POPULATION DYNAMICS
INTRODUCTION

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MAIN TOPICS

1. **BACKGROUND**
   - **China's Population Transition**
   - **Population Policy**
   - **New Strategic Population Issues**
   - **Traditional Chinese Society: Son Preference**
   - **Transitional Chinese Society: Rural-urban Migration**
   - **Summary**

2. **RURAL-URBAN MIGRATION STUDIES**
   - **Study Design**
   - **Survey & Data**
   - **Characteristics of Respondents**

BACKGROUND

1. China's Population Transition

In the past five decades, China has experienced dramatic population changes:

- Pre-1949: High birth rate, high death rate, low natural growth rate;
- 1950-1969: High birth rate, low death rate, high natural growth rate;
- 1970-today: Low birth rate, low death rate, low natural growth rate.

Total fertility rate (TFR) and life expectancy at birth (EO) of China, 1950-1999
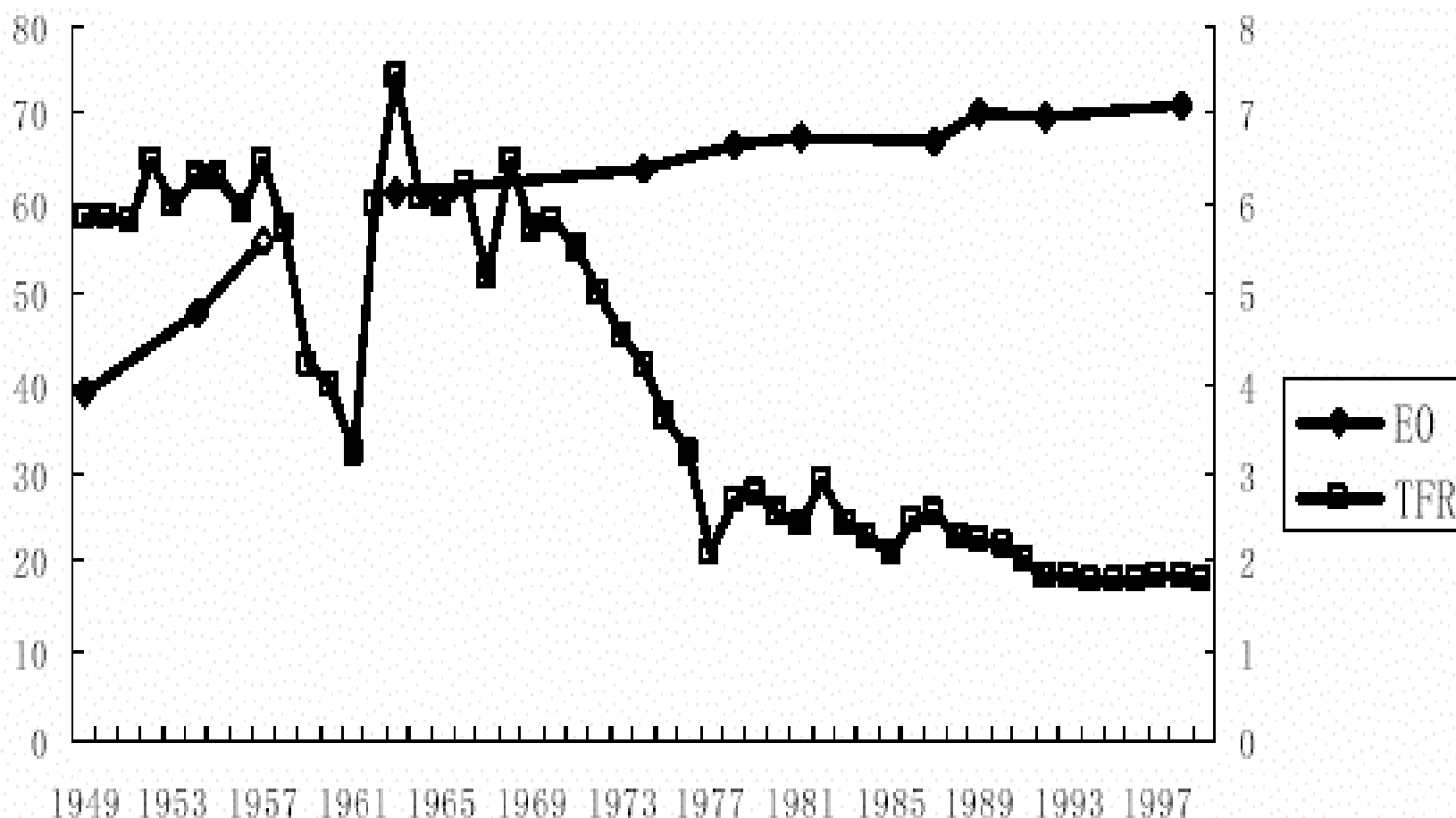
Source: Jiang Leiwen. 2002. Has China Completed Demographic Transition?
http://www.iussp.org/Bangkok2002/S02Leiwen.pdf

BACKGROUND

2. Population Policy

1) Process

- **1970-1980**
  "Later birth, longer spacing, fewer children"
- **1980-1984**
  Transition to one-child policy
- **1984-1991**
  Formation of current birth control policy
- **1991-2005**
  Stabilization of current birth control policy
- **2006 and later, new policies???**

BACKGROUND

2. Population Policy

2) Main features of current birth control policy

- Promote late marriage and later, fewer but healthier births with prevention of genetic and birth defects;
- Advocate the practice of "one couple, one child";
- Persuade rural couples with difficulties who want a second child to have proper spacing;
- Let the governments of autonomous regions or provinces inhabited by the national minorities set their family planning requirements in accordance with their own local conditions.
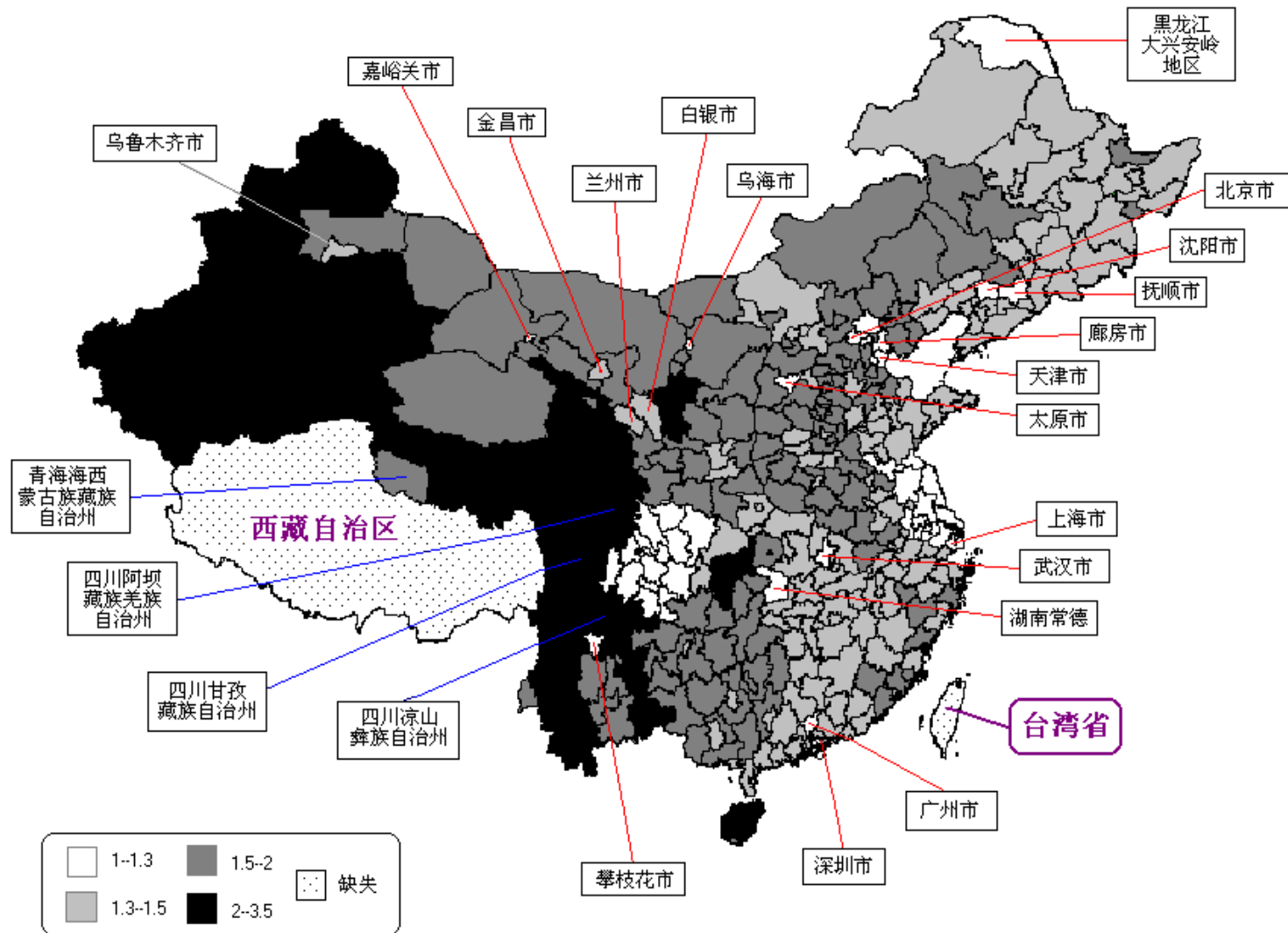
BACKGROUND

2. Population Policy

3) Implementation of current birth control policy

Four types of policies implemented in 420 regions:

- "**One-child policy**", **35.9% of the overall population;**

- "**One and a half child policy**", **52.9% of the overall population;**

- "**Two child policy**", **9.6% of the overall population;**

- "**Three child and above policy**", **1.6% of the overall population.**

BACKGROUND

2. Population Policy

4) Evaluation

Positive effects

- Reduced population size;
- Changed pattern of population growth;
- Improved healthcare for women and children;
- And more…

Negative effects

- Accelerated aging;
- High and rising sex ratio at birth;
- Difficulties of family support for the elderly;
- And more…

BACKGROUND

3. New Strategic Population Issues

1) Huge size of the overall population

2) Unfavorable features of the population: Low education level and high rate of birth defects

3) Public health and HIV/AIDS prevention

4) Aging and old-age support

5) Rural-urban migration, employment burden and social integration

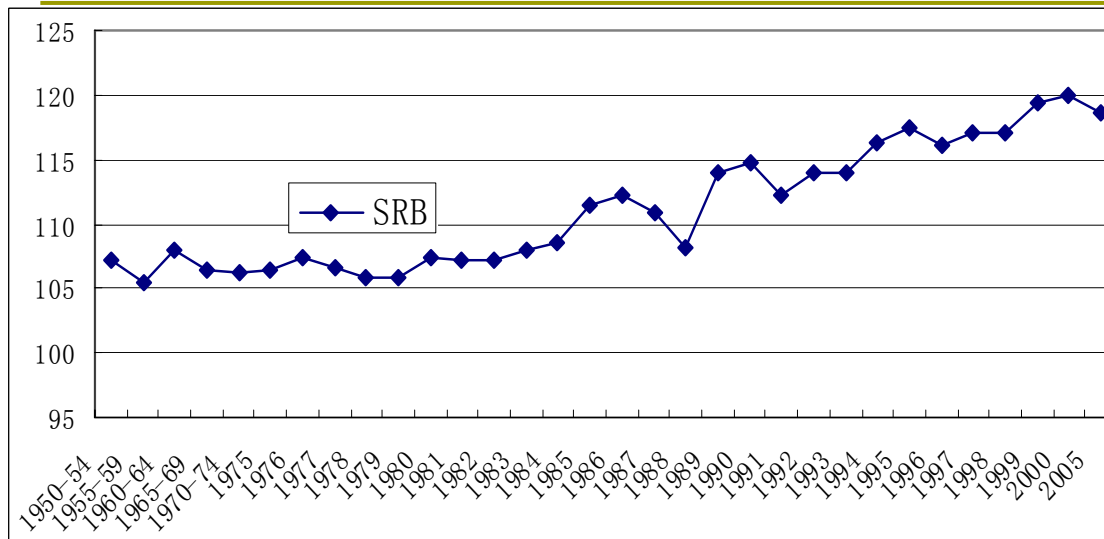6) High sex ratio at birth and serious socio-demographic implications

