across enterprises, industries, and regions. Seniority dominated the wage distribution within industrial enterprises. Along with pay, state owned enterprises were responsible for housing, retirement, and medical care of employees.

Work units known as *danwei* were the critical institution controlling urban labor. The government assigned every worker to a *danwei*, which regulated aspects of their lives from travel to marriage to provision of food in centralized canteens to access to entertainment. The Communist party kept dossiers on the activities of workers (*dangan*)<sup>2</sup> and penalized workers who broke administrative rules with loss of pay or allocation to less desirable housing or work assignments.<sup>3</sup> For their part, workers relied on personal connections (*guanxi*) with decision-makers to influence the government decisions that affected their lives. Perhaps your uncle working for the city could help you get a job in a workplace near your home rather than in Mongolia. Perhaps your family could do a favor for the party official who determined work assignments, who would reciprocate by assigning you the type of work you wanted. Personal connections substituted for market freedom in matching workers with jobs.<sup>4</sup>

Workers who sought to change their job relied on *guanxi* help from family connections, former classmates, or relatives. Persons with party membership or other official status did best in moving to

more desirable jobs but most workers remained with the firm to which the state had initially assigned them. In a 1999 survey 78 percent of urban workers reported that they had only a single employer in their work life. As reforms proceeded the government recognized the legitimacy of individuals applying for jobs on their own and of employers screening applicants and choosing their hires but reforming the assignment system came late in the process of modernizing the economy.

Exemplifying the way the job assignment process worked, in the 1970s when urban areas faced potential high levels of youth unemployment, the government ordered state owned enterprises to promise older workers who retired early that the firm would give their job to their son or daughter. In 1979 about 90 per cent of the 8,000 new workers for Chongqing Iron and Steel Company were the children of employees, and of those over 3,000 directly replaced retiringretiring parents. Some SOEs formed new collective factories or other companies to create jobs for their employees' children. The goal was to assure that urban China had full employment.

To control the rural work force the government used the *hukou* household registration system. This system required citizens to register their permanent place of residence with the government. Persons with urban *hukou* were entitled to jobs in state-owned enterprises and to education, housing, and health care. From the mid-1950s through the 1970s urban residents received ration cards for buying grain and other necessities. Individuals who had rural *hukou* but who were residing in urban areas received none of these benefits.

The government prohibited urban units from recruiting rural workers and required rural persons to obtain a temporary certificate to visit an urban area for more than three days. Without the urban *hukou* unauthorized rural migrants would have problems finding a place to sleep and buying food in a city. The few rural workers who gained urban *hukou* did so by joining the People's Army or the Communist Party or getting a university degree and shifting their *hukou* to the university.

Assigning workers to a *danwei* and keeping rural persons from migrating to urban areas gave the government control over the allocation of labor. Setting industry wages and agriculture prices low enabled the government to accumulate capital to invest in its goal of capital-intensive industrialization. The administered labor system produced an "iron rice bowl" of lifetime job security, income and benefits for urban workers. <sup>9</sup> It prevented the massive rural-to-urban migration found in most developing countries. But the system failed to match workers and jobs efficiently or to motivate workers to give full effort at the workplace. It created an apartheid-like society that made second class citizens of the 80 percent or so of the Chinese population in rural areas.

The column "Before Reforms" of exhibit 1 summarizes the labor system in this period of time.

# REFORMS TOWARD LABOR MARKET

China started its economic reforms in the late 1970s in agriculture. The government contracted land to individual farmers and allowed the farmers to sell their produce on open markets once they had met the quota the government set to provide food for urban workers. This *household responsibility system* induced farmers to raise agricultural productivity. The increase in productivity freed many agricultural workers to seek work off the farm in the rural area where they had their hukou residency. The government increased prices for rural goods as well, which together with higher productivity, raised rural incomes relative to urban incomes. Local governments responded to the increased supply of rural labor and greater demand for goods and services from farmers by forming or encouraging individuals

to form town and village enterprises (TVEs) to produce non-agricultural goods and services in rural China.

China's leaders turned next to reforming the industrial sector. Following the path they had begun by freeing farmers to profit from exceeding agricultural quotas, the government allowed state-owned enterprises to keep the revenues from production that exceeded the levels dictated by the Five Year plans. The government gave state-owned enterprises leeway to determine employment and pay though it maintained control over their total payroll. Seeking to increase effort and productivity, SOE managers introduced piecework-type wages, point systems for bonuses, and linked hiring and promotion to performance and skills. The government also allowed management to fire employees who did not perform adequately and to select employees by examinations that tested them for technical skill and work performance.

In the 1990s the Ministry of Labor began to relieve enterprises from providing housing, medical service, and pension benefits to their employees. The goal was to develop portable national pension, health, and unemployment insurance programs comparable to social security systems in most other countries. To protect older workers in the transition, the state differentiated workers who retired or who started work before 1997 and were still working then and those who started after 1997. The older cohorts receive a housing subsidy when their firm did not provide them apartments while newer cohorts did not receive a subsidy. The government described this policy as "New People new rule, old people old rule".

Another step in non-agricultural reforms was to allow non-state owned enterprises – town and village enterprises in rural areas; private firms; foreign-owned multinationals – to enter or expand in the market. The percentage of workers in TVEs increased from 9 percent in 1980 to 26 percent in 1995 and the TVEs became more privately controlled. <sup>12</sup> In the urban sector, employment in state-owned enterprises (run by the central government) or in urban collective enterprises (run by cities or other lower jurisdictions) dropped from about 90 percent of urban workers in the 1970s to 50 percent in the 1990s and kept falling through the 2000s. By 2010 just 30 percent of urban workers worked in state-owned or collective enterprises; about 60 percent were self-employed or worked in privately owned firms, including 10 percent in foreign owned and Hong Kong, Macao, or Taiwanese firms; while the rest were in cooperatives, or joint or limited liability firms over which government had some control. <sup>13</sup>

Freeing SOE management to operate by market principles and allowing private enterprise to employ a majority of the work force was the death knell to the system of labor bureaus assigning workers to jobs. Young workers increasingly found jobs on their own. By 2001 the state assigned only 5 percent of college graduates to jobs and shortly thereafter it ended the job assignment system.

