

# 14.73 Challenges of World Poverty

Lecture 2

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## Putting a face on poverty: Pak Solhin

- We met Pak Solhin in a small village in Indonesia, in the summer of 2008
- When we met him, he was all alone at home
- The older of his three children, a 13 year old, was working as a construction worker in the nearby city
- His wife was also in the city, as a live-in maid
- The other two children were staying with their grand-parents
- His house does not have a single item of furniture, no water, no electricity

# Pak Solhin

- Until that summer, Pak Solhin was a farm laborer
- He does not have any land, because his parents had 13 children, and they had to cut the land in many small pieces to build homes on them.
- But that summer, because of the increase in fertilizer and oil prices, farmers stopped hiring workers to save money, and started to work the farm themselves.
- Pak Solhin could not accept a lower wage instead of losing his job, because the food prices had increased to: at a lower wage, he would not even have enough strength to work a whole day.
- He cannot work as a construction worker, because he is too weak for the basic job, too unskilled for the better jobs, and too old to be an apprentice.

# Pak Solhin

- He had no money to feed himself or the kids, so his wife and older kid went to the city. Even with their salary, he cannot pay for the food for the younger ones and himself.
- Nobody can lend him money; but the grand parent agreed to take the two young children with them.
- The older child dropped out of school and became a construction laborer
- He eats about once a day, when he gets subsidized rice, or he catches a fish on the bank of the river: he cannot swim, so he cannot properly fish.
- He is very depressed, and negative about the future. He almost cries during the interview.

What are the striking/puzzling aspects  
of this story?

# Anecdote or illustration?

- What is unique in the case of Pak Solhin, and on the contrary, what seems to you to be representative of the lives of many of the poor?

# A nutrition based story for a poverty trap: the capacity curve

- The first few calories are used by your body just to survive: they don't make you strong
- When you start eating enough to survive, the next calories start giving you strength
- Someone who is very poor like Pak Solhin may not have enough to eat to be very productive, but he could eat more, he would.