BACKGROUND

**4. Traditional Chinese Society:
   Son Preference**

1) Phenomena

- **High sex ratio at birth**

- **Excess girl child mortality**

- **Missing women**

High sex ratio at birth (SRB)

Historical and current situation

SRB in 1950-2005 in China

Source: From 1950-1959 and for 1988, SFPC (1990); from 1960-1979, Gu and Xu (1994); from 1980-1987, China Population Statistics Yearbook 1991; for 1989, Reference of Population Census in 1990; from 1990-1999, China Population Statistics Yearbook of past years; for 2000, Tabulation on 2000 population Census.
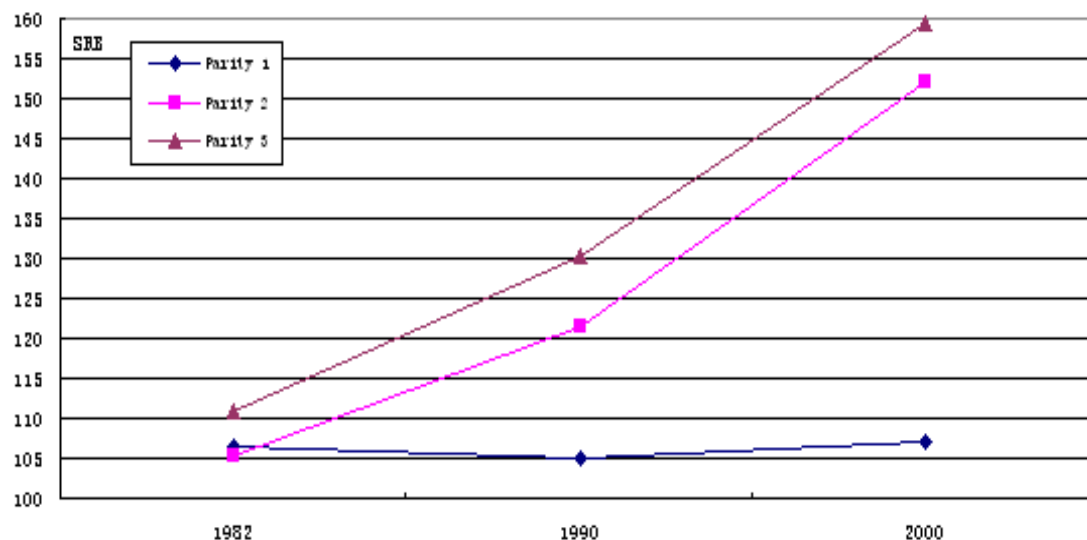
SRB by Parity in Selected Census Years

Source: Tabulation on the population census in 1982, 1990 and 2000.

High sex ratio at birth

Regional difference

- **Higher in rural areas than in urban areas**
- **Increasing both in rural and urban areas**
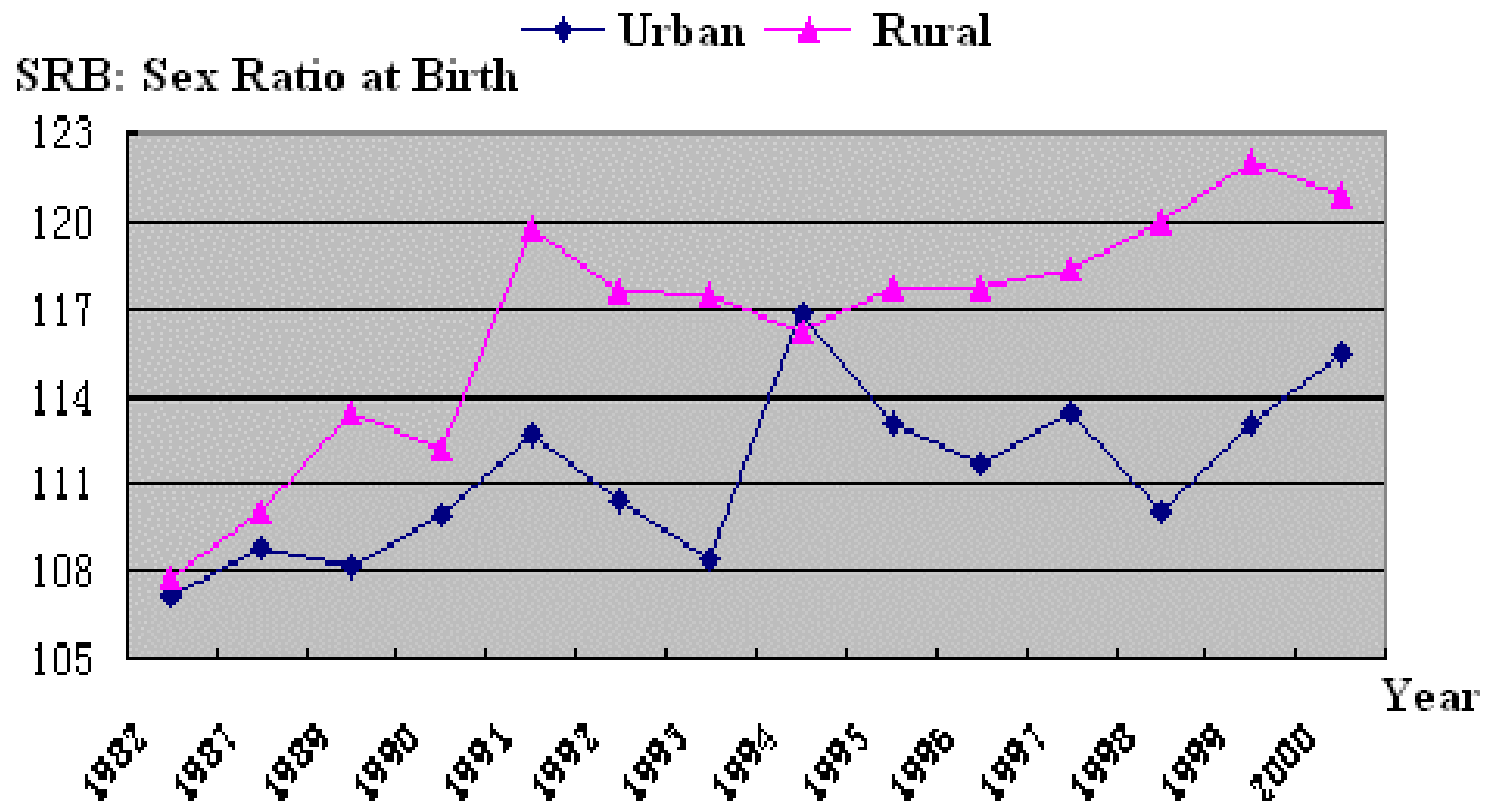
Excess girl child mortality

Sex ratios of child mortality

Excess girl child mortality
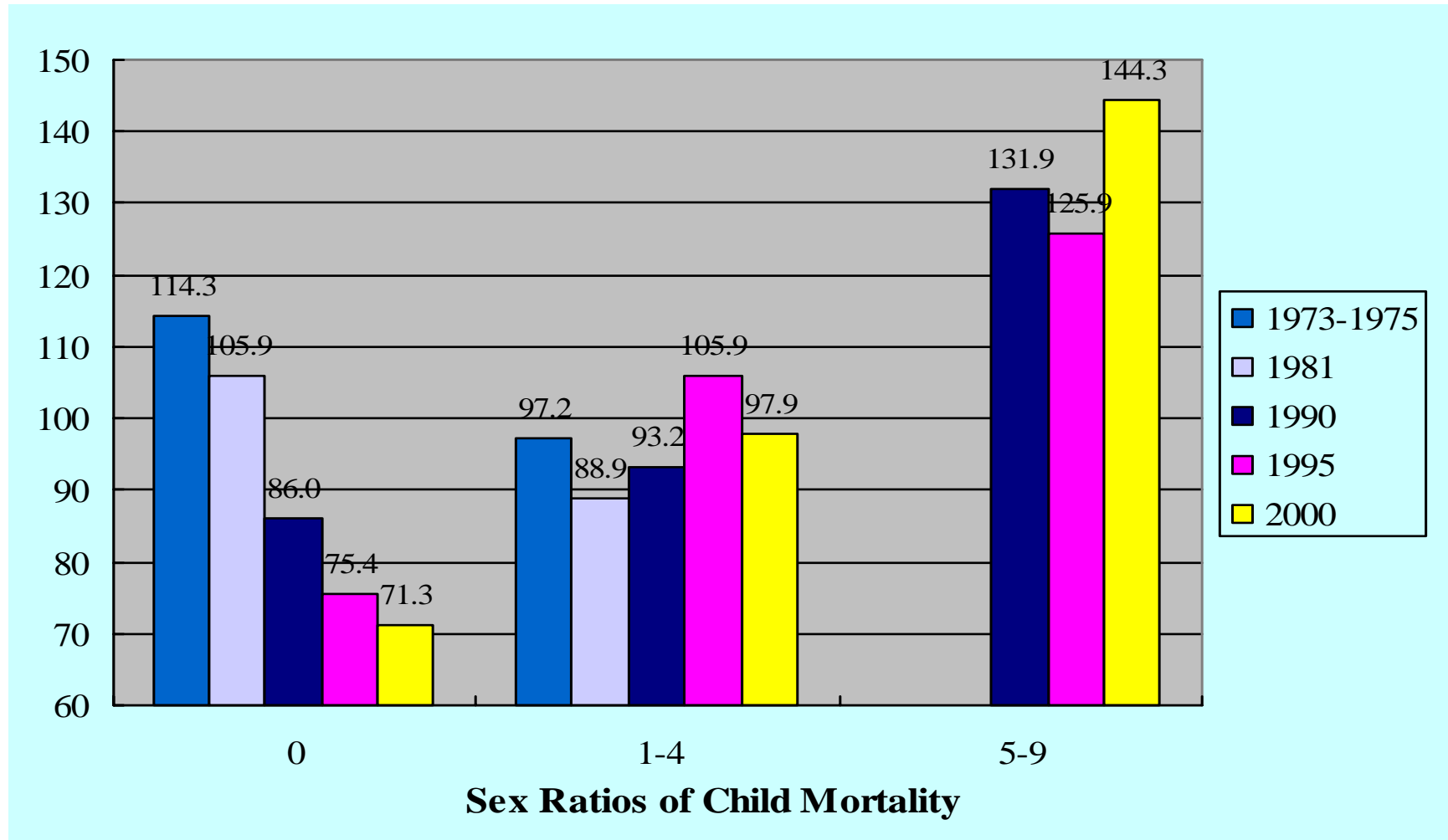
Sex ratios of surviving children

