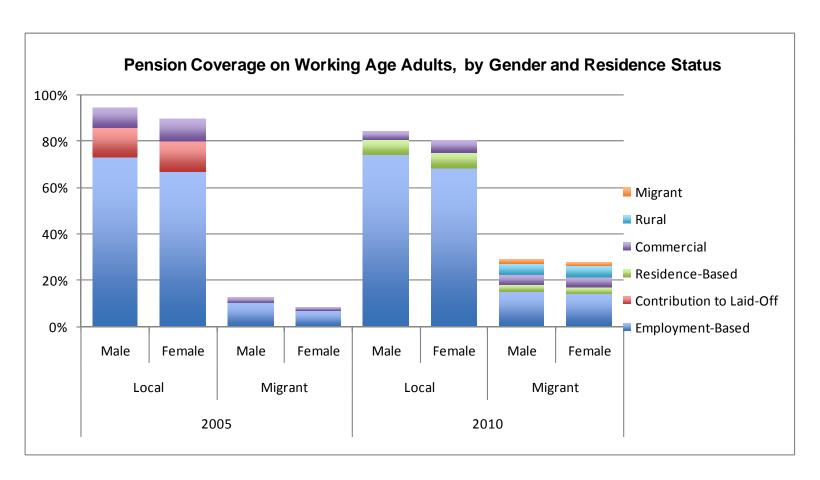
## Social Insurance and Social Protection in China

John Giles and Dewen Wang

Section 3

Slides Summarizing Micro Empirical Evidence on Analysis of Coverage

# Pension Coverage in 2005 and 2010: Increases in Coverage through Employers and Participation in Residence-Based Pension



# Use of Employment Contracts and Increased Benefit Coverage Among Migrants Driven by Changes in Sample Composition?

**CULS Migrant Populations for 2005 and 2010** 

Use of Contracts and Access to Employer-Based Pension

		2005			2010	
	Migrant-	Migrant -	Total	Migrant-	Migrant -	Total
	Non-Ag	Agric	Migrants	Non-Ag	Agric	Migrants
Contract	177	317	494	451	672	1123
No Contract	514	3017	3531	645	2915	3560
Total Migrants w/Contract Info	691	3334	4025	1096	3587	4683
Share w/Contract	0.26	0.10	0.12	0.41	0.19	0.24
Emp-Based Pension	157	193	350	403	306	709
No Pension	521	3070	3591	686	3227	3913
Total Migrants w/Pension Info	678	3263	3941	1089	3533	4622
Share w/Emp-Based Pension	0.23	0.06	0.09	0.37	0.09	0.15

### How do Migrant Status, Gender & Education Affect Pension Coverage?

- Estimate Probit Models for Participation in Different Types of Pension Schemes
- A First Set of Models Controls for Individual Characteristics (Age, Gender, Education, Residence Status), Survey Round And Interactions
  - Highlight difference in probability of coverage based on gender and hukou status
  - Note differences within the migrant population (urban versus rural migrants) and migrant men versus migrant women
  - Examine whether differences over-time experienced by women relative to men, migrants relative to local residents

### Gender and Migrant Status Over Time

- Women are less likely to have employer-provided pension coverage (Table 3.2, column 1)
  - 5 percent less likely than men overall, though the 70 percent of the gap with men closes by 2010 (see Female\*Migrant interaction)
- Migrants are far less likely to have pension contributions than local residents
  - Overall, migrants are 43 percent less likely to have pension contributions, and for migrants with rural *hukou* status this probability is reduced another 26 percent
  - Among migrants, women are 5.4 percent more likely to be covered than men

#### Education

- An additional year of schooling is associated with a 4 percent higher probability of receiving pension contributions
- Completing some post-secondary education is associated with 7 percent higher probability

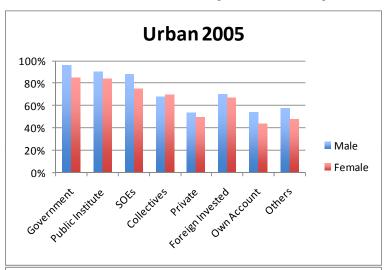
# How Important are Industry and Ownership Sector for Driving Differences Across Individuals?