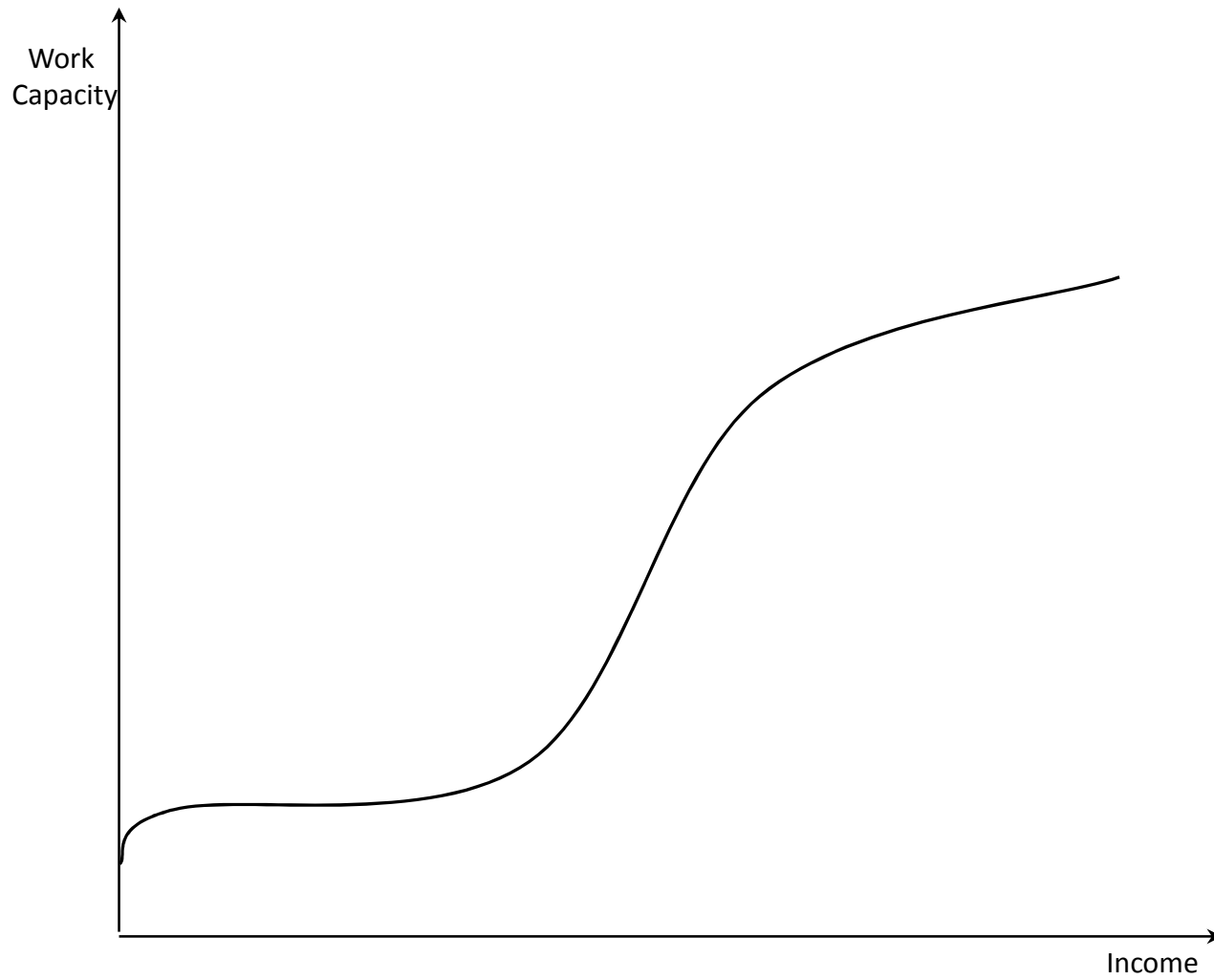


Figure 1: The Capacity Curve : the Shape



# The dynamic of income leads to the possibility of poverty trap

- Start at  $y_0'$ , go to  $y_1'$ ,
  - Find  $y_1$  on the 45 degree line: find the new  $y_1'$ , go to  $y_2'$
  - And it goes on like this....

