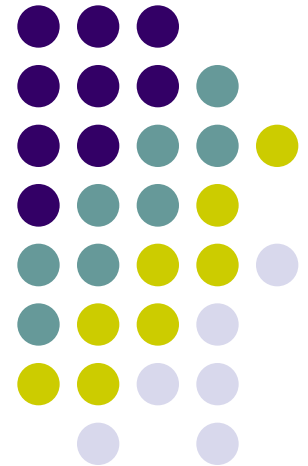
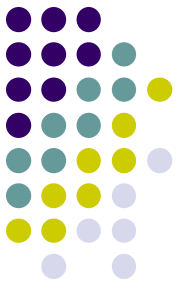


Changes in income inequality in China in the past three decades

Li Shi

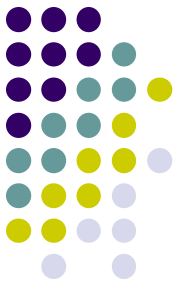
Beijing Normal University





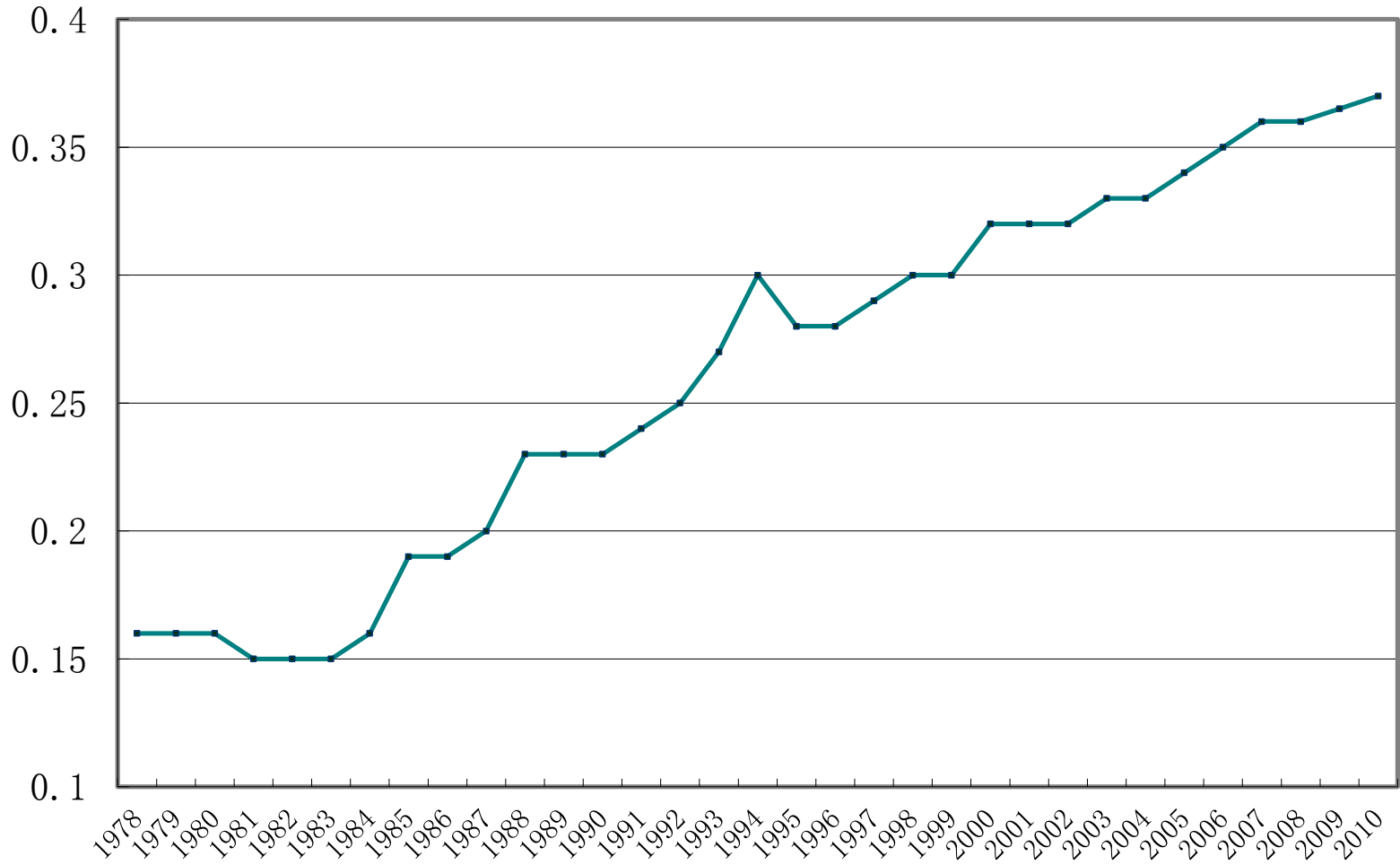
- Two topics:
 1. Some features of changes in income inequality in China.
 2. How to explain rising income inequalities?

