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China’s Human Resources Development: Recent Evolution and Implications for the Global Market

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Abstract. Our purpose in this article is to develop a framework for studying organizational arrangements used by Chinese Global firms in allocating work and managing human resources in the international context. Our framework based on human capital theory, transaction cost economics, and resource-based view of the firm investigate four factors: institutional, demographic, legislative, and educational changes in China, drawing some of the main challenges in Human Resources Management (HRM) for both Chinese and foreign firms. The paper contains a brief review of literature concerning the role of human capital in economic growth, then it focuses on the recent evolution of the Chinese labor market, and finally, it draws some implications for human capital management in China from global point of view. Our general framework contribute: first, to the formulation of research hypothesis of convergence (or divergence) of HRM practices in global markets, second, it emphasizes the relationship between the institutional and country’s specificities of labor market and the HRM, and last it shows some effects of institutional policies and reforms on the quality and the availability of human capital China. These three points seem to support a broad idea of competitiveness based on labor market efficiency and how the internationalization strategies depend on the sources of human capital.

Keywords: Chinese Labor Market; Labor Market Regulations and Laws; Human Resources Management Strategies; Human Capital Development and Leverage.

JEL Classification Numbers: J24, J41, J82, L22, M12, M54

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1. INTRODUCTION

The emergence of China as economic power has accelerated globalization affecting also the world labor supply and demand; the global labor market has been shaped by the emerging economies. Turning from a country based mainly on agriculture to one of the world’s most advanced economies, now China exports goods all over the world, and at the same time it has become a huge market for developed countries.

In the past two decades, economic development and the reform of labor legislation have deeply changed China’s labor market. In this new global context Chinese and international firms need to implement sustainable Human Resources Management (HRM) policies in order to achieve high performances. But how has the labor market followed the massive and very fast changes that characterized the Chinese economy? How did the skills requested by the employees evolve? What role does human capital mobility shape the evolution of the second economy in the world? What are the relative consequences of human capital treatment and selection in Chinese fast changing labor market? These are the main issues that the paper addresses in an attempt to draw a research agenda of current and future evolution of globalization strategies of Chinese companies.

The paper is organized in three sections. The first section analyzes the literature regarding the role of human capital in economic growth, focusing on the Chinese market. The second section focuses on the institutional, demographic, legislative, and educational changes that have radically transformed Chinese labor market in the past decades. The last section contains a discussion and the implications regarding human resources management (HRM) from a global point of view.

2. LITERATURE REVIEW

Starting from the second half of 1900s, there has been an increasing amount of literature (Schultz, 1961; Becker, 1962; Uzawa, 1965; Nelson & Phelps, 1966; Lucas, 1988; Romer, 1990; Mankiw et al., 1992) on the role of human capital in economic growth, considered not secondary to other factors such as physical capital and financial resources.

Already Solow (1957), in defining his neo-classical growth model, recognized the importance of skill accumulation as a form of capital formation. However, the first conceptualization of human capital was given by Schultz (1961), who defined it as the complex of abilities, knowledge, skills, and qualifications possessed by individuals. Later Becker (1962) expanded human capital’s attributes, including time, health, and life expectancy. Moreover, Becker compared human capital to the firm’s physical means of production as the investment on education would turn into monetary return. Other studies stressed the relationship of human capital with technology. Nelson and Phelps (1966) claimed that education represents a facilitator in technology diffusion and leads to growth. Consequently, the growth rate of technology in a given country can be increased if this country invests in education, in addition, the investment in backward countries would result more productive, as with an educated labor force they have the advantage in using the technologies accumulated in technologically advanced countries, therefore the potential for rapid growth is higher.
According to Uzawa (1965) and Lucas (1988), human capital is skill embodied-labor, as its use in a profession precludes the use in another one. Their approach is based on a human-capital-based endogenous growth model, also called “Uzawa-Lucas model”, according to which total output depends on physical and human capital, and the saving rate is not exogenous but endogenously determined by the preference and technology parameters.

Later Romer (1990) developed a growth model based on research and development (R&D), according to which investment in R&D is undertaken by profit-seeking firms, however it also influences a country’s total factor productivity (TFP). Romer (1990) pointed out that an economy with a larger stock of human capital will experience faster growth and that also free international trade can speed up growth.