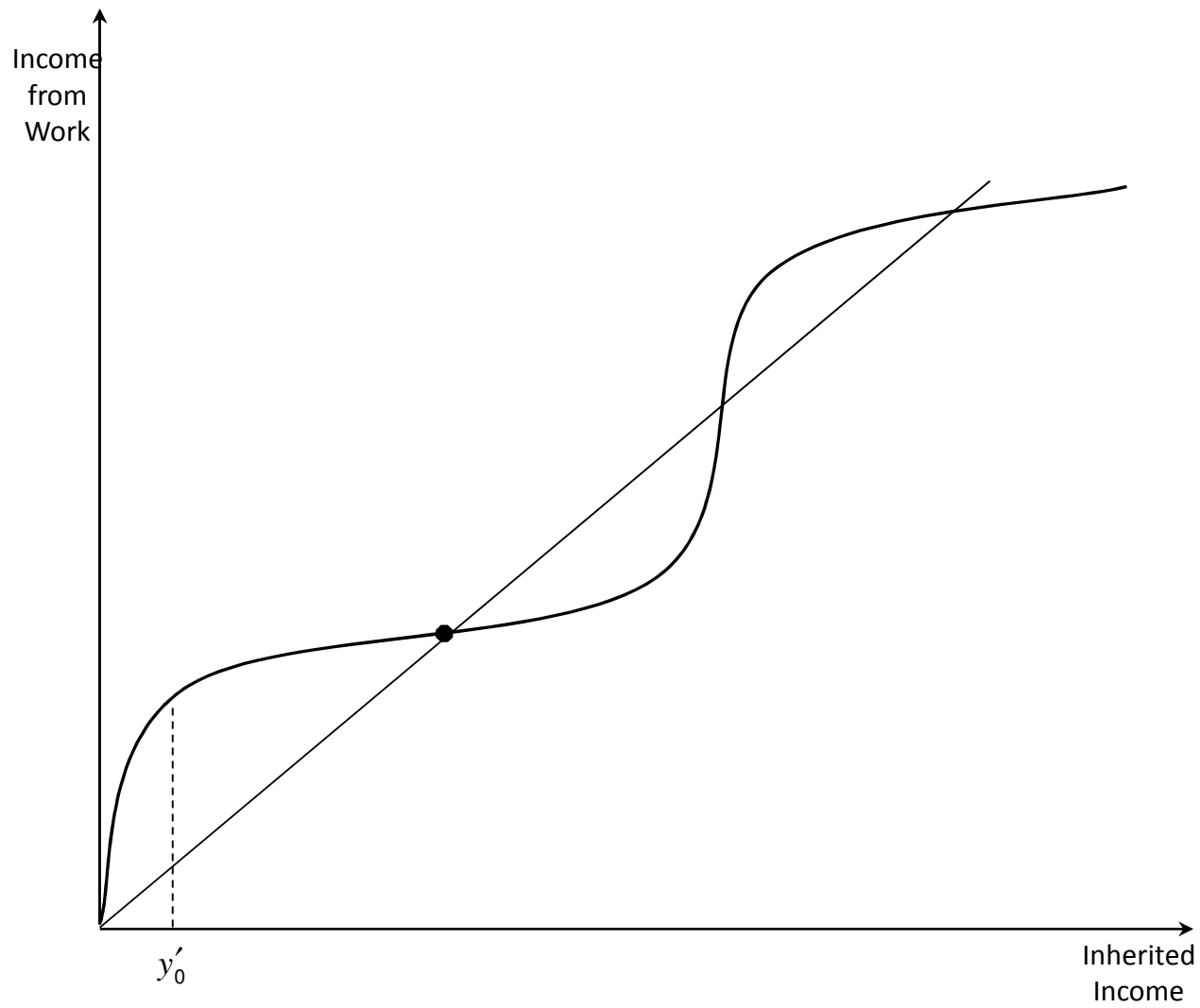


Figure 2: The Dynamic of income and the poverty trap

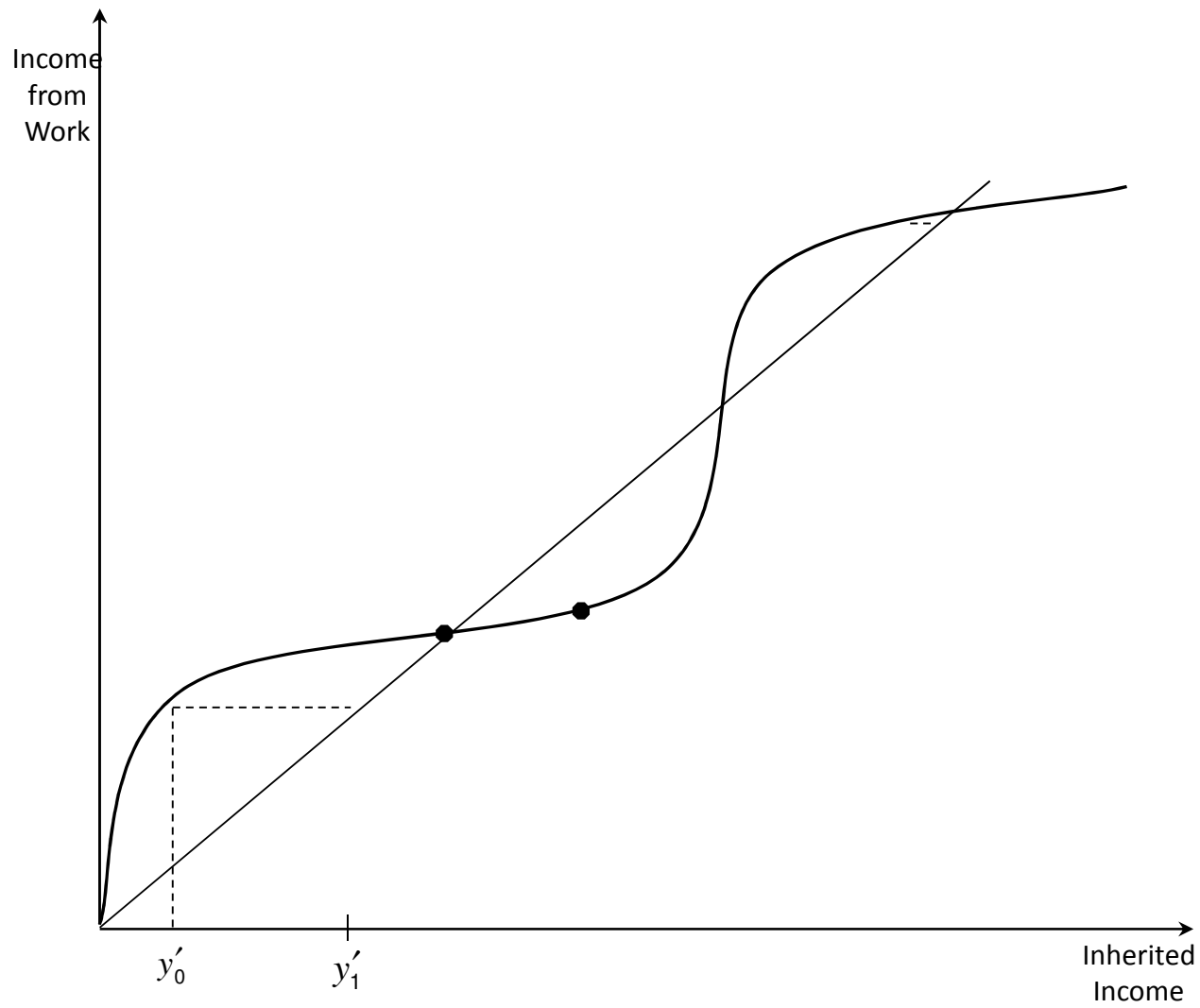