China's economic reforms set off one of the greatest economic expansions in history. Firms desperately sought workers to produce goods for export and for building infrastructure and domestic consumption. With rural people able to rent housing and buy food, and other consumption items on the open market and to set up their own businesses in the informal sector, some 150-160 million rural persons migrated to work in cities between 1980 and 2010. Henefiting from this "floating population" of migrants, cities encouraged rural residents to migrate to work but cities but at the same time withheld from migrants the benefits of urban amenities such as health care and the right to enroll their children into regular urban schools, the right to buy rather than to rent housing. As an example of the discrimination against migrants, pregnant women were told to go back to hospitals in their rural area to bear children rather than use the urban medical facilities. Cities sold urban *hukou* at prices that varied depending on the size and attractiveness of the city. He forms the firm of the discrimination are the urban medical facilities.

At the turn of the millennium parts of the administered labor system remained but market forces had replaced administrative orders as the driving force for employment, wages, and working conditions in China. How did the new labor market change wage and employment outcomes from those set by the government administrative rule?

#### THE NEW LABOR MARKET: WAGES AND INCOME

Market determination of pay increased wage and income differentials along a variety of dimensions (see exhibit 2). Urban incomes increased more rapidly than rural incomes, which produced the highest urban-rural income gap on record: urban incomes 3.13 times rural incomes in 2011 (exhibit 2, column 1). The earnings premium of junior college or bachelors' graduates over high school graduates of the same age increased from the 1990s through 2009. (column 2). The earnings advantages of workers in the highest paying industries relative to workers in the lowest paying industries increased substantially over the period (column 3). Incomes in the more industrialized and high income coastal regions pulled further ahead of incomes in the lower income provinces in the interior of the country and in the north and west. Although geographic disparity in earnings declined in the 2000s, regional disparities were far higher in 2011 than in the 1980s and 1990s (column 4). The last column in exhibit 2 compares the incomes of college graduates aged 25 to the incomes of migrant workers. It shows an increase in the ratio of young college workers to migrant workers in the 1990s, followed by a drop in the 2000s as migrant incomes increased greatly. This generated claims that China had entered a new phase of labor market development (the Lewis turning point) that I discuss shortly.

## Why did market forces raise earnings differentials so greatly?

One reason is that when the government controlled the economy it set wage differentials far below market-clearing levels. It did not have to pay people more to acquire skills or move to particular sectors. It assigned people to those activities. Once workers could move among jobs and firms could alter pay to attract the workers they wanted, supply and demand raised pay more in higher skilled and paid activities than in lower skilled and paid activities.

A second reason is that as the economy grew supply and demand changed in favor of more skilled and higher paid work activities. Growth of GDP, for example, shifted demand for labor to higher skill occupations and industries, which raised the earnings of college graduates.<sup>16</sup>

The increase in wage differentials raised inequality in earnings. Exhibit 3 displays two measures of inequality in labor earnings: the variance of the log earnings of workers and the ratio of the earnings of workers at the 75th percentile of the earnings distribution to the earnings of workers at the 25th percentile. Both statistics show a trend increase in inequality with a modest dip in 2009, possibly because of the global economic recession.

Exhibit 4 turns FTO inequality in total income, as measured by Gini coefficients for total income. Inequality of total income depends on the distribution of national income between labor and capital, which shifted toward capital in China as in most other countries, and on the level of inequality in capital income, which far exceeds inequality in labor income in all countries, as well as on the inequality in labor income. Chinese officials pay close attention to the Gini coefficient in the belief that values above 0.40-0.45 foment social unrest. The estimated Gini coefficient of 0.47 in 2012 was in the danger range but estimates from other sources suggest that the Gini could be much higher. <sup>17</sup> Statistical

measures aside, opinion polls show that China's citizens view inequality as a huge problem, and place it and corruption at the top of their list of concerns. <sup>18</sup>

# TURNOVER, MOBILITY AND PRODUCTIVITY

China's economic reforms opened the door for firms to hire and fire workers freely and for workers to change jobs as they saw fit. Lifetime security for workers disappeared. Working in a single firm for an entire working life disappeared. State owned enterprises laid workers off when they deemed it necessary and hired temporary workers when they deemed it profitable. Urban workers, particularly young educated persons, changed jobs frequently in pursuit of higher paying and better work. Rural workers poured into cities, moving from employer to employer.

The most striking shift in employer behavior occurred in the late 1990s when state-owned enterprises and urban collectives undertook the biggest layoff of workers in history. Seeing these enterprises as an inefficient drag on the economy and burdens on governmental budgets, the central government announced the goal of restructuring, privatizing, or closing thousands of state-owned industries and reducing employment in the state-owned sector by 30 percent. Under the slogan "Grasp the Large, Release the Small" the government closed many large firms and privatized smaller firms. From 1995 to 2000, employment in state owned enterprises fell by 36 million persons while employment in urban collective enterprises fell by 21 million persons. Many workers who lost their jobs had little skills beyond those used at their workplace. None had experience searching for work in the labor market. <sup>19</sup> The result was that the official rate of joblessness, which had been near zero in the pre-reform period, reached 4.3 percent in 2002. But this underestimated the extent of job loss because many enterprises kept workers on the books as *xiagang* – off-post – workers, paying them modest benefits without work. <sup>20</sup> Counting these persons as unemployed, the rate of joblessness exceeded 10 percent or so.