Sex Ratios of Surviving Children
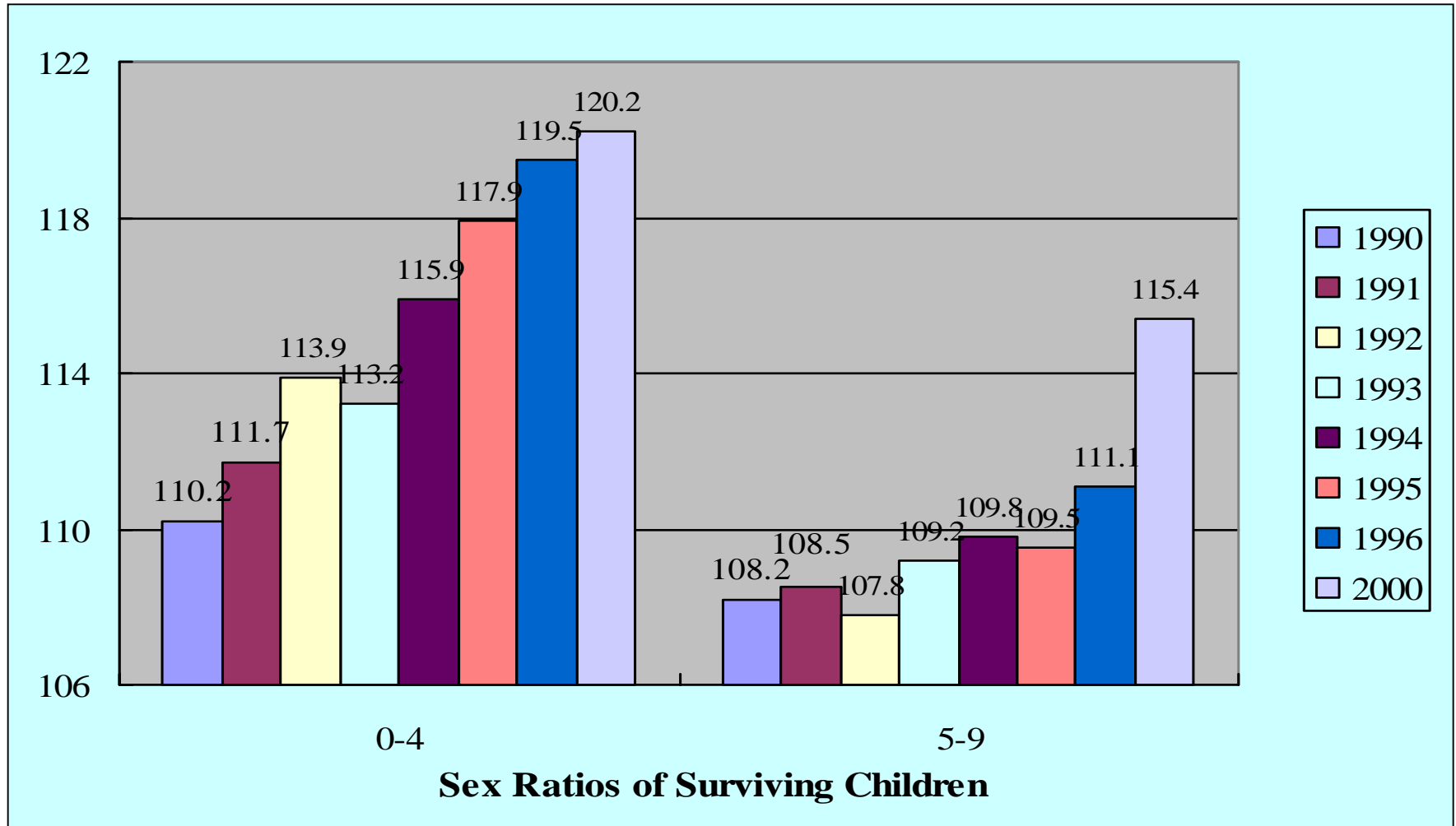
Missing women

Percentages of missing females during 1900–2000
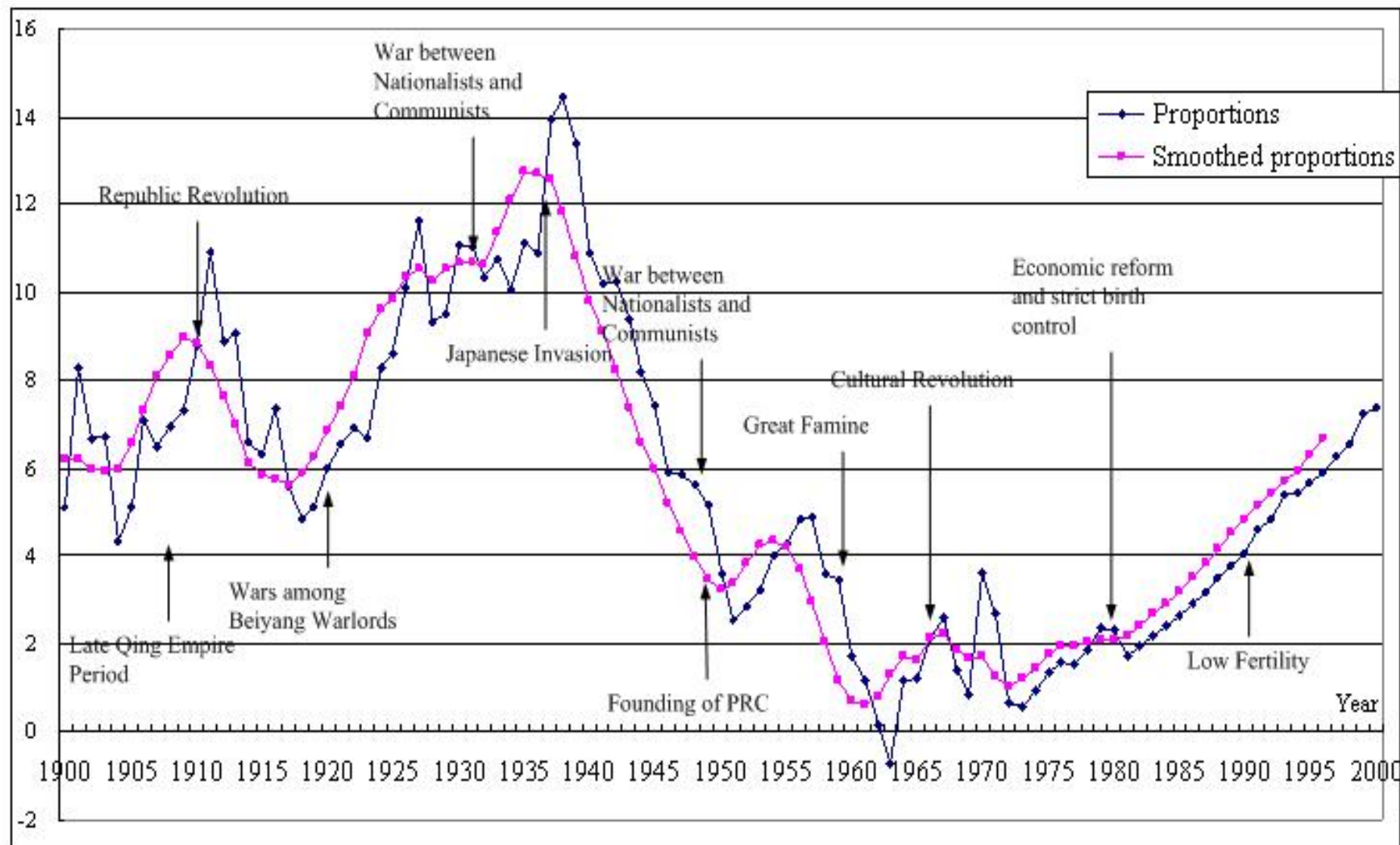
BACKGROUND

4. Traditional Chinese Society: Son Preference

2) Causes

A. Family system and traditional culture
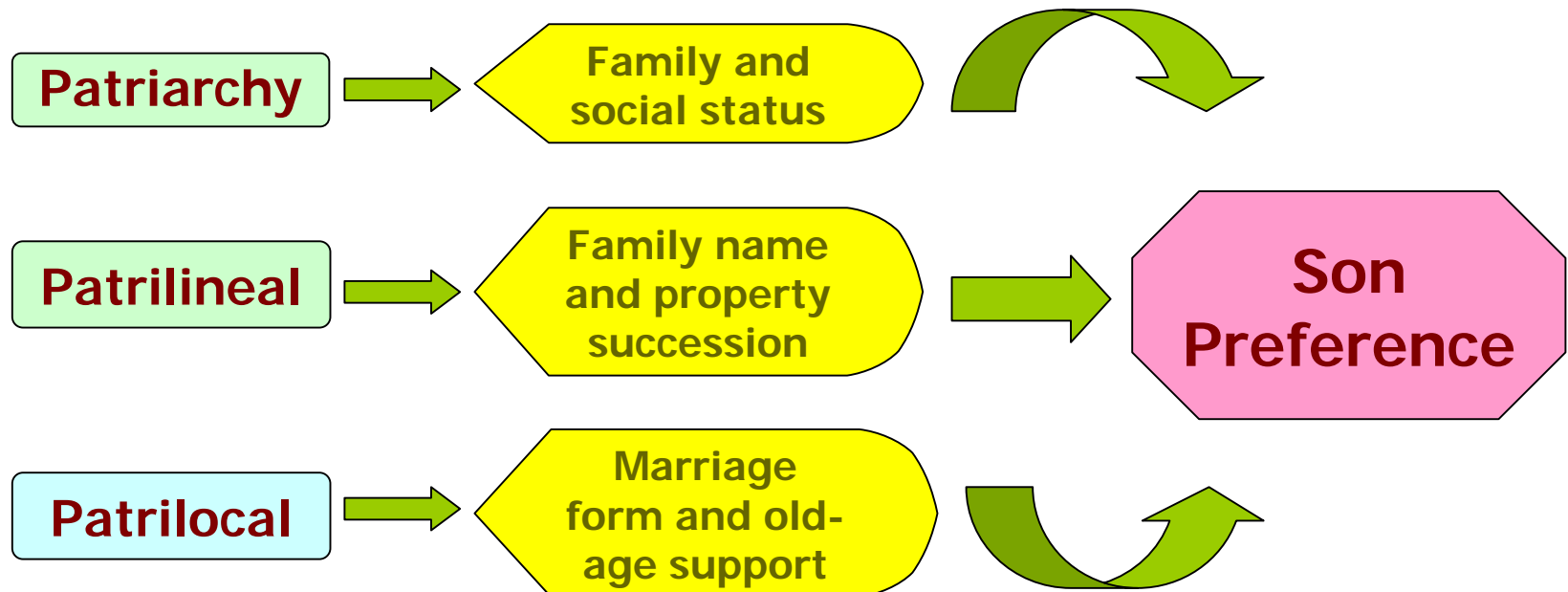
BACKGROUND

4. Traditional Chinese Society: Son Preference

2) Causes

B : Family economy

- ❑   Low socioeconomic level induces great demand for male laborers;
- ❑   Restored production role for family following economic reform makes the number of laborers one of the main factors to increase wealth;

C : Social security systems

- ❑   Current insurance system for elderly support is severely lacking in funds;
- ❑   Income is not high enough for most rural couples to save for their old age; about 67.45 percent of the elderly in rural areas have to be supported by their children, mainly relying on sons;
- ❑   Family support for the elderly is and will continue to be the dominant form of care for the elderly in rural areas in the foreseeable future.

→   **Son preference is fundamentally caused by the traditional Chinese culture, and exacerbated by the sustained low fertility followed by the strict birth control policy and socioeconomic change.**

4. Traditional Chinese Society: Son Preference

3) Implications for Chinese society

- **Marriage market imbalance**
  The surplus male population will reach 30 million in 2020, which will threaten social and demographic security.

- **Women's status and human rights**
  Missing females may have helped to slow down China's population growth; this has happened at the cost of deterioration of women's rights of survival, social participation and development.

BACKGROUND

5. Transitional Chinese Society: Rural-urban Migration

1) Brief introduction

- **Household registration system** (*hukou)* **before 1978, confined most Chinese citizens to their place of birth;**
- **Economic reforms** since 1978 caused a significant rural labor surplus;
- **Urban-biased and pro-coastal development policy** enabled cities to achieve rapid economic growth and attracted labor migration from rural to urban areas since the mid-1980s;
- **0.14 billion rural migrants** residing in cities without permanent legal status, 30% of rural labor force;
- **Circular migrants**, moving back and forth frequently.

Increasingly important in Chinese demographic change and social development.

