

# Helping the poorest nations: Bangladesh and Indonesia (Ethiopia?) aid and trade....

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**World Poverty and Economic Development  
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# How to help Malawi vs. Bangladesh?

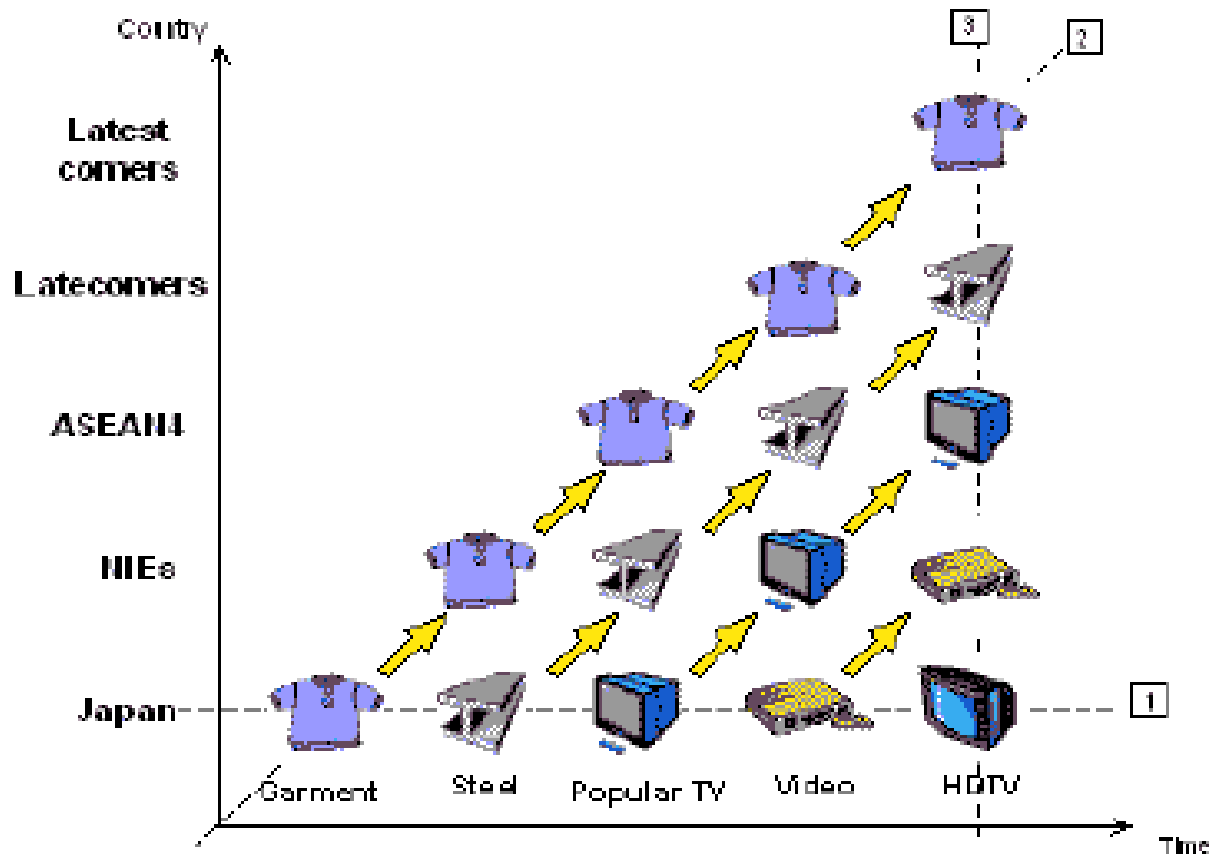
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- Malawi, Aid then trade, needs green revolution (fertilizer subsidies).
- Bangladesh (BGD): had Aid, now trade... food aid in 1973: trade sanctions, World Food Program.
- BGD got special access to MFA quota (expired last year, except for China).
- See NY Times article on fertilizer subsidies..

# Flying Geese Justin Lin see also MIT complexity lab, industry clusters

Figure 5  
Asian 'wild geese flying' pattern

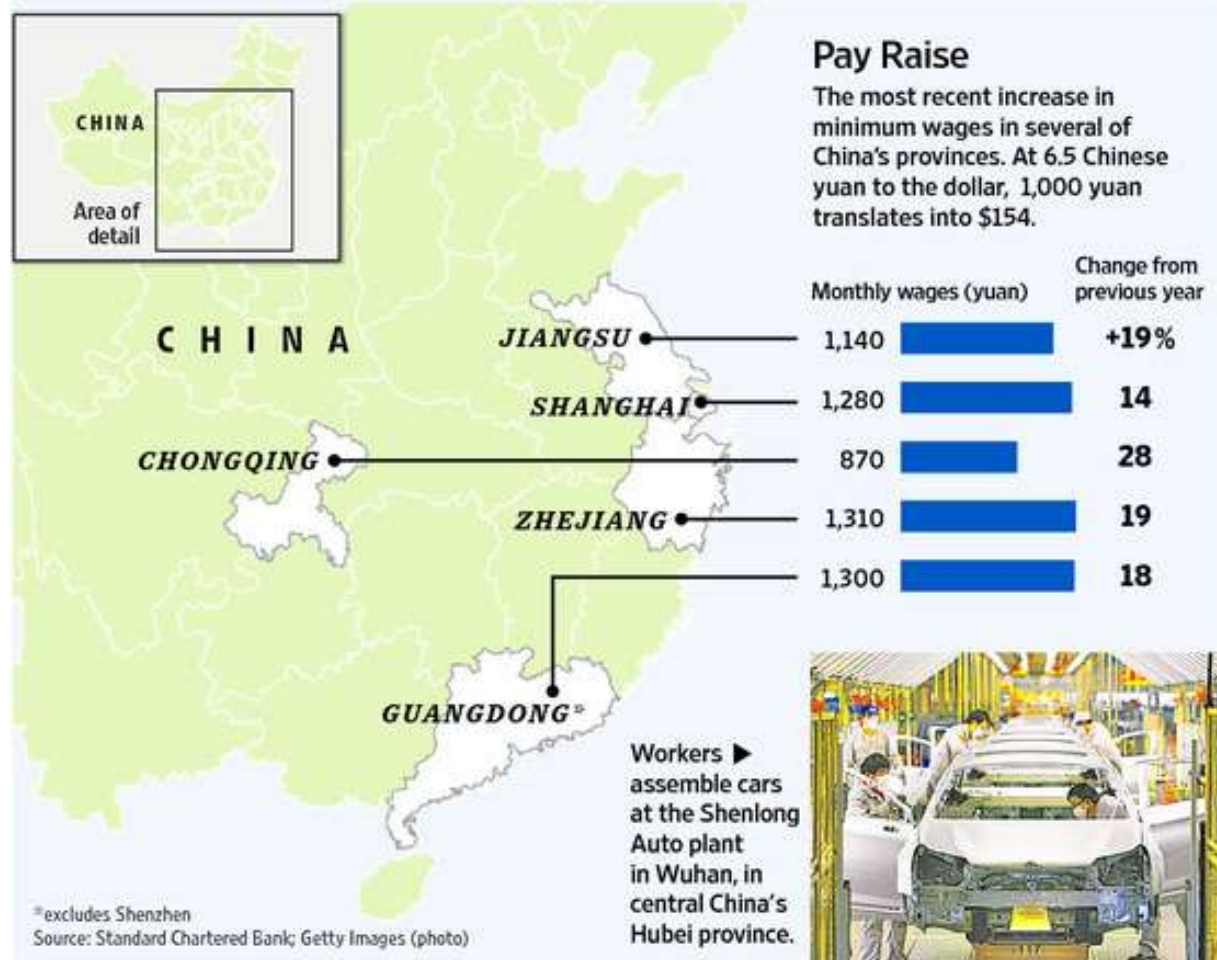
## Structural Transformation in East Asia



# Flying Geese Justin Lin

Rising wages in China (2011) pave way for BGD & Ethiopia? See WSJ on garment exports from BGD

Wages rising in most poor regions



# Geese still flying (Akamatsu)

Table 1  
Geese still flying in Asia: country rankings in selected industries, 1992 and 2008

<u>Country</u>	Live animals		Pharmaceuticals		Footwear		Iron & steel	
	1992	2008	1992	2008	1992	2008	1992	2008
China	1	1	2	3	1	1	3	1
India	5	4	3	1	4	2	4	4
Japan	3	3	1	2	5	5	1	2
Korea Rep.	2	5	4	4	2	4	2	3
Thailand	4	2	5	5	3	3	5	5

<u>Country</u>	Plastics		Electrical machinery, parts		Television receivers		Toys	
	1992	2008	1992	2008	1992	2008	1992	2008
China	3	1	3	1	3	1	1	1
India	5	5	5	5	5	5	5	5
Japan	1	2	1	2	1	2	2	2
Korea Rep.	2	3	2	3	2	3	3	4
Thailand	4	4	4	4	4	4	4	3

Note: Rankings established from data at the two-digit level for exports in the WITS database.