The late 1990s retrenchment of the state-owned and collective enterprise sector <sup>21</sup>was China's version of the "big bang" shift from a planned economy to a market economy that the former Soviet Union and Eastern Europe undertook following the fall of communism. In contrast to the 10-15 percent declines in GDP associated with the transition to markets in most European transition economies, however, GDP continued to grow during big bang retrenchment of the state sector. But growth did not benefit many of the laid-off once-privileged SOE and urban collective workers. The government provided some unemployment compensation and training programs to the displaced workers but nothing that could ameliorate the loss of the iron rice bowl. The biggest beneficiaries of privatizing state owned businesses were factory managers or relatives or friends of party officials with *guanxi* who bought the profitable parts of firms at bargain prices and left the unprofitable parts and commitments to pension and medical costs of workers in government hands. In some provinces, such as Liaoning in the North, tens of thousands of *xiagang* workers protested the loss of jobs and corrupt privatization – the first massive protest against the communist state in modern times, but to no avail.

Continued economic growth shifted the locus of turnover from firms to workers. With firms no longer providing social benefits workers were less tied to their employer than in the past. Young urban workers moved from firm to firm in search of better job matches and higher pay. Turnover rates in major firms rose to 20 percent or so per year<sup>22</sup> – a proportion of voluntary leaving similar to the yearly quit rate for American workers,<sup>23</sup> and far above turnover in many other advanced countries. The huge flow of migrants added millions more persons who shifted jobs frequently, some working self-employed in the informal sector and some working on short term stints at construction sites and for

firms. A substantial proportion of migrants would return to their village at the Spring Holiday and then find other work instead of going back to the same employer.

When the economic reforms kicked in China had relatively few college graduates. Mao's Cultural Revolution had wrecked China's higher education system so that less than 100,000 students were enrolled university in 1970.<sup>24</sup> From 1978 through 1988 China averaged less than 300,000 graduates per year. It expanded enrollments moderately in the 1980s and 1990s; added hundreds of new institutions of higher education in the 2000s, and produced a massive increase in enrollments and graduates in the 2000s.<sup>25</sup> The number of bachelor's graduates increased to 600,000 in 1990, doubled to 1.2 million in 2002 and then jumped by over fivefold to 7 million in 2013. In three decades China had transformed a train-wreck higher education system into a system that educated the "best and brightest" top scorers on the national entrance and then into a system of mass higher education.

Businesses in all countries complain about the costs of voluntary labor turnover and seek ways to reduce it. When workers quit their jobs, it is costly to find and train new workers to replace them. For some period of time, the productivity of new employees is often lower than that of the experienced worker who left. Thus, high turnover is associated with higher costs of production and lower profits for an individual firm. But from the standpoint of the economy writ large, turnover often improves economic performance. Workers who move to higher paying more productive jobs not only raise their own incomes but increase national output. As China reformed its economy workers moved from lower-paying rural jobs to higher paying jobs in rural town and village enterprises. Then they moved to the coastal province factories that produced the goods for China's export boom and to construction and service sector jobs in larger cities. Within manufacturing, employment shifted from light export industries to high value added high tech industries. It is difficult to imagine that China could have increased productivity as rapidly and reallocated workers among sectors as successfully as it did without a market driven labor system with high labor turnover.

## THE "LEWIS TURNING POINT" DEBATE AND INFORMAL URBAN SECTOR

In the 1950s Arthur Lewis developed a model of economic development that captures some of the problems faced by China half a century later. Lewis divided developing economies into two sectors: a low productivity agricultural sector with an "unlimited" supply of labor and a high productivity modern industrial sector that expands by drawing labor from agriculture. With an unlimited (infinitelyelastic) supply of labor from agriculture, urban firms are able to increase employment without raising wages. This allows them to earn considerable profits which they can then invest profits in expanding their business or other businesses to produce a self-sustaining drive to modernization. As more and more rural workers obtain jobs in the urban economy, the supply of labor changes from infinitely elastic to an upward sloping curve. This is the "Lewis turning point", where development has advanced sufficiently that firms must raise wages to attract more low skill workers.

Lewis based his model on the experience of Caribbean economies but the model offers insights into any economy where migration from a lower productivity sector to higher productivity sector is an important component of development. In the 2000s migrant wages began rising in China's cities, suggesting to some economists that China had reached the Lewis turning point. Other economists disagreed, arguing that rural China still harbored millions of "surplus workers" who would move to cities without wage increases. Differences in the ratio of urban to rural incomes in various data sources and disagreement over the key indicators that identified the turning point fueled the debate. Over the same period, urban China experienced a huge increase in the proportion of persons in *informal* 

*employment, by which I mean* working ed self-employed, for family-owned or small enterprises that faced no pressure to follow the labor laws, or by working without formal status in large firms.

The informalization of the work force added a new twist to the relation between economic growth and employment. In advanced economies most workers work for *formal sector* firms that offer permanent jobs, standard hours, and social security benefits as set by employment laws, collective bargaining, and firm-based human resource policies. In developing countries, by contrast, most work in jobs that are temporary, irregular, and without legal benefits or protection. With the exception of self-employed persons who run successful businesses, most informal sector workers earn less and work under worse conditions than workers in the formal sector. Until the 1990s and 2000s the prevailing view among development experts was that economic growth would shrink the informal sector in the same way that it shrinks the agriculture sector in the Lewis model. Some warned governments against improving protections and benefits for formal sector urban workers for fear that the increased labor costs would slow movement of jobs from the informal to the formal sector.

But regardless of labor policies, economic growth in the 1990s and 2000s did not reduce the informal sector share of employment. The OECD's analysis of the data led it conclude that the informal had become normal. Tather than a short run transitional state on the growth road. Productivity increases in manufacturing and the introduction of new capital-intensive technologies in the modern sector of developing economies kept formal sector jobs from increasing rapidly as they had done in advanced countries decades earlier. The informal or irregular share of urban employment in Korea, arguably the most successful of all developing countries, expanded as the country grew. In China, which rapidly became the manufacturing center of the world economy, the share of workers in manufacturing fell from 16% in 1990 to 13% in 2009 due in large part to the 1990s retrenchment of state-owned manufacturing enterprises. The urban share of manufacturing employment fell even more, as firms increasingly outsourced production to lower cost rural areas.