1. Some features of Changes in income inequality in China



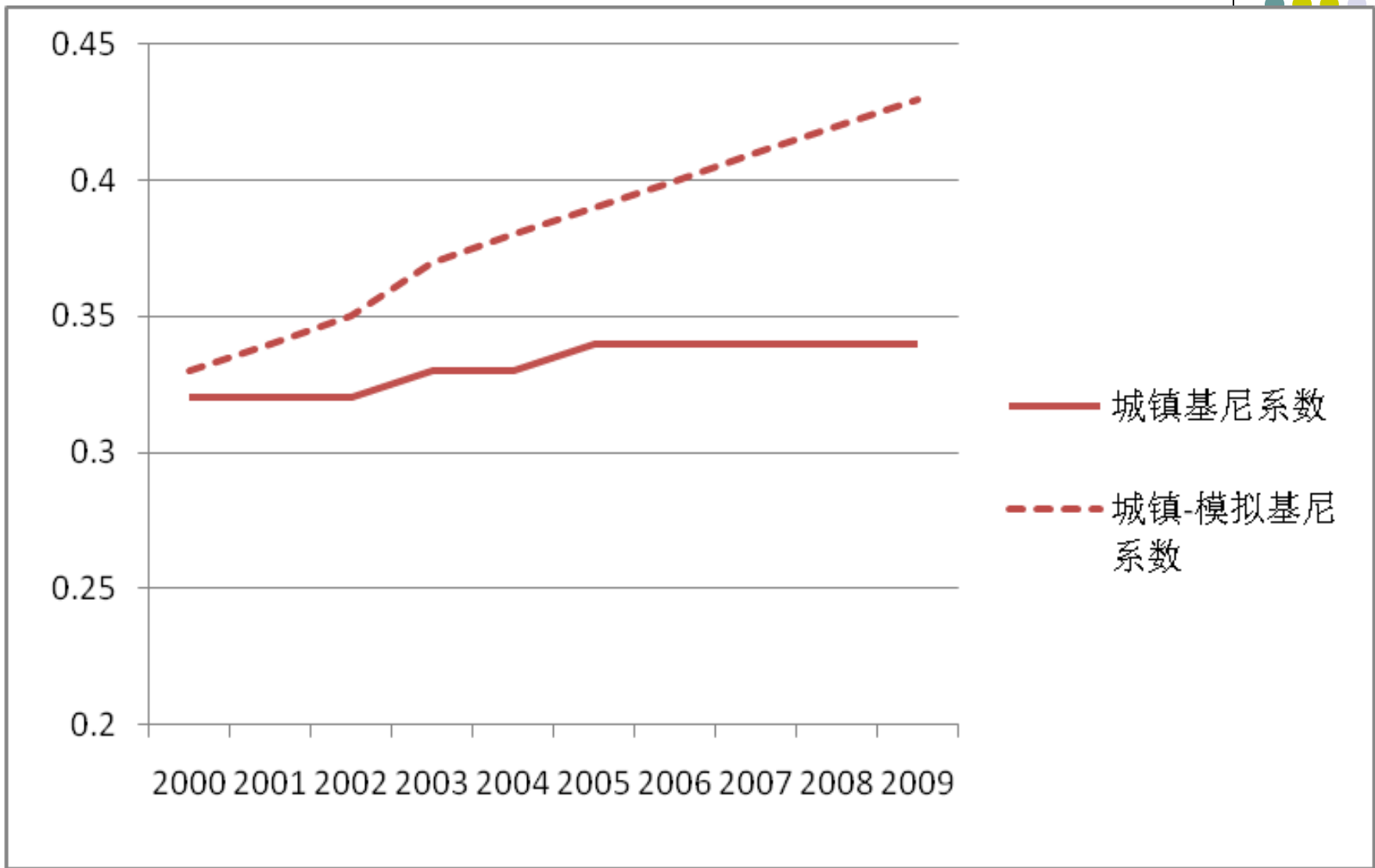
- Increasing inequality in all the aspects
- 1. Urban areas:
 - Gini 0.15 (1981) \longrightarrow 0.36(2007)
 - D_t/D_b 4.4 (1988) \longrightarrow 12 (2007)

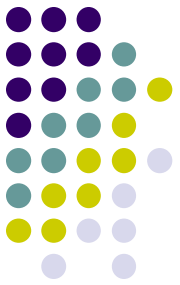
Urban Gini





Simulated urban Gini





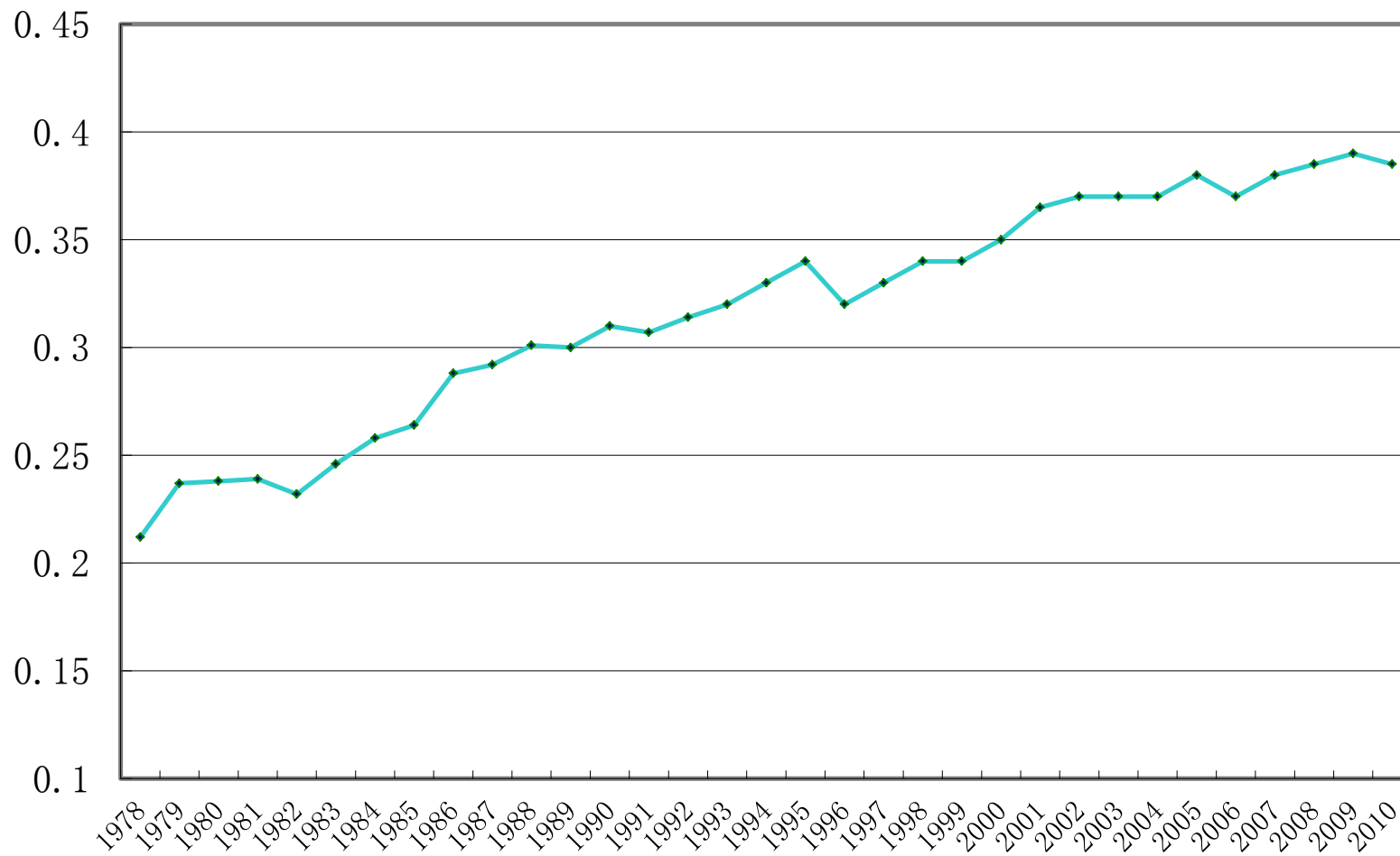
- 2. Rural areas:

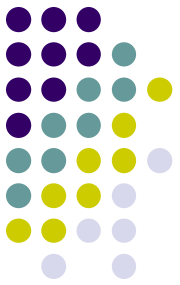
- Gini 0.23 (1978) \longrightarrow 0.38 (2007)

- D_t/D_b 8.6 (1988) \longrightarrow 11.2 (2002)



Rural Gini





- 3. Entire China

- Gini 0.38 (1988) \longrightarrow 0.48 (2007)

- D_t/D_b 7.3 (1988) \longrightarrow 23.3 (2007)

Changes in Gini coefficients in China as a whole, 1986-2007

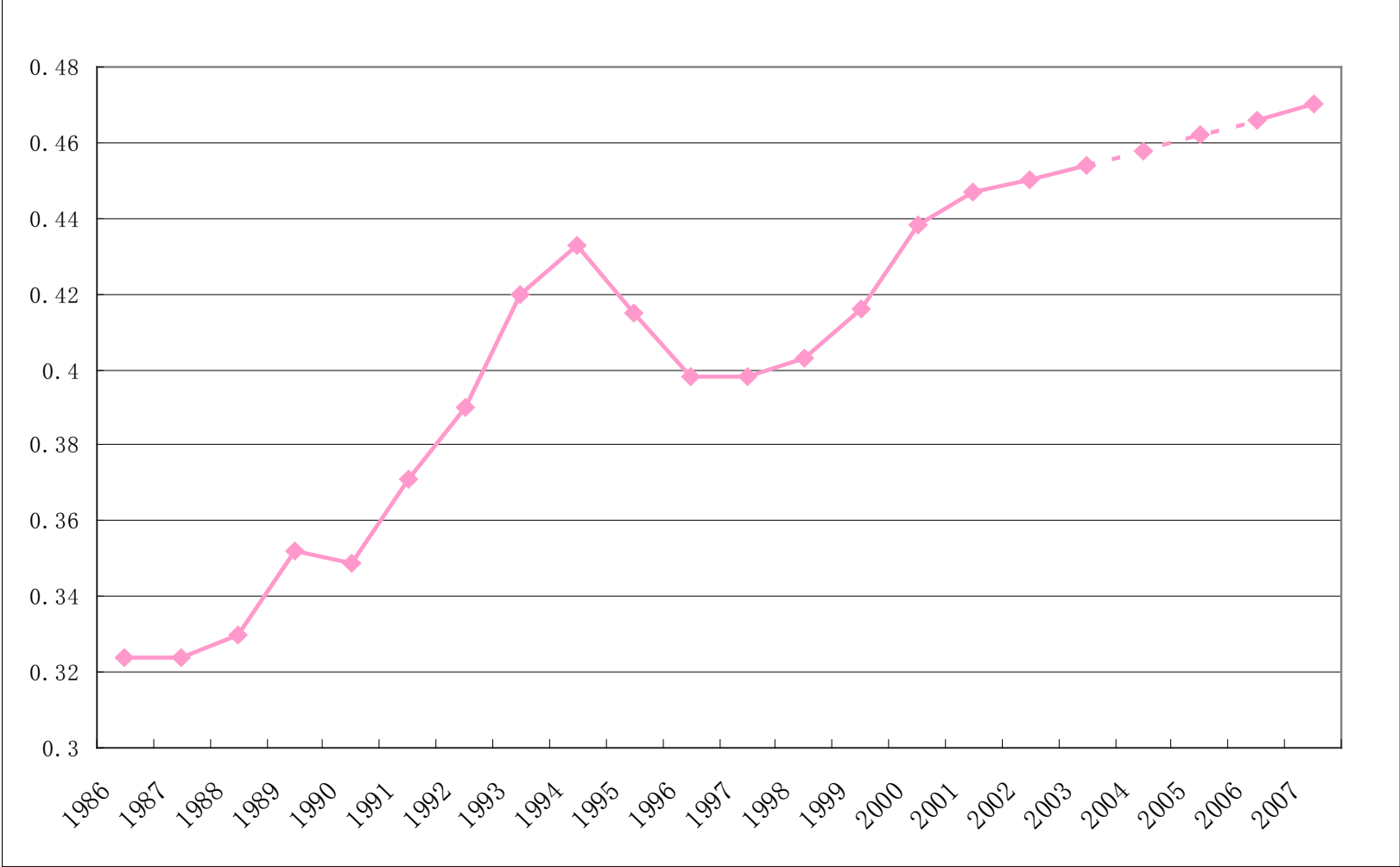


Table 1: National mean income and inequality, 2002 and 2007

	2002		2007		% change, 2002 to 2007, constant 2002 prices	
	Excluding migrants	Including migrants	Excluding migrants	Including migrants	Excluding migrants	Including migrants
NBS income, two-level weights						
Mean income	4426	4479	8653	8899	71.65	74.44
Gini	0.452	0.450	0.474	0.473	4.9%	5.1%
GE(0)/MLD	0.359	0.357	0.403	0.403	12.3%	12.9%
GE(1)	0.351	0.348	0.385	0.381	9.7%	9.5%
NBS income, three-level weights						
Mean income	4467	4530	8932	9165	75.55	77.63
Gini	0.456	0.455	0.481	0.478	5.5%	5.1%
GE(0)/MLD	0.362	0.361	0.414	0.413	14.4%	14.4%
GE(1)	0.360	0.356	0.398	0.392	10.6%	10.1%
CHIP income, two-level weights						
Mean income	4921	4964	10210	10413	82.16	84.17
Gini	0.462	0.460	0.489	0.485	5.8%	5.4%
GE(0)/MLD	0.373	0.371	0.432	0.427	15.8%	15.1%
GE(1)	0.366	0.362	0.411	0.404	12.3%	11.6%
CHIP income, three-level weights						
Mean income	4966	5019	10584	10772	87.12	88.43
Gini	0.466	0.464	0.497	0.492	6.7%	6.0%
GE(0)/MLD	0.378	0.375	0.445	0.439	17.7%	17.1%
GE(1)	0.376	0.371	0.425	0.416	13.0%	12.1%

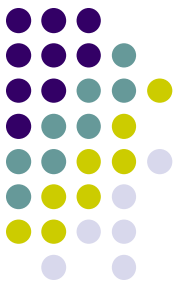


Table 3: Inequality estimates without and with PPP adjustment, 2002 and 2007

	2002		2007		% change, 2002 to 2007	
	Without PPP	With PPP	Without PPP	With PPP	Without PPP	With PPP
NBS income						
Gini	0.455	0.389	0.478	0.421	5.1%	8.2%
GE(0)/MLD	0.361	0.265	0.413	0.315	14.4%	18.9%
GE(1)	0.356	0.258	0.392	0.302	10.1%	17.1%
CHIP income						
Gini	0.464	0.395	0.492	0.433	6.0%	9.6%
GE(0)/MLD	0.375	0.271	0.439	0.333	17.1%	22.9%
GE(1)	0.371	0.264	0.416	0.320	12.1%	21.2%

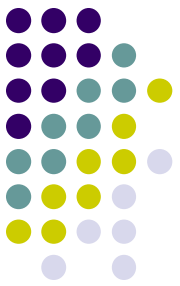
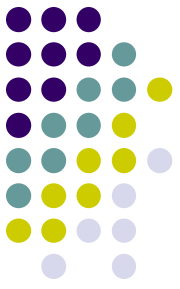


Table 8: Urban inequality with and without migrants, 2002 and 2007

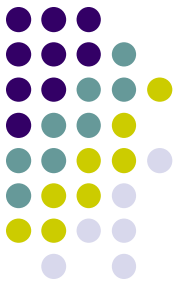
	2002		2007	
	Without	With	Without	With
Gini	0.327	0.329	0.337	0.334
GE(0)/MLD	0.179	0.182	0.190	0.187
GE(1)	0.182	0.184	0.197	0.194

2. How to explain rising income inequalities?



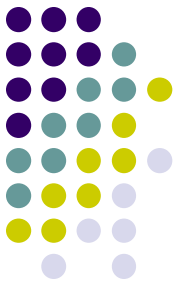
- (1) Significant differences between urban and rural areas.
- (2) Uncompleted market reform: regional immobility and monopoly.
- (3) Rising returns to education.
- (4) Corruption

