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List of Abbreviations and Acronyms:

Bureau of Labour and Personnel (BLP)

Chinese Academy of Social Sciences (CASS)

Chinese Communist Party (CCP)

Gross National Income (GNI)

Human Capital Theory (HCT)

Higher Education Council (HEC)

Higher Education Graduates (HEG)

Higher Education Graduates Employment (HEGE)

Higher Education Institutes (HEIs)

Job Competition Model (JCM)

Job Matching Theory (JMT)

Labour Market Information (LMI)

Ministry of Labour and Social Security (MOLSS)

Ministry of Education (MOE)

Ocean University of China (OUC)

Social Survey Institute of China (SSIC)

State-Owned Enterprises (SOEs)

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Chapter I. Introduction

1.1 Background context

Before 1980's Chinese higher education and labour market had no any relationship, because the graduates were assigned to the working units by government plans. Chinese urban economic reform which focus on the transition from centrally planed economy to market-oriented system provided the prerequisite to interaction between higher education and labour market. In order to adapt to the new economic system, a lot of reform measures took place in the fields of higher education and labour assignment .

Started from scratch, Chinese labour market has grown fast, and, instead of government plans, it becomes the main means to facilitate efficient allocation of labor resources, The creation of a labor market was intended to endow autonomy to enterprises to recruit, dismiss, and incite workers and introduce labour mobility, resulting in better allocation of labour in the productive system, improving enterprise profitability and reducing production costs. To do so, it was necessary to dismantle the old organization in the working units, which secured lifetime employment. Several schemes were devised in order to introduce the market mechanism. By now, a basic market structure has been set up by characterized contracting system, antonymous recruitment, relative mobility etc. However, Chinese labour market isn't the complete free and flexible one. Strong government intervention works significantly and some constrains for free employment and mobility still exist.

China's fast economic growth and social development have increased the demand for more highly skilled personnel and technological advancement in the country. The tasks of educating the leadership and generating and utilizing knowledge for her continuing development effort present major challenges to the nation's Higher Education Institutes (HEIs). Many initiatives and improvement have been made within the system in the past decades. All the reform initiatives touched the deep aspects of higher education

system as well as universities' inside managerial system. Great chances took place in various of aspects which includes the relationship amongst government, universities, and societies, managerial decisions, financial issues, academic subjects and curricula. All of these change came from the basic reason that reforms endowed universities autonomy.

Under the economic and social environment of labour market building and higher education reforming, state stopped the job allocation to Higher Education Graduates (HEGs). They had to go to labour market to find their own jobs. 'Two-way choices' happens between graduates and employing units in the labour market. Dynamic interaction between higher and labour market takes place truly in the graduate employment. The role of HEIs changed from a passive distributor to a active distributor. Labour market also plays its role in the graduates allocation.

1.2 The research problems and justification

Only a few years ago, a university degree has always meant lifetime security and status. Supply-driven higher education was never challenged by labour market. However, since late of 1992, higher education enrollment has increased rapidly. The annual average increase rate was up to 30%. The number of university students has skyrocketed. Especially, in 1999, the number of enrollment increased from 1,084,000 to 1,597,000, the increase rate is up to 50%. Consequently, 2003 grads was the largest ever---2.12 million students in contrast of 1.17 million last year. However, the labour demand didn't increase. As a result, it was reported 500,000 college students couldn't find the jobs. This serious problem draws enormous attentions. Discussion about how higher education and labour market could act properly were heated amongst educationists and economists. Various criticisms have been raised regarding the relevance of higher education to the changing labour market. It is argued that the system is still largely supply-driven and that it does not adequately prepare the graduates for employment. A massive graduates unemployment first time hit labour market. And when they eventually get employment, they increasingly find that they are not able to effectively utilize the skills acquired. After reaching the highest level in the

education pyramid, they may find that their knowledge and skills are not appreciated in the labour market. This has tended to disillusion and despair the graduates who often have very high employment expectation. While the unemployment problems and lacking of practical ability has been acknowledged, there has been little or serious efforts to get the connection between HEIs and various employers. This problem is exacerbated by the current lack of proper linkages and co-ordination between industry and higher education.

" Education has become a major source of skills and trained talent. Indeed, from one point of view, this is education's critical economic role..... In general it is true to say that the more advance economies require a far higher degree of trained skill than the simpler economies," (John Vaizay) Higher education expansion has been highlighted by Chinese institutional reform. One of higher education key roles is "cultivating advanced talent for the economic construction." Contribution of higher education to economic development was emphasized by Chinese scholars and educators. The dedication of higher education to economy is supplying the high qualified labour, so the relationship between higher education and labour market is apparently significant. Chinese higher education used to academic education and rigid government planning. When the state changed the whole economic system and institutional structure, facing the market economy and labour market, Chinese higher education presents clumsiness. Evidently, most of the scholars focus on higher education reform which make the whole education system to fit the market economic system. This paper focus on HEGs labour market. Why graduate labour market? Unlike counterpart in the developed countries, China's higher education is still elite education. Resource for higher education is very limited. Any under utilization, wrong utilization of graduates' capacity, or graduates unemployment is the serious waste of limited resources. Hence, researching the link between the higher education system and the labour market is very important to improve efficiency of the high quality labour allocation.

1.3 Objective of the research

The main objective of this paper is to present how higher education and labour market

interact in China. Aiming at critical analysis of this interaction, this paper explored the reforms higher education system and labour market separately. In the analysis of HEGs labour market, the reason of employment difficulty is explored closely. The discrepancies between HEGs and employers are presented and analyzed. The reasons for these discrepancies are also examined closely. And the function of Labour Market Information System (LMIS) is highlighted in the graduates employment market. Finally, this paper tries to give some solutions and suggestion for the relative institutions and policy-makers.

After reading this paper, the readers should understand: What changes took place in higher education system and labour market establishment and what are the problems in the process? How the higher educated graduates get a job before reform and after reform? Why HEGs find a suitable job is so difficult What discrepancies exist in the HEGs job market? What role do HEIs play in the graduates employment? What the government and HEIs should do for reeducation the difficulties?

1.4 Data and methodology

Both primary and secondary data are applied in this paper. Different issues have different source of data. In the analysis of labour market establish. The data is on the micro national level and mainly comes from national statistical year book and publications of Ministry of Labour and Social Security (MOLSS). National Labour Market report is the latest and authoritive bulletin published every quarter. Many latest data about labour market comes from this report. The data about higher education reform, which is on the national level, comes from China education statistic year book 2000 and China statistic year book 2000, which is on the individual university level, in the case of Ocean University of China (OUC). Because OUC is my working university, these data are directly borrowed from my colleges. Additionally, as a university lecturer, I participated and witnessed the process of higher education reforms in person. My professional career makes me acquainted with the higher education policy discussions.

The data in the HEGs labour market are based on the surveys. The results of three surveys are used in this paper. The first is annual graduate allocation report and questionnaire survey conducted in OUC. These document comes from Graduate Allocation Office of OUC. The second is conducted by Social Survey Institute of China (SSIC) which was published in China's Education Newspaper. The third survey is about graduates employment situation in Beijing which is conducted by Higher Education Research Center in Beijing University. These data was published in the China News Web Site.

The research methodology focus on the qualitative analysis, which mainly includes content literal description, critical analysis, and data study. Empirical evidence and analytical argument are the main tools to support the literature review. Semi-structure interview and questionnaire survey with graduates in different major in OUC were conducted to obtain the sample data

1.5 Organization of paper

Since the paper aims at analyzing the interaction between higher education and labour market and put forward to policy recommendation, it is quite apparent that the structure of paper is organized as following: Chapter one briefly introduces the research background and issues. Chapter two is the theoretical framework, in which concerned theories and literatures are reviewed. Chapter three analyzes labour market establishment and present the whole picture of current labour market. In this chapter, the changes in enterprises, the demand side of graduates, are fully expatiated. On the supply side, higher education reforms, is discussed in chapter four. Chapter five focus on the graduates labour market where presents the problems of higher education and labour market interaction. The final chapter discusses the policies recommendation to resolve the problems in the HEGs labour market.

Chapter II. Theoretical Framework and Literature Review

2.1 Human capital theory with special reference to education

HCT (Schultz and Becker,1964) assumes that investment in human capital associated with better skills, like education, improves individual's productive capacity and income. One premise of the HCT is that there is wage competition in the labour market, so that wages are related to individual productivity in job. The more educational attainment individual has, the more productive he/she would be in a job. Then the more productive an individual is in a job, the higher his or her earning will be.

However, investment in education, especially, in higher education causes large direct cost and opportunity cost. All of these costs are expected to be compensated by the future vocation. According to the rule of the higher education the higher income, high earning is one of the strongest motivation for people to pursue higher education.

2.2 The job competition model

Contrasted to the HCT, the JCM assumes characteristics of the job rather than abilities of the person determines the wage.(Thurow 1975). Employer ranks entrants candidates in a labour queue, with the lowest training cost at the top. The cost of training employee to obtain the productivities is determined by new entrants background characteristics, for example, sex, level of education attainment, working experience, age or race. Since higher education level indicate higher learning ability, then higher trainability of individual, therefore, lower training cost. Individual with higher education is put the top of the labour queue and has more possibility to be employed.

The JCM also shows that the learning ability attributed to a type of education is an important explanation of the types of jobs on the labour market. Job characteristics are highly relate to types of education. Certain job needs certain level of education which supplies the certain learning ability to this job.

2.3 Job matching theory and educational effects of job mismatches

Combining HCT and JCM, JMT developed by Jovanovic (1979) and Hartog(1987) states that productivity and earning in a job is not dependent only personal abilities or the characteristics of the job, but also dependent the combination of job characteristics and personal abilities. If person work in a job which doesn't utilize his advantages, his educated skills or personal ability will be misutilized. Therefore, his productivity is limited, and wage is less than the optimal. The allocation of worker over jobs will reach the optimal point when every worker is matched to a job in which he performs better than all other workers.

Jovanovic developed a series of mathematical models to explore the job matching in relation to educational attainment. These models 'implicitly assume that individual suppliers of labour differ in the extent to which the qualifications they have acquired during their education are matched to the requirements of specific jobs. Because of these differences some people are better qualified for certain jobs and are therefore more productivity in these jobs than other people. It is also assumed that earning are based on a person's productivity in a job. People's earning will be highest in jobs for which they have a comparative advantages' (Marke, Hans,1996)

Job mismatch on educational qualifications of school-leavers are the result of incomplete information on the abilities of school-leavers and the characteristics of jobs offered by employers. This two-sided matching game referred by Logan (1996) could achieve a better match by changing jobs or (re)-training. Job mismatches can thus be considered as a temporary position that allows a transition to a better one (Sicherman, 1991). It is obvious that education is the key determinant for job mismatch:

- First of all, education that provides more specific human capital needed to perform properly on the work floor is supposed to bring out less job mismatch. So vocational education, especially workplace-based vocational education, is assumed to have more effects on the likelihood of preventing job mismatch than general education only.
- Secondly, the relative degree to which the curriculum of the education programme provides required knowledge and skills matters this matching game. It is expected

the more a study specifically prepares students for a few particular jobs the closer will be the fit between education and employment. For example, education of medical specialty has a close link to the medical doctor, and the occupation is accessible only with the right certificate.

- Thirdly, the level of education attained by school-leavers determines the likelihood of being employed in a nonmatching job. If highly educated school-leavers are oversupplying, they may find jobs in the relative fields, but at a lower job level. Whereas the lower educated school-leavers, cannot use this strategy, because of the fewer alternatives that exist form them. Therefore, higher educated school-leavers are expected to have less likelihood of being in the mismatching jobs.

