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China's labour market: characteristics and issues over the medium-term

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Abstract

The exceptionally rapid economic growth in China over the past 15 years has been associated with significant labour market issues, ranging from large pockets of unemployment or under-employment in the informal sector to skill shortages and rapid increase in labour costs.

This disappointing outcome of the rapid growth reflects cheap capital and high investment, but also significant specific imbalances in the labour market - between geographic locations, between skills and qualification, and between types of company (notably SOE reforms and adjustments). These trends are to be seen in parallel with the crucial role played by migrant workers in manufacturing, construction and trade activities, and with the segregation of the labour market enabling the maintenance of low wages and very poor working conditions.

Demographic trends suggest that these recent changes are likely to continue over the next few years, with the possibility of rising urban unemployment and increased bottlenecks, associated with increasing wages. On the longer term horizon, the expected decline in the working age population, coupled with the fact that the largest decline will be in the "core" migrant age group, points towards a strong likelihood of even sharper wage increases. This would be compounded by a rapid move of Chinese industry towards higher valued-added activities requiring superior skills, as well as by the likelihood of improved social policies towards the migrant population.

However, such a transformation may not be sufficient to reduce unemployment, precisely because of the geographic and skills issues. A possible direction might well turn out to be a rapidly growing unemployment problem for people aged 40 and above, with the younger generations benefiting from the expected wage increases. The translation of such a potential trend, with increases in wages bills, in terms of cost-competitiveness is difficult to appraise, but it is probably safe to assume that the strong deflationary forces exerted by China on world markets may come to an end between now and the end of the decade.

Keywords: China, labour market, demography, wages

JEL Codes: J11, J21, J31

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1 Introduction

Many fundamental macroeconomic and social questions pertaining to China's medium and long-term development are directly or indirectly related to labour market issues and prospects. In parallel, long-term international trade relationships are and will increasingly be affected by the evolution of China's competitiveness and labour cost advantages, while global financial balances worldwide will be sensitive to significant changes in savings/consumption patterns in the context of a rapidly aging Chinese population.

The scope and aim of this article do not permit a comprehensive analysis of China's labour market situation, prospects and issues - such an endeavour would clearly imply enormous research investment. More modestly, we shall try here to summarize a limited number of what we consider to be "key relevant features" of the labour market.

We look at such features through three different aspects: demographics, labour market characteristics, and wages. The methodology adopted is based on a quite extensive review of existing literature², which is completed by our own data and information analysis, and then subjected to discussions³ with labour market specialists in very different positions - academics, members of international institutions and companies' human resource managers.

The analysis and the results derived from the research should, nevertheless, be viewed with caution, since a first element in any study related to the Chinese labour market is a crucial deficiency of information and statistics. From the broadest background items in labour market evolution (demographics, location issues) to the more precise elements (employment, wages, ...), there is no single area where doubts are not incurred because of statistical issues. A debate exists on the exact size of China's population with suggestions that the official figure may underestimate the real size of the populace by anything between 50 mn and 150 mn persons - in part because of the "one child policy" adopted by China and the consequent decision by households not to declare the birth of a second child! The effective participation of the population in the workforce is also subjected to huge differences in number, depending on the different sources. Labour surveys are sketchy and time series do not exist or are not comprehensive; for example, aggregate labour market data are provided by the National Bureau of Statistics (NBS) which conducts a quarterly survey on a sample of 1 mn persons, benchmarked on 1990 and 2000 censuses. Yet, details by industry are based on a different NBS survey (Establishment Survey) which has a different base and excludes most of the private sector. Disaggregated figures cannot, then, be reconciled with national data⁴. Hence, any basic initial conclusion or recommendation would be a requirement to support some improvement of statistical information available on the labour market (notably on hours worked, compensation outside cities, informal sector, etc.).

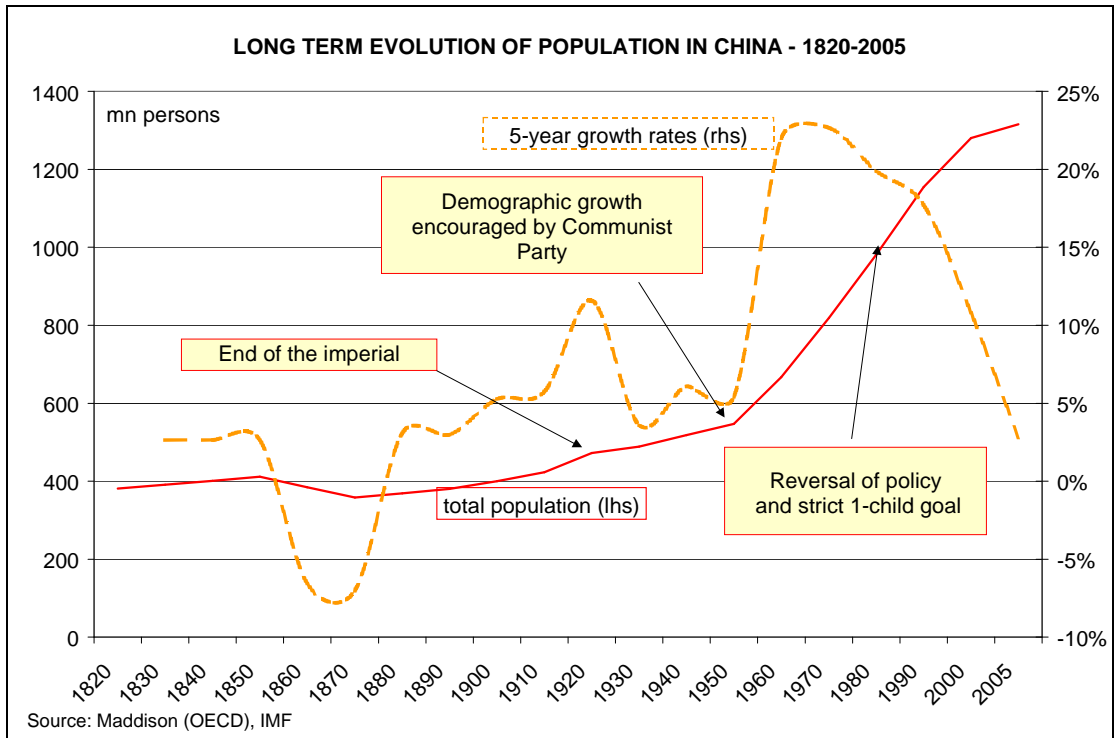
2 Demographics

Total population in China was estimated at 1315 mn persons in 2005, almost one quarter of the entire world's total and 30% above the next most populous nation (India). This is a long-term outcome of strikingly different historic phases in China's demographic development, which saw something like stability over one century (around 400 mn persons between 1820 and 1920), then a modest increase until the early years of Communist power - at which point population growth received greater political attention and was considered a key instrument of development and power. The population then doubled between 1950 and 1990, before a marked slowdown related to the implementation of stringent restrictive population policies, notably the one-child incentive/enforcement measures.