In contrast to Romer, Mankiw et al. (1992) developed an exogenous model which they defined “augmented Solow growth model”, as to the original model designed by Solow, which originally included only physical capital and raw labor, they added human capital as factor of production. They also identified differences in saving, education, and population growth as the determinants of cross-country differences in income per capita. Consequently, in this model a high rate of educated labor force would contribute to economic growth.

Referring to education, several studies on human capital in China have been recently developed (Wang & Yao, 2002; Heckman, 2005; Zhao, 2008; Fleisher, Li, & Zhao, 2009; Wei & Hao, 2011).

Wang and Yao (2002) analyzed the sources of economic growth in China between 1952-1999, including human capital as input in the aggregate production function. Their findings showed that the accumulation of human capital was quite rapid in the examined period and it contributed significantly to growth and welfare. Regarding the growth of TFP, it contributed positively to output growth in the reform period, while it was negative in the pre-reform period.

However, the economic growth is characterized by an unequal development in Chinese provinces, which results a function of several interrelated factors (Fleisher, Li, & Zhao, 2009): investment in physical capital, human capital, and infrastructure capital; the diffusion of technology; and market reforms.

One main factor is represented by the educational policy, in fact TFP growth is promoted by various levels of schooling depending on the region’s location (Wei & Hao, 2011): in the eastern region productivity is enhanced by secondary education, while in the central region it is mainly promoted by primary and university education, and in the western region the main role is played by primary education.

In the analysis of human capital in China, Law et al. (2003) assume that there are two dimensions which contribute to firm’s performance: the role of HRM and the followers’ perception of the leader. HRM plays a strategic role in a firm as it influences a firm’s productivity, while the employee attitude towards top management affects firm profitability.

3. EVOLUTION OF CHINESE LABOR MARKET (1989-2012)

The aspects to be considered to get a deeper understanding of the evolution of Chinese labor market include: the economic development, major demographic trends, education issues, and the legislative evolution and reform.

3.1 Economic development
China evolved from an agriculture-based economy (60.1% of employment and 25.1% of GDP in this sector in 1989) (National Bureau of Statistics (NBS), 2011) to an industrial economy, and finally it is moving towards services. CIA World Factbook (2013) underlines that in 2008 occupation in each economic sector was quite equilibrated (36.7% agriculture, 28.7% industry, and 34.6% services), while the contribution of each sector to GDP was differently oriented: in 2012 agriculture counted for 9.7% of GDP, industry 46.6% and services 43.7%, with a shift from agricultural to industrial and services economy. This means that the professional figures have evolved and different skills are needed. Nowadays there is a fast growing demand for managerial skills, required to suit the needs of medium and large companies, which compete in a global scale and manage an high complexity. Labor market has developed in a heterogeneous manner, both on the demand and on the supply side.

There are two main drivers used by the Government to help a more homogeneous development of the country: the first, introduced by Deng Xiaoping in 1978 with the Open door policy, is the creation of the so-called Special Economic Zones (SEZs), areas or provinces of the country with special legislation with the purpose to enhance special districts characterized by high-technology productions. The first five SEZs were established in Shenzhen, Zuhai and Shantou in Guangdong Province, Xiamen in Fujian Province, and the entire province of Hainan. Later new SEZs opened, especially expanding in the eastern regions, reaching a number of 132 SEZs listed by the Ministry of Commerce of PRC in 2012. The second driver is the “China Western Development” policy (also called “Go West”), which is oriented to delete disparity between different areas of the country by incentivizing the economic development of the internal region. This policy was started in 1998 and it has also been carried on to attract foreign direct investments and build new infrastructures.

In this manner China has been protagonist of an heterogeneous regional development and of an evolution of the labor demand quality, in fact the labor market is characterized by a deep segmentation by geographical areas and by requested skills.