2.4 Workers-jobs assignment theory

Assigning workers to jobs is a complicate process. School-leavers or unemployed workers engage in job search, eliciting job offers until they find a satisfactory one. Employers typically interview a number of candidates for a job, seeking the most appropriate one. Difficulties of decision arise out of these activities, such as what, how, and for whom. Sattinger (1993) examined how the decisions of employers solve the assignment problem facing the economy. He also explained how assignment problem generates wage differentials and the distribution of earnings among the workers. Sattinger presented and explained assignment process by comparative advantage model and the scale of operation effect model.

Comparative advantage model explains why some assignment occurs instead of others. The reason is employers always choose the labour with comparative advantage over a certain job. Sattinger defined 'comparative advantage'(ca) through discriminating from 'absolute advantages '(aa). ca arises whenever ratios of outputs for two workers are not identically equal in every job. While aa arises when a worker is better at a job than other workers. 'The significance of comparative advantage is that a worker can still get a job even though he or she is worse at all jobs than other workers, i.e. even though absolute advantage is absent for that worker.' (Sattinger 1993)

Besides comparative advantage, scale of operations effect is another production

principle underlying the assignment of workers to jobs, because labour cooperates factor of production, like machine, in a job. Basically, more resource, in form of capital, labour or greater responsibility, are allocated to workers with greater abilities because these workers can make greater output with more resources. In turn, with greater resources, output is more sensitive to the abilities of workers, raising wage differentials for workers with greater abilities.

2.5 Labour market position of types of education

With help of human capital theory, job competition model as well as job matching model, Arents, Marike and his colleagues deduced the diverse characteristics of various types of education affect the labour market position of their graduates. They distinguished three principal determinants:

(a) the qualification level,

(b) the learning level or the occupational specificity of the qualifications,

(c) the comparative advantage.

The qualification level which graduates acquire is emphasis especially by the human capital theory that assumes the there is a wage competition in the labour market, so that wages are related to individual productivities and qualification in jobs. Learning ability is emphasized in the job competition model in which it is assumed job competition in labour market, then productivity and wages depend on the characteristics of the job. Matching models implicitly assume with different qualification they have acquired during their education some people are better qualified for certain jobs and are therefore more productive in these jobs than other people. In other words, some types of education have a comparative advantages over other types of education in certain kind of occupations. As a implication, each type of education has his own occupational domain: the set of occupations in which that type of education has a comparative advantage.

With higher investment in human capital, graduates of higher education are on the higher level of education attainment and acquire higher qualification than graduates of lower education systems. Furthermore, they acquired greater learning abilities than

other graduates, because the qualification they acquired are of a higher and more academic level. Although, these qualification may be less occupationally specific than those of vocational education, yet their learning ability will give them ability to learn rapidly and to be adaptable to a variety of working circumstances. Thus it is plausible that higher education would have largely wide and various occupational domains. With higher qualification of specific skill, graduates vocational of higher education would be than other graduates. With greater learning ability, graduates of higher education would have more opportunities to get the jobs in new had higher technology industries, because they have the comparative advantage in these domains.

2.6 Relationship between labour market and supply of education

According to C. Terlouw and J. Oosterhuis, University of Twente, the relationship education—labour market is complex and blur, because of some complicate processes exist. The key processed occur in this relationship are:

(a) absorption process: employers, the demand side of labour market, recruit the students who finish their studies. (b) distribution process: employers place the suitable position to graduates.

(c) substitution process: graduates with different level qualification push each other out of the market.

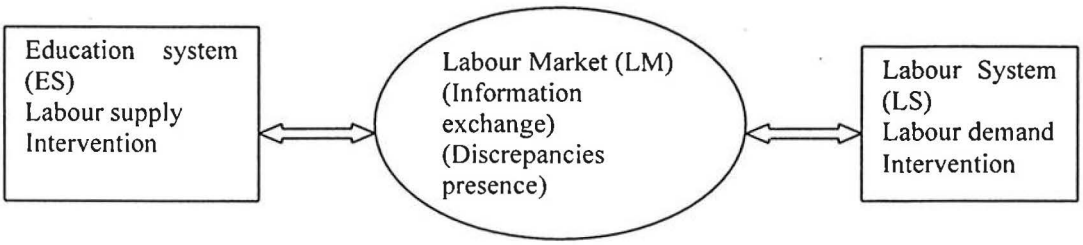
In these process, discrepancies between education and labour market present and focus on utilization problems of graduates capacities:

(1) Under-utilization: firstly, labour system cannot absorb all the graduates in the labour market. Second, because of too large supply of certain categories of graduates and relative limited corresponding position, some higher level qualified graduates can only do the low level jobs.
(2) Over-utilization: the opposite of second part of under-utilization. Besides, graduates with a low level qualification might push other graduates with high level qualification from the market.
(3) Wrongly-utilization: It is caused by the discrepancies between the yielded

qualification profiles and the required qualifications in the labour market.

Directly relating to the essence of problems describing above, C. Terlouw and J. Oosterhuis-Geers developed the University of Twente model(UT model) to explain the relationship of education – labour market. The following figure simply illustrate this relationship.

Figure1: Relationship between Labour Market and Supply of Education



This model started reformulation of the market problems in terms of a communication problem. ES and LS are the supply side and demand side of LM separately. They communicate each other in the LM. If the information from both sides isn't match, the discrepancies will present. Then the intervention will occur in both systems to contribute to reduction of discrepancies in the LM. In side of ES, for example, the departmental manager may intervene in the choice of study and in the students demand for education. In the side of LS, " a broad of a management team of an organization may intervene in the general policy, the recruitment policy, the personal policy, or in concrete terns in the personal department or in the organization of the business. This may be seen in terms of interventions in on-the-job-training programs, in management development, in creating opportunities in terms of probation, etc. these interventions may also have their consequences for a lowering in the number of discrepancies on the labour market." (Terlouw & Oosterhuis-Geers,1986)

Chapter III. Labour Market Establishment in China

3.1 Pre-market system: government planned labour arrangements

Before economic reform was initiated in 1978, China didn't have labour markets in the conventional sense. The state sector, which occupying over 90%of the total national industrial economy, held 79%of total urban employment. The rest of economy was mainly the collective sector. Urban private sector was virtually non-existent(Meng X, 2002). Under such central planning economic system, government control over every aspect of labour arrangements:

3.1.1 Employment

On the side of demand, majority of employers were state or collectively-owned enterprises and government organizations. They were not allowed to recruit freely. Every work unit was given an annual employment quota from superior government department and Bureau of Labour and Personnel (BLP). Or retired worker vacated a position. With these quotas and vacancies, employer could recruit the new employees. Supply of labour was also controlled by government. Jobs were mainly assigned to the graduates through educational institutes. people who were not graduates, the local communal offices where people registered their residency or local BLP would assign the jobs to them according to the plan of employment quota. Individuals were not allowed, and were also unable, to find jobs by themselves.

3.1.2 Promotion

In each work unit, there were two authorized status: cadres and workers. The status for new entrants were determined by the education and former status. For example, a university graduate, or a demobilized military officer was a cadre on the first day they entered the work unit, while a graduate from a high school or low level vocational school was a worker. A work had very rare opportunity to promote to be a cadre. Both

education and seniority played an important role in the determination of position and promotion.

3.1.3 Mobility

Labour mobility is highly controlled. Once assigned to a job, employee was not allowed to quit, change, or move to another job freely and working-unit was unable to dismiss unsatisfactory workers, unless the superior government department redeployed the personal. *hukou* (household registration which testifies people's or family's residence) and *dang'an* (personal historical archive which is hold by work unit) were two hardest restrictions on labour mobility. If employees moved from one city to another for working, *hukou* and *dang'an* had to be moved along with people. With the permission from former work unit and local BLP, these two documents transfer was a highly bureaucratic process.

3.1.4 wages

Wage was highly closed to the rank of position. The grade wage system had 8 distinct levels for factory workers and technicians(worker's wage ranking) and 24 levels for administrative and managerial employees (cadre's wage ranking). The wage-setting was determined by educational level and years of working. Two people both had university diploma and worked for the same years. They must have the same wages no matter the industries and their performance. But wage difference existed in different region, because of different cost of living. Wage increase were award only according to government regulations. Bonus was fixed and paid quarterly, or yearly. The incentive mainly come from the spirituals not economic rewards.

3.1.5 Social welfare

To keep wage low, most welfare benefits—such as housing, medical care, pensions, and even schooling and hospital treatment for workers' children—were provided by the state-owned enterprises as an internal social security system. (Meng X, 2002). In other words, if one has no job, he/she will have no social benefit and security, except the

disables, orphans, elderly without children etc. The working units substituted government to shoulder the responsibility of social security.

3.1.6 Critical analysis of pre-market labour arrangement system

In the labour arrangement system, workers were not motivated to create the high productivities, consequently, enterprises produced very low efficiency and output. Closing examining the system, we will find the fatal shortcomings which led to the poor performance of workers and work units.

The work units were rigidly constrained to choose, hire and fire employees, it is not easy to punish inadequate workers. Furthermore, with the fixed and rigid wage and incentive system, work units couldn't reward productive effort efficiently. Without commensurate economic reward, workers have no motive to improve productive. In this case, the link between human capital and labour productivity was broken.

The rigid labour assignment system allowed the government to allocate labour regardless of a firm's requirements only cater the whole national economic plan. In order to achieve the full employment, government could forcefully assigned labour to work units. This resulted in widespread over-staffing, and mismatch between works and jobs. Once over-staffing and mismatch occurred, work units were not allowed to correct by themselves.

Work units were burdened the social security for all workers including the retired. Since the low productive and limited resource, the in-put was invested in product must be reduced by other investment in social welfare. As a result, lower output and lower productive occurred. In turn, the vicious cycle went on and on.

Without free labour mobility, workers cannot choose jobs which many best suit their abilities or interests, a poor worker-job match may result. This may, in turn, induce shirking as the worker is not interested in the job. Therefore, human capital can be a measure only of potential labour productivity. Hence, a high level of human capital

stock does not necessarily guarantee high productivity.

3.2 Labour market establishment: changes and improvements

Since the beginning of 1980's, building Labour Market has been tightly connected to the reforms of State-Owned Enterprises (SOEs) in the context of transition from central planning to a market of economy. Along with introducing the market mechanism to allocate labours, emerging changes and improvements are focus on the following aspects:

3.2.1 More autonomy is endowed to working units for employment, promotion and dismissal

Assignment labour to job by planned quota gradually vanished. SOEs had enjoyed more autonomy in hiring workers since 1983. SOEs would carry out recruitment tests among job applicants from society at large and select the best applicants on the basis of merit. This screening introduced an element of choice at the entry point of the labour market. Since the early 1990, managers of SOEs have been given further decision-making power over personnel recruitment, promotion and dismissal. A survey conducted by the China Economic System Reform Commission in 1992 of 933 SOEs suggested that about 69 per cent of the sample firms had direct or indirect decision-making power over recruitment and about 86 per cent over dismissal. Another survey conducted by the Institute of Economics at the Chinese Academy of Social Sciences (CASS) shows that, by 1995, among 752 SOEs surveyed, more than 70 percent claimed to have direct control over employment and dismissal.(Meng X 2002) Gradually, the intermediary role of Labour Bureaus was transformed. Instead of making unified labour assignment to enterprises, Labour Bureaus began to provide the job introduction and employment direction.

3.2.2 Labour contract system breaks the lifetime employment

Labour contract is signed by work and working unit. It stipulates time of employment,

rights and obligations of employer and employee. It is the crucial legal document for relationship between employer and employee. A labour contract system was introduced to break the lifetime employment and expanded gradually. In 1983, labour contract system was experimentally utilized to cover new entrants to SOEs. Until 1994 when the Labour Law was issued, employment contract was formulated in this Law. In Articles 2, it stipulated that all employees and employing units should sign employment contracts, disregarding ownership forms. Jobs security were deteriorate, at lest in the legal way, although, the contract normally led to continuous employment and personally quitting a job resulted in a high fine.

