

Theory and Reality, Part Two: International Trade

Earthlings do Not Engage in Interplanetary Trade with Extra-Terrestrials

Anne Emerson

The above statement was (approximately) a student's attempt to explain the problems of growth to professors, who appeared to find the remark ridiculous. Read on for a better explanation of what has gone wrong in the global pursuit of economic growth.

In Part One of "Theory and Reality," we mentioned some real-world challenges to microeconomic and macroeconomic modelling. In this Part Two, we explore international trade and the domestic economy, showing that reality differs from theory here also.



International Trade: This section will show that free trade does not produce happy outcomes for everyone. First, we give predictions, for farm incomes, of the "with-trade" approach and the "without-trade" approach. Then we compare those predictions against reality. Then we adopt the "without-trade" approach because it explains the data, and invite everyone to confront and deal with this reality.

So, economic models of trade and the domestic economy fall into two main types: open-economy models (with-trade models) and closed-economy models (without-trade models). Without-trade models predict that resources will leave necessity industries such as farming, and move into luxury industries such as computing, while with-trade models predict more-comfortable outcomes for farms and farm incomes.

Should we therefore open all countries to trade because we think trade is good for everyone, including farmers? Why does that not seem to work, as with-trade models predict? Why do we still see technological growth (high profit margins) and agricultural stagnation (low profit margins) worldwide, matching the without-trade case more closely than the with-trade case?

Why do some rural residents in the U.S. lean toward insurrection, as though they think their government does not work for them? Why do wealthy countries not want to lose international market share in farm products (i.e., food, such as tomatoes or beef)? Why, if free markets work, do so many governments subsidize important industries, including farming?

One word can answer these questions – globalization! Trade among many countries fails to improve the lot of farmers everywhere, because the whole global system – including all farmers and all tech companies – operates as a *without-trade* system. (No interplanetary trade... Yes, I was the wacky student quoted above, who cut that out of my doctoral dissertation rather than annoy professors further. Today, I do not have a career to lose from telling it like I see it.) Therefore, as output of everything increases worldwide, all global farm industries – all agricultural businesses - lose workers and other resources to the parts of the global economy that grow, often big cities in wealthy countries.

This represents the without-trade case. To understand what this means for each of us, we must stop perceiving our own country as an open (trading) economy that sells its farm products abroad in order to maintain farm incomes and food security; we must, instead, perceive the whole world – all countries – as one

huge without-trade economy, from whose downside, under current rules, there is no escaping. With globalization, we must face that what has worked for us in the rich world has not worked for everyone. There is no magic that will make everyone better off, or even fairly treated.



You may ask, why does food-production suffer while cutting-edge industries can keep growing? Here, too, there is an easy answer. Many of us want as much cutting-edge output as we can afford. We do not usually want more food (farm output) than we can eat. The next two sections describe a few ways in which this difference in buying habits skews the global economy against farmers, farming, and nutritious food.

Technology, Growth, and Farming: It was long believed that what is described above was a good thing – with technological

advances and increasing output in all industries, we do not need as many resources to produce an item of food as we did ten or fifty years ago. This frees up resources to make more advanced technological products that can enrich the world, in terms of material wealth.

So, what is the catch? Why are things not looking good in paradise right now? Again, there is a simple answer. Increases in output are often measured in terms of quantity rather than quality. Since we cannot tell quality at first glance, we may fill the pockets of those who persuade us to buy what they are selling, however they manage to do so.

In our example – farming – output increases, populations grow, and competition remains fierce; so, farmers cut costs in order to stay competitive, retain market share and pay for the most necessary supplies. They grow fruits, vegetables, or meat in competition with other farmers until the whole global farm industry produces food that is not as healthy to eat as food used to be. If you doubt this, read on.

Farmers and Free-Market Competition: Here are a few consequences of competitive behavior in pursuit of profits, for food and farming: Farmers may find it necessary to produce their most profitable crop, rather than their most nutritious one. They may

try to produce it year after year, rather than use crop rotation, perhaps destroying their soil from overuse without a rest or a change. In cutting costs, they may buy herbicides rather than pay workers to pluck weeds. Then, they may modify plants' genes to resist the herbicides so



that they can safely spray from aircraft rather than paying workers to walk the fields targeting only weeds. Then, the herbicide (poison) is on the food we eat. And, they buy pesticides as a quick and inexpensive way to avoid sharing their crops with miscellaneous bugs. This may kill bees and other pollinators along with the pests. For example, a friend who grew up in the U.S. Midwest went back, perhaps twenty years ago, and there

were many bugs smashed upon her windshield as she drove along. She went back more recently and there were no bugs smashed on the windshield.