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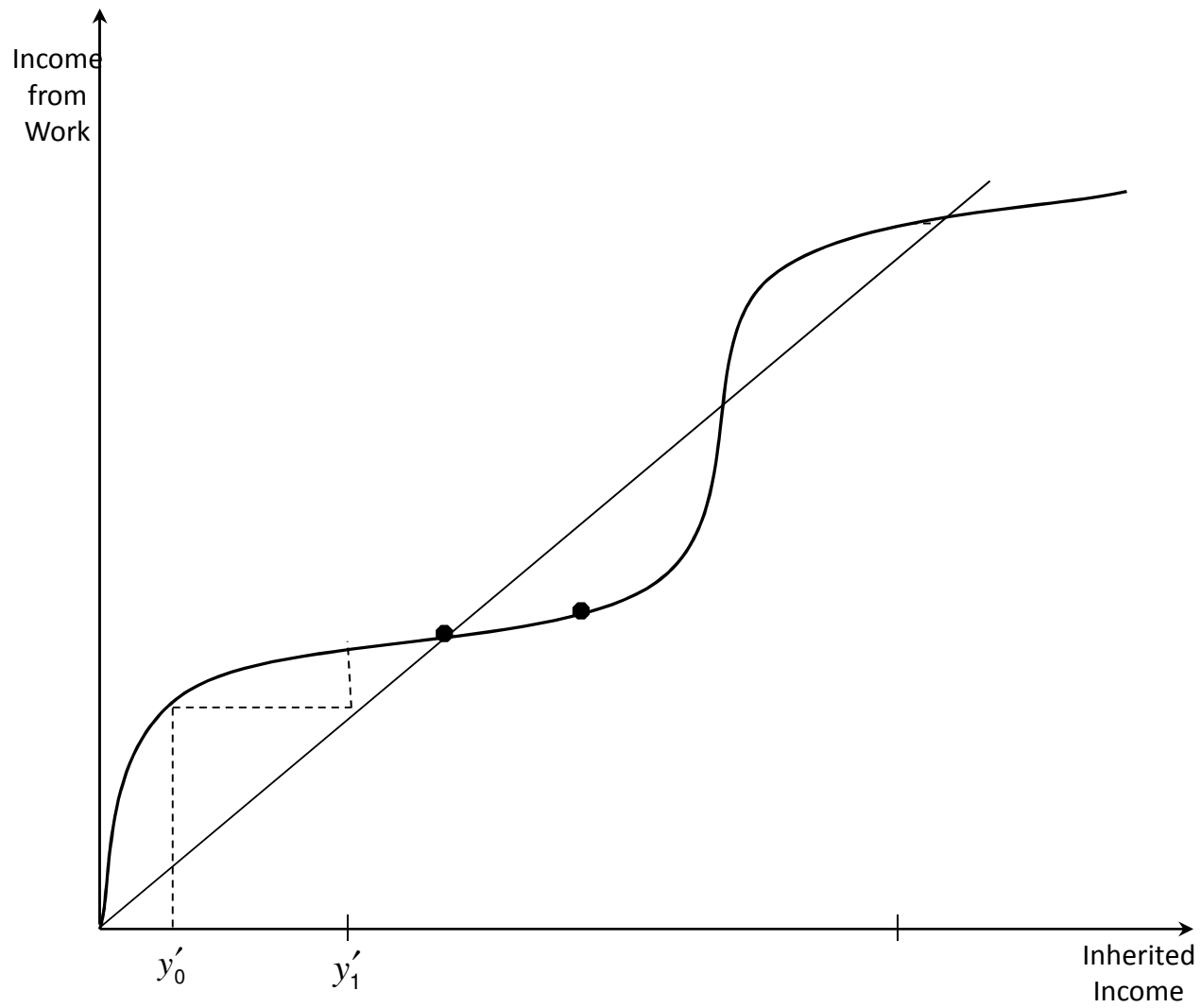


