The Dynamic Change of Wage Inequality between Urban Residents and Rural Migrants in Chinese Cities

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(Revised Research Proposal for PEP)

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1 Abstract

Since the late 1980s after 40 years of stagnation, the emergence of large scale spontaneous rural to urban migration is one of the significant phenomena in China’s labor market. Currently, there are more than 120 million rural-to-urban migrants working in Chinese cities, account for one third of the Chinese urban labor force. Although they contribute substantially to the recent unprecedented economic growth in China, rural migrants are treated differently from urban residents. Under the “guest worker system”, they usually hold a temporary “visa”, take low-pay works, and no access to social benefits available to their urban counterparts, which makes them more likely to fall into poverty.

The purpose of this project is to examine dynamic rural-urban migrants’ status from an empirical aspect using the data from the China Income Distribution Survey 1999 and 2002 as well as the China Urban Labor Survey 2001 and 2005. First, the dynamic wage decomposition methodology will be adopted to describe the changes of earning gap between rural migrants and urban residents and its determinants during the period 1999-2002 and 2001-2005. Additionally, we will also investigate the effects of change in inequality between rural migrants and urban residents on migrants’ poverty. Second, the “economic assimilation model” will be developed to fit for studying internal migration in case of China and analyze whether the wage of new rural migrants will converge to their urban counterparts during life-time and examine the extent and channels of wage assimilation of migrants in urban China. Third, a “dynamic recursive model” is used as a migration monitoring tool, through which impacts of various policies on migrants’ situation can be accessed numerically. The results may shed light on the future policymaking for migration management in China as well as the general understanding of migration issues in developing counties.
2 Motivations and Objectives

Over the past twenty years, China has experienced a large scale of migrant flow from rural to urban areas, which make a significant contribution to urban economic growth. Currently, there are around 120 million migrants are working in cities, account for one third of the Chinese urban labor force. It is widely agreed that, over the next decade or so, an additional 150 million rural residents will move to cities. Compared with the historical experience of most industrialized countries with similar population movement during the period of the Industrial Revolution, China is undergoing a much larger scale movement within a much shorter period of time. The sheer scale and urgency of the issue suggests that the central, provincial, and city governments are facing the policy question of how to manage the unprecedented large-scale rural-urban migration. To solve the policy problem, it is necessary to understand migrants’ status in Chinese urban labor market especially from a dynamic perspective.

Chinese cities usually adopt a “guest worker” system to meet labour shortages and distinguish these rural and urban workers by a Household Registration System (i.e. Hukou System). Many academics believe that “China is, perhaps, the only country in the world which adopts the ‘guest worker’ system for its own rural citizens” (Du et al. 2006, pp.2). Under this institutional discrimination, rural migrants usually hold temporary work “visa” and are restricted from attaining urban residency status in these host cities. As a result, they often take dead-end jobs, work long hours and get low payments. In addition, they are normally ineligible for the social benefits available to their urban counterparts. Since the lack of social safety net, many rural migrants are living under poverty, and concentrated in ghettos, the crowding and poverty conditions may lead to high crime rates and social and political instability, which is a great concern of Chinese government. As more and more rural migrants come to the cities, the well-being of rural-urban migrants, such as living conditions, employment status, health care and the education of their children, has attracted attention from academics, as well as central and local government.

Although there is currently an abundance of literature examining rural-urban migration in China from different perspectives, dynamic changes in the gap between rural migrants and their urban counterparts as the time spent in host cities increases still very poorly researched or understood. As a consequence, long-term dynamic impact of various migration policies on the rural-urban migration
flow cannot be monitored and much information on many aspects of rural-urban migration is not available to both academics and policy makers.