² Literature on China's labour market is quite extensive, with both Chinese and foreigners providing different views, analytical method and conclusions. The survey undertaken in this research was quite wide (more than 50 research documents), but we also made intensive use of 7 key papers which are indicated as reference at the end of the article

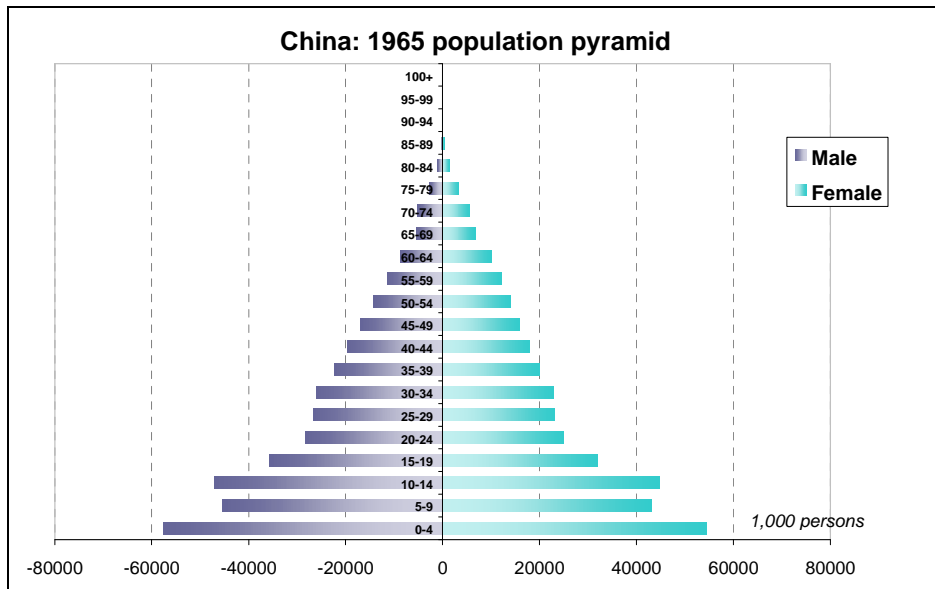
³ Including interviews during a mission in China in Sep. 2006

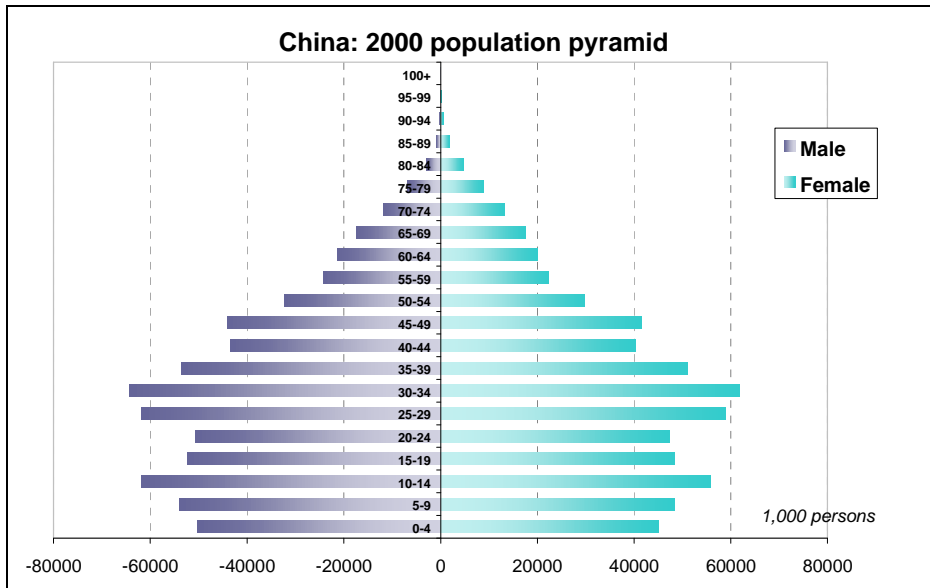
⁴ A summary of statistical sources regarding population and other labour market issues can be conveniently found on the IMF data dissemination website : <http://dsbb.imf.org>



These changes have had enormous economic and social consequences, which can be synthetically related to the huge distortions in the structure of the population by age groups.

Evolution of China's population pyramid

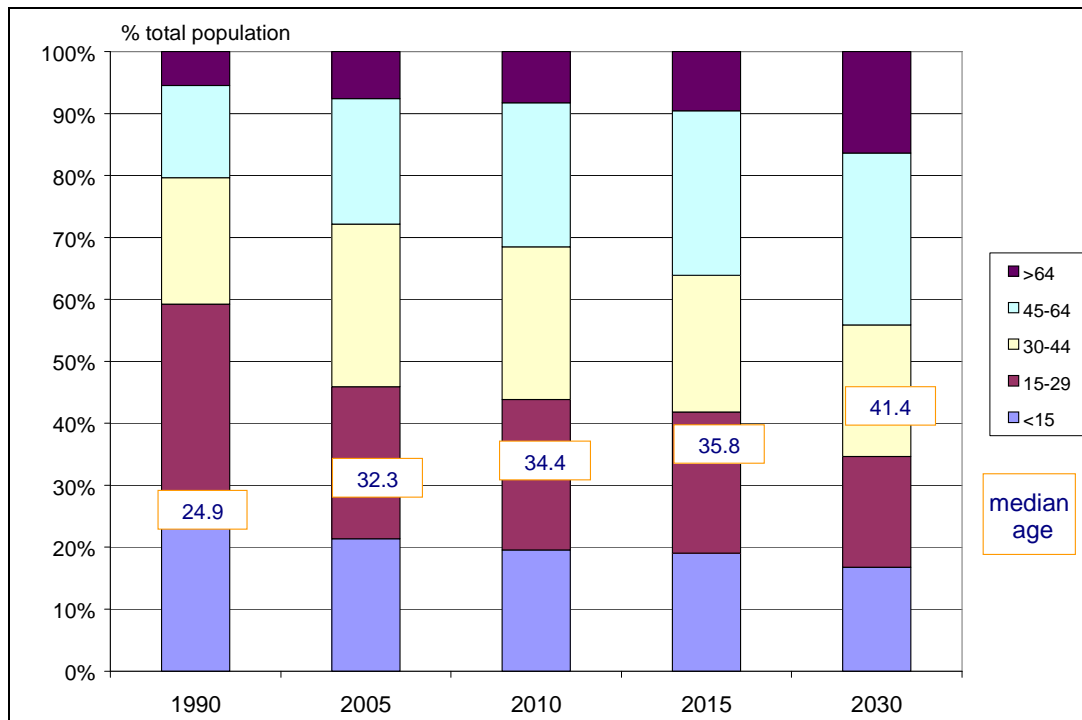




Source: T-A-C, from U.N. Population Division.

