



# **Child Poverty and Wellbeing in China**

---

## A Multidimensional Deprivation Approach

DI QI & YICHAO WU University of Bristol

# Introduction

## Geographic regions of China



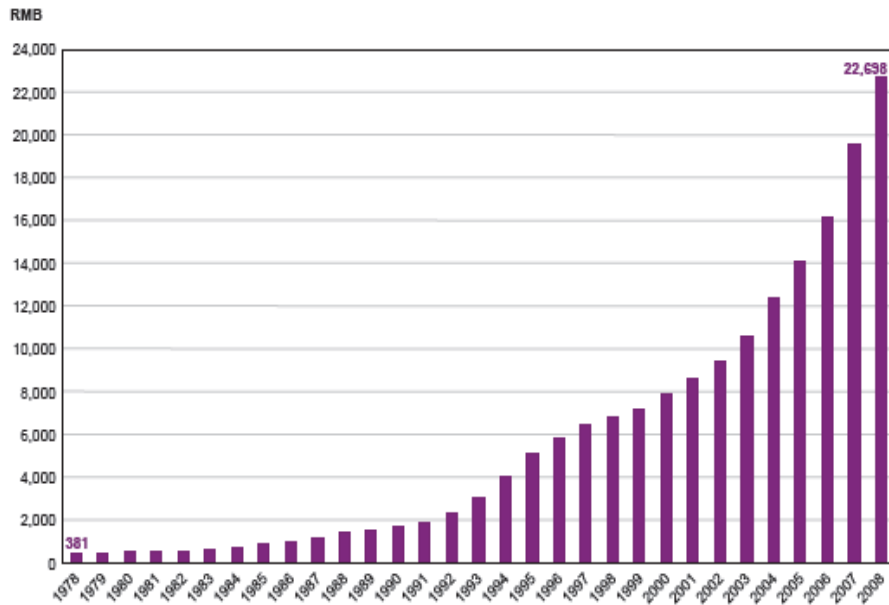
# Introduction

---

China has achieved great progress after 1978 the economic reform. Per capita GDP and Per capita income increased dramatically

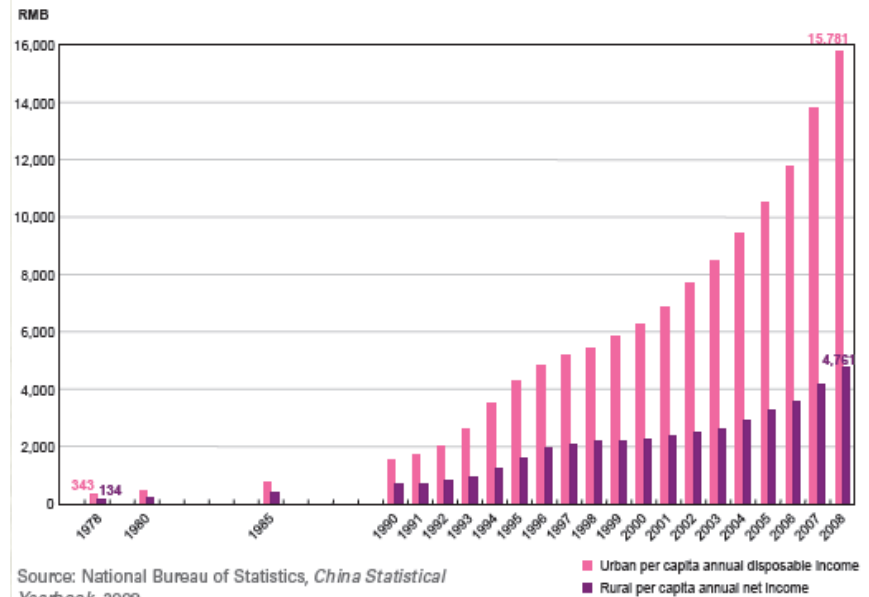
# Introduction

## GDP per capita, 1978–2008



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2009

## Per capita income, urban and rural, 1978–2008



Source: National Bureau of Statistics, *China Statistical Yearbook*, 2009

# Introduction

But in some areas children's living conditions still remain low standard





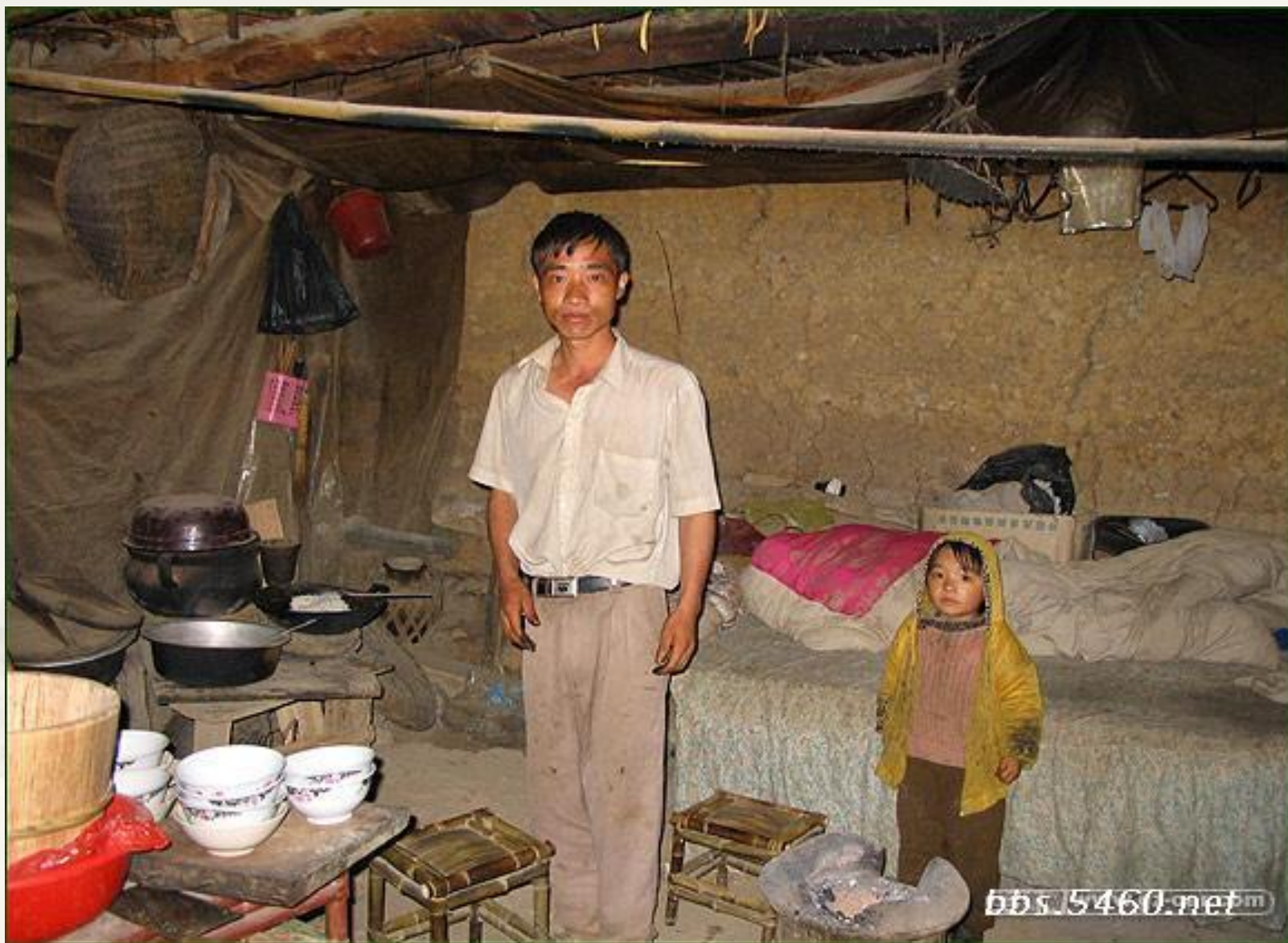
# Introduction





图片来源 [www.cdysxx.com](http://www.cdysxx.com)