To fill the research gap, this project will examine rural-urban migrants’ status in Chinese urban labor market from a dynamic aspect. Methodologically, we not only use the decomposition method developed by Smith and Welch (1989) (based on the standard Oaxaca-Blinder decomposition) and the semi-parametric methodology to describe the migrants/urban residents earning gap during the period 1999-2002 and 2001-2005, but also apply the economic assimilation model (Chiswick, 1978; Borjas, 1985 and 1995) to analyze whether the wage of new rural migrants will converge (or diverge) to their urban counterparts and its determinants. The data are taken from two recent available data sources, the China Income Distribution Survey (CIDS) 1999 and 2002 and the China Urban Labor Survey (CULS) 2001 and 2005. In particular, five questions will be posed in this project. First, how have the wage gap between urban residents and rural migrants evolved across years? Second, does it affect the poverty of rural migrants? Third, what are the factors which attribute to the change in wage gap? Fourth, is it possible new arrival rural migrants will eventually catch up to their urban counterparts in terms of wages with time spend in host city? Fifth, which factors affect the wage assimilation (or disassimilation) of rural migrants in the urban labor market?

In addition, this research will not only help us understand the change in earnings of rural workers during the economic transitional period, but also help establishing a migration monitoring system by incorporating empirical estimates on many important parameters and coefficients into a dynamic recursive model.

3 Literature Review and Contribution

The majority of the literature on rural-urban migration in China so far focuses on issues mainly related to the determinants of migration (see Zhao, 1997; Hare, 1999; Zhao, 1999), migration spells (Hare, 1999), and impact of migration on income of migrant families in rural areas (see Zhao, 1999; Taylor, Rozelle, and de Brauw, 2002; Zhu, 2002).

The issue of how migrant workers fare in the urban labor market has been examined by Meng (2000), Meng (2001), Meng and Zhang (2001) and Du et al. (2006). The general findings suggest that migrant workers are mainly hired in low income, 3D (dirty, dangerous, and disgrace) jobs, working longer hours, and with much lower earnings than their urban counterparts. However, whether migrant
workers have been improving their economic status over time in the city has not been researched in the literature due to lack of longitudinal data.

In general, we know relatively little about the assimilation (i.e. convergence of economic and cultural traits) of migrant workers and their family into the urban society in China, although considerable research effort has been directed towards measuring the degree and speed of economic assimilation of immigrants in developed countries (see Chiswick, 1978; Borjas, 1985; LaLonde and Topel, 1992; Baker and Benjamin, 1997). For those countries, we know that assimilation can take place through investment in local human capital, linguistic adjustment (see, for example, Chiswick and Miller, 1992; Dustmann and Fabbri, 2003), and intermarriage (Meng and Gregory, 2005).

In this project, we will focus on the changes of the earning gap between rural migrants and urban residents and the assimilation of migrant workers in urban China. Four contributions are made as below.

First, over the next 20 years, the world is expected to witness the largest population movement in human history: it was estimated that in China alone around 150 million migrants will move to cities in addition to the current 126 million. In order to manage this movement effectively, more and more characteristics of rural-urban migration in China should be understood by both academics and policymakers. Under such a background, this project will provide some important knowledge on the changes of earning gap between rural migrants and urban residents and the dynamic employment status of migrants in the urban labor market, which will fill the gap in the theoretical and empirical literature of development economics.

Second, the project is the first attempt to studying economic assimilation of migrants and its channels in urban China, which opens a new aspect for discussing Chinese rural-urban migration issue. Compared to conventional migration studies that only focus on migrants at a point in time (such as Meng and Zhang, 2001 and Du et al., 2006), this project innovates in studying the long-term labor market dynamics and its impact on migrants’ earning. In particular, we will use the wage assimilation model which is widely used in studying international migration issues of developed countries (for example, Chiswick, 1978; Borjas 1985 and 1995; LaLonde and Topel, 1992; Dustmann and Fabbri, 2003, Meng and Gregory, 2005) to probe the extent to which migrants assimilate and the channels through which they assimilate into urban society with the “guest worker” system, such as human capital investment and accumulation of social experience in host city. Moreover, this project
will make efforts to develop the economic assimilation model to fit for the study of internal migration in case of China. Since the basic assumption of “constant year effect” on both rural and urban workers in traditional economic assimilation model are violated in the case of China, the model has to be modified to fit the new circumstance. It can help to relax the basic assumption of the original model, which is usually ignored by most of pervious literatures on the assimilation issue, and make it fits for more general case, especially when focus on two group of labors from different part of wage distribution. The results will potentially shed light on the future policymaking of rural-urban migration in China as well as the general understanding of migration issues in developing countries.