Source: World Bank, WITS database.

# Geese still flying (Akamatsu)

Table 2

Flying geese and the international division of production: Asian economies with a revealed comparative advantage in footwear, 1962–2000

		RCA in Footwear							
1962	1965	1970	1975	1980	1985	1990	1995	2000	
Japan	Japan								
China	China	China	China	China	China	China	China	China	
	Taiwan, China	Taiwan, Ch.	Taiwan, Ch.	Taiwan, Ch.	Taiwan, Ch.	Taiwan, Ch.			
	S. Korea	S. Korea	S. Korea	S. Korea	S. Korea	S. Korea			
		Pakistan							
				Philippines	Philippines	Philippines			
					Thailand	Thailand	Thailand	Thailand	} Other L-MICs /LICs
						Indonesia	Indonesia	Indonesia	
						India	India	India	
						Vietnam	Vietnam	Vietnam	
						Sri Lanka	Sri Lanka	Sri Lanka	
							Myanmar	Myanmar	
							Bangladesh	Bangladesh	
							Fiji	Fiji	
							Cambodia	Cambodia	

Note: Revealed comparative advantage is calculated as the share of footwear in the economy's exports divided by the share of footwear in global exports. The comparative advantage of a particular economy is 'revealed' when this ratio is greater than 1. All economies in the table except China are ranked by income level.

Source: UN COMTRADE data.

## What about Labor standards?

1. Krugman and Kristof warn labor standards undermine competitiveness of lowest wage countries (Niger, Africa, Cambodia...). What is their argument?
2. Others, including ILO Better Factories/jobs argue It is possible to have both?
3. WB's [2012 NARI \(woman\) program](#) offers to protect women from rural Bangladesh who want to migrate but fear urban areas.

# Summary

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- Flying Geese (Justin Lin) rising wages
- Slain dragons Institutions & Poverty trap
- Asian Tigers to African Lions: boom in Africa
- Clusters of trees (industrial policy vs. free trade)
- Growth miracle? Can Africa can make MDG 1...or at least MDG 4? No, but some countries can, find



# The Bangladesh miracle: women's agency, social innovation "workaround" bad institutions, very bad government...

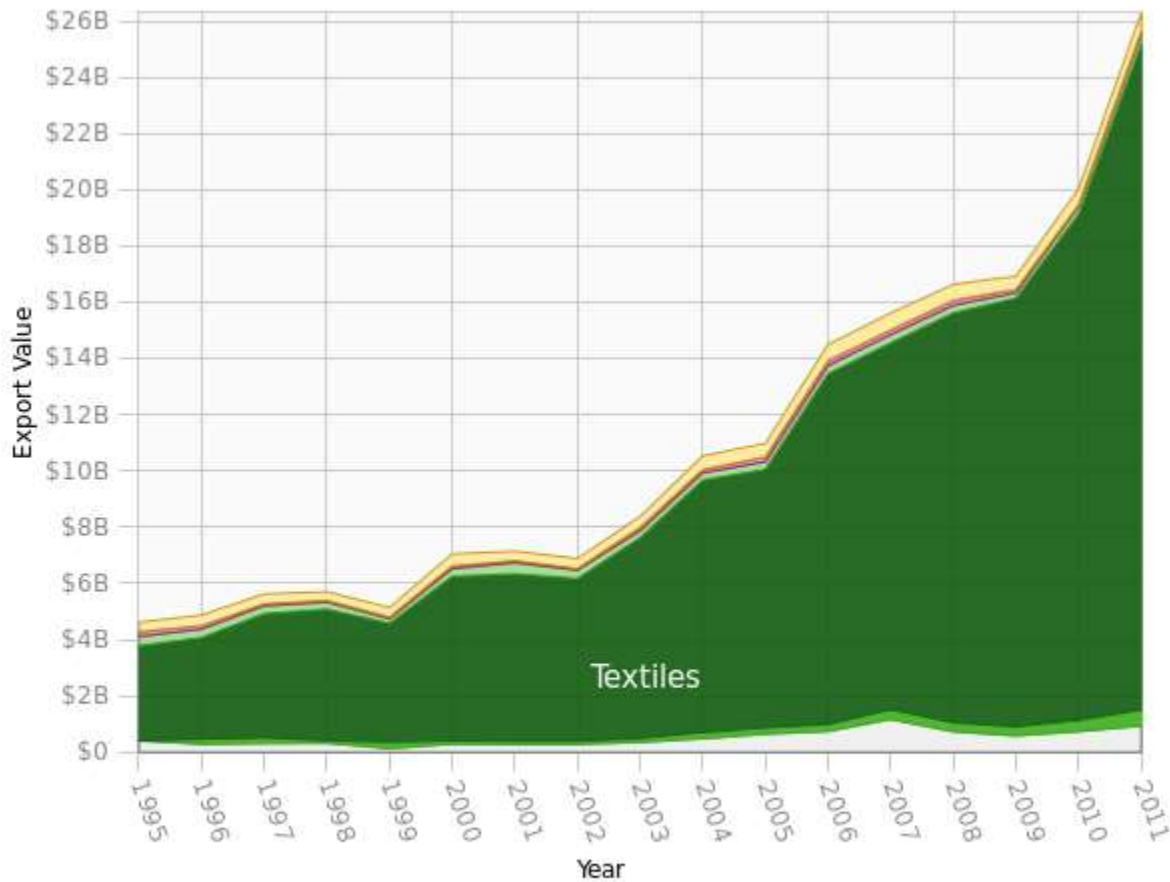
- Mohammed Yunus, social innovation, thought up microfinance Grameen (but Accion may have been first).
- Low wage garment export jobs: U.S. MFA forced Korean company to move to Dhaka to get quota.
- Amazing fall in population growth, see Melinda Gates letter part 3, 2014
- Immigration, remittances from middle east countries mainly (Egypt, Saudi Arabia).
- Health system, access to contraception... See QJE 2009 T. Paul Schultz on Matlab...