# Introduction



© www.cfp.cn 版权作品 请勿转载





# Human-rights Based deprivation approach

---

- \* Universal Framework: Convention on the Rights of Child (UNCRC, 1989)
- \* *Poor children are deprived of nutrition, water and sanitation facilities, access to basic health-care services, shelter, education, participation and protection....(definition by UN)*



# Human-rights Based deprivation approach

---

Positive Approach –Mental, Material, Subjective, Psychosocial....

Deprivation Approach- Negative, Multidimensional Material living conditions

# Research Questions

---

- \* How to choose the original deprivation dimensions and indicators to measure child poverty and wellbeing in China?
- \* How to test the original deprivation indicators are valid, reliable, additive or scientific?
- \* How child poverty and well-being in China changes from 1989 to 2009 and differs among regions?

# Objectives

---

- \* Use existing longitudinal and cross sectional survey data to build scientific deprivation indicators
- \* Measure the living standards of children and produce estimates of child poverty in China across time and space.



# Choose Original MD indicators

---

- \* MD indicators should be informative of child-related problems or issues
- \* MD indicators should be customary and commonly accepted as ‘necessities’ in the given society
- \* MD indicators reflect financial constrains

# Choose Original MD indicis

---

Theoretical Support

Previous Research

Universal agreed human rights (UNCRC, 1989)

Human development goals( MDGs, 2004)

# Deprivation Dimensions

---

- \* Food/Nutrition
- \* Water
- \* Sanitation facilities
- \* Shelter
- \* Education
- \* Health
- \* Information
- \* Consumer Durables
- \* Leisure Activities



# Food/Nutrition

---

***1. Three meals a day***

***2. Malnutrition/Anthropometric Failure***  
*heights, weights < 2SD*

# Water

---

## ***3. Improved Water source***

can't obtain tap water (Zou and Fang, 211) and water source is not ground water (>5m) or water plant (Wang and Alkire, 2010)

# Sanitation Facilities

---

## ***4. Toilet Facilities in or near home***

no flush, in-house toilet (Zou and Fang, 2012)

## ***5. Processed cooking fuel***

use coal, kerosene, wood, sticks/straw, charcoal

# Shelter

---

## ***6. Overcrowding***

international criteria: >3 people per room

## ***7. Dwelling Quality***

Mud floor

## ***8. Lighting***

No electricity



# Education

---

## ***9. Not currently attending school***

# Health

---

## ***10. Immunization***

not fully immunized

## ***11. Needed Medicines/Drugs***

# Information

---

***12. Black/White or Colour TV***

***13. Computer***

# Consumer Durables

---

- \* *14. Telephone/Cell phone*
- \* *15. Washing machine,*
- \* *16. refrigerator*
- \* *17. bicycle/motorcycle/car*



# Leisure Activities

---

- \* *18. Indoor activities*
- \* *19. Outdoor activities*

# Data

---

- \* China Health and Nutrition Survey data
- \* Waves included 1989, 1991, 1993, 1997, 2000, 2004, 2006, 2009
- \* Nine Provinces with different demographic, socioeconomic situations in China
- \* Comprehensive information on health, education, nutrition, housing conditions, child-related activities, etc.

# Data



# Validity

---

- \* Logistic Regression
- \* Independent variable: Household income per capita
- \* Dependent variable: MD indicators



# Validity Test Results

- 1.Three meals a day**
- \* **2.Malnutrition**
- \* **3.Improved Water**
- \* **4.Toilet facilities**
- \* **5.Processed Fuel**
- \* **6.Overcrowding**
- \* **7.Dwelling Quality**
- \* **8.Lighting**
- \* **9. At school**
- \* **10.Immunization**
- \* **11.Need Medicines**
- \* **12.TV**
- \* **13.Computer**
- \* **14.Phone**
- \* **15.Washing Machine**
- \* **16.Refrigerator**
- \* **17.Transport**
- \* **18.Indoor Activities**
- \* **19.Outdoor Activities**

# Reliability

---

- \* Cronbach's Alpha: internal consistency
- \* If removing one indicator results in an increased Alpha value, the indicator can be regarded as an unreliable item

# Reliability Test Results

---

- \* 3.Improved Water
- \* 4.Toilet facilities
- \* 5.Processed Fuel
- \* 6.Overcrowding
- \* 7.Dwelling Quality
- \* 8.Lighting
- \* 9. At school
- \* 12.TV
- \* 13.Computer
- \* 14.Phone
- \* 15.Washing Machine
- \* 16.Refrigerator
- \* 17.Transport

# Additivity

---

- \* Those suffer from two deprivations are more deprived (poorer) than those suffering from only one.