China's population pyramid has certainly registered the most impressive transformation ever registered on earth on such a large scale, moving from a "triangular" shape in 1965 to a "bottle-shape" in 2000. The expected change from now to 2015 (and 2030) is a narrowing of the base of the pyramid (possible softened by the growing relaxation of the 1-child policy) accompanied by a massive enlargement of the oldest groups. The next chart and table provide the current estimates on the medium- to long-term changes expected in China's population.

Demographic changes in China, 1990-2030



Source: T-A-C, from US Bureau of Census

The clearest points that emerge are (1) the stabilization and decline of the proportion of people aged 30 to 44, (2) the persistent increase of people aged 45-64, who become the largest group in 2015 (and remain so in 2030, whereas the 30-44 sector is the largest in 2005 and still so in 2010) and (3) the sharp increase in people over 64 years-old, albeit later in the decade, i.e. between 2015 and 2030.

As well as the change in China's total population (from 1,315 mn persons in 2005 to 1,393 mn in 2015 and 1,461 mn in 2030), this transformation in the population structure translates into vast changes in numbers within age groups, with a 105 mn increase to 370 mn persons for the group 45-64 between 2005 and 2015, compared to a 32 mn increase (to 239 mn) for the group over 64 years-old, and a decline of 34 mn (to 307 mn) for the group aged 30-44, over the same 10-year period.

Changes in number of persons in each age group in China, 1990-2030

Number of persons	<15	15-29	30-44	45-64	>64
2005 (/1990)	-48 476 243	-31 857 536	107 990 740	94 037 300	36 255 081
2010 (/2005)	-15 414 137	5 846 128	-10 132 387	48 954 473	11 995 609
2015 (/2010)	1 774 398	-9 655 680	-24 346 228	56 535 358	21 545 887
2030 (/2015)	-20 578 167	-55 511 855	2 035 456	35 513 233	106 652 189

Source: T-A-C, from US Bureau of Census

The consequences of such massive and rapid transformations must not be underestimated. It is probably fair to say that the spectacular decline in China's dependency ratio (number of people below 15 and above 64 as a proportion of those in working age groups, i.e. 15 to 64 years old) has been the most important single explanatory factor behind China's huge economic take-off. This was a powerful force, unleashed with the reforms of the 80s, to enhance savings while creating a huge demand for infrastructure and consumer goods. It is important to realise, even so, that this positive relation also puts pressure on the economy's ability to absorb large numbers of new entrants into the labour market, as the active proportion of 15-64 year-olds increases rapidly. Employment and social issues could therefore be considerable, even if GDP growth is high.

Looking ahead, the turning point is around 2010, when the decline in the proportion of young people will be rapidly counterparted by a growing number of older persons. The dependency ratio is expected to increase after 2010, even though it will remain growth-supporting until 2015. Thereafter, the working age population (15 to 64-year olds) will start to shrink in absolute values, once again an historic reversal for China.

3 Labour market features and characteristics

3.1 Short summary of economic reforms and the labour market⁵

Under the planned system of pre-1978 China, all workers were matched to jobs by government bureaus, with lifetime employment guaranteed and labour mobility severely restricted, by location as well as by occupation. Wages were centrally controlled and prescribed through a homogenous grading system which limited wage differences across regions and jobs. Wage increases were based mostly on seniority, and most social services were provided by the employing units, directly to their workers (in particular housing, health and child education). One of the important administrative tools established to enforce such rigid working rules was the household registration system (Hukou) which categorically divided rural and urban populations and ensured that most social rights were related to location.

On the onset of Chinese economic reforms, a key element was the introduction of the household responsibility system in agriculture (1978-1983). This simultaneously increased the returns to farm activities compared to the previous collective organisation and stimulated dramatic increases in agricultural productivity. As early as 1983, the government realized that the combination of labour mobility restrictions and emerging excess labour in the agricultural sector needed to be tackled. Regulations were then relaxed to allow farmers to work freely in nearby towns or villages in newly emerging Township and Village Enterprises (TVEs). In parallel, urban reforms led to a gradual autonomy of firms in setting wages and introducing financial incentives for workers.

⁵ This section draws heavily on Fang Cai (2004)

From 1985 to 1992, TVEs enjoyed rapid development, enabling the smoother absorption of rural surplus labour without triggering significant migration flows across China. In urban areas, the gradual phasing out of administrative pricing mechanisms was imposed to enhance companies' (and management's) autonomy and their ability to meet changing market requirements, thus putting pressure on both the system of permanent employment and the rigidities in wage determination. Labour contracts were formally introduced in 1986, giving firms the freedom to hire and select their employees, but the no-fault dismissal of workers or firing was still strictly restricted until the end of the 90s. At the end of the 80s, there was recognition of "three different channels of employment: spontaneous organisation of employment by enterprises, government direct allocation of labour, and self-employment under the guidance of the state plan". The reforms also began to facilitate the movement of labour from rural to urban areas, with a gradual (and still limited) reform of the Hukou system.

Simultaneously, the initial steps towards reform in the State Owned Enterprises (SOEs) created huge difficulties regarding employment. There was an undisputed need to dismiss superfluous workers, but the government required SOEs to respect their responsibilities towards laid-off workers, including re-employment and social and other provisions, while putting strict limits on the number of workers who could be laid off. The pressure on urban labour markets increased significantly, at the moment when the relaxation regarding rural migration started. This led a large number of provincial or municipal authorities to establish restrictions on the temporary recruitment of outside workers, creating different systems of working permits. Overall, it could be argued that there was no coordination of the differing elements of the labour market changes during this period.

The "anti-migrant" stance of authorities across China appears to have somewhat subsided since the mid 90s, in part because exceptionally rapid growth and industrialisation have pushed wages higher and created a stronger demand for labour in many urban areas. However, this coincided with a more intensive measure in SOE reforms with greater levels of privatisation (for most small and medium-size companies) and with stronger incentives for increased productivity and competitiveness in the larger SOEs. This led to the progressive disappearance of life-long employment and the breaking up of the so-called "iron rice bowl" system of guaranteed employment. Initially, the government established a special assistance programme for laid-off workers from SOEs, providing up to 3 years of benefits as well as training (called *xiagang*). In essence, this is the period when China really moved from controlled to market-based labour market functioning, despite the persistent issues and debate about the effectiveness of the "market functioning" of labour in China. The search for work would no longer be supported by the government or the administration, and hiring and firing procedures were allowed greater flexibility.

Policy focus is, therefore, clearly moving towards training, supporting placement assistance by employment centres, and social assistance for the unemployed. The government standardised its unemployment insurance scheme in 1999, with financing through payroll charges and provision of subsidies for a maximum of 2 years after lay-off. Starting in 1998, most cities began to provide relief assistance to unemployed persons through Minimum Living Standards Programmes (MLSP), but those were ad hoc and lacked coordination. The Hukou system was further relaxed - enabling, in particular, families to re-unite in the working place of the migrant.

Reform of the Hukou system: summary from the IMF Working Paper - November 2003

The household registration system (Hukou) was set-up in the mid-fifties to control the movement of population and effectively constrain the development of a national labour market. An urban Hukou was required to stay in cities and gain preferential access to city services such as education, health, and social security. Moreover, urban enterprises were restricted from recruiting labour from another province unless labour was unavailable locally.

