

# Problems and Prospects of the Nepalese Economy

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**Talk for NPCCUK Jan 30, 2011**

# Problems and Prospects

## Problem

- Nepal is one of the poorest country in the world now.

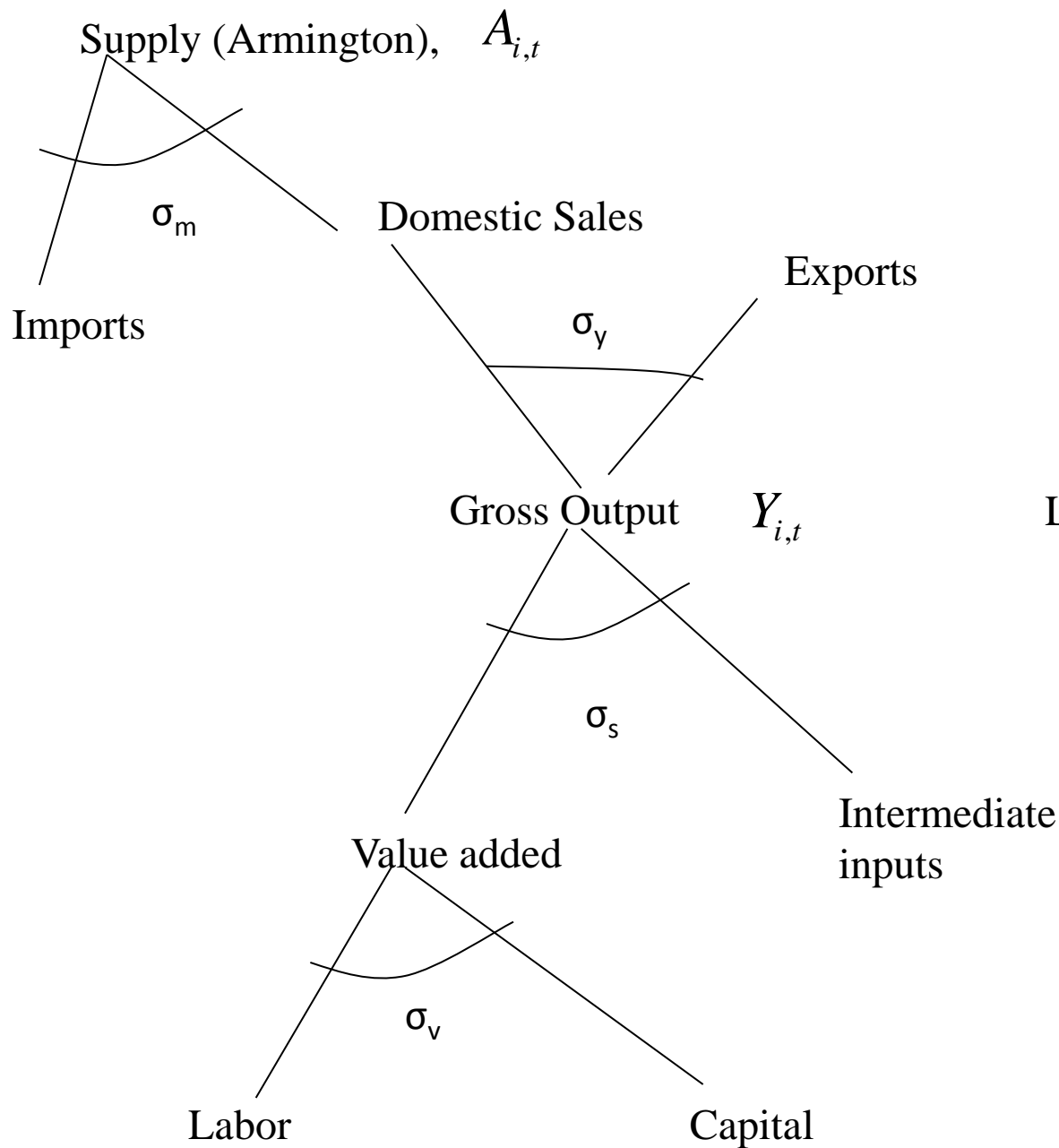
## Prospect

- Nepal can be one of the best country in 100 year's time with the economic policies based on cooperation, trust, investment
- May remain like this or become even poorer if current deadlock/noncooperation continue



# Theory of the Nepalese Economy





Dynamic Analysis



Law of capital accumulation

and

Investment by origin  
and destination

and

Steady state and  
Transitional dynamics

# Dynamic GE Model of Redistribution and Growth

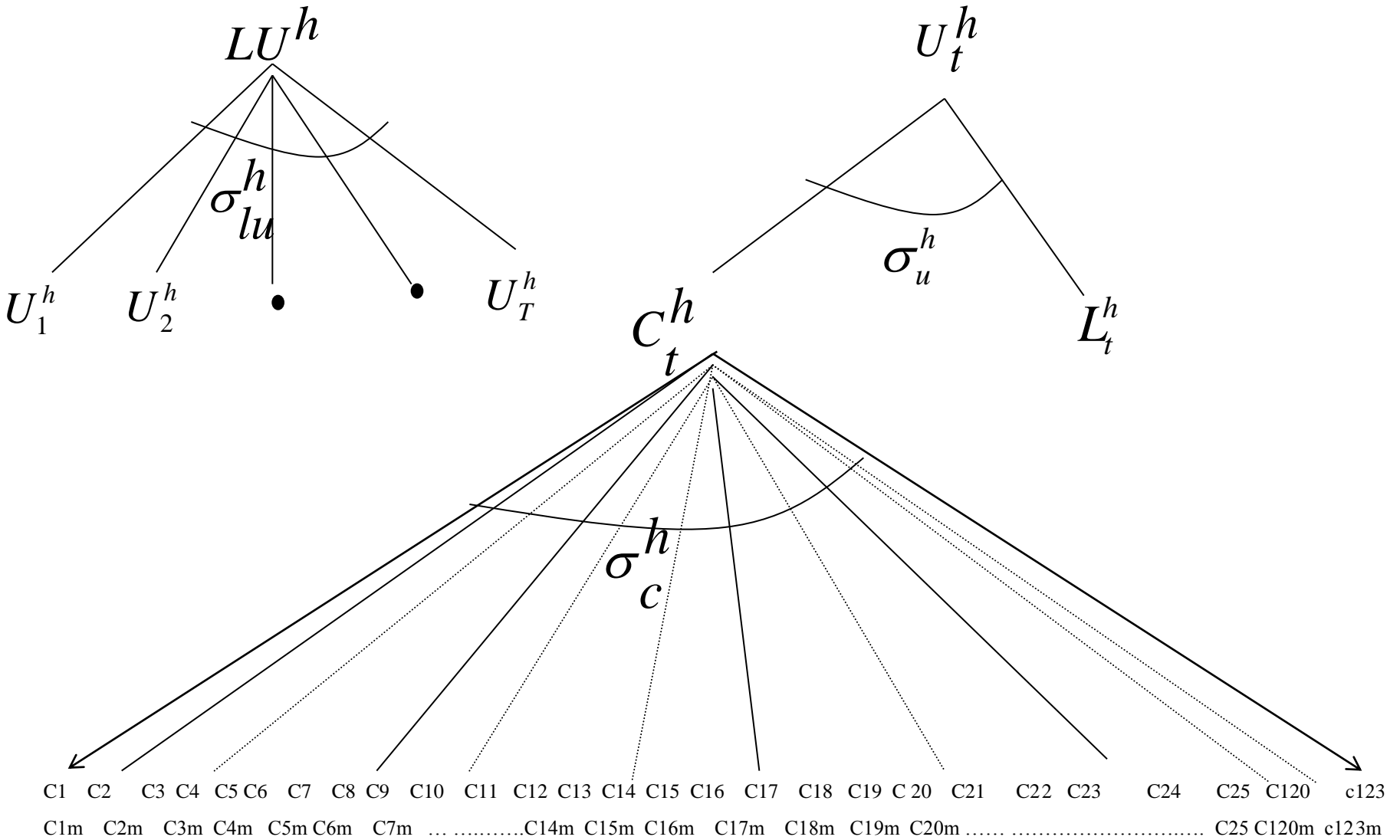
- Consumption
  - 10 categories of representative household
  - Investor
  - Trader
  - Government
- Labour-leisure choice and labour supply
- Production
  - Capital
  - Labour
  - Technology
  - Input-output structure

Nested functions

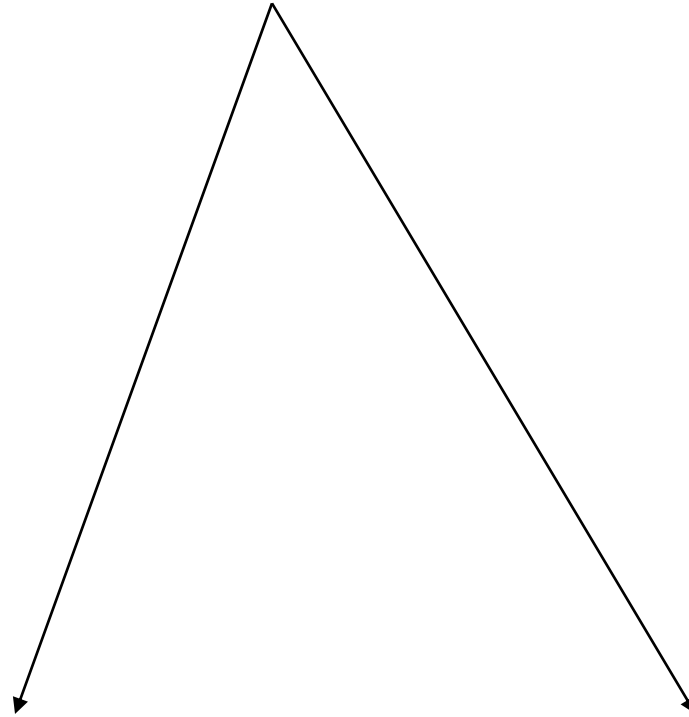
Price based substitutions

Separate models with nine, eleven, 16, 21 sectors

# Lifetime and Instantaneous Utility Function of a Household in the BHI CGE Model



Time Endowment of  
Household H



Leisure of Household h

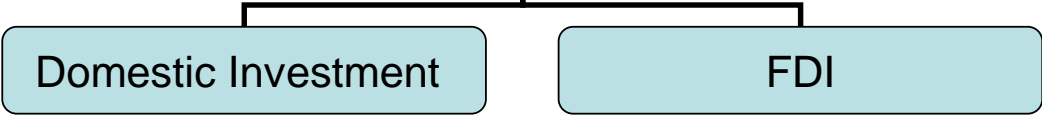
Labour Supply of  
household h

# Investment by Origin by Sectors

$I_1$   $I_2$  . . . . .  $I_j$  . . . . .  $I_{122}$   $I_{123}$



Single Capital Good



Domestic Investment

FDI



Investment by Destination Sectors

$ID_1$   $ID_2$  . . . . .  $ID_j$  . . . . .  $ID_{122}$   $ID_{123}$



Capital Stock by Sectors

$K_1$   $K_2$  . . . . .  $K_j$  . . . . .  $K_{122}$   $K_{123}$

## Input-Output Table of Nepalese Economy Demand-Supply and Distribution Relations

Nine Sector Input/Output Table for 1999/00 at Producer's Price (In Million Rs.)

	agri	manuf	Chem	Metal	Gaselw	Hotel	Transp	Finance	SocServ	Sub-Total	Pcon	Gcon	Prfxinv	Gfxinv	Stock	Exp	Sub-Total	Total Output
agr	8694.1	16788.6	544.5	1778.5	0.0	193.6	0.1	18.8	16.6	28034.8	103889.	0.00	538.38	0.00	44488.7	1942.67	150859.	178893.
Manuf	1985.1	6550.4	35.8	1457.0	9.9	211.4	46.9	171.6	2127.4	12595.4	72038.1	0.00	53.43	13.87	-	30752.8	73853.5	86448.9
Chem	3730.4	22.3	684.3	419.0	15.4	27.0	16.5	0.0	84.0	4998.92	3232.07	0.00	0.00	0.00	-4586.43	3696.72	2342.36	7341.28
Metal	900.1	87.8	25.0	13336.2	36.3	59.3	31.4	437.5	615.4	15529.0	10412.1	0.00	37756.7	25478.7	3741.50	9814.43	87203.5	102732.
Gaselw	10.4	612.1	34.1	316.1	118.8	310.3	62.4	80.5	112.8	1657.32	1684.16	0.00	0.00	0.00	4823.23	0.00	6507.39	8164.71
Hotel	3195.0	4104.7	244.2	3335.4	84.2	4507.7	6841.8	746.8	1797.6	24857.4	20952.9	0.00	484.95	146.78	10552.4	14347.4	46484.6	71342.0
Transp	4805.3	6582.2	407.5	4566.2	103.8	4284.7	4506.1	666.8	2501.5	28424.0	15808.8	0.00	784.96	237.51	9603.27	6924.96	33359.5	61783.6
Finance	8294.7	4279.1	253.9	3062.6	1143.2	2902.2	6340.7	1383.3	1009.8	28669.5	9576.25	0.00	0.00	0.00	3043.02	0.00	12619.2	41288.8
SocServ	164.5	367.8	21.4	4204.3	20.0	404.4	146.2	449.7	1429.3	7207.70	7007.13	34579.0	0.00	0.00	-	21441.0	48610.7	55818.4
DOMESTIC INPUT PURCHASE	31779.5	39394.9	2250.70	32475.3	1531.57	12900.5	17992.0	3954.98	9694.48	151974.19	244601.13	34579.0	39618.4	25876.8	28244.7	88920.0	461840.24	613814.43
intimp	2147.48	14982.6	2190.90	19674.2	677.08	14673.0	14050.9	408.48	11881.4	80686.3	36282.3	0.00	4179.00	468.00	0.00	0.00	40929.3	121615.76
TOTAL INTER INPUT	33926.9	54377.6	4441.60	52149.6	2208.65	27573.6	32043.0	4363.46	21575.9	232660.57	280883.52	34579.0	43797.4	26344.8	28244.7	88920.0	502769.62	735430.19
Wages	46202.7	4516.98	221.65	20382.0	801.44	5274.29	11652.7	14234.5	29221.7	132508.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132508.23
Depr	1721.62	1092.75	107.44	1784.01	717.71	1472.39	7482.37	1070.36	68.71	15517.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15517.3
Indtx	244.01	6097.31	1278.38	6664.20	61.06	659.39	459.64	6.35	218.52	15688.8	7063.48	0.00	813.57	91.11	0.00	1240.97	9209.14	24898.0
capital	96798.6	20364.2	1292.22	21752.6	4375.85	36362.3	10145.8	21614.0	4733.55	217439.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	217439.6
VALUE ADDED	144967.01	32071.3	2899.68	50582.8	5956.06	43768.3	29740.6	36925.3	34242.5	381153.86	7063.48	0.00	813.57	91.11	0.00	1240.97	9209.14	390363.00
GRAND TOTAL	178893.99	86448.9	7341.28	102732.52	8164.71	71342.0	61783.6	41288.8	55818.4	613814.43	287947.00	34579.0	44611.0	26436.0	28244.7	90161.0	511978.76	1125793.19

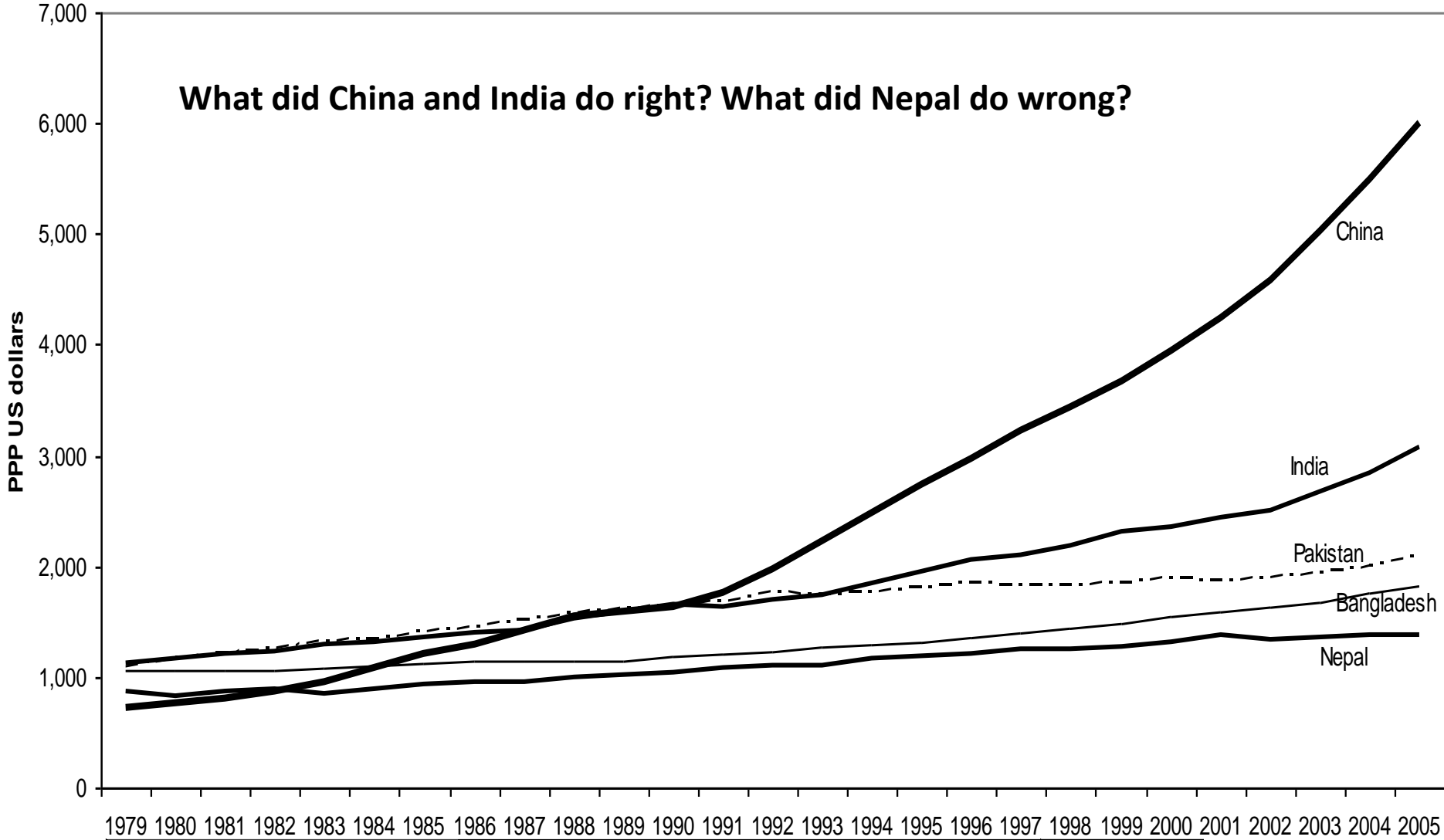
Reference: Adapted from from 25 sector input-output model of Nepal received from the NPC Secretariate, Kathmandu (cortesy Pushpa Shakya)..

Economic policies should be based on such facts not in whims of politicians.