3.2.3 Wage links more closely to workers performance

The linkage between the wage and productivity became closer. The emphasis was placed on introducing incentives to work and encouraging efficiency. Besides the basic wage which was centrally fixed, a variety of supplements, subsidies, allowance and bonus which were mainly determined by enterprise produced more and more influence to individual's income. Basic wages accounted for 85% of workers' income in 1978, this proportion declined to 49% in 1991. Meanwhile, the share of bonuses rose to 18%, and subsidies increased to 22%.(Mattias Burell, 2001). Wage reforms like "wage-efficiency linkage system", which meant that state enterprises pegged their wage bills to a set of performance indicators ended wage adjustments imposed by the central state. 'Position-and-skill wage system ", starting in 1991, focused on standardize wage distribution and wage differentials. According to individual's skill and working performance, worker was set in a level of position, accordingly got different wage.

3.2.4 Employment service system facilitates labour arrangement

Since 1979 when the first labour service company was set up in Shanghai, an enormous employment service system has been unceasingly developed, which includes job match service, vocational training system, labour market information system, unemployment insurance, support for the retired, etc. Through this system, job-hunters and employer

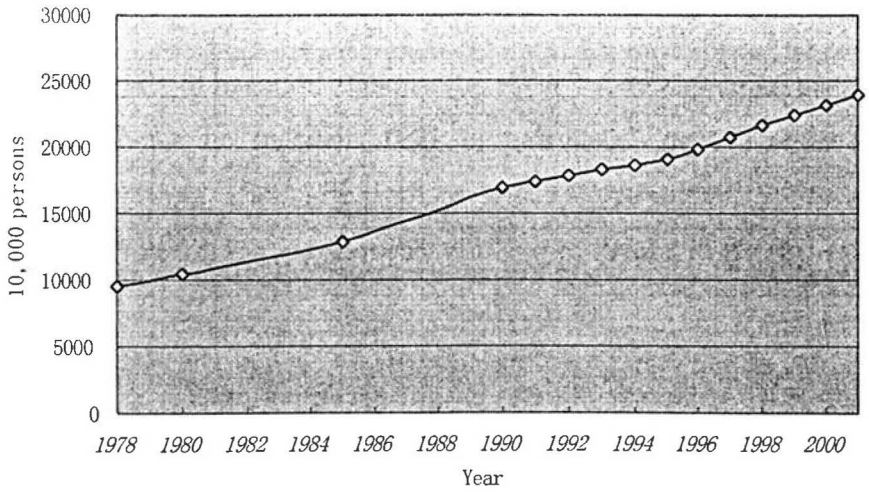
could obtain labour demand-supply information; jobless could access training; unemployed could get the unemployment insurance. The government encourages non-stated owned employment media service agencies. By the end of 2001, national total registered career service agencies were 26,793 which had 84,440staff and workers. In year 2001, 12 million job-seekers registered in these agencies, amongst which 98.8% were placed the jobs.

3.3 Current labour market analysis

3.3.1 Labour force growth and participation rate

China's labour market is the largest in the whole world. At end of 2001, the total employees in urban area was 239.4 million, which increased 7.9 million compared to 2000, (China Statistical Year Book 2001) Furthermore, During 1978—2001, Labour force growth rate in urban area presented a rapidly increasing trend. .(see figure 2) Official Chinese statistic put labour force growth at 2% annually between 1995 and 2000. Moreover, labour force participation rates are also high. At the end of 2001, china's labour participation rate was 77%

Figure 2: Labour Force Growth Rate in Urban Area.



(Source: China Statistical Year Book 2001)

3.3.2 Structure of employment

Along with decades' economic reform which focus on closing, merging, bankrupting as well as downsizing state-owned enterprises reform, employment structure on the ownership of working units changed dramatically . The state-owned and collective-owned units formerly held 80% urban employees, only employ 31.9% urban labour at the end of 2001. In contrast, the employees working in the private companies, foreign funded units, joint venture, limited liability and share-holding corporations increase at a astonishing speed. (see table 1)

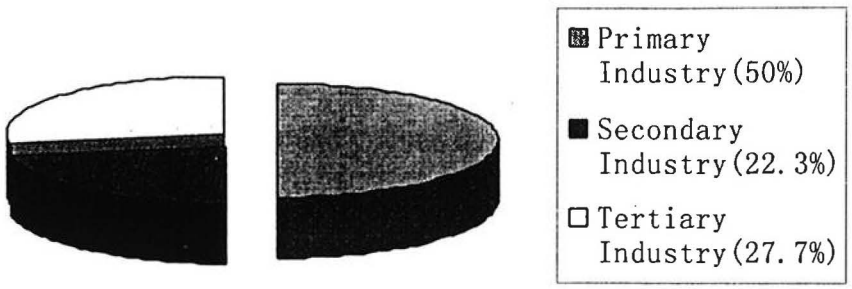
Table 1: Urban Employees in Different Ownership Units (10,000 person)

Year	1998	1999	2000	2001
Urban Employed Persons	21616	22412	23151	23940
State-owned Units	9058	8572	8102	7640
Urban Collective-owned Units	1963	1712	1499	1291
Joint Ownership Units	184	190	197	198
Limited Liability Corporations	484	603	687	841
Share-holding Corporations Ltd.	410	420	457	483
Private Enterprises	973	1053	1268	1527
Foreign Funded Units	587	612	642	671
Self-employed Individuals	2259	2414	2136	2131

(Source: China Statistic Year Book 2002)

China constantly adjust the industrial structure, the proportion of primary industry in the economy incessantly decrease, while the second and tertiary industries become stronger and stronger. As an effect, the numbers of employees also changed in the same way. Especially, in the tertiary industry, employment growth is fast. Between1978—2001,the composition of employment number in primary industry reduced from 70.5% to 50%, while the second and tertiary industries increase form 17.3% to 22.3% and from12.2% to 27.7%, separately.(See Figure 3)The increasing rate in tertiary industry was up to 127%.

Figure 3: Employment Structure by Industries



(Source: China Statistic Year Book 2002)

As far as the specific sectors are concerned, service sectors, commercial and trade, construction, transport and telecommunication service employed more and more labours (See Table 2). Whereas, the manufacturing, energy which did significant contribution to Chinese development reached a employment peak in the middle of 1990's, then went to decrease. The employment in government agencies decreased in 2001 because of the polices of reducing redundant staff to improve the efficiency

Table 2: Number of Employed Persons at the Year-end by Sector (10,000 persons)

Year	Manufacturing	Commercial Trade and Finance	Construction	Social Service	Transport Storage Post& Telecommunication Service	Government Agencies	natural resource and energy supplying
1978	5332	1247	854	1727	750	467	937
1980	5899	1499	993	1925	805	527	1003
1985	7412	2480	2035	2285	1279	799	1134
1990	8624	3101	2424	2760	1566	1079	1271
1995	9803	4648	3322	2805	1942	1042	1325
1996	9763	4887	3408	2901	2013	1093	1304
1997	9612	5190	3449	3024	2062	1093	1280
1998	8319	5053	3327	3097	2000	1097	1120
1999	8109	5175	3412	3146	2022	1102	1063
2000	8043	5113	3552	3149	2029	1104	991
2001	8083	5180	3669	3202	2037	1101	954

(Source: China Statistic Year Book 2002)

3.3.3 Unemployment

Recently, China's labour market is facing very heavy unemployment pressure which come from three resource: new youth labour, layoffs, and rural immigrant labour. During 1995—2000, urban new youth labour was 54 million, only 38 million could find jobs. Including layoffs, 30 million urban labour were unemployed. Besides, there are 137million rural surplus labour needed to move to urban. It is predicted that the average unemployment rate in urban would be 27.7% in 2005 (Zhang Weidong) In China, the official registered unemployment rate is very conservative, (see Table 3) because jobless laid-off from SOEs and collectively owned enterprises as well as unemployed rural migrant workers are excluded. By the state's policy of keeping surplus workers in both SOEs and agricultural collective, a high level of employment was sustained before reform. With moving toward to market economy, this policy was abandoned. Furthermore, structural adjustments reduces the capacity of the agricultural and manufacturing sectors to absorb laborers. Simultaneously, China is increasingly move to capital-intensive economy. This trend further limits the potentials to generate jobs, thus, make unemployment more serious.

Table 3: Registered and Estimated Unemployment Rate 1990—2000 (in percent)

Year	Registered rate	Estimated actual rate
1990	2.5	--
1991	2.3	--
1992	2.3	--
1993	2.6	3.3—3.7
1994	2.8	3.6—4.1
1995	2.9	4.4—5.0
1996	3.0	5.1—6.0
1997	3.1	6.8—7.8
1998	3.1	7.9—8.3
1999	3.1	--
2000	3.1	--

(Source: www.globalpolicynetwork.org)

3.3.4 Wages level and wage inequality

Average annual wage level has constantly increased since the labour market system is established. (see table 4). From 1991 to 2001, wages increased 8 times during this decade. Deducted inflation, the real annual increase rate was 8.1%. After reduce redundant staff state-owned enterprises have the ability to raise wages. Other ownership enterprise generally offered higher wages to attract talents, as a result, the average wage level increases.

Table 4: Urban Average Annual Wages Level (Unit: Chinese yuan[1])

Year	1978	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001
Annual average wage	615	762	1148	1148	5500	6210	6470	7479	8346	9371	10870

(Source: China Statistic Year Book 2002)

Wage disparity exists in different ownership working units, different industries and different areas. Wage difference between state-owned enterprise and other ownership enterprises is quite obvious. Especially in the foreign funded enterprises, the wage is 3 or 4 times higher than state-owned enterprises. State-owned enterprise kept their employees mainly by the life employment and the welfare security but which was deteriorated by a series of reform measures. A large number of young employees move from state-owned agencies to foreign agencies. The most attractive advantage in foreign agencies is the higher payment.

Recently, the average wage levels in emerging industries mainly controlled by state such as telecommunications, banking and insurance, and real estate have increased significantly in recent years. Because of higher economic returns and no finical burden from redundant and retired stuffs, enterprises in the emerging industries could offer much higher payment than other the traditional manufacturing industries.(see Table 5)

Table 5: Wage Discrepancy by Industries: (Unit: Chinese yuan)

5 industries with higher wages		5 industries with lower wages	
Scientific Research and Polytechnic Services	16437	Farming, Forestry, Animal Husbandry and Fishery	5741
Finance and Insurance	16277	Wholesale and Retail Trade & Catering Services	8192
Electricity, gas and water supplying	14590	Construction:	9484
Transport and telecommunication service	14167	Mining and quarrying:	9586
Real estate trade	14096	Manufacturing	9774

(Source: China Statistic Year Book 2002)

Wage disparity between rich province and poor province is the main inequality in China's labour market. With high level human resource, better infrastructure, stronger economic basis, as well as the preferential policies, coastal regions developed rapidly and attracted more investment, supplied more job opportunities, then entered a virtuous cycle. While the west inland area presents the opposite situation. Table 6 shows the wage difference between the poor and the rich. Although, government reduces this inequality through inter-regional fiscal transfers from rich to poor province, the discrepancy is still getting bigger and bigger.

Table 6: Wage Discrepancy by Regions. (Unit: Chinese yuan)

Rich provinces		Poor provinces	
Shanghai	21,781	Henan	7,916
Beijing	19,155	Anhui	7,908
Zhejiang	16,385	Jiangxi	8,026
Guangdong	15,682	Shanxi	8,122

(Source: China Statistic Year Book 2002)

3.3.5 Government intervention

China's labour market cannot be regarded as the free market system. Some Chinese scholars estimate that China's labour market is only at most 2/3 of free market. Because of the strong government intervene, it has the characteristics of "semi-governmental institution plus commercial behavior". Ministry of Labour and Social Security

[1] 1 yuan = 0.12 $ U.S.