Since the mid-nineties, reforms to the Hukou system have been initiated. In 1997, the authorities experimented with relaxation of household registration regulations in some small towns and cities, allowing migrants who had either a stable income (from a job or business) or who owned a house to obtain an "urban Hukou". These reforms, however, were not far-reaching, and by end-2000, only 540,000 people had applied for a Hukou in small towns and cities.

The reform gained momentum in 2001. Since October 2001, anyone with stable work and a residence should be able to obtain a Hukou in more than 20,000 small towns and cities, while

retaining their land use rights in the countryside. In addition, the State Planning Commission has stipulated that charges levied by localities on migrants, such as “temporary residence fees” and “birth control fees” should be removed by early 2002. These charges could amount to several hundred renminbi, a sizeable portion of migrant earnings.

While the new reforms are a significant step toward establishing a national labour market, a number of barriers remain. First, a Hukou in small towns and cities is not as attractive to rural migrants as a Hukou in large and medium cities (that provide better services) where reforms have not been as far reaching. Second, ownership of a residence is a demanding condition for most rural migrants to meet, given their relatively low income. Third, localities will probably resist reducing the fees applied to migrants, given the potential loss of revenue. Fourth, those who obtain an urban Hukou can only give birth to one child, while in many rural areas, two children are permitted.

3.2 Labour market characteristics

The following table provides the basic information describing China’s labour market and the changes observed since 1980:

<i>Data in million persons at the end of the year</i>	1980	1990	2000	2004
Total population	987.1	1143.3	1265.8	1299.9
Urban	191.4	301.9	458.4	542.8
Rural	795.7	841.4	807.4	757.1
Working age population	594.1	763.1	888.0	903.0*
Labour force	429.0	653.2	739.9	751.3*
Participation rate (%)	72.2	85.6	83.3	83.2*
Employment	423.6	647.5	720.9	752.0
Unemployment	5.4	5.7	19.1	
Urban employment	105.3	170.4	231.5	264.8
Urban registered unemployment	5.4	3.8	6.0	8.3
Laid-off (<i>xiagang</i>)			9.4	13.0
Unemployment rate (registered and <i>xiagang</i>) (%)	4.9**	2.5**	6.0	5.4*
Rural employment	318.4	477.1	489.3	487.3

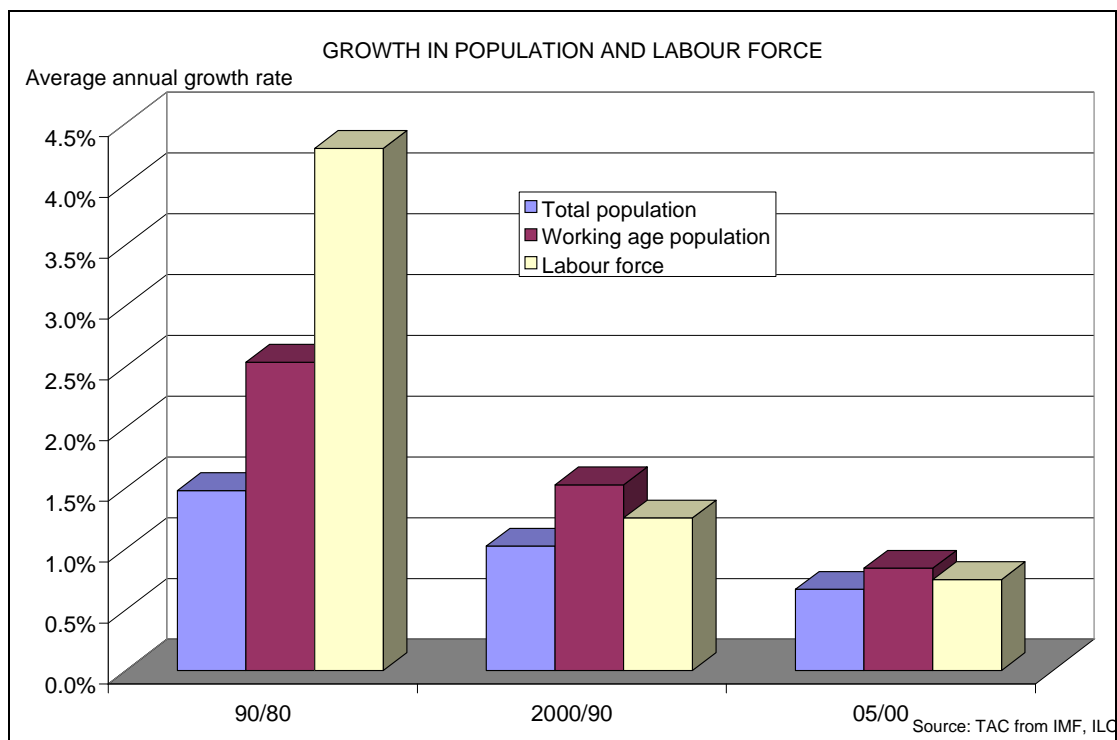
Source: IMF, ILO

**: for 2002*

***: excluding xiagang*

The main observations can be summarized as follows:

- The structural demographic changes described above are already impacting the labour force. In the last couple of years, and for the first time in China’s recent history, the growth rate of the working age population is smaller than the growth rate in total population (see chart).
- Growth in the labour force age group is also slower than for the active population, leading to a decline in the participation rate. This is also a “first time” change for China and may be related to the declining participation rate for women older than 40 years and associated with the migrant worker situation.
- Rural population is now declining in absolute numbers, not taking into account a suspected under-measurement of urban population because of fiscal consideration for small towns (that have an incentive to be classified as rural areas). The decline has accelerated since 2000, but, interestingly, the annual growth rate of urban population appears to be stabilizing, albeit at a substantial level (4.3% per annum).



- The numbers for the unemployed should be treated cautiously, since certain cloudy issues are found within the scope of the surveys, e.g. the ability to capture informal activities and the criteria used for declaring a person as unemployed (i.e. one hour of work per week was mentioned as a sufficient working time to be included in the “employed” category).
- The limited information available suggests that the situation worsened markedly in the 90s, partly because of the large number of laid-off workers in the wake of SOE reforms. Total registered unemployed persons increased from less than 6 mn in 1990 to 19 mn in 2000. Since 2000, the unemployment rate seems to have somewhat declined (from 6.0% in 2000 to 5.4% in 2002) despite the increase in registered urban unemployed persons (from 6 mn to 8.3 mn) and the parallel jump in laid-off workers (from 9.4 mn to 13.0 mn persons). The explanation lies in the apparent sharp decline in laid-off workers “remaining unemployed” (from 6.4 mn in 1999 to 1.5 mn only in 2004, according to ILO).
- Without doubt, different estimates would indicate a slightly higher unemployment rate in China. The most convincing figures⁶ suggest a total unemployment rate of 7.3% in 2002 (against the IMF estimate of 5.4%), and 11.1% for urban areas. Part of the difference is related to a lower estimate for the participation rate and therefore a smaller labour force. Considering urban unemployment, any national average rate (in a range of 5.5% to 11%) hides great differences by region, with the highest rates in the North-eastern provinces and the lowest in the Northern and Eastern provinces. However, there were only 7 among the 31 Chinese provinces that achieved a decline in unemployment during the 90s, despite, yet again, astounding economic growth of nearly 10% on average per year.