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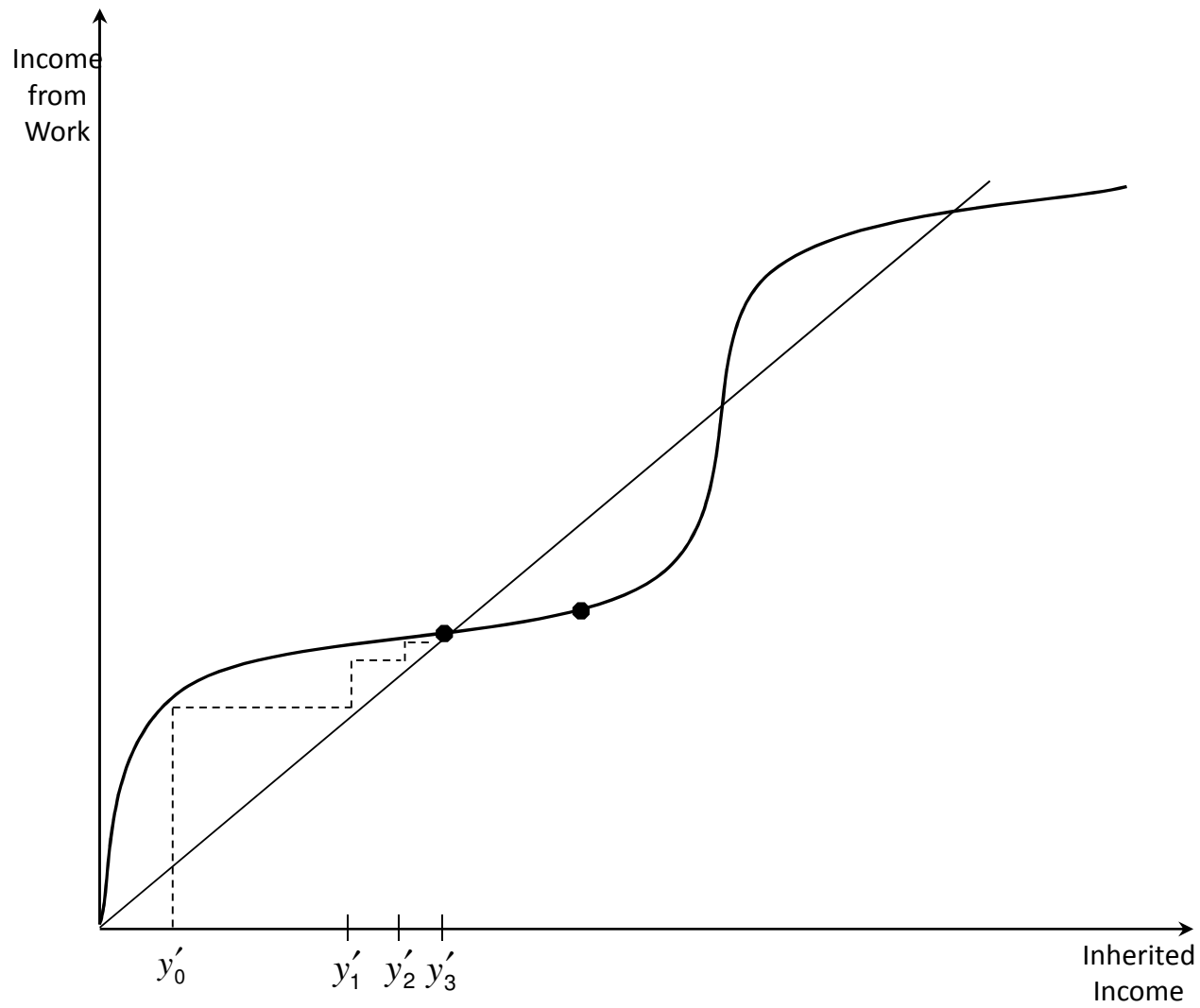