While China's statistical agencies do not provide official estimates of informal sector work, analyses of employment data tell a clear story about the expansion of the informal sector to over half of the urban work force in the 2000s. Rural migrants constitute a large proportion of the sector, working long hours for low pay. In the 1990s rural migrants in the informal sector worked 72 hours per week compared to 42 hours per week of persons with an urban *hukou* in formal sector jobs; earned 30 percent lower monthly income; 2 percent of the informal sector workers had pension coverage compared to 82 percent of the workers with an urban *hukou*. Many large export firms in export and construction employed migrant workers without giving migrants the individual employment contracts and the social insurances that national labor law required. Lacking legal documentation of their work status that they could take to labor arbitration committees responsible for dealing with the rights of workers, workers increasingly undertook protests against the way management treated them, ranging from wildcat strikes to civil disobedience – blocking roads, surrounding work sites in large numbers, etc – that the government viewed as threatening social stability (Lee, 2007).

To strengthen the ability of workers to defend their rights through legal channels, in 2007 the Chinese government enacted a new Labor Contract Law. This law required that employers give workers written contracts and that employees who accumulate tenure on their job obtain permanent rather than temporary contracts. The law was enacted after a remarkable wide-ranging open debate. Pro-worker rights forces in China, led by the government-run All China Federation of Trade Unions (ACFTU), favored the new initiative. Labor and human rights groups in the US and other advanced countries endorsed it. Business groups in China and the US opposed the law on the grounds that it would bring back the iron rice bowl and reduce employment by raising labor costs.

Despite China's generally weak implementation of labor laws, the new law improved conditions for migrant workers. After the law took effect in January 2008, there was a jump in the proportion of migrants who obtained individual contracts and in the proportion who received legally mandated social insurances and a drop in the proportion whose wage payments were delayed or reduced by the employer. Because the great recession-induced decline in export demand hit China shortly after the law was implemented, it is not possible to determine whether the law adversely affected employment as its opponents feared. Employer and employee responses to the recession and recovery dominated employment in the late 2000s.

## THE GREAT RECESSION TEST

The 2007-2008 global economic decline tested the resilience of labor markets around the world. When Chinese exports to advanced countries dropped sharply in winter 2008-2009, many worried how the country's new labor market would respond. The immediate impact was a huge decline in jobs. <sup>31</sup> World Bank researchers estimate that between October 2008 and April 2009 49 million rural migrants lost their off-the-farm jobs – 6.8 percent of the rural work force -- and that the wages of migrant workers fell by 10.5 percent. <sup>32</sup> Some advanced countries, such as the US, also experienced large job losses while others, such as Germany, introduced various forms of work-sharing to preserve employment.

Many labor analysts, who had heralded the US as the advanced world's great jobs machine for its performance in the 1990s, expected the US to follow its great job loss with a robust job recovery. It did not. To the contrary, the US had an extraordinarily weak job recovery, with fewer persons employed four years after the recession officially ended than helo jobs before the recession. Many other advanced countries also had weak recoveries. Unemployment in advanced European countries was in double digits in 2013, with Germany being the exception with a rate of unemployment lower after the recession than before.

The new labor market with Chinese characteristics did remarkably well in recovering the huge recession-related losses. Chinese workers found jobs rapidly. Nearly half of the displaced workers were re-employed by April 2009. One year after the crisis most workers had obtained new work. Some found employment in the informal sector. Some returned to their family's land but returned to off-farm work as China's aggressive stimulus package<sup>33</sup> spurred employment in the non-traded goods parts of the economy. The fall in wages may have also induced some firms to increase employment quickly. The difference between China's recovery of jobs after it lost millions of jobs in the 2008-2009 Global Recession and its sluggish job creation after the late 1990s layoffs is in part a story of workers and firms learning how to navigate a market driven economy. With some amazement, the World Bank team that studied the employment patterns in the Recession in China remarked on "the speed of the labor force adjustment in the crisis" in China compared to sluggish adjustments in the US and Europe.

## LABOR CHALLENGES

The creation of a functioning labor market notwithstanding, China faces major labor problems to continue to bring the benefits of modern economic development to its nearly 1.4 billion people. The most important challenges are (1) to develop an effective labor relations system to resolve the labor and management conflicts that invariably arise in a market economy; (2) to absorb the huge supply of university graduates and; (3) to extend social benefits and opportunity to rural citizens and informal

sector workers. Resolving these problems will ameliorate the inequalities that accompanied its growth spurt and that potentially threaten future social stability.

Historically, **trade unions** have been the key institution through which workers defend their economic interests and **collective bargaining** has been the mechanism by which unions and management resolve workplace disagreements over pay, benefits, and working conditions. On paper China has the largest trade union movement in the world. In 2010, the government sponsored All China Federation of Trade Unions (ACFTU) claimed membership of 239 million workers, including 89 million migrants. Unlike independent unions formed by workers, however, the ACFTU has traditionally sought to defuse worker discontent and encourage "harmonious labor relations" rather than fighting for workers. Per the worker in the New York Times interview summarized below, many workers saw the union as an extension of authority over them rather than their voice in the economy,:

(Worker) "Trade union? ... "What's that?" (Reporter) Was there no state-sponsored union in their factories, as required in principle? (Worker) "Oh, yeah, I guess maybe we do have one of those ... when management has some new demand or request, they call us together for a meeting".37

The shift to a labor market dominated by private employers fundamentally changed the nature of China's labor-relations. Workers could protest conditions at work and seek redress from their employers without challenging government authority. The number of labor disputes brought to the Labor Dispute Arbitration Committees (the legal entity set up to resolve disputes) sky-rocketed from 8,150 in 1992 to 135,206 in 2000 to 1,280,000 or so in 2010.<sup>38</sup> Acting on their own with no help from the official unions, workers began striking in large numbers for better conditions in different parts of the country.<sup>39</sup> In summer 2010 a strike by Honda workers in Guangdong made headlines around the world when it produced a collective agreement with improved pay and benefits.<sup>40</sup>

China's labor laws require firms to accept unions and give the ACFTU exclusive right to represent workers, which explains its huge membership. The usual ACFTU mode of organizing a union has been to remind management of its legal responsibilities and to ask it to set up a union and appoint a company official to be union head, with the promise that "unlike western unions, which always stand against the employer, Chinese unions are obliged to boost the corporation's development and maintain sound labour relations". Even operating in this fashion, AFCTU unions are associated with higher wages and greater worker benefits in China, Perhaps because the firms that agreed to set up a union viewed this as part of a positive labor relations policy to prevent worker activism.