(1) Significant differences between urban and rural areas



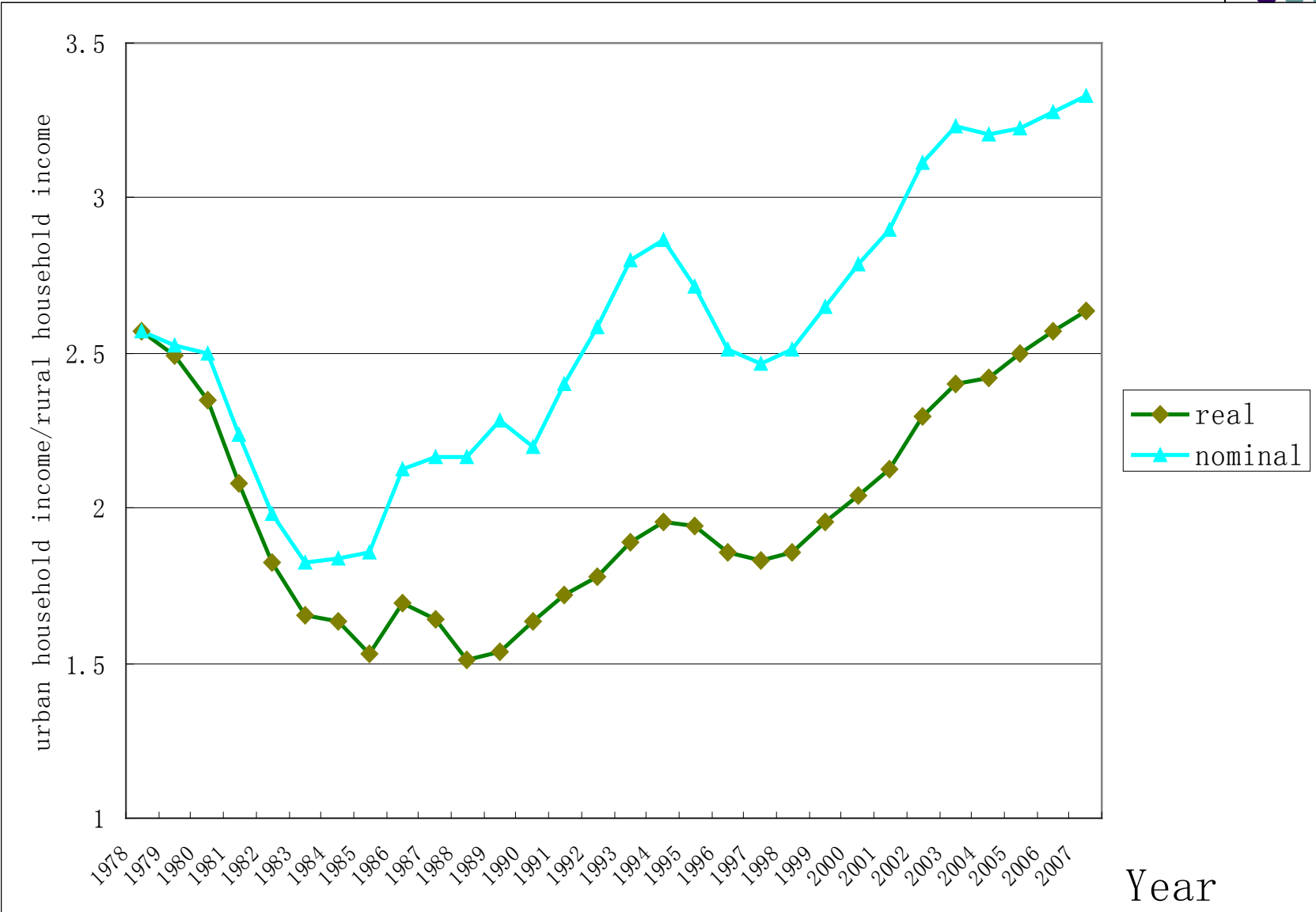
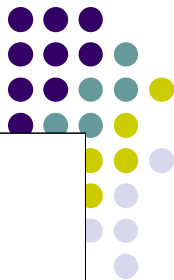
- Significant differences between urban and rural areas in terms of income, social security, public services, reflecting government policies and political institutions discriminating against rural people.

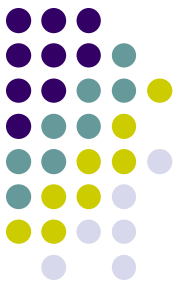
Income gap between rural and urban households



- 1、 Income ratio of urban and rural households
- 2、 Importance of urban-rural income gap in total inequality in China

Income ratio of urban and rural households