Rural-urban migrants at a city railway station

http://bbs.people.com.cn/bbs/ReadFile

http://news.tom.com

Rural-urban migrants and a permanent urban resident

Historical trends

Urbanization and rural–urban migration in China: 1979–1999

Year	Total population (10,000)	Urban population (10,000)	Urbanization			Natural growth		Net migration	
			Level (%)	Growth rate (%)	Growth in persons (10,000)	Growth in persons (10,000)	Share (%)	Growth in persons (10,000)	Share (%)
1978	96,259	17,250	17.92	2.11	582	144	24.76	438	75.24
1979	97,542	18,494	18.96	5.80	1244	144	11.59	1100	88.41
1980	98,705	19,139	19.39	2.27	645	158	24.51	487	75.49
1981	100,072	20,175	20.16	3.97	1036	200	19.36	835	80.64
1982	101,654	21,479	21.13	4.81	1305	228	17.45	1077	82.55
1983	103,008	22,270	21.62	2.32	791	206	25.99	585	74.01
1984	104,357	24,017	23.01	6.45	1746	210	12.01	1537	87.99
1985	105,851	25,094	23.71	3.01	1077	247	22.89	831	77.11
1986	107,507	26,366	24.53	3.45	1272	281	22.12	991	77.88
1987	109,300	27,674	25.32	3.24	1308	315	24.11	992	75.89
1988	111,026	28,656	25.81	1.94	982	313	31.91	669	68.09
1989	112,704	29,540	26.21	1.55	884	310	35.11	574	64.89
1990	114,333	30,191	26.41	0.75	651	306	47.01	345	52.99
1991	115,823	30,543	26.37	−0.14	352	282	80.21	70	19.79
1992	117,171	32,372	27.63	4.77	1829	255	13.94	1574	86.06
1993	118,517	33,351	28.14	1.85	979	267	27.27	712	72.73
1994	119,850	34,301	28.62	1.71	950	269	28.32	681	71.68
1995	121,121	35,174	29.04	1.47	872	261	29.86	612	70.14
1996	122,389	35,949	29.37	1.15	776	264	34.02	512	65.98
1997	123,626	36,989	29.92	1.86	1040	322	30.96	718	69.04
1998	124,810	37,942	30.40	1.60	953	310	32.54	643	67.46
1999	125,909	38,893	30.89	1.61	951	289	30.44	662	69.56
Annually average growth and shares									
1978–1988	1.44	4.79	0.79	3.72	1199	245	20.41	945	79.59
1989–1999	1.11	2.79	0.47	1.66	1024	314	30.63	710	69.37
1978–1999	1.29	3.79	0.65	2.63	1058	266	25.12	793	74.88

The share of natural urban growth is defined as percentage of natural growth of urban population in total urban growth in persons. The remaining part of total urban growth is the share of net migration.

Source: These values were computed from the *China Statistical Yearbook 2000* and *Comprehensive Statistical Data and Materials on 50 Years of New China*

See: Zhang, Kevin H. and. Shunfeng Song. Rural–urban migration and urbanization in China: Evidence from time-series and cross-section analyses. China Economic Review 14 (2003) 386– 400

Spatial trends

Rural–urban migrants at the end of 1998 by provinces: shares in nation

Regions	Out-migration				Region	In-migration			
	Total	Interprovince	Intraprovince			Total	Interprovince	Intraprovince	
	(%)	(%)	(%)	Share in total		(%)	(%)	(%)	Share in total
Coastal areas	18.80	11.12	33.79	61.15	Coastal areas	68.93	75.54	60.22	37.71
Jiangsu	3.61	2.71	5.39	50.77	Guangdong	30.9	36.57	23.43	32.73
Shandong	3.56	2.36	5.91	56.50	Zhejiang	9.54	11.92	6.40	28.97
Hebei	3.52	2.66	5.23	50.53	Fujian	6.08	6.31	5.77	40.98
Guangdong	3.12	0.45	8.31	90.63	Jiangsu	4.58	3.06	6.59	62.07
Others	4.99	2.94	8.95	61.04	Others	17.82	17.67	18.02	43.63
Inland areas	81.20	88.88	66.21	27.75	Inland areas	31.07	24.46	39.78	55.25
Sichuan	18.97	19.68	17.83	31.98	Sichuan	4.94	1.02	10.11	88.26
Henan	14.17	14.94	12.87	30.91	Henan	4.23	2.75	6.17	63.01
Anhui	10.83	13.90	3.80	11.93	Shaanxi	2.89	2.25	3.72	55.63
Hunan	7.90	10.11	3.76	16.21	Hubei	2.41	1.44	3.70	66.09
Jiangxi	6.12	8.10	2.40	13.33	Xinjiang	2.30	3.52	0.69	13.03
Others	23.21	22.15	25.55	37.46	Others	14.30	13.47	15.38	46.44
Nation	100.00	100.00	100.00		Nation	100.00	100.00	100.00	

Notes: All numbers are percentage in nation, except shares in total for intraprovince, which is percentage in the reporting province. For instance, 50.77% for Jiangsu Province indicates the share of intraprovince migrants in total cityward migrants of Jiangsu.

The coastal areas include three municipalities and eight provinces as follows: Beijing, Tianjin, Shanghai, Hebei, Liaoning, Shandong, Jiangsu, Zhejiang, Fujian, Guangdong, and Hainan.

The remaining provinces are considered as inland areas.

Source: *China Labor Statistical Yearbook 1999*

See: Zhang, Kevin H. and. Shunfeng Song. Rural–urban migration and urbanization in China: Evidence from time-series and cross-section analyses. China Economic Review 14 (2003) 386– 400

Floating direction: The main inter-provincial migration flows in China, 1995-2000
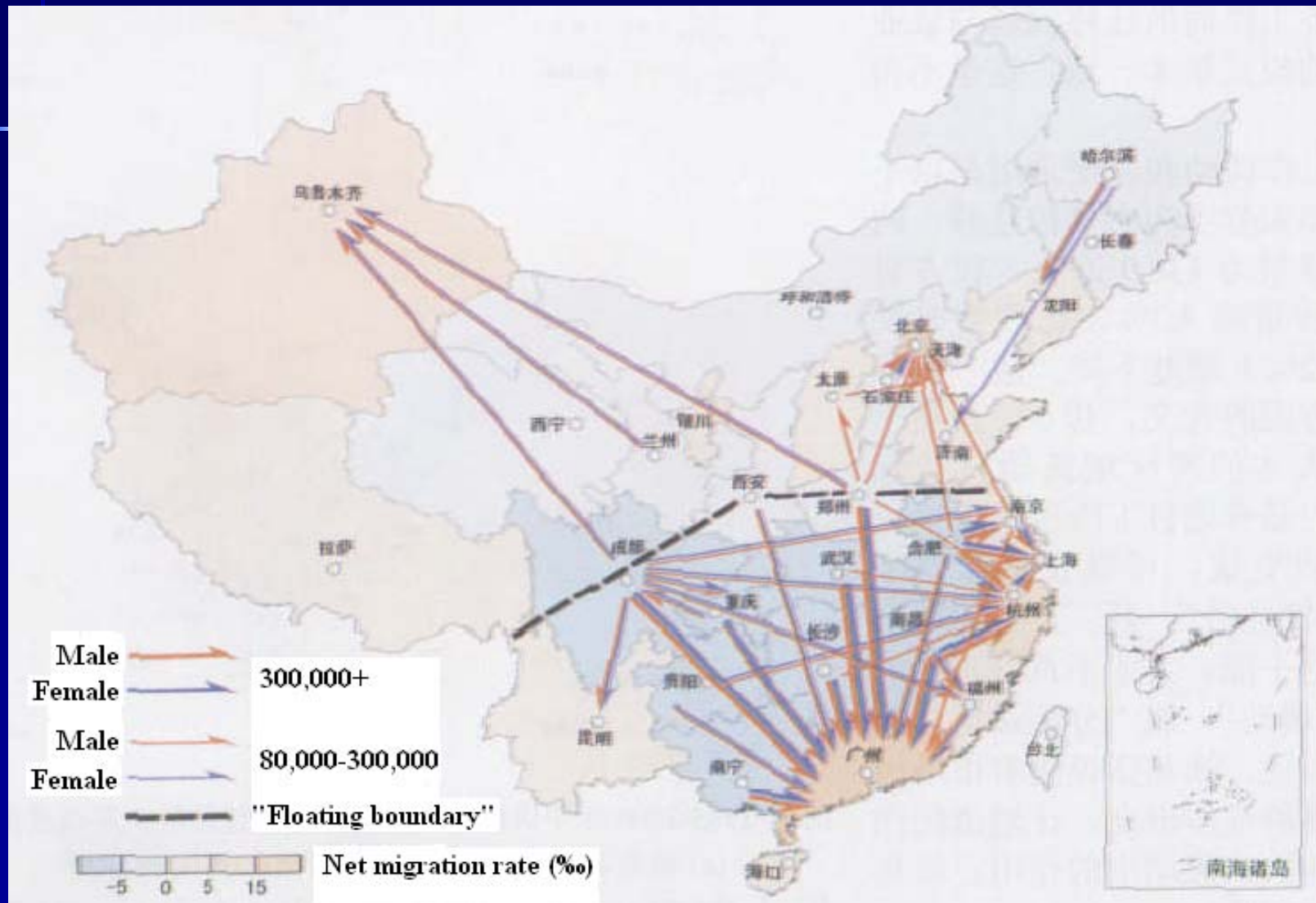
Source: Ding Jinhong, et al. 2005. Areal differentiation of inter-provincial migration in China and characteristics of the flow field. *ACTA Geographical Sinica* 60(1): 106-114
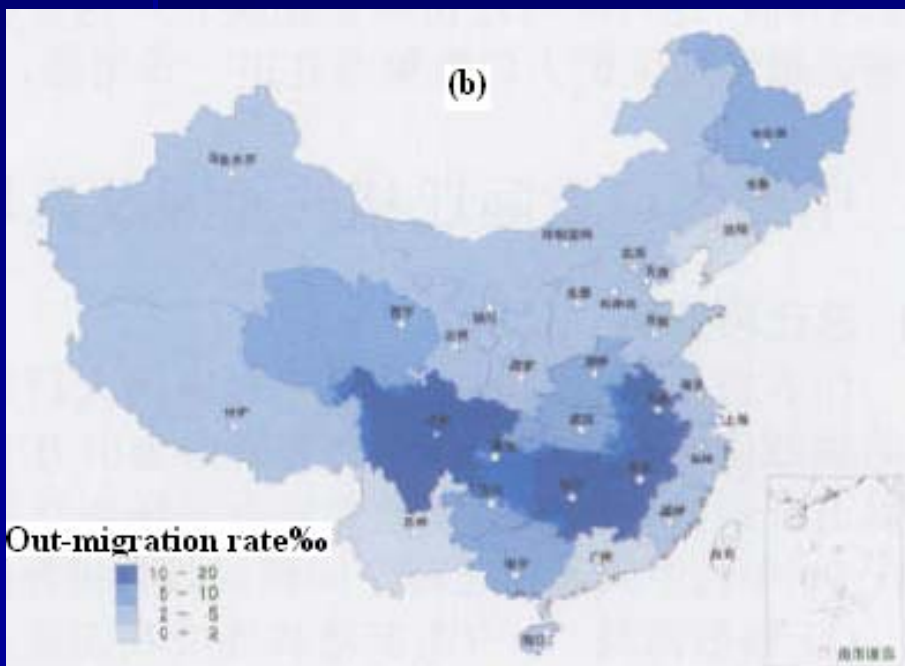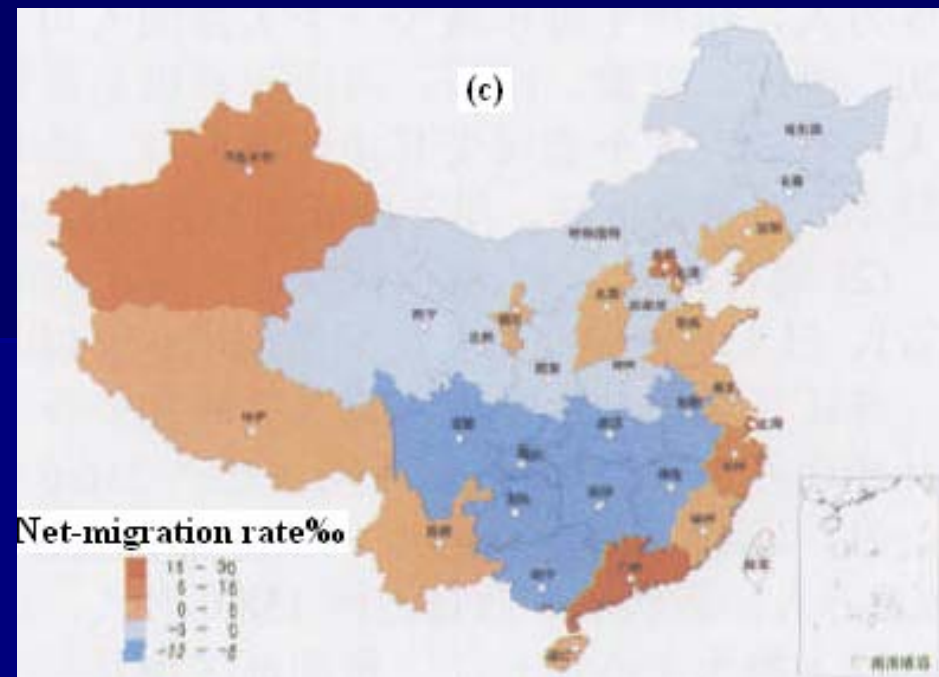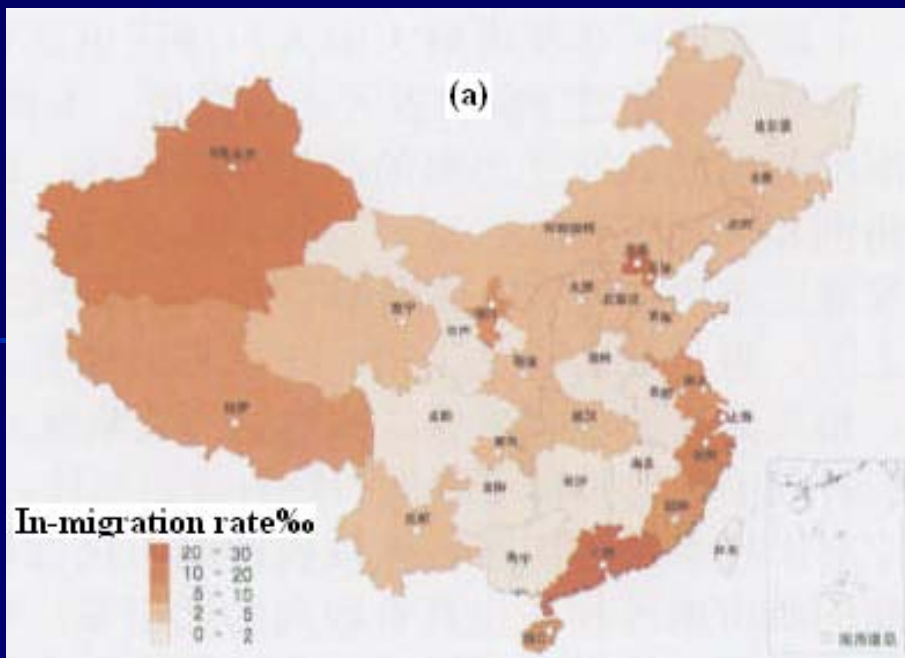
Distribution of inter-provincial migration rates of China, 1995-2000