# Additivity

---

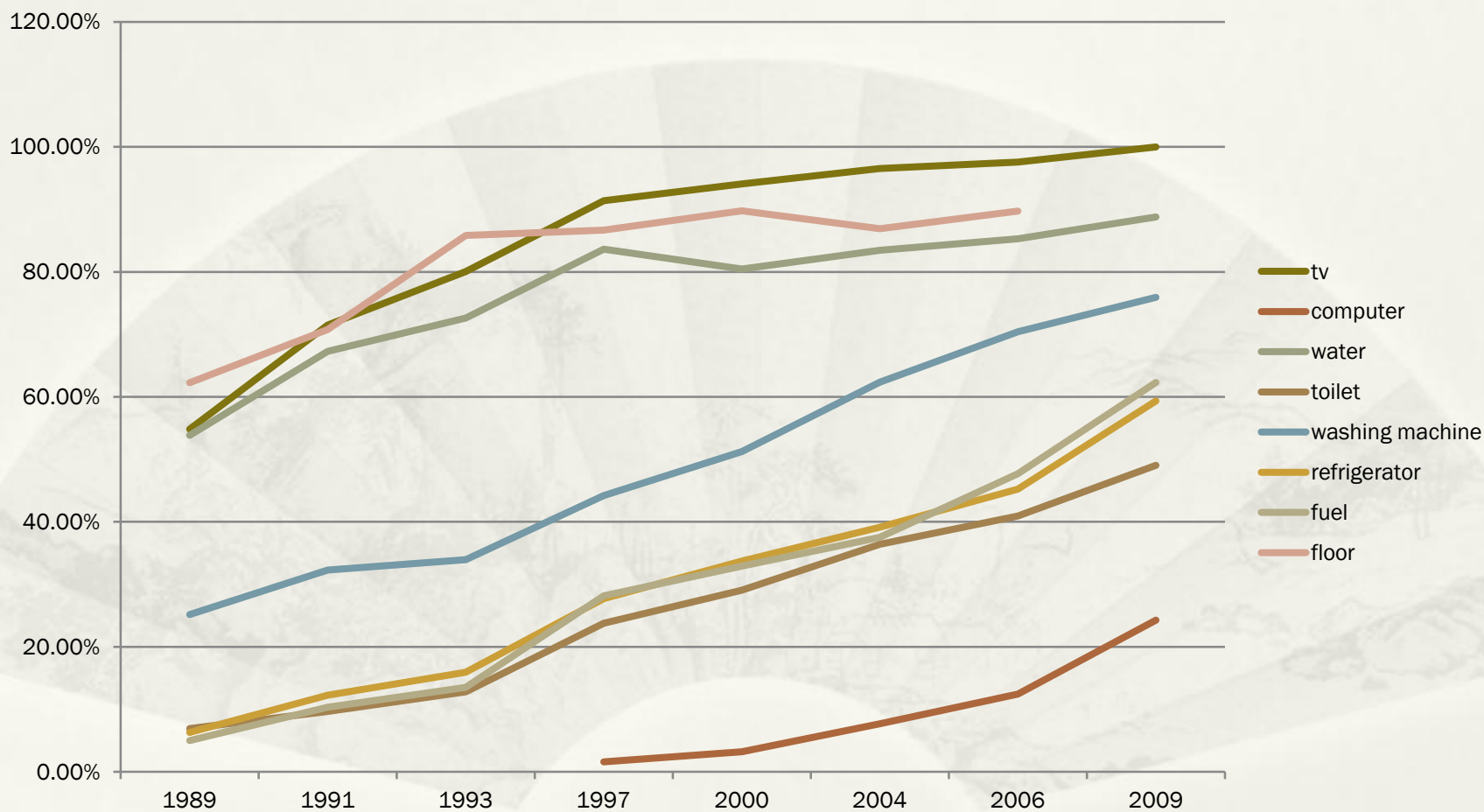
- \* 3.Improved Water
- \* 4.Toilet facilities
- \* 5.Processed Fuel
- \* 7.Dwelling Quality
- \* 12.TV
- \* 13.Computer
- \* 15.Washing Machine
- \* 16.Refrigerator
- \* **17.Transport**

# Final List of MD indicis

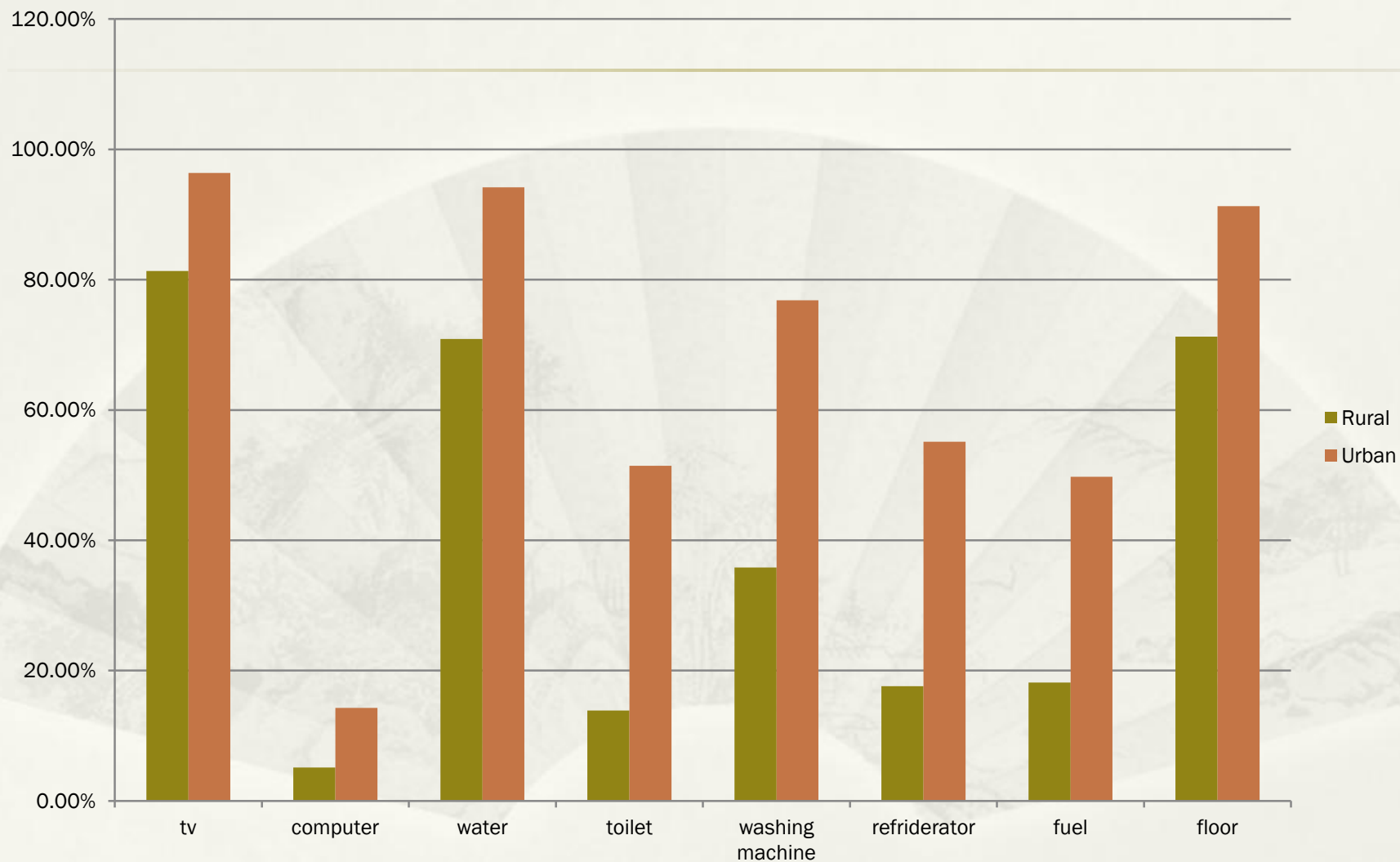
---

- \* Improved Water
- \* Toilet facilities
- \* Processed Fuel
- \* Dwelling Quality
- \* TV
- \* Computer
- \* Washing Machine
- \* Refrigerator