# GDP Percapita in Nepal and Her Neighbours (PPP)

**What did China and India do right? What did Nepal do wrong?**



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Figure 4

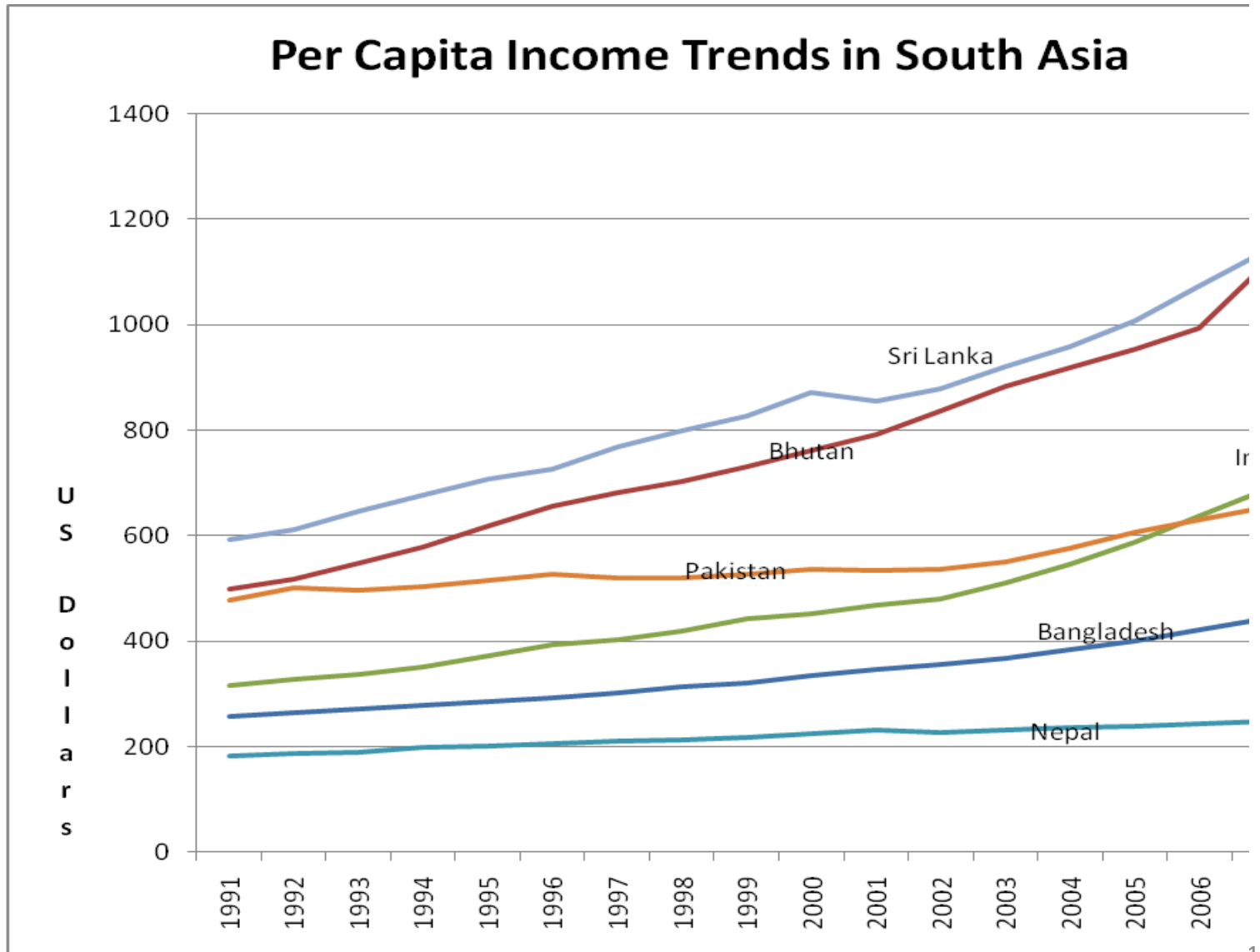


Figure 5

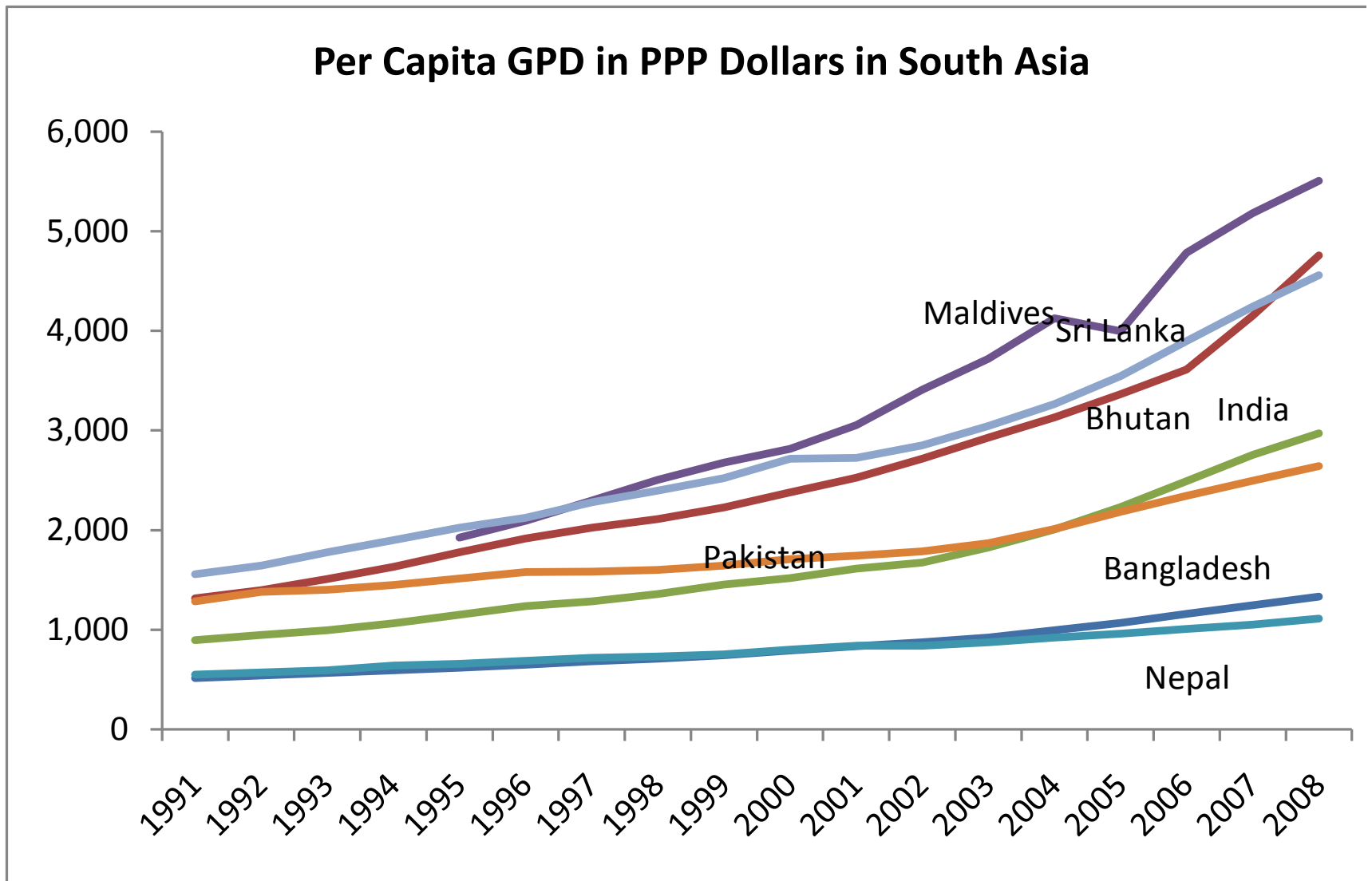


Figure 6

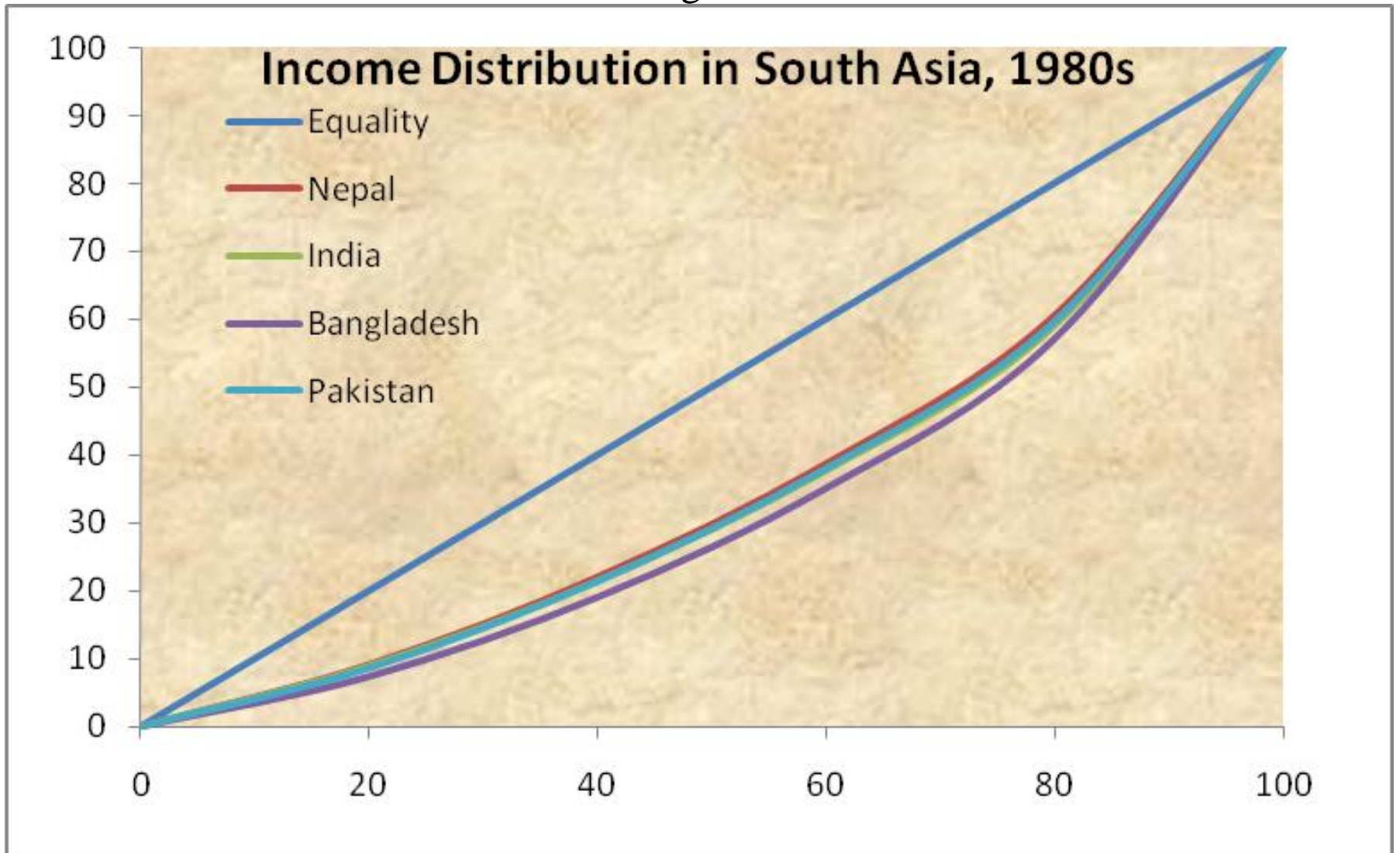
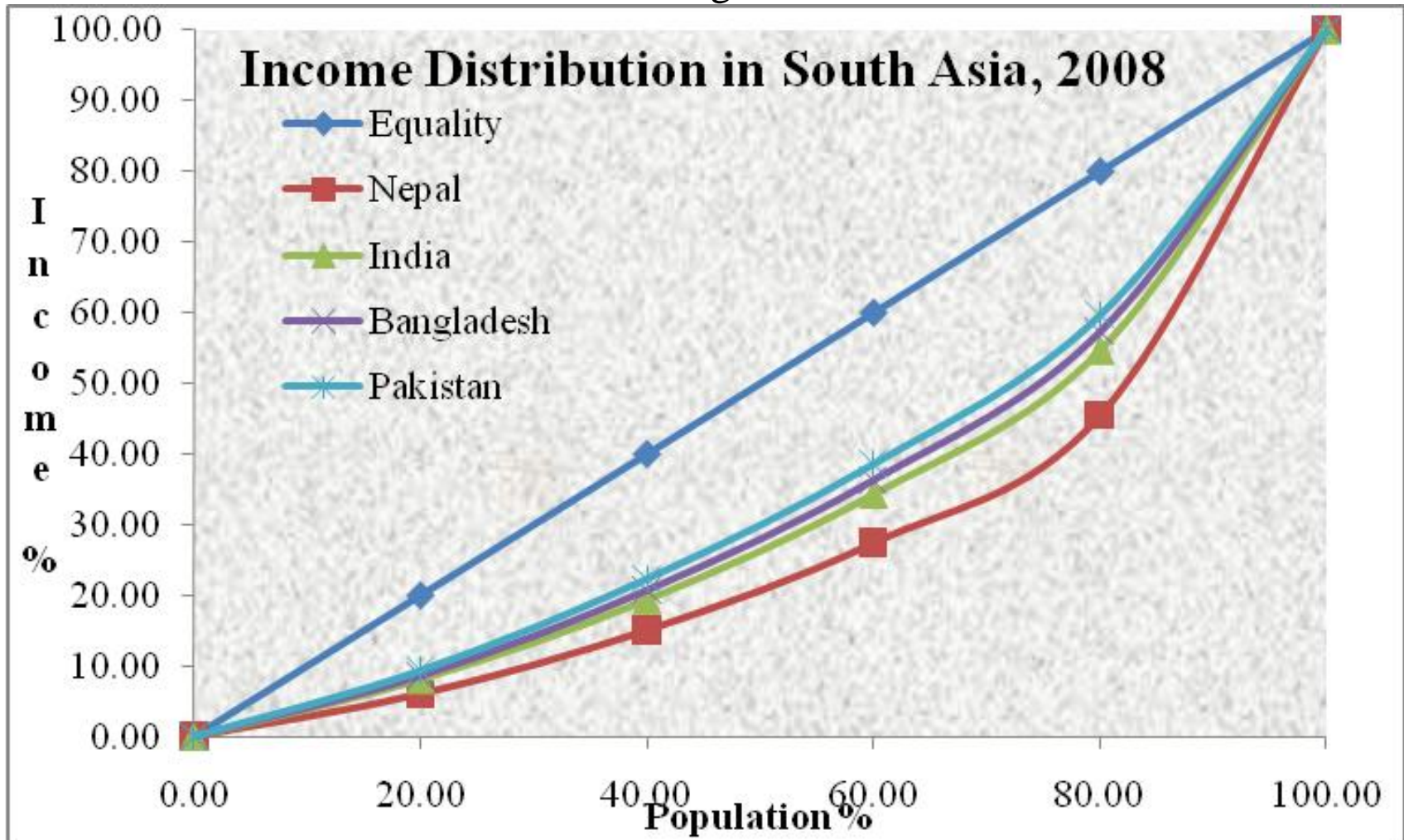


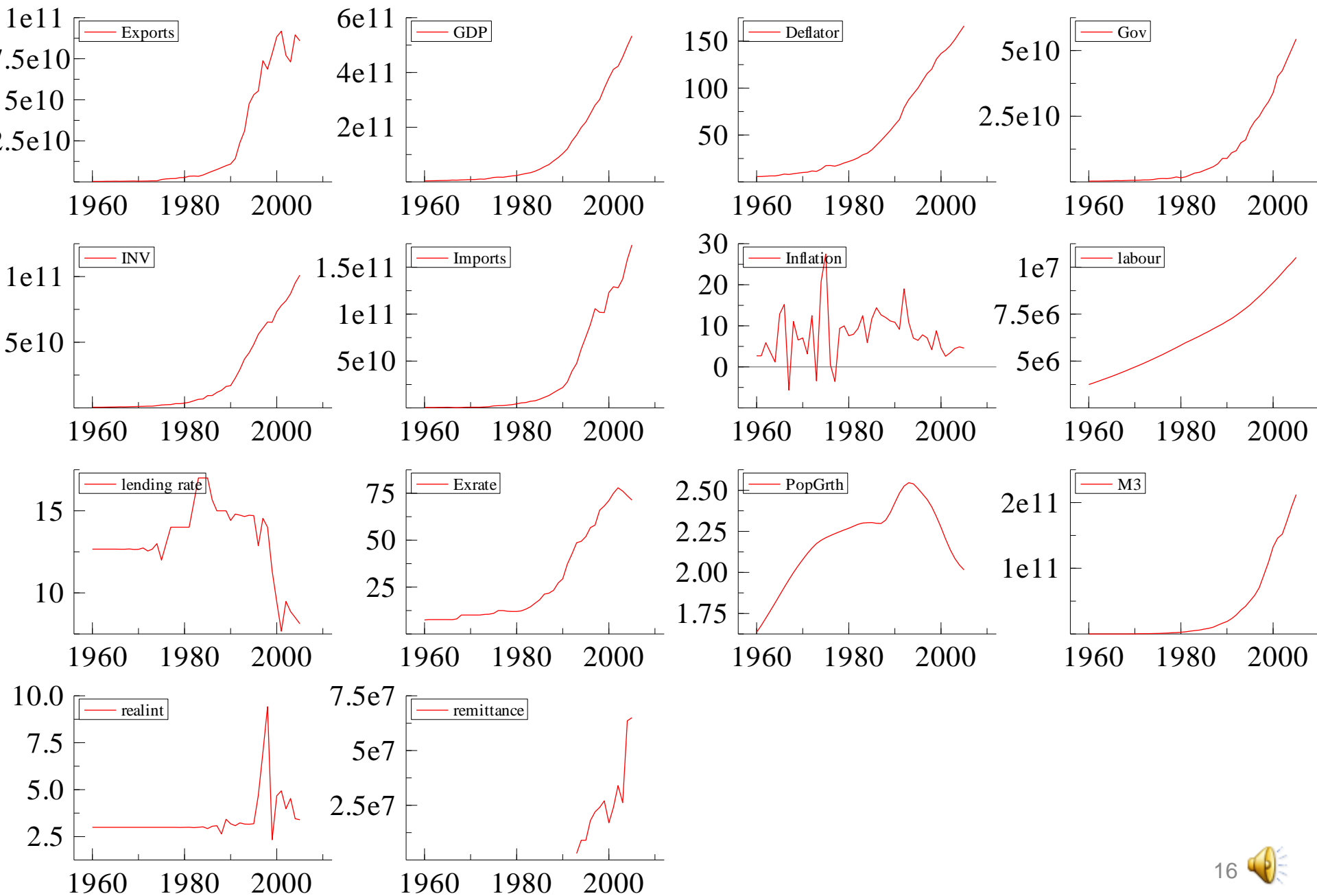
Figure 7



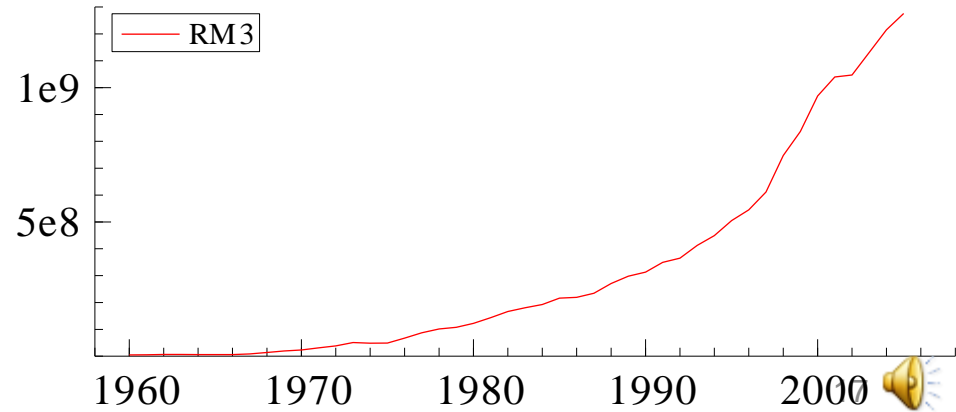
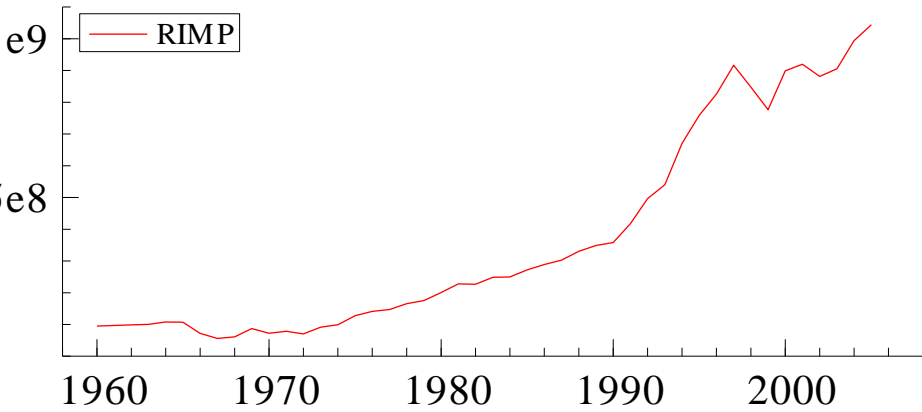
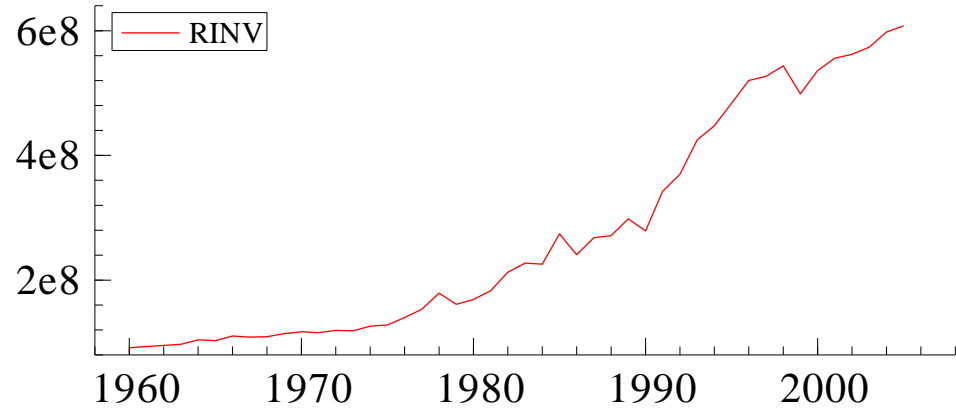
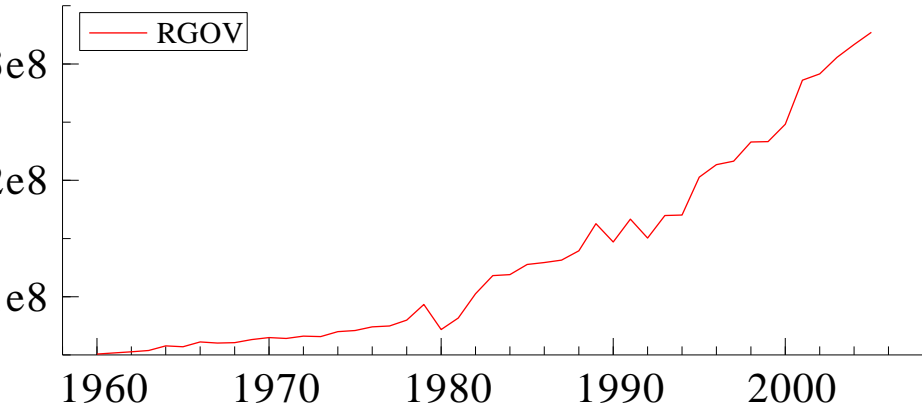
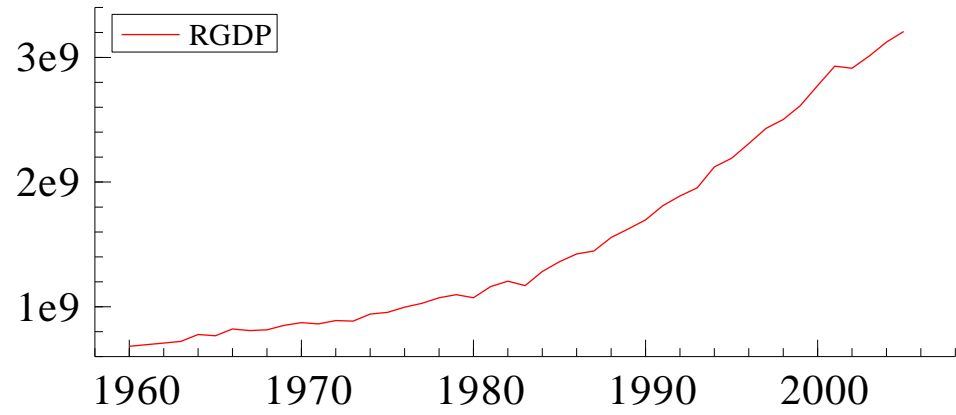
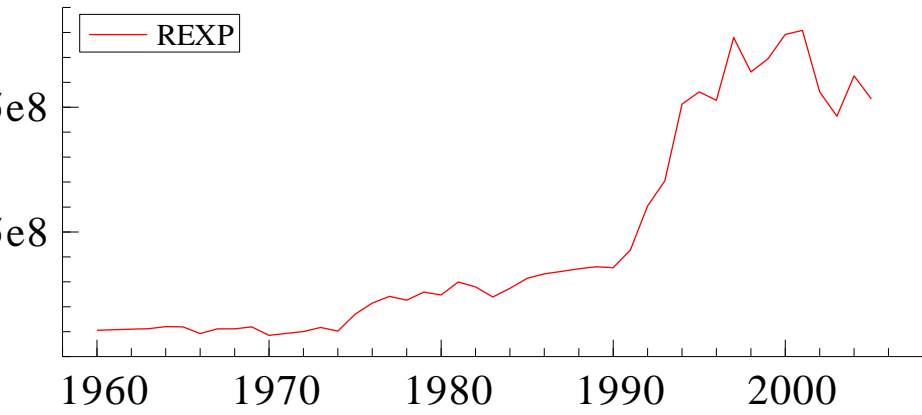
# Vast literature in macroeconomic modelling

- Keynes (1936), Hicks (1937), Samuelson (1939),
- Phillips (1958), Friedman (1968), Phelps (1968), Tobin (1969),
- Sargent and Wallace (1975), Lucas (1976), Fisher (1977), Kydland and Prescott (1977), Wallis (1980), King and Plosser (1984) Mankiw (1989), Prescott (1986), Taylor (1987)
- Blanchard and Kiyotaki (1987), Manning (1995), Rankin (1992)
- Barro and Gordon (1983), Sargent (1986) Goodhart (1989), Nickell (1990), Mankiw and Romer(1993), Lockwood Miller and Zhang (1998)
- Wallis (1989), MPC (1999), Pagan and Wickens (1989), Hendry (1995), Holly Weale (2000)
- Taylor (1993), Sargent and Ljungqvists (2000), Minford and Peel (2002), Blake and Weal (2003), Garratt, Lee, Pesaran and Shin (2003)
- Solow (1956), Lucas (1988), Romer (1990), Mankiw, Romer and Weil (1992),
- Harrod (1939), Domar (1947) and Solow (1956), Parente and Prescott (1993)
- Fullerton, Shoven and Whalley (1983), Auerbach and Kotlikoff (1987), Perroni (1995), Rutherford (1995), Bank of England, NIESR) Kehoe, Srinivasan and Whalley (2005), Bhattarai (1997, 1999)

# Nominal Magnitudes



# Deflated Real Macro Variables



## Estimated Model Equations

$$\text{REXP} = + 0.5132 \cdot \text{RM3} - 7.506e-009 \cdot \text{lending rate} + 4.942e-007 \cdot \text{Exrate}$$

$$(\text{SE}) \quad (0.0273) \quad (4.25e-010) \quad (2.06e-009)$$

$$+ 6.266e-009 \cdot \text{PopGrth} + 6.988e+007$$

$$(8.25e-011) \quad (3.64e-011)$$

$$\text{RGDP} = + 2.052 \cdot \text{RM3} + 2.636e-008 \cdot \text{lending rate} + 2.75e-007 \cdot \text{Exrate}$$

$$(\text{SE}) \quad (0.0488) \quad (7.6e-010) \quad (3.68e-009)$$

$$+ 2.403e-008 \cdot \text{PopGrth} + 8.736e+008$$

$$(1.48e-010) \quad (6.51e-011)$$

$$\text{RGOV} = + 0.2184 \cdot \text{RM3} + 3.434e-007 \cdot \text{lending rate} - 7.509e-007 \cdot \text{Exrate}$$

$$(\text{SE}) \quad (0.00454) \quad (7.07e-011) \quad (3.42e-010)$$

$$- 2.215e-008 \cdot \text{PopGrth} + 6.476e+007$$

$$(1.37e-011) \quad (6.06e-012)$$

$$\text{RINV} = + 0.4502 \cdot \text{RM3} + 3.931e-007 \cdot \text{lending rate} + 6.156e-007 \cdot \text{Exrate}$$

$$(\text{SE}) \quad (0.0175) \quad (2.73e-010) \quad (1.32e-009)$$

$$+ 2.089e-008 \cdot \text{PopGrth} + 1.321e+008$$

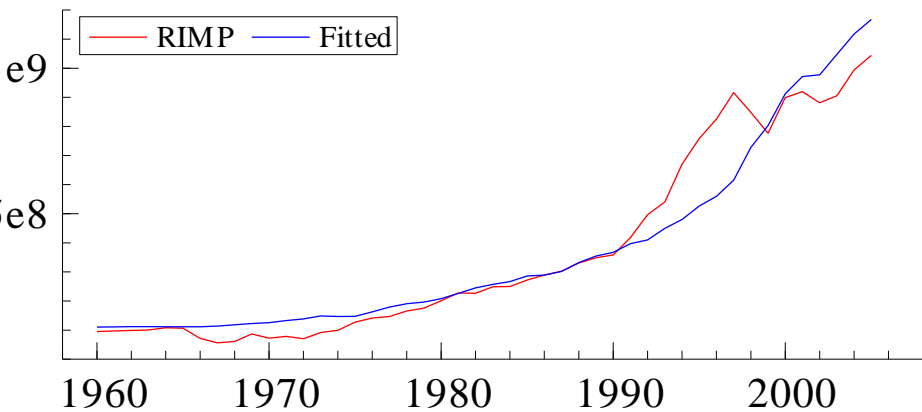
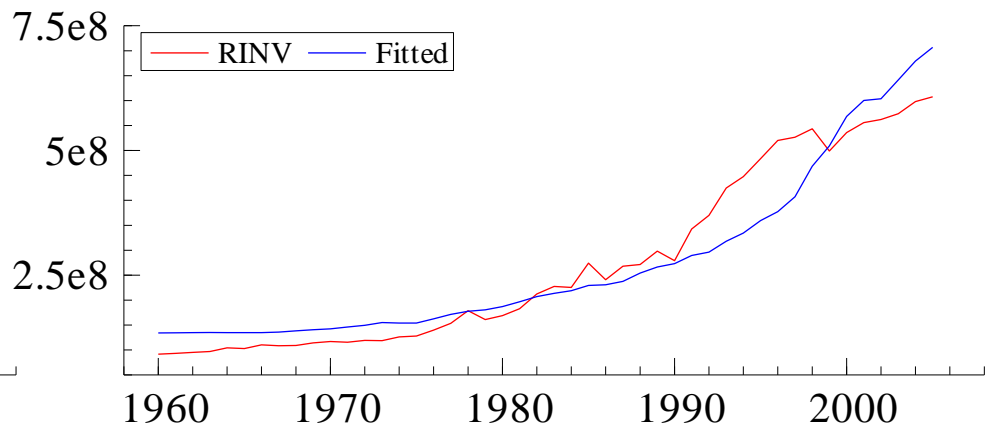
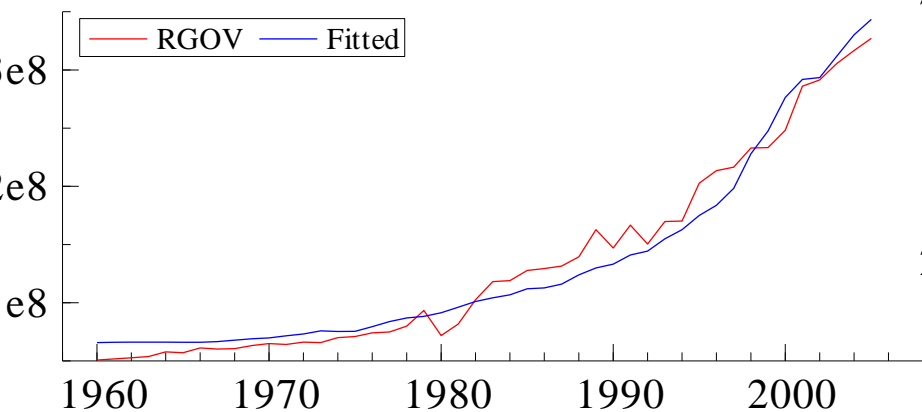
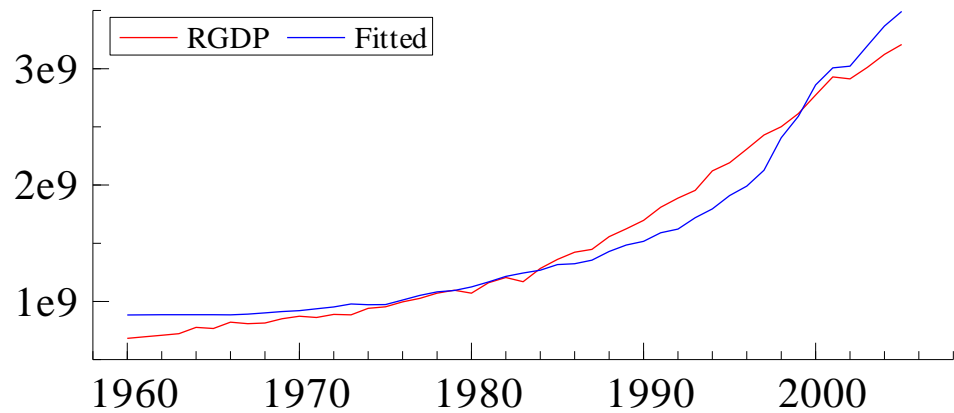
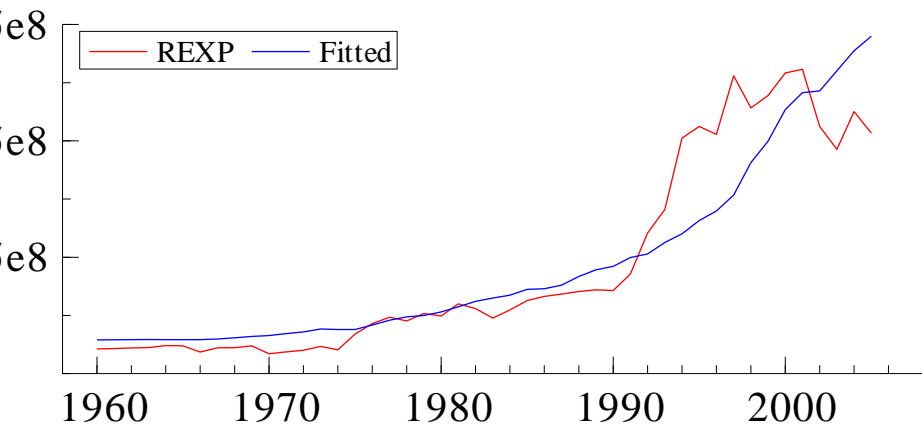
$$(5.3e-011) \quad (2.34e-011)$$

$$\text{RIMP} = + 0.8318 \cdot \text{RM3} - 7.534e-008 \cdot \text{lending rate} - 1.918e-007 \cdot \text{Exrate}$$