Third, the project is the first to use the data from the China Income Distribution Survey (CIDS) both in 1999 and 2002, which is one of few data set currently in China suitable for similar studies, to analyze the changes of earning gap between rural migrants and urban residents and its determinants. Since the data from CIDS have a large sample and the questions are widely consistent over two time points, this will increase the accuracy of our estimate on the dynamic migrants’ status in urban China and strengthen the reliability of our empirical results. In addition, the data is still being made continuously and can be used for updating this project in the near future. In addition, another data from CULS 2001 and 2005 \(^1\) will also be used to do the same analysis to help to double check the results from the CIDS data if necessary.

Fourth, the project provides an effective tool to access the impacts of various policies on the rural-urban migration process, in particular the dynamic wage assimilation of migrants. Although measuring the changes of the earning gap between rural migrants and urban residents and its determinants can helps provide useful information on the rural-urban migration process, the final purpose of the project is not to only explain the phenomenon but to find some useful policy instruments to smooth the migration process and fight against migration poverty. Fortunately, previous studies have provided both the partial and general equilibrium modeling techniques to fulfill this purpose. The project will develop a dynamic recursive model with the estimated economic assimilation relationship so that the impacts of various policy instruments can be accessed. This can help to analyze specific economic policies, such as “Hukou” system and social security arrangements, for facilitating rural-urban migration in China.

\(^1\) Compared with CIDS 1999 and 2002 which including 11 large, medium and small Chinese cities, CULS 2001 and 2005 only covers five large cities and a relatively smaller sample size.
4 Policy Relevance

During the past two decades, the large scale spontaneous rural to urban migration has become one of the most significant phenomena in China’s labor market. How to manage the unprecedented scale rural-urban migration requires policy makers to gather more information about rural-urban migrants, making this project a highly policy relevant study from two aspects.

First, China’s current urban social safety net is not accessible to rural migrants. This situation cannot be sustainable. As the Chinese government pay more and more attention on migrants’ issues in recent years, a coherent social safety net which covers both urban residents and rural migrants will be established in the future. Understanding the dynamic change in working status of rural migrants relative to their urban counterparts will definitely be used in designing an appropriate social protection system.

Second, an important policy issue of migration is how to “keep peace” between migrants and the locals. However, some empirical evidence shows that the “guest worker” system tends to enlarge the earning gap between rural-urban migrants and their counterparts in urban areas at least in the short run. In order to deepen the understanding of this issue in China and reduce its side effects, this project intends to explore the assimilation of migrants, by which we mean the convergence of economic and cultural traits of migrants with the urban societies. Based on the previous literature for international migration in developed countries, this project will extend the traditional assimilation model to study the rural-urban migration in China and probe the extent to which migrants assimilate and the channels through which they assimilate into urban society. An important policy implication is that policy makers can use various channels of assimilation, such as training, human capital investment and adjustment of local migration policy, to reduce the social costs related with the migration process.

In addition, the project is also ambitious to develop a migration monitor tool by incorporating the empirically estimated long-term relationship of economic assimilation into a dynamic recursive model. Thus, numerical simulation can be made to analyze the impacts of various policy adjustments on migrants’ status.
5 Methodology and Model Specification

There are generally three main approaches used in this project. The first approach is to use some decomposition methods to analyze the dynamic change of wage gap between male and female rural migrants and urban residents and its determinants. Second, the economic assimilation model and some graphic analysis will be employed to examine whether and how fast each cohort of male and female rural migrants can catch up their urban counterparts and is there any difference in assimilation profiles across gender and scale of cities. Finally, in order to make some policy implications, the dynamic recursive technique will be used to examine the impact of different policy instruments.

Wage Gap Decomposition

In the spirit of the Oaxaca’s (1973) one period decomposition, Smith and Welch (1989) developed an alternative approach to examine how the changes in means and returns to the explanatory variables combined to affect changes in wage gap over time. My study borrows their decomposition method to analyze attributes of some key variables to the change in wage gap between male (or female) migrants and urban workers from 1999 to 2002 in Chinese urban labour market. The Change in wage ratio of rural migrants relative to urban residents proposed by Smith and Welch (1989) can be expressed by the following equation:

\[
\begin{align*}
(\ln w_{u2} - \ln w_{r2}) &- (\ln w_{u99} - \ln w_{r99}) = \beta_{u2}(\bar{X}_{u2} - \bar{X}_{r2}) - (\bar{X}_{u99} - \bar{X}_{r99}) \\
&= \beta_{u99}(\bar{X}_{u2} - \bar{X}_{u99}) - (\bar{X}_{u99} - \bar{X}_{r99}) \quad (i) \\
&+ (\beta_{u2} - \beta_{u99})(\bar{X}_{u99} - \bar{X}_{r99}) \quad (ii) \\
&+ (\bar{X}_{u2} - \bar{X}_{u99})(\beta_{u2} - \beta_{r99}) \quad (iii) \\
&+ \bar{X}_{r99}(\hat{\beta}_{u2} - \hat{\beta}_{r2}) - (\hat{\beta}_{u2} - \hat{\beta}_{r99}), \quad (iv)
\end{align*}
\]

where, for this study, the superscripts \( u \) and \( r \) refer to urban residents and rural migrants, respectively; subscripts 02 means year 2002 and 99 is year 1999; \( \ln w \) indicates the mean log earnings; \( \hat{\beta} \) presents the estimated coefficients from wage regression; and \( \bar{X} \) is a vector of means for personal endowments.

This approach decomposes the raw change of wage gap between urban residents and rural migrants
into the following four components. The first term (i) in the above equation (1) measures the predicted change in wage ratio due to changing in mean characteristics, valued at 1999 urban residents’ parameter values. For example, if education differences between urban workers and rural migrants diminished over time, the wage gap between them would narrow. The change due to variation in mean attributes is regarded as “the main effect” (Smith and Welch, 1989). The second term (ii) represents “identity interaction” (i.e. identity of urban residents or rural migrants), which measures the additional change in the wage gap predicted by the change in attributes of rural migrants, fixing the difference of returns between urban residents and rural migrants in 2002. For example, if the return to “years of schooling” of urban residents in 2002 are higher than that of rural migrants, then an increase in mean levels of “years of schooling” overall leads to an increase in the wage gap. The first two terms (i) and (ii) measure the change in wage gap due to changes in the means of characteristics.

The remaining two terms (iii) and (iv) are usually acknowledged as the portion of change in wage gap that can be explained by changes in the coefficients \(^2\). The third part (iii) captures the effect of a change in the wage gap due to an increase in the returns to a characteristic across year for urban residents, valued at differences of mean characteristic levels between urban residents and rural migrants in 2002. For example, if rural migrants have, on average, less of “years of schooling” than their urban counterparts in 2002, even the return to this characteristic increases across years, the wage gap increases. The last component (iv), denoted as “the identity-year interaction effect”, measures the change in the wage gap that occurs because the wage structure (i.e. relative returns to characteristics) of two groups of workers are changing over time, valued at the mean characteristic of rural migrants in year 1999. For example, if return to “years of schooling” has increased more for urban residents than rural migrants from 1999 to 2002, the wage gap between the two groups will widen.

By using the above decomposition method, the determinants of the wage gap at the mean point can be addressed. However, since migrant workers have always been concentrated in the bottom tail of the wage distribution, if the wage distribution widens (inequality increase within group), then migrant/urban worker comparisons will show a relative decline in migrants’ earnings—even if there has no significant change in the characteristics of rural migrants. Accordingly, LaLonde and Topel (1992) and Butcher and Dinardo (2002) recommended comparing immigrants to native-born workers who would have experienced similar wage changes due to the overall change in the distribution of

\(^2\)The change of the constant terms in wage regressions of urban residents and rural migrants across years are included in this part.
wage. In this project, the semi-parametric methodology proposed by Dinardo, Fortin, and Lemieux (1996) might be adapted, which enables us to decompose the wage gap into its various components at multiple points of the distribution.

**Economic Assimilation Model**

The economic assimilation model is adopted to analyse whether the wage of new rural migrants can catch up their urban counterparts over time spent in host cities. Since the rural migrates collapse at the bottom tail of wage distribution of urban residents, the basic assumption of “constant year effect” in the original economic assimilation model may be violated in the case of internal migration in China. If this hypothesis is true, the traditional model has to be modified to fit this specific case.