## General trend of children's material living conditions from 1989 to 2009



# Rural-Urban differences on children's material living conditions (average)











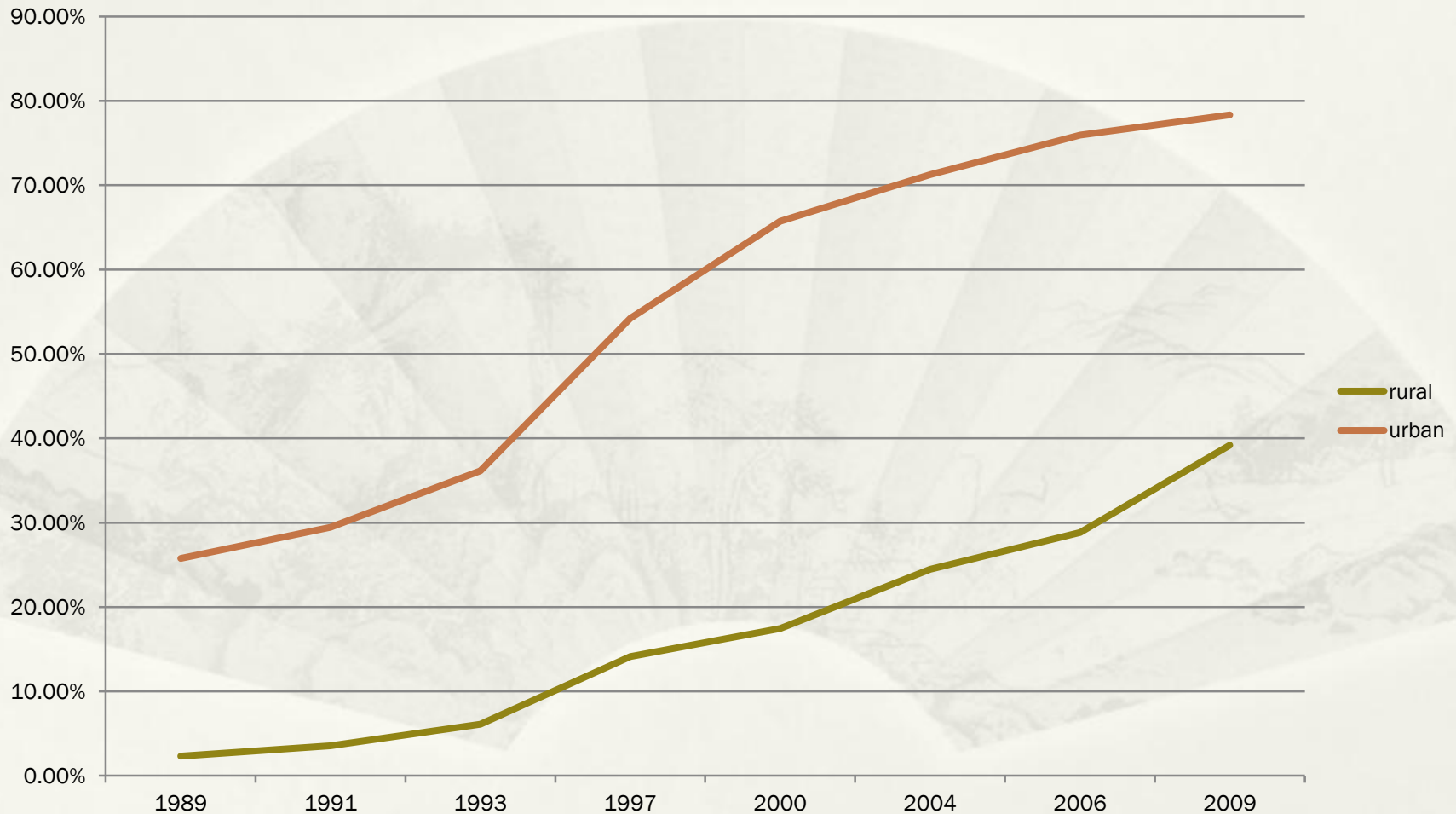




志 PHOTO  
abeviot.blog.163.com

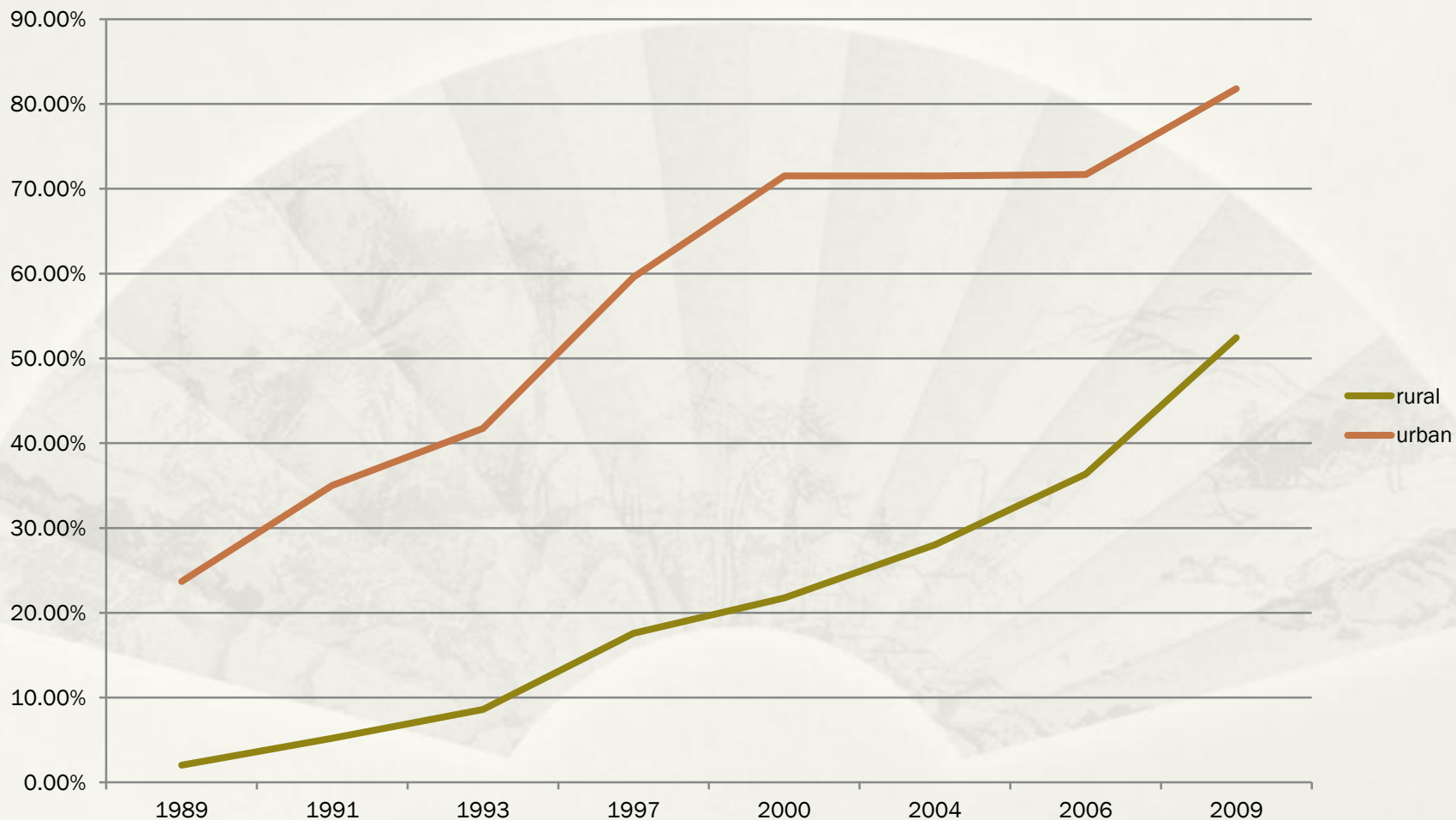