⁶ Giles, Park and Zhao - cited in Fang Cai (2004)

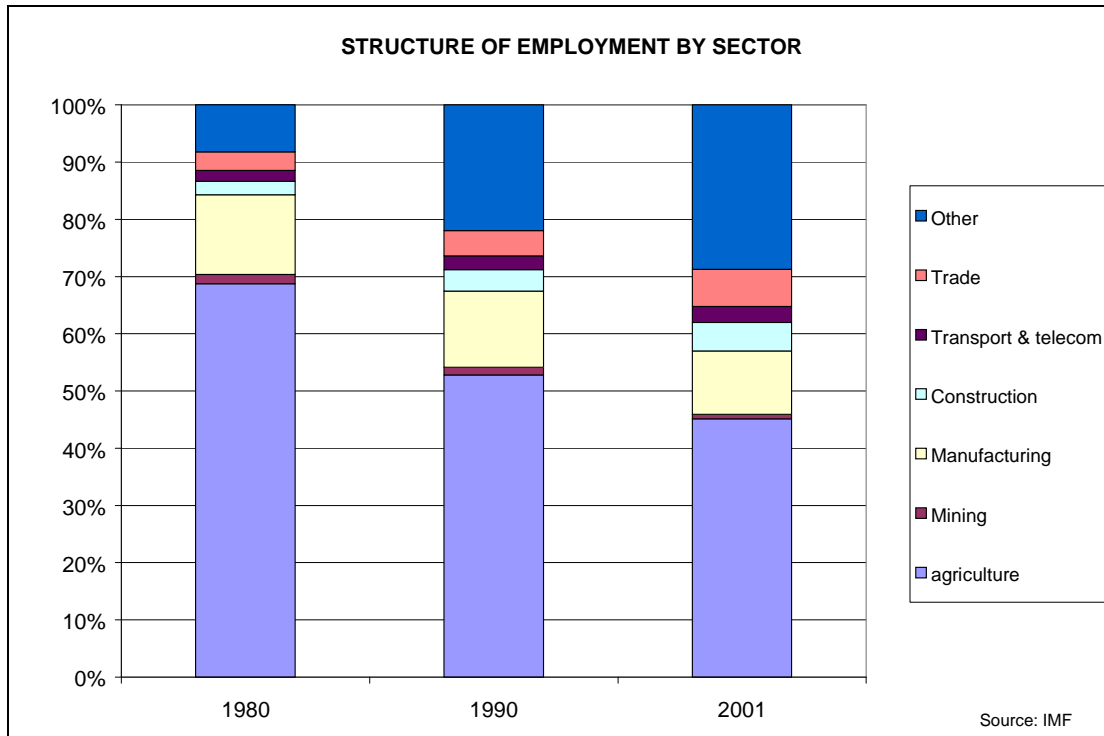
UNEMPLOYMENT BY PROVINCE

	1990	2001
North		
Beijing	0.4	1.2
Tianjin	2.7	3.6
Hebei	1.1	3.2
Shanxi	1.2	2.6
Inner Mongolia	3.8	3.7
Northeast		
Liaoning	2.2	3.2
Jilin	1.9	3.1
Heilongjiang	2.2	4.7
East		
Shanghai	1.5	..
Jiangsu	2.4	3.6
Zhejiang	2.2	3.7
Anhui	2.8	3.7
Fujian	2.6	3.8
Jiangxi	2.4	3.3
Shandong	3.2	3.3
Central and South		
Henan	3.3	2.8
Hubei	1.7	4.0
Hunan	2.7	4.0
Guangdong	2.2	2.9
Guangxi	3.9	3.5
Hainan	3.0	3.4
Southwest		
Chongqing	..	3.9
Sichuan	3.7	4.3
Guizhou	4.1	4.0
Yunnan	2.5	3.3
Tibet
Northwest		
Shanxi	2.8	3.2
Gansu	4.9	2.8
Qinghai	5.6	3.5
Ningxia	5.4	4.4
Xinjiang	3.0	3.7

Source: IMF – xiagang unemployed workers are not included

- Rural employment has begun to decline in absolute numbers since 2000. It is important to note that rural employment refers to the classification of the area where the person works and not to the type of activity. Indeed, the percentage of total labour in China working in agriculture fell rapidly (average 0.8% per year) over the reform period, and the share of agriculture employment declined from 91% in 1979 to 64% in 2003, while the absolute number of persons

started to decline in 1990. These numbers probably underestimate the extent of movement from agricultural to non-agricultural jobs, since many individuals engaged in agriculture also take up substantial amounts of non-agricultural work. Academics working on the basis of yield, productivity, and sown areas suggested that up to 25% of the workforce registered in “agriculture” is in fact working mostly in non-agricultural activities. Rural workers at TVEs amounted to 136 mn persons in 2003, while 17 mn were working in private enterprises and 23 mn were self-employed, the three categories representing 36% of total rural employment.



- The sheer impact of the transformation from an agriculture dominated labour market to a non-agricultural and increasingly urban labour market cannot be understated. Between 1980 and 2001, the total number of employed persons increased by 306 mn, of which only 38 mn was absorbed in agriculture. However, it is crucial to observe that such a shift was not accommodated by job creation in the manufacturing sector, despite the tremendous industrial growth of China during this period. Rural employment had started to decline in absolute numbers from 2000. Manufacturing activities had added only 22 mn jobs over the 21-year period, a mere 1.5% on average per year. Even more revealing is the absolute decline in manufacturing employment between 1995 and 2001, from a peak of 98 mn persons to 80.8 mn in 2001.
- The major “job absorbing” industries were in the wholesale and retail trade (34 mn new jobs, +6% per year during the past 20 years), construction (27 mn new jobs, +6.4% per year), transport and telecommunication (12 mn jobs, +4.5% per year), and in government/party/social organisations, which added 5 mn new jobs, an average 3.5% increase every year.
- However, as the previous list and the chart above strongly suggest, it is the “other” employment sectors that absorbed the most impressive number of workers during the whole period of economic reforms in China. Our own residual figure for “other” includes defined activities (finance, utilities, real estate, social services, health and education) and it saw an increase in employed persons of 175 mn over 1980-2001, an 8.9% average annual growth rate. Even when taking a stricter definition of “other” activities, its dominant role as a creator of employment is evident, and undoubtedly related to the large increase in informal/unregistered activities.