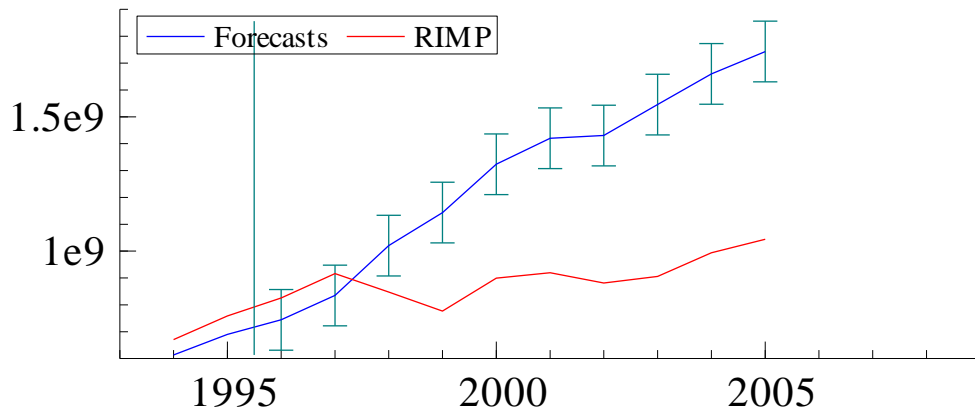
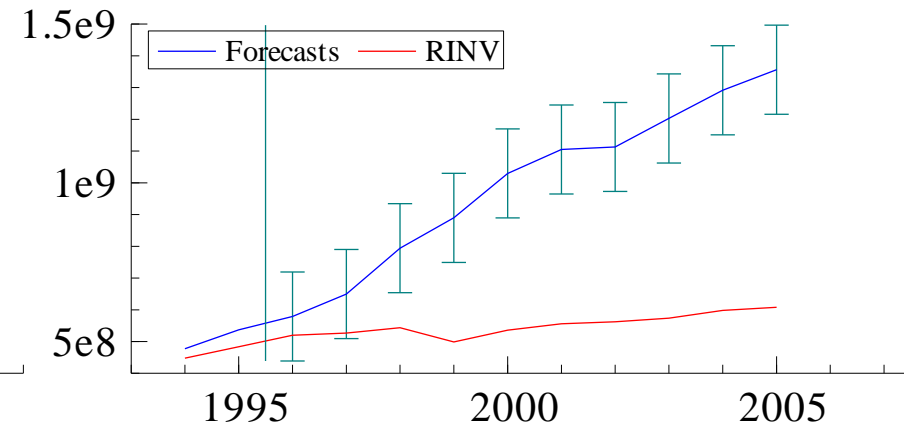
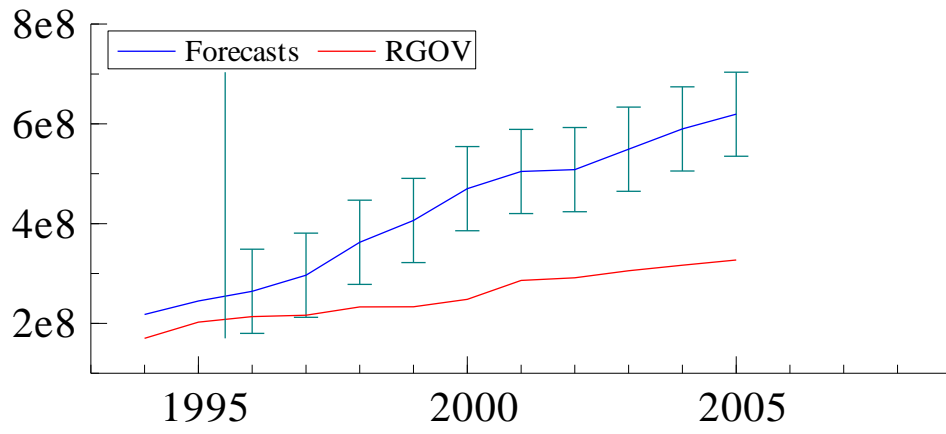
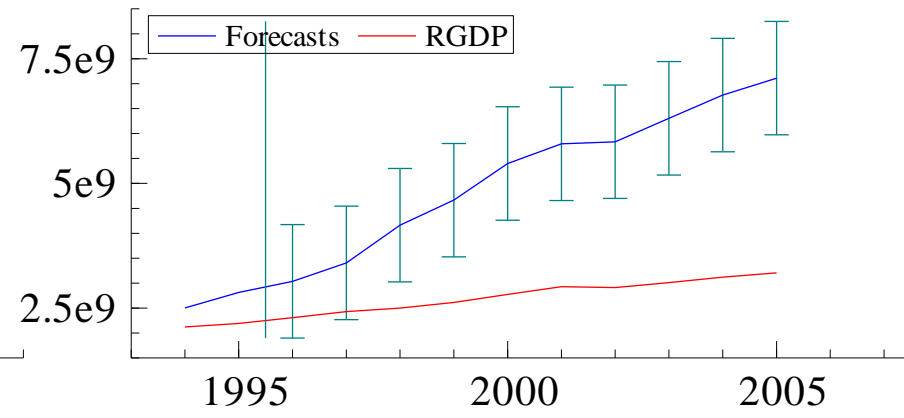
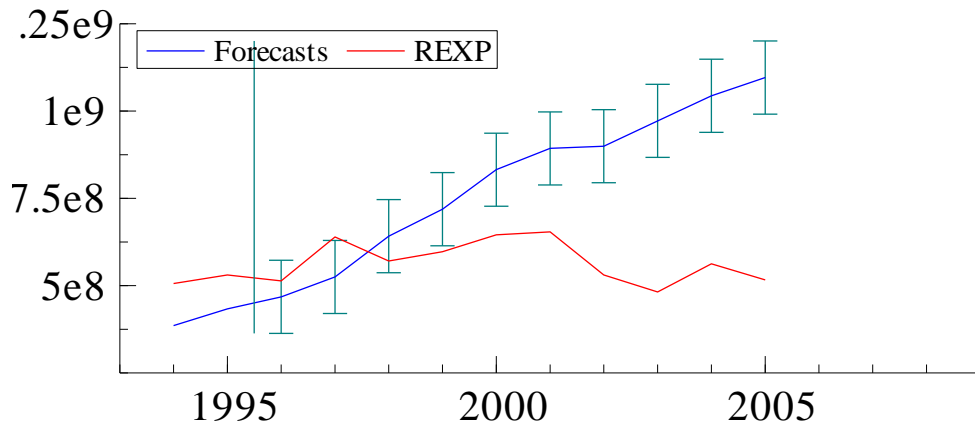
$$(\text{SE}) \quad (0.029) \quad (4.51e-010) \quad (2.18e-009)$$

$$- 1.639e-008 \cdot \text{PopGrth} + 1.066e+008$$

$$(8.77e-011) \quad (3.87e-011)$$



# How Accurate Are Forecasts?



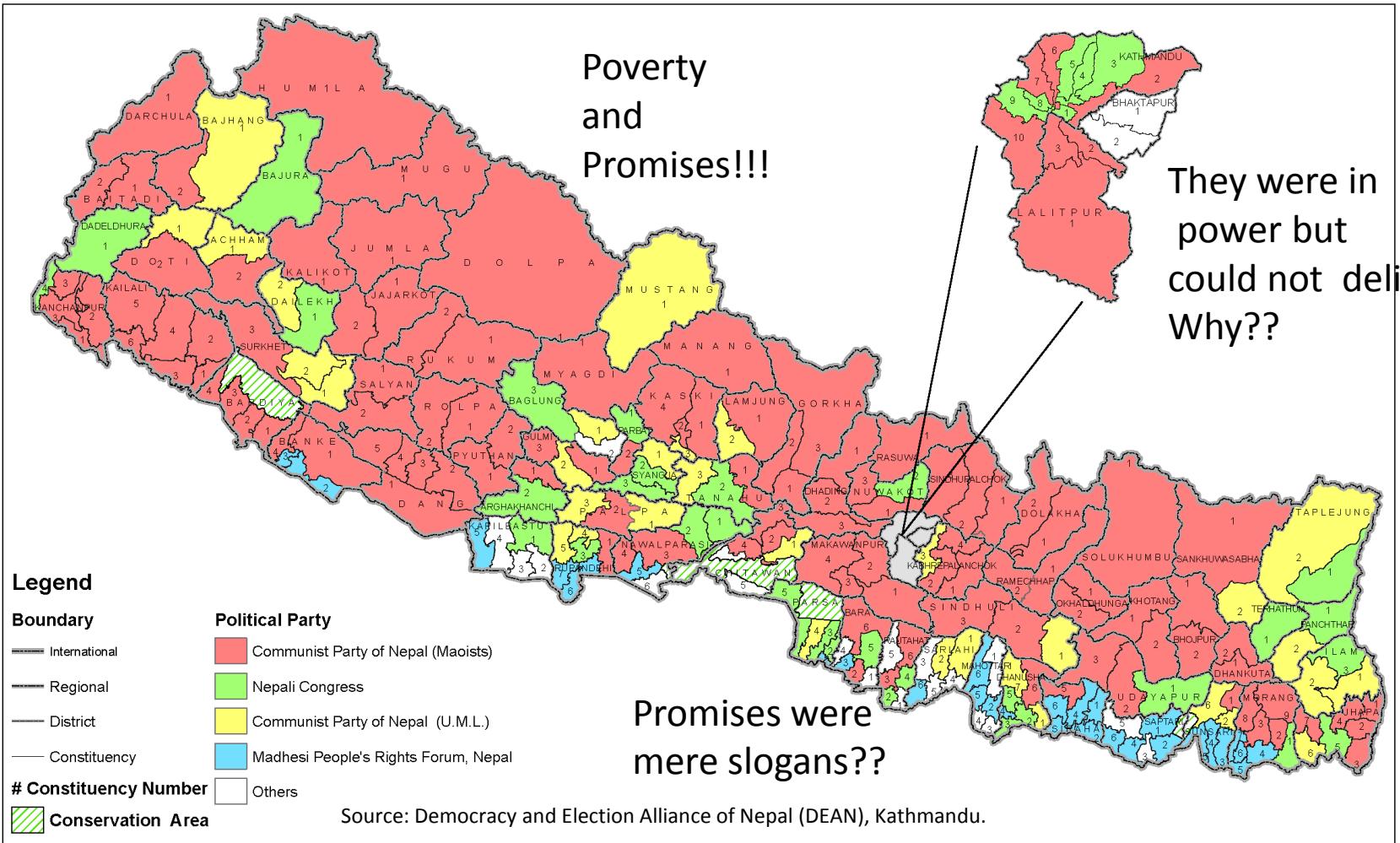
# Toll of Conflict

# Why People voted Maoists Overwhelmingly in the Elections for CA??

## Nepal Constituency Map of Elected First Past the Post Candidates by Party

Nepal Constituent Assembly Election Results 2008

As declared by the Election Commission 2008-04-25 14:00



Poverty and Promises!!!

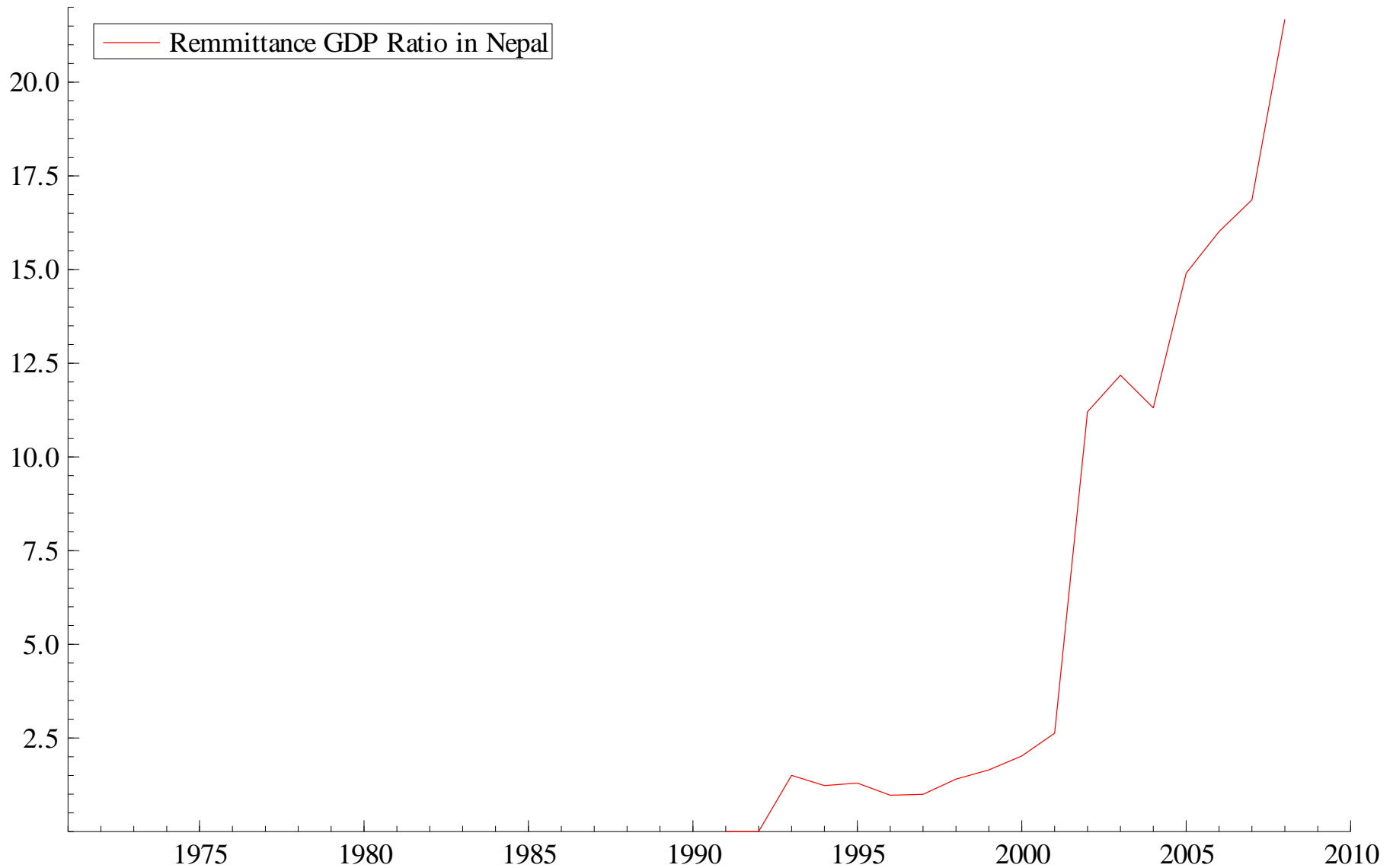
They were in power but could not deliver. Why??

Promises were mere slogans??

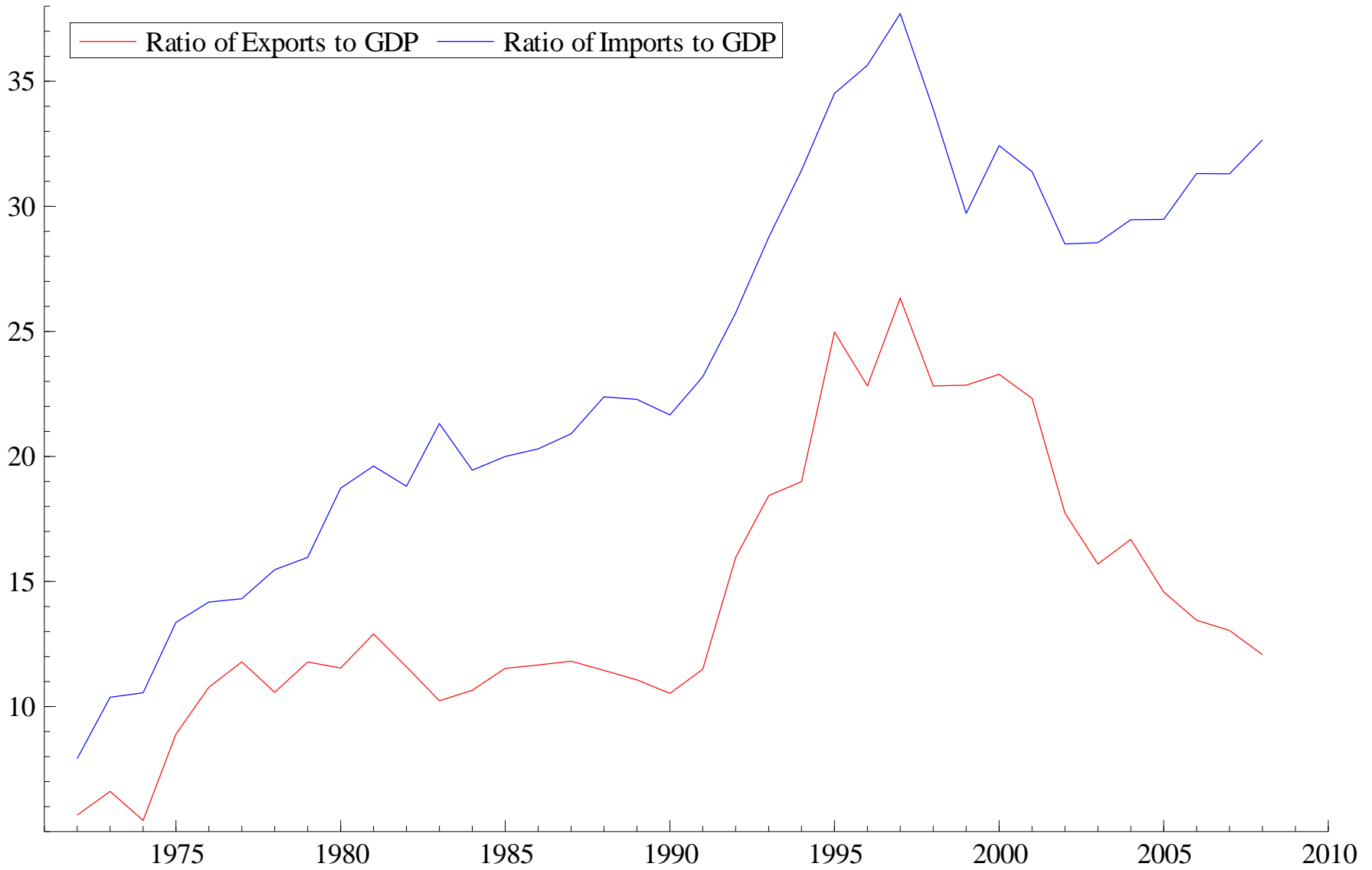
[www.nepalelectionportal.org](http://www.nepalelectionportal.org)

Success of protracted war and alliance strategy??

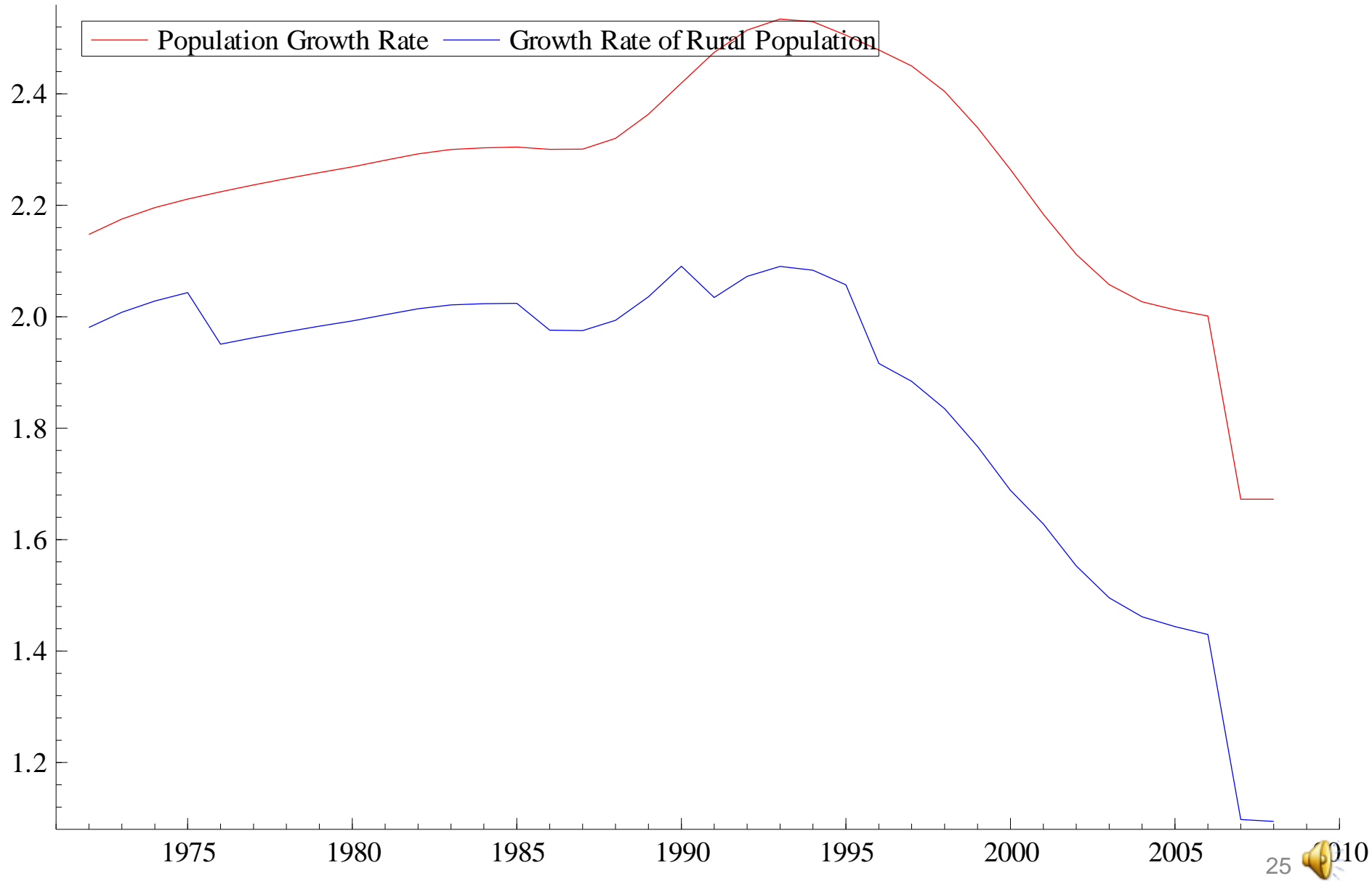
# Consequences of Bloody Civil War -4



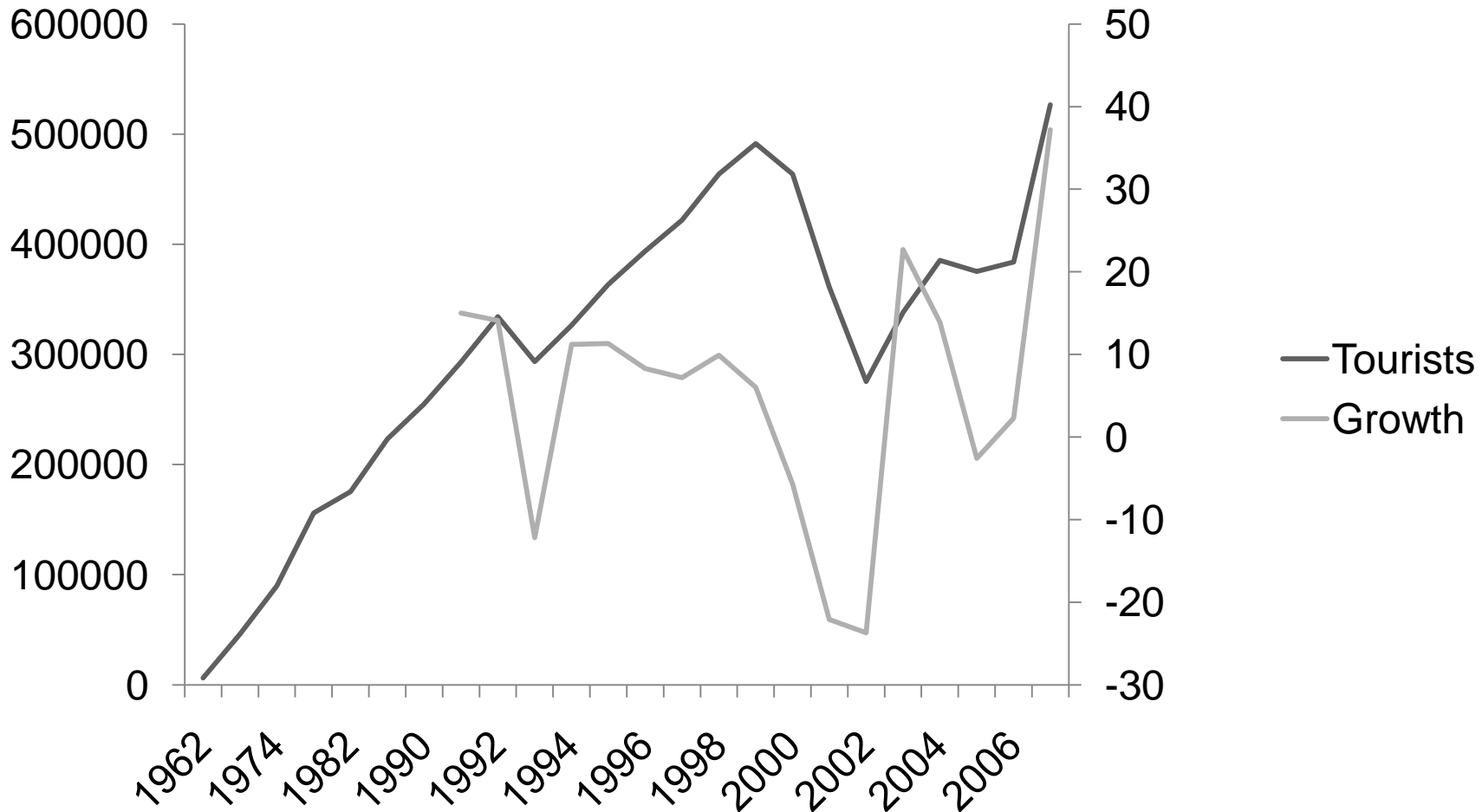
## Consequences of Bloody Civil War -2



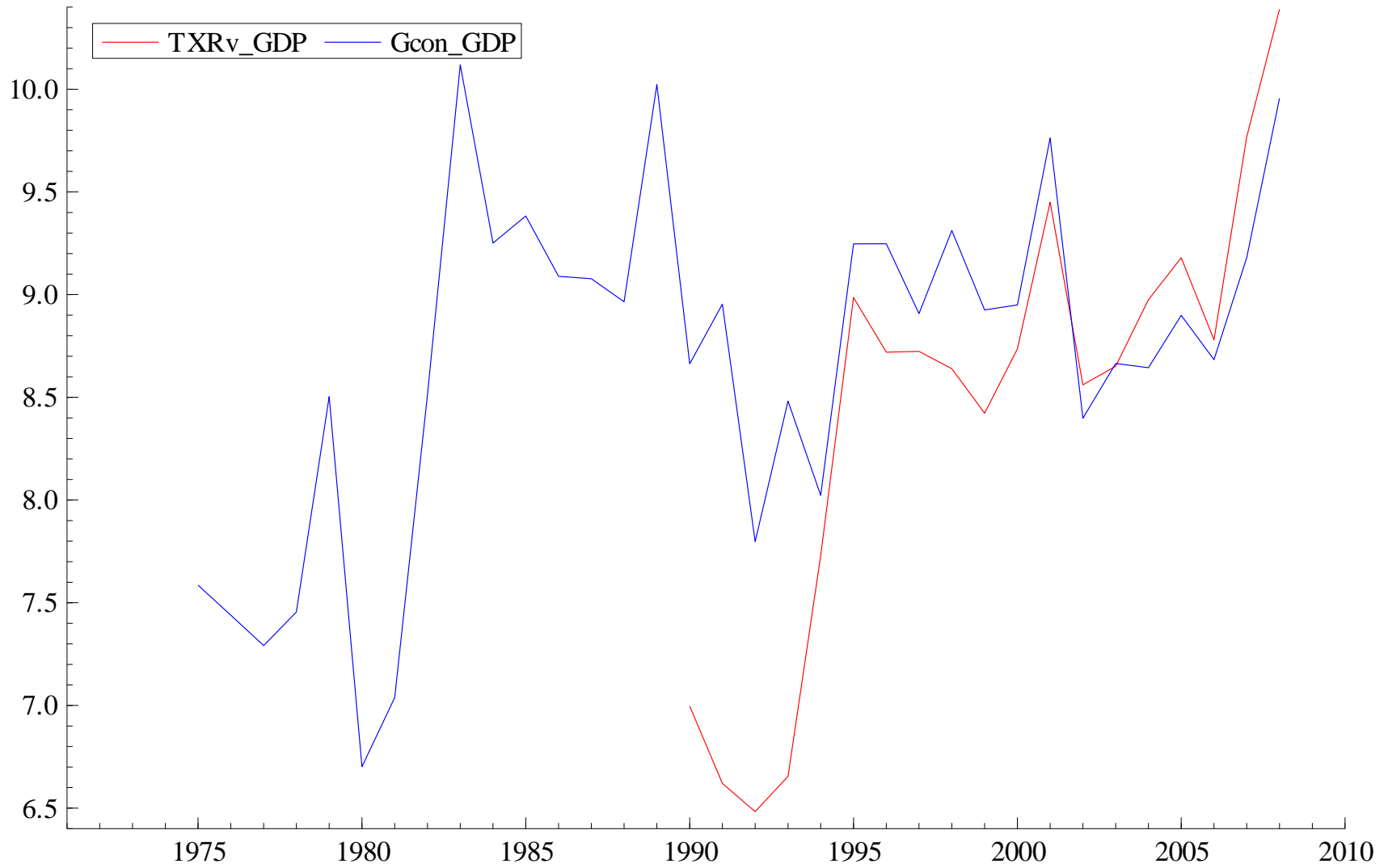
# Consequences of Bloody Civil War -3



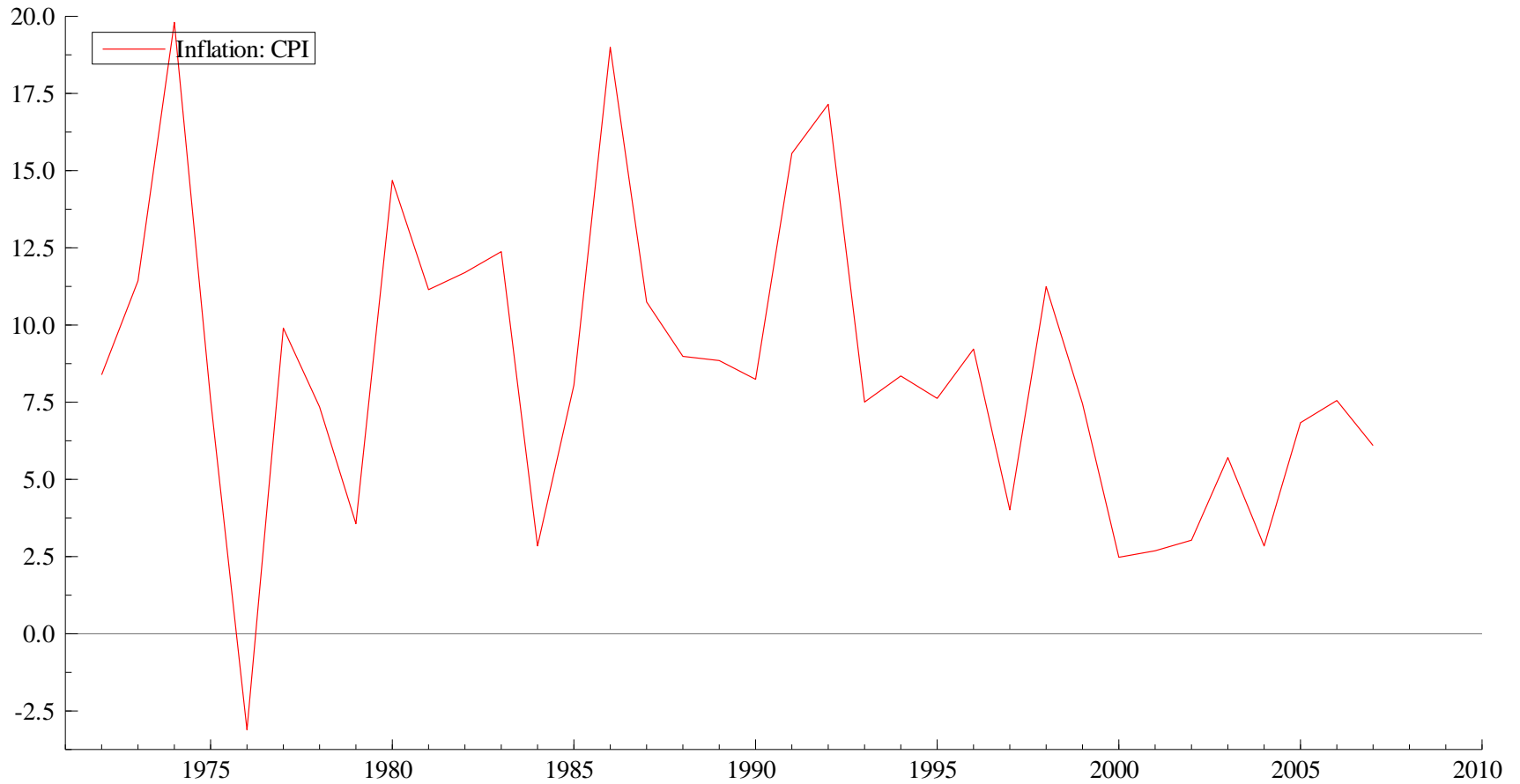
# Tourist Arrival and Its Growth Rate



# Consequences of Bloody Civil War -5



# Consequences of Bloody Civil War -6



## Members of Constituent Assembly by Political Parties in Nepal: Result of April 2008 Election of CA

	Total	Maoist	NC	UML	MPRF	TMLP	Others
Total	601	229	115	108	54	21	74
First Past The Post (FPTP)	240	120	37	33	30	9	11
Proportional Representation	335	100	73	70	22	11	59
Nomination	26	9	5	5	2	1	4
Percentage of each party	100%	38.1%	19.1%	18.0%	9.0%	3.5%	12.3%