(a) In-migration
(b) Out-migration
(c) Net-migration

Source: Ding Jinhong, et al. 2005. Areal differentiation of inter-provincial migration in China and characteristics of the flow field. *ACTA Geographical Sinica* 60(1): 106-114

Features

- Urban population grows much faster than total population, especially in the first 10 years (1978-1988);

- Rural-urban migration turns out to be the dominant source of Chinese urban growth in 1978-1999;

- Most migration takes place across provinces, from inland rural areas to coastal urban areas;

- Distances matter in the migration;
1. **Provinces having the most emigration:** Sichuan (19%), Henan (14%), Anhui (11%), Hunan (8%), and Jiangxi (6%);
2. **Provinces having the most immigration:** Guangdong (31%), Zhejiang (10%), and Fujian (6%).

BACKGROUND

5. Transitional Chinese Society: Rural-urban Migration

2) Process

- **Rural areas:** Strict patrilineal family system & strong son preference;

- **Urban areas:** Son preference has been weakened by the process of modernization and improvement of the social security system;

- **Rural-urban migrants:** Dramatic change of lifestyle and formation of new social networks might influence their attitudes and behaviors.
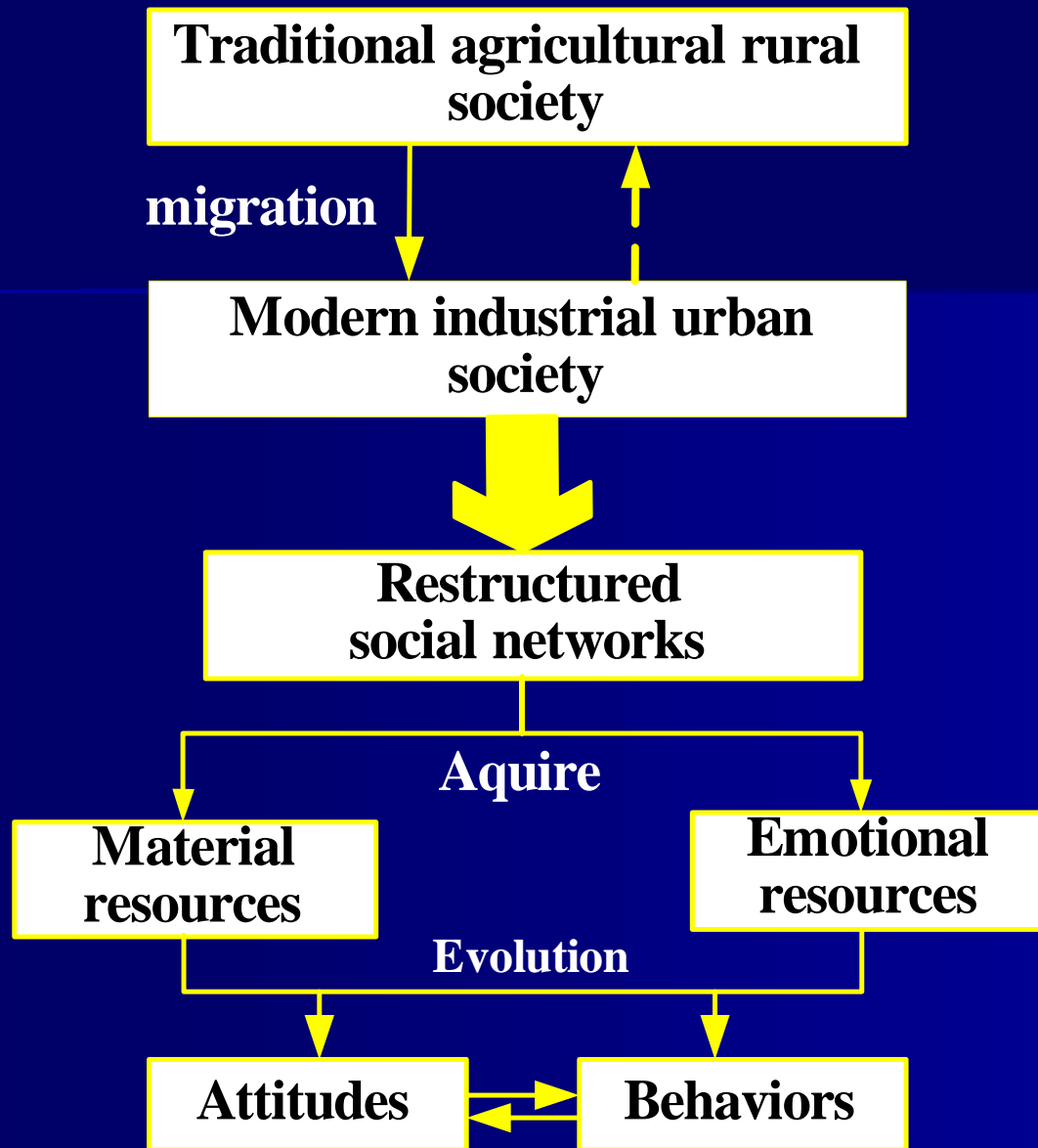
5. Transitional Chinese Society: Rural-urban Migration

3) Phenomena

The original, strongly male-biased culture and corresponding behaviors are likely to be influenced by the modern culture in cities

- ☐ Later marriage;
- ☐ Later childbearing;
- ☐ Weakened son preference but still with high SRB in short term;

Aging & old-age support

- ☐ Aggravation of aging;
- ☐ Improved financial well-being of elderly relatives;
- ☐ Reduced provision of daily care and emotional well-being.

Attitudes and behaviors of urban residents might be influenced by these migrants, especially when the migrant population is very large.

Average age at first marriage for women married before and after migration in Pudong, Shanghai, 2002

Year of marriage	1995-	1996-2001	Total
Sample size	302	230	532
Married before migration	22.78 (229)	24.07 (70)	23.08 (299)
Married after migration	25.50 (73)	25.82 (160)	25.72 (233)
t Test	***	***	***

Note: The number of samples is in parentheses;
   *** p < 0.001 ** p < 0.01 * < 0.05 + p < 0.1.
Data: Female Migrants Survey, Pudong, Shanghai, 2002
See: Jin Xiaoyi, et. al. 2005. Impacts of social network and integration on first marriage of female rural-urban immigrants: Evidence from survey in Pudong, Shanghai, *Population and Economics* (4).

Sex ratio at birth for rural-urban migrants and for non-migrants in rural and urban areas in China, 2000

	Number of births	Sex ratio at birth	X^2 test	LR test
(1) Rural-urban migrants	681	134.83	20.459***	(1)(2): 2.808+; (1)(3): 2.040
(2) Non-migrants in urban areas	2979	116.81	8.385**	(2)(3): 0.411
(3) Non-migrants in rural areas	7251	120.13	32.594***	(1)(2)(3): 2.809

Note: *** P<0.001， ** P<0.01， * P<0.05， +P<0.1
Data: 1‰ Samples of the 2000 Census, China
See: Wu Haixia, et al. 2005. Social network and son preference among rural-urban migrants in China: A case of Shenzhen. Seminar on Female Deficit in Asia: Trends and Perspectives, December 5-7. Singapore.

Relation between sex ratio at birth of rural-urban migrants and years since initial migration
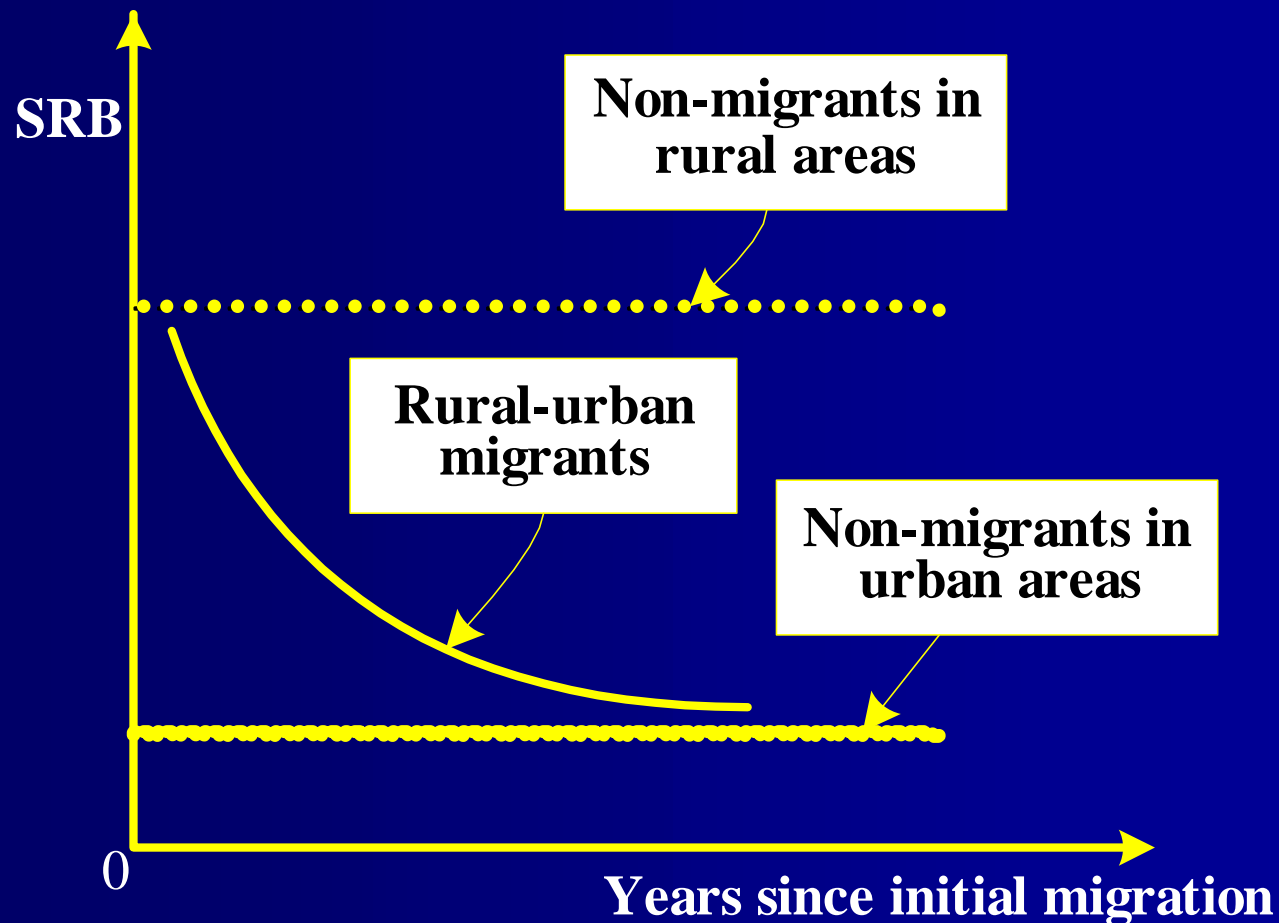
Projected percentages of the Chinese population aged 65 years and older under the medium-fertility assumption and under alternative assumptions as to rural-urban migration and as to the cohort mean age of childbearing (CMAC)