# The Bangladesh miracle: 2011 exports

Total: \$26.3B



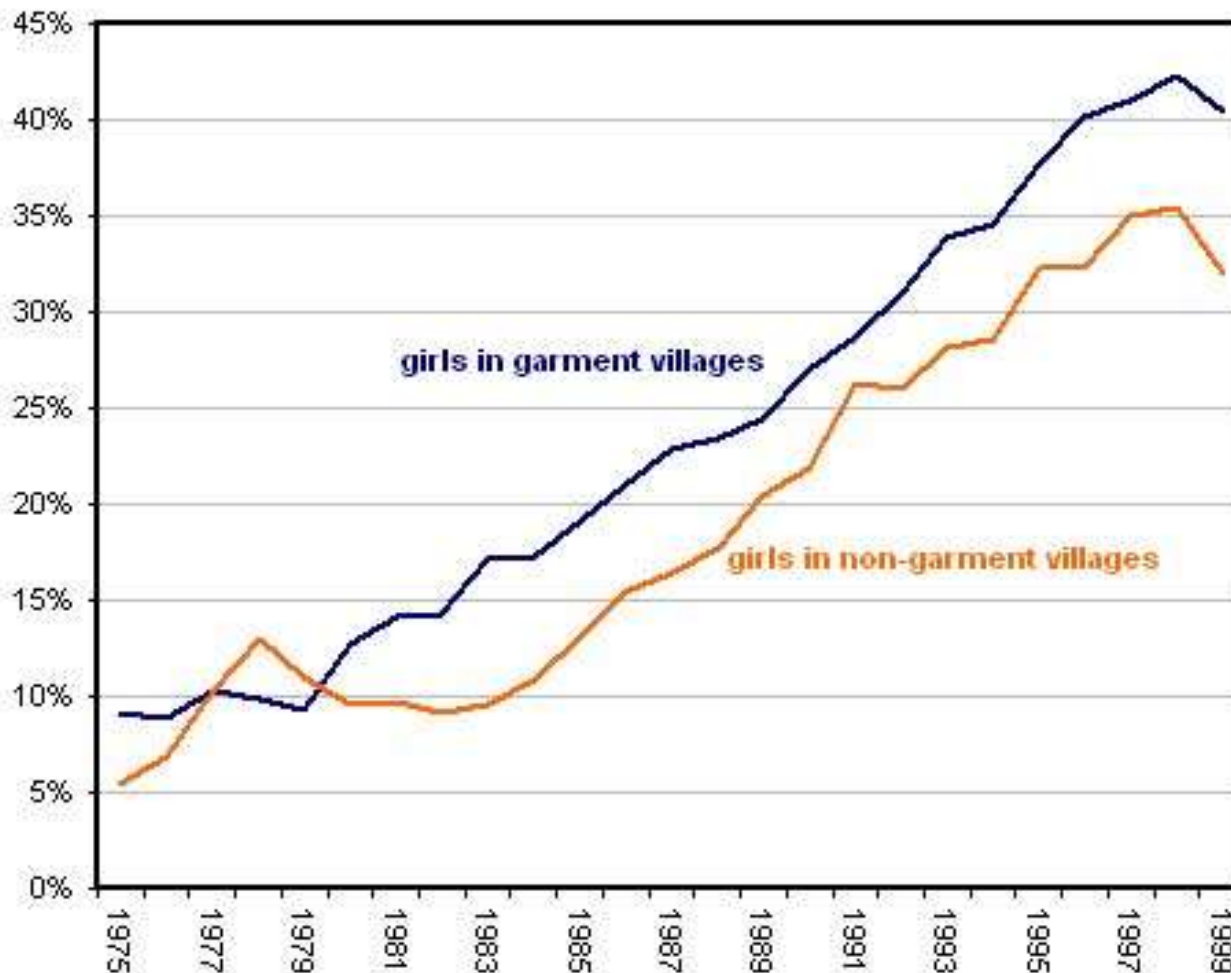
# The Bangladesh miracle garment exports (source MIT “Observatory of complexity”)



# Bangladesh garment factory associated with higher girl's school enrollment

(mainly for 5-14 group, no effect on boys or 15-18 enrollment, see: Vikas Bajaj (2010) Garment Factories, "[Changing Women's Roles in Poor Countries](#)" *NY Times*, *Economix* blog- *Explaining the Science of Everyday Life* July 21, 2010)

Percent of females in Bangladesh, ages 5-18, enrolled in school



# How Bangladesh became a major garment exporter

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- Bangladesh (BGD): received considerable food aid (“Map of the world” a David Hare play based on a major food aid scandal in 1973 in which the United States “punished” World Food Program).
- After this BGD got special access to MFA quotas (expired in 2005, except for China).
- How did BGD Garment industry get started?

Daewoo industries opened plant in 1979, the OECD boosted MFA quotas (twice) and the rest is history

# Why garment exports jobs help reduce poverty & empower women?

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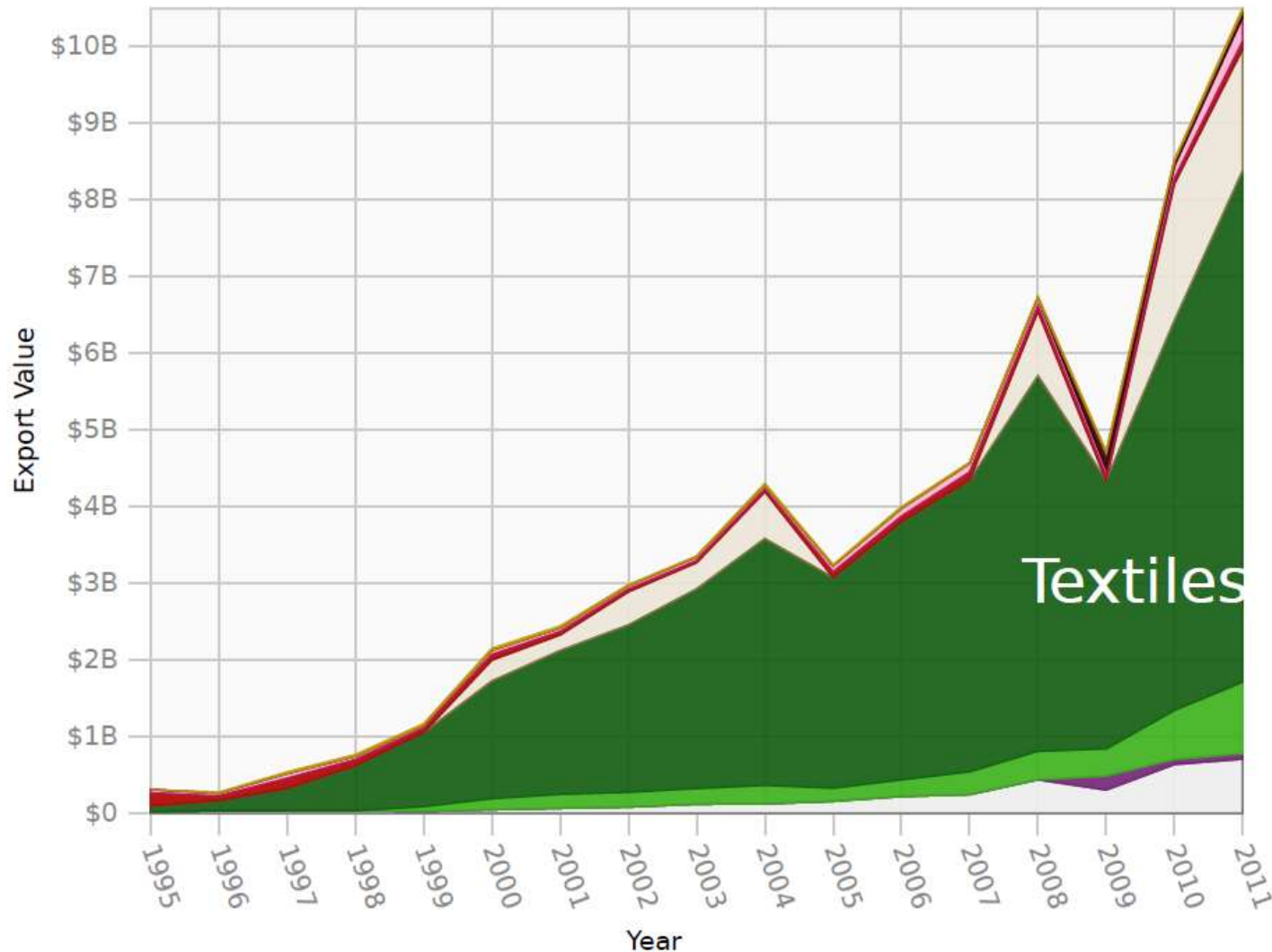
- Apparel workers hire mainly women: true in NYC lower east side & in Brooklyn too
- Delay marriage 17 to 20 (see Gruben & McLeod, 2006 page 6)
- Employers hire & promote educated young **women** (recall Min's handwriting... Junior high required for garment jobs in Bangladesh, see G&R, 2006 page 5)
- Remittances sent to parents who treat "treat their daughters like sons..." (Chang, 2009, chapter 10)
- Number of "missing women" falls as girls get more food and health care within family...

# Why garment exports jobs help reduce poverty & empower women?

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- Child marriage raises risk malnutrition and maternal mortality.
- Both supply (education) and demand side policies matter (Supply vs. Demand Wallas in B&D, 2012)
- Heath and Mubarak 2012 find scholarships do nothing, but jobs make a big difference (see Figure below) \*  
Does Demand or Supply Constrain Investments in Education? Evidence from Garment Sector Jobs in Bangladesh
- See also Gruben and McLeod, 2006.