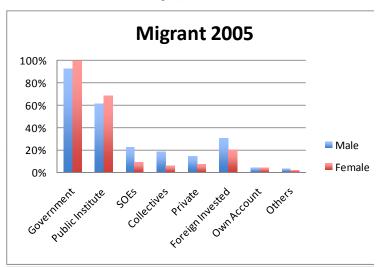
- What drives apparent gender differences and other differences across groups?
  - Discrimination or characteristics of industry or work-unit where workers of a particular type (gender, migrant status, education) are employed
  - Include industry dummy variables (Table 3.2, column 2), work-unit dummy variables, (Table 3.2, column 3)
- Industry & Ownership of Work-Unit?
  - Include Industry Controls: Magnitude of negative effect on female declines from 5 to 2.1 percent and becomes insignificant: industry and occupation which women sort into may account for difference
  - Less apparent effects of ownership sector
  - Industry and Ownership have a much less pronounced effect on the probability that migrants have access to pensions.

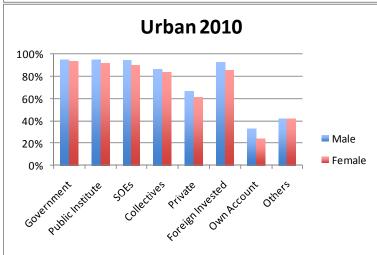
### Labor Contracts and Access to Pensions Funded by Employer & Worker Contributions

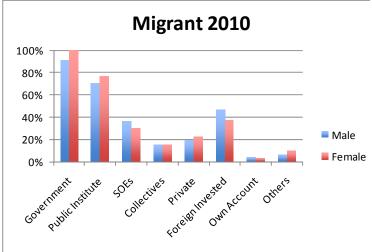
- Working in a position with a labor contract is associated with a 40 percent increase in the probability of having pension contributions (Table 3.2, Column 4)
- Once industry and work-unit ownership dummy variables are included, a contract is still associated with a 29 percent increase in probability of pension contributions (Table 3.2, Column 6).
- Even after controlling for industry and work unit ownership, migrants and rural migrants are still far less likely to have pension coverage through employer contributions
- Bottom line: Evidence consistent with usefulness of contracts.
   Focusing on specific industries in which firms don't provide coverage makes sense
- Another look: Some ownership sectors (e.g., Foreign Invested and Private) have expanded coverage significantly for both migrants and local residents

#### Participation in Pension through Employer/Worker Contributions (by Enterprise Ownership)









# Residents' Pension and Rural/Migrant Pension Programs

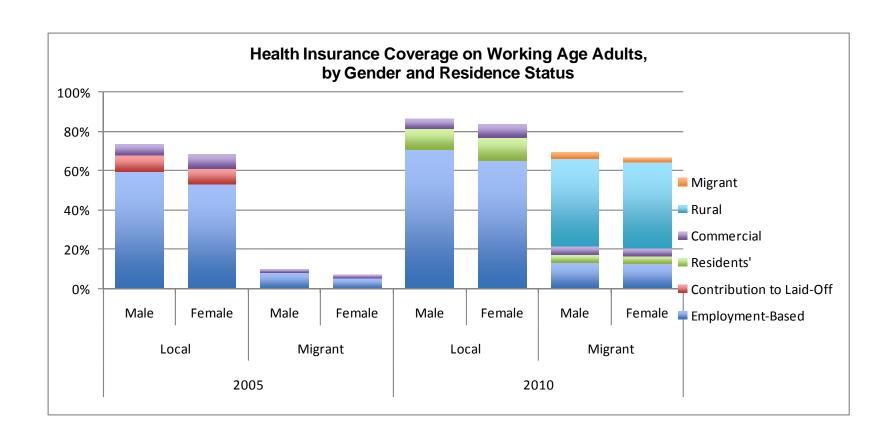
- Develop Programs Targeting Individuals Who Might Not Have Employer-Based Program
- Results of Probit Models for Participation in 2010 in Residents' Pension (Table 3.3) and Rural Pension or Migrant Pension (Table 3.4).
  - Note that coefficients are smaller, but they may still be economically significant as average participation in the sample is low (4.8 percent for Residents' Pension and 6.6 percent for Migrant or Rural Pensions).
  - Note that migrants, and in particular, rural hukou migrants, are significantly less likely to participate. This likely gets to issues of both portability and program design
  - Having a Labor Contract is strongly associated with participation.
     Reflects individual characteristics associated with ability to get a contract, and to recognize a need to think longer term. More established individuals want a contract and a way to insure against poverty in old age.