Data source: Election Commission of Nepal, MAY 2008

<http://www.election.gov.np/EN/>

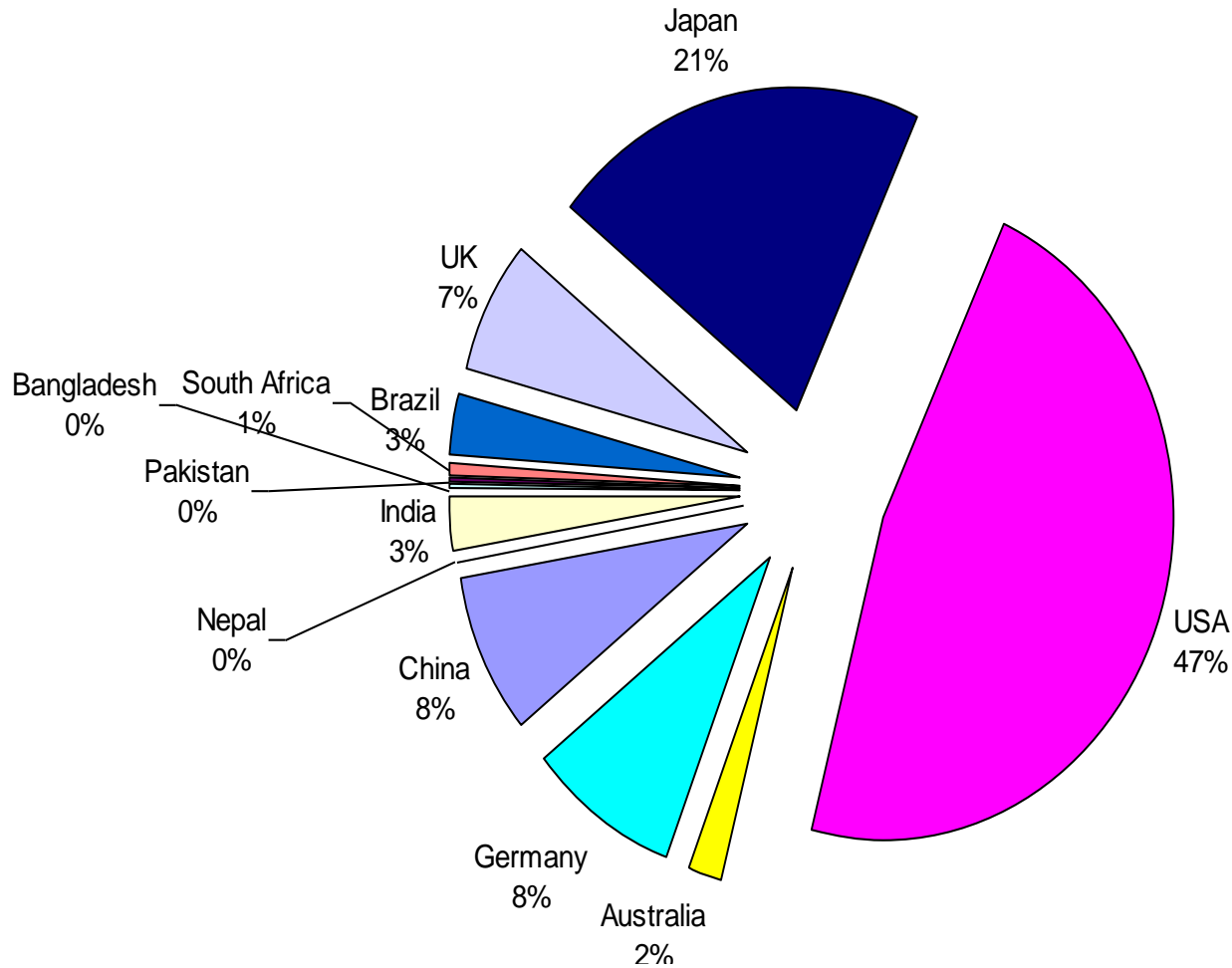
Table 1  
 Votes for Prime Ministerial Candidates in the 601 member Constituent Assembly of Nepal

	First Round		2nd Round		3rd Round		4th Round	
	July 21, 2010		July 23, 2010		Aug 2, 2010		Aug 6, 2010	
	Dahal	Paudel	Dahal	Paudel	Dahal	Paudel	Dahal	Paudel
For	242	124	241	123	259	124	213	122
Against	114	235	113	241	114	246	99	245
Neutral	236	228	228	214	208	186	156	194
Total	592	597	572	578	581	556	468	561
	5th Round		6th Round		7th Round		8th Round	
	Aug 23, 2010		Sept 5, 2010		Sept 7, 2010		Sept 26, 2010	
	Dahal	Paudel	Dahal	Paudel	Dahal	Paudel	Dahal	Paudel
For	246	124	240	122	252	119	-	116
Against	111	243	101	242	110	245	-	2
Neutral	206	200	163	172	159	151	-	71
Total	563	567	504	536	521	515	-	189
	9th	10th	11th	12th	13th	14th	15th	16th
	Sep-27	Oct-06	Oct-07	Oct-10	Oct-26	Oct-29	Nov-01	Nov-04
	Paudel	Paudel	Paudel	Paudel	Paudel	Paudel	Paudel	Paudel
For	105	109	104	89	98	96	96	82
Against	2	1	1	1	2	2	2	2
Neutral	61	46	40	29	44	40	31	17
Total	168	156	145	119	144	138	129	101



# Nepal in the global economy

# What is Nepal's Economic Power in the Global Economy?



WBI 2005

**Nepal need to think about the bigger Global Economy.**



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**GDP of Nepal and Countries Around the World  
(Measured in US \$ 2000 Prices)**

Countries	1979	2,005	2005 GDP/1979 GDP	Nepal's Relative Size	
				In 1979	In 2005
China	169,704,964,096	1,889,929,920,512	11.14	78.14	297.79
Nepal	2,171,713,024	6,346,610,176	2.92	1.00	1.00
India	143,798,108,160	644,098,359,296	4.48	66.21	101.49
Bangladesh	20,282,712,064	61,356,519,424	3.03	9.34	9.67
Pakistan	24,577,280,000	92,770,861,056	3.77	11.32	14.62
South Africa	89,572,245,504	159,694,880,768	1.78	41.24	25.16
Brazil	362,915,528,704	670,449,991,680	1.85	167.11	105.64
UK	890,510,049,280	1,619,534,413,824	1.82	410.05	255.18
Japan	2,716,531,425,280	4,992,808,779,776	1.84	1250.87	786.69
USA	5,140,400,046,080	11,046,425,198,592	2.15	2366.98	1740.52
Australia	201,699,966,976	468,368,621,568	2.32	92.88	73.80
Germany	1,214,070,259,712	1,971,479,511,040	1.62	559.04	310.64

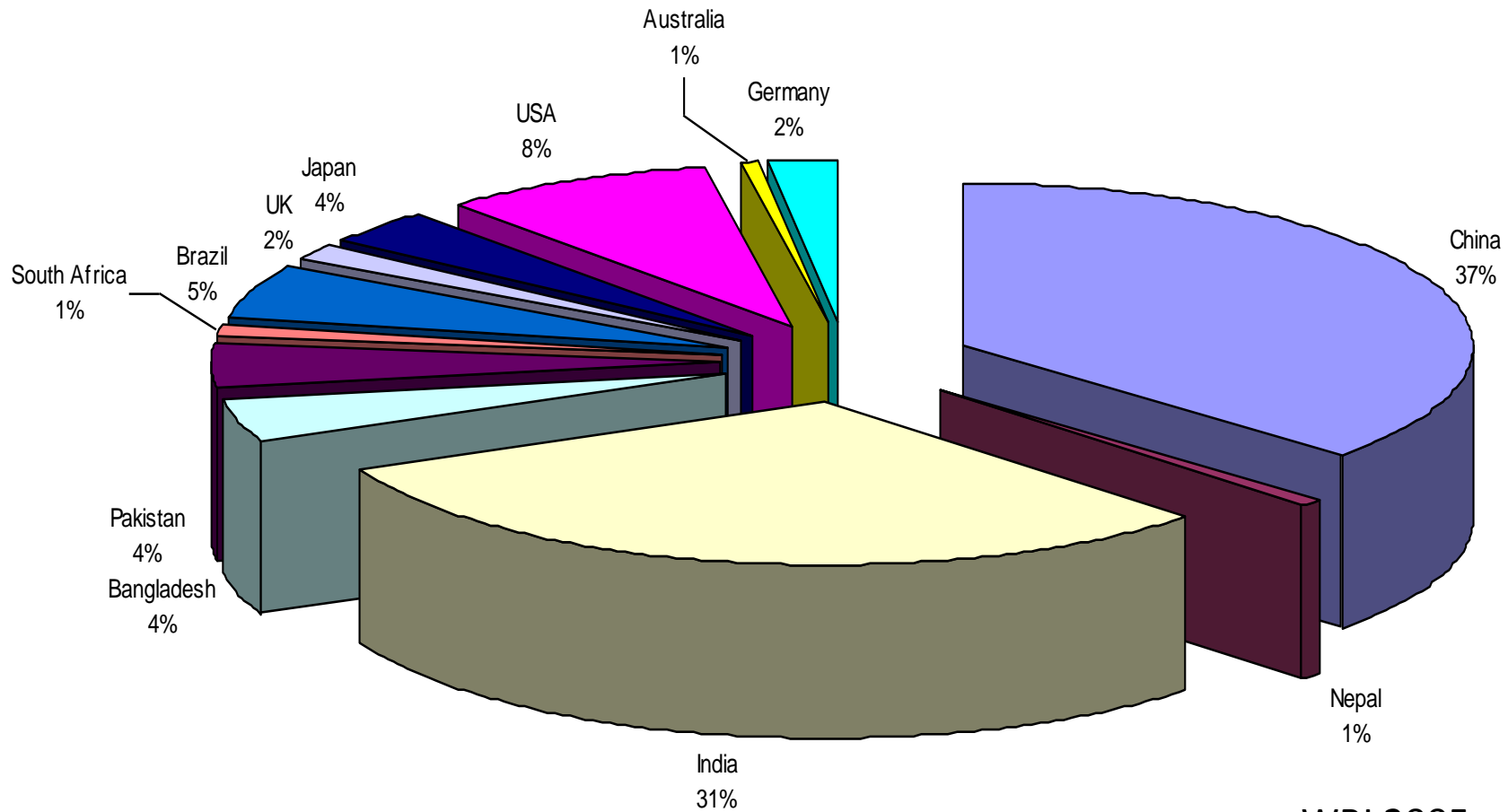
Questions: Why so much difference in growth record?  
How has it affected to poverty?



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# How Does Peoples' Power in Nepal Compare with others around the world?



WBI 2005

**Puzzle: So do many people can grow but Nepalese people cannot live in peace?**



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## Population: Nepal and World

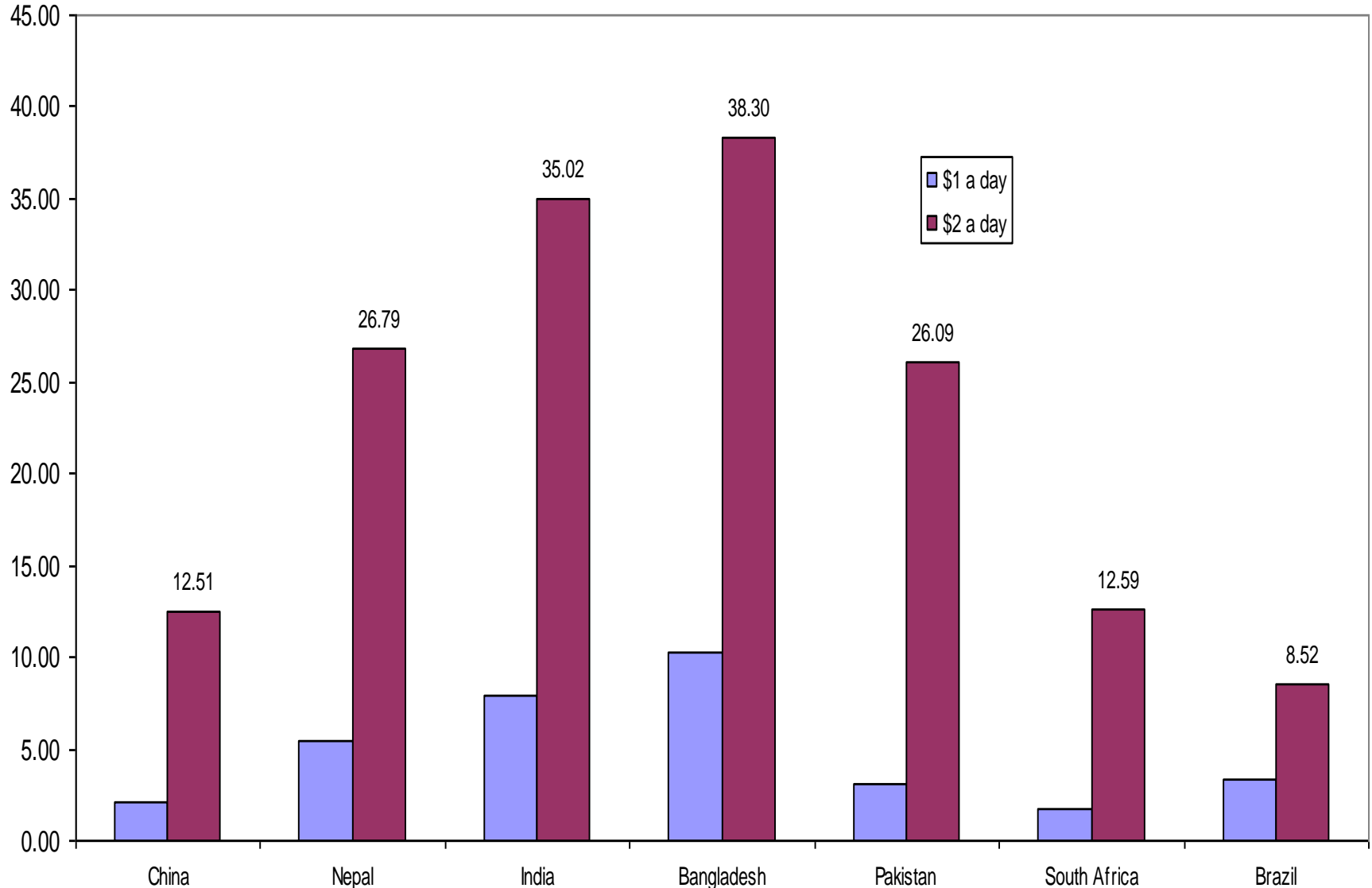
	Ratio of 2005			Relative to Nepal	
	1979	2005	to 1979	1979	2005
China	969,005,000	1,304,500,000	1.35	65.39	48.08
Nepal	14,818,709	27,132,629	1.83	1.00	1.00
India	672,020,870	1,094,583,000	1.63	45.35	40.34
Bangladesh	80,262,537	141,822,276	1.77	5.42	5.23
Pakistan	80,354,108	155,772,000	1.94	5.42	5.74
South Africa	26,940,793	46,888,200	1.74	1.82	1.73
Brazil	118,804,569	186,404,913	1.57	8.02	6.87
UK	56,242,000	60,226,500	1.07	3.80	2.22
Japan	115,870,000	127,774,000	1.10	7.82	4.71
USA	225,055,000	296,410,404	1.32	15.19	10.92
Australia	14,514,000	20,329,000	1.40	0.98	0.75
Germany	78,104,000	82,469,400	1.06	5.27	3.04



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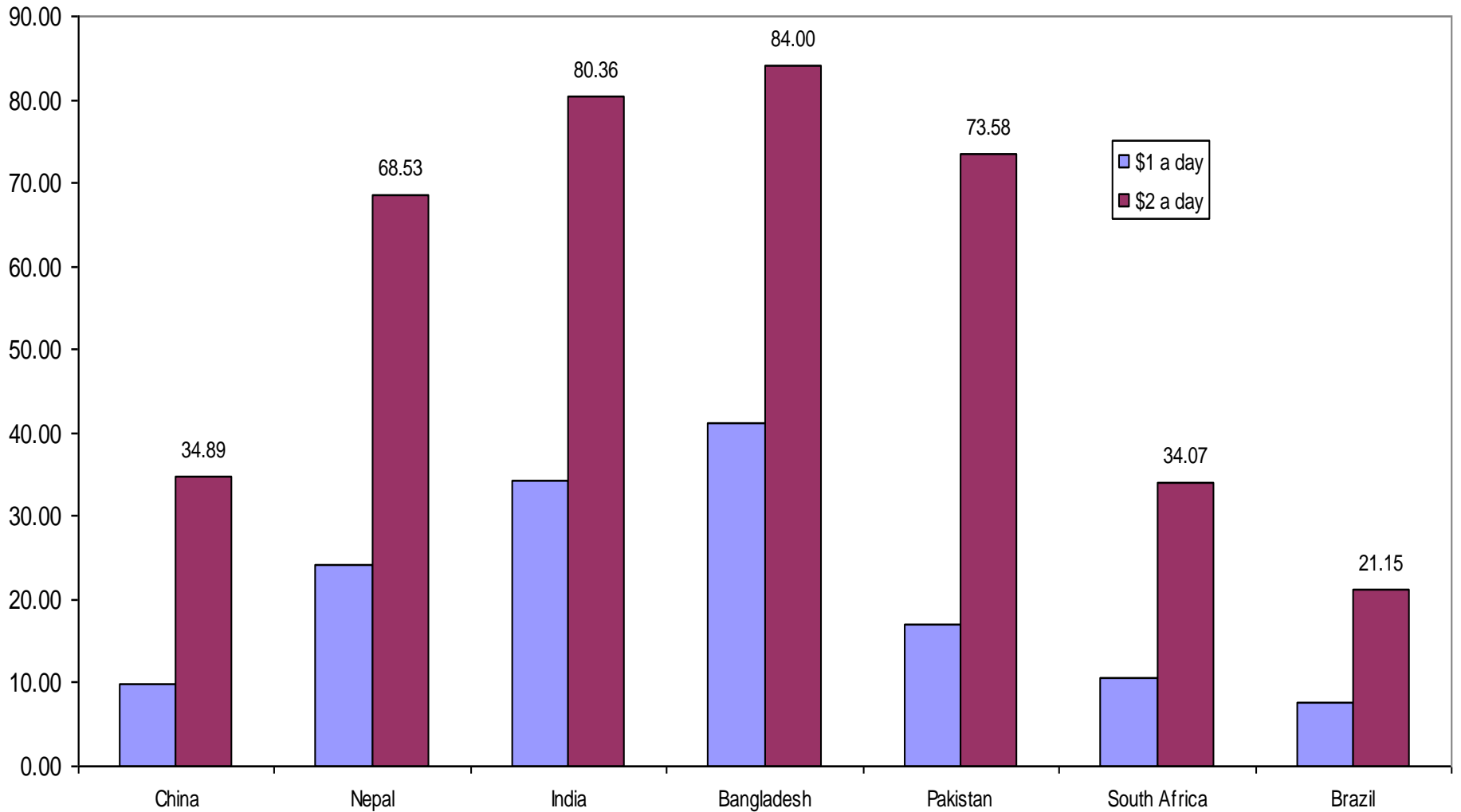
Business School

# Poverty Gap In Nepal and Other Countries With \$1 or \$2 Poverty Line (World Bank)



Business School

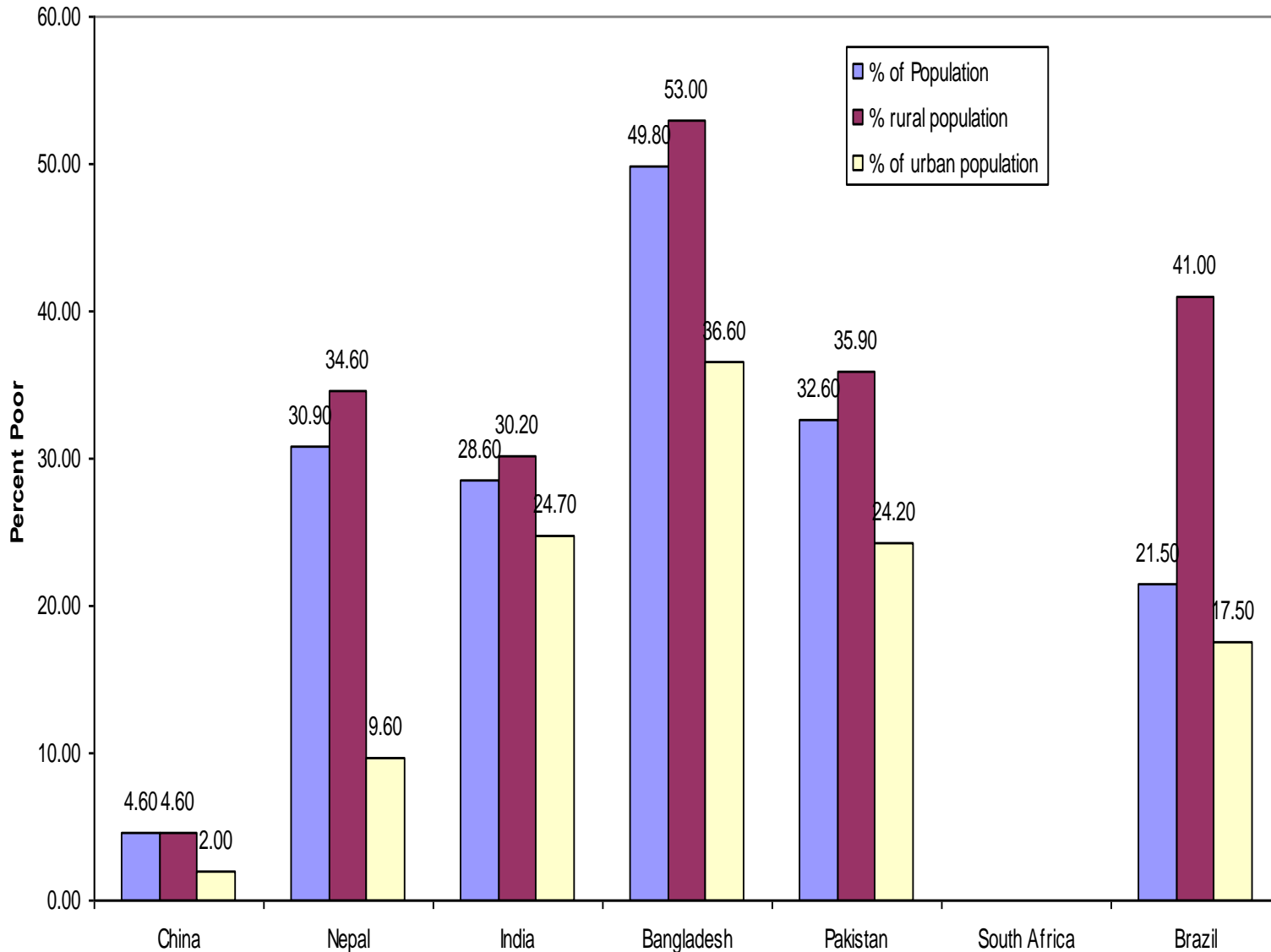
# Head Count Ratio of Poverty by \$1 or \$2 Ratio



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# Urban, Rural and Overall Poverty According to the National Poverty Line



## Poverty Gap and Percentage of Population Below Poverty Line (From Latest Available Figures)

	Poverty Gap		Poverty Head count Ratio		National Poverty Line		
	\$1 a day	\$2 a day	\$1 a day	\$2 a day	% of Population	% rural population	% of urban population
China	2.10	12.51	9.90	34.89	4.60	4.60	2.00
Nepal	5.43	26.79	24.10	68.53	30.90	34.60	9.60
India	7.88	35.02	34.33	80.36	28.60	30.20	24.70
Bangladesh	10.30	38.30	41.30	84.00	49.80	53.00	36.60
Pakistan	3.06	26.09	16.98	73.58	32.60	35.90	24.20
South Africa	1.74	12.59	10.71	34.07			
Brazil	3.37	8.52	7.54	21.15	21.50	41.00	17.50

More than two thirds of Nepalese people are poor by \$2 a day criteria.

More poverty in rural areas than in urban areas

Poverty is less serious problem in China than in Nepal, India, Bangladesh and Pakistan.

## Size Distribution of Income

	China	Nepal	India	Bangladesh	Pakistan
Highest 10%	34.940	40.563	31.130	27.900	26.327
Highest 20%	51.860	54.559	45.340	42.700	40.327
Fourth 20%	21.730	18.032	20.370	21.000	21.088
Third 20%	13.680	12.360	14.940	15.600	16.272
Second 20%	8.480	9.030	11.270	12.100	12.969
Lowest 20%	4.250	6.019	8.080	8.600	9.345
Lowest 10%	1.620	2.561	3.640	3.700	4.044

	South Africa	Brazil	UK	Japan	USA	Australia
Highest 10%	44.746	44.825	28.491	21.690	29.853	25.4
Highest 20%	62.178	61.120	44.015	35.650	45.816	41.32
Fourth 20%	18.000	18.668	22.471	21.980	22.406	23.57
Third 20%	10.041	10.964	15.963	17.580	15.660	17.2
Second 20%	6.307	6.446	11.410	14.210	10.682	12.01
Lowest 20%	3.475	2.802	6.141	10.580	5.436	5.9
Lowest 10%	1.354	0.873	2.062	4.780	1.878	2.03

Richer countries like Japan, UK, USA have more equal distribution than poor countries like Nepal.

Among Developing Countries African and Latin American Countries seem have more unequal income than Asian countries.

In Asia India has more equal distribution of income than in Nepal or China. This must be the effect of democracy.

Income distribution in India is like that in more advanced countries Japan, UK and USA. Income inequality is greater in China than in India.

Income distribution in Nepal is more unequal than India but poor households are relatively worse in China than in Nepal.