Putting the interests of the employer or government above those of workers did not fit the reality of China's new labor market. Both the government and the ACFTU sought ways for the official unions to operate differently and represent workers in ways that would help China develop a new effective labor relations system. In some parts of the country, such as Shenzhen or Guangzhou, the ACFTU has broken new ground by establishing procedures for workers to elect union leaders. The head of the Guangdong ACFTU committed his organization to put workers interests first in all of its activities. But is is unclear how far the ACFTU can reform itself. Local and provincial party organizations appoint union leaders, and they often favor business development above all else. Still in 2011, after reviewing the changing labor scene on the Mainland, Han Dongfang, the Hong Kong based advocate of independent unionism, called on the international union movement to engage the ACFTU to help it morph into a genuine representative of workers43

The explosive **increase in the supply of college graduates** from the 1990s through the 2010s poses a different challenge to China's labor market. The following headlines (obtained by googling the words, "China University graduate employment" in July 2013) give the magnitude of the challenge: *College Grads Are Jobless in China's "High-Growth" Economy* (Forbes, May 26, 2013); *China's Graduates Face Glut* (Wall Street Journal, August 22, 2011): "Dearth of Work for China's College Grads (Businessweek September 01, 2010.) China's Ant Tribe: millions of unemployed college grads, (Christian Science Monitor December 21, 2009).

Two facts lie behind the headlines. The first is that many graduates from the huge bachelor's degree classes in the late 1990s-early 2010s failed to obtain regular jobs upon graduation, with some remaining without work months or even one to two years later. <sup>44</sup> A national survey found that 16.4 percent of college graduates persons aged 21 to 25 years were unemployed in 2011 compared to 8.2 percent of similarly aged high school graduates, <sup>45</sup> while by contrast older college graduates had much lower unemployment rates than older less educated workers.

Unemployment is not the only way in which a job market responses to huge increases in supply. In a well-functioning market a supply shock reduces the college earnings premium for new graduates relative to less educated workers. This occurred in China to such an extent that the pay of starting graduates dropped relative to that of migrant workers, so that it was barely above migrants pay. <sup>46</sup> The critical issue for the labor market is to whether the higher unemployment and lower pay at the outset of their work lives will permanently lower the lifetime income trajectory of graduates, as it has in the US, <sup>47</sup> or whether it will be a temporary blip from which graduates will catch-up as they gain experience.

The labor market has additional ways to adjust to the huge increase in graduate supply that should ameliorate the headline-making problems. On the demand side, with more graduates available at lower wages, industries that rely most extensively on graduate workers have an incentive to expand their share of output and employment. In the global market, these sectors should increase their exports and compete better with imports from similar industries in other countries. On the supply side, with jobs hard to find and pay depressed, some graduates will choose to invest in higher-level degrees and delay entry into the job market. Their improved skills should help them gain better jobs in the future. Geographic mobility of graduates will also help the market equilibrate. Graduates who seek work outside the major coastal cities and provinces which have employed most of China's highly educated workers in years past will find a better supply-demand balance than in the urban hotspots. More graduates working in China's 2<sup>nd</sup> and 3<sup>rd</sup> tier cities rather than Beijing, Shanghai, Guangzhou, etc. will give the graduates new opportunities and boost economic growth in those areas while reducing the surplus of graduates in the largest cities.

The experience of the US and Korea in responding to large influxes of university graduates suggests that the most important market adjustment is through graduates using their education in occupations that traditionally relied on less educated workers. This requires that employers offer these jobs to graduates and that graduates accept them and that both find ways for the graduates to use their skills in raising productivity in those jobs. News stories report that, although graduates earn more than non-graduates and presumably get promoted more quickly in non-traditional graduate occupations in China as in other countries, many Chinese graduates reject such career paths. Under the headline "Chinese Graduates Say No Thanks to Factory Jobs", 48 the New York Times reported on the unwillingness of Chinese graduates to accept jobs that required manual labor. But a period of joblessness or of temporary work may change those views. Upgrading the education levels of occupations and industries across the board will ultimately benefit the overall economy as graduates

bring their skills to these areas and it is likely to offer career paths into management and other highpaying jobs for graduates as they build work experience.

Because disgruntled young graduates can be the cutting edge of social disorder, the Chinese government has developed special programs to help them overcome their job problems. In response to the reduction in employment opportunities in the Great Recession the government encouraged graduates to accept employment outside the major cities, offering them higher wages and other benefits. In 2013 the government ordered schools, government agencies and state-owned enterprises to hire more graduates to help relieve joblessness. In the troubled Xinjiang Uygur autonomous region, the state government set aside posts in government departments and institutions, and in State-owned enterprises, for students who finish a new one-year job training program. <sup>49</sup> Government programs can help improve the matching of graduates and jobs and can encourage universities to develop more joboriented educational programs but the bulk of the adjustment to mass higher education rests with graduates and employers.

The third big problem facing China's labor market is to move from a **dualistic labor market** in which earnings and social benefits are markedly higher for workers in the formal urban sector than for workers with rural *hukou* and workers in the informal sector to a market that provides similar social benefits and opportunity to all workers. Virtually everyone in China appreciates the unfair nature of the *hukou* system that restricts the opportunities and benefits for persons with rural hukou when they reside and work in a city. Top leaders and government bodies advocate *hukou* reforms. Public opinion favors reforms. And various cities and provinces have experimented with ways to weaken the disadvantage of the *rural hukou*. But cities have been sluggish instituting changes to help migrants when the changes reduce the well-being of city residents – for instance by expanding city schools to accept the children of migrants or opening urban medical facilities to migrant workers. With limited city budgets and ways to raise money and local opposition, it is difficult to make radical changes in the system. The most success in reforming the *hukou* system has come in small and medium sized cities where urban amenities are limited. Some large cities have offered point systems through which rural persons can gain urban *hukou*. Some cities privilege persons with rural hukou in the same province.

