## ECON 3240

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 Kretsu (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? List the range of prices from American Sniper or Birdman or any movie you can see right now NYC and Mumbai, India. 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). Take the ratio of \$US prices in NY vs. India to compute some PPP ratios. Compare these the ones shown in Table 1 of the PPP handout. EC get out of Mumbai into ar rural area, or look at ticket price for Bollywood movies. Why do PPP adjustment factors tend to be higher for rural *areas?* 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? 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? What happened to \$1/day or \$1.25/day poverty in Indonesia between 1987 and 2009? (see Figure 4 below). b) Are footwear workers in Indonesia or Vietnam \$1 a day or \$2 a day poor? 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? d) What can be done to help seasonal workers like Munee? Why is Munee unlikely to get a factory job? What might Munee's kids be able to do if she had a factory job? What can be done to break this cycle of severe poverty or poverty trap? 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. Why does Min leave the black factory? Do her fellow workers leave as well? Why do they take jobs there in the first place? b) Min gets a new job, despite her slim resume. Using Table 1 compute Min's pay per month and hour using U.S prices or a \$PPP factor of 3.5. c) When was Min born? Was the one child policy enforced in Min's village? 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.

| Job Description        | Wage                      | \$per<br>hour <sup>3/</sup> | Hours &<br>days per<br>week | #<br>Room<br>mates | \$PPP<br>per<br>month <sup>3/</sup> | \$ppp<br>per<br>hour <sup>3/</sup> |
|------------------------|---------------------------|-----------------------------|-----------------------------|--------------------|-------------------------------------|------------------------------------|
| Factory floor assembly | \$50-80/mnth              | \$0.19                      | 14h-7d                      | 12                 |                                     |                                    |
| Clerk machine records  | \$100/month               | \$0.33                      | 10h-7d                      | 8                  |                                     |                                    |
| Human resources 1/     | \$135/month <sup>2/</sup> | \$0.50                      | 8h-6d=48                    | 4                  |                                     |                                    |
| 1/ record keeping &    |                           |                             |                             |                    |                                     |                                    |
| hiring                 | 2/ after 3 mont           | hs                          |                             |                    |                                     |                                    |

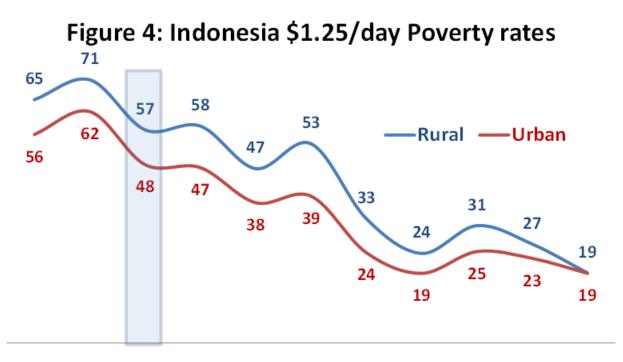
| Table 3 2. Lu Oingmin's | (aka "Min") | mobility in | Dongguan  | China |
|-------------------------|-------------|-------------|-----------|-------|
| Table 3.2: Lu Qingmin's | (aka win )  | mobility in | Dongguan, | China |

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

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? Is she taking too much credit for Min's education? How much money do Min and Guimin send back each year? What do their parents say they use these remittances for? (b) Convert the total remittances Min and Guimin sent in a year to U.S. prices using the \$PPP factor of 3. Add this to their \$250 annual income from farming also converted to \$US using the same PPP factor. What is the Lu's total household income Hubei? 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? 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? Use this word template.

3.5 According to the WSJ articles about Nike and Reebok contract factories, the 1997 minimum wage in Indonesia was about \$2.50 at market rates or \$10 per day in purchasing power parity (PPP) dollars (\$2.50\*4). (a) Why is the wage so much higher when we measure it in terms of U.S. prices or purchasing power? Why is the PPP adjustment factor higher in Vietnam and India than in Indonesia? Which wage, the PPP or unadjusted dollar wage is most important to Nike and which wage rate matters most to the factory workers? (hint: where do most factory workers live, and where do most NIKE corporate employees live and work?). (b) Discuss the sense are Indonesian footwear factory wages "high" and in what sense are they "low". (hint: compared to wages in Viet Nam or Cambodia, compared to U.S. wages, compared to rural wages for weeding rice fields in Indonesia and or compared to the earnings of migrant workers like Munee in Bihar). (c) According to the World Bank's global poverty monitoring page (povcal.net)\* the \$2 day poverty rate in Indonesia averaged about 66% from 1996 to 1999. Assuming footwear workers make about \$40 per month at market exchange rates or about \$160 per month in \$PPP or U.S. Prices, roughly what % of Indonesians are poorer than these workers? (hint: \$2/day is about \$65 per month, PPP). (d) Use the Tangerang shopping data presented by Jim Keady & Leslie Kretzu on their "Educating for Justice" research web page or the PPP handout to compute a Tangerang-NY PPP conversion factor (see Table 4). Do your price ratios seem broadly consistent (roughly) with the PPP ratio official PPP estimates for Indonesia? Provide some examples comparing the prices of two goods For example, a coke costs \_\_, bottled water \_\_ a chicken a \$1.33 in Tangerang (a suburb of Jakarta) —how much do similar items cost at C-Town or on Arthur Avenue in the Bronx? (e) Go online and see what movie tickets cost for some current release films in India (for Mumbai or Bangalore see http://en.wikipedia.org/wiki/Sathyam\_Cinemas) Using a market exchange rate of about 40 rupees per dollar, compare these prices with what we would pay in NYC to see the same movie. Why are movie ticket prices lower in India? Given that most poor live in rural areas, and may not go to movies, the PPP ratios computed in c,d, and e are likely to be low. Why?

3.6 The information you need to answer this question is in the Indonesia Case Study Part II Nike worker profiles and in this New York Times blog entry and in Gruben and McLeod, 2006. (a) What percentage of Indonesian and Bangladeshi garment/footwear workers are women? Where do they come from, generally (hint: see Women's Day NARI report)? Why do mainly young women work in this industry? Women be willing to work for less than men, especially in Bangladesh or Indonesia, does this imply these factories "exploit" the young women? How does the opportunity to work in these industries affect the status of women? (Gruben and McLeod (2006) Economic Letter). (b) Why does Sachs (2005) Chapter 1 argue employment of women is particularly important in countries like Indonesia and Bangladesh (his "first rung" argument)? Some argue these women are working instead of going to school. How might one test this proposition? (c) Are most Indonesian footwear workers educated, or uneducated; married or unmarried? Why is this important to Sach's ladder up argument? Surveys of apparel and shoe contract factory workers suggest female workers tend to marry at about 21 compared to 16 for those who remain in the village. Why do these young women to delay marriage? How does delayed marriage affect their villages? Relate this to what Sterba saw when he visited a Java village. Given the above, are most women working in footwear or garment factories likely to have children as dependents (will they be buying children's cloth's)? (d) Discuss the similarities and differences between Kristof's prescription for Niger or Cambodia and Collier's and Sach's program for Africa. (e) What is an "arisan?" Compare the Arisan" to American lotteries? One worker expects to buy land with winnings from an arisan (about \$100), how is this possible? The Arisan is a ROSCA (look this up online)



## 1984 1987 1990 1993 1996 1999 2002 2005 2006 2007 2009

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