# Rural-Urban trend of children's deprivation on Toilet Facilities from 1989 to 2009

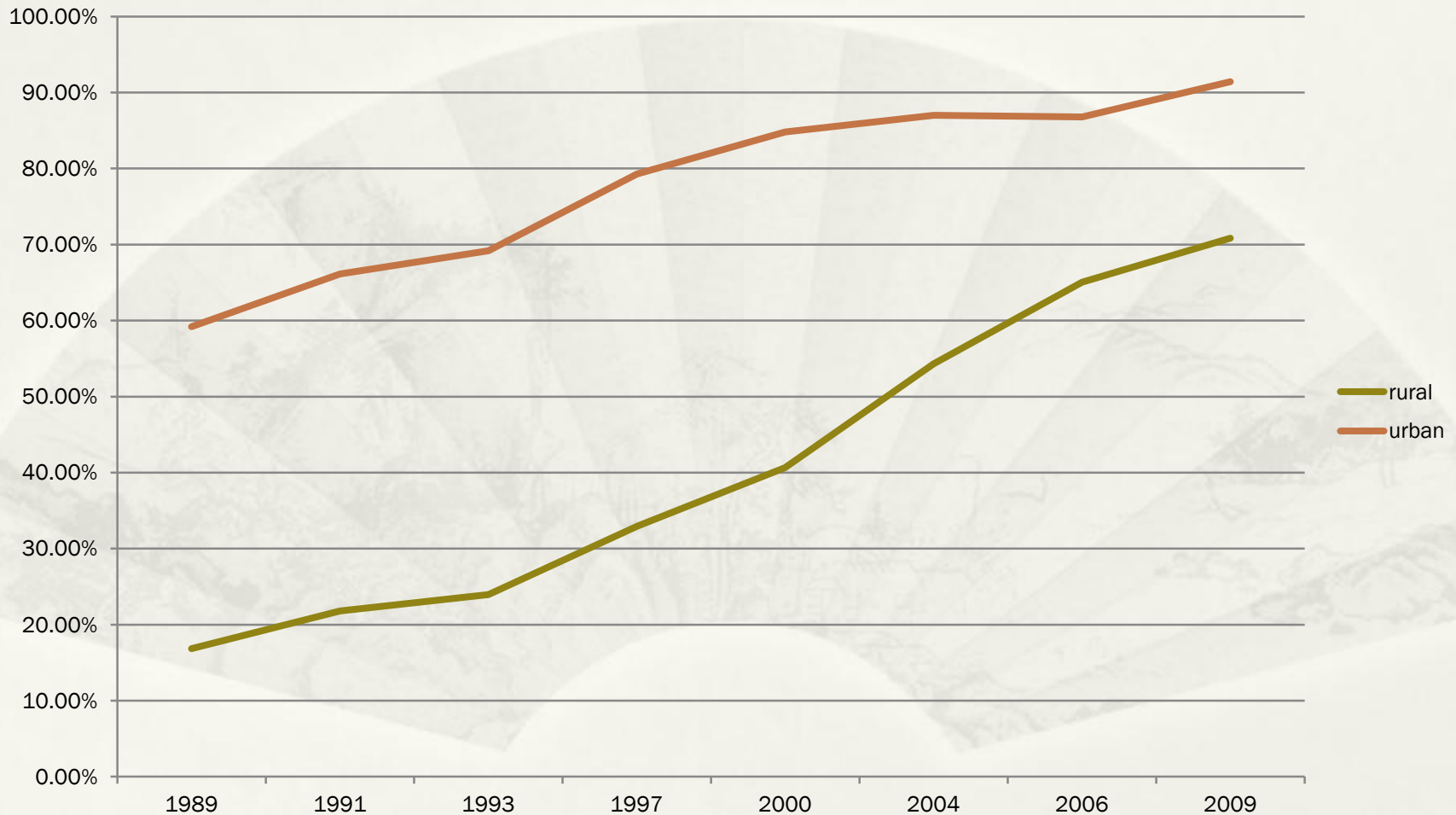




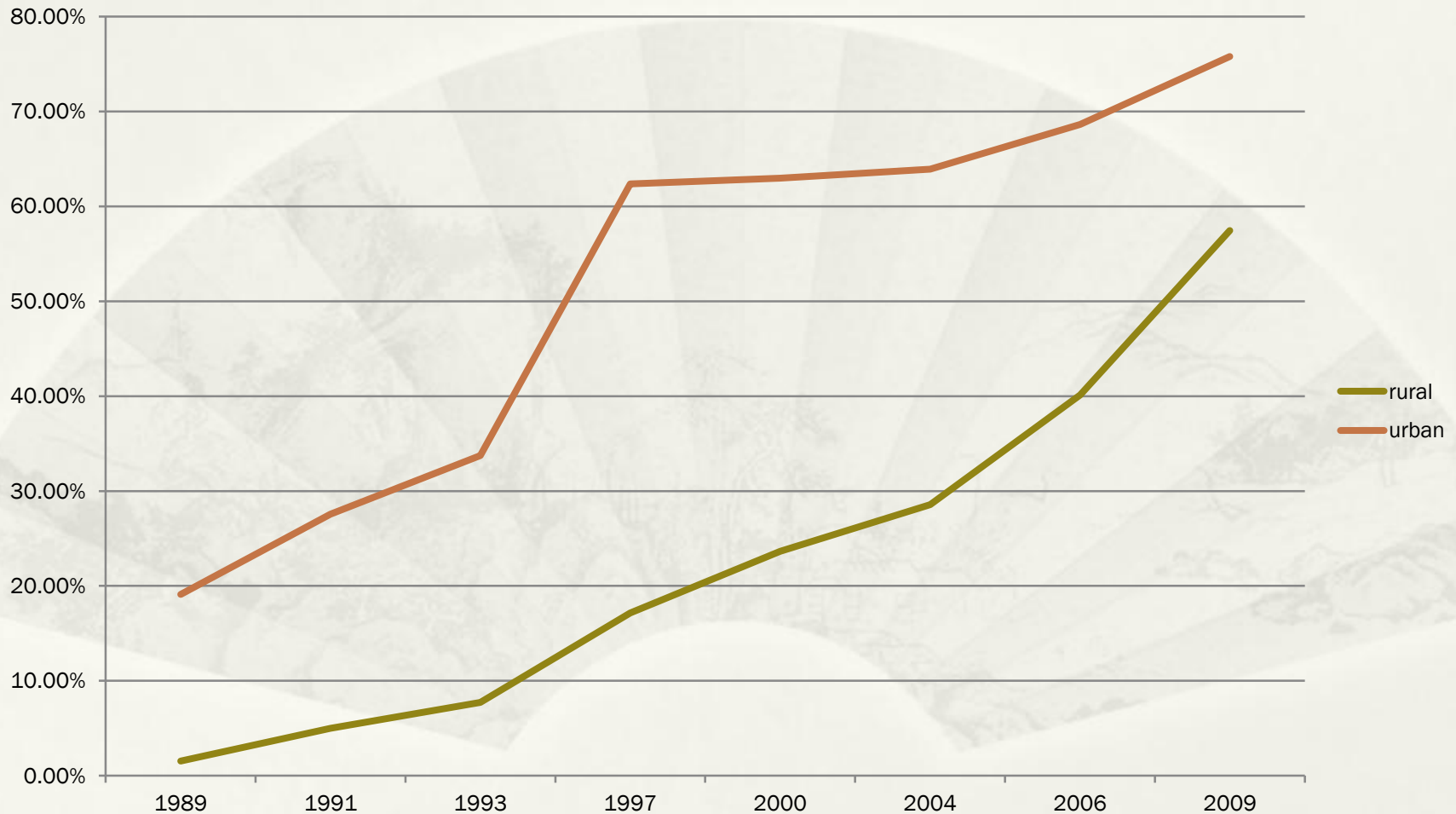
# Rural-Urban trend of children's deprivation on Refrigerator from 1989 to 2009