- Theil decomposition: Share of urban-rural inequality increased from 38% in 1995 to 43% in 2002, in national inequality.
- Decomposition based on regression analysis: 37% of national inequality is due to urban-rural inequality.

Importance of urban-rural income gap in total inequality in China



Theil decomposition: :

1988: 37%,

1995: 41%,

2002: 46%,

2007: 51%.

Decomposition based on regression analysis:

2002: 37%.

(2) Uncompleted market reform: regional disparity

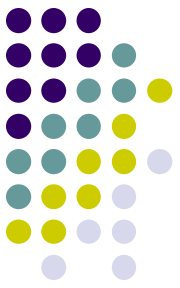
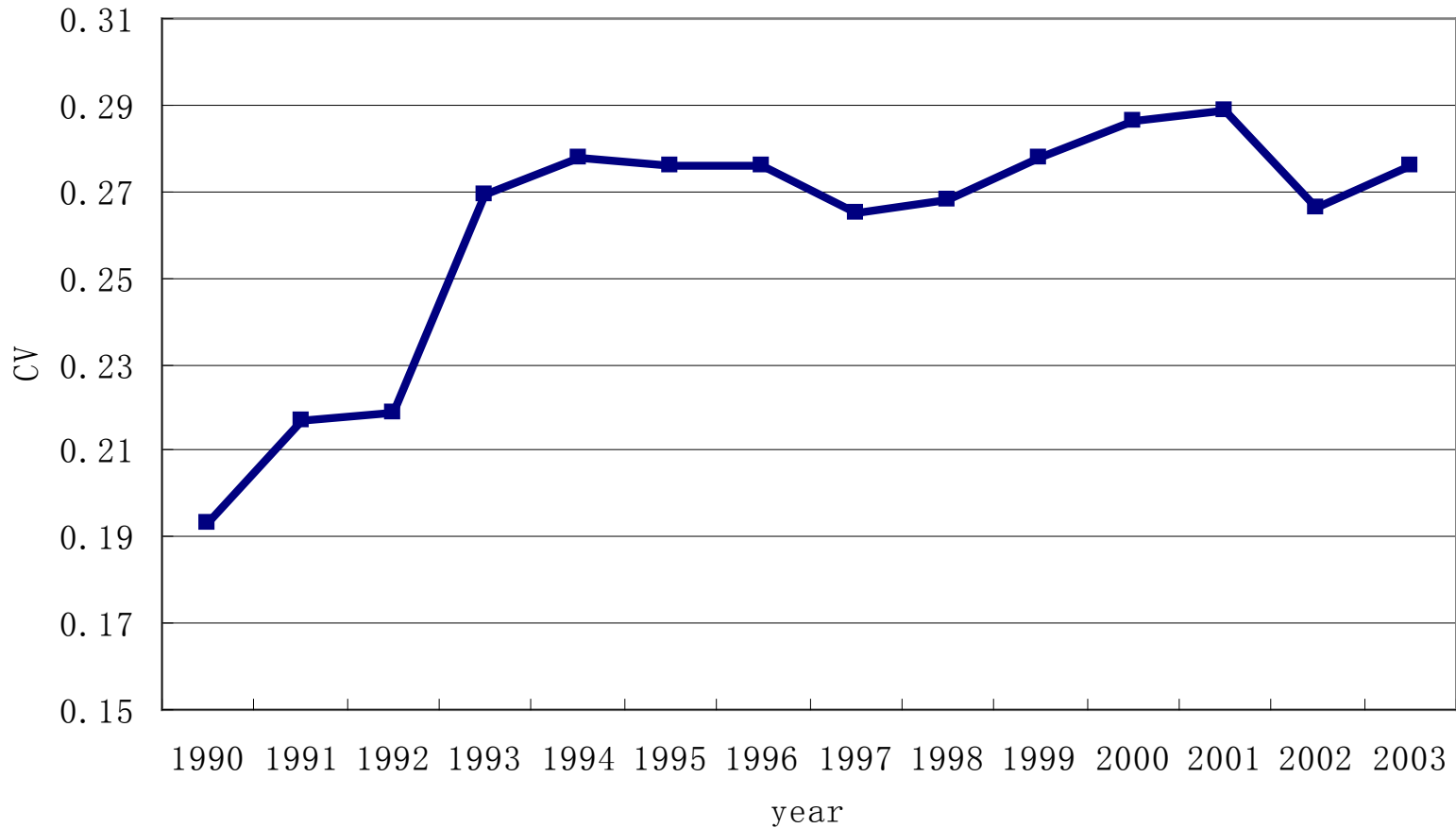
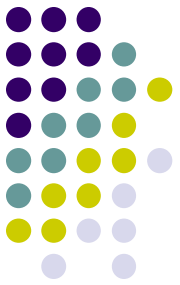