# Grow Nepal Contract

Basis for a national consensus and  
Reconciliation

# Grow Nepal Contract

1. Rule of law
2. Equality by means of education and training
3. Creativity and productivity through competitive system
4. Transparency in use of public funds
5. Strengthen laws for property rights, saving and investment
6. Liberal tax and transfer system for growth with redistribution
7. Eliminate corruption
8. Encourage entrepreneurs, minimise blockage and extortion
9. Respect individual freedom and opinions of others
10. Open up for trade, FDI and Technological Transfer
11. Formulate economic policies based on scientific modelling
12. Peaceful means for resolution of conflict of interests

# Game of Poverty Alleviation

Poor, rich and government strategy profiles =  $(s, l, k)$

State contingent income of rich  $y_t^P(s, l, k)$

State contingent income of poor  $y_t^R(s, l, k)$

Probability of being rich  $\pi_t^P(s, l, k)$

Probability of being poor  $\pi_t^R(s, l, k)$

Proposition 1: The state contingent money metric utility of poor is less than that of rich

$$\sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^P(s, l, k) \cdot \delta_t^P u(y_t^P(s, l, k)) < \sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^R(s, l, k) \cdot \delta_t^R u(y_t^R(s, l, k))$$

Proposition 2: Transfer raises money metric expected utility of poor and reduces the utility of rich

$$\sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^P(s, l, k) \cdot \delta_t^P u(y_t^P(s, l, k) + T_t^P(s, l, k)) < \sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^R(s, l, k) \cdot \delta_t^R u(y_t^R(s, l, k) - T_t^P(s, l, k))$$

Condition 3: Incentive compatibility requires

$$\sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^P(s, l, k) \cdot \delta_t^P u(y_t^P(s, l, k) + T_t^P(s, l, k)) > \sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^P(s, l, k) \cdot \delta_t^P u(y_t^P(s, l, k))$$

$$\sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^R(s, l, k) \cdot \delta_t^R u(y_t^R(s, l, k) - T_t^P(s, l, k)) < \sum_{s=1}^s \sum_{l=1}^l \sum_{k=1}^k \sum_t^T \pi_t^R(s, l, k) \cdot \delta_t^R u(y_t^R(s, l, k))$$

Condition 4: Growth requires that income of both poor and rich are rising over time:

$$T_t^P(s, l, k) < T_{t+1}^P(s, l, k) < T_{t+2}^P(s, l, k) < \dots < T_{t+T}^P(s, l, k)$$

$$Y_t^P(s, l, k) < Y_{t+1}^P(s, l, k) < Y_{t+2}^P(s, l, k) < \dots < Y_{t+T}^P(s, l, k)$$

$$Y_t^R(s, l, k) < Y_{t+1}^R(s, l, k) < Y_{t+2}^R(s, l, k) < \dots < Y_{t+T}^R(s, l, k)$$

State contingent poverty line:

$$Y_{t+T}^P(s, l, k) \geq \frac{1}{2} \sum_{p=1}^P Y_{t+T}^P(s, l, k)$$

## Measuring Poverty in a hypothetical economy

y	N	cy	cp	yshre	cyshre	pshre	cpshre	Triangle	Rectangle	Area	ygap
10	1	10	1	0.01	0.01	0.1	0.1	0.0005	0.000	0.0005	-90
20	1	30	2	0.02	0.03	0.1	0.2	0.001	0.001	0.0020	-80
30	1	60	3	0.03	0.06	0.1	0.3	0.0015	0.003	0.0045	-70
40	1	100	4	0.04	0.10	0.1	0.4	0.0020	0.006	0.0080	-60
50	1	150	5	0.05	0.15	0.1	0.5	0.0025	0.010	0.0125	-50
60	1	210	6	0.06	0.21	0.1	0.6	0.0030	0.015	0.0180	-40
90	1	300	7	0.09	0.30	0.1	0.7	0.0045	0.021	0.0255	-10
100	1	400	8	0.10	0.40	0.1	0.8	0.0050	0.030	0.0350	0
200	1	600	9	0.20	0.60	0.1	0.9	0.0100	0.040	0.0500	100
400	1	1000	10	0.40	1.00	0.1	1.0	0.0200	0.060	0.0800	300

## Sen(1996) Measure of Poverty

$$P = H.I + H(1-I)G$$

$$z = \frac{1}{2} \bar{y} = 50$$

$$I = \frac{\sum_i^n (y_i - z)}{z \cdot n} = \frac{40 + 30 + 20 + 10}{50 \cdot 4} = \frac{100}{200} = 0.5$$

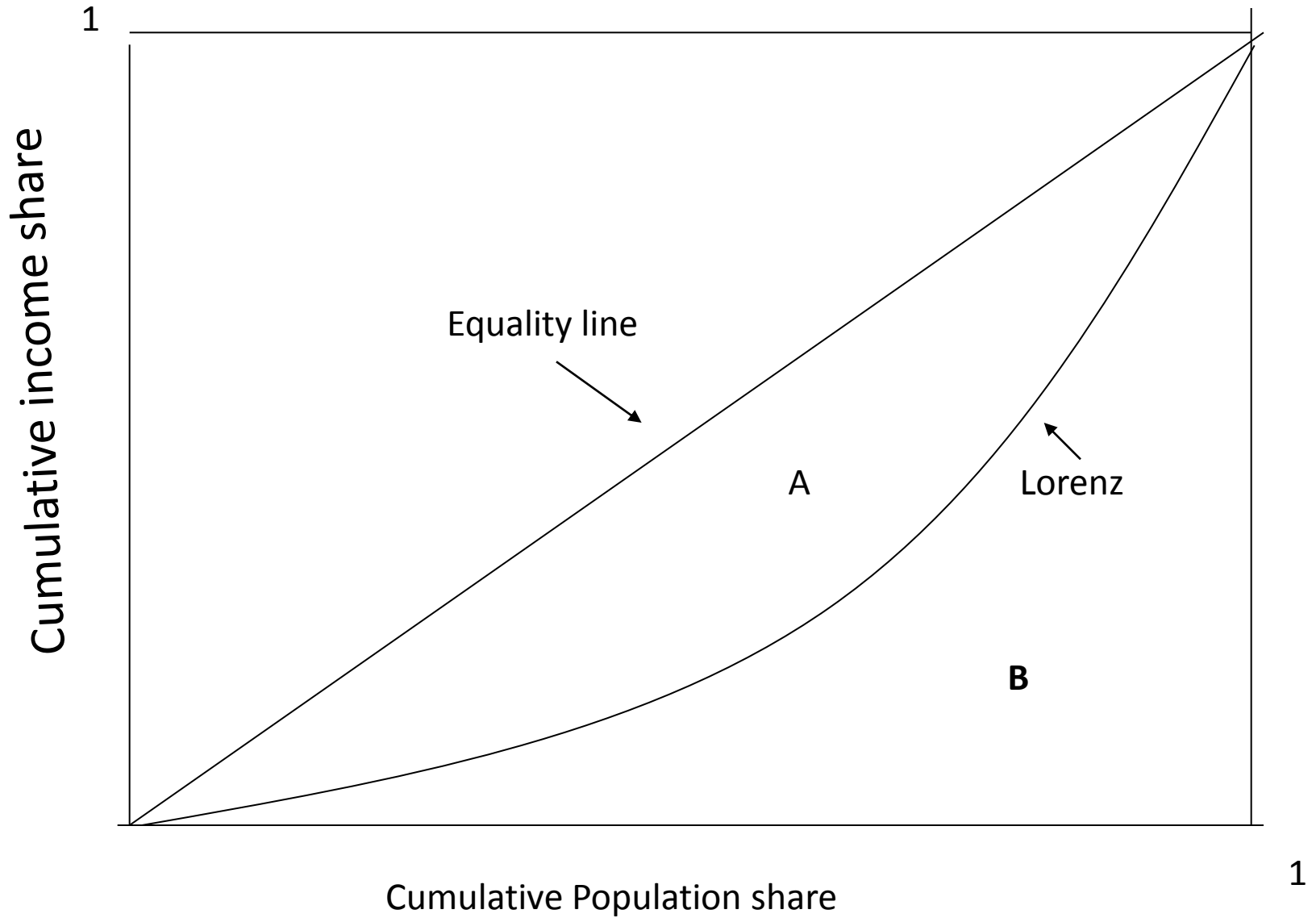
$$P = H.I + (1-I)G = 0.4 \times 0.5 + 0.4(1-0.5)0.528 = 0.2 + 0.106 = 0.306$$

Poverty elimination

$$T_1 = 40 \quad T_2 = 30 \quad T_3 = 20 \quad T_4 = 10$$

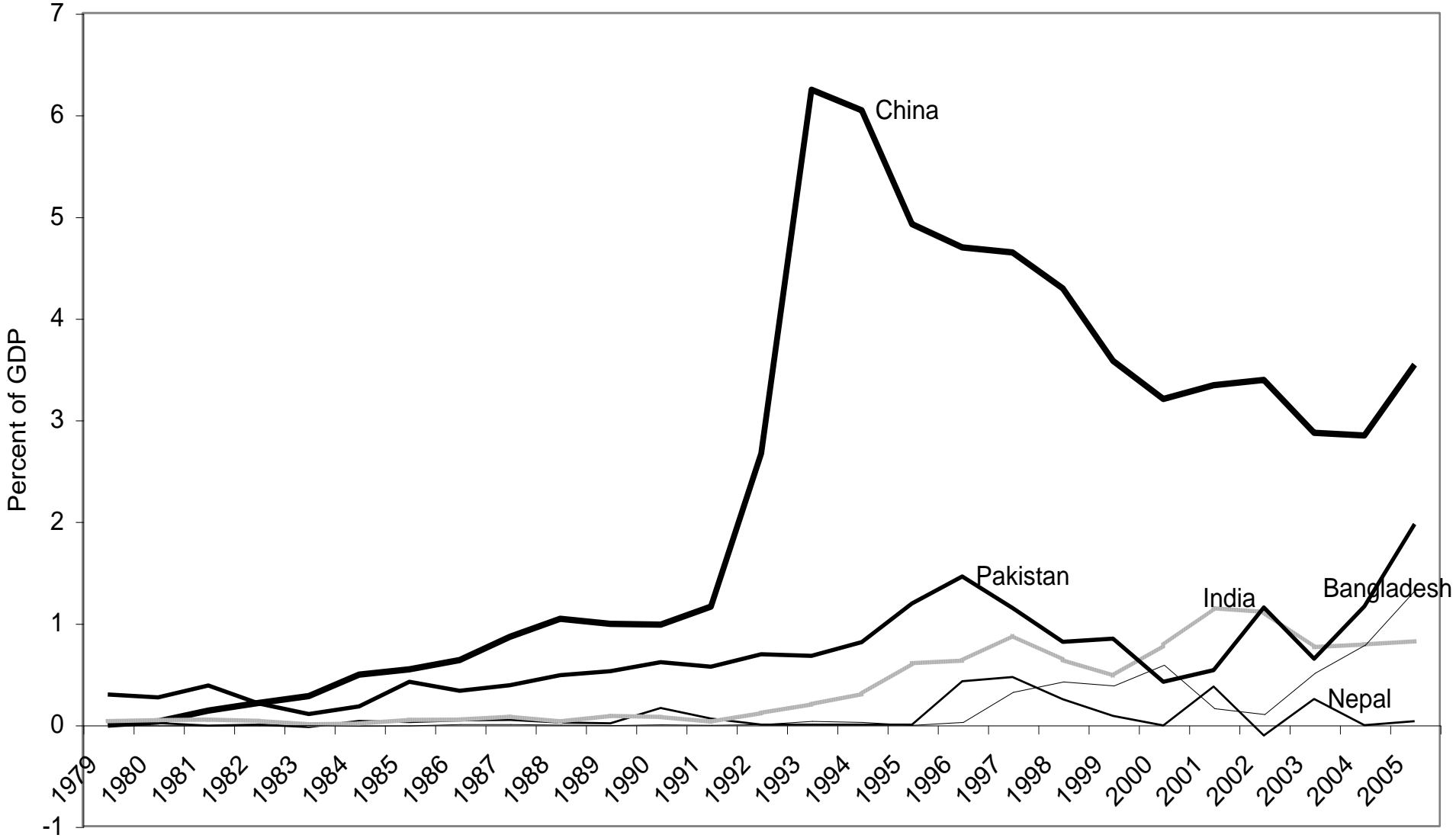
Tax 9<sup>th</sup> and 10<sup>th</sup> decile 20 and 80

# Income Inequality and Lorenz Curve

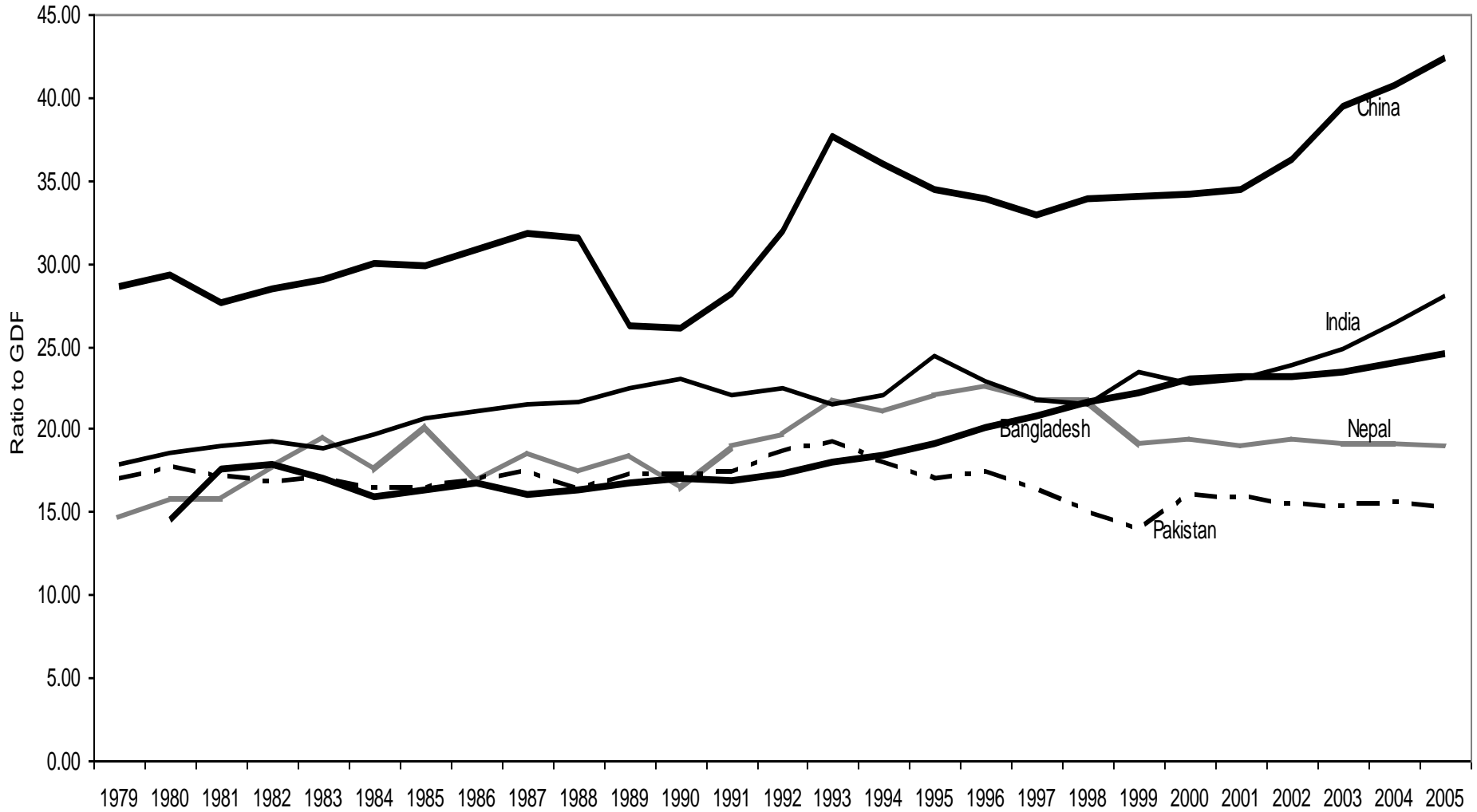


# Consequences of Good or Bad Policies

# Foreign Direct Investment Ratio



# Investment Ratio in Nepal and Her Neighbours

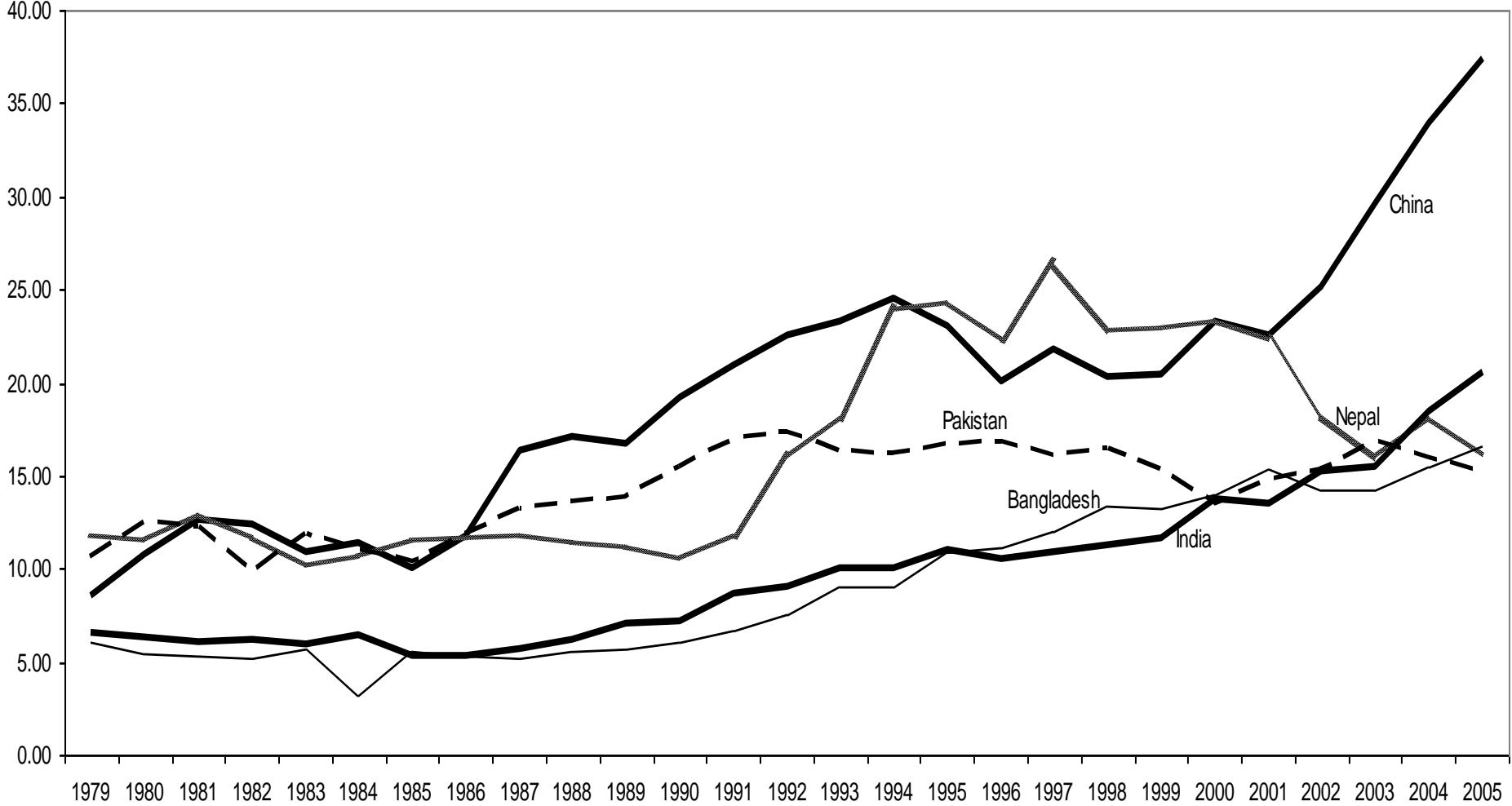


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### Export Ratio in Nepal and Her Neighbours

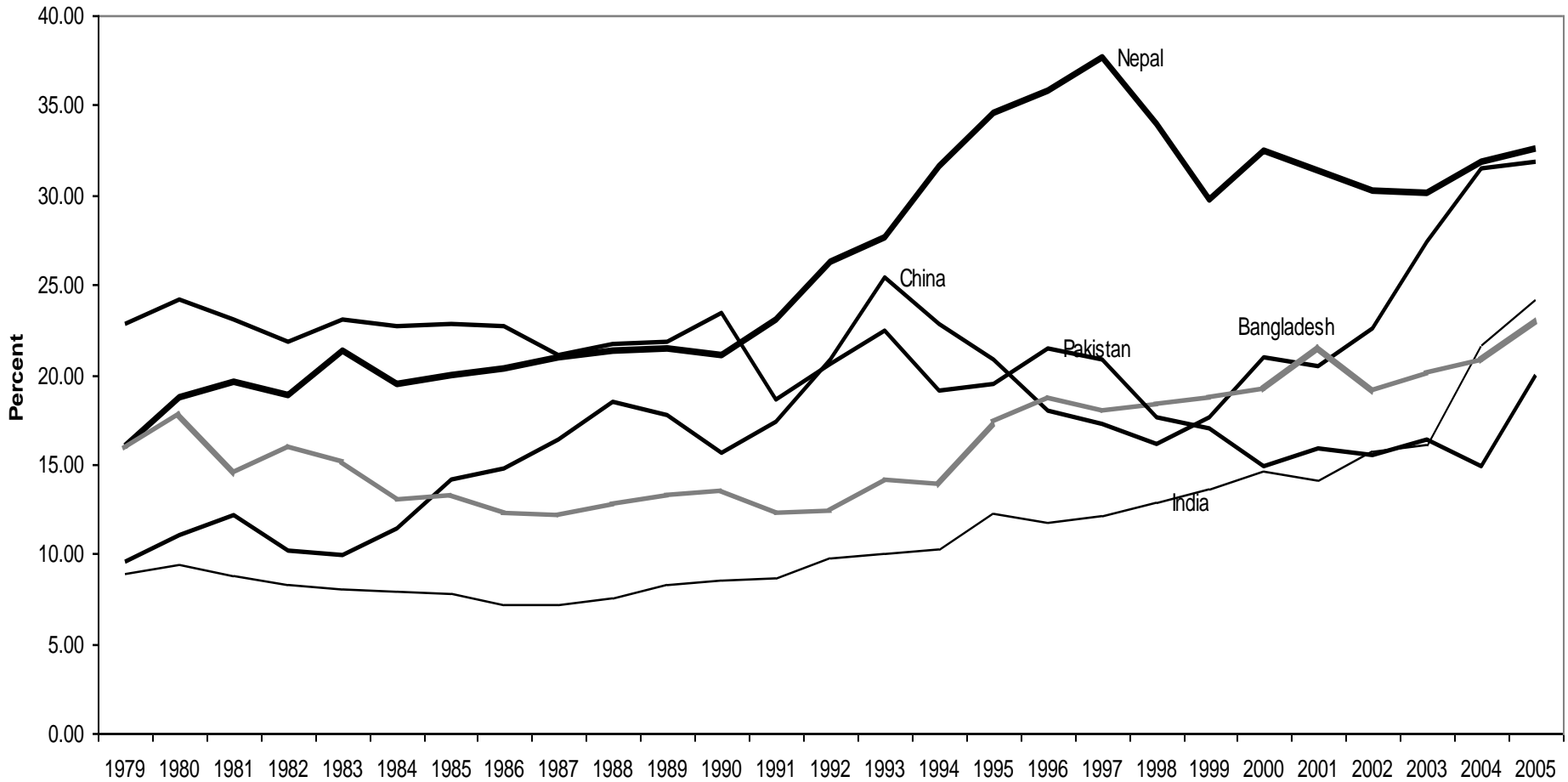


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# Import Ratio of Nepal and Her Neighbours

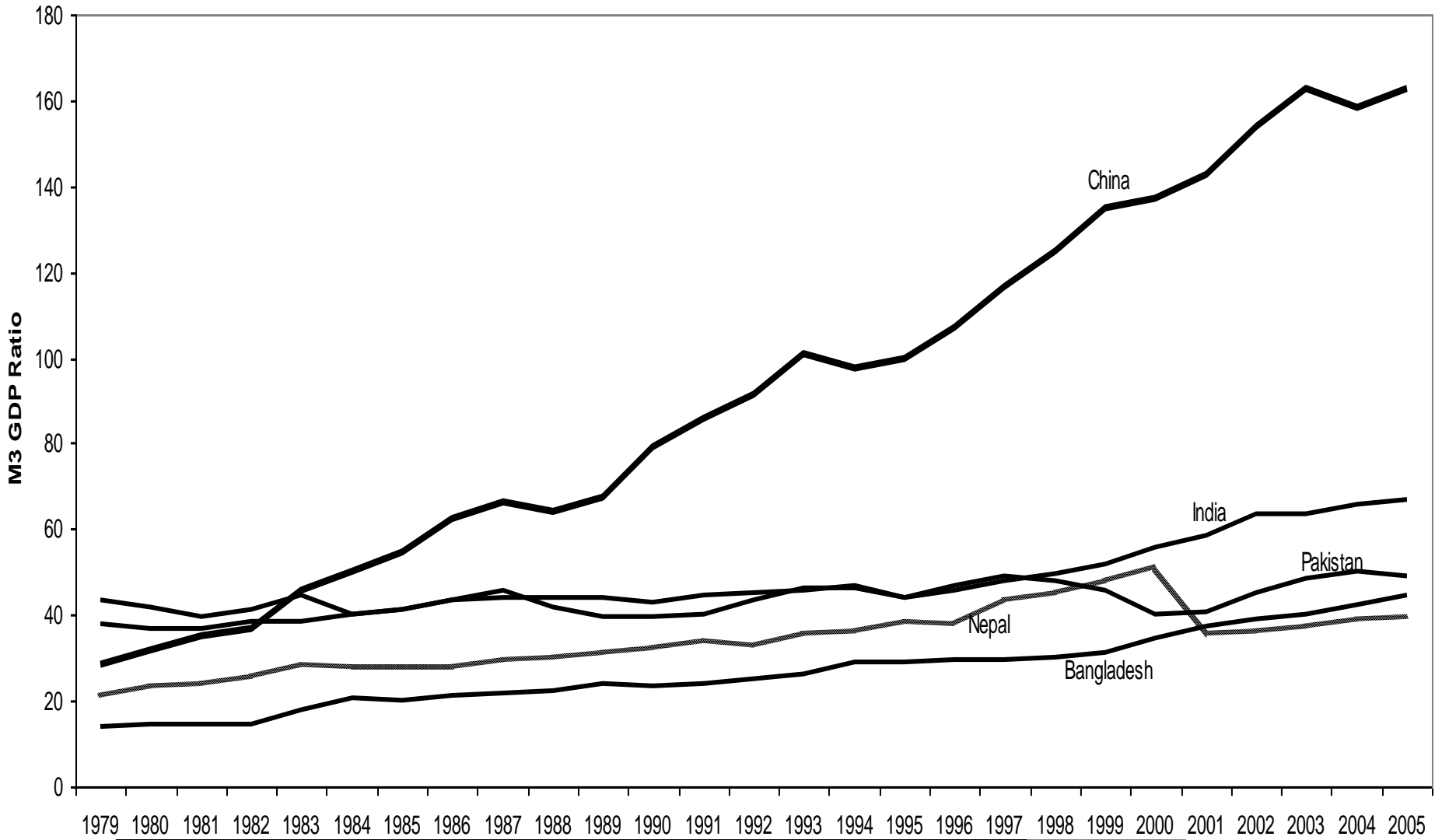


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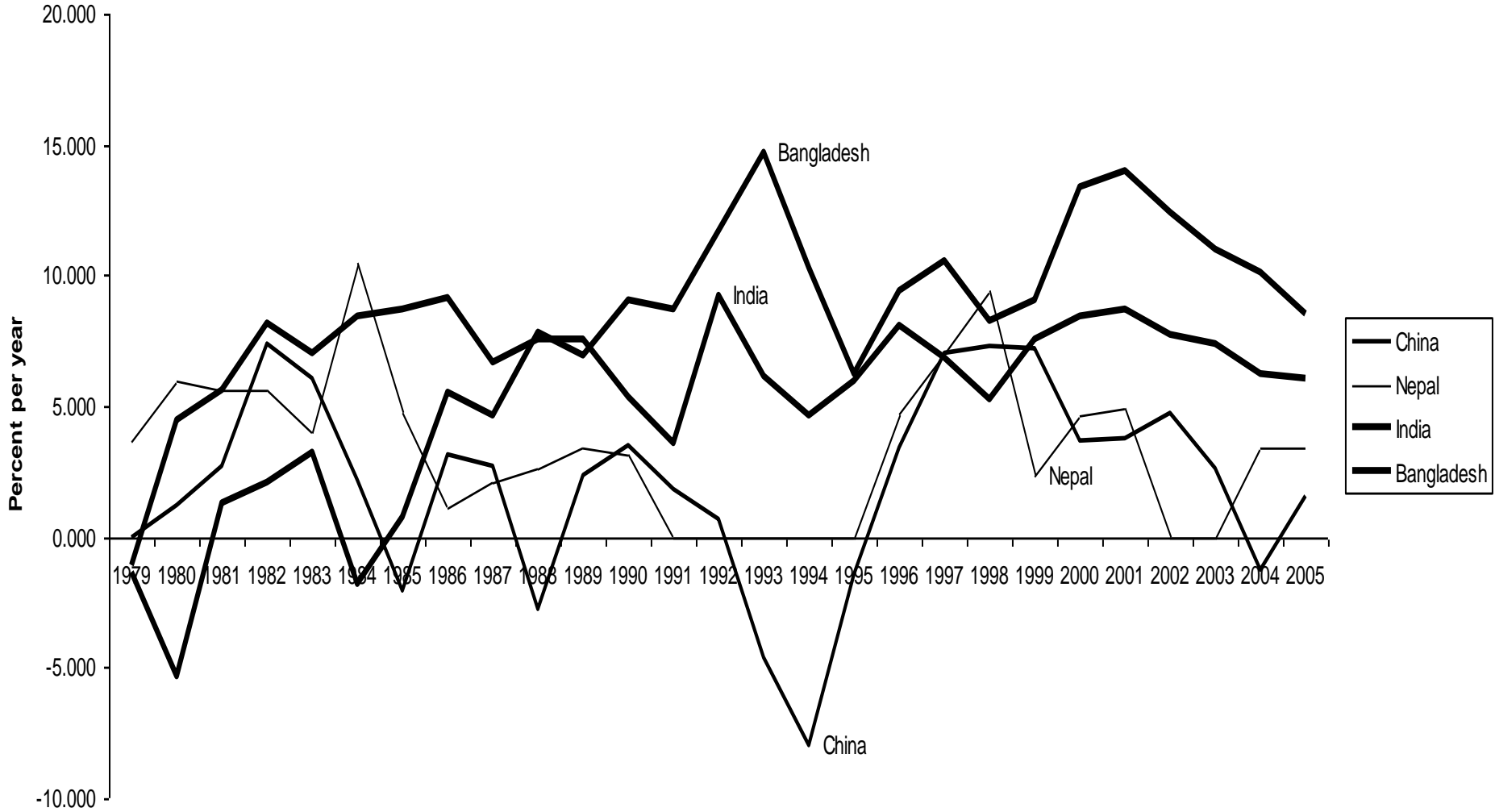
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# Liquidity Ratio of Nepal and Her Neighbours