- A final important feature of China's labour market is the particular role played by migrant workers⁷. The special situation of such migrants is related to (1) the differences in job opportunities and standards of living between urban and rural China, between provinces too, and (2) the Hukou system relating social services and employment opportunities to the geographic registration of workers. From an economic perspective, the latter can be equated to a cost premium for migration: the Hukou system implies that a greater difference (than would be the case otherwise) in living conditions is needed to trigger migrations, but it also leads to labour market and social condition segregation between workers performing similar jobs.

Analysis of migrations and their impact on the labour market is particularly difficult to appraise, not only because of the very different definitions of migration (according to destination, or to length of stay), but also because of the largely clandestine nature of migration in China. It is estimated that only 4% of all migrants obtain either a temporary or permanent resident permit. The others, who have lived without local authorisation for at least 6 months, are known as the "floating population", and these people migrate, reside and work through informal and unregulated channels. The most commonly accepted estimate for this "floating population" today is around 100 mn persons, compared to 40 mn in the mid-80s. Official figures from the 2000 Census put the number of persons residing outside their places of household registration as 131 mn, one tenth of the total population in China. Other estimates by different Ministries or the Academy of Social Sciences were in the range of 100-150 mn persons. The importance of migrants is much stronger when related to urban employment (260 mn people), with estimates putting their overall share at 40% of the total urban labour force.

Migration patterns and characteristics are fairly imprecise, but they allow us to perceive several broad traits:

- Rural migrants are usually young, with more than 70% in the 15-29 age bracket. Despite their age, marriage and parenthood do not reduce migration. These two points are crucial for assessing future influences on the labour market, as this has implications for both workforce demand requirements (young/flexible/cheap) and the temporary nature of migration, even though this can extend over many years. Similarly, it seems that demand requirements were behind the growing feminisation of migrants, with a roughly even distribution between sexes in recent years.
- In terms of education and skills, migrant workers are those with higher level of education relative to the average of their initial location. Even so, most are strongly disadvantaged vis-à-vis urban workers. Most have only a junior high school diploma and as few as 20% have received specific skills training.
- Only 40% of the total migrant population reflect a move from a rural to an urban area. Almost the same proportion is accounted for by urban-to-urban shifts, and close to 20% by rural-to-rural migration. In terms of geography, the concentration by broad region of destination has significantly increased since the early 90s. In 2000, 75% of all inter-provincial migrants were to be found in the Eastern part of China (including the South), against 54% in 1990. Conversely, only 9.8% were in the Central regions (against 24% in 1990) and 15% in the Western areas (21% in 1990).
- Migrants are mostly employed in construction (25%), manufacturing (24%), wholesale and retail trades, and in catering (20%). As they account for a high average proportion of the urban workforce, this relative concentration by type of activity underlines their critical role in the overall dynamics of the labour market - they account for almost 70% of the workforce in the whole processing and manufacturing industry, nearly 80% in construction, and more than 50% in trade and catering services.
- Working conditions for migrants are far worse than for the other employed people. Although urban enterprises are required by law to establish labour contract for all workers, all surveys and research projects indicate that more than 80-90% of migrant workers do not have such contracts, implying extreme social vulnerability and almost no defence against, or bargaining power with, employers. Their level of pay is much lower (see 5.3 below), and occupational safety and health are much poorer; a recent study showed that migrant workers accounted for 80% of the deaths in mining, construction

⁷ This section draws substantially on Max Tunon, ILO, 2006

and chemical factories, and 90% of patients suffering from workplace-related diseases are migrant workers.

3.3 Economic growth and employment

The analysis above heralds a massive macroeconomic management issue, since it clearly expresses that the current development path and structure of China does not allow sufficient absorption of workers in the labour market in the formal sector, and that the very high and sustained economic growth, particularly in manufacturing, has failed to deliver a large increase in employment opportunities.



Recent research by ILO provides the following computation on the 2004 urban employment demand and supply (in millions of individuals):

- Newcomers in the working age group and looking for a job: 7.7
- Farmers shifting to non-agriculture: 1.4
- Laid-off workers + registered unemployed: 15.0
- Total job seekers: 24.0
- Jobs created: 9.8
- Jobs shortfall: 14.2

This shows that even with limited shifts from the rural sector, the ability to reduce unemployment is weak. This strong conclusion is compounded by most econometric research aiming to assess any simple relationship between output growth and employment growth.

Interestingly, econometric research gives a convergent message that suggests a strong change in employment-to-output elasticity around the second part of the 90s. For the IMF, this elasticity declined from 0.5⁸ over the period 1978-1993 to 0.2 over 1993-2000; for other authors, this elasticity is closer to 0 since 1996.

Using such models proffers useful hints at the challenges ahead. The table below shows the “central scenario” of the IMF for urban employment from 2003 to 2010. This central scenario is based on an employment-to-GDP elasticity of 0.47, where average GDP growth is 7%, and the labour force

⁸ 1% growth in GDP induces a 0.5% increase in total employment

participation rate stays unchanged. Under these assumptions, the number of unemployed urban workers would increase by 16 million between 2003 and 2010.

PROJECTION OF URBAN UNEMPLOYMENT TO 2010

	Sum for 2003-2010, million persons
New jobs	115
Increase in working age population	93
Increase in labour force	77
New jobs less increase in labour force	38
Surplus labour seeking jobs	54
<i>SOE re-employment</i>	11
<i>Rural migrants</i>	44
Change in urban unemployment	16

Source: IMF

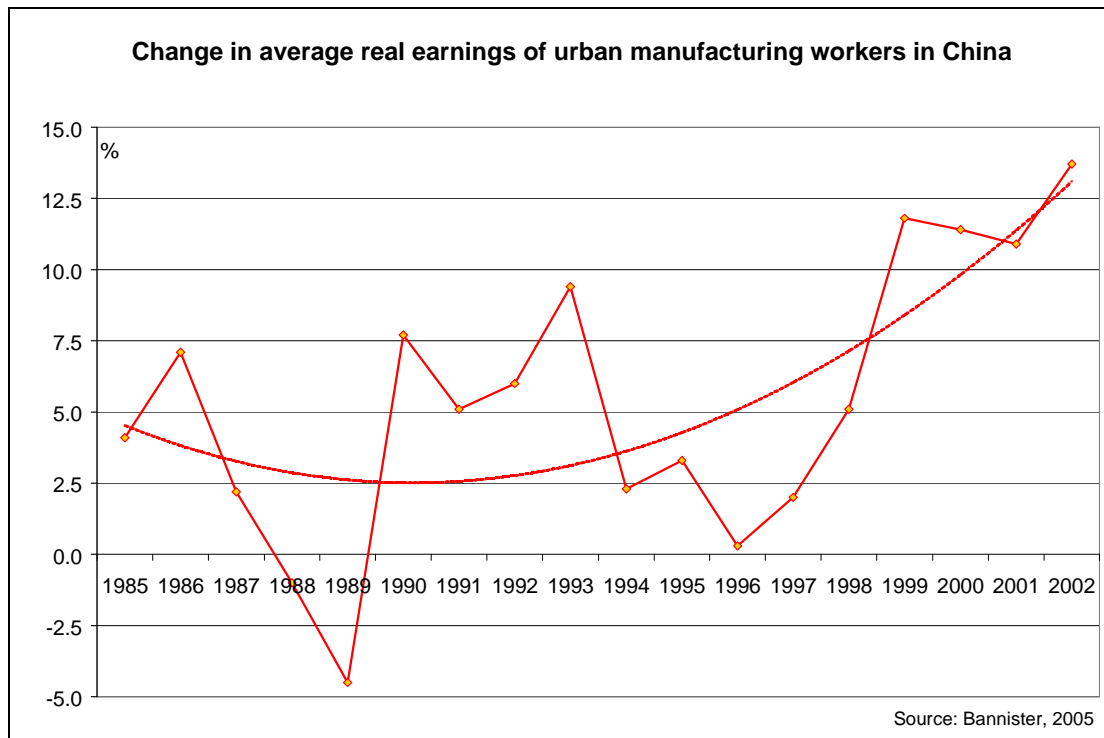
If we take the more recent estimation for job-to-GDP elasticity (0.20) but conversely revise upwards the average annual GDP growth (to 8%), but keeping the remaining assumptions unchanged, the cumulative increase in urban jobs over the period 2003-2010 would fall from 38 mn in the central scenario to 3 million only. This very restricted job-creation ability suggests a need for a re-think about industrial priorities and the combination between labour and capital in China's production "function".