	"Scenario 1" No migration and constant CMAC			"Scenario 2" With migration and constant CMAC			"Scenario 3" With migration and increasing CMAC		
Year	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1987	5.5	5.4	5.5	5.5	5.4	5.5	5.5	5.4	5.5
2000	6.7	8.0	7.2	7.8	6.6	7.2	8.0	6.7	7.4
2020	9.5	13.8	10.9	13.7	10.0	11.3	14.6	10.4	11.9
2050	16.6	25.0	18.9	22.9	20.8	21.2	26.4	22.2	23.1

Scenarios:

- **Scenario 1**: No migration between rural and urban areas and constant mean age of childbearing;

- **Scenario 2**: Substantial rural-urban migration, with age-specific rates of migration following the pattern derived from China's 1987 One-Percent Population Survey, but constant mean age of childbearing;

- **Scenario 3**: Substantial rural-urban migration, together with an increase in mean age of childbearing;

Source: Zeng, Yi and James Vaupel. 1989. The impact of urbanization and delayed childbearing on population growth and aging in China. *Population and Development Review* 15 (3): 425-445.

Projected percentages of the Chinese population aged 65 years and older in rural and urban areas and the whole country, assuming rural-urban migration and increasing cohort mean age of childbearing (Scenario 3)

Impacts of out-migration on old-age support

OLS estimation of intergenerational transfer (N=1636)

Variables	Financial support	Instrumental support	Emotional support
Sons residing in the village	0.259***	0.082	-0.074*
Daughters residing in the village	0.227***	1.147***	-0.079
Sons out-migrating into urban areas	0.407***	-0.451***	-0.059+
Daughters out-migrating into urban areas	0.327***	-0.083	-0.026

Note: ***P<0.001, **P<0.01, *P<0.05, +P<0.1;
Data: Well-being of the Elderly Survey, Anhui.

See: Li Shuzhuo, et al. 2005. "Adult out-migration and intergenerational support for the elderly in rural China: A longitudinal study". Paper presented at *the Longitudinal Studies and Demographic Challenges of the 21st Century*, November 18-19, Montreal, Canada.

BACKGROUND

5. Transitional Chinese Society: Rural-urban migration

4) Implications

- Weakened son preference in the long run;
- New pattern of family formation, i.e. timing of marriage and childbearing;
- New pattern of family support for the elderly;
- Social cohesion and urbanization;
- Cultural transition of the whole population.

BACKGROUND

5. Transitional Chinese Society: Rural-urban migration

5) Challenges 1 – Migrants and urban development

- Protection of civil rights of rural-urban migrants;
- Social security system for rural-urban migrants;
- Employment, and infrastructure and facility burdens;
- Environment and resource burden;
- Social cohesion and social conflicts;
- Effective urban management;
- Reform of Hukou system and relevant policy innovations.

BACKGROUND

5. Transitional Chinese Society Rural-urban migration

5) Challenges 2 – Aging under rural-urban migration

☐ **Grandparents and grandchildren left behind–Absence of care-givers:**

1. *Lack of instrumental support;*
2. *Lack of emotional support;*
3. *Excess burden of rearing grandchildren.*

☐ **Rapid aging in rural areas with universal poverty of rural areas;**

☐ **Establishment of pension system and old-age insurance.**

6. Summary – A shift of research concerns
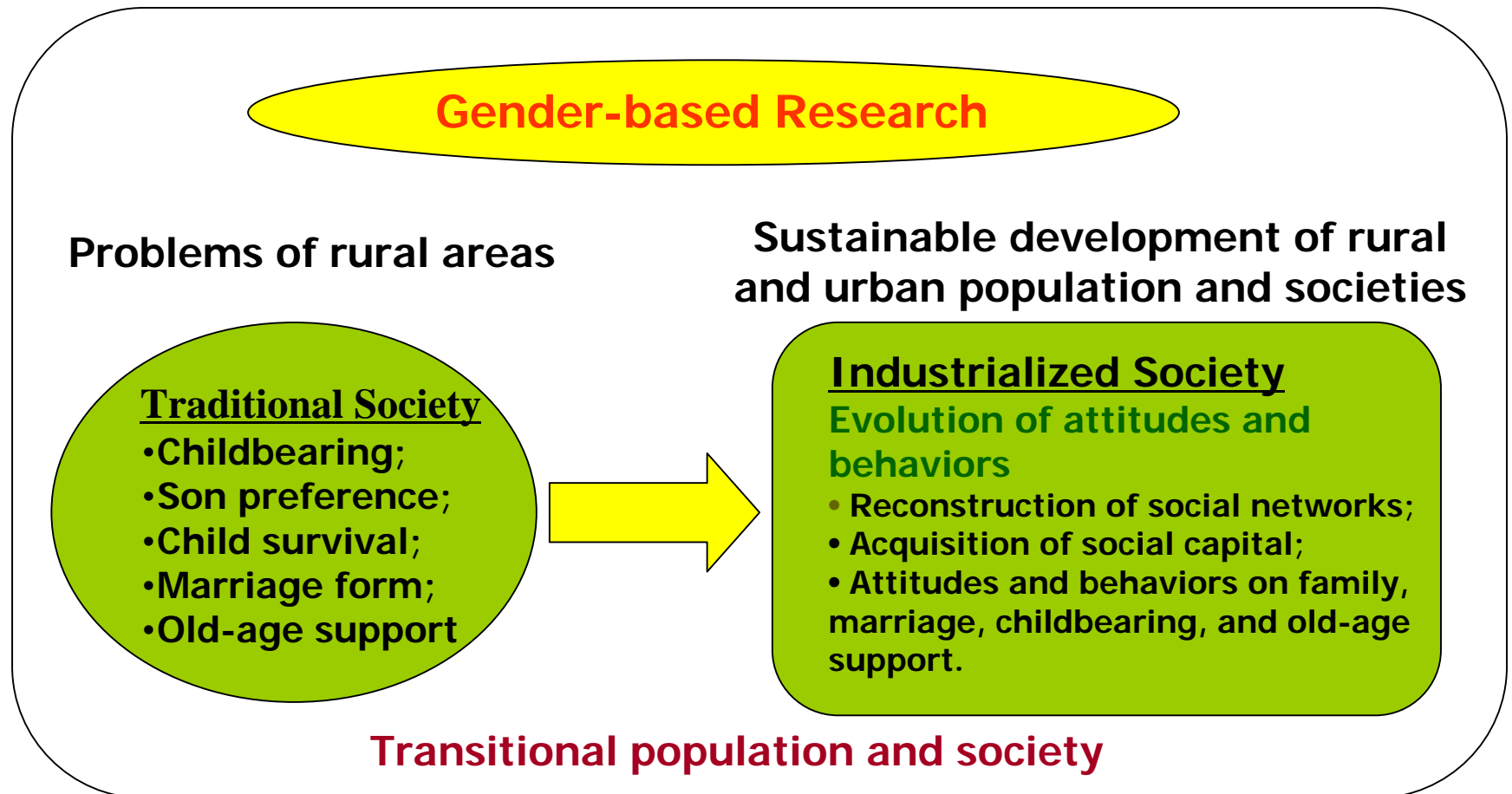
BACKGROUND

6. Summary – New perspectives and approaches

- Population dynamics in China is a typical example a complex social phenomenon;

- Traditional social science theories and ordinary statistical methods are not capable of investigating population dynamics adequately;

- Applying complex tools to study evolution of attitudes and behaviors through cultural transmission and diffusion during the process of rural-urban migration in Contemporary China.

RURAL-URBAN MIGRATION STUDIES

1. STUDY DESIGN

1) Objectives

- ❑ Migrants' social networks in urban areas and social integration;

- ❑ Evolution of attitudes and behaviors and its socio-demographic implications;

- ❑ Complex network models;

- ❑ Policy suggestions to improve social integration and sustainable development.

RURAL-URBAN MIGRATION STUDIES

1. STUDY DESIGN

2) Theories, Methodology & Methods

□ **Theories:**
  ➢ **Social Capital and Social Networks;**
  ➢ **Cavalli-Sforza & Feldman's Cultural Transmission and Evolution Theory (1973; 1981; 2004);**
  ➢ **Innovation Diffusion Theory (Rogers, E.M. 1995)**

□ **Methodology:**

  Combining methods of sociology, demography, statistics, and complexity science, etc.

❑ **Quantitative methods**
  ➢ **Social network analysis**
  ➢ **Statistical analysis**
  ➢ **Simulation**
  ➢ **Public policy analysis**

3) Framework

Migration caused by globalization and unbalanced rural-urban development

Attitude and behavior evolution of rural-urban migrants and their social cohesion

Theories

Social Capital

Social Networks

Culture Transmission

Innovation Diffusion

Complex Networks

Models &Methods

Statistical Model

Network Model

Complex Network Models on Attitude and Behavior Transmission and Diffusion

Model Evaluation

Theory Simulation Study

Parameter Identification

Process &Phenomenon

Social Network Analysis

Statistical Study

Simulation Study

Dynamic process of attitude and behavior evolution

Mechanism of attitude and behavior evolution

Prospect of social integration of rural-urban migrants

Process, approach and consequence of social integration of rural-urban migrants

Promoting social integration

Policy and system innovations for rural-urban migrant social cohesion and sustainable development in both rural and urban areas

Promoting sustainable socio-demographic development in rural and urban areas

2. SURVEY & DATA

1) Selection of Survey Sites

Shenzhen, Guangdong province

- ❑ **Location:** South of Guangdong;
- ❑ **History:** Set up in 1979, established as "special economic region" in 1980;
- ❑ **Features:** Representative of coastal and well-developed cities in China;
- ❑ **Region:** Six districts--Luohu, Futian, Nanshan, Yantian, Bao'an and Longgang.
- ❑ **Economy:** High-tech, advanced manufacturing and service industries; the 4th highest GDP among cities of China in 2003.
- ❑ **Population** (2000 census)
  - ➢ **Total number:** 7,008,800 *(now, > 10,000,000)*
  - ➢ **Average age:** 30.8
  - ➢ **Ratio of migrants to permanent urban residents:** 4.3:1
  - ➢ **Features:** High density, Rapid increase, Low education level of labor force

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

2) Survey Components and Contents

Composition	Target Population		Survey Sites	Samples size
Random Street Interviews	Temporary rural-urban migrants & urban permanent residents		4 commercial streets	1011
Sampling Survey	Temporary rural-urban migrants, over 15	Male workers	2 construction companies	183
		Female workers	3 companies in 2 district	368
		Not specific	5 communities in 3 district	1188
In-depth Interviews	Temporary rural-urban migrants, over 15	Not specific	4 districts	6
Focus Group Discussion		Married women	1 community	10
		Unmarried women	1 electronic factory	6
Community Investigation	/	/	4 districts	9

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

2) Survey Components and Contents

i) Random Street Interviews

- ❑ Respondents

  Above 15 years old, not including foreigners, tourists and short-term visitors

- ❑ Contents of the questionnaire
  - ➢ Basic individual information
  - ➢ Attitudes towards marriage, childbearing, aging and future plan
  - ➢ Life satisfaction in Shenzhen
  - ➢ Attitudes towards rural-urban migrants etc.