The pooled OLS estimation techniques will be employed to analyze the “assimilation effects” on migrants workers. Since there exist significant structural differences between the wages of urban residents and rural migrants, the separated wage equations developed by Borjas (1985, 1995) are used in this analysis, which allows the coefficients vary between rural migrants and urban workers. The baseline wages equations in traditional economic assimilation model are specified as follows:

Migrants’ equation:

\[
\ln Wage_{it} = X_{it}\beta_r + \gamma_{r1}\text{Exp}_{it} + \gamma_{r2}\text{Exp}_{it}^2 + \kappa_1 YSM_{it} + \kappa_2 YSM_{it}^2 + \sum_{k=1}^{L} \pi_k\text{COHORT}_{ik} + \theta_r \text{YEAR}_{it} + \epsilon_{it} 
\]

(2)

Urban workers’ equation:

\[
\ln Wage_{it} = X_{it}\beta_n + \gamma_{n1}\text{Exp}_{it} + \gamma_{n2}\text{Exp}_{it}^2 + \theta_n \text{YEARN}_{it} + \epsilon_{it}
\]

(3)

\(\ln Wage_{it}\) as the dependent variable is logarithm hourly earnings for each individual (rural migrants or urban workers). The independent variables comprise some control variables and measures of immigrant assimilation. The control variables in the regression, \(X_{it}\), include city dummies and individual characteristics, such as health situation, years of schooling, marital status, dummy for party member, and some employment features, such as occupation, industry and contract categories. The “experience effect” is captured by \(Exp_{it}\) and its square term. \(Exp_{it}\) gives the worker’s labour market experience, which is calculated as \(age - yearsofschooling - 6\). The “assimilation effect” is captured by the linear
and quadratic form of $YSM_{lt}$, which is identified by a cross-time variation deviation from the common time effect that is correlated with time since arrival. The “cohort effect” (or arrival year effect) is measured by a group of cohort dummies ($COHORT_{lk}$), which is defined by the year of arrival at the host city. It helps to sweep out the cross-sectional variation correlated with years since migration. $YEAR_{lt}$ gives the year dummy.

Here, since the “cohort effect” gives the intercept and “assimilation effect” provides the slope of assimilation profile of rural migrants, some graphic analysis will be conducted to describe the assimilation profiles for both male and female migrants for a specific cohort across cities compared to their urban counterparts.

**Dynamic Recursive Technique** *(Optional)*

Based on the discussion of measuring the dynamic changes of the earnings gap and specifying its determinants, this project also develop some experimental model with the dynamic recursive technique to simulate the impact of current policy instruments on reducing the wage differential between rural migrants and urban residents in Chinese cities. The dynamic recursive technique has been well developed by Spear and Srivastava (1987), Kydland and Prescott (1980) and Marcet and Marimon’s (1999) and extended to examine optimal policies with rational expectation in a time-inconsistency framework during the past two decades. It is one of the key and powerful tools to study macroeconomic policy issues, which has been widely used for examining optimal planning problems: to design government decision rules and predict policy outcomes. The main idea behind the method is that one can use some recursive technique, such as

$$V(x, s) = \max_{a \in A(x, s)} \{ r(x, a, s) + \beta E[v(x', s')|s] \}, \quad s.t. \quad s' = l(x, a, s)$$

to solve the optimal maximization process (or sequence problem) like

$$\max E_0 \sum_{t=0}^{\infty} \beta^t r(x_t, a_t, s_t)$$

$$s.t. \quad x_{t+1} = l(x_t, a_t, s_{t+1}), \quad a_t \in A(x_t, s_t) \quad for \quad all \quad t \geq 0$$

$$given x_0, s_0$$

where $r(x_t, a_t, s_t)$ is a payoff function, $x_t$ is the state variable, $a_t$ is the control variable, $s_t$ is an exogenous random variable, $\beta \in (0, 1)$ is the discount factor, $A$ is a technological constraint on $a_t$
and \( l \) is the transition function that defines the evolution of the state variable. So that the stationary policy function \( f \) of optimal allocation satisfying \( a_t = f(x_t, s_t) \) for all \( t \), can be simulated.