4 Wages

The demographic patterns presented above and the job creation issues are unquestionably related to China's low-cost competitiveness through expected downward pressures on wages. However, the actual situation is far more complex, and the road ahead uncertain. We shall argue here that the combination of labour imbalances and higher unemployment with rapidly increasing wages is a likely scenario for the years ahead.

4.1 Upward pressures on wages since the early 2000s

First, wages are increasing quite rapidly, especially since the mid-to-end 90s, following a long period of ample variations around a moderate trend. The next chart shows the annual increase in real terms (i.e. after adjusting for price changes) of average urban workers' wages in the manufacturing sector.



The acceleration in the latter part of the period is confirmed from many sources:

- Recent data on employment and overall wages at city or prefecture level show a “national” average annual salary moving from 7,615 yuan in 1998 (USD 920 per year) to 9,480 yuan in 2000 (a 24% increase over 2 years) and to 16,117 yuans (USD 1950) in 2004. This is 71% above the average figure for 2002 and 110% above the 1998 average. This datum is partly confirmed by in-depth research by Bannister (see reference at the end of the section) who computed an average national earning (annual basis) of 11,150 yuans, to which are to be added other labour costs (social insurance, housing funding payments and other compulsory charges), to bring the total up to 17,150 yuans (manufacturing urban units).
- Most human resource managers interviewed, as well as anecdotal evidence from the press and other sources, indicated growing difficulties in hiring staff without significant pay increases since the early 2000s, but recognizing even so that, at least for unskilled workers, wages had not increased at all for the past 5-10 years. In the Pearl River Delta, price competition pressurising wages led to an apparent shortage of manpower, estimated at around 2 mn people, and leading some companies to shift their production units to more remote areas in China.

4.2 A still segregated labour market

One possible explanation for this paradoxical situation of upward pressures on wages together with increased unemployment is the persistence of strong segregations within the labour market, implying large “pockets” of imbalances and restricting both job creation and the “clearing” mechanisms of adjustable wages.

Two major inter-related segregations are quite significant (between provinces and between migrant and non-migrant workers). A third one is less significant (foreign invested enterprise - FIEs- versus domestic companies, and within FIEs) but it could lead to upward pressure on average salaries.

Wage or income differences between provinces are extraordinarily large. This is undoubtedly one of the reasons behind inter-provincial migrations, but recent years do not seem to have induced a reduction in such inter-province gaps. On the contrary, overall measures of inequality of income between provinces have increased, as has the gap between rural and urban incomes.

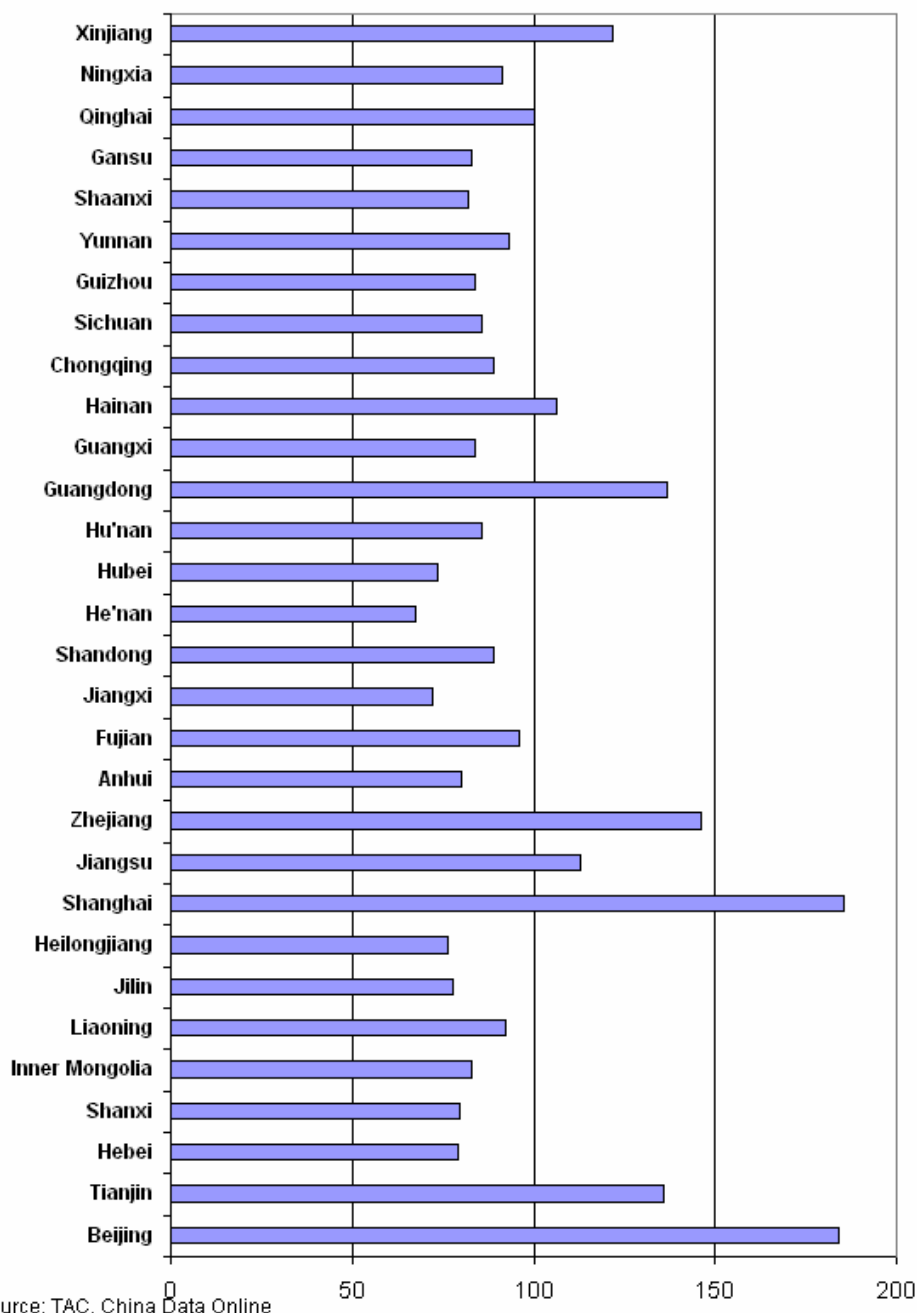
In the 2004 survey on wages and salary at the prefecture level, the ratio between the highest wage (Shanghai) and the lowest (Henan) was 2.7. However, only 7 out of the 31 provinces showed wages above the national average, implying a large group of “low pay” provinces and a limited number of “very high pay” provinces (see chart next page).