(MOLSS), National Trade Union, Chinese Enterprises Association represents government, workers and enterprises separately manage the labour market operation. However the later two always follow the policies and strategies from MOLSS. Besides laws and regulations, other official documents are frequently delivered to institutions and enterprises to intervene decision-making. For example, although, wage is claimed to be set on a negotiated basis, yet "guidance price for wage" and "standards for raising wage" are generally set by provincial or municipal government to control wage raising and wage inequality.

Chapter IV. Higher Education Reform in China

4.1 Evolution of China's higher education

Modern higher education is quite young in China; it is started in 1895 when the first modern university was established. From that time to 1949 when People's Republic of China was founded by the Chinese Communist Party (CCP), the higher education system basically imitated Japanese, European and American models successively. After 1949, higher education evolution can be divided into four phrase:

1949—1966: In this phrase, the pattern of higher education was changed from the western model to the Soviet Union model. All HEIs were nationalized. The comprehensive universities were taken back to the Ministry of Higher Education. The specialized colleges were under control of the corresponding national ministry for instance, Ministry of Hygiene took care of all medical colleges. Government completely financed and planned higher education.

1967---1976: Higher education virtually died of political movement of Cultural Revolution. During this decade, modern knowledge was regarded as heresy and was depressed. Although 328 institutes and 83,000 students still existed(www.h-edu.com), yet higher education was retained for political objectives. No serious scientific

knowledge was taught.

1977---1991: This phrase can be regarded as convalescence period. Since China rehabilitated the entrance examination to college in 1977 and the degree rewarding in 1981, higher education has been revitalized. Compare with the first phrase, higher education system didn't change much. Soviet Union model still played the dominative role. Since economic reform and open-door policy in 1977, well-educated labor had been needed badly for the demand of fast economic development. As a result, higher education went through an process of expanding scale, upgrading curricula and improving teaching and researching. It was noted that changes and reforms in this phrase were quite conservative and cautious.

1992---Now Along with various preferential polices, interim provisions, as well as new laws and regulations, universities and colleges have been going through a series of bold and drastic reforms that involved all aspects of HE. The overall objectives of higher education reform are to smooth the relationship among government, society and HEIs, setting up and perfecting a new system in which state is responsible for the overall planning and macro management while HEIs follow the laws and enjoy the autonomy to provide education according to needs of the society.

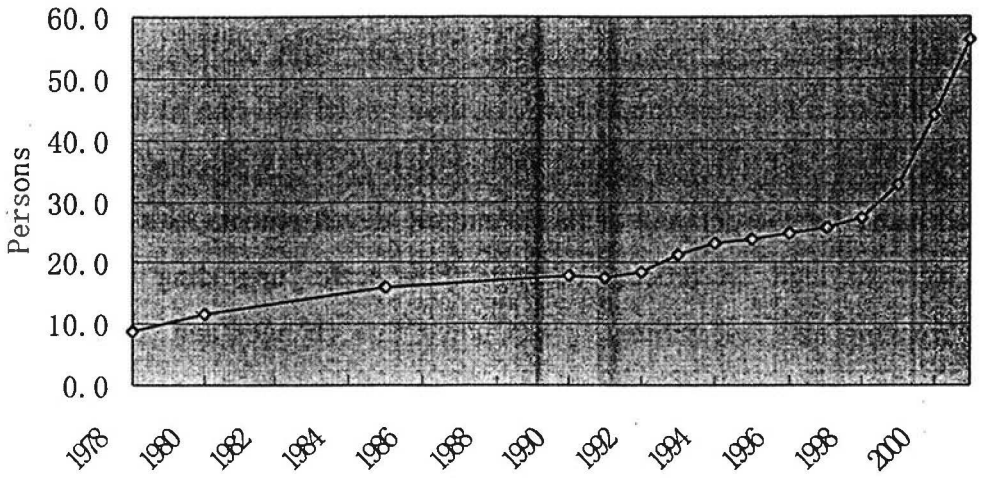
China's higher education presented a trend of rapid development and expansion in this phrase. Up to 2001, there were 1225 higher educational institutes composed of comprehensive universities and specialized colleges (see table 7) The number of students increases every year. The proportion of the students in the total population rises radically (see Figure 3) In 2001, 7,191,000 students were enrolled, among which 1,306,000 postgraduate students.(China Statistic Yearbook 2002)

Table 7: Number of Higher Educational Institutes by Types (2001)

Total	Comprehensive universities	Science and engineering	Agriculture	Forestry	Medical	Teacher training	Linguistics
1225	91	231	42	6	96	210	15
	Economic and finance	Politics and law	Physical culture	Art and perfor-mance	Minority nationali -ty academy	Vocationa l colleges	
	65	28	14	29	12	386	

(source: China Statistical Yearbook 2002)

Figure 4: Number of University and College Students amongst per 10 000 Population



(Source: China Statistic Year Book 2002)

4.2 Background: higher education and economic development

China's growing stature as a global power has accelerated since the government's shift from isolationist, politics-oriented policies to open door , economics-oriented policies. This shift was accompanied by major reforms in higher education, which was ascribed a key supporting role in the drive to modernize the nation.(China: Higher Education Reform: A World Bank Country Study)

The adoption of a new economic model, which involved a change from planned economy to socialist market economy, had important implications for higher education. In a planned economy, critical economic processes are largely determined not by market forces, but by a central economic planning body which implements society's major economic goals. A market economy, on the other hand, manifests extensive private ownership of capital and allocates goods and service by the price mechanism with government supervision, in the absence of omnipresent government intervention. This latter type of economy is characterized by volatility, competitiveness, openness and information network, it requires a large supply of trained professionals and technical personnel who are practical, flexible, versatile, international and innovative.

Since the market fluctuates quickly according to the principle of supply and demand, the society constantly needs people who are well-trained in a certain specialty or a combination of specialties quickly. A market economy not only requires trained personnel speedily, it also needs a large number of them.(Agelasto and Adamson,1995)

Chinese HEIs play two roles in sustaining economic growth rates and facilitating socially and environmentally responsible development in the country. First, they prepare citizens to fill high-level scientific, technical, professional and managerial positions in the public and private sectors. Second, in their capacities as repositories, generators, and communicators of knowledge, they underpin internal technological advancement, particularly in transforming research and development results for industrial productivity, and provide access to and adaptation of ideas from elsewhere in the world. Higher education in China played the unique role of supporting the modernization drive through developing the requisite human capital, as articulated by the CCP in 1985:

"Education must serve socialist construction, which in turn must rely on education. Our massive socialist modernization program requires us not only give full rein to the skilled people now available and to further enhance their capabilities, but also to train, on a large scale, people with new type of skill who are dedicated to the socialist cause and to the nation's economic and social progress into the 1990s and the early days of the next century. " (Editor's Introduction, Higher Education in Post-Mao China)

4.3 The reform agenda of higher education

In the final quarter of the twentieth century, the nation's reforms in higher education have progressed in leaps and bounds. Since 1978, the Chinese government has placed priority within the education sector upon rapid expansion and improvement of higher education to help reduce the serious human resource constraints on the country's economic and social development. In 1985, the government adopted the document *Decision on Education Reform,* which aimed at providing the mix of skills of a rapidly changing society; to improve efficiency, quality and equity; and to release resources

required to develop an enhance education at lower levels. In order to speed up nationwide transformation from a planned economy to a market economy, the state council and the communist party jointly issued the *Guidelines of China's Educational Reform and Development* in February 1993 advocates changes at two levels: chiefly, governmental policy and institutional practice. The major strategic approach is that of decentralization in institutional management and administration while maintaining managerial oversight at the macro level. Devolution of power and responsibilities to institutions has brought new challenges to the higher education sector. In 1997, the State Educational Commission distributed a series documents aiming at endowing more autonomy to HEIs. (Higher Education Reform: www.h-edu.cn)The milestone of past years' reform was the new Higher Education Law which was formally implemented in January 1999. This law not only stipulated the previous reforms measurement, but also provide more freedom to HEIs and administrative agencies. The autonomous rights of HEIs expended further with regard to admissions, the elaboration of special studies, setting up of administrative structures, appointments and dismissals, the use of funds, job evaluation, remuneration policies and international cooperation and exchange, etc. In the following years, reforms were around the purpose of this new law: devoting major efforts to developing higher education, thriving the country with development of education and technology. Changes and innovations took place during the process of reforms in various of aspects.

4.3.1 Reform of higher educational system

The reform focused on the relationship among universities, government (central and local) and society. This relationship was gradually smoothed out by ways such as joint establishment, adjustment, cooperation and merger. Since 1992, 251 institutes have been merged into 135, with the decrease of 116 institutes. And 87 adult higher educational institutes have been adjusted into regular higher educational institutes. 177 institutes have taken part in the joint establishment, among which 43 are affiliated to the Ministry of Education, 44 to other Central departments, 90 to local governments. The joint establishment have five forms joint establishment by provincial government and central departments, by municipality and central departments, by provincial

government and municipality, by provincial government, municipality and central departments and by central departments. By early 2000, the administration of over 400 universities has changed hands from the Central government ministries to some form of co-administration . some institutes which used to be administrated by provincial professional departments are now under the administration of provincial education committees. 317 institutes have developed inter-institute joint education provision and establish 277 cooperative education provision entities. Among the participating institutes, 43 are affiliated to the Ministry of Education, 140 to other central departments and 134 to local governments. 241 institutes have cooperated with 5218 enterprises to provide education with various forms.(Min Weifang, 2002) With enterprises, enterprises groups and research institutes taking part in higher education provision, the relationship between institutes and society is strengthened. After this reform the role of central government shifted from providing education with overall planning and management to making the relative laws and regulations. As a result, the overlapping of education was overcome, At the same time, the government streamline their administration and delegate more power to the institutes, expanding their autonomy of providing education for the society according to the laws.

4.3.2 Flexibility of admission and enrollment

Before 1992, central government formulated the higher education admission and recruitment plan, which included (a) the number of total students enrolled and recruited, (b) recruitment quota for each sector and each province, (c) the distribution of student enrolment by field of study, and (d) institutional enrolment quota by discipline and specialty. With reforms, institutes had more autonomy on recruitment. Although the quota from state plans still exists, the enrollment rate increased sharply and institutes could recruit a limited number of students so-called "self-paid" who are supposed to pay the tuition covering the full expenditure. Correspondingly, the students recruited as the state plan are called "planed" students. It is noted that the only standard for admitting new students is the marks of Entrance examination to college given by MOE, except for very rare case of distinguish students recommending from high school without entrance examination. MOE announces the

certain marks for entering all kinds of universities and colleges. But the "self-paid" students, university can admit them with the lower standard. Even though, these "self-paid" students can obtain the same diploma as "planed". But when they hunt jobs in the labour market, their "self-paid" identity is indicated in the formal university recommendation document. This causes the discrimination to them in the labour market. Besides enrolling the degree students, HEIs have more autonomous right to enroll the non-degree full-time students as well as part-time students. Through the flexible admission and enrollment system, more and more people can access higher education which was only accessible for a few elite young talents. This is one way to popularize higher education.