Fig. 3 Coefficient of variation of household income per capita among provinces





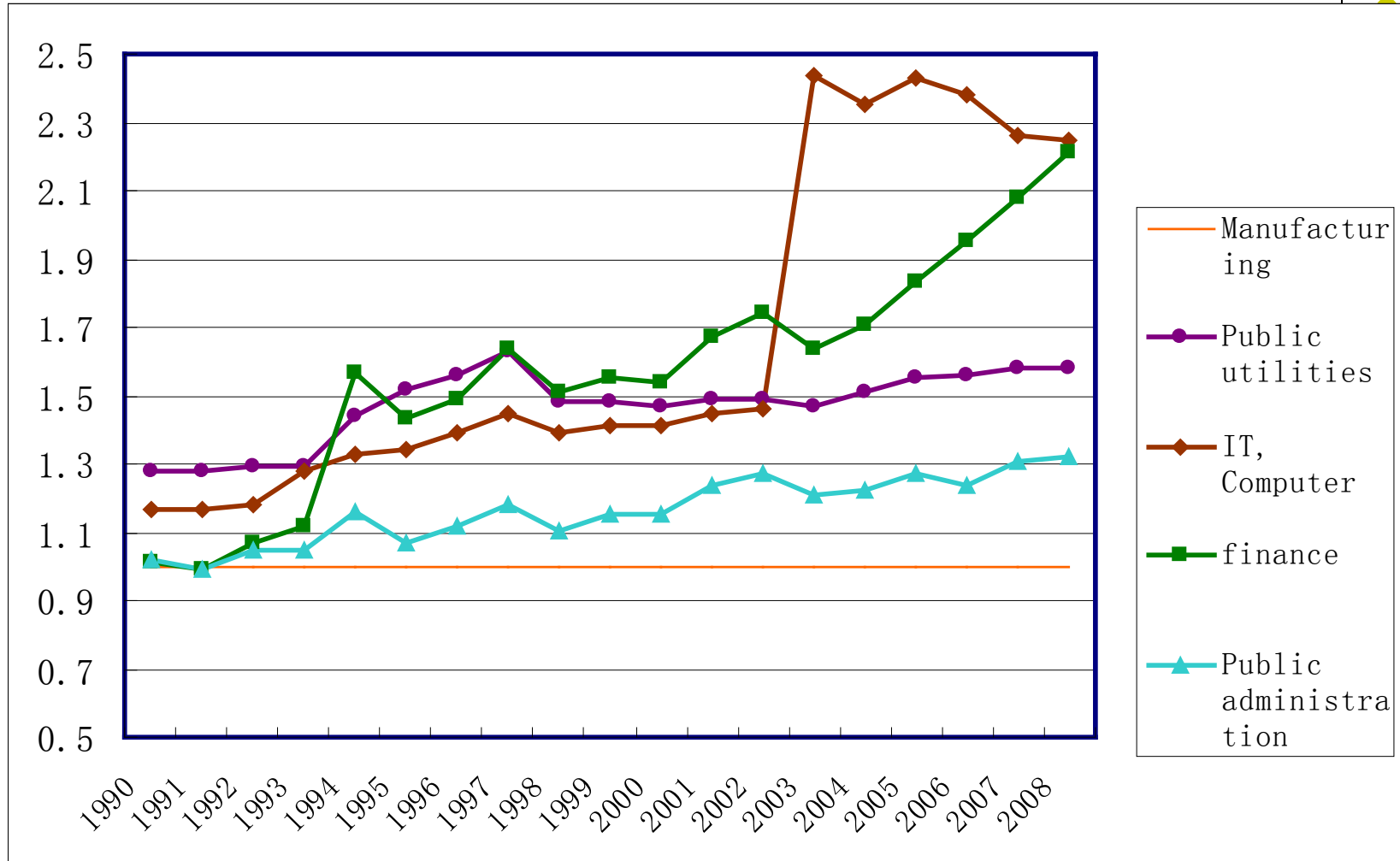
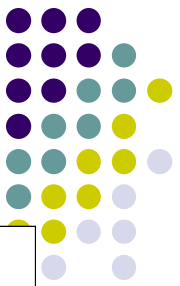
- Decomposition based on regression analysis: Provincial dummies explain 10-12 percentage points for urban China in 2002.