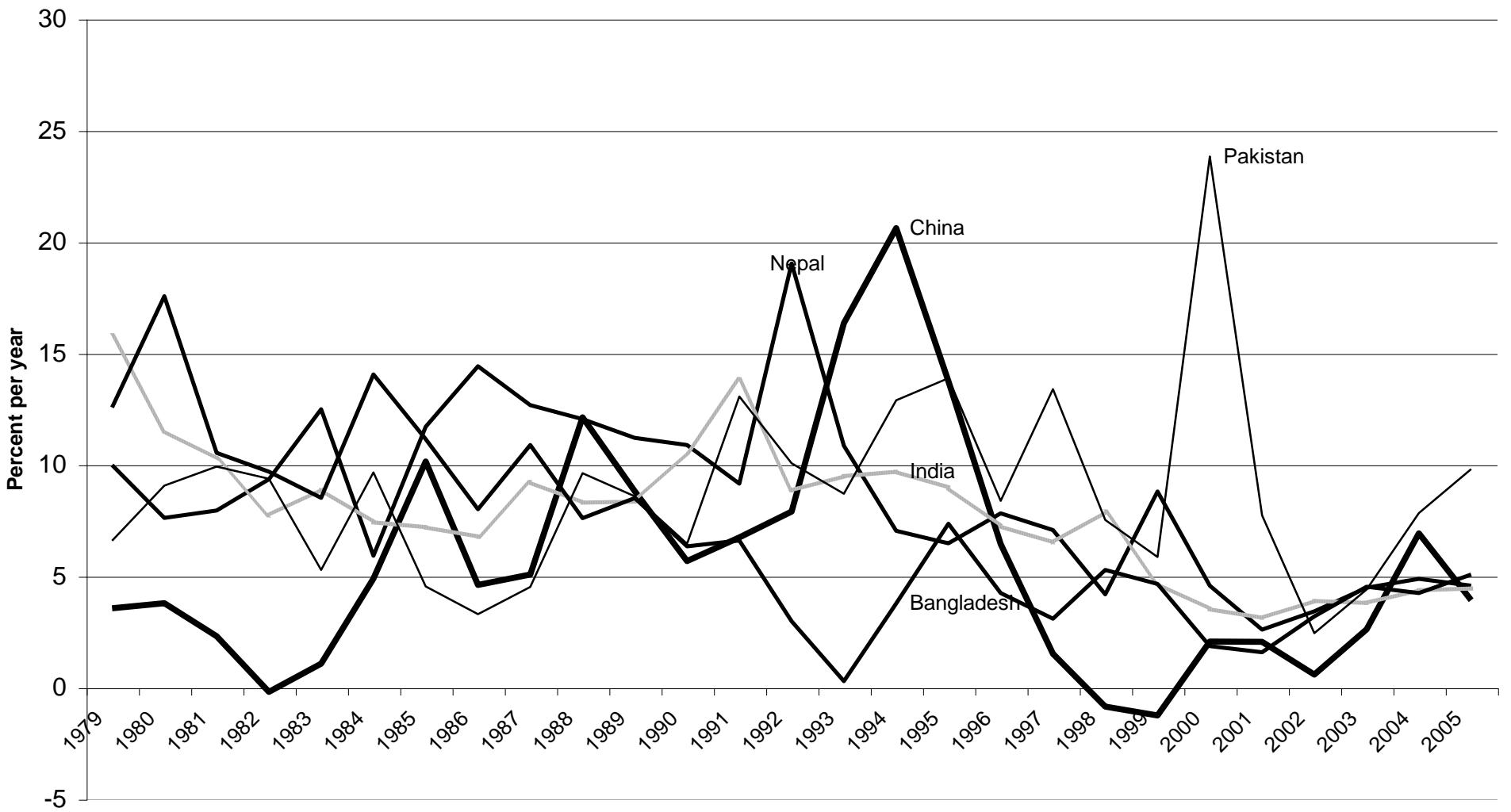
# Real Interest Rate in Nepal and Her Neighbours



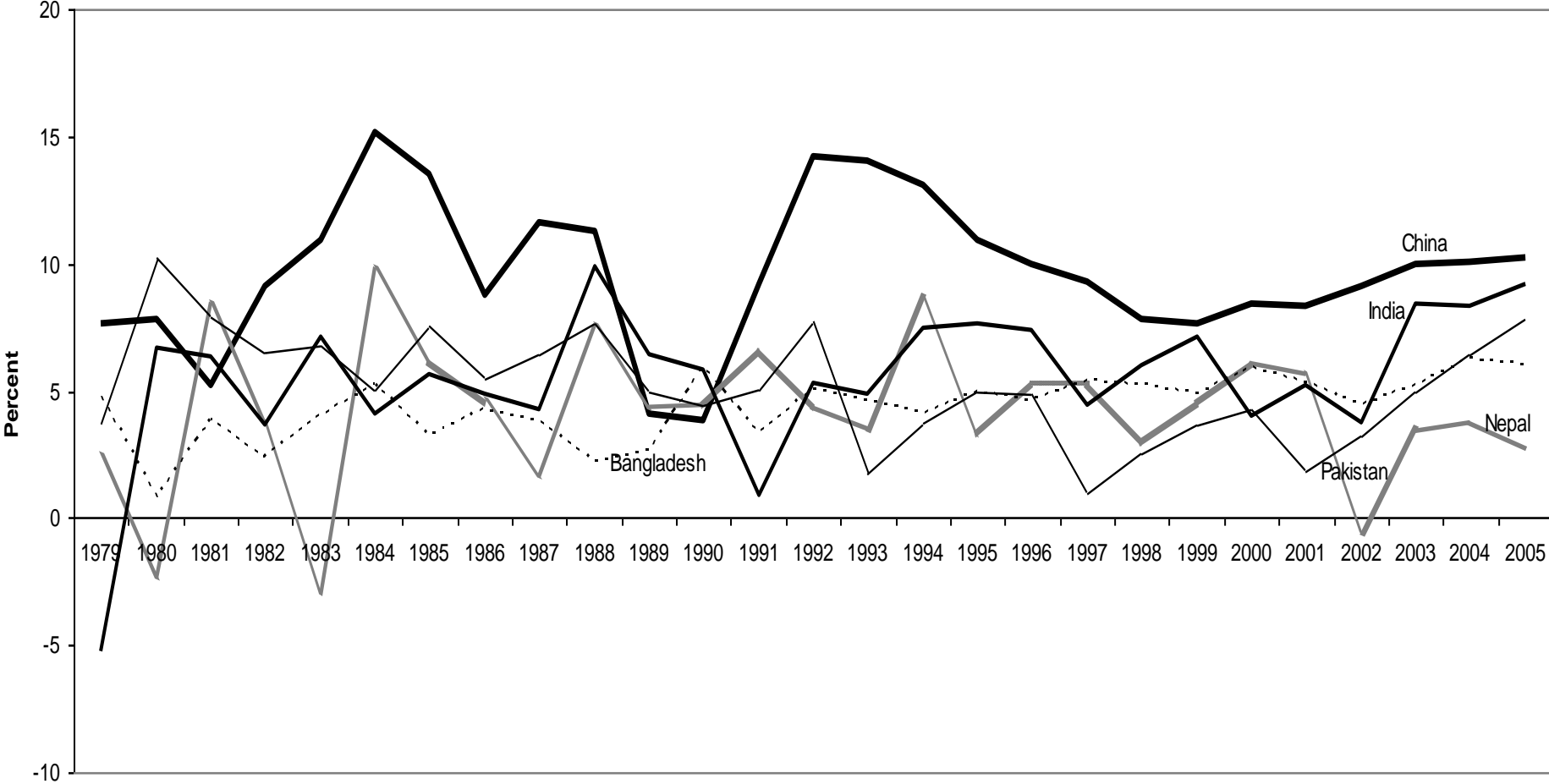
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# Inflation in Nepal and Neighbours



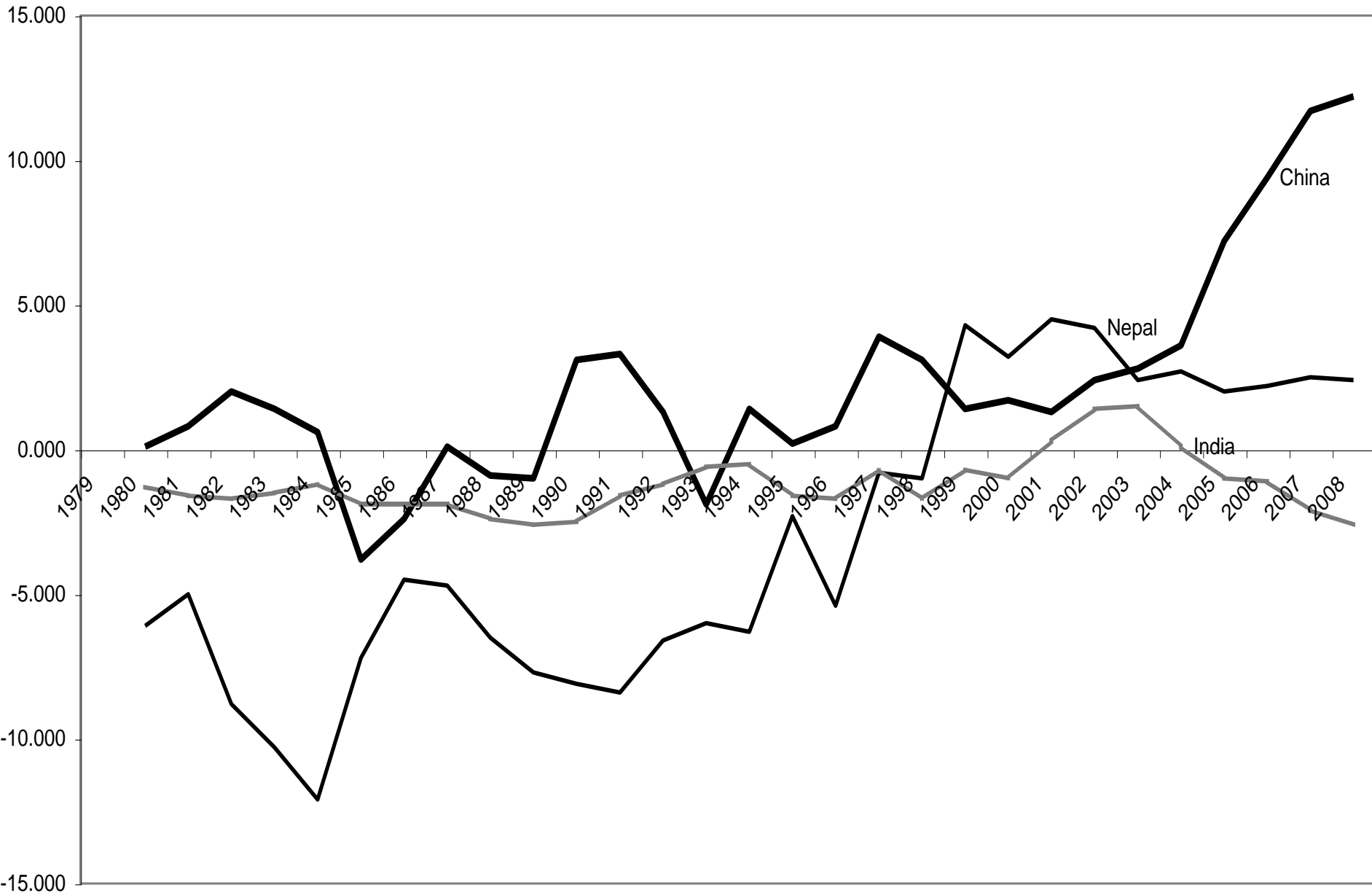
GDP Growth Process in Nepal and her Neighbours in the last two decades



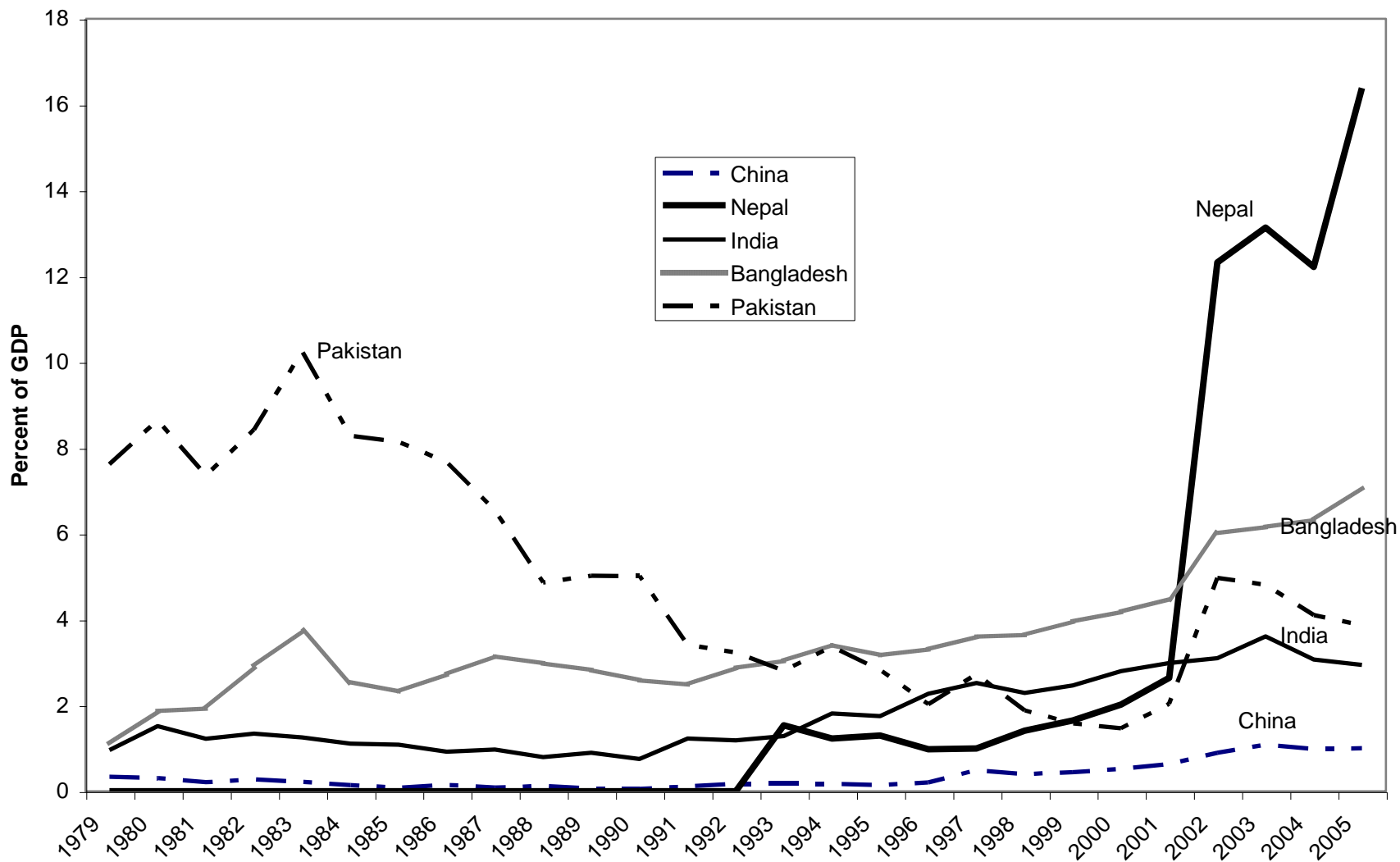
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# Current Account Balance to GDP Ratio