# Some progress Cambodia Exports



1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
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# How the garment industry started in Bangladesh? MFA quota caused spread, low wages, scale helped

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“in **1979** Daewoo signed a collaborative agreement with Dosh Garment Ltd in Bangladesh. Daewoo agreed to bring 130 Bangladeshi workers to South Korea for training at a Daewoo plant in return for Dosh paying commissions amounting to 8 percent of future sales. At the time of the training there were a total of 40 workers producing garments in Bangladesh, and Dosh’s first year of operations produced \$55,050 in sales on 43,000 shirts. **By 1987 the** industry’s output had grown to 2.3 million shirts. During the 1980s, of the 130 Bangladeshi workers initially trained by Daewoo, 115 of them had left Dosh to set up their own garment export firms.” see, Beaudry, P. and P. Francois, 2005, Managerial Skill Acquisition and the Theory of Economic Development, NBER Working Paper

No. 11451 June. (same story reported in UNDP’s 2004 Report Unleashing entrepreneurship

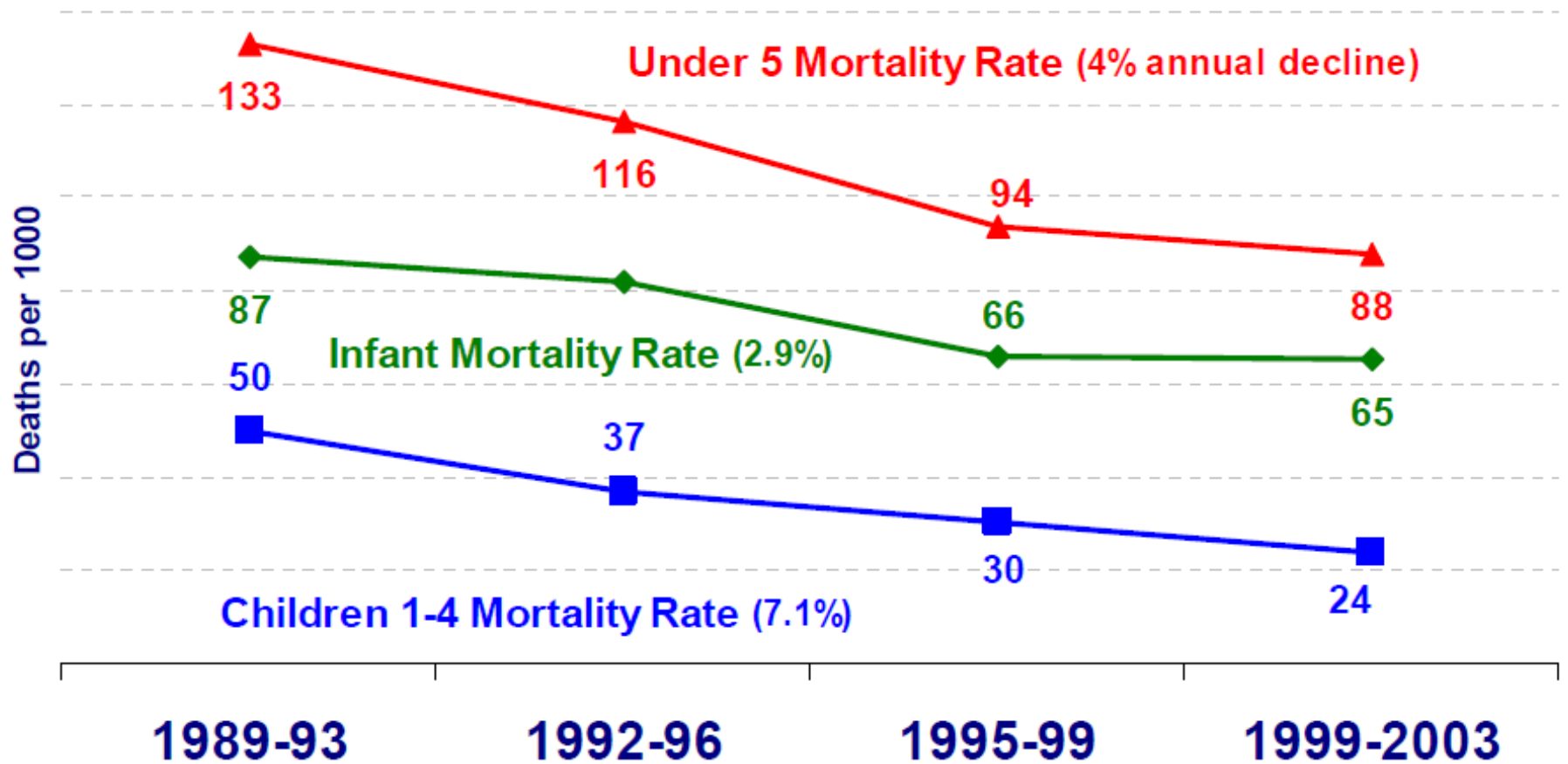
# Why Poverty fell rapidly in Indonesia (and in China, Vietnam, Bangladesh....)

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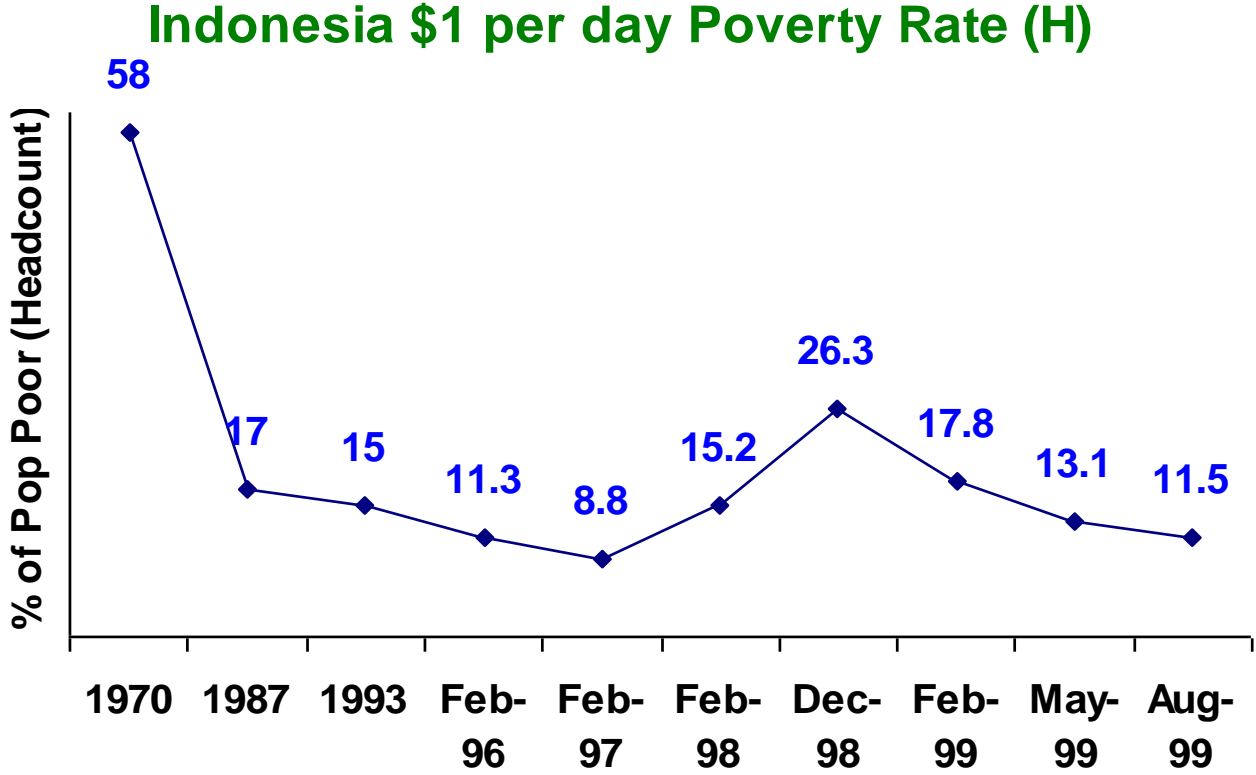
- **Green Revolution** in the 1970s tripled rise yields raising the incomes of many small farmers **Higher farm incomes** led to new spending on goods and services by richer farmers (Engle's law\*\* at work...).
- **Education particularly of women** key in India & Bangladesh (Kerala).
- **Light manufacturing exports**, NIKE and other multinationals set up factories to export shoes and garments from Indonesia Villager's & migrants sent kids to school (with shoes).