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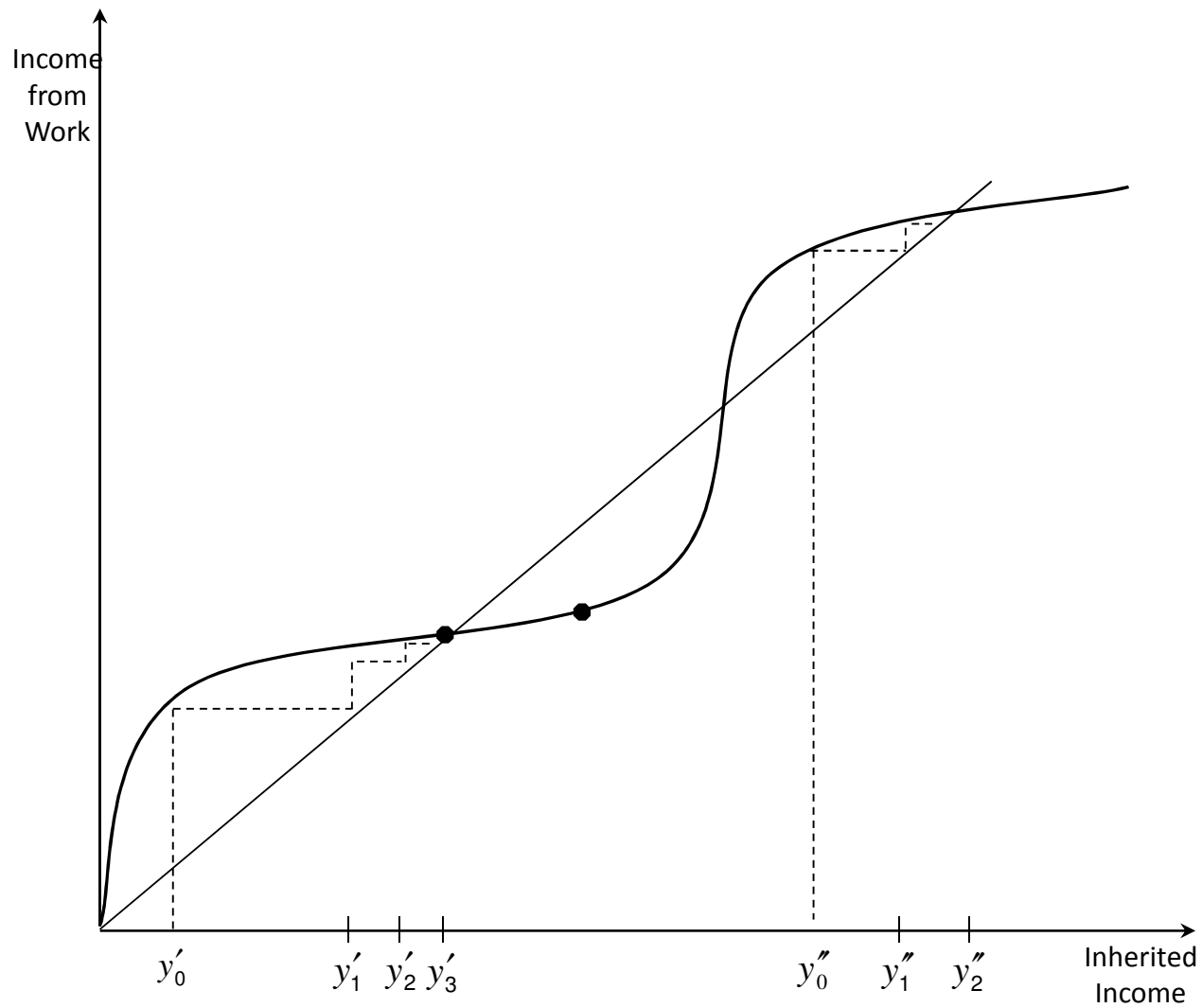
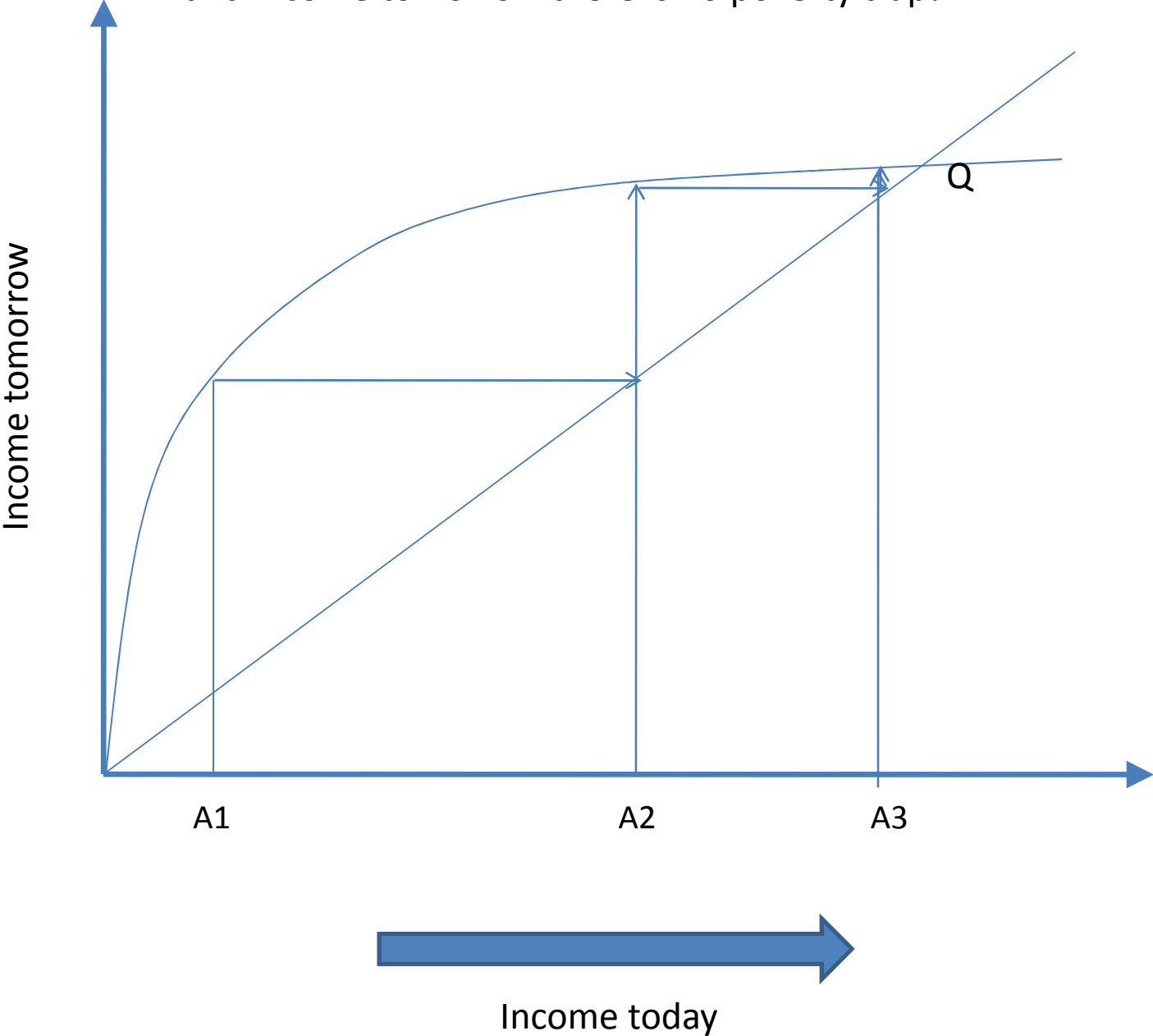


Figure 2: The Dynamic of income and the poverty trap

With a concave relationship between income today and income tomorrow there is no poverty trap!