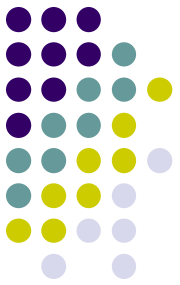


Table 13: Gini coefficients by region, 2002 and 2007

PPP unadjusted		
	2002	2007
Big cities	0.314	0.320
East	0.426	0.465
Center	0.404	0.443
West	0.462	0.485
PPP adjusted		
	2002	2007
Big cities	0.304	0.312
East	0.357	0.412
Center	0.352	0.396
West	0.428	0.444

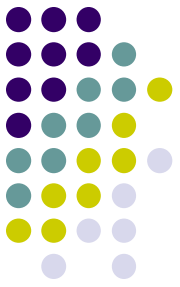
Wage differentials between monopolistic and competitive sectors





- 3. Oxacca decomposition analysis:
- 1995: Monopoly/competitive sector: total difference: 10%, segmentation: 9%
- 2002: Monopoly/competitive sector: total difference: 48%, segmentation: 59%

(3) Education plays more important role in income determination



- 1、 Significant rise in returns to education
- 2、 Decomposition based on regression analysis: education explain 3.8% in 1988, 6.7% in 1995 and 15.6% in 2002, of the inequality in urban China.

Fig 4 Rate of private returns to education
in urban China (%)

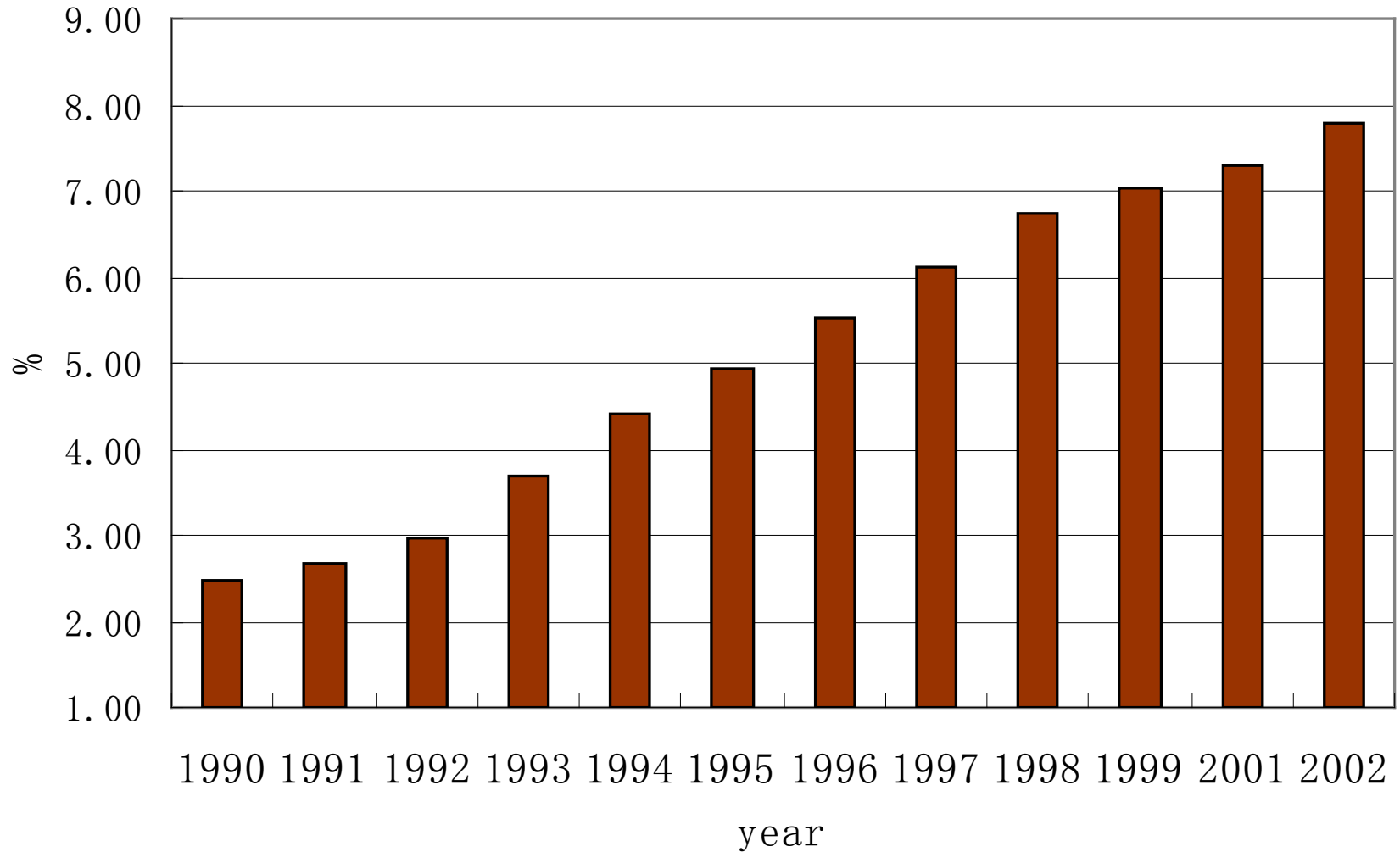
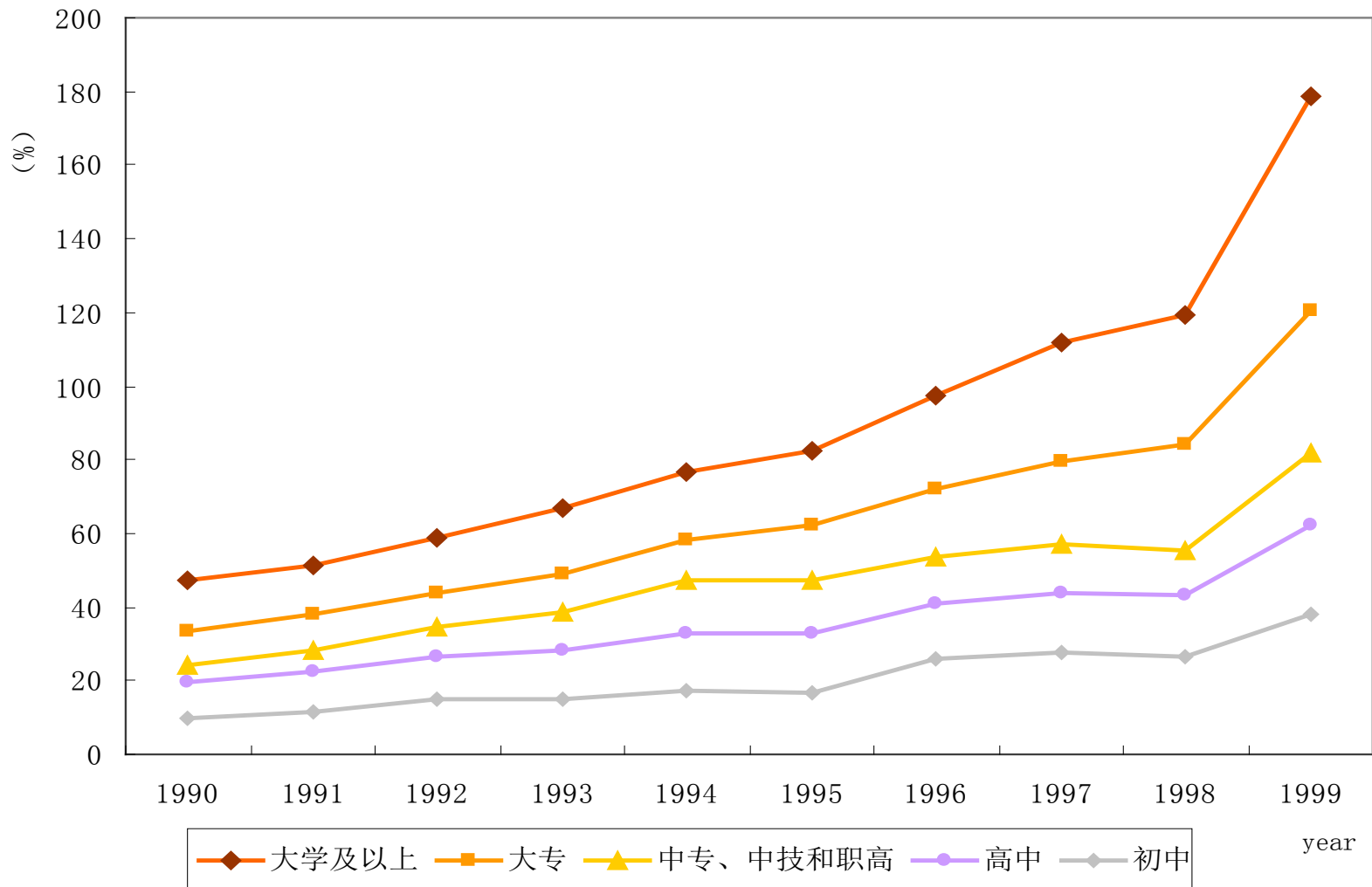
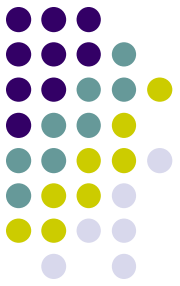