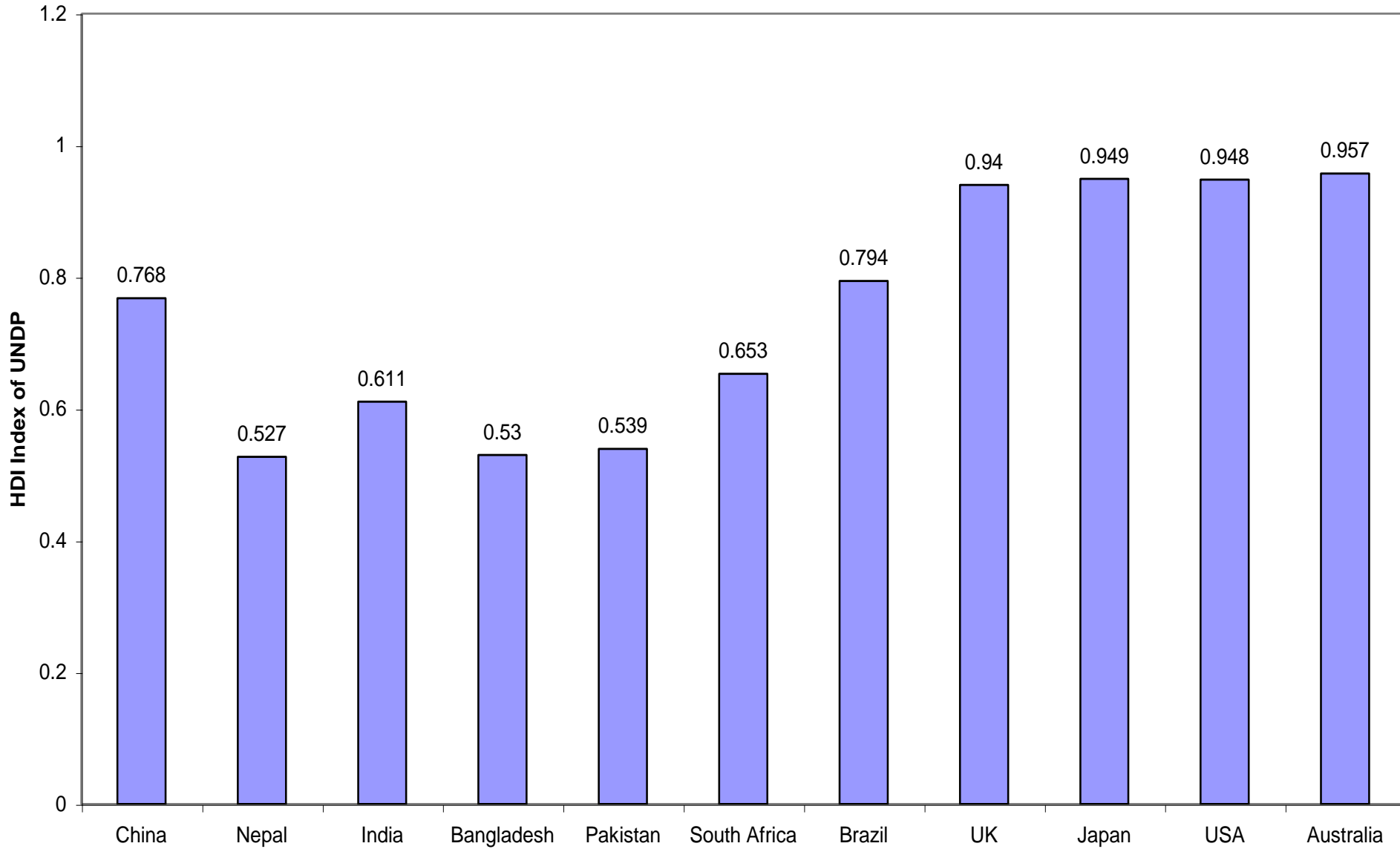


# Worker's Remittances and Compensation Received as a percent of GDP

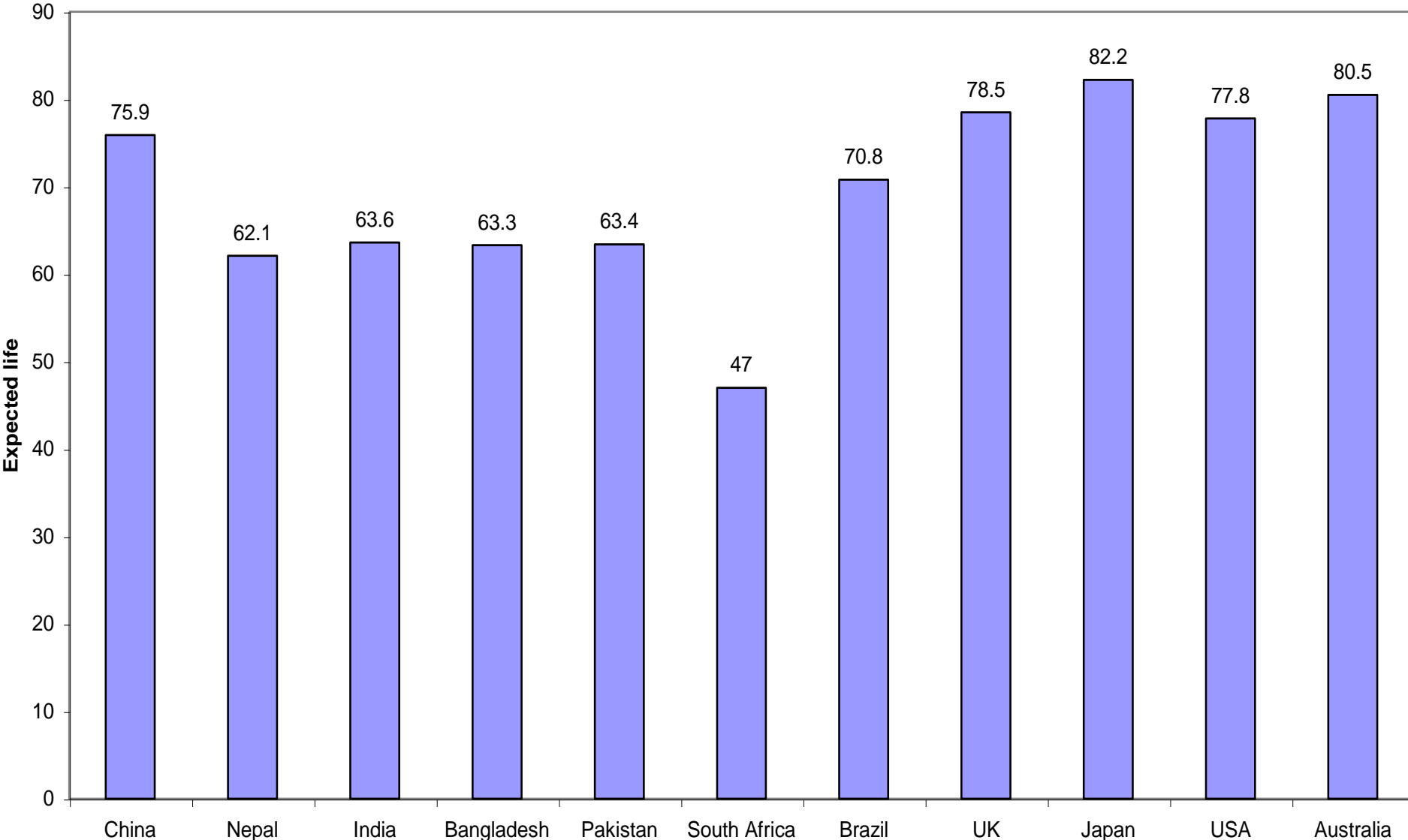


# Development Index

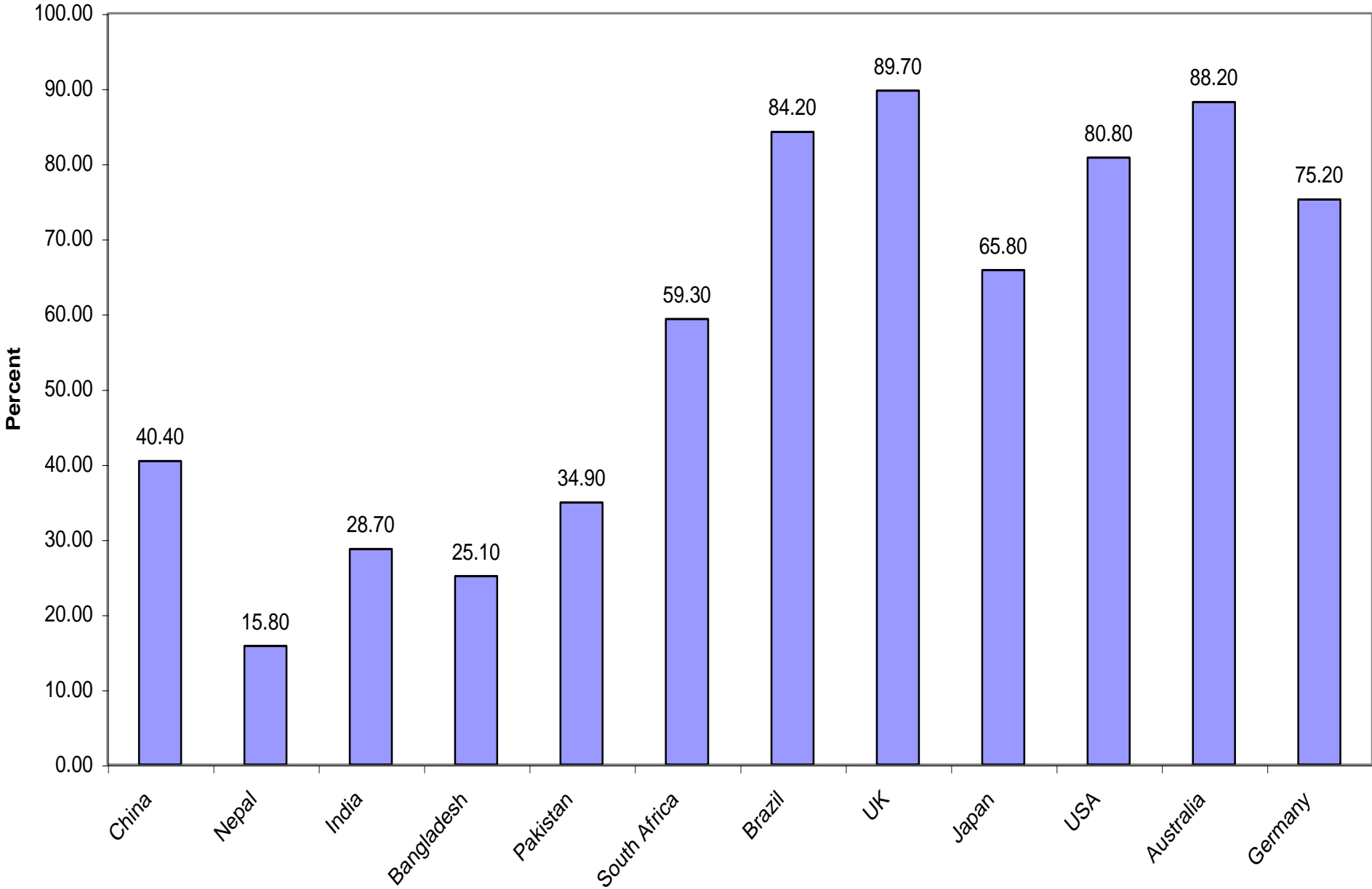
## HDI Index Comparison, 2006



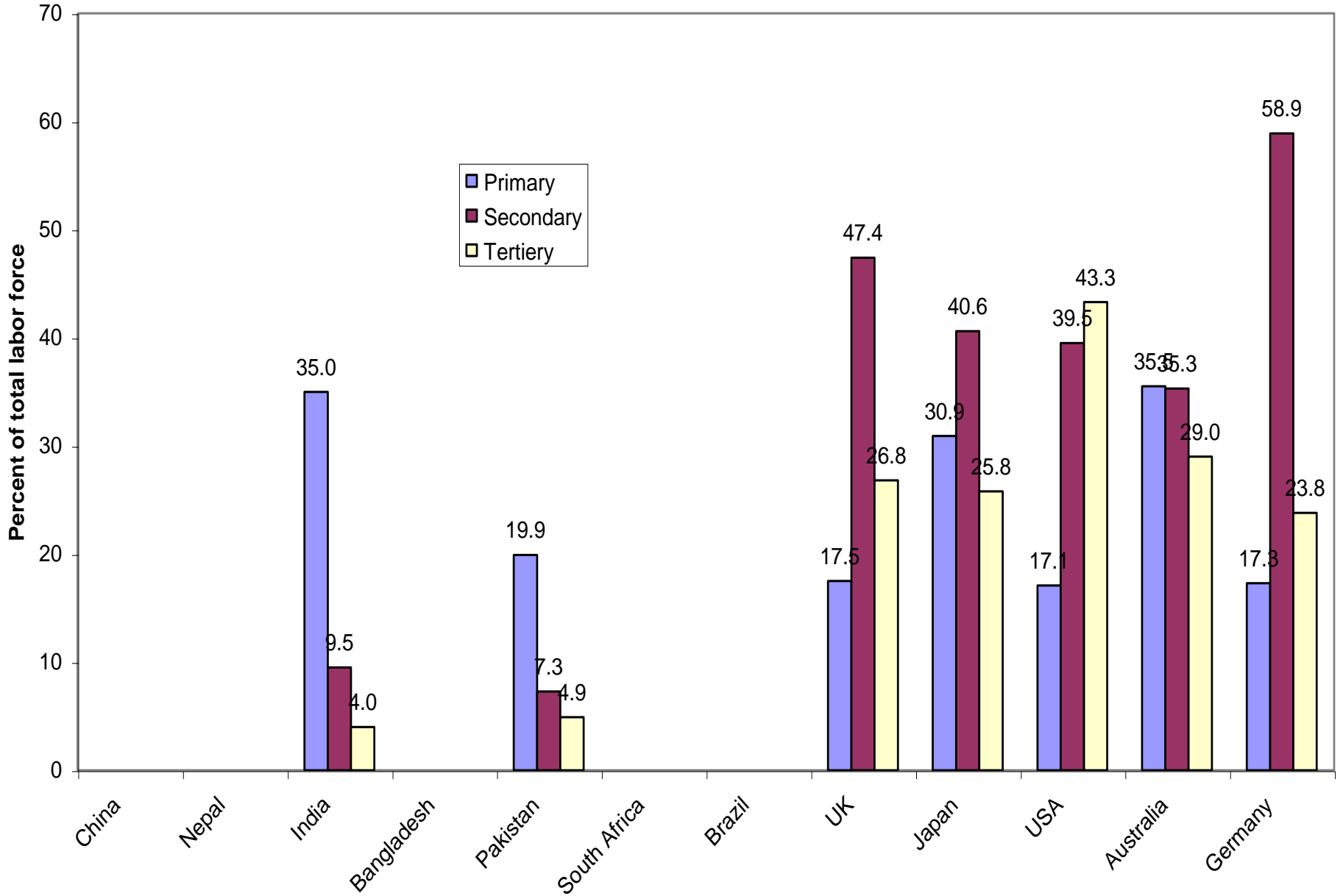
# Life Expectancy at Birth



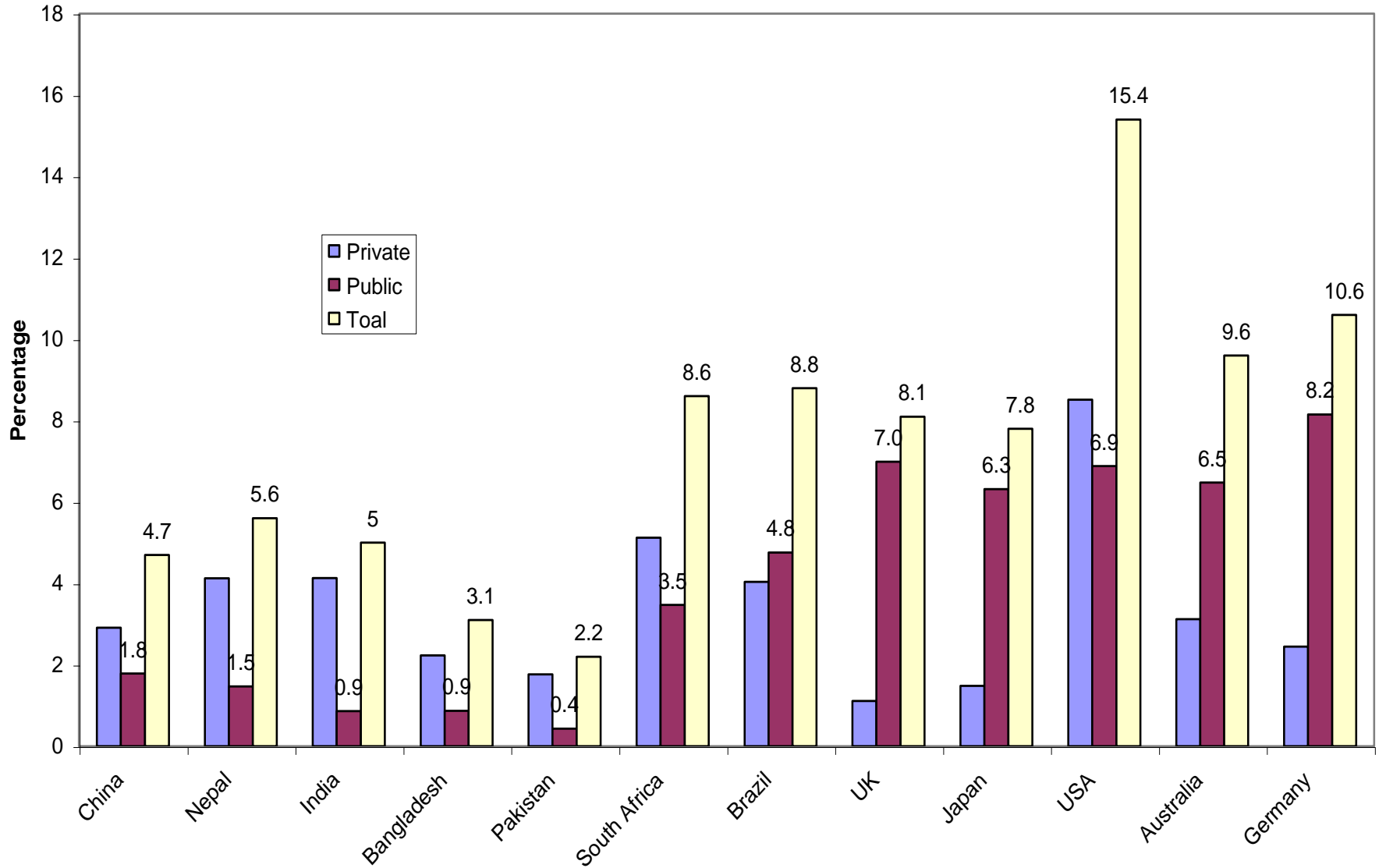
## Ratio of Urban Population



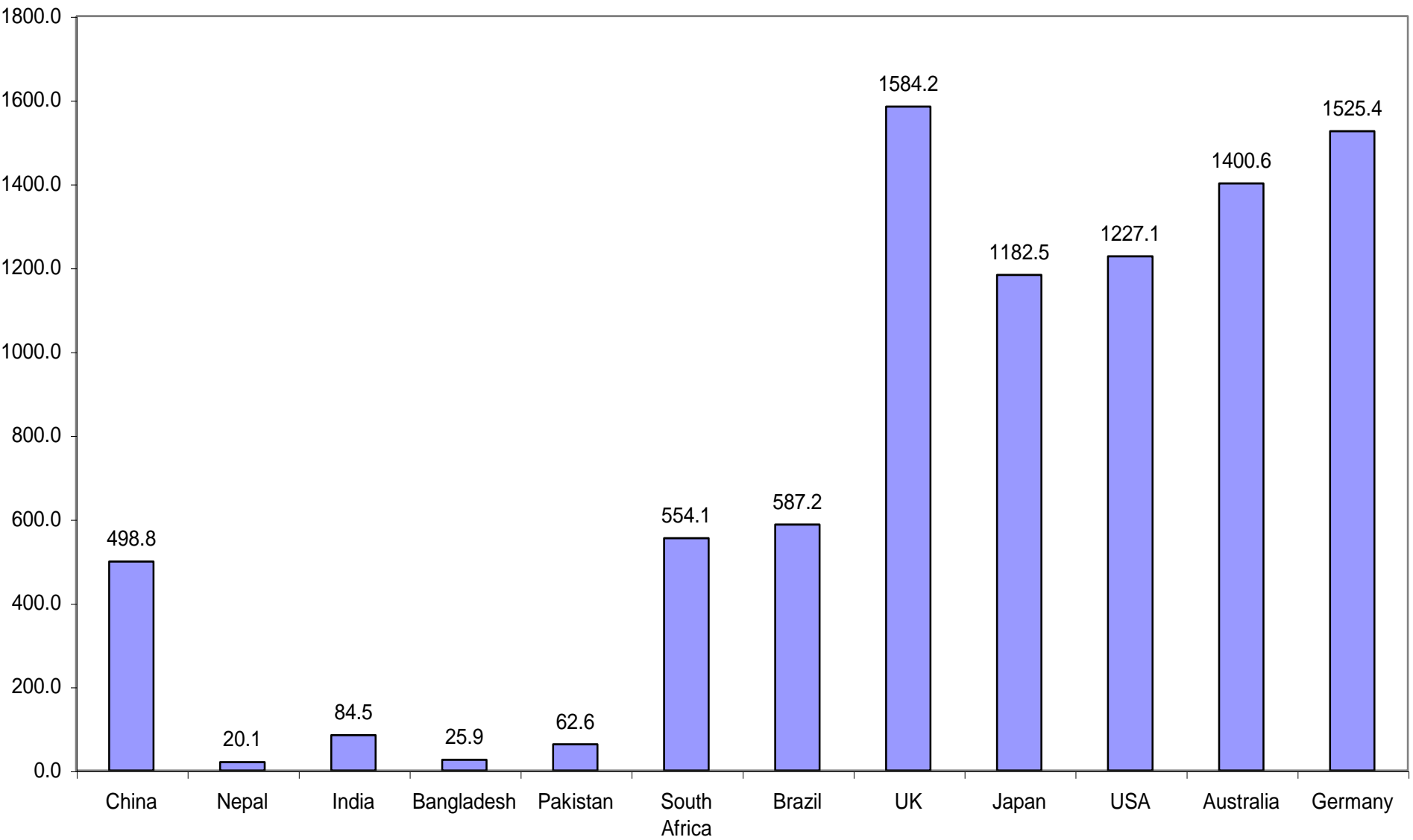
# Labor by Level of Education



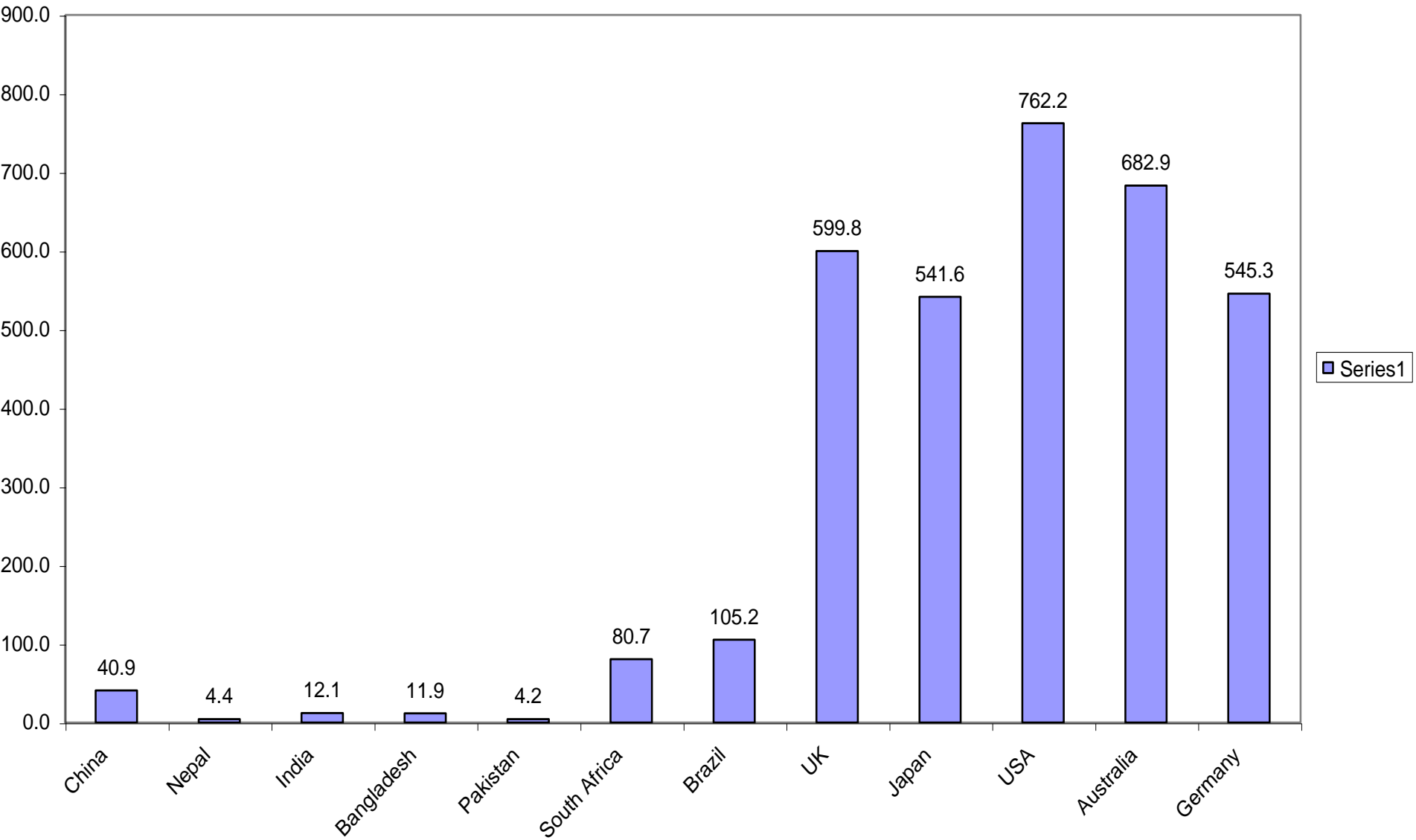
## Private and Public Expenditure on Health



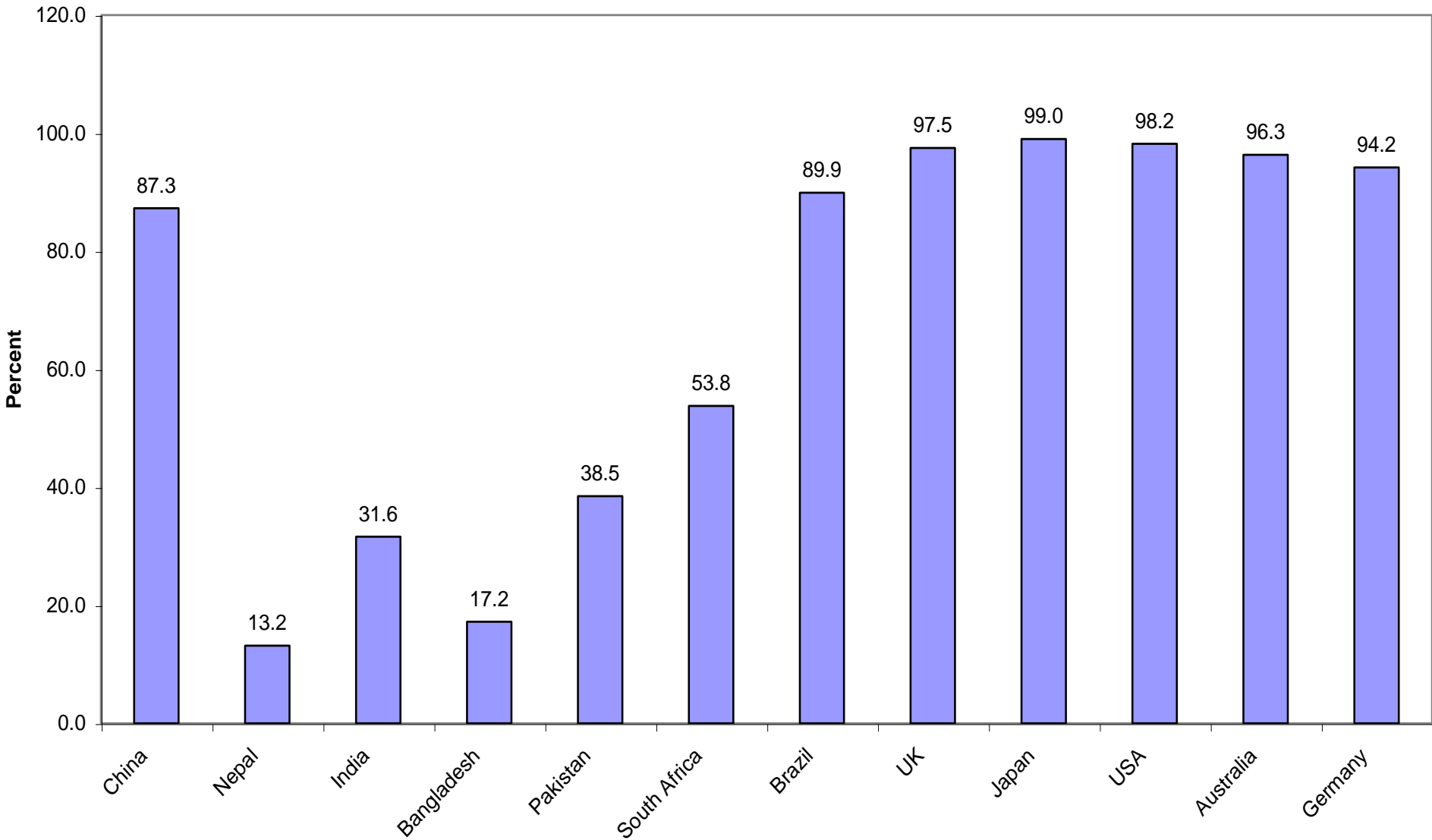
## Phone lines per 1000 population



### Computer per 1000 population



## Households with Access to TV



# Chronological view of literature on Poverty

Smith (1776) Rowntree B. S. (1902) Hansen A H (1926)  
Keezer D M (1943) Davis J. S, (1945) Atkinson, A. B.:(1970)  
Sen A. (1976) Beckerman W. (1979) Schultz TW (1979) Townsend P.  
(1979) Kakwani N. (1980) Danziger and Gottschalk,(1983) Cutler  
(1984) Basu,(1985) Piachaud(1987) Pyatt G (1987) Swinton,(1987)  
Atkinson, A. B.:(1987) Kniesner T. J., M B McElroy and S P Wilcox (1988)  
Lewis G. W. and D.T. Ulph (1988) Hagenaaars and Vos, Klaas de (1988)  
Davidson(1988) Webb S (1889) Brown J C (1990) Jenkins(1991) Sharif  
(1991) Gaude and Watzlawick(1992) Keen M (1992) Blackburn(1994)  
Zheng (1994) Preston (1995) Bardhan P (1996)  
Ravallion M. (1996) Whitehouse E. (1996) Barrington L (1997)  
Betson D.M. and J L Warlick (1998) Triest R K (1998)  
Besley T, R. Burgess (2003) Blaug M (1963) Casper L M (1994)  
Shorrocks A. F. (1995) Slesnick D.T. (1996) Deaton A (1998)  
Haveman R A Bershadker (1998) Foster J. E. (1998)  
Foster J E and A F Shorrocks (1988) Garfinkel I. (1994)  
Micklewright J and K Stewart (1999) Guo G, K.M. Harris (2000)  
Sutherland H and D Piachaud (2001) Hillman A L (2002)  
Stifel, D.C. Thorbecke, E.(2003)

# Analytical Structures

- statistical measurements: income distribution and poverty line
- Income inequality and poverty: relative concept
- strategic model of poverty alleviation
  - Game of rich, poor and the government
- Multi-sectoral multi-household dynamic general equilibrium models for poverty alleviation.

Households:  $i = 1, 2, \dots, N.$

Income:  $y_i \neq y_j \quad \forall_i$

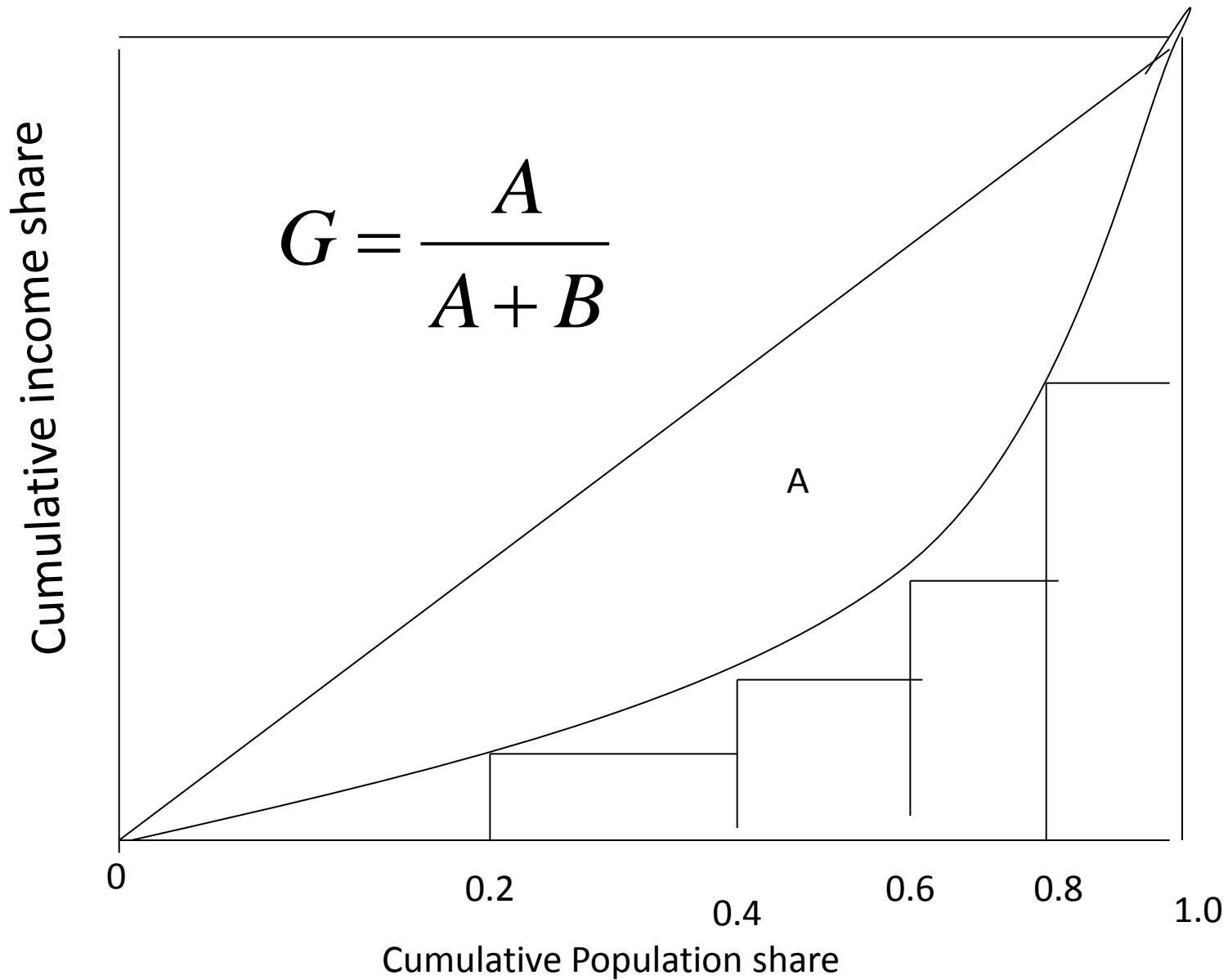
Income distribution:  $y_1 < y_2 < \dots < y_N$

Average income:  $\bar{y} = \sum_i^N \frac{y_i}{N}$

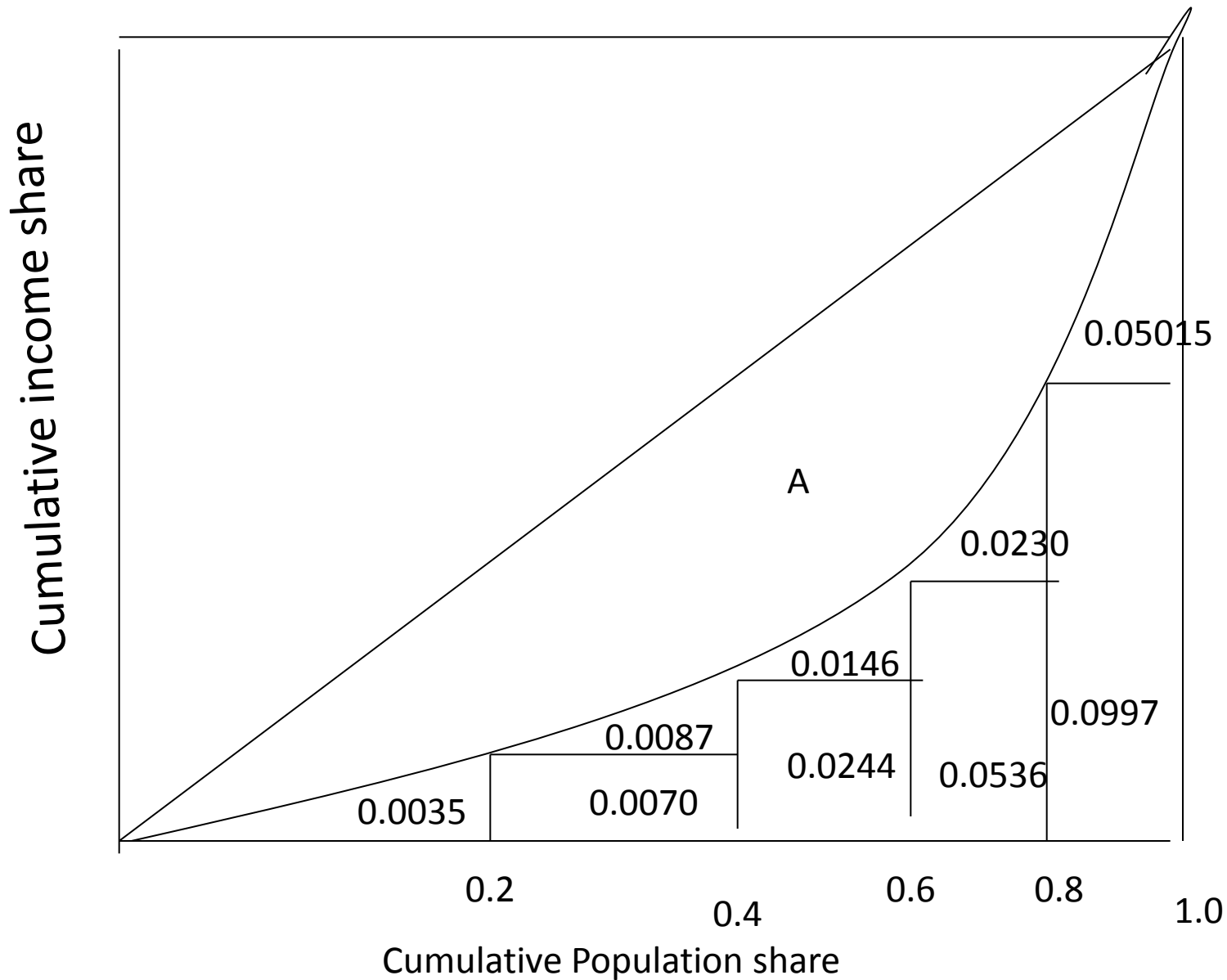
Poverty line  $z = \frac{1}{2} \bar{y}$

Depth of Poverty:  $I = \frac{\sum_i^n (y_i - z)}{z \cdot n}$

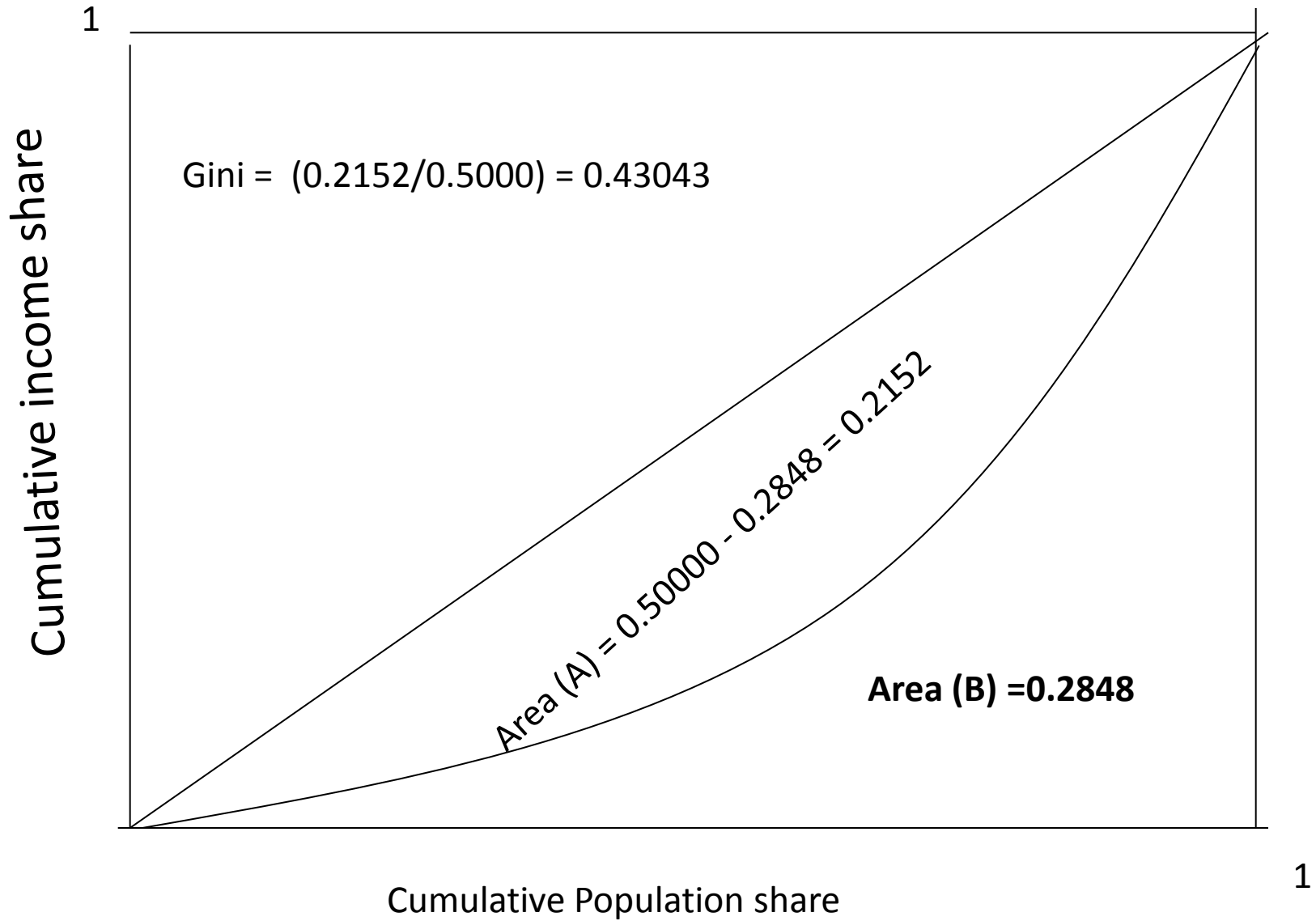
# Approximation of Area Under the Lorenz Curve



Approximation of Area Under the Lorenz Curve



# Computation of Gini Coefficient



Income group	Income
1st (lowest)	10186
2nd	25321
3rd	42492
4th	66939
5th (highest)	145811
Total	290749

Ishare	CMIshare	Equality	pop	cmpop	Rectangle	Triangle	Total area
0.035034	0.035034	0.2	0.2	0.2	0	0.003503	0.003503
0.087089	0.122123	0.4	0.2	0.4	0.007007	0.008709	0.015716
0.146147	0.268269	0.6	0.2	0.6	0.024425	0.014615	0.039039
0.23023	0.498499	0.8	0.2	0.8	0.053654	0.023023	0.076677
0.501501	1	1	0.2	1	0.0997	0.05015	0.14985

Total area under Lorenz

0.2848

Gini

0.43043

# Average, Chronic and Transitory Poverty

Foster-Greer-Thorbecke (1984)  $FGT = (1/n) \sum_i^m (1 - y_i/z)^2$

Average annual poverty  $A_{FGT}(T) = (1/N) \sum_{t=1}^T \sum_i^m (1 - y_{i,t}/z)^2$ ;  $N = nT$

Chronic poverty  $C_{FGT}(T) = (1/n) \sum_i^{m_y} (1 - Y_{t,l}^*/z)^2$  where  $Y_{t,l}^*$  is permanent income.

