

Chapter 19

Population Growth and the Distribution of Wealth

HOW DOES A GROWING POPULATION increase rent? Current thought says a higher demand for subsistence forces production to inferior land. For example, if the margin of production is the place where the average laborer can produce 30, then on all lands where more than 30 is produced, there will be rent. A growing population requires additional supplies, which cannot be obtained without extending cultivation. This causes lands that were formerly free to bear rent. Say the margin is extended to 20. All land between 20 and 30 will acquire value and yield rent. All land over 30 will increase in value and bear higher rent. As explained by Ricardo (and later economists), this inability to procure more food except at a greater cost accounts for the increase in rent.

I will show, later, that rent would increase even if population remained steady. But first, we must clear up the misconception that using poorer land produces less aggregate production, proportional to labor expended. For increased population—of itself, and without any technological advances—makes possible an increase in the productive power of labor.

All things being equal, the labor of a hundred people will produce much more than one hundred times the labor

of one person. And the labor of a thousand, much more than ten times the labor of a hundred. With every additional person, there is a more-than-proportionate addition to the productive power of labor. As population increases, naturally less productive land may be used—but without any reduction in the average production of wealth per worker. There will be no decrease even at the lowest point. If population doubles, land of only 20 (as per our earlier example) may yield as much as land of 30 could before, given the same amount of labor.

For it must not be forgotten (although it often is) that the productiveness of either land or labor is not measured by any one thing—but by all things we desire. A settler may raise as much corn a hundred miles from the nearest house as on land near a city. But in the city, one could make as good a living, with the same effort, on much poorer land (or on equal land after paying high rent). This is because labor becomes more effective in the midst of a large population. Not, perhaps, in the production of corn, but in the production of wealth. That is, in the ability to obtain the goods and services that are the real object of labor.

A growing population increases the effectiveness of labor by permitting greater economies. More wealth can be produced with the same effort. It increases productivity not only on the newer land, but on all the better land already in use.

If productivity rose faster than the need for less productive land, the average production of wealth would increase. Thus, the minimum return to labor would increase, although rent would still rise. In other words, wages would rise as a quantity—but fall as a proportion.

If productivity just compensated for the diminishing

productiveness of additional land, average production would still increase. Rent would increase (as the margin fell), without reducing wages as a quantity.

Finally, as growth forced even poorer quality land into use, the difference might be so great that even the increased power of labor could not compensate for it. The minimum return to labor would be reduced. Rents would rise, while wages would fall, both as a proportion *and* a quantity.

But even here, average production will still increase (unless the quality of land falls far more precipitously than has ever happened). Remember, the increase of population, which compels the use of inferior land, increases the effectiveness of labor at the same time. This increase affects all labor. Therefore, the gains on superior land will more than compensate for diminished production on the lowest quality.

In short, the aggregate production of wealth, compared with the aggregate expenditure of labor, will be greater—but its distribution will be more unequal. Rent will increase. Wages may or may not fall as a quantity. But wages—as a proportion—will fall. Increasing population seldom can—and probably never does—reduce the aggregate production of wealth compared to the aggregate expenditure of labor. On the contrary, a greater population increases wealth—and frequently increases it greatly.

But it is a mistake to think that lowering the margin is the only process that increases rent. Greater density raises rent without reference to the natural qualities of land. The enhanced powers of cooperation and exchange that come with a larger population are equivalent to a greater capacity to produce wealth. Indeed, I think we can say without metaphor that they actually increase the capacity of land.

Improved tools or methods give greater results to the same amount of labor. This is, in effect, equivalent to an increase in the natural powers of land. But I do not mean to say the power that comes with larger population is merely like this. Rather, it brings out a greater power in labor—and this power is localized on certain land. It does not belong to labor in general, but only to labor exerted on particular land. It resides in land as much as physical qualities such as soil, climate, mineral deposits, or natural situation. Like these, this power passes with possession of the land.

Consider an improvement in cultivation (or tools or machinery) that allows two crops a year instead of one. Clearly, the effect is the same as if the fertility of that land were doubled. But such improvements can be applied to any land, while increased fertility affects only that land. In large part, the increased productivity arising from population can be utilized only on certain land.

*The Unbounded Savannah**

Imagine a vast, unbounded savanna, stretching off in endless sameness till the traveler tires of the monotony. The first family of settlers approaches and cannot tell where to settle—every acre seems as good as any other. There is no difference in location, fertility, or water. Perplexed by this embarrassment of riches, they stop somewhere, anywhere, and make themselves a home.

The soil is virgin and rich, the game abundant, the streams flash with trout. What they have would make them

*This famous narrative of a society's development has often been excerpted. A savannah is a grassy plain.

rich—if only they were among others. Instead, they are very poor. To say nothing of their mental cravings, which would lead them to welcome the sorriest of strangers, they labor under all the disadvantages of solitude. For any work requiring a union of strength, they are limited to their own family. Though they have cattle, they cannot often have fresh meat—to get a steak, they must kill a whole steer. They are their own blacksmith, carpenter, and cobbler; jacks of all trades and masters of none.

Their children can have no schooling, unless they pay the full salary of a teacher. Anything they cannot produce, they must buy in quantity to keep on hand—or go without. For they cannot constantly leave work and make a long journey to civilization. When forced to do so, getting medicine or replacing a broken tool may cost their labor and the use of their horses for several days.