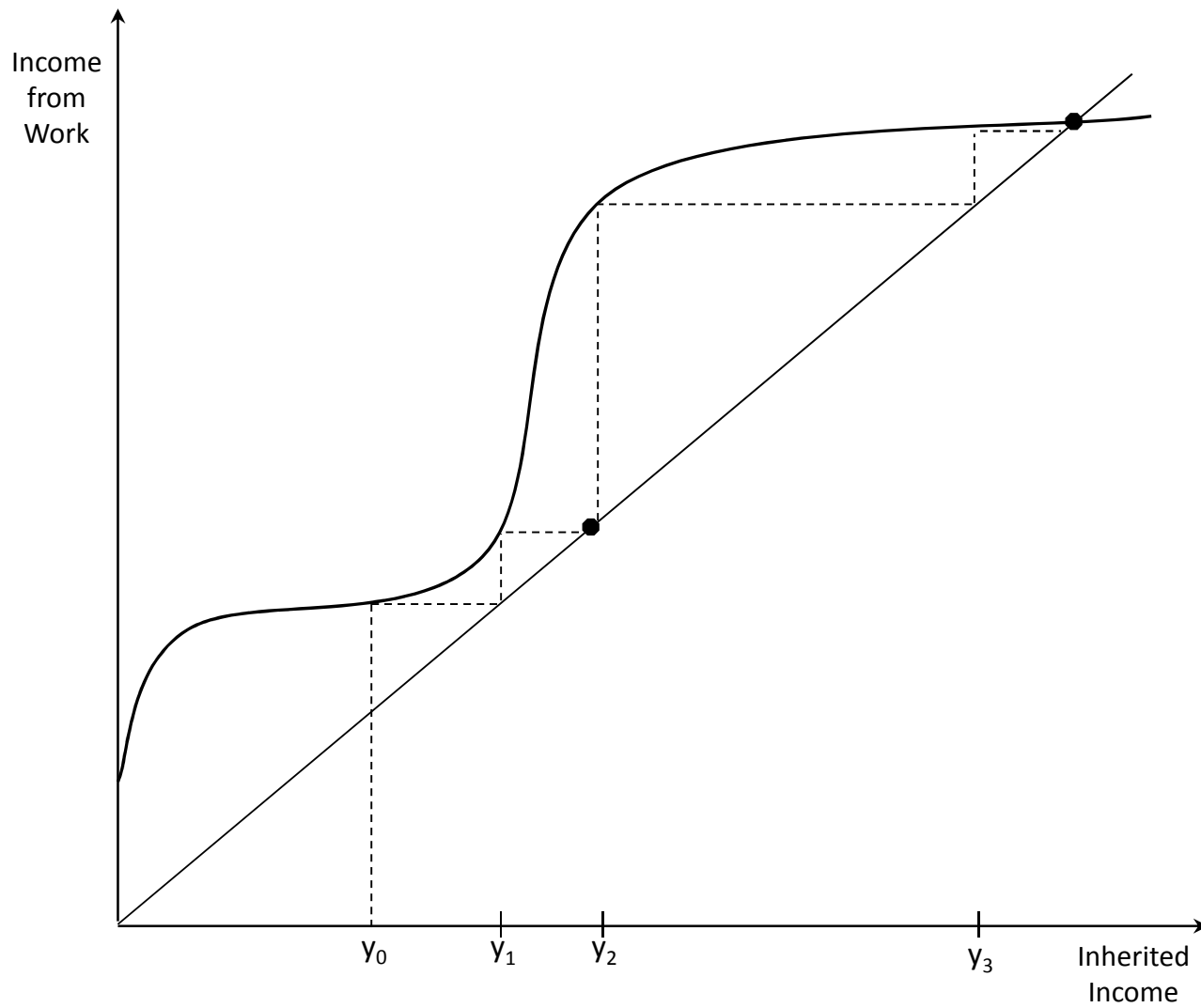


Figure 2: If the capacity curve is about the 45 degree line, there is no poverty trap either!