The issue is not whether China will ultimately scrap a system that disadvantages so many people but how quickly it will do so.

Because a disproportionate share of informal sector workers are migrants with rural *hukou*, extending social benefits and rights to persons with rural *hukou* will benefit many informal sector workers. But the problem of the informal sector goes beyond the *hukou* issue. The problem of low wages, high working hours, and lack of pensions and other job-related social insurances for informal sector workers is universal among developing countries. Increasing the proportion of workers with individual contracts, as the 2007 Contract Labor Law did, was a significant step toward helping informal workers employed by large formal enterprises. But it had no direct effect on the self-employed, or persons in small family or other businesses. All developing countries are struggling to find ways to extend benefits and protections to informal sector workers. Thus far none has come up with a "magic bullet" solution. Benefits given to persons through citizenship regardless of employment status – such as national health insurance – offers one solution, but require an effective tax system and the willingness of workers and firms in the formal sector to fund benefits for those in the informal sector.

### CONCLUSION

China's transformation from a society dominated by an administered labor system to one with a functioning labor market is a remarkable achievement. The before/after contrasts summarized in Exhibit 1 and described in the text reflect a unique "natural experiment" of the difference between having a labor market determine employment and compensation and determining those outcomes without a market. Resolving the three big labor challenges that face the country at this writing – creating a modern labor relations system; absorbing huge numbers of college graduates; and extending social benefits and equal opportunity to persons with rural *hukou* and those working in the informal sector -- will require strong institutions and policies responsive to the needs and concerns of the participants in China's new labor market with Chinese characteristics.

Exhibit 1: Supply, Demand, and Labor Institutions Before and After Labor Market Reforms

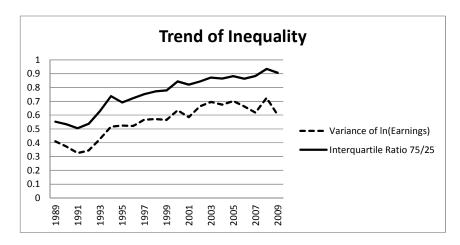
	Before Labor Market Reforms, 1970s – early 1980s	After Reforms – 1990s through 2013,	Policies to regulate new labor market
Firm employment	Determined by the state employment quotas; only formal employment in state- owned enterprises	Shift of employment to private sector,	Labor contract law policy to move short term workers to permanent contracts
Wage determination	Set by national wage grid with little variation among sectors, employers, or skills. Minimal inequality	Market-determined with large increase in dispersion of earnings	City minimum wages increase rapidly; college to migrant earnings gap falls with huge graduating classes; possible Lewis turning point
Provision of housing, medical insurance, retirement pay, other social amenities	Mandated benefits part of compensation package for firms; ration cards for consumer commodities for workers with urban hukou	Eliminate the requirement that firms provide benefits; require contributions to portable national benefit system	Portable benefit system still work-in- progress
Migration from initial location	Hukou restrictions; rural workers	Huge "floating population" without urban amenities	Contract labor law to assure workers of legal rights with individual contracts
Worker Choice of employer	State assigns workers to firm; Almost all urban workers employed by state-owned or collective enterprises	Workers choose own job; employers hire who they want; graduates favor safe jobs in government but biggest growth is informal sector work	Firms favor applicants with city hukou and from elite institution
Freedom to quit and find new employer	Cannot leave job without danwei approval; most workers stay with single firm their entire life	High worker mobility	Firms complain about excessive mobility
Union activity	All China Federation of Trade Union (ACFTU) operates as Leninist transmission belt	ACFTU lobbies for worker interests within government; some branches	

Exhibit 2: Market-Driven Widening of Wage and Income Differentials, 1980 to 2011

year	Urban/R ural	Junior College or BA Degree/High School (aged 35)	Top paying industries/ lowest paying industries	Top paying provinces/lowest paying provinces	Junior College or BA aged 25 /Rural Migrant
1980	2.50		1.42	1.37	
1990	2.20	1.18*	1.61	1.84	1.30*
2000	2.79	1.24	1.87	2.84	2.30
2011	3.13	1.43**	3.03	2.35	1.43**

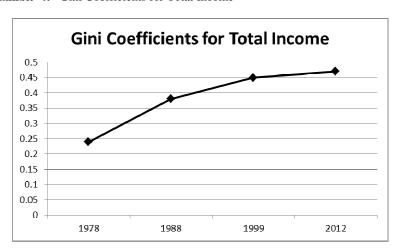
Source: China Statistical Yearbook; Junior college or BA to High School based on annual income from micro China Urban Household Survey data with \*1992; \*\* 2009. Top and bottom industries and top and bottom provinces change over time, so this measures spread of distribution. For industries, unweighted average of top three and bottom three; for provinces unweighted average of top five and bottom five. The data cover fewer industry groups than province groups. College aged 21 from China Urban Household Survey micro-data. Rural migrant wage per month from Feng Lu 2012. College income of persons aged 25 divided by 12 to be on monthly basis.