\*\*Engle's law: incomes double, people do not double their spending on food; they buy other goods and services, which creates jobs outside of agriculture demand for other goods and services and exports account for most of employment nationally and even in a small village like Begajah in Indonesia.

**Figure 5: Bangladesh DHS Child Mortality Trends**  
(annual rate of decline)

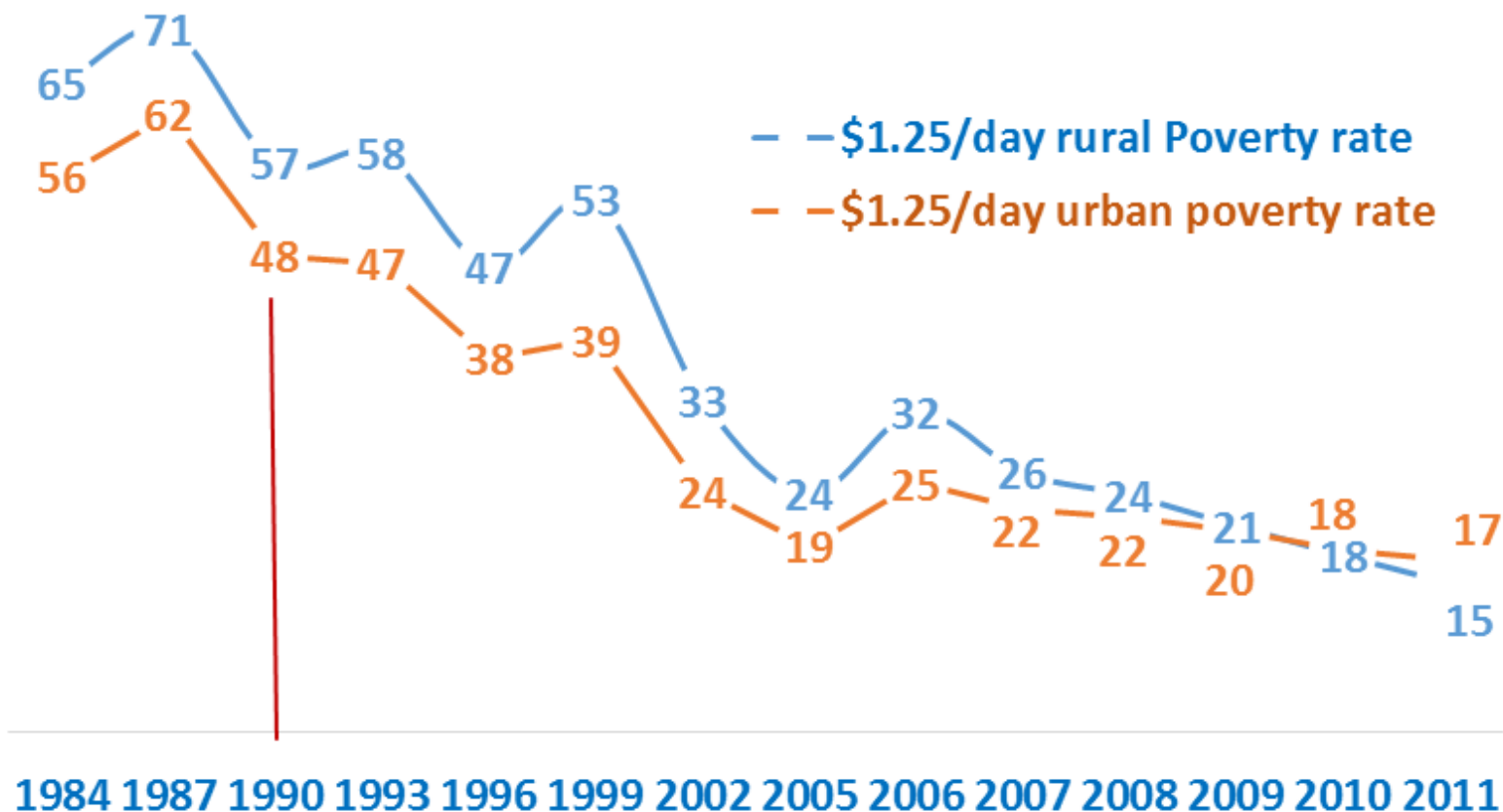


# Poverty Fell sharply and then rose a bit in Indonesia...



# Poverty Fell sharply and then rose a bit in Indonesia... a record reversal? 1987-2004

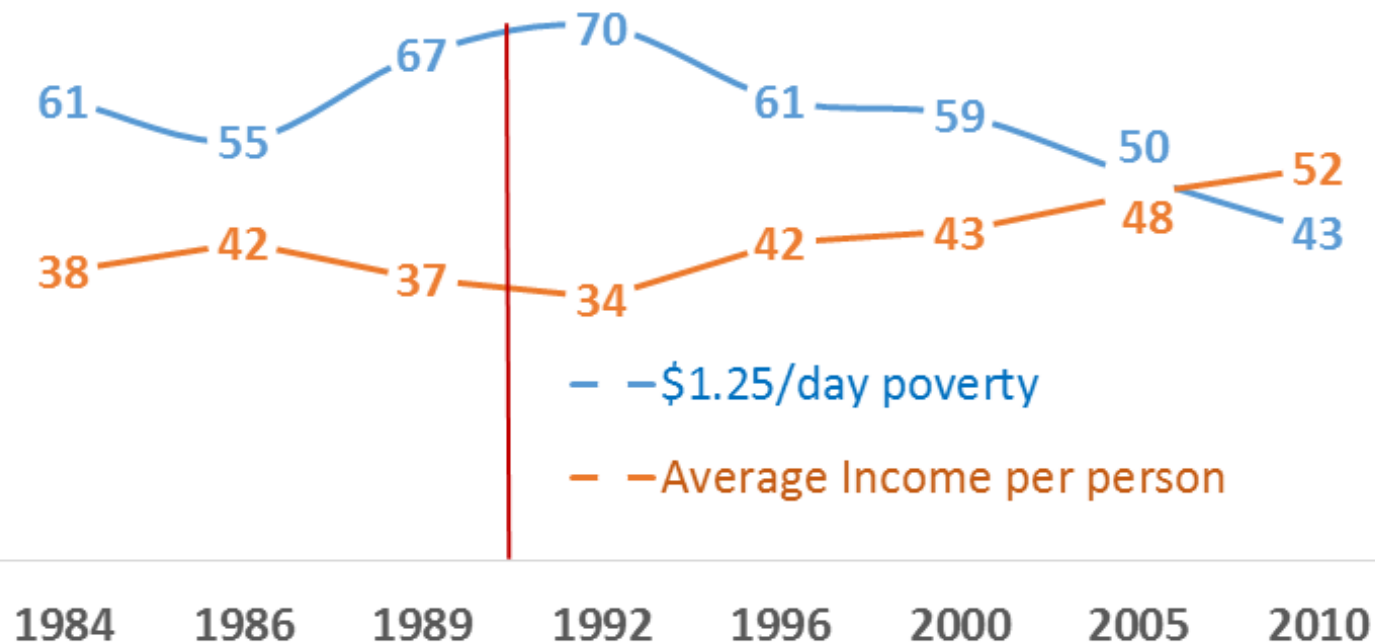
**FIGURE P-1: INDONESIA MDG-1 POVERTY**



Source 'PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank (<http://iresearch.worldbank.org/PovcalNet/index.htm>)

**Poverty falling in BGD on track....**but from 59% in 2000 to 43% in 2010, or about 1.6% per year,  $5 * 1.6 = 8$  so perhaps 35% in 2015, exactly MDG 1...