Applying the dynamic recursive technique to develop a partial equilibrium analysis model for simulating different policy instruments, this project attempts to analyze the role of government in fighting migrant poverty and inequality in urban areas. Three advantages make the method suitable for this study. First, since the model is simulated with the dynamic recursive technique, it cannot provide not only the stationary policy assessment but also the dynamic path of policy impact. Second, since the model provides a laboratory for analyzing optimal government policies, it can be used to compare different policy instruments and their effects on reducing migrant poverty. Third, since related coefficients and parameters are estimated with real data and are dynamically updated in the model, the model can be used as an on-time tool for supervising government policies aiming to reduce migrant poverty.

6 Data

The data used for this project come from China Income Distribution Survey (CIDS) in 1999 and 2002 respectively, which is conducted by the Institute of Economics of the Chinese Academy of Social Sciences. The survey in 1999 is made in 6 provinces covering 13 cities and that in 2002 is made in 12 provinces covering 28 cities. Both surveys are made by using the random sampling method and distinguish between urban residents and rural migrants. Two characteristics of the data are shown as below:

First, since the survey was made both for 1999 and 2002, the data from the survey contain the dynamic information of migrants’ status in urban China. Thus, once combined, they can be used to examine the changes of wage gap between rural migrants and urban residents over time and the dynamic economic assimilation of rural-urban migrants into their host cities.

Second, since the surveys are devised to compare the different statuses of urban residents and rural migrants, the data from the survey contain detailed employment and earning information for both urban workers and rural migrants and some migration related information such as “year of arrival in the host city” and “time spent in the host city” for rural migrants. Thus, cohort effects of migrants can be controlled in the standard economic assimilation model.
Third, even if the sample is restricted to rural migrants and urban workers with their age between 16 to 65, there are still a large sample size left. This will guarantee that the results of our project is reliable in statistics and sustain to sensitivity analysis.

The above three characteristics of the data make it suitable for our project.

In addition, CULS data in 2001 and 2005 can also be available for doing this project. The CULS was conducted in five large capital cities (Shanghai, Wuhan, Shenyang, Xian, and Fuzhou) by the institute of Population and Labor Economics at the Chinese Academy of Social Sciences in 2001 and 2005. It also quite fits for the research purpose of our study. However, CIDS has a larger sample than CULS and includes large, medium, and small cities. Here, we are going to use CULS data to assess the robustness of our results from CIDS and extend our study span to 2005.

7 Consultation and Dissemination Strategy

To disseminate research results to academics, policy-makers and the public, firstly, we will hold seminars at both Chinese Academy of Social Sciences and Australian National University, and seek opportunities to present this project in relevant domestic or international conferences, such as PEP meetings and workshops, China’s Economists Annual Conference, and Annual Conferences of Chinese Economists Society, etc., to collect comments. Secondly, we will denote ourselves to publish our research papers in some high ranked English and Chinese academic journals, such as Journal of Comparative Economics, China Labor Economics and China Economic Quarterly. Thirdly, we will hold a policy consultation seminar for the related government agency and some lectures for students on campus, disseminating our research outcomes to policy-makers and the general public. Meanwhile, we will also send this research report as bulletin report to relevant government agency through well-established channels connecting between Chinese Academy of Social Sciences and related government agencies, including the Developing and Reform Commission of China, Ministry of Labor and the Social Security of China and Ministry of Civil Affairs and so on.
8 List of Team Member and Projects in Related Areas

Last name: Zhang, First name: Dandan, Age: 29, Gender: Female.

Dandan Zhang has been working for Institute for Population and Labor Economics at the Chinese Academy of Social Sciences (CASS-IPS) as a research associate (from 2000 to 2003) and an assistant professor (since July 2003). With the long-term study and research work in the related areas, she has accumulated a large amount of experience in studying China’s rural-urban migration and urban poverty. As a young labor economist in China, Ms. Zhang has participated in a large number of national and international projects during the past five years, which helps her to generate a lot of related publications (See her CV for details). In particular, she is competent at organizing and carrying out national-wide surveys on employment and rural-urban migration issues, and specialized in making the related micro-econometric analysis.