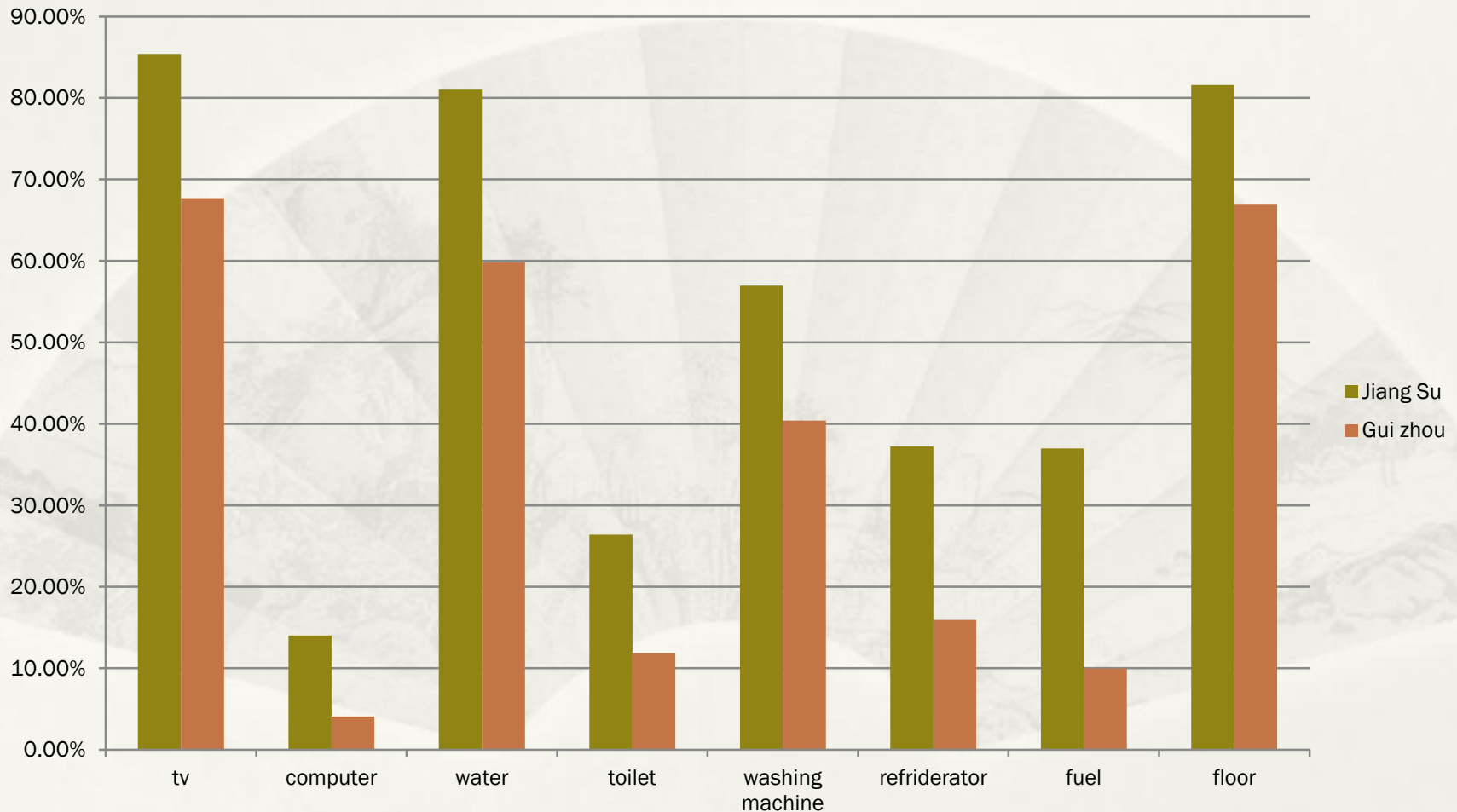
# Rural-Urban trend of children's deprivation on Washing Machine from 1989 to 2009