### Participation in Health Insurance Programs

## Health Insurance and Other Sources of Social Protection

- Patterns of access to health insurance are very similar to those for pensions, with a couple of differences
  - Implementation of the New Rural Collective Medical Scheme (NRCMS)
    means that a far higher share of migrants have health insurance
    coverage
  - Important to remember that this coverage is available in migrant home communities, and migrants typically cannot use it in their current place of residence
- More pronounced growth in coverage from 2005 to 2010 for all types of health insurance
- Significant differences between migrant and local residents
- Slight differences by gender as well

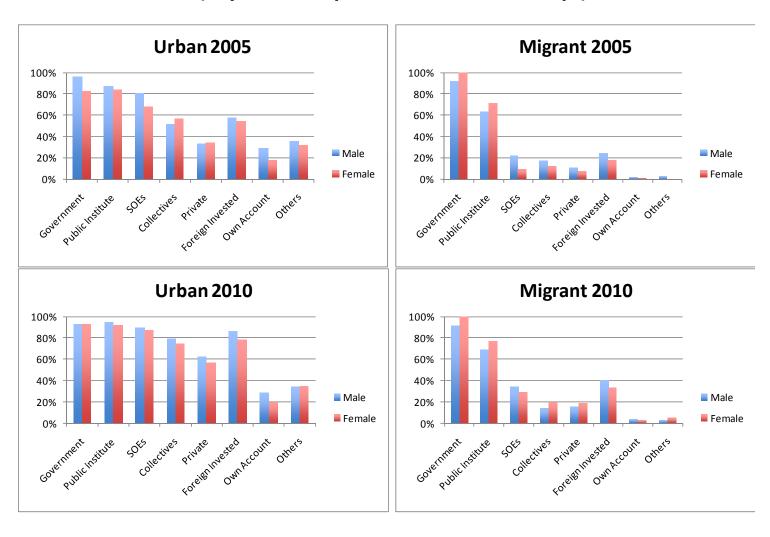
## Health Insurance Coverage in 2005 and 2010: Increases in both Employer-Provided Health Insurance, and Access to NRCMS Insurance



### Health Insurance Provided Through Employer/Employee Contributions

- Patterns are very similar to those for pensions
- Significant increase from 2005 to 2010 in likelihood of participation
- Migrant, and particularly rural migrants are less likely to have coverage
- The differences between men and women, before controlling for industry are not as strong (Table 3.5, column 1), and participation of women may actually have improved overall
- As with pensions, a labor contract is strongly associated with having contributions through an employer.

#### Participation in Health Insurance through Employer Contributions (by Enterprise Ownership)



#### Residents' Health Insurance

- No information from 2005.
- Multivariate analytical results in Table 3.6
- Participation in Residents' Health Insurance is consistent with a response to lack of formal coverage among local residents:
  - Negatively associated with access to employer-based pension
  - Negatively associated with having a labor contract
  - Gender has no impact on participation
  - Individuals with some post-secondary education are much less likely to participate
  - Migrants, and even more, rural hukou migrants are less likely to participate (a design or portability issue?)