4.3.3 Diversification of financial mechanism

As discussed before, the number of students expanded very fast, the old funding system which only depended on state appropriation could not keep up with the growing costs. A new system is establishing to pool resources from diverse channels with the main responsibilities on government. Systematic reform in financing higher education was implemented including these elements:

First effort has been made to change the structure of government spending in favor of education. In late 1990s, A decision was made in late 1990s that the rate of increase of appropriation to education at all governmental levels should be higher than the rate of increase of their revenue. The unit allocation per student should be increased, and teacher salaries and non-salary per student allocation should be increased for teaching and learning purposes. The central government decided to increase its allocation to education by one percent of its total budget higher than previous year continuously for five years from 1999 to 2002.(Min Weifang, 2002)

Secondly, Tuition and fees charging can be regarded as one of the strategies to lessen the current financial difficulties. Formerly, government provided free HE and stipend of accommodation and food for students. Since the relative policy made in 1992, more and more tuition and expenditure has been charged, from firstly partial charge, say,

20%, to now full charge. The average annual tuition increased from 550 yuan (about 60 euros) in 1992 to 5000 yuan (about 550 euros) in 2001 (www.h-edu.com). Along with the increase of tuition level, at present, about one fourth of total operational budget of Chinese higher education institutions comes from tuition. Simultaneously, a scholarship system for excellent student both academically and morally and a loan, stipend and taking part-time jobs system for students with family economic difficulties has been brought into common practice.

Third reform in financing higher education is to allow universities to take their human capital advantage and the advantage of science and technology to generate revenue by themselves. This is one of the promising strategies for increasing resources to higher education. The revenue generated by universities themselves increased remarkably since 1985 when higher education institutions were given autonomy to do so. Universities could generate funds by research contracts with industries, by technical consultation for enterprises and communities. Universities could also generate revenue by providing commissioned training and educational service for industries, and mobilize resources through fund-raising activities.

4.3.4 Development of non-state higher education

In recent years, non-state higher education is undergoing a rapid development. By 2001, there were 1,277 non-state HEIs, hosting1.5 million students (www.h-edu.com). This situation indicates that China has already shifted from state monopoly to a multiple suppliers. However, a closer scrutiny to Chinese non-state higher education found out that the strategies adopted by Chinese leadership aimed at creating more educational opportunities in response to emerging market needs and relieve the financial difficulty of the state to provide people with free education rather than to make a fundamental shift of value orientation towards "public choice" ideas. So the non-state HEIs are only used as a complement to the public counterparts. They deliberately differentiate themselves from state-funded HEIs by specializing in practical skills training and "market-driven" courses. Higher vocational education is almost the universal choice among non-state HEIs. Foreign language, computer training as well as other practical subjects which are suppose to be popular in the labor

market are main courses supplied by these institutes. In this way, their graduates in the labor market isn't competing with their counterparts from public universities, but their complement to meet market needs for the lower-level employment.

Chapter V. Higher Education Graduate Employment in china

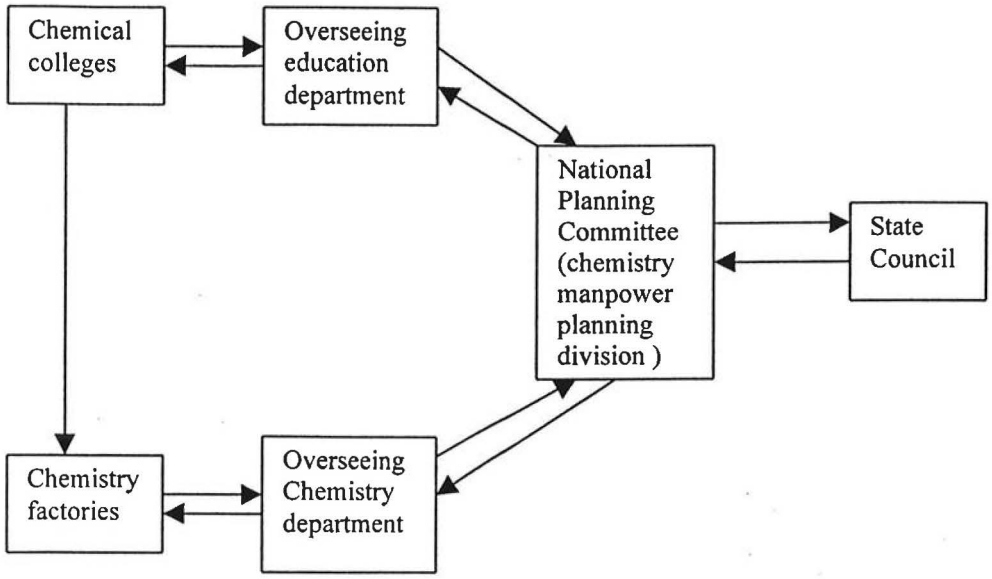
5.1 From planned graduates allocation to tow-way choice

As China moves away from a socialist redistributive economy and towards something that resembles a market-driven system, many aspects of central planning are being replaced with market mechanisms. As far as Higher Education Graduates Employment (HEGE) is concerned, the planning process controlled the placement of university graduates into jobs with state-run firms or governmental bureaus is replaced by a system that pushes graduates and employers into market to make two-way choice or mutual selection. This is a long process which takes 25 years to abandon the control of central planning, and the transition of marketization is continuously evolving.

5.1.1 Old system: Planned graduates allocation

The early form of planned graduates allocation started in 1952, when Chinese Communist Party had sufficiently consolidated its power and established its rule over country. Allocation of a graduate to a job was on the basis of the national planning. Take chemical college as a example, the procedure of graduates allocation is showed as the following figure:

Figure 5: Government Planned Graduates Allocation Procedure:



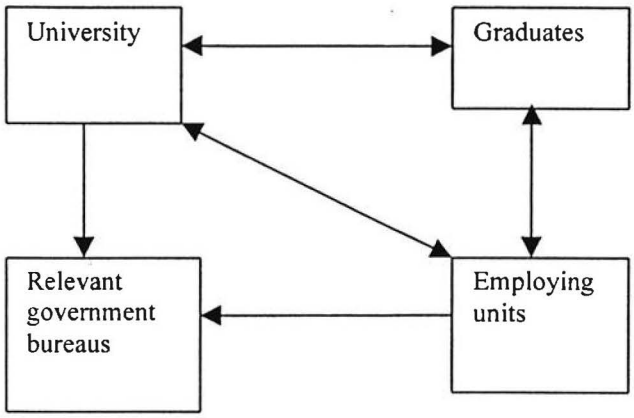
The year before students were to graduate, local universities and colleges reported to their overseeing educational department the graduates data like age, gender, hometown, etc. The educational department then reported to the national planning committee. On the other hand, local work-units reported to their overseeing department on their needs for students and these data got reported up to the state planning committee. These tow relevant reports were presented to the relevant division, in this example, chemistry manpower planning division, to consider and develop a draft for state council approval. When settled, quotas of employee were distributed to local level against the formal direction. After getting the approval, colleges decided assignments according to the quotas and students' situation. And working units prepared to accept the graduates sending from colleges.

In this process, HEIs and employers were separated by governmental plans and documents. Employers couldn't recruit the graduates according to their own requirement and standards, while the graduates couldn't chose jobs as they wanted. Because of the extreme scarcity of higher educated graduates, only few of big state-owned enterprise or other important public working units which were supposed to be contribute the socialist construction most could receive the graduates. Also with this strict plan, some graduates were dispatched to some arduous industries and remote undeveloped districts, in order to avoid the imbalance of regional development and industrial development.

5.1.2. New graduates employment: two-way choice/ mutual selection

China abandoned the graduates allocation system that suited to the planning economic system. It did so because there was general agreement that graduates allocation did not fit appropriately into the concept of market economy that was being developed. The new procedure of dispatch graduates presents like this:

Figure 6: Procedure of Dispatch Graduates under Two-Way Choice System



When the last term year starts, universities make the graduate recommendation in a pattern of form with official stamps. This recommendation form was regarded as the certification of students identity and quality. A complete set includes: students personal data, curriculum vitae, comment from professors, chair of department as well as president of school. With these comments plus resume or other document papered by students themselves, students contact employing units.

The connection between students and employing units are gotten through in many way. First, employing units contact universities actively and inform their requirement for graduates. Office of graduates allocation is responsible for publishing the information of various employing units. Students can freely contact these units. Second, every year all kind of fairs for students and employers meeting, so-call "supply-demand meeting" are held in Chinese key cities. These fairs have different scale: some are organized by

university and held in the campus, some are organized by local government and supplied the chances for local enterprises to attract talent students from all over the country, some are organized by individual industry department and aimed at to help the relevant majoring students. All these fairs provide the stage for the meeting of labour supply and demand. Third, the media plays its important role in this campaign. Job advertisement and information in the paper and magazine has become the undergraduates' favorite. Fourth, the internet shows its strong patient more and more to disseminate labour market information. The special public web sites issue the labour market information for new graduate recruitment on free. Almost every province and city has its own web site especially for graduate employment. The last but very important is the graduates family connection to the employing units. With family connection, finding a good job successfully is most possible. So students with strong family background, they are never worried about employment.

After interview, if both graduates and employing units are satisfied each other. A employment contract will be signed. Then the universities send the students to employing units. Both of universities and employing units will report to their relevant overseeing bureaus about this year's graduates arrangement and recruitment situation.

So in the new system. Universities, employing units, and Graduates connected closely and actively. The two-ways arrows in figure 6 present the communication of information and the interaction of these three. On the contrast, the bureaucratic relationship between university and overseeing education department, as well as employing units and their overseeing department became loose, because the plans and quota system collapsed. The overseeing departments in this field lost their authorities. However, they still oversee the whole process. With the feedback information from the official report, they suggest the central government to make policies in correct direction. In turn, these policies will direct and guide the concerned agencies to improve the whole process.

5.1.3 Comparative analysis of the old and new system

Graduate-job allocation was seen as suitable for the Chinese development in the planning economy. And it played an essential role in meeting the special needs of the country's key construction projects and the remote regions. But in the reality, its inherent drawback caused a lot mismatch between supply and demand.

5.1.3.1 Drawbacks of planned graduates allocation

First it isolated HEIs from society and separated the supply sides and demand sides. No connection between HEIs and employing units. No interview between graduates and working units before graduates were dispatched to the working units. Not allow employees and employers to choose each other results in mismatches. As far as students are concerned, they didn't use what they studied in their jobs. Mismatch was illustrated by the oft-told anecdote of the nuclear physicist who must serve as a secretary in a factory because that was where she was assigned. However, once assignment occurred, the system did not allow any corrections. Abidance of the allocated jobs was prized as a virtue. Moreover, once-in-life employment made and shift of jobs highly unlikely. Without any contact to society, HEIs didn't care the needs of society. Mismatch also present between curricula and the skills needed. An extreme example occurred in a particular chemical specialization where demand for graduates was 71 times the available supply.

Second, job allocation decisions were made by bureaucrats without any economic knowledge. Distribution of educated personnel focus on national political needs regardless of employers requirement. For example, during 1950's in order to contend with capitalism world, steel industry is regarded significant to military force. Many graduates were allocated to this industry to develop it rapidly regardless of their specification or inclination. Geographical balance was also very important factor to decide distribution of graduates.

Third, job allocation offered extreme job security for graduates, because of the scarcity of higher educated graduates. Normally, graduate were distributed to the key working units like large state-owned enterprises or government organs that supplied high job security. They had no authority to dismiss employees. They seemed never to be

bankrupt with the strong national support. University graduates' were called "God's favorite sons" without any worry about employment. As a result, they had no any sense of competition. They didn't care diligent studies and professional knowledge. This point made a great negative influence on the efficiency and quality of higher education.

In short, the major problems caused by planned graduates allocation focused on inefficiency, participants' irresponsibility, and lack of competition. This system was found bureaucratic and chaotic in the new marked- oriented system. Thus, it was hardly surprising that reform was welcomed.

5.1.3.2 Improvement in the new system

Improve efficiency through flexibility:

Once students got jobs they were just like paired birds--- mated for life. This rigidity caused considerable inefficiency, including working unit overstaffing and employee-employer mismatch. Talents were being wasted in this system. Graduates were not able to use their acquired skills on their jobs. HEIs were turning out graduates in specialties that were no longer needed by society. (Chen Kaiming,1986) Now, students contacted work-units directly, they would get the better idea how to evaluate themselves. A new principle is employed: "good students better use." Better match between specialty of study and job would result because jobs deal with specialty of study and have a better chance for promotion.