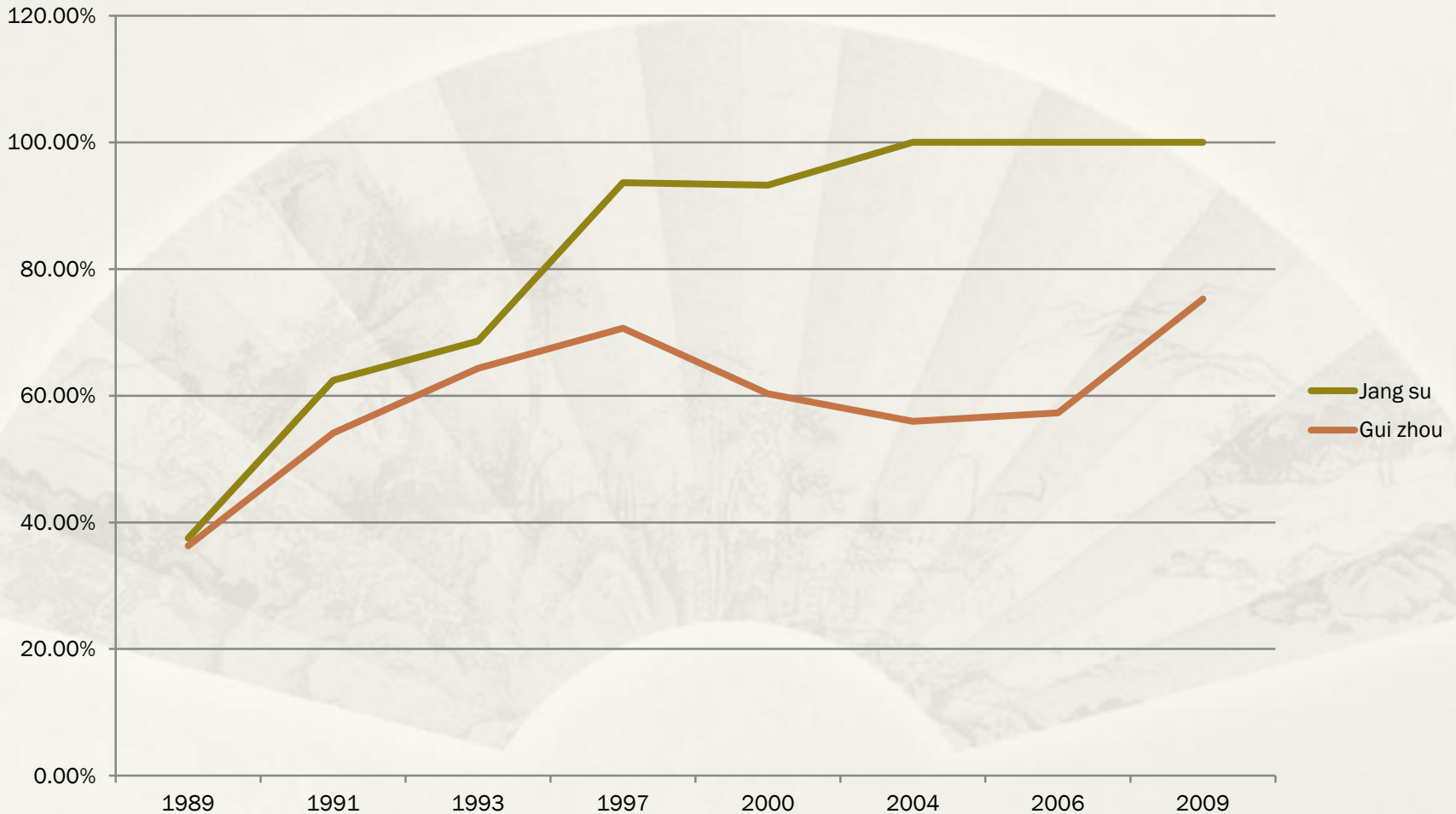
# Rural-Urban trend of children's deprivation on Fuel from 1989 to 2009