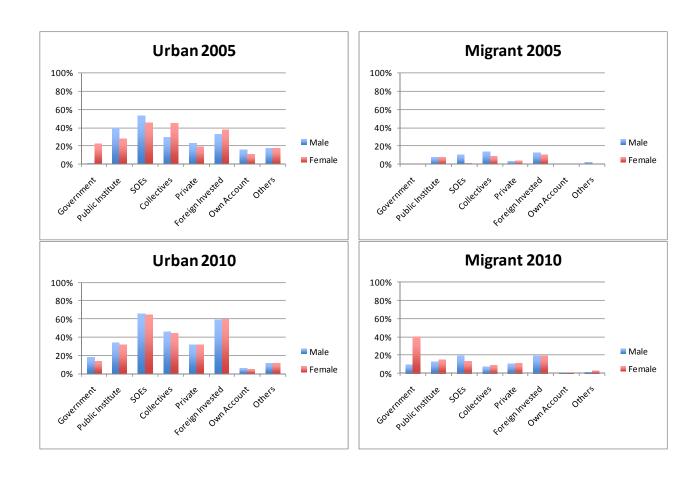
### Migrant/Rural Health Insurance

- No Information from 2005
- Sample restricted to migrants
- Probit Marginals shown in Table 3.7
- Few respondents report participating in migrant health insurance so we pool with participation in NCMS
- Individuals with less education (and less likelihood of participating in employer-based insurance coverage) are more likely to be covered by this insurance. Individuals with a labor contract are also less likely to report this source of coverage
- Women are somewhat less likely to have coverage
- Controlling for industry and work unit ownership has little effect (which makes sense as the source of insurance is in home villages)

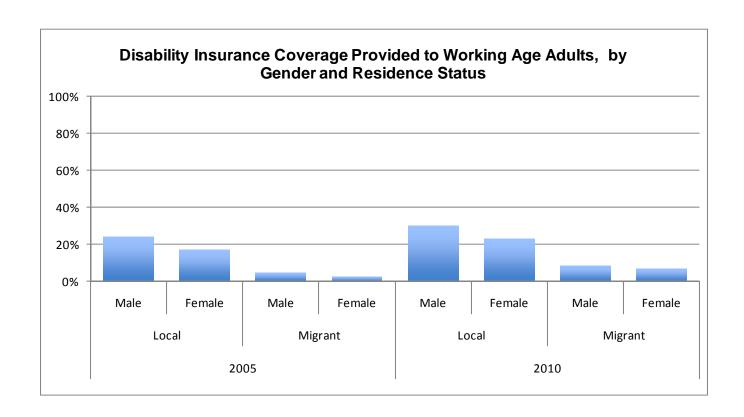
### Unemployment Insurance Coverage

- Questions About Data: Low Coverage of Government and Public Institutions Workers
  - Do government and shiye danwei (CASS) employees lack UI coverage?
  - Or do they not have it because they really face no chance of unemployment or layoff?
  - Or is layoff so unlikely that they do not know whether they have this source of insurance
- Similarities to Pensions and Health Insurance (Results in Table 3.8)
  - Migrants less likely to be covered but coverage increased between 2005 and 2010
  - Slightly lower coverage of women disappears once contr

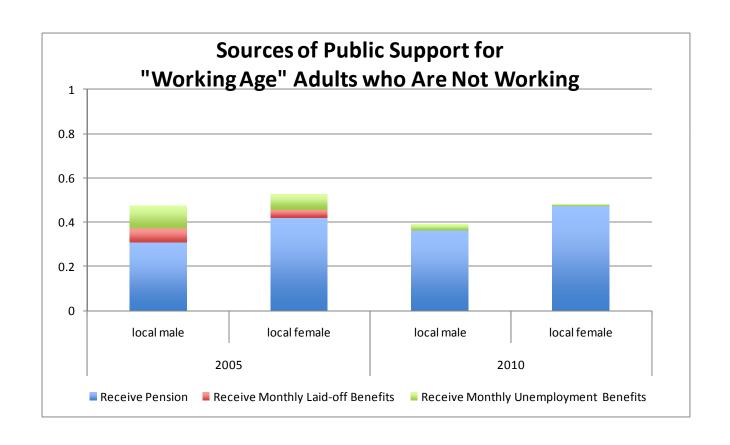
### Unemployment Insurance Coverage in 2005 and 2010: A Puzzle...Perhaps the CULS Does Not Ask About this Correctly?



### Disability Insurance Coverage in 2010



### Pensions from Early Retirement are the Primary Source of Support for Working-Age Adults Who are Currently Not Working



#### Pension Receipt by Retirement-Age Adults

