

Poverty and mobility in Indonesia, Vietnam, India and who is \$1/day poor?: Use the assigned questions to target your readings. Most of these questions refer to the [Indonesia Case Study Part II](#) and the other readings from case study 2.1 on this old [course web page](#) but the essential readings are Chang Factory girls Chapters 1 and 10 (see below) and the [PPP handout discussed in class](#). Recall that the international poverty rate was \$1/day but then increased to \$1.25 to account for inflation in 2010 (with the 2005 \$PPP estimates). One PPP dollar in 1993 U.S. prices purchased about 2250 calories in most countries. Some say this is too low a line, others say it is way too high (2250 calories cost less than \$1 or \$1.25 a day). Jim Keady and Leslie Kretzu (see the PPP handout) think \$1.15/day is too low. Duflo and Banarjee (2011) in Poor Economics and the picture below of a school girl in Indonesia suggest food prices tend to be low even in some urban areas. Similarly, [Kristof and Wudunn](#) bought a hot meal with fried beetles for about 5 cents in Thailand. Costs have gone up with wages, but the cost of locally produced goods and services are generally lower in poor countries (because wages are lower). We have to adjust wages reported at market exchange rates to determine who is officially poor and who is not. Fortunately, we let the World Bank and others do this for us, but we still need to understand how they do it. As discussed in PPP handout, a dollar in Indonesia goes further than it does here. To account for lower prices we have to multiply Indonesian dollar wages by a PPP conversion factor which varies by country from say 1.5 to 4 (see examples from the World Bank and IMF below). The purpose of these exercises is to determine whether apparel or footwear workers are poor by any international standard, and to discuss what can be done to improve working conditions and further reduce poverty in countries like Bangladesh, Vietnam, Indonesia and Cambodia that have large garment or footwear export sectors in many cases producing the shoes and clothes we purchase here in the U.S. See also [better factories](#) in Cambodia and recent articles on Foxconn in China ([the “human cost” Iphones](#)).

3.1 Purchasing power parity: a) Why does a dollar go much further India or China, especially in rural areas? The purchasing power of the dollar varies across countries due to differences in wages and other non-tradable goods which in turn lower the cost of many services, rents, etc. List a range of prices for American Sniper or Birdman or any movie playing right now NYC and [Mumbai, India](#).



Table A1

get movie prices in Mumbai in Rupees, the local currency	350	220	180	160	150	110
Convert Mumbai prices using the market exchange rate to get prices in US \$. The market rate is 60 Rupees per \$US.	350/60= 5.65	3.5	2.9	2.6	2.4	1.77
Now, get prices of the same movie in NYC	\$17.50	15	14.5	13	12.50	12
To get the ppp conversion factor, calculate the ratio of US to Indian prices. $PPP\ factor = \frac{US\ Price}{Price\ in\ India}$	3.1	4.3	5	5.1	5.2	6.8

Give the exchange rate is about 60 rupees per \$US, compare the range of prices you see in India vs. NYC (choose all theaters, and run your cursor over the times to see the prices in rupees. (avoid IMAX movies). In India, American Sniper costs between \$1.80 to \$5.70. In NYC it costs between \$12 to \$18. Take the ratio of \$US prices in NY vs. India to compute some PPP ratios. See Table A1 row 4. Compare these to the ones shown in [Table 1 of the PPP handout](#). In Table 1 in the PPP handout, Indonesian PPP factor is about 3.8, which falls within the range for PPP’s conversion factors computed from movies prices *EC get out of Mumbai into a rural area, or look at ticket price for Bollywood movies. Why do PPP adjustment factors tend to be higher for rural areas?* Repeat the steps in Table A1 above b) Compute a \$PPP factor using NYC prices compared to the same item bought here in New York (at Walmart?) On average how much cheaper are these items in Jakarta circa 2000? A more elaborate way of calculating PPP factors is to use a representative basket of goods instead of using one good. In page 2 in the handout, Jim Keady and Leslie Kretzu use a basket of goods to compare what a dollar buys in New York vs. Tangerang, Indonesia. To get the PPP conversion factor, they use a weighted average of the cost of the basket in New York vs. Tangerang. That is, they divide the total cost of the basket of goods in New York by the total cost of the same basket of goods in Tangerang. The PPP conversion factor they find is 3.8. What this means is that, on average, one dollar in Indonesia has a purchasing power equivalent to that of \$3.8 in the US. See [Table 4 of the PPP handout](#), this done for you on page 2.