Exhibit 3: Measures of Inequality



Source: Chi, Wei, Richard B. Freeman, Hongbin Li 2012

Exhibit 4: Gini Coefficients for Total Income



Source: China Statistical Yearbook, 1990-2011 based on official statistics; 1980 unofficial estimate

Year	Gini Coefficients		
	1980	0.32	
	1990	0.39	
	2000	0.41	
	2011	0.47	

- Bian (1994) p 971
- 2 <a href="http://en.wikipedia.org/wiki/Public\_records\_in\_China">http://en.wikipedia.org/wiki/Public\_records\_in\_China</a>
- Walder (1986) is the classic account of this system.
- Bian, Y. (1994)
- <sup>5</sup> Knight and Yueh (2004) p 643. Consistent with this a 1995 survey found that 75 percent of urban workers worked at a state-assigned job. See Bian (1994), table 5.
  - <sup>6</sup> Bian, Y. (1994), table 1, p 273
  - Shirk (1981) p 577
  - <sup>8</sup> Wang, Fei-Ling (2004); Wang, Fei-Ling. (2005). Walder (1986)
  - chttp://en.wikipedia.org/wiki/Iron\_rice\_bowl>
- As reported in Xia, Q. et al (2013). The most detailed analysis of the labor reforms is found in Cai, Park, and Zhao (2008).
  - <sup>11</sup> Shirk (1981)
  - <sup>12</sup> Sabin (1994)
  - 13 Rush (2011) graph 4
- Different studies report different numbers of migrant workers around a rising trend. The 160 million number comes from Li, Shi (2008). Li, Bin (2011), head of the National Population and Family Planning Commission, also estimated that the floating population numbered 160 million but put the total floating population at 221 million. See <a href="http://www.chinadaily.com.cn/china/2011-02/28/content\_12091797.htm">http://www.chinadaily.com.cn/china/2011-02/28/content\_12091797.htm</a>. Li, Jing (2008 p 1083) reports 200 million on the basis of a report from the Research Office of the State Council. The National Bureau of Statistics of China the estimated 262 million migrant workers in 2013 as reported in <a href="http://www.clb.org.hk/en/content/migrant-workers-and-their-children">http://www.clb.org.hk/en/content/migrant-workers-and-their-children</a>.
  - <sup>15</sup> Zhang (no date provided), table 3
  - <sup>16</sup> Chi, Freeman, and Li (2012)
- The annual Household Finance Survey of Chengdu's Southwestern University of Finance and Economics China gives an estimated Gini coefficient of 0.61, which would make China one of the most unequal countries in the world. <a href="http://english.caixin.com/print/print\_en.jsp">http://english.caixin.com/print/print\_en.jsp</a>> Estimates of the number of billionaires in China also suggest an extremely high level of inequality. On Forbes' 2012 billionaires list Mainland China was number 2 in billionaires with 122 compared to the US's 442 while Hong Kong had 39 more. The Shanghai-based Hurun Rich List, which estimates the hidden wealth of China's richest citizens, reports that China had 317 billionaires compared to 408 U.S. billionaires. <a href="http://www.hurun.net/usen/NewsShow.aspx?nid=418">http://www.hurun.net/usen/NewsShow.aspx?nid=418</a>>
- A February 2012 poll reported that income inequality and soaring house prices were top concerns. A March 2012 poll put corruption and income distribution as top concerns; a November 2012 poll rated the wealth gap, corruption and the power of vested interests as top issues (see the Economist 'China and the environment; The East is grey' Aug 10 2013 <www.economist.com/news/briefing/21583245-china-worlds-worst-polluter-largest-investor-green-energy-its-rise-will-have>
  - <sup>19</sup> For a description of the problem SOE employees had in finding jobs in this period, see Song, C. (1997).
- Wong and Ngok (p 159) give the formal definition "Workers who because of the situation relating to production and operation of the employing units have left their original work posts and have not been given any other assignments in their work units but still maintain labour relations with their original employer"
- The division between private and state-owned and collectively owned enterprises is not as sharp as in other countries, as government agencies hold some shares. See <a href="http://www.mansfieldfdn.org/backup/programs/program\_pdfs/ent\_china.pdf">http://www.mansfieldfdn.org/backup/programs/program\_pdfs/ent\_china.pdf</a>
- 22 <a href="http://www.globaloutsourcinginfo.com/chinese-employees-average-salary-jumps-9-1-turnover-rate-up-18-9-in-2012/">http://www.globaloutsourcinginfo.com/chinese-employees-average-salary-jumps-9-1-turnover-rate-up-18-9-in-2012/</a> reported a 19 percent turnover rate in 2012.
  - <a href="http://www.bls.gov/news.release/pdf/jolts.pdf">http://www.bls.gov/news.release/pdf/jolts.pdf</a>
- The cultural revolution began in 1966 and continued for some years afterwards. From 1967 through 1976 the government cancelled university entrance exams, restoring them in 1977 under Deng Xiaoping. But the country

lost many intellectuals who spent years in rural labor camps, and some of whom left China when the Revolution ended. <a href="http://en.wikipedia.org/wiki/Cultural\_Revolution">http://en.wikipedia.org/wiki/Cultural\_Revolution</a>

- <sup>25</sup> Li, H. (2010)
- Some of the main articles in this debate are: Chan, Kam Wing (2009); Cai, Fang. 2010; Cai, Fang, and Yang Du. 2011; Cai, Fang, and Meiyan Wang. 2011; Golley, Jane, and Xin Meng. 2011; Minami, Ryoshin, and Xinxin Ma. 2010; Zhang, Xiaobo, Jin Yang, Shenglin Wang. 2011: Zhu, Andong, and Wanhuan Cai. 2012; Wang and Weaver 2013
  - See for example, Jütting and Laiglesia (2009), Is Informal Normal? Towards More
    - and Better Jobs in Developing Countries; Freeman (2009)
- Huang (2009) estimates that the informal sector share of urban jobs doubled between the 1990s and the early 2000s and had 1.5 times as many workers as the formal sector. Kuruvilla (2011) estimated that Chinese enterprises shifted 39 percent of China's urban work force from permanent employment to the "informal" sector. Park and Cai, (2009) estimate that in 2005 over half of urban workers were informal, with about 10 percent self-employed and another 36 percent undocumented in government statistics on employer ownership types with many employed in the service sector.
- <sup>29</sup> Park and Cai (2009) provides finer comparisons with data on migrants in the formal sector and of persons with hukou in the informal sector, who fit between the two groups in the text.
  - Freeman and Li (2013)
- There are diverse estimates of job loss in the crisis. The most widely cited estimate is 20 million on the basis of government surveys (see The Economist, March 12,2009 Unemployment: When jobs disappear and <a href="http://www.economist.com/node/13278217">http://www.economist.com/node/13278217</a>; Tan Yingzi and Xin Dingding (China Daily) 20 million migrants lost jobs: Survey

March 2, 2009 <a href="http://www.chinadaily.com.cn/china/2009-02/03/content">http://www.chinadaily.com.cn/china/2009-02/03/content</a> 7440106.htm But Cai and Chan (2009) estimate 23 million migrants losing jobs.