A formed market require labour mobility and graduates would be versatile. The reformed system was intended to develop, not impede, students' creativity and spirit by treating them as individuals. The concept of flexibility also extended to the university curriculum which were seen as too specialized, a hold-over from the Soviet-inspired era. Allocation hampered the market's ability to influence course content and it prevented education from meeting society's needs. Many majors were outdated and required adjustment to meet the needs of the market. Students often enrolled in their major "blindly" and the education they received paid too much attention to theory, too little to practical applications. In other words, graduates were "unable to use their hands", not employing what they had learned. Teaching only emphasized book-

learning and students lacked broad knowledge. Two-way choice introduced the invisible hand of the market to control labour flow. Implementing these reforms generated closer relationship between HEIs and the workplace. Feedback information from workplace would impact arrangement and content of curricula. And then the students cultivation would be under market orientation.

Improve responsibility through accountability:

The state was fully responsible for designing and executing job allocation, and the tree major participants--- HEIs, students and employing units---- had little more to do than to follow directions. They were dependent on taking orders from higher authorities. Job allocation bred irresponsibility and the reforms created a system which required the participants to be responsible for their actions. Thus it would produce accountability.

Under the old system, HEIs were not responsible for judging the relevance of their curricula against the needs of society. Teaching quality was never examined. In contrast, two-way choice put burden on the tertiary institutions to adjust their majors to society's needs. Given the reforms that provided tertiary institutions with autonomy, institutions could move from being "closed " to "open". They could decide on their own how many students should take particular majors and could determine the length of training. Tertiary institutions would become accountable. Good institutions would get good students. Bad ones would not able to survive. (Michael Agelasto, 1995)

Employing units were not required to be responsible under allocation because they had to passively accept assignees, and they often had no choice but to put them in inappropriate position. Once the position arranged, they had no authority to shift or dismiss these assignees. Employers were also unsuccessful in inducing the labor force to be productive. In the new system, companies will hire according to need and select candidates with their own standards. On the other hand, they have to compete with other employers for the most talented graduates. Now, they have the autonomy to select personnel.

Students, especially, became dependent, not active. Getting into university meant

automatic allocation to a job. Students didn't need to do well in their studies. Permitted into university was very difficult, the entrance examination was highly competitive. High school students studied extremely hard to got the admission to university. Once they entered university, it meant they could be relieved and no need to worry about the future. They strove themselves only for passing mark, since jobs were not allocated on the basis of achievement, students lacked motivation and were under no pressure to perform well. In the new system, students were pushed to face the elections and they were prodded into being active. The principles of "good graduates better jobs", "passive graduates even no jobs" are enacted in the process of two-way choice.

Improve equity through fair competition:

Job allocation prevented the competition amongst the principle participants. It had lacked competition. Graduates were wanted everywhere, like an emperor's daughter who never had to worry about getting married. The reforms created the possibility for students, employers, and tertiary institutions to compete their counterparts. Through the continued forces of competition, the best students would go to the best university, where they would study the most popular subject. They would be likely chosen by the best work-units through the fair competition of a job market. Thus, students would compete among themselves to be the best. Work-unit would compete to gain the reputation as the most desirable place to work. In the same vein, HEIs could take advantage of the competitive environment to improve teaching quality to attract more applicants. Feedback from work-units would allow HEI to improve their curricula more suitable for labour market's needs.

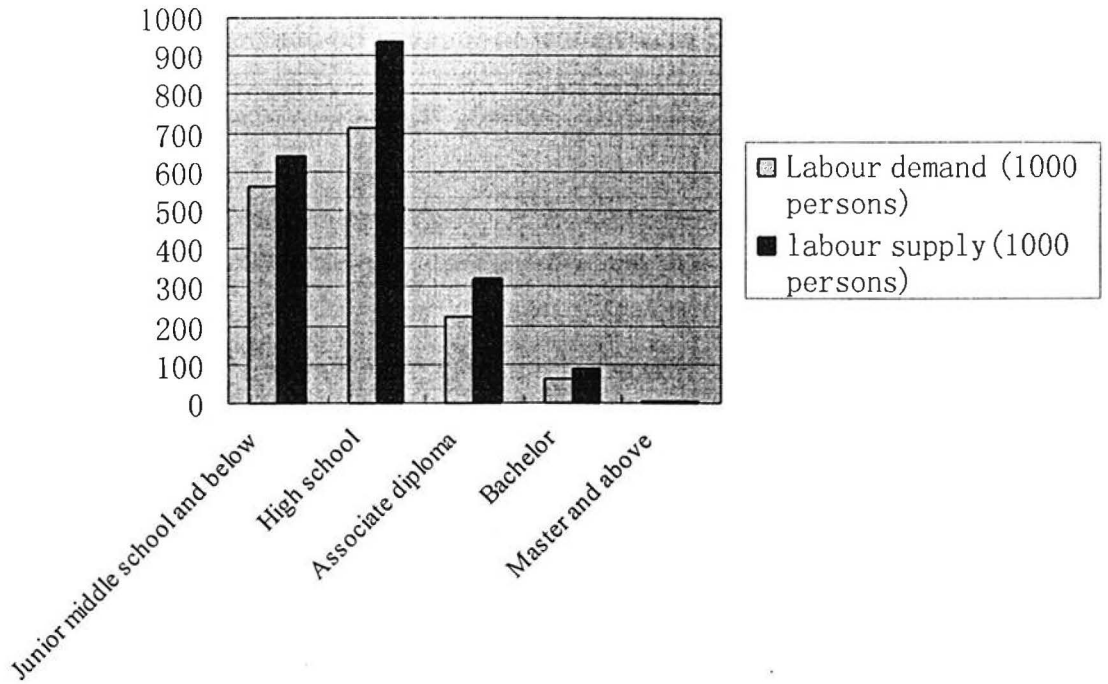
These three propositions---that the new system would ensure efficiency through flexibility, responsibility through accountability, and equity through fair competition---are the crux of the initiatives. However, in the reality, Chinese labour market system is not yet developed. Fair competition is not yet to be achieved either. The reform is still in the process and will continuously improved.

5.2 Insight Into Higher Education Graduate Labour Market

5.2.1 Basic problem: employment difficulty

Interaction between labour market and higher education is represented fully by Higher Education Graduates (HEG) job market. Chinese HEGs had been under the insufficient supply all the time. But in the year 2003, the press of employment for HEGs struck the whole labour market. This year is the first year to face the fresh graduates from the biggest enrollment expansion. The number of graduates was 2.16 million which is unprecedented growth. Compared to 2002, the increase is 1.17 million (Mo Rong 2003). As development of education, education level of labour was raised generally. Education advantage of college students is not so obvious. According to the data from National Labour Market Report in the second quarter of 2003 based on 89 typical cities that are distributed all over of the country, the labour market situation is very rigorous. Expect for Master degree and above, all other labour supply exceed demand, (see figure 7). It is worthy to notice that labour of lower education level like junior middle school and high school even easier to find a job with demand and supply ratio of 0.98 and 0,86 compared to 0.79 and 0.81 of associated diploma and bachelor.(see table 8)

Figure 7: Labour Supply and Demand by Level of Education



(Source: Labour market report the second quarter of 2003) (MOLSS)

Table 8: Labour Market Analysis by Level of Education

Labour by level of education	Labour demand (1000 person)	Demand proportion	labour supply (1000 person)	supply proportion	Ratio of demand and supply
Junior middle school and below	563	31.7%	641	32%	0.98
High school	713	40.2%	940	47%	0.86
Associate diploma	222	12.5%	322	16.1%	0.79
Bachelor	64	3.6%	91	4.5%	0.81
Master and above	6.6	0.4%	6.3	0.3%	1.14
No requirement	206	11.6%	na	na	na
Total	1,774	100%	2,000	100%	0.89

(Source: Labour market report 2003) (MOLSS)

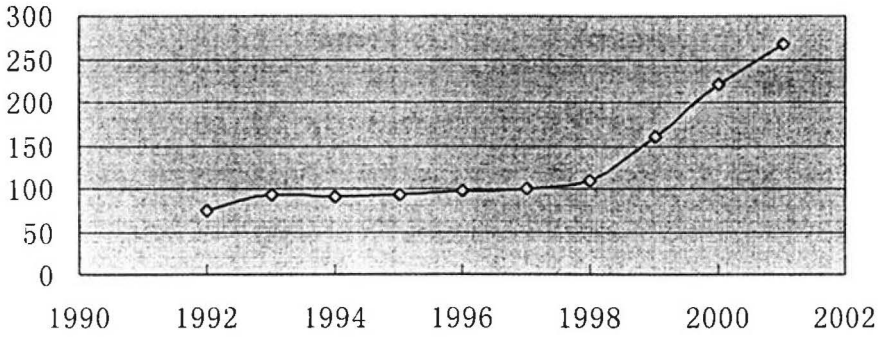
Used to secure job allocation system and preferential treatment from employing units, HEGs feel the crisis in the job market. It was the very common scene in the supply-meeting-supply fair hundreds of application were submitted for one position. HEGE met the unprecedented difficulty. By the end of June when graduates employment arrangement should be settled down, rate of signing employment contract(qian yue lv) was only 50%. Compared to over 90% employment rate at the same period in the former years, this year's HEGs employment problems caused enough attention from society. The left unemployed graduates continued contact employers or start the temporary jobs.

5.2.1.1 Should be Enlargement of enrollment blamed?

The media argued that HEIs should be blamed for enrolling too much in 1999 which is regard as the direct reason for employment difficulties. The expansion of admission issued in 1999 which marked the increase rate of enrollment of 50% which has never

been reached before. The number of new students increased half million. (see figure 4) Both scholars and correspondents analyzed that supply of HEGs excesses the decreased demand from society. Complain came both employers and graduates that there isn't sufficient position for HEGs.

Figure 7: Enrollment of Higher Education (10,000 persons)



(Source: China Statistical Year book 2002)

Are Chinese HEGs really over-supply? Chinese HE enrollment rate is 15 %, while US is 82%, other developed countries like Japan, U.K or France is more than 60%, some developing countries, like India or Philippine is even about 30%.Compared to the world average HE enrollment of 17.8%, Chinese enrollment rate is relative low. The other indicator, the proportion of HE labours in the total employees is also low in China. Amongst Chinese employed population in 2000, who have above higher school diploma took up 18%, who have above associated colleges diploma only occupied 5%. As a contrast, the same indicators in the OECD countries are 80% and 26% separately (Data comes from http://www.zju.edu.cn). Obviously, Chinese higher education labour is far more insufficient than surplus.

If these students had not been enrollment in HEIs, they would have gone to labour market 4 years before. Enrollment enlargement didn't increase the total amount of labour supply, but improved the quality of labour. These high qualified labour has more flexible and broader choices. Furthermore, Chinese economy is transferring from labour-intension to capital and tech- intension, the demand for skilled labour increase constantly, while the diminishing demand for unskilled labour is inevitable.

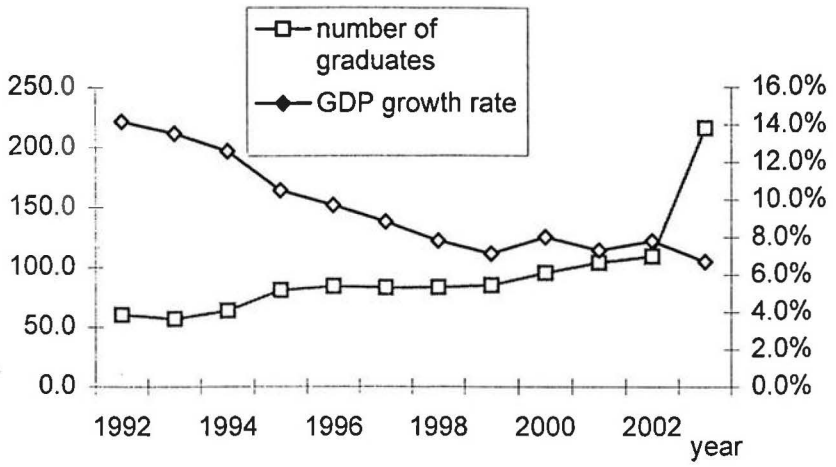
Enlargement of higher education scale just meets the demand of economic growth. It is true that, in short term, abruptly increased HEGs produced pressure to the labour market. But this pressure doesn't come from not enough jobs for graduate, but from not enough jobs which employers think suitable and graduates feel satisfied.