C) Optional extra credit read chapter 2 of *Poor Economics*, do Banerjee and Duflo argue \$1/day poverty understates or overstates malnutrition. How much do they claim it costs to have a meal in rural areas? What is the PPP factor implied by their example? [Use this word template.](#)

3.2 Who is \$1.25/day poor? a) Soon after Sterba left Indonesia in 1988, NIKE showed up and began purchasing shoes from factories in Indonesia. How did these factory jobs potentially reduce \$1/day poverty directly and indirectly? “Use a \$PPP factor of 4 to compute daily wages in these factories? **The NIKE factory minimum wage (not including overtime) is \$2.5 times the \$PPP factor of 4 is about 10/day US\$ PPP.** Poverty falls directly when the NIKE factory workers make \$10/day and indirectly when they send money home or spend it on goods and services in Tangerang or in their village (such as Begeadah) What happened to \$1/day or \$1.25/day poverty in Indonesia between 1987 and 2009? (see Figure 4 below). **Rural poverty dropped from 71% to 19%, more than a poverty Poverty Reversal, Urban poverty dropped from 62% to 19%.** b) Are footwear workers in Indonesia or Vietnam \$1 a day or \$2 a day poor? No, because they make \$3-\$10 in U.S. prices or \$PPP which is the way poverty measured. c) Who is \$1/day poor? Take for example, Munee in Bihar, India a migrant worker. She makes 40 rupees a day. Use a \$PPP factor of 4. Is her family \$1/day poor? How much does she earn per hour? In the 1980s, the exchange rate was one dollar for 40 rupees. So, Munee makes \$1/day a day, or 4\$ PPP a day, or about 6 cents an hour for a 15 hour day. She has three kids, counting each kid as ½ adult making adult equivalent family size 2.5. So, when she is working Munee’s family makes about \$1.6 a day PPP. Unfortunately, her work in the brick factory (and at home on farm is only seasonal). When Munee has work in the Brickyard, her family is poor, but this may only last a few months, then she has to move on looking for other work and her average income drops below \$1/day. She realizes she needs an education to get a factory job, this would lift Muni out of the \$1.25 a day PPP and she would be able to stop moving and send her kids to school. d) **What can be done to help seasonal workers like Munee?** Off season jobs as with the Ethiopia public works program, India has an EGS in Maharashtra state which does just this, but Muni is in Bihar. **Why is Munee unlikely to get a factory job?** She has no education, as a result she gets screen out. **What might Munee’s kids be able to do if she had a factory job?** Go to school. **What can be done to break this cycle of severe poverty or poverty trap?** CCTs or some sort of off season EGS would help a lot. [Use this word template.](#)

3.3 Factory girls: a) How old is Min when she leaves home to get a job in the “black factory” living in a dorm room with 12 other workers. **Leslie Chang (WSJ), “Almost all the young people in her village left home to find work. At 16, Min left too. She quit vocational high school a semester before graduation to save her family the tuition fee and get a jump on the job hunt. Her older sister, Guimin, worked in a factory in Dongguan, about 500 miles away. In January 2003, Guimin returned home for the Chinese New Year's holiday and took Min with her when she left.”** Why does Min leave the black factory? “They withhold her pay so she can’t but she gets into a fight with her boss and finally they pay her, and she leaves. Do her fellow workers leave as well? “At first her friends stay, but within six months they leave too.” Why do they take jobs there in the first place? **Everyone hates working at the “black factory” and quits as soon as they can, this is why this factory always has job openings (like some stores and fast food places in the U.S.). Since everyone soon quits, this factory is always hiring. Evidently, many migrant workers get their first job here. This factory does not seem to check IDs, resumes, anything. They hire anyone, experienced or not (recall the sign outside the Chai Feng factory). This is evidently a “conspiracy of the poor” migrant workers & factories conspire to break labor laws. The factory owners benefit from low wages and long hours, the workers benefit because it is easy for almost anyone to find their first job.**

b) Why does Min get a new job, despite her slim resume? **The recruiter notices her nice handwriting and her blunt honesty.** Using Table 1 to compute Min’s pay per month and hour using U.S prices or a \$PPP factor of 3.5.

Table 3.2: Lu Qingmin's (aka "Min") mobility in Dongguan, China

Job Description	Wage	\$per hour ^{3/}	Hours & days per week	# Room mates	\$PPP per month ^{3/}	\$ppp per hour ^{3/}
Factory floor assembly	\$50-80/mnth	\$0.19	14h-7d	12	175-280	0.665
Clerk machine records	\$100/month	\$0.33	10h-7d	8	350	1.155
Human resources ^{1/}	\$135/month ^{2/}	\$0.50	8h-6d=48	4	472.5	1.75