	Year1	Year2	Year3	Year4	Year5	Year6
Person A	300	300	300	99	99	300
Person B	101	101	101	10	10	101
Person C	300	300	99	99	99	300

z=100

# Problems of students UK

# Literature on Himalayan Exodus and Learning and Earnings

- This is an issue that has been addressed neither in the literature of Nepalese studies (Bhattarai (2007) Central Bureau of Statistics (2009), Dahlin, Bo; Regmi(2000) , Hall (1996), Koirala and Koshal. (1999) , Mahat and Scoloveno (2006), Masaki (2006), MOE (2009), Murshed and Gates (2005) National Planning Commission (2009),
- Parker (2006) , Sharma, Sisira and Oczkowski (2000), Shrestha and Velu(1993) , Simpson, Schumaker, Dorahy, Shrestha and Sarvagya (1996), Wagle (2005)) nor in the literature of migration in the west particularly in UK (Anderson, Waddington (2007), Bingley, Walker and Zhu (2005), Economic Outlook (2006),
- Greenaway and Haynes (2003) , Hardill and MacDonald(2000), McCormick and Wahba (2001), Roberts, Oakey and Hanstock (2007), [Kane](#) and [Rouse](#) (1999).

## Structure of Primary Survey

	Frequency	Percent	Cumulative Percent
Below 20 years	8	14.5	14.5
20 to 25 years	30	54.5	69.1
25 to 30 years	10	18.2	87.3
30 to 35 years	3	5.5	92.7
Above 35 years	4	7.3	100.0
Total	55	100.0	

**Table 2: Descriptive Statistics on Their Expenses**

	N	Minimum	Maximum	Mean	Std. Deviation
Total monthly expense	50	60.0	650.0	326.0	107.0
Rent	52	.0	430.0	199.3	74.0
Travel	49	8.0	120.0	54.6	24.9
Food	41	10.0	100.0	51.3	19.9
Other expenditure	39	.0	150.0	33.2	29.4
Tuition	50	2000.0	7500.0	3843.9	1078.3

# Figure 1: Tuition and Total Monthly Spending

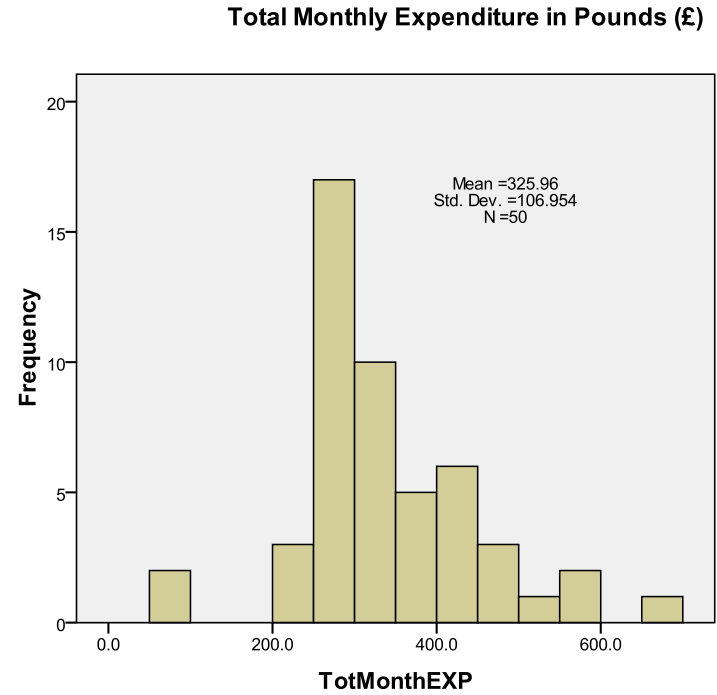
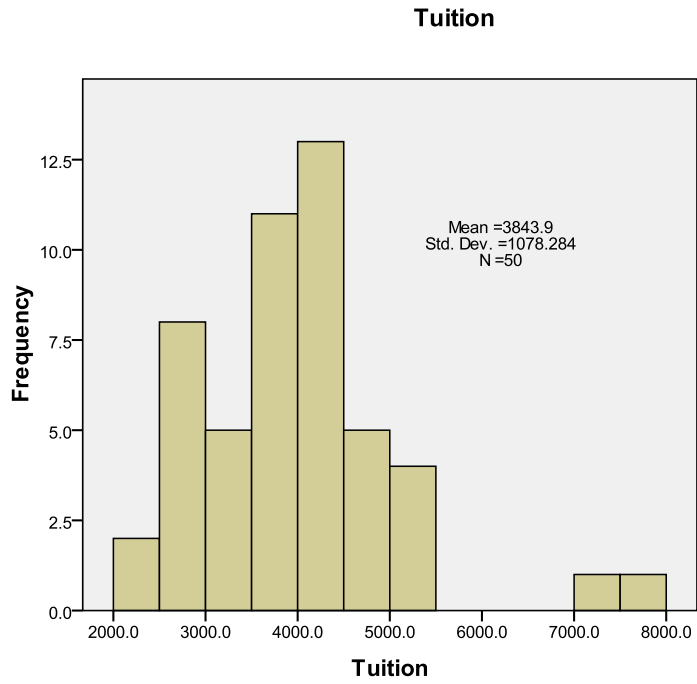
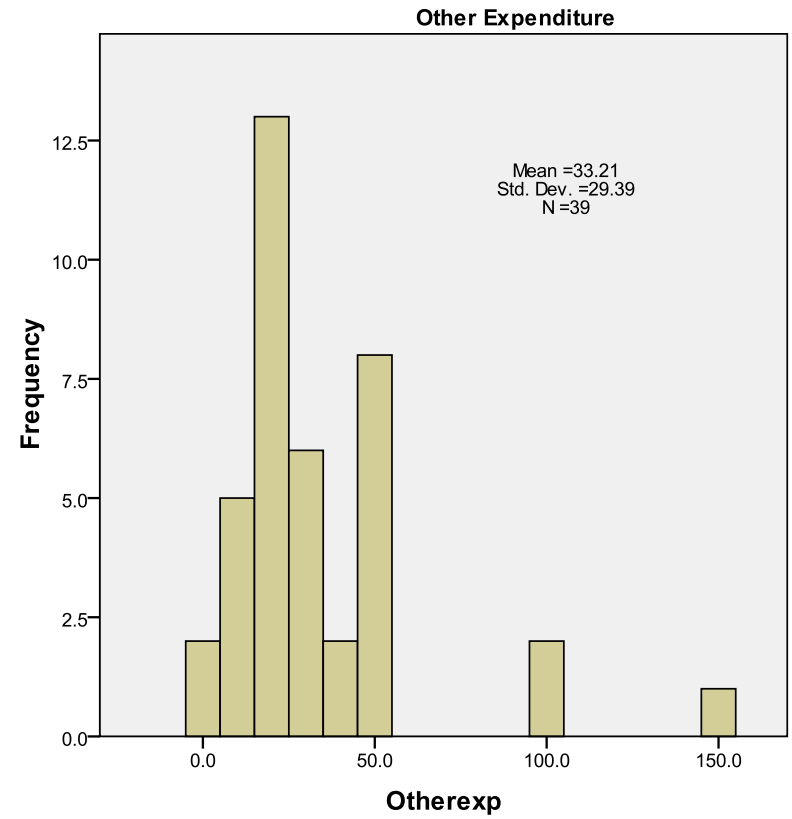
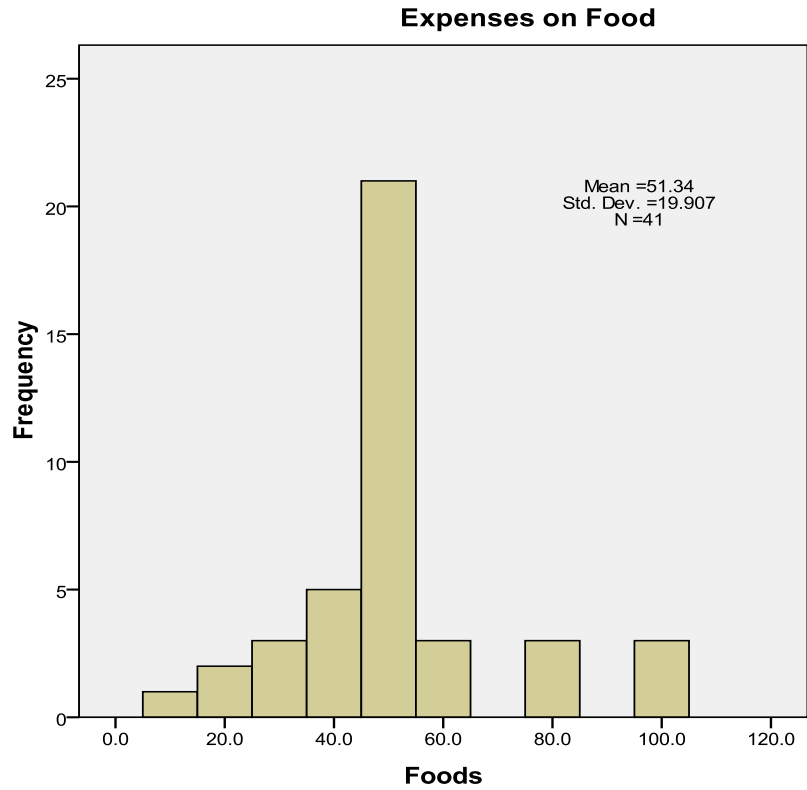


Table 3

Student's Estimated Budget for an Academic Year in Hull University

	International Full Time		UK/EU Full Time	
	Post Graduate	Undergraduate	Post Graduate	Undergraduate
Tuition	9,800	9,800	3,390	3,290
Accommodation	3,432	2,776	3,432	2,767
Food and Housekeeping	2,340	1,890	2,340	1,890
Phone	250	250	250	250
Course Materials	500	500	500	500
Travel (Bus pass)	190	190	190	190
Entertainment	2,340	1,890	2,340	1,890
Total	18,852	17,296	12,442	10,777

Figure 3: Expenses on Food and Other Items



# Migration

# Migration: Supply and Demand Side Factors

- Supply Side Factors of migration
  - **Poverty and Growth Disaster in Nepal**
  - **Growth of Education Sector in Nepal**
  - **Global Nepalese Network (NRNA)**
- **Demand Side Factors**
- **Globalisation**
- **Population Imbalance and Pension Crisis**

**Table 4**  
**Enrolment in Secondary Level**

	Secondary Pupils		Enrolment Percent			Student teacher Ratio
	Population	Enrolment	Total	Male	Female	
2005	4,493,285	2,054,165	46	49	42	
2000	3,814,002	1,348,212	35	41	29	30
1995	2,536,969	1,016,443	40	50	30	32
1990	2,228,808	708,663	32	44	19	31
1985	1,969,275	496,921	25	38	12	27
1980	2,510,587	512,434	20	32	8	31
1975	2,245,582	281,816	13	21	4	28
1970	1,400,147	122,394	9	14	3	21

Source: UNESCO (<http://stats.uis.unesco.org/unesco/TableViewer/dimView.aspx>)

Table 5

Enrolment in Tertiary Education in Nepal: All Programmes				
2001	2002	2003	2004	2007
103,290	119,670	124,817	147,123	255,354
21,333	24,646	30,121	40,577	

Table 6

Estimation of Nepalese Migration in Around the World(000)

South Asia	East Asia	Middle East	Australia and Oceania	Europe	North America	Africa and Latin America
5,000,000	724,200	847,000	32,700	88,800	150,000	1270

Source: www.NRN.org.np

Table 7  
Immigration from Nepal to European Economies

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Belgium	:	:	:	:	0	:	69	:	73	:	:	:
Czech Republic	:	:	0	:	1	:	:	3	11	2	9	15
Denmark	10	23	10	17	27	20	59	32	49	16	65	133
Germany (including ex-GDR from 1990)	315	382	383	0	0	:	0	:	:	475	438	443
Ireland	:	:	:	:	:	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:	:	:	:	:	9
Spain	:	:	3	7	3	15	35	38	146	193	224	403
France	:	:	:	:	:	:	:	:	6	0	:	55
Italy	:	20	:	21	19	35	:	66	76	:	:	:
Cyprus	:	:	:	:	:	0	:	0	0	43	58	96
Latvia	:	:	:	:	0	2	0	1	0	2	1	1
Lithuania	:	:	0	0	0	0	0	:	0	0	0	6
Luxembourg (Grand-Duché)	:	6	5	1	4	6	1	3	3	8	5	8
Hungary	:	:	:	:	:	:	2	2	7	6	4	3
Malta	:	:	:	:	:	:	:	:	:	:	:	:
Netherlands	48	53	60	72	74	72	59	95	115	100	324	194
Austria	:	20	24	28	29	:	28	62	53	95	106	192
Poland	:	:	:	:	:	:	:	:	:	:	:	3
Portugal	:	:	:	1	:	:	:	6	1	12	:	57
Romania	:	:	:	:	:	:	:	:	0	0	0	0
Slovenia	:	:	0	0	0	0	1	3	5	2	7	3
Slovakia	:	:	:	:	:	:	0	0	1	0	3	3
Finland	4	9	1	11	23	15	16	21	20	45	56	63
Sweden	4	7	7	5	4	9	9	9	16	17	31	27
United Kingdom	:	:	:	:	:	:	851	934	1065	981	2022	5207
Croatia	:	:	:	:	:	:	:	0	0	0	:	0
Former Yugoslav Republic of Macedonia	:	:	:	:	:	:	:	0	:	0	0	0
Turkey	:	:	:	:	:	:	:	:	:	:	11	15
Iceland	:	:	:	:	:	:	6	11	:	:	:	:
Norway	:	:	:	:	:	:	:	108	53	82	82	78
Switzerland	:	:	:	:	:	:	:	62	80	41	56	89

Source: Derived from the Eurostat in ESDS

Table 8 Immigration to UK from South Asian Countries

	Total			EU 27			Bangladesh			India		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
2001	372,206	187,376	184,830				4,479	2,842	1,637	16,001	10,193	5,808
2002	385,901	199,659	186,242				3,722	2,773	949	20,956	10,919	10,036
2003	431,487	211,737	219,751				4,094	2,380	1,715	31,257	20,120	11,137
2004	518,097	260,621	257,477	196,948	102,678	94,269	5,590	4,591	999	48,367	25,053	23,313
2005	496,470	273,128	223,342	211,918	122,709	89,208	9,832	6,710	3,122	46,621	28,078	18,542
2006	529,008	280,419	248,588	218,713	114,289	104,424	9,594			56,850		
	Sri Lanka			Maldives			Nepal			Pakistan		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
2001	2,149	979	1,170	111	111	0	851	206	644	9,561	6,552	3,009
2002	3,990	1,604	2,386	40	0	40	934	432	503	6,300	3,067	3,233
2003	5,513	3,585	1,928	0	0	0	1,065	225	839	9,491	7,826	1,665
2004	4,880	1,952	2,928	156	44	112	981	310	671	21,651	15,241	6,410
2005	5,857	3,198	2,658	0	0	0	2,022	823	1,199	15,758	11,295	4,463
2006	5,594						5,207			30,817		

Source: Derived from the Eurostat in ESDS

	Nationality	Estimate		Nationality	Estimate
1	Poland	499	31	Afghanistan	35
2	Republic of Ireland	342	32	New Zealand	35
3	India	297	33	Iraq	35
4	Pakistan	176	34	Iran	33
5	United States of America	126	35	<b>Nepal</b>	<b>32</b>
6	France	121	36	Bulgaria	30
7	Germany	104	37	Greece	27
8	South Africa	101	38	Japan	27
9	Italy	96	39	Latvia	27
10	Nigeria	93	40	Libya	26
11	Portugal	89	41	Russia	25
12	Australia	85	42	Sweden	24
13	China	82	43	Kenya	24
14	Philippines	79	44	Czech Republic	23
15	Bangladesh	74	45	Thailand	22
16	Somalia	69	46	Cyprus	21
17	Lithuania	68	47	Hungary	19
18	Zimbabwe	68	48	Denmark	19
19	Spain	68	49	Mauritius	17
20	Ghana	55	50	Austria	16
21	Jamaica	54	51	Netherlands Antilles	16
22	Slovakia	48	52	Norway	15
23	Netherlands	47	53	Colombia	15
24	Romania	46	54	East Timor	14
25	Canada	44	55	Belgium	14
26	Sri Lanka	44	56	South Korea	13
27	Brazil	44	57	Albania	13
28	Turkey	41	58	Zambia	13
29	British Indian Ocean Territory	40	59	Eritrea	13
30	Malaysia	36	60	Saudi Arabia	13

Source: Annual Population Survey and Labour Force Survey, ONS.

**Table 10**  
**Pattern of Immigration to the UK**

	2002	2003	2004	2005	2006
<b>European Union (25 countries)</b>		<b>111,639</b>	<b>126,915</b>	<b>159,184</b>	<b>174,216</b>
Germany	23,577	14,558	16,326	26,956	20,505
Spain	13,122	15,493	12,819	13,773	14,736
France	16,172	27,767	15,040	12,882	21,821
Netherlands	8,411	10,190	7,301	5,356	
Poland	1,288	3,534	16,985	51,915	58,468
<b>Africa</b>	<b>56,305</b>	<b>61,184</b>	<b>86,440</b>	<b>62,559</b>	<b>47,771</b>
Kenya	3,100	3,360	4,274	3,665	2,205
South Africa	24,578	25,514	35,712	27,110	19,767
Zambia	1,109	475	3,063	825	
Zimbabwe	5,453	7,358	9,086	7,131	
Ghana	3,185	5,575	3,425	1,787	
Nigeria	2,478	4,714	10,130	8,920	8,508
<b>Asia</b>	<b>130,699</b>	<b>145,409</b>	<b>190,989</b>	<b>164,871</b>	<b>197,442</b>
China (including Hong Kong)		38,281	34,942	23,441	30,064
Japan	9,223	6,707	7,003	9,888	5,674
Taiwan	1,871	3,604	4,855	2,025	3,944
Korea (Republic of) (South)	2,010	3,774	4,029	6,382	2,806
Malaysia	3,984	5,052	7,290	4,205	8,503
Philippines	17,752	10,375	11,563	8,207	
Singapore	4,172	1,720	2,630	3,970	1,590
Thailand	2,884	3,794	8,694	3,925	7,167
Vietnam	175	537	801	3,050	
Bangladesh	4,535	4,553	6,345	10,525	10,328
India	20,369	29,802	46,219	45,836	51,849
Sri Lanka	3,642	4,744	4,537	4,338	5,802
<b>Nepal</b>	<b>1,389</b>	<b>1,122</b>	<b>931</b>	<b>1,959</b>	<b>4,346</b>
Pakistan	6,664	10,157	26,445	19,272	31,566
United Arab Emirates	3,275	4,605	4,533	2,520	
Bahrain	582	840	850	1,844	
Iraq	159	116	1,388	447	
Iran (Islamic Republic of)	1,956	1,820	734	580	
Kuwait	279	1,000	443	625	
Oman	628	1,981	5,074	627	
Qatar	56	82	436	342	
Saudi Arabia	2,140	4,809	3,012	1,835	2,036
Oceania	49,201	50,212	51,734	53,642	50,844
<b>Australia</b>	<b>37,177</b>	<b>37,285</b>	<b>38,787</b>	<b>38,760</b>	<b>38,433</b>
<b>New Zealand</b>	<b>11,885</b>	<b>12,803</b>	<b>12,737</b>	<b>14,533</b>	<b>12,207</b>
<b>America</b>	<b>43,305</b>	<b>50,114</b>	<b>48,652</b>	<b>39,686</b>	<b>38,834</b>
Canada	7288	12813	7750	6626	6775
United States	26615	27464	26135	23760	21806
<b>Brazil</b>	<b>2228</b>	<b>974</b>	<b>3855</b>	<b>3649</b>	
<b>Total</b>	<b>385,901</b>	<b>431,487</b>	<b>518,097</b>	<b>496,469</b>	<b>529,008</b>

Source: Derived from the Eurostat at ESDS.

# Why No Constitution

Theory of Chaos

Theory of Second Best

# Constitutional Development in Nepal

- Medieval period 22/23 kingdoms (Manusmriti)
- 1768: Formation of Nepal (under the leadership of PN Shah from Gorkha)
- 1846: Kot Massacre and beginning of 104 year dictatorial Rana Rule
- 1947 Constitution of Government of Nepal
- 1951 Interim Constitution of Nepal
- 1959 : Royal Constitution of Nepal
- 1962: Panchayat Constitution of Nepal
- 1990 : Constitution of Kingdom of Nepal
- 2007: Interim Constitution of Nepal
- 2008: Constituent Assembly (From People)
- 2010: Constitution of Nepal??

## **Conflict and Coalition: Successes and Failure**

- Parliamentary Democracy and constitutional monarchy under 1990 Constitution.
- Maoists' Underground People War since 1996.
- No peace deal with the Maoists. 2001 massacre.
- Political Instability; 13000 people died in the Maoist Movement.
- King imposed emergency rule and became a dictator in 2005 by dissolving the elected government and the parliament as in 1961.
- Maoist crises worsened. Political parties also came against the King.
- Abolition of absolute monarchy required cooperation of all parties. Seven Party Alliance (SPA) and the Maoists signed 12 point agreement in November 2005 concurred in New Delhi.
- This brought successful April 2006 Revolution. King gave up power. House was reinstated; Power transferred from the King to the Parliament; Coalition government formed under the Premiership of GP Koirala bringing Maoists in the mainstream.
- UN peace Mission. Maoists arms in cantonements and Maoist armies put in temporary camps. Maoists promised to return captured properties and dissolve the parallel government.
- This was a big democratic achievement for the time being.
- Government of seven party drafted a interim constitution 2007 for the election of Constituent Assembly.
- Emergence of regional and ethnic organisations and issues

## **Election of the Constituent Assembly: Short-lived Cooperation?**

- Election of constituent Assembly of Nepal May 5, 2008.
- Maoist emerged major party with 38% of votes; NC 19% ; UML 18% and MPRF 9% , TMLK 5.5% and Other Parties 12%.
- Nepal was declared Federal Republic Unanimously on May 28, 2008; King was forced to leave palace on June 15, 2008. Palace turned into a museum.
- President (NC) and Vice Presidents (TPRF) and Speaker (UML).  
Maoists led Cabinet under the Premiership of Pushpa Kamal Dahal.
- Coalition gradually weakened and contradictions in interests emerged.
- Maoists have not returned properties seized during people's war, have not completely dissolved the parallel government and demanding integration the 19000 People's Liberation Army into the regular Army.
- Parties without guns and armies are intimidated of dictatorship.
- Maoists fired COAS on May 4, 2009; coalition partners withdrew support and Maoist resigned from the government as they became minority.
- New Coalition of 22 parties; Communication with Maoists has broken
- Protests from street and parliaments; strikes, bandhas and blockades continue.

# Spirit for the Constitution for the Republic of Nepal 2010

- Magna Carta (1215)
- 1689 Bill of rights
- Constitution of United States
- Bill of rights of United States
- French Declaration of the rights of man and the citizen (1789)
- Canadian Charter of rights and freedom 1867
- Universal Declaration of Human Rights – United Nations
- Constitution of India
- Constitution of China
- Basic Law of Federal Republic of Germany 1949
- UN Convention against Genocide
- UN Covenant on Economic, Social and Cultural Rights
- UN Convention Against Torture
- UN Covenant on Civil and Political Rights

# Why Other Political Parties and India are Afraid of Maoists in Nepal?

Main Issues:

Grow fast

Eliminate poverty

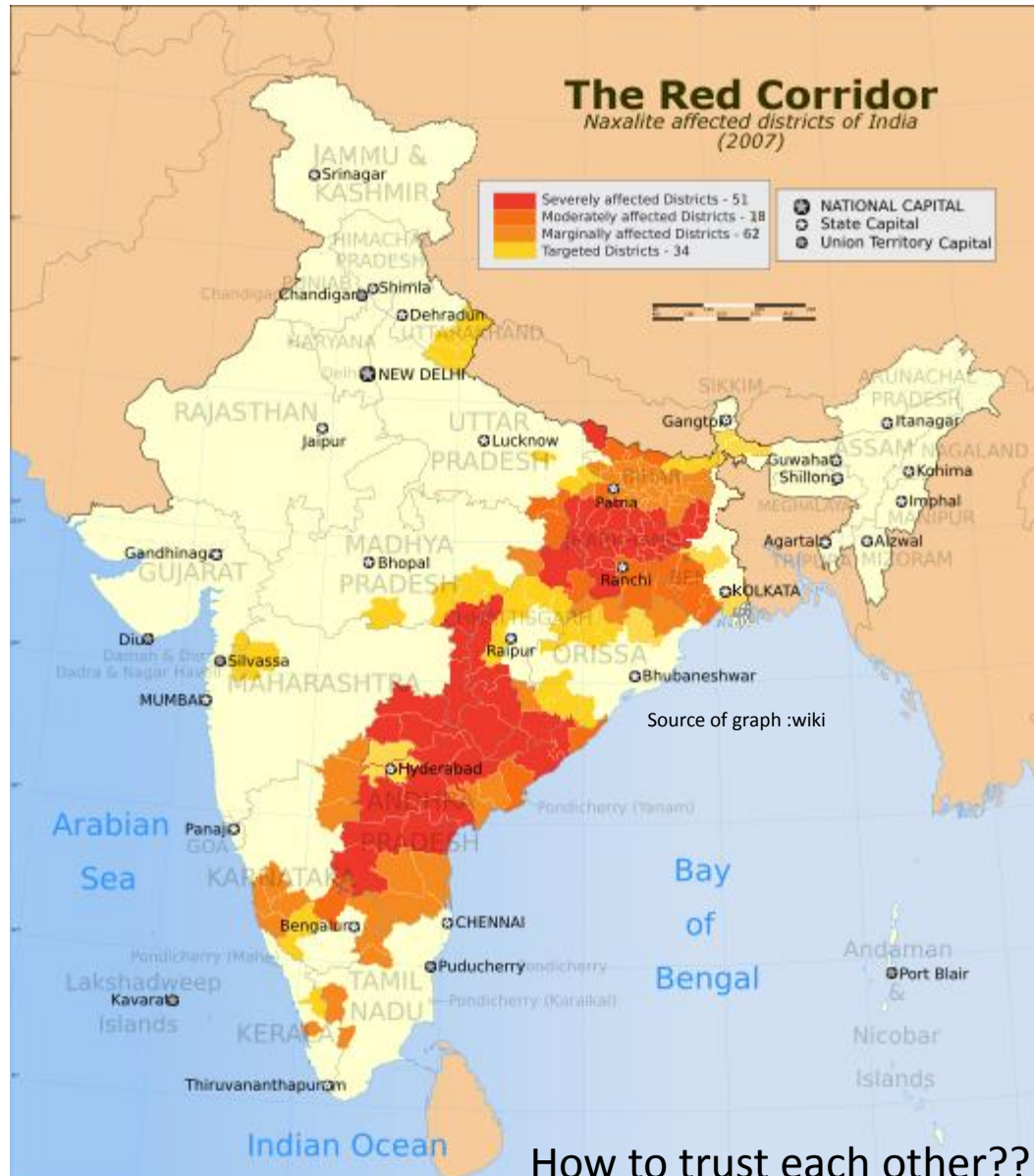
Rule of Law

No corruption

Value of life

What is the option from other parties??

Common people are fed up.



Communism exists only in theories

People are motivated by system of rewards for good acts and punishment for bad.

Equal opportunities through education

None delivering.

All same.

How to trust each other??

Good mechanism from top to the bottom requires honesty of words and actions

# Problems and Prospects

## Problem

- Nepal is one of the poorest country in the world now.

## Prospect

- Nepal can be one of the best country in 100 year's time with the economic policies based on cooperation, trust, investment
- May remain like this or become even poorer if current deadlock/noncooperation continue