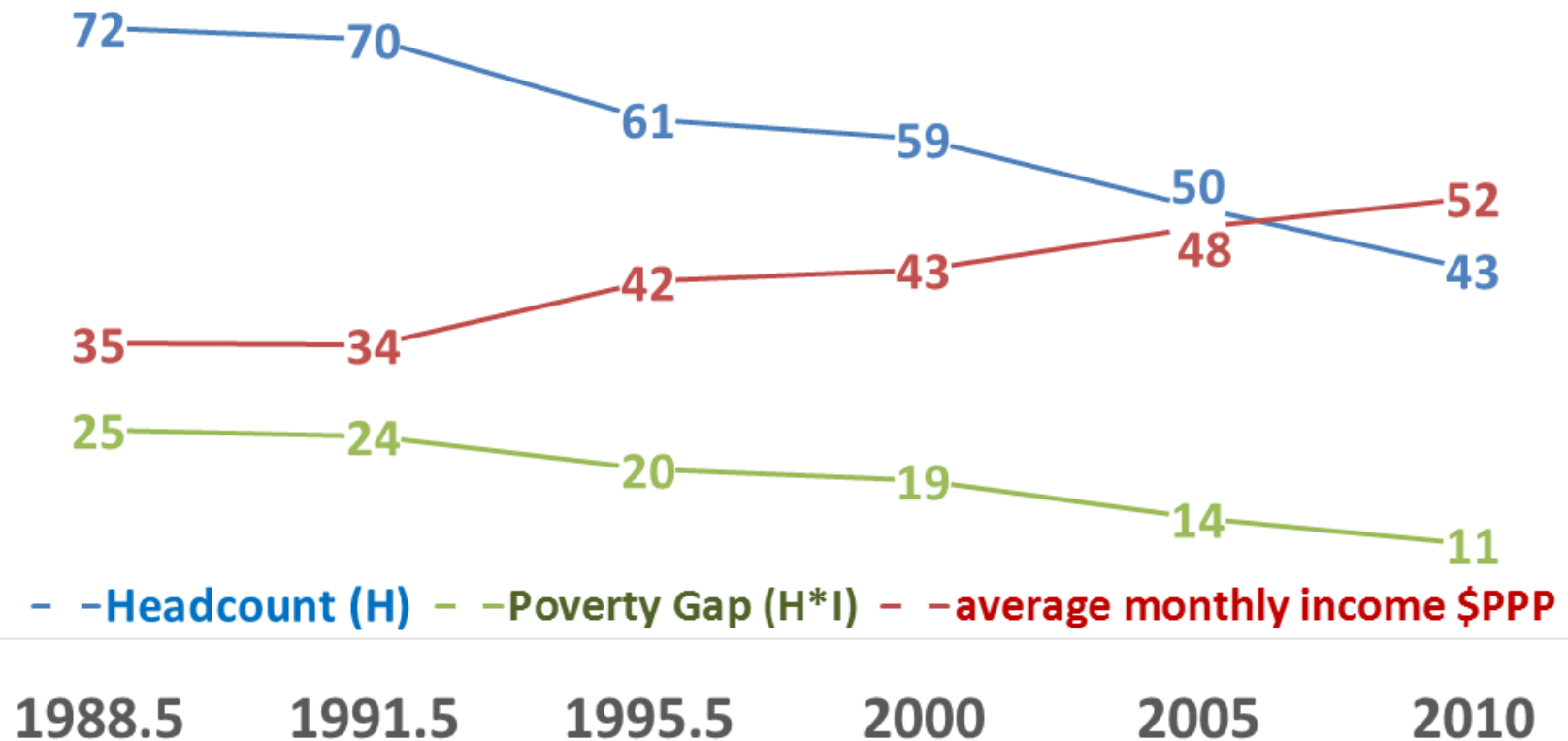
**FIGURE P-3 BANGLADESH \$1.25/DAY POVERTY**



Source 'PovcalNet: the on-line tool for poverty measurement developed by the Development Research Group of the World Bank (<http://iresearch.worldbank.org/PovcalNet/index.htm>)

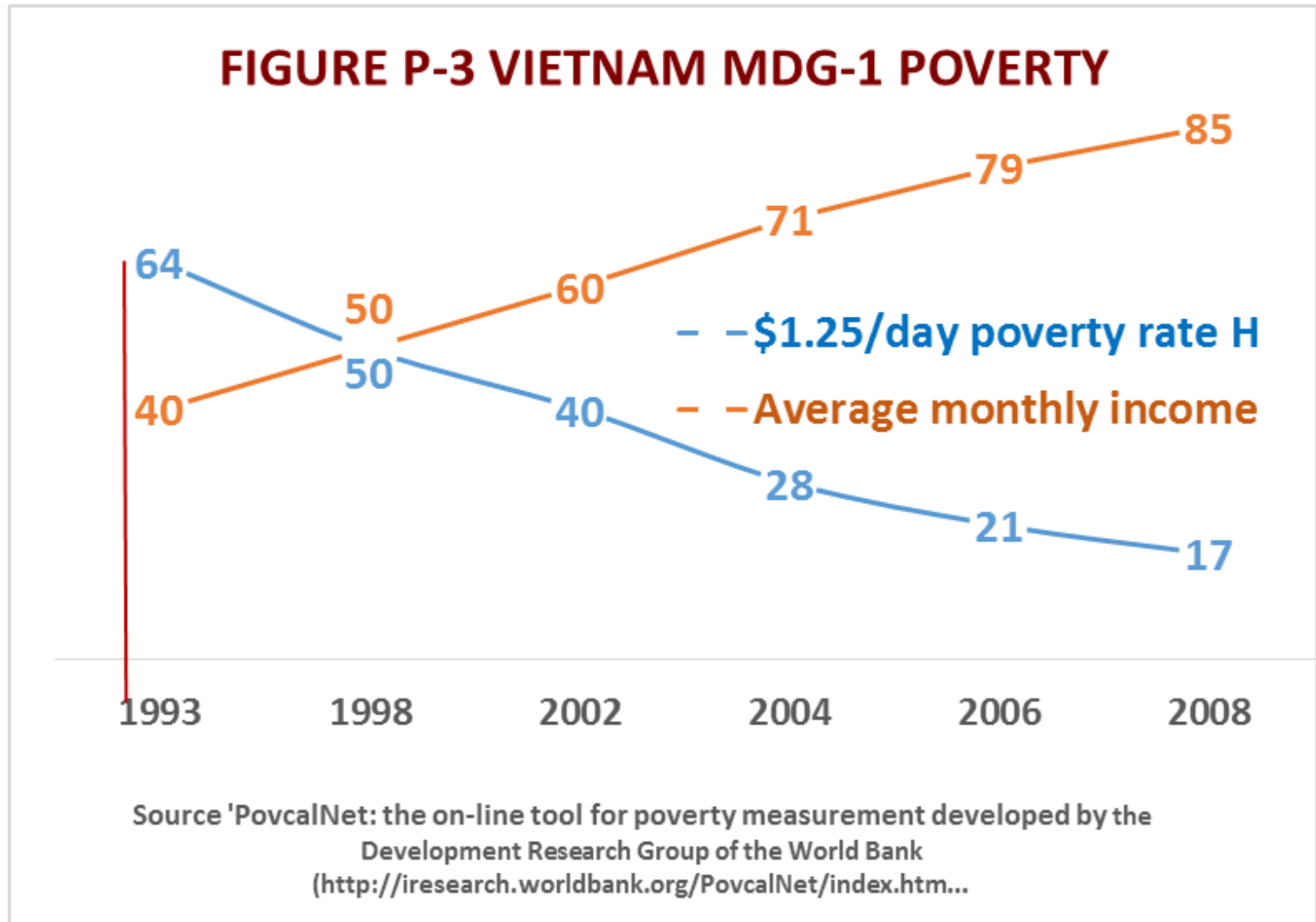
**Poverty falling in BGD on track....**but from 59% in 2000 to 43% in 2010, or about 1.6% per year,  $5 * 1.6 = 8$  so perhaps 35% in 2015, exactly MDG 1...