### 3.2 Demographic evolution

Demography is probably the most important factor that contributed to the sharp economic growth in China. As a matter of fact, the country can count on the largest workforce ever existed in the world. In 1982 the Chinese population overtook the billion threshold and in 2012 the official statistics stated a total of 1,34 billions inhabitants, of which 800 millions constitute the total workforce (World Bank, 2012; CIA, 2013). High availability of low cost human capital contributed in a decisive manner to economic development. This wide workforce is probably not going to be the main success factor in the medium term, as far as the demographic policies will impact on the abundance of labor. For instance the one child policy, applied from 1979, mitigated the growth of the population: “after 30 years of efforts 300 million births have been prevented” said Zhao Bingli (2002), vice minister of the State Family Planning Commission, during an interview. This policy is impacting in these years, as the number of people entering in the labor market has started to decrease, according to the annual report of Italy-China Foundation (CeSIF, 2010) based on China Statistical Bureau data. The demographic dividend that characterizes the country implies a variegated labor supply in terms of composition and distribution, which creates continuous internal movements of workforce. The most immediate effect is the aging
of the workforce, which implies relevant changes in the policies concerning competences development (training on the job) and retirement management (social security for outbound workforce and turnover of new employees).

3.3 Work and education

Therefore the workforce is not growing as fast as the work demand. But the quality, in terms of education, of the workers which enter in the labor market is growing: an increasing number of young people has been involved in tertiary education, while the tertiary education enrollment rate has moved from 15.79% in 2005 to 24.53% in 2011 (World Economic Forum, 2012). The higher level of education is having the effect of creating high and immediate job expectations in young people, while their competencies and practical skills are not developed enough. Young graduates expect to find managerial and responsibility jobs, without having the necessary experience to execute this kind of tasks. The sharp economic growth did not allow to create a solid base of certain professional figures due to the impossibility to create a stratification of competencies and skills in a couple of decades in such a large population. Nowadays the number of firms in China is increasing, as well as their average size and the request for specific skilled employees. The Government has recognized the education issue as a strategic field and has made a great effort in the last years by financing education, both tertiary and vocational, until the goal to spend the 4% of country’s GDP in education was reached in 2012 (Li, 2012).

Education has a positive value for Chinese families as it constitutes a driver for development of the people, due to the will of personal growth. This desire and the huge investment on education is shaping more high-skilled people with job expectations in line with the level of their education.

3.4 Chinese Labor Regulation

The last aspect to be considered is the legislative evolution of the labor market in the past decades. As the labor market represents a priority for Chinese governmental policies, many regulations and laws have been issued since the 1990s, which include Labor Law (1994), Wage Guideline System (1999), Minimum Wage Regulations (2004), Employment Contract Law (2008), Employment Promotion Law (2008), and Labor Disputes Mediation and Arbitration Law (2008).

The Employment Contract Law (or Labor Contract Law) of 2008 represents a milestone in the labor market regulations as it symbolizes China’s approach to a more regulated labor market (Cai et al., 2009), in fact it was introduced with the goal to enhance the rights of the employees, updating the Labor Law of 1994 which was not very detailed.

An institutional authority that gained power was the All-China Federation Trade of Unions (ACFTU), which now possesses a greater authority to advocate for the rights of workers. ACFTU with more than 160 million members represents the biggest trade union in the world more than all other unions together (White, 1996; Geffken, 2006).

Before 2008 the system of hiring workers from job agencies was very widespread and in some cases abused in China, but no law recognized it. The Labor Contract Law dedicates an entire section to “dispatched work”: the term “labor dispatch” refers to the practice of hiring employees through an employment service agency (e.g. FESCO), as opposed to direct employment (Baker & McKenzie, 2011). The legislation goal
was to slow down the use of this instrument, but the effect has been to legalize this practice and the number dispatching agencies has grown dramatically.

A new tentative to limit the use of dispatched work is on the way to be approved, with the proposed amendment to the Labor Contract Law of 2012, which entitles dispatched work only for “temporary, auxiliary and substitute” jobs. The other brake for using this type of contract is the minimum duration of the contract (two years) and the fact that a worker must be paid from the agency even if he is not dispatched to another company. This new potential market attracted the foundation of many new Chinese agencies and, at the same time, international companies: CIETT (2012) estimates the presence of 49,000 employment agencies in China in 2010 and the number is growing.