Under such circumstances, though nature is prolific, the family is poor. It is an easy matter to get enough to eat. But beyond that, their labor can satisfy only the simplest wants in the rudest way.

Soon, though, other immigrants arrive. Though every acre is still as good as every other, there is no doubt where to settle. The land may be the same, but one place is clearly better than any other. And that is where there is already a settler, and they may have a neighbor.

Conditions improve immediately for the earlier pioneers. Many things that were once impossible are now practical—for two families can help each other do things one could never do. As others arrive, they are guided by the same attraction, until there are a score of neighbors around our first.

Labor now has an effectiveness that it could never ap-

proach in the solitary state. If heavy work is to be done, the community—working together—accomplish in a day what would have required years alone. There is fresh meat all the time. When one butchers a steer, the others share in it, returning the favor in their turn. Together they hire a schoolmaster. All their children are taught for a fraction of what it would have cost the first settler. And it becomes easy to send to the nearest town, for someone is always going. But there is less need for such journeys.

A blacksmith and a wheelwright soon set up shop. Now our settlers can have their tools repaired for a small part of the labor it formerly cost. A store opens, and they can get what they want, when they want it. A post office soon gives regular communication with the rest of the world.

Occasionally, a passing lecturer opens up a glimpse of the world of science, art, or literature. And finally comes the circus, talked of for months before. Children, whose horizon had been only the prairie, now visit the realms of imagination: princes and princesses, lions and tigers, camels and elephants.

Go to our original settlers now and make this offer: "You have planted so many acres, built a well, a barn, a house. Your labor has added this much value to this farm. But after farming for a few years, your land itself is not quite as good. Still, I will give you the full value of all your improvements—if you will go with your family into the wilderness again."

They would laugh at you. The land yields no more wheat or potatoes than before—but it does yield far more of the necessities and comforts of life. Labor brings no more crops than before—yet it brings far more of all the other things for which people work. The presence of others—the growth

of population—has raised the productiveness of labor in these other things. This added productivity confers superiority over land of equal natural quality where there are no settlers.

If, however, there is a continuous stretch of equal land over which population is now spreading, it will not be necessary to go into the wilderness. A newcomer could settle just beyond the others, and get the advantage of proximity to them. The value or rent of land will then depend on the advantage it has: the advantage of being at the center of population over being at the edge.

As population continues to grow, so do the economies its increase permits. In effect, these add to the productiveness of the land. Our first settler's land is now the center of population. The store, the blacksmith, the wheelwright have set up nearby. A village arises, becoming the center of exchange for the whole district.

This land has no greater agricultural productiveness than it had at first. Yet it now begins to develop productiveness of a higher kind. Labor expended in raising crops will yield no more of those than at first. But labor will yield much greater returns in specialized branches of production—where proximity to others is required. The farmer may go further on, and find land yielding as great a harvest. But what of the manufacturer, the storekeeper, the professional? Their labor here, at the center of exchange, gives a much greater return than labor expended even a short distance away from it.

All this difference in productiveness, the landowner can claim. Our pioneers can sell a few building lots at prices they would not bring for farming, even if the fertility were multiplied many times over. With the proceeds, they build

fine houses and furnish them handsomely. Or to state the transaction in its lowest terms: those who wish to use this land will build and furnish the houses for them. They do this on the condition that the landowners will allow the workers to avail themselves of the superior productiveness of this land—productiveness given solely by the increase in population.

The town grows into a city: a St. Louis, a Chicago, a San Francisco. Its population gives greater and greater utility to the land—and more and more wealth to its owners. Production is performed on a grand scale, using the latest machinery. The division of labor becomes extremely minute, wonderfully multiplying efficiency. Exchanges are of such volume and rapidity that they entail a minimum of friction and loss. This land now offers enormous advantages for the application of labor. Instead of one person farming a few acres, thousands work in buildings with floors stacked upon each other.

All these advantages attach to the land. On this land—and no other—they can be utilized. For here is the center of population: the focus of exchange, the marketplace, the workshop of industry. Density of population has given this land productive power equivalent to multiplying its original fertility a thousandfold.

Rent—which measures the difference between this added productivity and that of the least productive land in use—has increased accordingly.

Our settlers—or whoever has the rights to the land—are now millionaires. Like Rip Van Winkle, they may have lain down and slept. But they are still rich—not from anything they have done, but from the increase of population.

Nothing has changed in the land itself. It is the same

land that once, when our first settler came upon it, had no value at all. The vast difference in productiveness, which causes rents to rise, is not due to using inferior land. Rather, it is more the result of the increased productiveness that population gives to land already in use. This is how population acts to increase rent—as those living in an advancing country can see if they will just look around. The process is going on before their eyes.

The most valuable lands on earth, those with the highest rent, are not those with the highest natural fertility. Rather, they are lands given a greater usefulness by population density.

We sail through space as if on a well-provisioned ship.* If food above deck seems to grow scarce, we simply open a hatch—and there is a new supply. And a very great command over others comes to those who, as the hatches are opened, are permitted to say: “This is mine!”

* This may be the earliest mention of “Spaceship Earth”!