5.2.1.2 Should be slow-down economic growth blamed?

Since 1992, Chinese economic growth speed has been slowed down. From 1992 to 1999, the economic growth rate decreased continuously, the figures was 14.2%, 13.6%, 12.6%, 10.5%, 9.7%, 8.8%, 7.8%, 7.1% separately. In order to reduce the high pressure of inflation, government took several measures to slow economic development. With reduced public investment, tightened financial police, downward household consumption expenditure. Chinese economy "soft landed"[2] successfully. Too hot economy cooled down. In 1999, the most serious problem that impeded economic growth was regarded as lacking of efficient investment demand. In order to resuscitate economic growth, government took several measures to stimulated domestic expenditure and to increase the efficient demand. As a result, there were two little leap in 2000 and 2002 with growth rate of 8% and 7.8%. Under the influence of depressive global economy in the first couple of year of the new century, Chinese economic growth rate kept under 8%. But in the first half year of 2003, SARS attacked the whole nation. Foreign trade, foreign investment and service industry were impacted negatively. The domestic demands went to very low level. By the end of the third quarter of 2003, GDP growth rate was only 6.4%. But at this moment, doubled graduates were pouring in the labour market. The difficulties in employment was not surprising to be noticed.

Figure 8: Number of Higher Education Graduates and GDP Growth Rate

[2] Soft-landing refers to economy developed with high growth rate but low inflation.



(Source: China Statistical Year book 2002)

According to the research of Institute of Population and Labor Economics of the Chinese Academy of Social Studies, China's GDP growth has managed to create new jobs in urban areas at an average rate of 3 percent. This economic growth can enable 8-10 million people to be employed every year. So the 2.16 million college graduates a year should be no trouble to find work. But the problem is whether the new jobs created by economy are suitable for HEGs. Requirement of majority of jobs are lower than ability of HEGs. This is why labour with lower level education, instead of HEGs, is needed more (see table 9).

5.2.2 Discrepancy between graduates and employing units

Apart from factors in the macro economy and society, the discrepancy between graduates and employing units is the direct reason for the employment difficulties and the main disturbance for interaction of higher education and labour market.

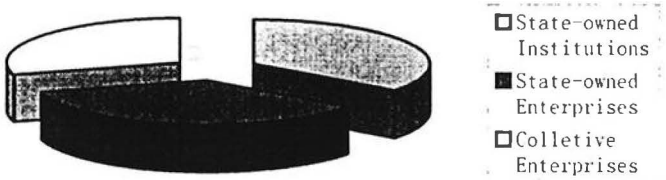
5.2.2.1 Out –of date employment view versus labour market demand

Under the old system, as the scare resources, HEGs were assigned to the large state-owned enterprises and key government organs. Even till 2000, HEGE still focused on state-owned institutions[3], state-owned enterprises, and collective enterprises[4]. 89.3% of

[3] State-owned institutions refers to organizations don't engage in production and enjoy the government support. For

total graduates employed by these three main employers, amongst which, state-owned institutions employed 31.6%, state-owned enterprises recruited 31.5%, and collective enterprises recruited 26.2%. (Surveys conducted by SSIC)As showed in Figure 9, these three main employers almost divided graduates evenly. So in people's mind, HEGs should be employed by these working units which provide the employees with respective social status, high security and complete social welfare with government support. However, as personnel system is going deeply, security and stability of position was shaken by 'position-responsibility links' and 'competing for position' system[5]. Also, housing, medical care can not be distributed freely by working units. Furthermore, social security and benefit system is developing towards mature phrase. Hosing, medical insurance and other social security and benefit is pushing to the market system. The advantage of state working unit become less and less.

Figure 9: The Main Employers for Higher Education Graduates



(Source: Surveys conducted by SSIC, 2000)

Due to long-term historical reasons, there are more redundant employees in these units. In the labour market, jobs supplied by these units are very limited. Actually, more than 60% employment chances are now supplied by non-state owned sectors. On contrast, demand of state-owned enterprises and intuitions decreased constantly. (See table 9) But the old employment views planted in graduates and their family's mind deeply and chronically. They took it granted that higher graduates should work as state cadre and enjoy job security and safe social benefit. only recruited by these state working units,

example, government organs, public schools, and academic research organization, etc.

[4] Collective- owned enterprises refers to those whose capitals are supplied collectively by individual people and/or organizations. Their management is independent from the state and their operations are largely local based. They are different from private enterprises.

[5] position-responsibility links" and "competing for position" system aims at introduce competition and break job security. This system is supposed to stimulate employees initiative and improve efficiency.

was graduated regarded to employed successfully. According the National Labour Market Report of the second quarter of 2003, only 10% of demand come from state-owned and collective employing units, while HEGs took up 21% of 89-city labour market. If higher graduates don't change their mind how could 10% demand absorb 21% supply?

Table 9: Labour Demand Ability of Enterprises with Different Ownership

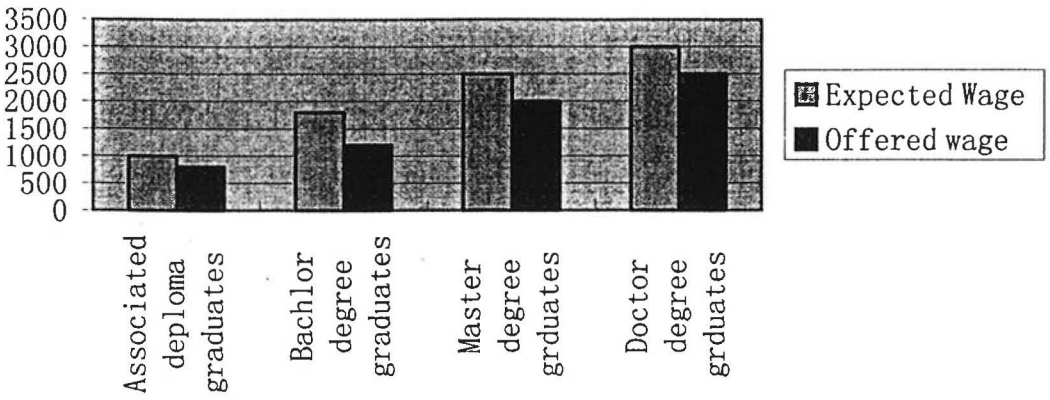
Employers	Demand proportion	Change comparing same period of last year
Enterprises	92.3% (100%)	-0.3%
State-owned	5.6%	-0.6%
Collective	5.5%	-1.1%
Private	37.9%	3.8%
Join venture	3.9%	-1.3%
Share-holding corporation Ltd	25.9%	0.2%
Foreign invested enterprise	13.5%	-1.1%
Others	7.7%	1.2%
State-owned institutions	1.6%	-0.2%
Others	6.1%	0.4%

(Source: Labour market report: second quarter of 2003) (MOLSS)

5.2.2.2 Unrealistic expectance versus employers situation

According to a resent survey conducted by Ocean university in Qingdao, job expectance of university graduates focus on three points: economic benefit, regional location, and stability. 94.5% of graduates listed 'economic benefit' as top priority in choosing a job. Income is the first important factor for choosing a job. Because tuition charge raised the higher education cost, income is the first thing to think about to cover the tuition and living fees paid during school years. In the survey, 69% of graduates expected their incomes to be more than 2,000 yuan a month, which is higher than that working units could offer.(See Figure 10)

Figure 10: Discrepancy Between Expected Wages e and Offered Wages (Unit: Chinese yuan)



(Source: Questionnaire Survey conducted by Ocean University of China, Qingdao, 2001.)

As far as the employment location is concern, 75.53% of graduates chose eastern coastal developed area and key cities. In the national level, Beijing Shanghai, Shenzhen, Tianjin, Guangzhou are the top 5 cities to attract graduates, which hold 85% university graduates. Students believed that since economy in these districts develop fast and most foreign investment took place in these area, more chances and vacancies would be supplies. In fact, in these key cities the ratios of demand and supply decreased in recent years because of too many labour pour into these area. On contrast, in order to stimulate development of western inland area, government took a lot preferential policies and enlarged investment. With improvement of infrastructure and rich natural resource, western area is attracting investment from every resource. Many employing units in the west need high qualified labour badly. However, students indicated in the survey that they would rather working in a small company in the developed area than going to the west. Compare to regional discrimination, graduate's risk-taking sense is also low. According to the survey, 50.2% of students prefer the employing units with high job security, only 8% of students want to try self-employment. As many researchers argue that unrealistic expectance is the main reason why HEGs have trouble finding work.

5.2.2.3 Insufficient ability of graduates versus employers requirement

Most employers often look for two different sets of skill in the graduates, that is:

specialist skills, which are of direct relevance to the job, and more general social, personal and intellectual skills of a transferable kind, which are generally seen to make graduates employable and promotable at work place (Brennan, J.L.et, al 1993).

In the job opening advert, besides academic and professional qualifications, selection criteria attaches more emphasis on skills like analytical and problem-solving skills, good interpersonal skills, team working sills, communication skills as well as capability to work independently. Graduates' EQ (Emotion Quotient) is more required than their IQ (Intelligence Quotient) by the employing units. The fresh graduate showed the great clumsy in these new requirement. It is the responsibility of HEIs to link theory with practice and train students abilities outside textbooks. The development of employability skills is a direct result of efforts to link curricula to the world through various initiatives such as, industrial attachment, implant exposures, practical training, career guidance and counseling, etc for students (Mangozho, 2001)

The traditional class lectures is still a dominate teaching and training methods in HEIs. It happens in some university that internship is just like holiday. Majority of the students are never trained as team players. Actually the terms of "team working" and "problem-solving ability" were introduce from the western only a couple years ago. Recently, only several key universities make a trial train for students.(Chinese education newspaper www. jyb.com.cn./gb/jybzt) Because of lack of practical training, most employers perceived graduates from HEIs, especially universities, to be generally book-orientated, attuned more to solving textbook rather than practical problems, as a result, when the students finish university, they find themselves suddenly faced with a challenge of possessing skills/qualifications with no value on the labour market. This was not to be looked at as a problem of the students but of the HEIs. Because the majority of the instructors and lecturers were taught only according textbooks. The problem is further explained by the lack of industrial experience for the teaching personnel.