The reform of the labor system has increased the safeguard of the employees’ rights in particular in the aspects regarding the formalization of contract procedures, social security, outplacement policies, work time, minimum wages, regulation of probationary periods, and sanctions for employers not respecting the rules. The legislative change is continuously evolving, in fact the amendment of the Labor Contract Law proposed in 2012 would increase the level of protection of the workers’ rights, setting higher standards to fulfill for employers. This situation has a double effect: it has improved the work conditions of Chinese employees, which now are more similar to the ones of the employees from other parts of the world, while it has made the Chinese market less attractive for firms seeking low costs of production, in fact foreign investors and even Chinese companies have started to de-localize their production to Vietnam, Bangladesh, Malaysia, Indonesia, etc. (Zou, 2009).

### 3.5 The effects on the labor market

All these factors (economic growth, demographic trends, education, and legislative transformations) determine the shape and the segments of the Chinese labor market. In the last twenty years the labor market has been characterized by a high mobility among jobs in different firms hides, which can be of three types. The first one is mainly linked to the rewarding system and it is typical of some geographic areas or provinces where there is a tendency toward a supply and demand equilibrium, therefore the success of attraction and retain policies depends on the compensation systems. The second case refers to a scarcity of skilled people, in other terms, there is a need of technical and idiosyncratic training in many firms. The last case concerns the availability of higher professional profiles than the requested ones. In particular, there is an abundance of newly graduated workers with high expectations and low experience. So they can easily find a job, but they do not find what they are looking for in terms of pay and tasks, therefore they tend to change and “jump” from a workplace to another. This phenomenon is called “job-hopping”: it is not allowing workers to accumulate the right competencies and companies to find the professional figures they need. As a matter of fact, there is a lack of low and middle management with a satisfying level of experience.

Companies have to handle these two problems: finding the right employees for such particular management tasks and retain them. While there is a shortage of low and middle managers, there is high competition to hire the few with the skills required, having strong managerial effects on HR policies. The solution used in the last years consisted of introducing a large number of expatriates from other countries in the job market, importing higher competencies. At the same time Government enhanced its efforts for education, but this process needs time to give its results and guarantee the
right number of skilled and experienced workers for the labor market. These considerations imply an uncertain future for Chinese labor market, between convergence and divergence of competencies of workers.

The first clue towards a convergence theory is given by the Labor Law changes. China is adopting more international labor standards, in order to create a more efficient and transparent market. International standards will attract foreign workers and will imply a more heterogeneous and variegated workers’ presence, importing competences that will consequentially enhance the average skills of workers in the country.

Investments in education in synergy with the legislative trends are pushing the Chinese market towards globalization, both in rules and in competencies. The improvement of the system of human capital development is, again, increasing the attraction of the market, in particular for foreign subjects (firms and investors).

It can be expected that, in a quite short period of time, the Chinese human capital will make a great improvement, because of the action of international jobs standardization and professional education. Nowadays the trend concerns mainly with incoming human capital (especially for high skilled jobs), but, as a consequence of skills enhancing in China, the trend will be reversed. In the future China will assist to an outgoing mobility of professional figures, pouring out the knowledge that the country is accumulating in these years.

4. DISCUSSION

China has invested many resources in technological and human capital since the implementation of the Open Door Policy in 1978. Regarding technology investments, the implementation of SEZs facilitated industrialization and drove China’s rapid development, contributing for a relevant portion in the creation of the total GDP, for example in 2006 the five initial SEZs accounted for 5 percent of China’s total real GDP (The World Bank, 2010). Regarding the expenditures on research and development activities, in 2012 China invested 1,024 billion yuan, up 17.9 percent over 2011, accounting for 1.97 percent of GDP (NBS, 2013).

In line with Nelson and Phelps’ assumption (1966), China’s rapid growth depends on the advantage of using the technologies accumulated in developed countries. In addition, as technology diffusion can be accelerated by investing more in education, China has increased its investments in human capital formation.