If there are not enough natural pollinators, then smart people invent drone pollinators. Then, farmers must pay drone corporations for the use of them. Suddenly the farm world, once relatively natural, becomes dependent on the technological world.



Somewhere in this mix, farmers started using commercial (chemical) fertilizers rather than natural ones. Chemical fertilizers often get more expensive year on year, and may run off into streams and rivers,

damaging ecosystems there. Moreover, some say that plants fed by chemical fertilizers are more attractive to bugs than plants fed with compost.

Then, farmers learn to buy not just nitrogen, phosphorus, etc., but also microbes to improve the soil. And, agricultural researchers invent genetically modified plants that provide more yield per acre than non-GMO plants. Then, when fields of GMO plants are more susceptible to drought and disease than fields of genetically-diverse non-GMO plants, researchers invent or discover something else to get around the challenges. All this may help keep farms in business (as well as agricultural researchers) but removes them ever farther from nature and that is usually unhealthy for consumers.

And, for customers who buy meat, a meat industry arises that fattens animals up artificially, packs them tightly in sheds, and kills them inhumanely; then consumers eat them, perhaps not knowing or caring how they were raised. *(Please note: the photo is of cattle for the meat or dairy industry, not a farm about which I know whether it does any of the above.)* Raising cattle also produces methane, a more powerful greenhouse gas than carbon dioxide.

Along with the above, there are farm lobbies which not only insist on income-support for farmers, but also on influencing what customers eat, perhaps even encouraging the USDA to recommend many portions of animal protein in a healthy diet.



Research into nutrition suggests that eating more plant protein than animal protein is healthy for us. But the meat and dairy lobbies do not share that information.

So, at the end of the day, increasing farm “productivity” (such as increasing yields per acre) means more pressure on farmers to innovate, for retaining market share. They will likely use the least expensive resources to produce the most profitable products, with little concern for nutritional quality or variety.



A Downward Spiral: In this way, Earth’s soil, food, and ecosystems become less and less natural, and Earthlings become less and less healthy. That is, as we become less well-nourished and more-removed from nature, our physical and emotional health suffers.

We feel better when we eat the foods that nature grows and that our ancestors used to eat, but these foods are disappearing, along with much else that our children and grandchildren may never know.

Should we care? If we have food on our table, does it matter how it was made, or what it may have cost in terms of someone else’s well-being? Each person will make up his or her own mind about that. For me, looking at the larger picture, I say incentives (pursuing profits in competitive environments) that oblige businesses to maintain profitability, no matter the cost elsewhere in the system, is unsustainable. Earth’s resources are finite, and she cannot continue to feed all our wants, as populations grow, output increases, and wants grow too.

If we had to choose between food and computers, what would we choose? Suppose, one day, we no longer have that choice? If we continue to want, make, and buy more computers, believing that ever-increasing output in a competitive environment, driven by technological change, is the best way to manage the world, we may find ourselves in an impossible situation “by accident.”

A lack of choice (between food and computers) might not happen because we planned it, but it could arise if many of us make unthinking choices against the needs of food, farming, and the natural world.

It could be, perhaps, that self-interest (making an easy choice in the moment), might bring us to that place. For example, some people say that none of us will live long if natural pollinators die out. Do we have a plan for that moment (drones and AI forever, perhaps?), or would we prefer to work toward avoiding the day when we must invent what feeds us, instead of finding it abundant in our fields, hills, and valleys?

Further Reading: *The China Study*, by Campbell and Campbell; *These Were the Sioux*, by Mari Sandoz ; *Lavender: Fragrance of Provence*, New Edition by Hans Silvester; *Annie’s Reading List for Joy* (see this website)

Further watching: *The Biggest Little Farm*; *The Amish – How They Survive*

Poem and Out-Takes on pages 5 – 7 below



The Dark Maw Beneath the Table...

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The Dark Maw Beneath the Table

Dorian, Oscar, Dr. Jekyll, Anna* –
four diners chatting – love this Beluga caviar.
Chomp – there goes a table leg –
common problem – laugh – love this caviar.
Other folks do tables – they'll fix it,
if needed.

Chomp – dishes sliding – chomp – dishes crashing.
Laugh – it's too bad – good help is hard to find.
Chomp – four legs gone –
table's flat – back to normal –
four diners – these are terrific escargots.

Chomp – half a table gone – don't worry –
Anna, Oscar, outcasts – re-positioned – best for everyone.
Four diners – what delicious escamole!
Chomp. Chomp. "Help!" Chomp. "Help!" Chomp.
Two diners – so heavenly, this casu marzu.

Jekyll's shame – so real – Dorian's problem – art.
(Jekyll doesn't know – not for me to share.)
Two diners – try this marvelous Kopi Luwak.
Chomp. Chomp. "Help!" Chomp.