5.3 Labour Market Information and HEIs

"Labour market information refers to any information pertaining to the two main elements of labour supply and demand and their interaction. It is a total body of information on how people prepare for work (skill development), search for work (skill utilization), under which conditions (negotiations, wage levels and work condition) and with what results (welfare and economic growth). " (Abbas, Abdelkarim)HEIs are not only the information user but also supplier. It is of paramount importance for HEIs to be able to interpret and balance employer requirements in the curricula and also to communicate this information to students, parent and concerned stakeholders. The interaction between higher education and labour market can easily be possible if there is an efficient and coherent LMI system

LMI includes vital contextual and back ground information which can demonstrate that an HEI's strategic plan is grounded within its political, educational, social, economic and labour market environment. Importantly, LMI can help HEIs to understand the nature of supply and demand for labour and skill (Maginn A and Dench, 2000: 4). The most significant use of LMI within universities is helping to develop the curriculum to better suit the demands and needs of employers. In view of the extent to which LMI can and should inform curriculum varies according to: the vocational specificity of the course, the employment specificity of the course, as well as the relevance of available data. In this sense, LMI will be more useful, and more relevant, for vocationally specific provision. With increased flows of graduates into the labour market, employers are able to become more demanding in terms of what they actually expect of a graduate, and in particular to require some basic employability skills. This is an area where all provision (and not just that is closely attuned to a particular professional practice or industry) should arguably be informed by LMI. Key skills can be integrated into any curriculum. (Andrew Maginn, Sally Dench)

Applied construction of the LMI situation in China is still under developing and often based on government initiatives. Structural mechanisms to link employers and HEIs in the labour market is generally weak. The absence of a coherent LMI system in China has resulted in a general lack of understanding of the functioning of labour market. The HEIs have frequently been frustrated by the employers' lack of precision in defining their need, their readiness to act in ways other than they speak in assessing and taking

on new graduates, and their tendency to seek to solve the problems of yesterday's skills gaps. Reciprocally, the employers cannot understand the universities' long lead time in developing and changing courses, the real issues of the marketplace, and the apparent failure of graduates to hit the ground. For example, in 1993 when China changed the Soviet accounting system into western model. Accountant was the most popular profession. Many university increased the enrollment of accounting students in 1994 semester. In Ocean university the enrollment of students in accounting department expanded at a astonish speed: 26 students in grade of 1994, 33 in 1995, 45 in 1996, 58 in 1997, 97 in 1998. At the same time, the present accountants were trained in various way and vocational education also cultivated the primary accounting students in the relative short term. As a result, accounting students found the vacancies were not so optimism as they expected. There is therefore a strong need to set up a effectively co-ordinate LMI which links HEIs and industry closely.

Chapter VI. Recommendations And Conclusion

In order to resolve the problems of mismatches and discrepancies in HEGs labour market, the concerned stakeholders should cooperate and change their policies or behavior to improve the interaction between labour market and HEIs.

6.1 Government policies

At present, Chinese governments, from central to local, made and carried out various policies to help graduates to find the jobs. These current polices mainly concentrate on four aspects: 1) More priorities and preferential policies are given to fresh HEGs to work in the public sectors, like state organs, government executive units. 2) Government actively sponsor the "supply- demand meeting" and afford all kinds of facilities to the other sponsors to organize such meeting fairs. 3) HEGs are encouraged to go the west by promising higher salary, more job security, as well as better social welfare. 4) HEGs self-employment is encouraged by simpler opening procedure, preferential banking credit, even lower or free tax levy for the first couple of years.

Overview present policies, the limitations of these makeshift solutions are observed. Positions of government institutions are limited per se, and abundant stuff is enough in these organizations. In "supply-demand meeting", more letters of intention between employer and graduates than the formal employment contracts are signed. With attractive polices many graduates go to the west for working, however, after a couple of years, they are not satisfied by the tough environment and low living standards. Many of them do everything possible to return the developed areas. So far as the self-employment is concerned, the police is much less effective. HEGs lack of risk-taking spirit widely. They squeezed to university with the highly competitive examination, just for a secure future. In the Chinese reality, self-employment not only meant highly risky but also meant much slier and richer social experience which HEGs exactly lack of. So in order to resolve the difficulties of HEGs, government policies should focus on these following three key points:

6.1.1 Increasing the labour demand for HEGs

In the long term, the key to raising the overall demand for labour lies in identifying new sustainable niches, in both tradable and nontradable. However, the period of adjustment takes time and people need jobs now, hence, three inter-related aspects should be emphasis: reducing unnecessary job loss in traditional industries with interventions to assist these industries to improve productivity; creating jobs through special employment programs, promoting the expansion of new activity and creating an enabling environment for HEGs.

Due to HEGs' comparative advantages: higher qualification and greater learning ability, their potential jobs should lie in the new, hi-tech industries, as well as the industries of higher value-added goods and services. Adjusting the industrial structures and encouraging the development of service are both effective measure to increase the labour demand.

Private sector foreign investment based enterprises become more and more attractive to

HEGs by their good payment, flexible and beneficial human resource management system. As FDI goes to China increasingly, new jobs created by this sector increase constantly. However, there are still policy constrains for graduate to enter these enterprise. For example, if these companies employed a university student, they have to pay the local education bureau so-called cultivate fee which is suppose to compensate for state education subsidy. These policies constrain limit non-state enterprises to absorb the higher educated graduates. As long as reforms goes deeper, these policies should be removed.

6.2.2 Facilitating building of market mechanism

After all, graduates employment should mainly rely on market mechanism to adjust. So a complete and effective labour market service system is significant for allocating graduates efficiently. As an intervener, government has the commitments to facilitate building the fine market mechanism. According to Chinese current situation, government policies should focus on LMI network, market management as well as the removing all the constrains and obstacles.

Urban LMI network for HEGs could base on the city level and connect with the main public career service agencies, employers and HEIs. Employers reported vacancies and employment information regularly. Career service agencies should set up the special service for university students. HEIs public annual graduates situation. Through this network, the connection and communication between intermediary career agencies , employers, HEIs and graduates should conduct smoothly. The local government should organize a professional sector to be responsible for managing and maintaining this network.

Unified and perfect management system and standard management process is the guarantee for market function. Regulations, rules and conventions should be clearly established. Good order is the key point for the effective market system. It is the government responsibility to standardize and legalize the behaviors of HEIs, employers and career service agencies. According to the principle of scientific management,

government policies should including amplifying necessary rules and regulations, making the specific service standards, defining the requirement for various services, strengthening the supervision and inspection system etc.

There are still many constrains and obstacles inherited from old job allocation system. For example, the process of sending graduates to working units is still complicate. Besides the employment contracts, the dispatch certificate issued by HEIs is required to accept fresh graduates. Only with this certificate, could graduates archive, *hukou* or other document be transferred from HEIs to employing units. The autonomy of employing university graduates for non-state owned sectors is still limited by entrants quota or *hukou*. Mobility between cities and provinces is constrained, because of local protectionism. In order to improve the market system, all of these constrains and obstacles should be removed.

6.2 HEIs commitments

HEIs play the main role in HEGE. HEI is the most important medium between employers and graduates. According to statistics, 40% of graduates employment was accomplished with HEIs as a go-between, in 2002 (www.jyb.com.cn) Intermediary function that match graduates and workplace is one of most important commitment of HEIs. However, since graduates employment started to be market-oriented, HEIs have shouldered the main responsibility to make their output "graduates" to meet market demand. Due to the inertia from the old system, present Chinese HEIs present large deficiency in this aspects. In order to improve graduates employability, HEIs should strengthen the following aspects:

6.2.1 Cultivating graduate's practical ability

During 4 years study in college, examine marks and textbook knowledge learning are demanding and challenging to students. The course are emphasized by theories, basic knowledge, structure, standard and difficulties. There are no specific lectures or

programmes to improve the ability of applying knowledge to resolve the problems. College students generally lack of the capacity of exploration, innovation or creativity as well as the cooperation and communication with team members, because they are never taught or inducted to achieve these ability which are supposed to be learned by themselves in their social life or in the future working. From the lesson from market mechanism more and more HEIs should realize the important of ability education. New design of instruction methods and courses framework should realize the shift of emphasis from the memorization of factual knowledge to the cultivation of students' ability in creative and critical thinking, problem solving and information acquisition and generation, and intellectual independence More heuristic and participatory method of teaching should be adopted which encourages students to develop the ability to explore and project what will happen in the future career.. With the rapidity of socioeconomic and labour demand changes in China, parts of curricula of educational institutions become obsolete from time to time. According to employers requirement, HEIs should update their curricula and make their graduates more directly relevant to professional employment needs.

6.2.2 Supplying the employment guidance

Employment guidance for HEGs is very insufficient. Along with employment is marketed, fresh graduates need the skills of hunting jobs, like train for interviews, the communication skill with employers etc. They also especially need the guidance for adjust their psychological problems that are inconsistent with real labour market situation. Chinese HEIs don't supply the special lectures for these skills and guidance. They haven't the professional faculty in this field. They haven't the relative textbook or systematic teaching materials. The only guidance they supplied is one or two seminars to introduce employment process and relative government policies. According to a survey conducted amongst 7 universities in Beijing. 67% of interviewees were not satisfied the HEIs employment guidance, they said: " Career guidance is deficient, and guidance channels and forms are too simplex." (www. china.com.cn/Chinese/op-c/352046.htm). In order to make their products 'graduates' more suitable for market demand, HEIs should strength and amplify the employment guidance and service

system. The professional stuff, regular lectures and training, special funds for outlay, more communication between students and employers should be guaranteed by HEIs.

6.3 Concluding Remarks

This study has highlighted employment difficulty in the HEGs labour market. Compared to the full employment under the old job allocation system, only 50% HEGs had signed employment contracts by the end of May, 2003. This serious issue draws enormous attention from society. Enlargement of enrollment and slowdown economic growth are the two reason blamed mostly for this difficulty by the media and scholars. However, with a very low enrollment rate even lower than the average rate of developing countries, enlargement of enrollment is the trend of development of higher education. Furthermore, Chinese economic development need more skillful labour. Enlargement of enrollment scale just meets the demand of economic growth and higher education development. As far as the second reason, although the economic growth slows down, but it is still able to create enough jobs for HEGs. So HEGs employment difficulty signals the deeper issue of discrepancies between the demand side and supply side of HEG labour market. They are presented by HEGs' out-of date employment view versus the changing labour demand; their unrealistic expectance versus the employers situation; as well as the insufficient ability of graduates versus employers requirement. These discrepancies also indicate the disconnect between higher education and labour market. In addition, underdeveloped applied construction of the LMI situation in China make this interaction more difficult.

In order to deeply examine the interaction between higher education and labour market, this paper reviewed and analyzed the reform of these tow. Because labour market was established from scratch, although some basic elements of market system were build up, it is not the real free market system. Government intervene influences it strongly. More importantly, it contains the problems and faces a lot of challenges, like heavy unemployment pressure and regional imbalances. As far as higher education is concerned, the fast development is ascribed a key supporting role in the drive to modernize the nation and upgrade the economic development. The reforms within this

system focused on endowing more autonomy to HEIs in various of aspects: admissions, the elaboration of special studies, setting up of administrative structures, appointments and dismissals, the use of funds, job evaluation, remuneration policies and international cooperation and exchange, etc. Reforms of both higher education and labour market supplied the possibility of the transition from government planned graduates allocation to free choice between graduates and employing units. The interaction between higher education and labour market also transferred from the passive process to the active one. The new system is more flexible, accountable, and introduced fair competition. As a result, the efficiency, compared to the old system, the responsibility and equity was improved,. Obviously, China's labour market isn't a developed and mature one and China's higher education still has many aspects needing improvement. This is the root cause for the discrepancies in the HEGs labour market in China.

At general level, the strategies and policies to cope with employment difficulty and improvement of the interaction discussed in this paper are two folds. From the aspect of government policies, long-term policies, creating the labour demand of HEGs and Facilitating building of market mechanism should be strengthened. From the side of HEIs, since they are the most important medium between employers and graduates in HEGs labour market, they bear the commitment to improve graduate employability to meet the requirement of labour market.

HEG is greatly scared resource in China. Open unemployment of HEGs has attracted considerable concern in recent years. Although MOLSS stated: 'the surplus of college graduates is not in the sense of market', i.e. more supply than demand, therefore, the surplus is relative.', and it is predicted optimistically this difficulty will be gradually solved by changing graduates picky attitude for jobs and regions. Yet the deepest issue of higher education system and labour market operation should be explored. Old systems and institutions have been broken, but the new ones have not been established completely. Indeed, more efforts and research should be done in building adequate institutions to facilitate the transition. (Kolodko, 1998)

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