Since 1999 the Chinese government has implemented a policy expansion in higher education. In the period between 2001 and 2010 the total number of fresh college graduates increased more than six-fold from 960,000 to 6,350,000, at an annual increment of 1 million per year (NBS, 2011). In 2012 the total investment in fixed assets (excluding rural households) in education was of 467.9 billion yuan, up by 20.3% in 2011.

However, as described in our analysis of the evolution of the labor market, the development in Chinese provinces has not been homogenous and only since 2000s the Government has actively implemented the “Go West” policy in order to revitalize the poorer western parts of the country. As previous research has pointed out (Wang & Yao, 2002; Heckman, 2005), China should adopt a more balanced investment strategy in the rural and urban areas of the country in terms of information-infrastructure and through continuous education and training. Moreover, only an adequate training can
prepare the necessary professional figures necessary in the local and foreign companies operating in China.

Despite the consistency between human resource management practices and firm-level performance outcomes, there is a lack of empirical studies that link the two with the efficiency of the labor market. In other terms, we can predict positive effects on labor productivity for organizations that have more sophisticated human resource planning, recruitment, and selection strategies, but it’s difficult to measure these effects as a partial (or mediated) consequences of labor market reform.

International Human Resources Management studies emphasize the strategic relevance of knowledge based competencies, they outline their direct link to achieving and sustaining a competitive advantage. A common approach looks at the core competencies, which are valuable, rare, inimitable, and non-transferable and should be developed internally while others may be outsourced. The labor market may incentive or not the development of specific skills and knowledge increasing the convenience of the so-called “internal labor market” (ILM). These effects concern decisions to internalize or externalize employment, which are affected by the labor regulations.

The economic and organizational perspectives analyze the expected returns of employee productivity and the contribution of employees’ skills to the firms’ core capabilities.

Some open questions regard how the labor market reform influence the creation and allocation of human capital in terms of generic or specialized skills, transferability and complementarities of skills. Moreover, what are the incentives to invest in employee skills and how these investments may contribute to future productivity?

The human capital theories suggest to investigate deeply labor market transformations such as the recent Chinese labor reform in order to measure the short and long term effects on: i. the labor costs relative to the return on investment for developing employee skills and competences; ii. the boundaries and protection from the transfer of human capital investments to other firms; iii. the distribution of costs and investments of skills development among different economic subjects such as firms, workers, institutions and state.

5. CONCLUSIONS AND IMPLICATIONS

The recent evolution of the Chinese labor market implies three main challenges to global HRM. First, the labor market in China has specific characteristics: to start with, its large dimensions, however, firms should also consider, on one hand, cultural, historical and anthropological factors, and on the other hand, the country’s specialization and internationalization (in the past years China was considered the world’s factory, now it has turned into a relevant market for international products and services).

Second, in our framework analysis we identified invariable factors and variable ones in the Chinese labor market, which explain its segmentation in different areas of the country and in different skill levels of the labor force. The invariable factors are related to the legislation (especially the Chinese Labor Contract Law of 2008) and the demographic dividend, which contributed to the economic growth, while the variable factors are determined by the dynamics in labor demand and supply, and by the effects of the different educational policies of the human capital in Chinese provinces.

Lastly, transformations in the Chinese labor market have consequences at a global level, not only because China represents a main competitor in the manufacture of
goods, but also because its policies in human resources management are shaping the labor supply of the world.

Our contribution focuses on main drivers of change of Chinese labor market and show how main implications on Human Resources Management of Chinese firms developing strategies based on direct international presence abroad.

The efficiency of the labor market in the creation and allocation of human capital, the human resources policies in term of career paths and skills development impact deeply on the capabilities for competing in global markets.

Also the focus on the dynamics of the Chinese Labor market in term of recent reform provides a exploratory hypothesis for a future research agenda. A research program aims at identify on how institutional or social factors may influence HRM policies and strategies of Chinese international companies.

In conclusion, adopting the perspective of human capital linked to the firms’ HRM practices contribute to measure the potential to be a source of competitive advantage to be developed and deployed in the globalization strategies. The ability to manage the HR processes may become a core capability that other firms find difficult to replicate only if the linkage between the macroeconomic, demographic and institutional transformations and HR strategies is explored and comprehended. The relationship between macro-policies and micro-actions is worth further investigations.

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