- ❑ Sites: 4 places

  Bagualing (high proportion of rural-urban migrants)
  Huaqiangbei, Book city, East gate walking street (high proportion of permanent residents)

- ❑ Implementation
  - ➢ Time: April 18, 2005
  - ➢ Duration: 1 day
  - ➢ Planned survey size: 1,000 people
  - ➢ Number of qualified questionnaires: 1,011

Baigualing

East gate walking street

Book city

Huaqiangbei

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

2) Survey Components and Contents

ii) Sampling Survey

❑ **Respondents**

Above 15 years old, rural-urban migrants, not including permanent urban residents;

➢ **Concentrated residence:**

Rural-urban migrants living together within a relatively concentrated community, with few permanent urban residents.

➢ **Scattered residence:**

Rural-urban migrants living in the communities with high or medium proportion of permanent urban residents;

Survey sites(1):
Concentrated residence

- Entrance of Airmate Co.

- **Dormitory of Airmate company, most of the workers living together**

- **Respondents of Airmate are from one of the buildings, they live on the same floor and do the same kind of work.**

Survey sites(1): Concentrated residence

- Interviews

- Dormitory

Survey sites(2):
Scattered residence

2. SURVEY & DATA

ii) Sampling Survey

❑ **Contents of the questionnaire**

Basic information
— Individual information
— Attitudes and behaviors towards marriage and family
— Attitudes and behaviors towards childbearing
— Attitudes and behaviors towards old-age support

Social network information
— Social support network:
  Job hunting, instrumental, emotional and social contact
— Social discussion network:
  Marriage & Family, Childbearing & Education, Contraception, Old-age support

Whole network of concentrated residence (companies)
— Individual information
— Relation with other respondents working in the same company

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

ii) Sampling Survey

□ **Sampling**

➢ **Scattered residence:** Systematic sampling

4 townships of 3 districts, Luohu, Yantian, and Nanshan

➢ **Concentrated residence:** Cluster sampling

2 construction companies and 3 manufacture companies in 3 districts, Nanshan, Longgang and Bao'an

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

- ❑ **Basic information for 5 companies**
  - ❑ **Hongming company (HM)**
    - ➢ Located in Longgang district, northwest of Shenzhen
    - ➢ Produces electronic equipment
    - ➢ Most of the 200 workers are women aged from 20 to 30.
  - ❑ **Airmate company (AMT)**
    - ➢ Produces electronic appliance and equipment
    - ➢ About 80% of the 75 workers are very young women
  - ❑ **Xin Yongxing company (XYX)**
    - ➢ Spraying workshop
    - ➢ Most workers are younger than 40 years old
    - ➢ Half of the 90 workers are women.
  - ❑ **Chuangzhu company (CZ)**
    - ➢ Construction company;
    - ➢ Most workers are men;
    - ➢ Many change jobs annually moving to another construction company when one project is completed.
  - ❑ **Shizheng company (SZ)**
    - ➢ Smaller construction company;
    - ➢ Most workers are men.

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

ii) Sampling Survey

- ❏ **Network data collection**

  - ◆ **Ego Network**

    -Data collected from "**Scattered & Concentrated Residence**"

    - ➢ Respondents from *Scattered Residence* live dispersed among various communities, most have no contact with each other- *sociomatrix* cannot be structured;
    - ➢ Data are mainly analyzed by statistical methods.

  - ◆ **Whole Network**

    -Data collected from "**Concentrated Residence**"

    - ➢ Respondents from *Concentrated Residence* live in the same community or dormitory (such as factories or construction sites) , they are likely to know each other- *sociomatrix* can be structured;
    - ➢ Data are mainly analyzed by social network analysis.

I Social Support Network

Job hunting:

101 How did you get your *first job* after arriving in Shenzhen?
103 How did you get your *current job*?

Instrumental support:

105 If you want to borrow something (like money, sugar or pliers), or do some housework (like moving furniture, buying daily necessities, etc.), whom will you ask for help?

Emotional support:

106 If you feel depressed because of conflicts with others, facing difficulties in work or life, whom will you choose to confide in?

Social companionship:

107 If you have social activities, such as shopping, attending a party or dinner, playing cards, chatting, etc., with whom will you do this?

The number of network members in hometown before the migration:
                               Neighbor_____ Relatives_____ Others (Please note:) _____
The number of network members in Shenzhen:_____

II Discussion Network

201 If you want to discuss something about marriage and family, whom will you choose? They are:

203 If you want to discuss something about childbearing and child education, whom will you choose? They are:

205 If you want to discuss something about contraceptive use, whom will you choose? They are:

206 If you want to discuss something about old age support, whom will you choose? They are:

Besides the above persons, is there anybody who discussed with you, or with whom you can discuss?
Please provide the total number of these persons: _____.

Social Network

Note: In the following forms, if a person appears in more than one form, write only his or her name or code name.
For the answers please see "Coding for Social Network".

203．If you want to discuss something about childbearing and child education, whom will you choose? They are:

Network member						
Has an urban household registration in Shenzhen (Shenzhenese)?						
Relation						
Sex						
Age						
Marital status						
Occupation						
Education						
Intimacy						
When did you know him/her?						
Frequency of contacts	Face to face					
	Calling or writing letters					
His/her attitude towards "Desired number of children"		( ) **Children:** ( ) Boy/s ( ) Girl/s ( ) no preference	( ) **Children:** ( ) Boy/s ( ) Girl/s ( ) no preference	( ) **Children:** ( ) Boy/s ( ) Girl/s ( ) no preference	( ) **Children:** ( ) Boy/s ( ) Girl/s ( ) no preference	( ) **Children:** ( ) Boy/s ( ) Girl/s ( ) no preference
His/her children		( ) Boy/s ( ) Girl/s	( ) Boy/s ( ) Girl/s	( ) Boy/s ( ) Girl/s	( ) Boy/s ( ) Girl/s	( ) Boy/s ( ) Girl/s
His/her attitude towards "when first child is a girl"*						
His/her attitude towards "Boys should be educated more than girls"*						
Did he/she actually discuss with you? (1.Yes,2.No)						

* Attitude towards "when first child is a girl":

    1．Stop childbearing   2．Have one more, regardless of sex   3．Continue childbearing until have a boy

* Attitude towards "Boys should be educated more than girls":

    1 Strongly disagree   2 Disagree   3 Indifferent   4 Agree   5 Strongly agree

Concentrated residence networks

(Whole Network)

Note: <mark>Scattered residents need not answer this page!</mark>

Network members should be chosen from the list of names of the factory/company/construction site, which contains all persons who are respondents in this survey.

Name Code	Coding is same as the above							Yes: 1 No: 2			
	Relation	Intimacy	When did you know each other	Whether turn to him/her for daily trivia help	Whether turn to him/her seeking emotional support	Whether choose him/her as a partner in social activities	Whether discuss with him/her about marriage and family	Whether discuss with him/her about childbearing	Whether discuss with him/her about contraceptive use	Whether discuss with him/her about old age support

RURAL-URBAN MIGRATION STUDIES

2. SURVEY & DATA

iii) Implementation (Duration of survey: April 20-27, 2005)

Composition		Survey sites	Sample types	Size
Sampling survey **Total respondents: 1739**		Nanshan	Scattered residence in a village	209
			Concentrated residence in 2 construction companies	136
				47
			Scattered residence	224
		Luohu	Scattered residence	252
			Scattered residence	250
		Yantian	Scattered residence	253
		Longgang	Concentrated residence in 1 company	200
		Bao'an	Concentrated residence in 2 companies	76
				92
interview	In-depth interviews	Nanshan, Luohu, Longgang, Yantian		6
	Focus group discussion	Longgang community in Qingshuihe street, Luohu District		10
		Hongming company in Buji township, Longgang District		6
Community investigation		Nanshan, Luohu, Longgang, Yantian		9

iv) Quality Control
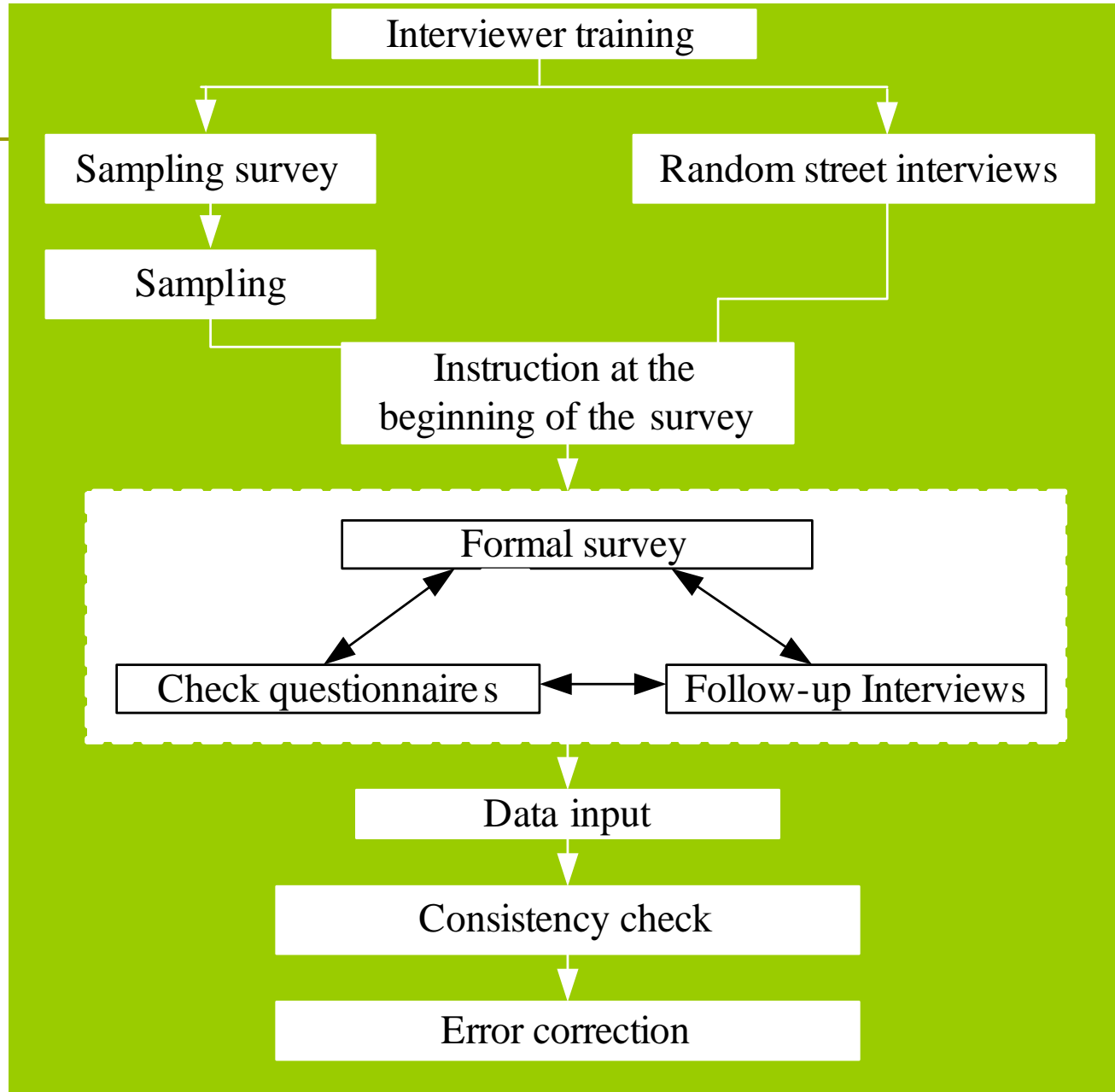
- Interviewer training

- Questionnaire check

RURAL-URBAN MIGRATION STUDIES

3. Characteristics of respondents

i) Demographics of the samples: Street random interviews

Total No. of Samples: 1011	Percent (%)		Percent (%)
Gender		**Education**	
Male	52.8	8-	15.2
Female	47.2	9-12	39.7
Age		13+	45
24-	38.2	**Average monthly income (yuan)**	
25-34	45.5		
35+	16.3	0	4.7
Marriage	16.3	1-799	8.7
Never-married	63.6	800～999	4.4
Ever-married	36.4	1000～1499	18.9
Household registration		1500～1999	11.4
Yes	23.8	2000～2999	21.2
No	76.2	3000+	33.5