For example, in 2002, Dandan Zhang participated in an international project with the title “China Urban Poverty”, sponsored by the World Bank. As a research associate from CASS-IPS, she contributed to this project by drafting the background paper—“Urban Poverty in China: A Review of Literature, Policy and History”, which was later presented and published on “Urban China Anti-poverty Forum” in December 2002. In July 2004, Ms. Zhang participated in the project of “Social Protection and Urban Poverty in China”, sponsored by the Ford Foundation. As one of the core participants in the project, Ms. Zhang not only succeeded to organize and lead the related household survey which covers fourteen cities in China but also had “Earning Differentials between Rural Migrants and Urban Residents in State and Non-State Enterprises in Urban China” published as a working paper.

From September 2004 to July 2006, Ms. Zhang has been working with the project ‘Impact of the Minimum Living Standard System on Urban Poverty in China” sponsored by CASS-IPS. With this project, she studied systematically the economic assimilation model and its application in studying the issue of rural-urban migration in urban China and had her literature review “Economic Assimilation Model and its Application for Chinese Rural-Urban Migration” published as a working paper. Currently, she is engaged in an international project titled “Rural-urban Migration in China”, sponsored by the Ford Foundation, AusAID and the Australian Research Council, which propose to undertake a five-year longitudinal survey in China and use the a series of modern econometric methods (including
the assimilation model and so on) to examine the living status of rural-urban migration in urban China.

Dandan Zhang will contribute to this project with model set-up, data analysis and report writing.

Last name: Wang, First name: Dewen, Gender: Male.

Dr. Dewen Wang is currently an associate professor at the Institute of Population and Labor Economics, Chinese Academy of Social Sciences (CASS-IPS) and working as the Head of Social Security Division and Deputy Director of Center for Social Security Research, CASS, since 2002. As a famous labor economist in China, his background as a former government officer (he had ever been appointed as the Deputy Division Director, Department of Agricultural Policy and Regulation, Ministry of Agriculture during the period of 2001-2004) made his research on the issue of rural-urban migration and urban poverty provoked from both the academic and policy perspectives.

Dr. Dewen Wang is competent at using modern econometric methods to analyzing the labor economic issues with micro-economic data. In particular, he is specializing at using the wage decomposition method and the economic assimilation model. His current research interests are mainly focusing on Employment, Wage and Social Security, Population Transition and Economic Growth, Rural Development and Agricultural Policy in China, and being involved in many co-operation research projects with the Ford Fund, the World Bank and so on focusing on the rural-urban migration.

Dr. Dewen Wang will contribute to this project through model set-up, policy analysis and report writing.

Besides the above team member, the project will also get access to some technique and academic supports from external resources, such as Prof. Xin Meng, Prof. Yaohui Zhao, Prof. Xiaoyuan Dong, through consultation and collaboration. Both Dandan Zhang and Dr. Dewen Wang have a long-term cooperation relationship with Prof. Xin Meng, Prof. Yaohui Zhao, Prof. Xiaoyuan Dong in carrying out the study of the rural-urban migration issues in China and continuously get their support from the academic perspective, which will help the fulfillment of the project.
9 Capacity Building

Due to the lack of data, methodologies and financial support, the research on the rural-urban migration issue in China has long been under developed. As the top research institute focusing on the study associated with rural-urban migration and urban poverty issue in China, the Institute of Population and Labor Economics, Chinese Academy of Social Sciences (CASS-IPS), though making some progress in some related fields, need to carry out some in-depth analysis with some more advanced empirical methods. The supports from the PEP of IDRC will definitely helps to push forward the current research frontier in this field for CASS-IPS (also China) and arouse the public interest from both the academic and government perspectives. In particular, since the project is the first attempt to explore the rural-urban migration issue in China from a dynamic perspective, it will provide some good mode and research frameworks for the future related studies.

CASS-IPS not only takes the lead in the research and teaching on the labor economics issues but also plays an important role in influencing the policy-making process in China. Thus, another important consequence of this project is that it may help to contribute significantly to the capacity building for some academic institutes as well as government agencies thorough the academic and policy-suggestion-related influence of CASS-IPS. In addition, the research and international collaboration will also help to nurture the research ability for some young labor economists, such as Dr. Dewen Wang and Dandang Zhang, and contribute to the capacity building of those young in CASS-IPS.
References


Appendix: Response to the Referees’ Comments

Comment 1, definition of the “guest worker” system.