# Provincial differences on children's material living conditions (average)

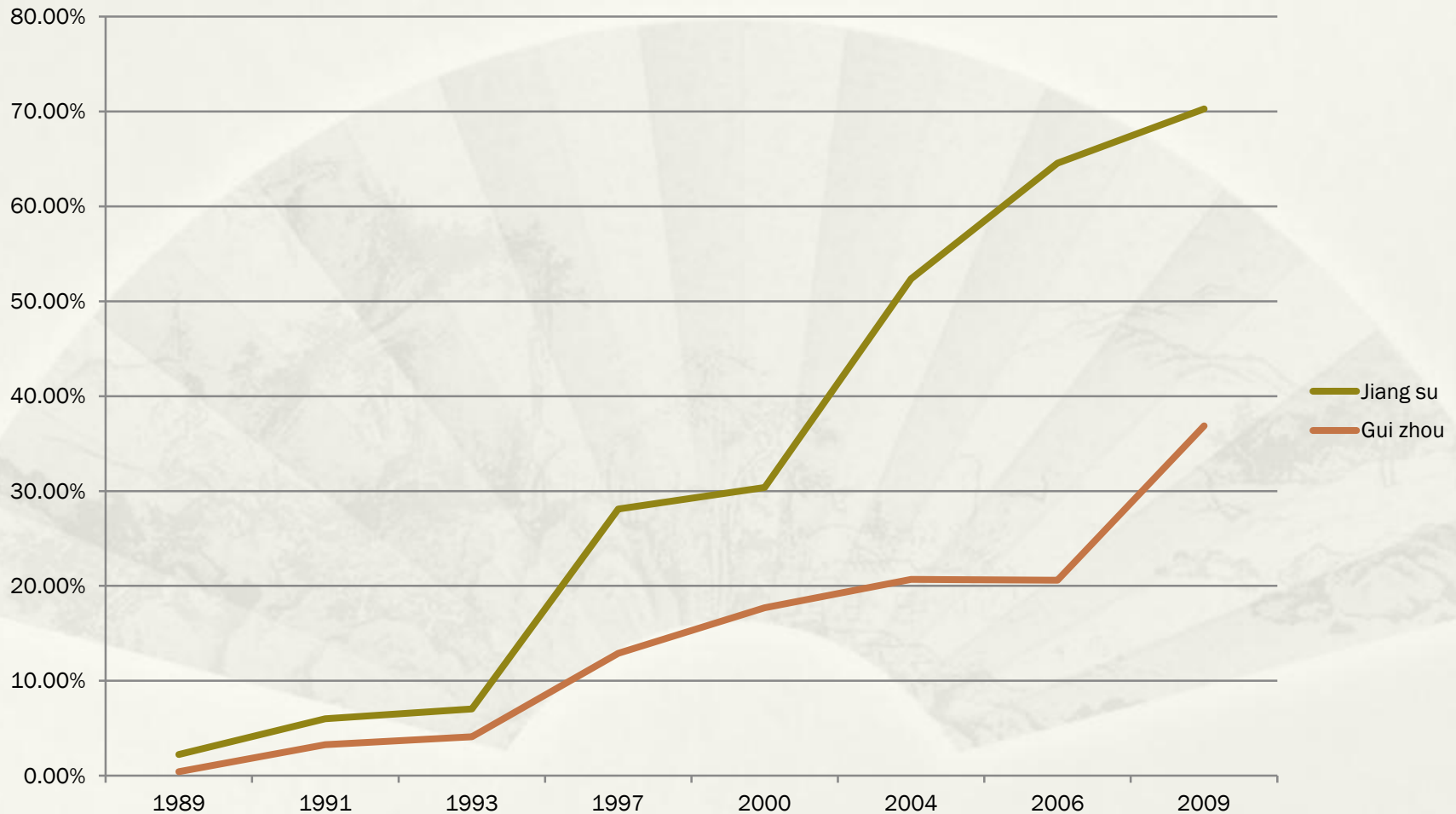


# Provincial differences of children's deprivation on Water from 1989 to 2009

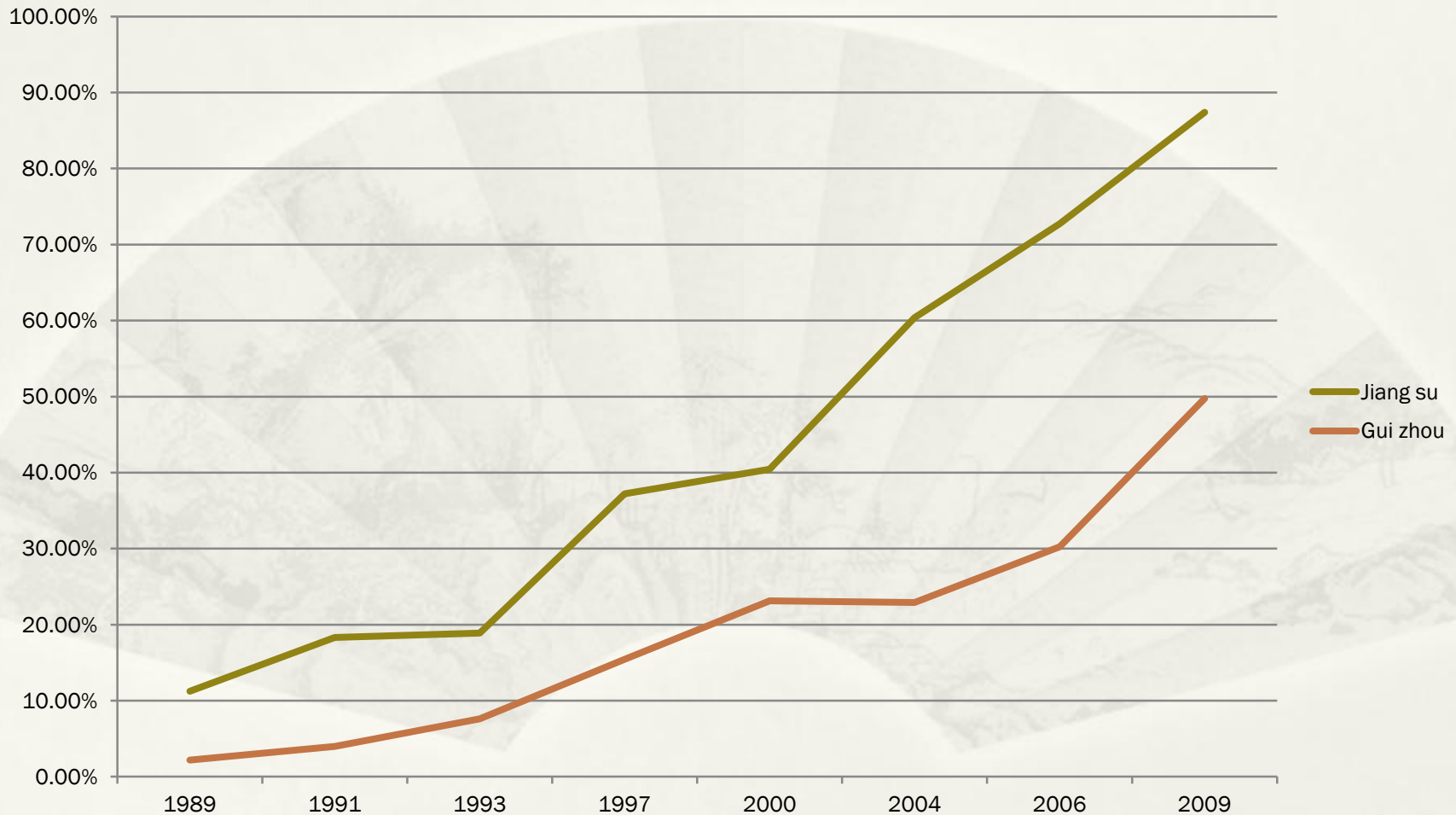




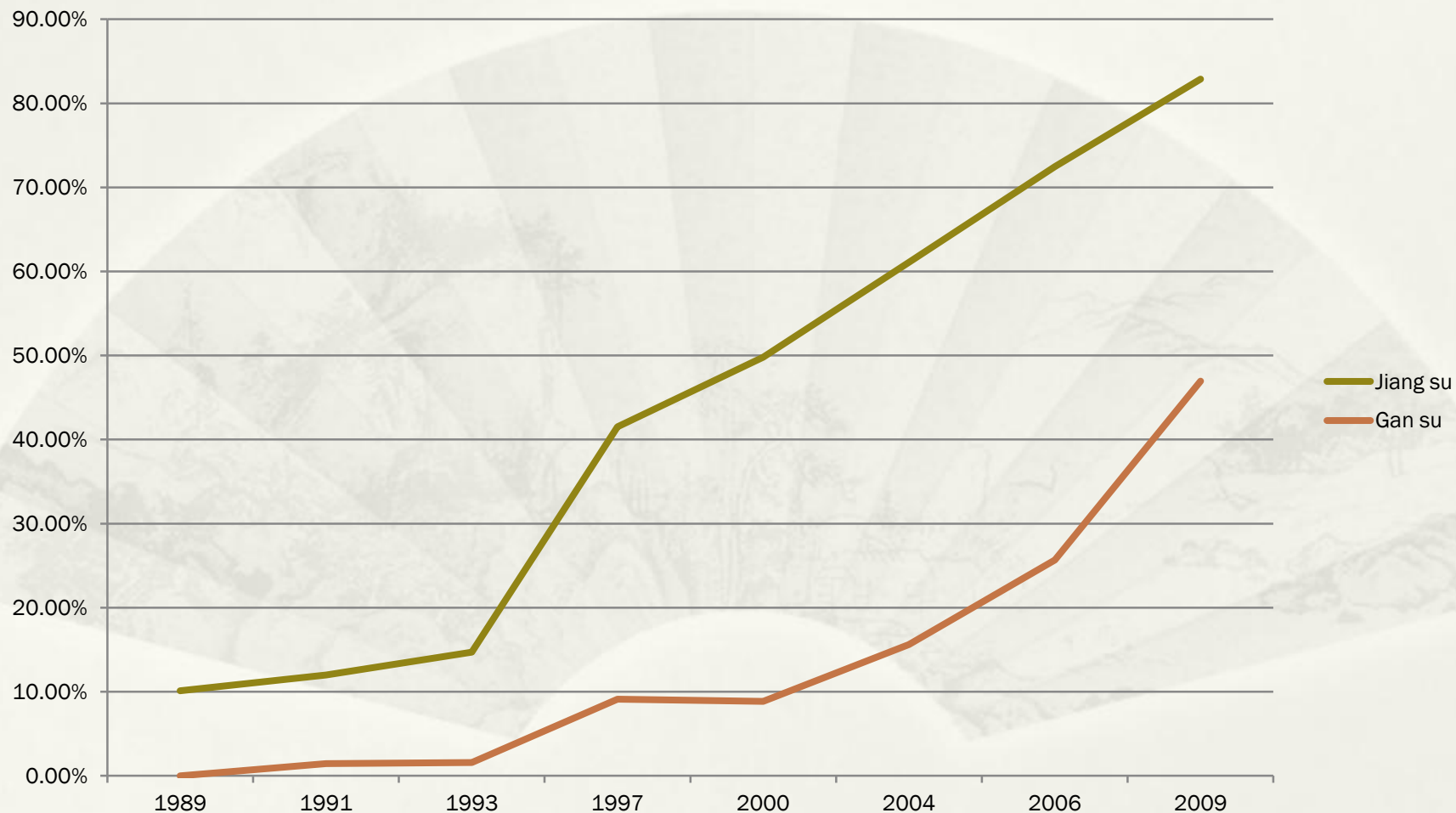
# Provincial differences of children's deprivation on Toilet from 1989 to 2009



# Provincial differences of children's deprivation on Refrigerator from 1989 to 2009



# Provincial differences of children's deprivation on Fuel from 1989 to 2009



# Conclusion

---

- \* 1. In general, children's overall wellbeing in China has been improved greatly across time
- \* 2. Regional disparities are also significant which needs well attention



**Thank you**

---