All's consumed – our[^] Dorian wants a space-ship.
But – other tables – other Maws.
Engineers – gone; suppliers – gone; workers – gone.
Dorian can look out for self – awful clever,
he may yet reach the stars, but
Why?

*Dorian Gray, Oscar Wilde, Dr. Jekyll of Jekyll and Hyde, Anna Karenina

[^]Colloquial term of familial affection – "Our Mary likes ginger beer."

Out-takes:

Business and the Free-Market: In the free-market ideal, all business owners receive the same, acceptable, or “normal” profit. This is because, as the theory goes, if one type of business makes more profit than another, other businesses and resources will wish to share in those excess profits and will freely enter that industry. This shares the profits out among more businesses, bringing the profit back to “normal.”

Alternatively, if there are low profits in an industry, businesses will leave that industry. Then, those low profits will be shared among fewer businesses, so that profit per business owner returns to “normal.” It is assumed that, if there are low profits in an industry, then consumers must not want the product. That is, the free market will eliminate that which we supposedly do not want, transferring its resources via Adam Smith’s Invisible Hand into those products and services which we supposedly do want.

Thus, one important rationale for free markets is that free entry and exit of businesses to and from different industries is an effective and fair way of organizing economy and society. To repeat, if profits are high, businesses move into the industry. If profits are low, businesses move out of the industry. The signal that guides this behavior in each industry is the market price of the product, or the price at which the quantity supplied equals the quantity demanded. Price fluctuations, interacting across *all industries*, ensure an even distribution of profits across *all businesses*.

Prices signal consumers’ wants and needs to suppliers. (That is, people pay high prices for what is important to them. If many people want something, its price increases and more is produced.) This is how, according to the theory, resources are directed to where they need to be. Price changes alter profits; businesses enter or exit industries in response; businesses then deploy resources wisely, in accordance with consumers’ wishes, which are signaled via market prices that change when money is spent.

In this way, the economy is supposed to adjust so that *all* business profits are “normal,” representing a fair return to entrepreneurship. ***Thus, market theory overlooks the possibility that some industries are “naturally” more profitable than others and can attract resources away from more-important but less profitable industries over the long run.*** For example, anything that is addictive will attract and retain customers.

A business in an addictive industry would have an incentive to persuade more and more customers to buy the product, unless it is held accountable for the costs of sicknesses, rehabilitations, overdoses, etc. Or, if a product is inexpensive and harmful, but the latter information is suppressed, the industry may avoid being held accountable. And, if a business or industry can find a way to insist that its product be purchased as part of living life, it may have a cash cow forever.

Resources and the Free-Market: Free-market theory *also* assumes that *resources*, such as workers, respond to financial incentives. That is, resources will go where they earn their best return. Then, so the theory goes, everyone is compensated according to their priorities in terms of efforts, wants, and needs; and everyone can afford what they most want and need – so that everyone finds their appropriate niche in the system.

People who like the free-market idea may develop institutions and lifestyles designed to help us all approach this ideal. Questioning free-market ideas has not been acceptable, among those who both believe in it and pass it along to others. Here is a challenge they are invited to meet, if they truly believe the free market is good for the world:

Theory suggests that higher pay for unpopular work will arise spontaneously, when workers become scarce. But, if low-paid workers are at the beginning of a chain of products, each needing to keep costs down, how

can they be paid more? Their higher costs will be passed all along the chain, until their initially-higher wages will not buy any more than their lower wages bought before.

If there are financial incentives to move out of low-paid work, into work that is generally better-liked and better-paid, who would remain low-paid? It seems to me that, in order to keep people doing low-paid and unpopular work, we would have to make sure they did not have other opportunities. That is not freedom.

So, if we have a free country and a well-functioning market system, with a hierarchy of products having incentives to keep costs down throughout their supply chains, we would expect few low-paid workers and many high-paid workers. We would expect those low-paid workers who cannot advance their positions to protest, up to and including use of strikes, violence, or insurrection.

This is what we appear to have, here in the U.S., and free-market proponents need to answer the challenge – do they intend to fix it, or to maintain the status quo with reference to theories that in the real world only work for some? Socially-conscious free-market opponents have a different problem: money does not grow on trees, so you cannot spend your way out of a malfunctioning system for ever. Regardless of theory or which political position you hold, you will see in Annie’s analysis how making money, (or, perhaps, simply trying to stay in business) in a competitive environment leads to negative outcomes for almost all.

What is “different” about Annie’s analysis is that she explains *how this happens relative to free-market theory*. Free markets do not solve human problems, as the free-market system is currently institutionalized. If we know why and how, we can work to change the rules, hopefully in peace and with mutual respect.