Response: We agree with the comment from the referee that the “guest worker” system needs to be addressed more clearly. In the new version, we highlighted the feature of this unique system in China. The major difference is the existence of Hukou system (Household Registration System) that cause rural migrants cannot choose cities as a permanent resident place through migration. The man-made institutional discrimination has deprived rural migrant workers of the equal rights of employment, social securities, and access to public service (education, health, housing and so on) as urban workers.

Comment 2, the relationship between “rural-urban migration” and “rural poverty reduction”.

Response: Thank you for the referee to suggest us emphasis the link between rural-urban migration and poverty reduction issue. Rural-urban migration can attribute to reduce rural poverty and increase agricultural productivity through the following three channels. (1) Remittance of rural-urban migrants may increase the income of rural household and help to reduce the rural poverty; (2) The return of the rural-urban migrants bring back human capital and their savings, which may increase investment and thus the rural productivity; (3) migration reduces the number of redundant workers, which increase the household income and makes some advanced agricultural technique applicable in rural areas.

Comment 3, data problem.

Response: (1) Although the data from CIDS is not longitudinal data, the method that we used (the assimilation model) can be used to compensate for the shortcoming of the data (only pooled-panel data will be enough); (2) It true that we’d better use some data with long time span. So, we add a new data set—CULS 2001 and 2005 to extend the time span covered by our research. Although the data from CIDS (in our proposal) only covers the period from 1999-2002, new data from CULS (for 2001 and 2005) is going to be available as the project proceeds. In the revised proposal, we introduced the data from CULS to compensate the shortcoming of the data from CIDS (3) since the main wave of rural-urban migrants take place after 2000, the time span that we have chosen is reasonable. Actually, there is no better available data can address this important issue of dynamic change of wage inequality between rural migrants and urban residents currently in China.
Comment 4, the linkage between wage assimilation and poverty reduction.

Response: Thanks for the comments from the referee on one of our shortcomings in the previous version of the proposal, which shows that it is lack of discussion on the linkage between wage assimilation and poverty reduction. To compensate for this shortcoming, we clarify the definition of "guest worker" system in China and elaborate the discussion on the linkage between the wage assimilation and poverty reduction in China in the revised version. In fact, due to the current institutional arrangement, the rural-urban migrants are unfairly treated in the urban area. As a consequence, they suffer from the discrimination and constitute a serious threaten to current poverty reduction policy especially in the urban area. It is the unfair institutional arrangement which discriminating between rural and urban workers that causes such a source of poverty.

Comment 5, policy tool.

Response: Understanding how the dynamic wage gap between urban and rural areas and what are major determinants behind it has many important policy implications for policy makers. For example, if the discriminative institutional arrangement (i.e. Hukou system) restricts rural-urban migrants from being equally treated as their urban counterpart, we should take measures to eliminate it. This will contribute greatly to facilitate the current poverty reduction policies. Basically, intermarriage, as a main channel to assimilate during international migration process, is not an important policy tool for internal migration in China. So, we just ignore it in our project.

Comment 6 & 7, wage decomposition method.

"About the Wellmington method"

Response: Thanks for the comment from the referee about the method used for studying the wage structure, which is one of our shortcomings in the previous version of proposal. In order to deal with this problem, we turned to use the method from Smith and Welch (1989)'s method to replace that from Wellington (1993), which is actually incorrect. With the Smith and Welch’s method, the components of wage changes can be more explicitly examined.

"Use of quantile regression" and "Occupational segregation"

Beside giving some useful comments on the wage decomposition at the aggregate level, the referee also raise two interesting extension for our study. One is about using the quantile regression and the
other is to make the occupational segregation. We think that both suggestions are interesting and should be incorporated into our study as much as possible. For quantile, we are thinking to use some descriptive statistics to compare the wage of rural and urban workers at each quantile of their wage distributions. For occupational segregation, the basic idea is that we are going to use a multi-nominal logit model to address the occupational attainment issue over time and examine the changes in their determinants.

Comment 8, focus of the project.

We agree with the referee. Since the project mainly aims to examine the dynamic changes in wage gap between rural and urban workers, we will treat the third section (developing the dynamic recursive model) as an optional part. This will make our study more focus.