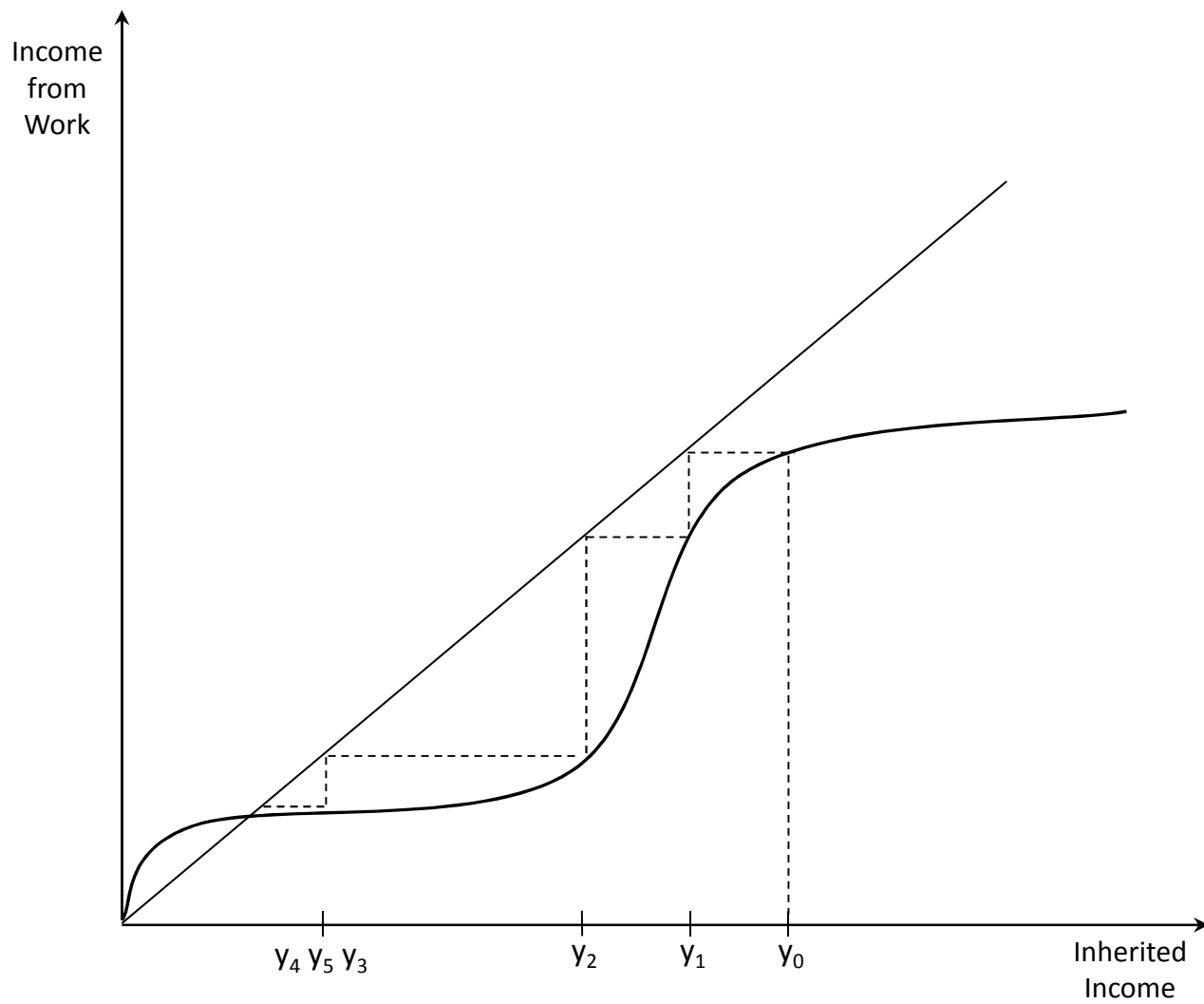


Figure 4: everybody ends up poor

# When does a poverty trap emerge?

- When we compare the different curve, there is something specific about figure 1:
- The S-Shaped curve intersects the 45 degree line from below:
  - For poor people, income grow slowly, so slowly that income tomorrow is below income today: the poor become poorer (up to a point)
  - At some point, the rate of growth of income start increasing: income yesterday becomes larger than income today: the middle class and the somewhat rich continue to be rich.
- This will be the key thing to look for in the class.
- Note that a double feedback loop (e.g. poor nutrition lower your income, and low incomes means you cannot buy a lot of food) does not always need there is a poverty trap: the relationship has to be sufficiently strong: this is an error many policy makers make!

# The importance of poverty trap

- The Jeff Sachs/Angelina Jolie video pointed out to several possible poverty traps.
  - The farmer Kennedy and his fertilizer: what could be his problem?
  - The mother of a large family and the nutrition of her children
  - Other?
- In each of these cases, what do we need to know to decide whether there is a poverty trap or not?
- Where else could we find poverty trap?

# The policy implications of a poverty trap

- It is important to know whether there is a poverty trap or not, because a poverty trap opens the possibility of a “big push”: a small action could have big benefits: so it may be the socially optimal thing to do.
  - Health (e.g.: free bednets)
  - Agriculture (e.g. free fertilizer one season)
- On the other hand, if we are in the case without poverty trap, helping the poor in this way will simply be a form of redistribution, but it won't produce efficiency gains.