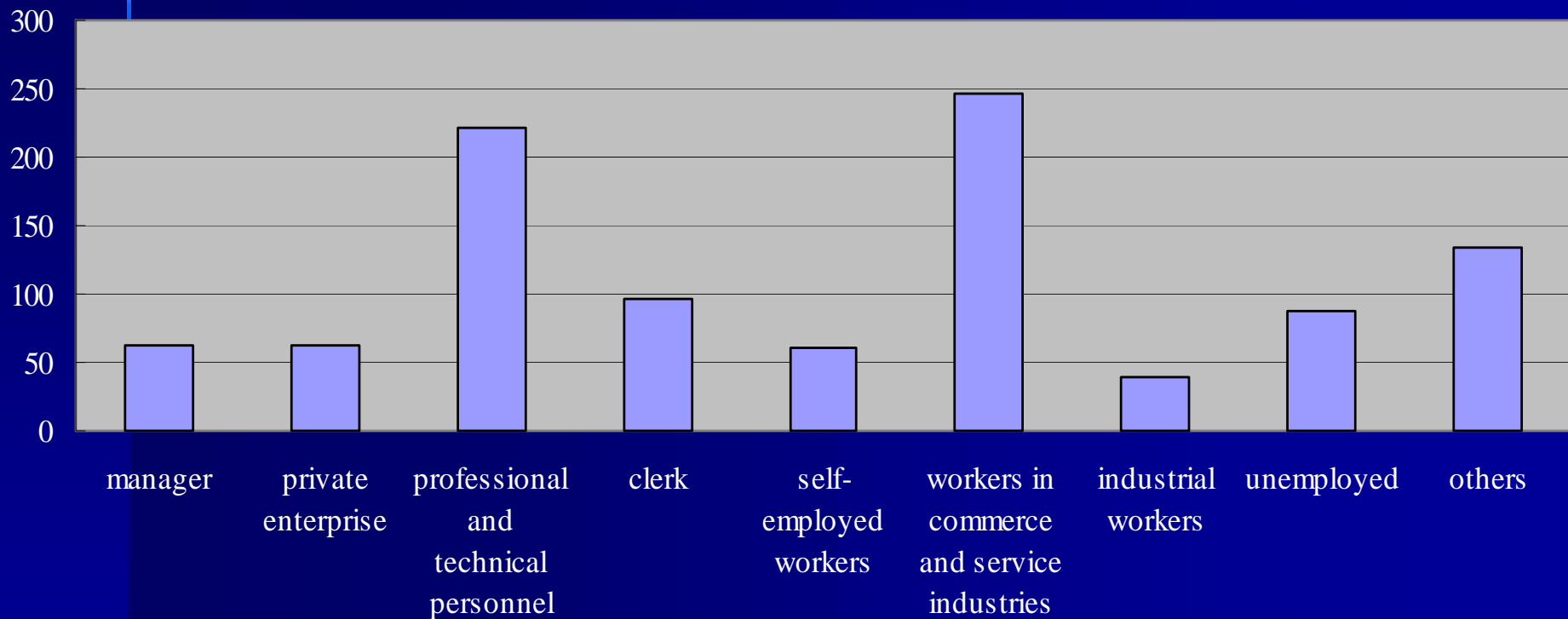Occupations of the respondents(1):
Street random interviews

RURAL-URBAN MIGRATION STUDIES

3. Characteristics of respondents

ii) Demographics of the samples: Sampling survey

Total No. of Samples: 1739	Percent (%)		Percent (%)
Gender		**Nationality**	
Male (888 samples)	51.1	Han	96.5
Female (851 samples)	48.9	Minority	3.5
Age		**Marriage**	
15-24	27.0	Never-married	32.0
25-34	40.0	Ever-married	68.0
35+	32.9	**Average monthly income (yuan)**	
Situation before entering Shenzhen		0	4.0
Temporary laborers in other cities	19. 6	1-799	20.2
Farmers	50.8	800～999	15.0
Rural students	25.9	1000～1499	32.5
No. of jobs ever had after entering Shenzhen		1500～1999	11.8
		2000～2999	7.4
0	4.1	3000+	9.2
1	55.4	**Average years in Shenzhen**	6.78(years)
2	20.6	**Way of entering Shenzhen**	
3	10.6	With fellow-villagers, family members or others	62.9
4+	9.3	Alone	37.1

3. Characteristics of respondents

iii) Characteristics of ego social network

❑ Sizes of social support networks before and after migration

Size shrinking after migration:

Compared with social support network in hometown, the sizes of the three support networks have all been reduced:

Network	Instrumental support	Emotional support	Social contact
Before migration	7.79	3.83	6.41
After migration	2.06	1.70	2.51

❑ Characteristics of social network members:
➢ Social support networks;
➢ Discussion networks;

Size of Support Networks (Samples: 1739) (%)

Size	0	1	2	3	4	5
First job finding support	29.1	60.0	9.0	1.4	0.3	0.2
Current job finding support	75.9	20.0	3.2	0.6	0.0	0.3
Instrumental support	7.8	39.0	30.6	12.0	4.3	6.2
Emotional support	9.9	47.6	26.2	9.7	3.3	3.2
Social contact	6.8	33.6	29.0	16.2	7.2	7.1

Information about members in support networks (%)
(The number of network members appears in parentheses)

	First job finding support	Current job finding support	Instrumental support	Emotional support	Social contact
Urban household registration in Shenzhen:	**(1464)**	**(516)**	**(3209)**	**(2761)**	**(3415)**
Yes	6.6	12.3	4.5	3.2	4.0
No	93.4	87.7	95.5	96.8	96.0
Relation (whether belongs to relatives or countrymen)	**(1464)**	**(515)**	**(3212)**	**(3212)**	**(3415)**
Strong ties	75.6	65.7	58.3	58.7	47.2
Weak ties	24.4	34.3	41.7	41.3	52.8
Gender	**(1469)**	**(515)**	**(3206)**	**(3206)**	**(3402)**
Male	66.5	68.9	59.8	51.7	55.1
Female	33.5	31.1	40.2	48.3	44.9
Education	**(1436)**	**(468)**	**(3160)**	**(2737)**	**(3368)**
Elementary school and lower	6.0	6.3	6.3	8.1	6.0
Junior high school	54.2	48.8	58.8	57.3	61.0
Senior high school and above	39.8	44.9	34.9	34.6	33.0
Intimacy	**(1470)**	**(514)**	**(3204)**	**(2761)**	**(3413)**
Extremely intimate	26.8	29.5	26.0	38.3	22.9
Relatively intimate	43.4	41.2	45.8	40.8	45.9
Commonly	28.6	29.1	27.6	20.5	30.9
Not intimate	0.8	0.2	0.4	0.2	0.2
Extremely not intimate	0.4	0.0	0.2	0.2	0.1
Frequency of getting together	**(1466)**	**(515)**	**(3214)**	**(2769)**	**(3420)**
Everyday	38.5	48.2	60.7	62.8	68.4
Several times every week	13.0	14.3	15.3	13.5	14.8
Several times every month	12.6	13.3	10.3	9.2	9.6
Once a month	8.0	8.1	5.1	3.4	3.3
Several times every year	16.4	8.9	6.6	7.6	2.7
Once several years	11.5	7.2	2.0	3.5	1.2
Frequency of calling or writing	**(1466)**	**(510)**	**(3195)**	**(2769)**	**(3412)**
Everyday	15.6	16.8	18.8	21.3	20.6
Several times every week	16.9	17.3	19.3	21.3	18.3
Several times every month	19.3	21.1	18.1	16.9	17.0
Once a month	11.7	11.5	8.5	8.7	9.0
Several times every year	10.8	9.2	7.0	5.2	4.8
Once several years	25.7	24.1	28.3	26.6	30.3
Samples	**1233**	**419**	**1603**	**1566**	**1620**

Size of Discussion Networks (Samples: 1739) (%)

Size	0	1	2	3	4	5
Marriage and Family Discussion	9.3	49.0	26.6	9.7	2.8	2.7
Childbearing Discussion	9.5	56.7	21.4	8.1	2.3	2.0
Contraceptive Use Discussion	21.9	60.7	11.4	4.2	0.9	0.9
Aging-life Discussion	13.8	58.3	15.4	8.6	1.8	2.1

Information about members in discussion networks (%)
(The number of network members appears in parentheses)

	Marriage and Family Discussion	Childbearing Discussion	Contraceptive Use Discussion	Aging-life Discussion
Urban household registration in Shenzhen:	**(3015)**	**(2482)**	**(1820)**	**(2305)**
Yes	3.0	2.8	2.4	3.0
No	97.0	97.2	97.6	97.0
Relation (whether relatives or countrymen)	**(2081)**	**(2479)**	**(1817)**	**(2311)**
Strong ties	20.5	50.6	46.5	53.7
Weak ties	79.5	49.4	53.5	46.3
Gender	**(3013)**	**(2477)**	**(1817)**	**(2307)**
Male	47.1	47.1	62.4	50.9
Female	52.9	53.0	37.6	49.1
Marital Status	**(3013)**	**(2468)**	**(1904)**	**(2299)**
Unmarried	23.8	18.9	24.1	22.0
Married	76.2	81.1	75.9	78.0
Education	**(3013)**	**(2482)**	**(1806)**	**(2298)**
Elementary school and lower	23.8	13.2	10.6	12.3
Junior high school	76.2	55.0	53.7	52.8
Senior high school and above	0.0	31.9	35.7	34.9
Intimacy	**(3026)**	**(2488)**	**(1814)**	**(2302)**
Extremely intimate	46.2	52.7	49.0	55.5
Relatively intimate	35.2	31.3	34.7	29.1
Commonly	17.9	15.6	15.9	15.0
Not intimate	0.5	0.3	0.3	0.3
Far from intimate	0.2	0.1	0.1	0.1
Frequency of getting together	**(3027)**	**(2492)**	**(1820)**	**(2316)**
Everyday	56.4	59.5	64.8	60.2
Several times every week	12.8	12.1	13.8	11.3
Several times every month	7.8	7.8	6.6	8.0
Once a month	3.7	2.8	3.0	3.5
Several times every year	13.0	12.6	8.1	11.8
Once several years	6.3	5.2	3.7	5.2
Frequency of calling or writing	**(3020)**	**(2482)**	**(1818)**	**(2311)**
Everyday	20.6	23.1	24.9	22.4
Several times every week	26.0	24.3	24.2	23.8
Several times every month	17.9	17.3	15.8	18.9
Once a month	6.9	7.4	7.4	7.5
Several times every year	5.1	4.4	3.7	4.6
Once several years	23.5	23.6	24.0	22.8
Samples	**1577**	**1573**	**1359**	**1499**

3. Characteristics of respondents

iv) Characteristics of individuals in whole networks (%)

Site	HM	AMT	XYX	CZ	SZ	Total
Size	(200)	(75)	(90)	(135)	(47)	(547)
Gender						
Male	0	0	50.0	100	91.5	40.8
Female	100	100	50.0	0	8.5	59.2
Age						
19-	9.5	31.5	13.3	1.5	6.4	10.8
20-34	88	65.6	67.8	46.4	23.4	65.63
35+	2.5	2.6	18.9	54.6	72.8	23.58
Education (years)						
6-	0	3.9	20.0	11.0	25.5	8.8
7-9	51.5	71.1	72.2	78.7	68.1	65.6
10+	48.5	25	7.8	10.3	6.4	25.5
Migration experience						
Ever migrated before	8.5	23.7	27.8	38.2	31.9	23.03
Never migrated before	91.5	76.3	72.2	61.8	68.1	76.97
Migration characteristic						
Alone	16.0	13.2	34.4	36.8	17.0	23.8
Spouse	3.0	18.4	17.8	3.7	8.5	5.7
Other family members	34.0	61.8	17.8	13.2	27.7	23.4
Fellow-villager	39.5	6.6	30.0	46.3	46.8	43.5
Others	7.5	0	0	0	0	3.7
Living environment						
Citizen's community	5.0	0	6.7	0	0	2.9
Rural migrants' community	76.0	100	63.3	99.3	100	85.0
Mixed living areas	19.0	0	30.0	0	0	11.9
Others	0	0	0	0.7	0	0.2
Marriage						
Never-married	59.0	89.5	44.4	16.9	21.3	47.2
Ever-married	41.0	10.5	55.6	83.1	78.7	52.9

Thanks!