^{1/} record keeping & hiring

^{2/} after 3 months

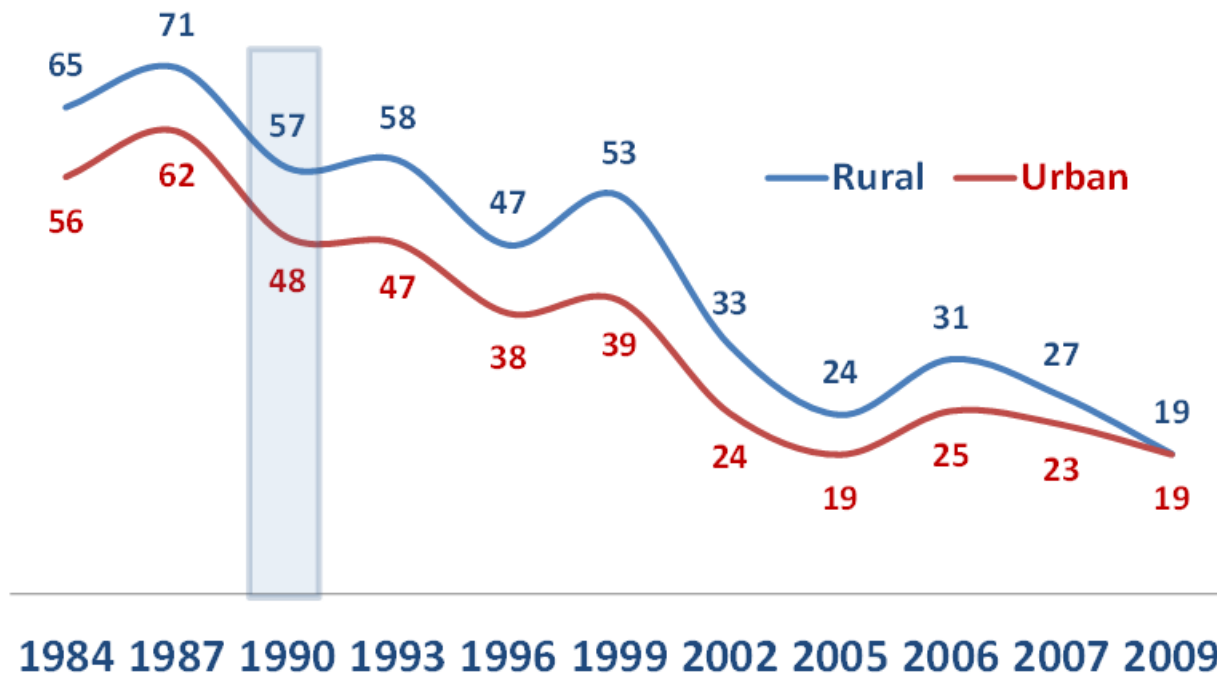
^{3/} cash only do not include room & board, use a 3.5 ppp factor.

c) When was Min born? 1986. Was the one child policy enforced in Min's village? No. She lived in rural area where the policy is not enforced. [Use this word template](#). *WSJ Nov. 8, 2004 "Chinese Dream: At 18, Min Finds Path to Success" photos only* **WSJ June 8, 2005 Min's Return: A Migrant Worker Sees Rural Home In a New Light* see also [Chapter 1, 2, 4 and chapter 10](#) in *Factory Girls* by Leslie Chang.

3.4 Return to Liemahuitou, Hubei Province (a) At some point in [Chapter 10](#) Min and Guimin's mother says "We treat our daughters as sons." What does she mean? We send our daughters to school. Is she taking too much credit for Min's education? Yes. Min went to an extra year of school because of Guimin's insistence. It's this year that gave Min an edge over other factory workers. How much money do Min and Guimin send back each year? 600\$ What do their parents say they use these remittances for? Send kids to school.

(b) Convert the total remittances Min and Guimin sent in a year to U.S. prices using the \$PPP factor of 3. $600 * 3 = 1800$ Add this to their \$250 annual income from farming also converted to \$US using the same PPP factor. $1800 + 250 * 3 = 1800 + 750 = 2550$ What is the Lu's total household income Hubei? 2550 Divide by the total number of adults + children where each child living at home counts as .5 adults (you are converting children to adult equivalents). Look at the photos to see the kids still at home (there is an Aunt living with them too perhaps, but focus on the immediate Lu family still living in Hubei. Are they \$1.25/day poor? Were they \$1.25/day poor before their two daughters migrated to Guangdong? $2550 / 3.5 = 728.6$ which is approximately \$2.02 PPP a day c) *EC There were about 130 million migrant workers in Southern China like Min and her sister. If all of these immigrants sent home remittances to rural farm families similar to the Lu family, how many people would escape \$1.25/day poverty in China? It takes 2 migrant workers to lift a family of 7 out of poverty. At this rate $(130/2) * 7 = 455$ million people lifted out of poverty.* [Use this word template](#).

Figure 4: Indonesia \$1.25/day Poverty rates



Source: World bank Povcalnet (January 2012)
<http://iresearch.worldbank.org/PovcalNet/povcalSvy.html>