- Huang, Zhi, Huang, Rozell and Giles (2010)
- On November 2008 China declared that it would spend 4 trillion (US\$ 586 billion) for infrastructure <a href="http://en.wikipedia.org/wiki/Chinese\_economic\_stimulus\_program">http://en.wikipedia.org/wiki/Chinese\_economic\_stimulus\_program</a> The IMF estimated that the combined 2009 and 2010 amount was 5.8 percent of GDP, which exceeded the US stimulus and was third to Russia and Saudi Arabia in its relative size of their simulus see

<http://www.treasury.gov.au/PublicationsAndMedia/Publications/2011/Chinese-Macroeconomic-Management-Through-the-Crisis-and-Beyond/working-paper-2011-01/Chinas-stimulus-package>. While the official estimates included spending that would have occurred in any case, such as relief for the earthquake in Setchuan and while some may have been wasted, China acted aggressively to fill in the lost demand for exports.

- Huang, Zhi, Huang, Rozell, and Giles (2010) p 23
- 35 <http://english.acftu.org/template/10002/file.jsp?cid=63&aid=622>
- <sup>36</sup> In the communist tradition, this makes it a Leninist transmission belt organization . See V. I. Lenin Role and Functions of the Trade Unions Under The New Economic Policy

<a href="http://www.marxists.org/archive/lenin/works/1921/dec/30.htm">http://www.marxists.org/archive/lenin/works/1921/dec/30.htm</a>

- NY Times, August 22, 2001
- <sup>38</sup> China Labour Statistical Yearbooks published figures through 2008 after which the numbers were not published. The purported 2010 figure is from China Daily (2011).
  - 39 <a href="http://en.wikipedia.org/wiki/2010">http://en.wikipedia.org/wiki/2010</a> Chinese labour unrest>
- The Chinastrikes website, which maps over time by area of the country on the basis of news articles and reports, shows increased strike activity over time concentrated in major urban areas.
- <sup>41</sup> Senior AFCTU official Guo Chen cited in Han Dongfang, China's main union has yet to earn a job" Guardian, June 26, 2011 <a href="http://www.theguardian.com/commentisfree/2011/jun/26/china-trade-union-global-movement">http://www.theguardian.com/commentisfree/2011/jun/26/china-trade-union-global-movement</a>
  - 42 Ying Ge(2012). Yi Lu, et al. (2008); Yang Yao and Ninghua Zhong (2010); Tony Fang and Ying Ge (2013)
  - 43 <a href="http://www.theguardian.com/commentisfree/2011/jun/26/china-trade-union-global-movement">http://www.theguardian.com/commentisfree/2011/jun/26/china-trade-union-global-movement</a>
- In the class of 2008, for instance, 27 percent did not have jobs by year's end. In March 2012 Prime Minister Wen Jiabao reported that 22 percent of the 2011 class of graduates were still jobless (reported in NY Times January 24, 2013 Chinese Graduates Say No Thanks to Factory Jobs). The Beijing Municipal Commission of Education

reported that through summer 2013 just 33.6 percent of college graduates in the city had signed employment contracts while the China Development Research Foundation found less than half of 2013 graduates found jobs. Summarizing the reports from several cities under the headline 'Chinese College Graduates Cannot Secure Jobs: 28% Of Beijing's 2013 Graduates And 44% Of Shanghai's Have Found A Job', an International Business Times article on May 17,2013 shows the problem to be endemic <a href="http://www.ibtimes.com/chinese-college-graduates-cannot-secure-jobs-28-beijings-2013-graduates-44-shanghais-have-found-jobs-28-beijings-2013-graduates-

- <sup>45</sup> China Household Finance Survey at Southwestern University of Finance and Economics in Chengdu data reported in <a href="http://english.caixin.com/print/print\_en.jsp">http://english.caixin.com/print/print\_en.jsp</a>
- Statistics for 2003, 2005 and 2008 showed that the average starting salary of college graduates stayed around 1500 yuan per month, but monthly wages for migrant workers rose from 700 yuan to 1200 yuan. (reported in University Graduates Earn Little More Than Migrant Workers, Willingbird Sunday, February 13, 2011) A 2011 survey of more than 6,000 new graduates conducted in Beijing said that entry-level salaries of 69% of college graduates are lower than those of the migrant workers who come from the countryside to man Chinese factories. Graduates from lower-level universities make an average 1,903 yuan a month 2,200 yuan (345 US dollars) a month for migrants. WSJ
  - Kahn, Lisa (2010), Oreopoulos, Philip, Till von Wachter, and Andrew Heisz (2012).
- 48 8/15/13 As Graduates Rise in China, Office Jobs Fail to Keep Up NYTimes.com <www.nytimes.com/2013/01/25/business/as-graduates-rise-in-china-office-jobs-fail-to-keepup.html?pagewanted=all&pagewanted=print 1/7> January 24, 2013 'Chinese Graduates Say No Thanks to Factory Jobs' By Keith Bradsher
  - <sup>49</sup> See Shao Wei and Mao Weihua 'Training program to boost employment in Xinjiang' China Daily 2011-03-26
- CHINA. ORG reports in an article Hukou Obstacle to Market Economy that 92 percent of respondents agreed that the *hukou* system was in need of reform; 53 percent said the government should eliminate restrictive policies attached to the system, such as limits on access to education, healthcare, employment and social insurance and 38 percent called for the system to be ended entirely. See <a href="http://www.china.org.cn/china/features/content">http://www.china.org.cn/china/features/content</a> 1211422.htm

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