As indicated earlier, segregation through the Hukou system and the existence of large numbers of migrant workers is a major feature of the Chinese labour market - in particular in manufacturing, construction and trade activities. A survey on migrant wages cited by ILO indicates that 30% of migrants earn an average monthly wage of between 300 and 500 yuans, 40% between 500 and 800 yuans, and 28% more than 800 yuan. A simple weighted average would suggest average annual wages around 8250 yuan, i.e. only about half the reported annual salary in China's prefecture. It was reported that in the Pearl River Delta, the wages for migrant workers had increased by a minuscule 68 yuans (about 6.5 euros at current exchange rates) in the last 12 years! It is also said that delays in wage payment and the absence of additional pay for overtime are frequent occurrences for migrants.

Finally, differences in wages are quite substantial between different types of employer. FIEs offer, on average, higher wages, even though this is not true for all foreign companies, with a clear “low pay” bias for Hong Kong and Taiwan invested companies, especially in the Pearl River Delta. Estimates show that the ratio of average wage between FIEs and other firms is about 2.5. However, for many reasons, including probably qualification and language skills, movement from “domestic” companies to FIEs appears to be very modest - estimated at 2.6% of all job changers for the period 1996-2001 (compared to 19.6% for individual or private enterprises, 8.7% for collective enterprises... and 58% unable to find a job). Deeper examination of the subject⁹ shows that, after taking into account non-wage benefits, state-owned workers earned significantly more than workers in collective and domestic private enterprises, and that unskilled workers in FIEs earned less than their counterparts in SOEs. However, skilled workers earned more in FIEs than in all other types of enterprises.

⁹ cited by Fang Cai

REGIONAL DIFFERENCES IN WAGES
(2004 - base: 100 for national average - prefecture level)



4.3 Skills and qualifications

The last key element in understanding relationships between the labour market situation and wage determination deals with skills. Indeed, the paradox mentioned above is also related to the very significant gaps in demand and supply for skilled labour.

This is clearly stated by human resource managers on the ground and it was captured in a recent Manpower “China White Paper” under the title “The China Talent Paradox”. This document explains the acute talent shortage for middle and senior management and provides advice on how to retain staff despite this shortage and how to avoid the (current) high turn-over of such skilled personnel. A manager at one very large foreign invested company operating in more than 70 locations in China indicated that the ratio of overall labour cost between Europe and China was about 10:1 for

unskilled workers but 1:2.5 for the most senior management. We are led, therefore, to believe that there is an extremely steep correlation between wages and qualifications.

This belief is corroborated by research devoted to the so-called “return-to-education” measures, through which a relationship is established between education levels and the earnings. Until recent years, such return-to-schooling was very low in SOEs, and much less than in the other forms of enterprises. It is suggested that the increased flexibility given to SOEs in hiring and setting wages has induced a recent catch-up. However, the aggregate measures show a 37% wage premium for workers having a college degree compared to those with only a high school education, and a total 91% premium between college and primary school qualifications.

5 Outlook and conclusions

Our concluding remarks on China’s labour market can be summarised through the following points:

- The formal economy and the very rapid growth in manufacturing over the past 15 years have not prevented a large increase in informal employment and higher unemployment, notably in urban areas.
- This reflects cheap capital and high investment, but also significant imbalances in the labour market - between geographic locations, between skills and qualification, and between types of companies (notably SOE reforms and adjustments).
- These trends are accompanied by the crucial role played by migrant workers in manufacturing, construction and trade activities, with the segregation of the labour market enabling the maintenance of low wages and very poor working conditions.
- Migrant workers are predominantly young, with limited qualifications, while family ties strongly suggest a potential return to their original location in the Central and Western parts of the country or to less prosperous urban centres.
- Despite this huge low-cost labour force, wages have been increasing rapidly since the end of the 90s, pushed by lower migration, needs for higher skills, a larger presence of foreign (non-Hong Kong and non-Taiwan) companies, but also the evident labour market segregation in geographic terms.
- Demographic trends suggest that the recent past changes are likely to continue over the next few years, with rising urban unemployment and increased bottlenecks, associated with rising wages.
- On the longer term horizon, the expected decline in the working age population, coupled with the fact that the largest decline will be in the “core” migrant age group, points towards a strong likelihood of sharper wage increases. This would be compounded by a rapid move of Chinese industry towards higher valued-added activities requiring superior skills, as well as by the likelihood of new social policies towards the migrant population (towards inclusion in the “normal” labour market), and also by a possible decline in the population participation rate because of family pressures (attending to parents and children for the 35-50 year old group).
- However, such a transformation may not be sufficient to reduce unemployment, precisely because of the geographic and skill issues. A very possible scenario is a rapidly growing unemployment problem for people aged 40 and above, with younger generations benefiting from the expected wage increases.
- The translation of such a potential trend increase in wages in terms of cost-competitiveness is extremely difficult to appraise, since the rapid accumulation of capital during past decades is inducing very strong productivity gains. However, it is probably safe to suggest that the strong deflationary forces exerted by China on world markets may come to a gradual end between now and the end of the decade.

6 Key research papers

- The Chinese Labour Market, Fang Cai (Academy of Social Sciences), Albert Park (University of Michigan) & Yaohui Zhao (Peking University), November 2004
- Manufacturing Earnings and Compensation in China, Judith Bannister (Javelin Investment, formerly US Bureau of Census), August 2005
- Decent Work, Employment and Poverty Reduction in Urban China, International Labour Organisation, 2005
- Internal Labour Migration in China: Features and Responses, Max Tunon, International Labour Organisation, April 2006
- China's Labor Market Performances and Challenges, Ray Brooks and Ran Tao, IMF Working Paper, November 2003
- Migration, Labor Market Flexibility and Wage Determination in China - A Review, Zhong Zhao, Peking University, August 2003
- How to Think About China - Part 2 : The Aging of China, Peter Ghilchik and Jonathan Anderson, UBS Investment Research - Asian Economic Perspectives, February 2005