**FIGURE SA-2: BANGLADESH \$1.25/DAY POVERTY RATE**



Source: World bank Povcalnet (February 2015) <http://iresearch.worldbank.org/PovcalNet/povcalSvy.html>

# Vietnam: done with MDG 1 in 2004... 10 years early!





# Bangladesh growing rapidly but vulnerable to climate change..

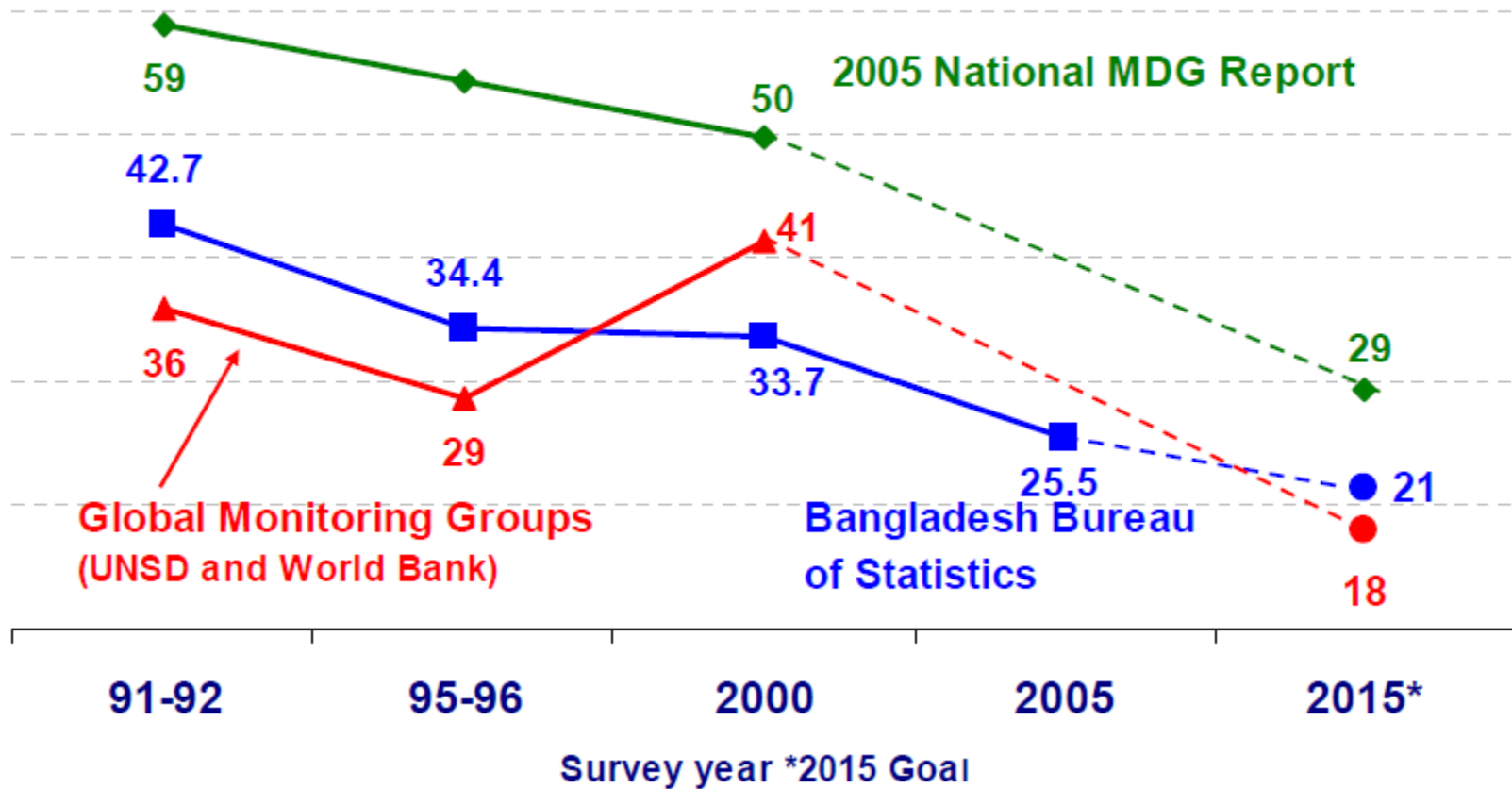
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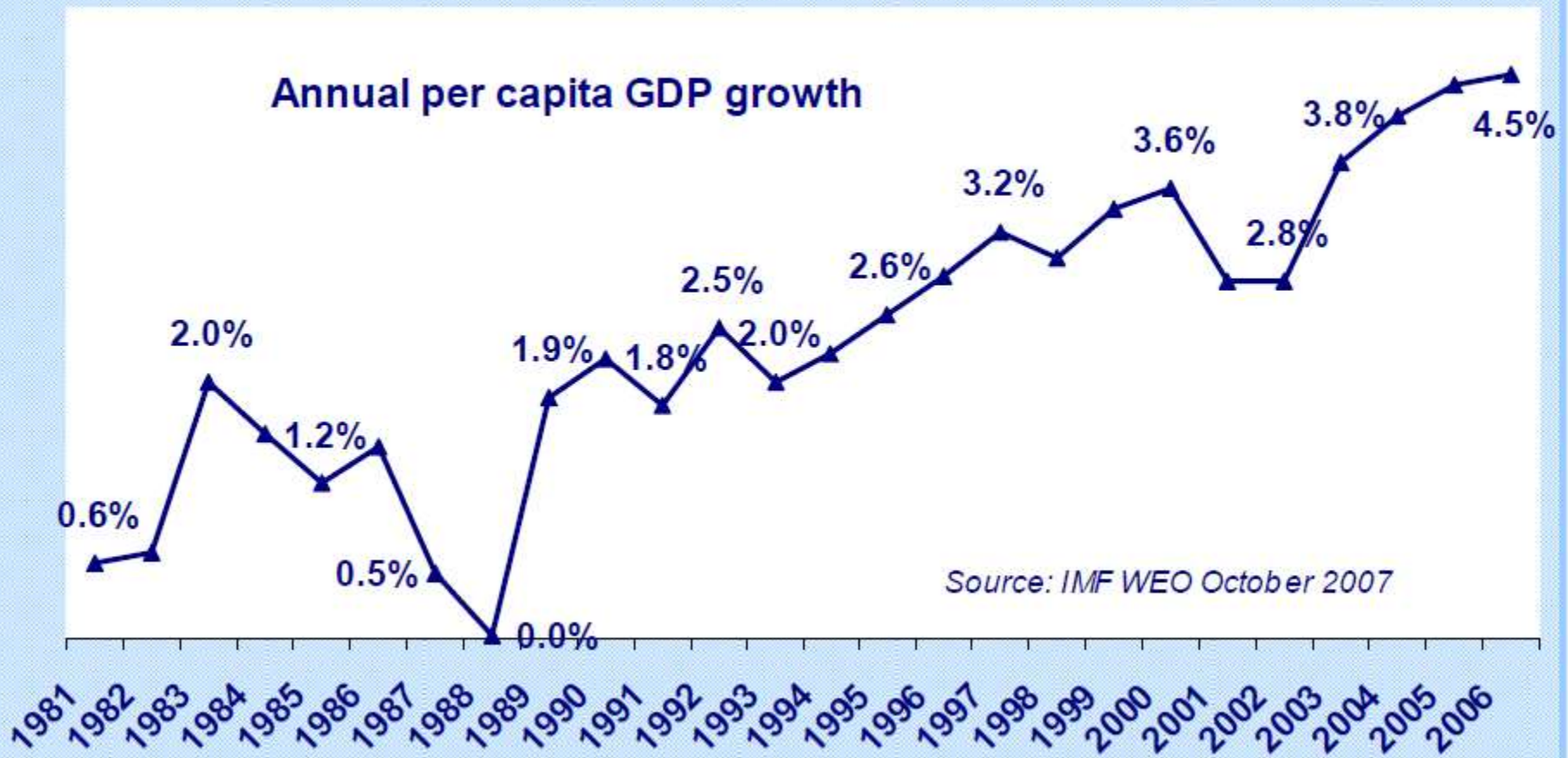
**Globalization & Capitalism made about a billion rich, two billion remain poor and about 3 billion are in the “new middle class”** —

- **Still, many remain in severe poverty in the world...** according to the World Bank, about a billion people still get by on less \$1.25/day.
- **Lack mobility,** cannot afford education: \$1 per day only buys about 2250 calories of coarse cheap grain (no meat, few clothes– but see B&D, 2011).
- **Vulnerable to Poverty** \$2-\$10 not poor, but risk falling back
- **Middle class:** > \$10 per day, less likely to fall back into poverty