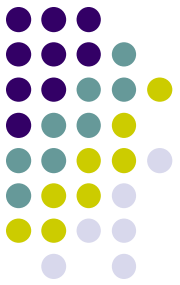
Figure 4. Rates of returns to education by level, 1990—1999



(4) Corruption and income inequality

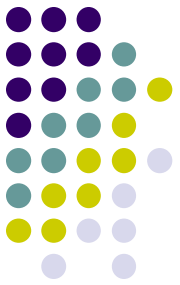


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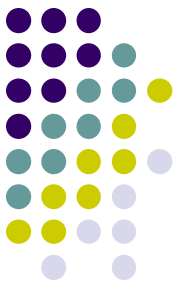
Introduction to CHIP data

- Four national household surveys conducted in
- 1988, 1995, 2002, 2007-2010

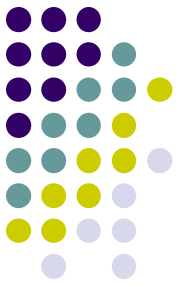


CHIPs sample size

	1988		1995		2002		2007-2010	
	rural	urban	rural	urban	rural	urban	rural	urban
Households	10258	9009	7998	6931	9200	6835	8000	10000
Individuals	51352	31827	34739	21694	37969	20632	33678	28000
Provinces	28	10	19	11	22	12	8	8
Cities/counties	126	60	110	66	120	56	80	18



- The Distribution of income in China /edited by Keith B Griffin, Renwei Zhao (1993)
Palgrave Macmillan Publishing
- *China's retreat from equality. Income distribution and economic transition.*
- Carl Riskin, Zhao Renwei et Li Shi eds., New York et Londres, M.E. Sharpe, 2001
- *Inequality and public policy in China / edited by Björn A. Gustafsson, Li Shi, Terry Sicular (2008)*
- Cambridge University Press, Cambridge.
- *Rising income inequality in China / edited by Li Shi, Hiroshi Sato, Terry Sicular (2013)*
- Cambridge University Press, Cambridge.



● Thanks