## Figure 2: Bangladesh Poverty Trends



# Figure 1: Bangladesh growth accelerated after 1990



# Bangladesh: on track to meet MDGs?

## MILLENNIUM DEVELOPMENT GOALS : BANGLADESH PROGRESS AT A GLANCE

Goals, Targets and Indicators (revised)	Base year 1990/1991	Current Status	Target by 2015
<b>Goal 1: Eradicate Extreme Poverty &amp; Hunger</b>			
<b>Target 1.A: Halve, between 1990 and 2015, the proportion of people below poverty line</b>			
1.1 : Proportion of population below national upper poverty line (2122 k.cal.), percent	56.6	40.0(2005)	29.0
1.2 Poverty Gap Ratio, percent	17.0	9.0(2005)	8.0
1.3 Share of poorest quintile in national consumption, percent	6.5	5.3(2005)	na
<b>Target 1.B: Achieve full and Productive employment and decent work for all, including women and young people</b>			
1.5 Employment to population ratio, Percent	48.5	58.5(2005)	for all
<b>Target 1.C : Halve, between 1990 and 2015, the proportion of people who suffer from hunger</b>			
1.8 Prevalence of underweight children under five years	66.0	47.8(2005)#	33.0
1.9 Proportion of population below minimum level of dietary energy consumption, percent	28.0	19.5(2005)	14.0
<b>Goal 2: Achieve Universal Primary Education</b>			
<b>Target 2.A : Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling</b>			
2.1 Net enrollment in primary education, percent	60.5	91.1(2007)	100
2.2 Proportion of pupils starting grade 1 who reach grade 5, percent	40.7	79.8(2009)	100
2.3 Adult literacy rate of 15+ years old population(proxy), percent	37.2	59.1(2008)	-
Adult literacy rate of 15-24 years old population(Female), percent		72.0(2009)	-

# Bangladesh: on track to meet MDGs?

<b>Goal 3: Promote Gender Equality and Empower Women</b>			
<b>Target 3.A : Eliminate gender disparity in primary and secondary education preferably by 2005, and in all levels of education no later than 2015</b>			
3.1a Ratio of girls to boys in primary education(Gender Parity Index=Girls/Boys)	0.83	1.03(2009)	1.0
3.1b : Ratio of girls to boys in secondary education(Gender Parity Index=Girls/Boys)	0.52	1.17(2009)	1.0
3.1c : Ratio of girls to boys in tertiary education(Gender Parity Index=Girls/Boys)	0.37	0.61(2006)	1.0
3.2 Share of women in wage employment in the non-agricultural sector, percent	19.1	14.6(2005)	50
3.3 Proportion of seats held by women in national parliament, percent	12.7	19.0(2009)	33
<b>Goal 4: Promote Gender Equality and Empower Women</b>			
4.1 Under-five mortality rate (per 1000 live births)	146	67(2009)	48
4.2 Infant mortality rate (per 1000 live births)	92	45(2009)	31
4.3 Proportion of 1 year-old children immunized against measles, percent	54	88(2006)	100
<b>Goal 5: Improve Maternal Health</b>			
<b>Target 5.A : Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio</b>			
5.1 Maternal mortality ratio, per 100,000 live births	574(1990)	348(2008)	144
5.2 Proportion of births attended by skilled health personnel, percent	5.0	24.4(2009)	50
<b>Target 5.B : Achieve, by 2015,universal access to reproductive health</b>			
5.3 Contraceptive prevalence rate, percent	39.7	59.0(2007)	-
5.4 Adolescent birth rate, per 1000 women	77.0	59(2007)	-
5.5a Antenatal care coverage (at least one visit), percent	27.5(1993)	60.3(2007)	100
5.5b Antenatal care coverage (at least four visit), percent	5.5(1993)	20.6(2007)	100
5.6 Unmet need for family planning, percent	19.4(1993)	17.6(2007)	-

# Bangladesh: on track to meet MDGs?

<b>Goal 6: Combat HIV/AIDS, malaria and other diseases</b>			
<b>Target 6.A : Have halted by 2015 and begun to reverse the spread of HIV/AIDS</b>			
6.1 HIV prevalence among population (per 100,000 population)	0.005	0.319(2007)	Halting
6.2 Condom use rate, percent	-	4.5(2005)	no target
6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS, percent	-	15.8(2006)	
<b>Target 6.C : Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases</b>			
6.6a : Prevalence of malaria per 100,000 population	43(2000)	59(2008)	Halting
6.6b : Death rate associated with malaria per 100,000 population	0.37(2000)	0.11(2008)	Halting
6.7 : Proportion of Children under-5s sleeping under insecticide treated bed nets [13 Malaria prone districts] percent	-	89(2008)	-
6.9a : Prevalence of TB per 100,000 population	264(1990)	225(2007)	Halting
6.9b : Death rates associated with TB per 100,000 population	76(1990)	45(2007)	Halting
6.10a : Detection rate of TB under DOTS, percent	21(1994)	73(2007)	Sustain
6.10b : Cure rate of TB under DOTS, percent	73(1994)	91(2006)	Sustain
<b>Goal 7: Ensure Environmental Sustainability</b>			
<b>Target 7.A : Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources</b>			
<b>Target 7.B : Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.</b>			
7.1 Proportion of land area covered by forest (percent) (tree coverage)	9.0	19.2(2007) Tree density > 10%	20.0 Tree density > 70%
7.2 CO2 emissions, metric tons per capita	0.14	0.30(2007)	
7.3 Consumption of ozone-depleting CFCs in metric tons	195	155(2007)	0
7.4 Proportion of fish stock within safe biological limits			
7.5 Proportion of total water resources used, percent		6.6(2000)	
7.6 Proportion of terrestrial and marine areas protected, percent	1.64	1.68(2007)	5.0
7.7 Proportion of species threatened with extinction			

# On track to meet MDGs

<b>Target 7.C : Halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation</b>			
7.8 Proportion of population using an improved drinking water sources, percent	89.0	97.8(2009)*	100
7.9 Proportion of population using an improved sanitation facility, percent	21.0	80.4(2009)	60
<b>Target 7.D : By 2020, to have achieve a significant improvement in the lives of at least 100 million slum dwellers</b>			
7.10 : Proportion of urban population living in slums, percent		7.8 (2001)	
<b>Goal 8: Develop a Global Partnership for Development</b>			
<b>Target 8.A : Develop further an open, rule-based, predictable, non discriminatory trading and financial system</b>			
<b>Target 8.B : Address the special needs of the least develop countries</b>			
<b>Target 8.C : Address the special needs of landlocked developing countries and small developing states</b>			
<b>Target 8.D : Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term</b>			
8.1a : Net ODA received by Bangladesh (million US\$)	1240	98.1 (2007-08)	-
8.1b : Net ODA received by Bangladesh, as percentage of OECD/DAC donors' GNI	5.7	0.2(2008)	-
8.2 : Proportion of total bilateral sector-allocable ODA to basic social services, percent		42(2005)	-
8.3 : Proportion of bilateral ODA of OECD/DAC donors that is untied (received by Bangladesh) , percent		82(2005)	-
8.7 Average tariffs imposed by develop countries on agriculture products, textiles and clothing from developing country (Bangladesh), percent		12-16 (2006)	-
8.12 : Debt service as a percentage of exports of goods and services, percent	20.9	7.9(2007)	
<b>Target 8.F : In cooperation with the private sector, make available the benefits of new technologies, especially information and communication</b>			
8.14 Telephone line per 100 population	0.2	0.92	-
8.15 Cellular subscriber per 100 population		30.8 (2008)	
8.14 Internet users per 100 population	0.0	3.4(2008)	-



# Barriers to growth

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- Poor institutions, property rights, credit markets etc. (corruption, misuse of aid)
- Resource curse.. Nigeria, Venezuelas
- Capital and trade flows: handmaidens
- Debt crises... many debt crises
- In Africa especially: poverty traps, low savings, low public investment, poor health rapid population growth...

# Poverty traps & growth in Africa

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- ❑ Absolute convergence 2000-2013
- ❑ Reversal of fortune (China and India)
- ❑ Capital and trade flows: working in reverse
- ❑ Debt crises... HIPC, Live Aid,
- ❑ In Africa especially: poverty traps, ethnic divisions, low public investment, poor health, high population growth...

## Fixing institutions workarounds (bottom up globalization)

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- ❑ NGOs parallel institutions Cambodia ILO
- ❑ Microfinance and remittances...
- ❑ Substitute militaries, peace keepers.
- ❑ EPZs and weak exchange rates
- ❑ Migration, diasporas and remittances
- ❑ Global health fund:
- ❑ Multi-national investment: China
- ❑ Charters and international agreements, e.g, the Kimberly accord (see Collier, 2008)