For most of history, attempts to distinguish the roles of consumer and producer would have meant little. While individuals within a family or other close-knit social group have always specialized in certain functions, as a unit they once relied almost exclusively on their collective output to sustain themselves. Increases in consumption were increases in production, and vice versa. But the story of economic growth since at least the start of the industrial revolution has been in large part a story of disaggregating these activities. Increased specialization at every scale has fueled the productivity gains and innovation responsible for the stunning improvement of living standards around the world.

Households began to specialize in particular outputs and trade within their communities to meet their needs. Trade between communities stitched together national economies that shared a common language, currency, legal system, and physical infrastructure—Topeka supplied wheat; Detroit, cars; Louisville, baseball bats. In the era of globalization, entire nations produce surpluses of certain goods and services that they can then trade for the surpluses from others.

Meanwhile, financial products allow economic actors, whether individuals or nations, to not only consume different things than they produce but also to do so at different times. When we say that someone is saving, we mean that he is converting current production into future consumption; a borrower funds consumption now through a promise to produce later. Government goes a step further, using its taxing and spending powers to translate the production by some into consumption by others.
At some point in the 20th century, as the activities of production and consumption drifted farther apart and the broader culture embraced individualism and the fulfillment of desires, Americans began identifying as consumers, consumption became the measure of prosperity, and discussions of policy reoriented accordingly. As Yuval Levin observes in *The Fractured Republic*, this trend was compounded by other consumer-friendly social and economic forces as well:

As our economy grew less consolidated and more fractured over the second half of the twentieth century, worker bargaining power came to be replaced increasingly by consumer bargaining power. Americans came to understand themselves first as individuals and consumers, and employers facing greater competition for customers grew more concerned with meeting consumers’ demands than those of workers.¹

Writing in *The Atlantic* back in 1995, Clifford Cobb, Ted Halstead, and Jonathan Rowe pointed the finger directly at the rising emphasis on GDP itself. While GDP and its close cousin GNP are technically measures of total national production, much of the economic theory built around them prizes consumption, which creates demand for production, as the central determinant of growth:

[T]he biggest change was in who “the people” now were. Because the Keynesian approach [to economic policy] saw consumption as the drive train of prosperity, Washington collectively looked at the public in those terms as well. They were no longer primarily
farmers, workers, businesspeople—that is, producers. Rather, they were consumers, whose spending was a solemn national duty for the purpose of warding off the return of the dreaded Depression. Our young men had marched off to war; now Americans were marching off to the malls that eventually covered the land. In this atmosphere the GNP, the measure and means of policy, rapidly became an end of policy in itself.²

The expansion of the welfare state surely played a role too, particularly as the social safety net sought to guarantee an individual’s right to consumption independent of what he produced. Trillions of dollars poured into low-income households to boost their consumption while doing nothing about (if not actively retarding) their ability to become more productive. Today, programs like the Supplemental Nutrition Assistance Program (SNAP, or “food stamps”) get credit for “lifting people out of poverty” despite doing nothing to help recipients gain a foothold in the economy and provide for themselves.

Matters have reached the point where consumption defines success even where it is not supposed to be the goal; some argue it has become an American virtue per se.³ “Healthcare reform” means neither improving the quality of the healthcare system nor improving people’s health, only buying more health insurance. “Free trade” must be working if prices decline. Unsustainable student debt produces more calls for tuition subsidies than for college educations worth their cost. Poverty gets fought by giving low-income households the things they might buy if they were not poor.
Superficially, consumption seems a sensible focus. In popular culture, consumption is the end goal and an obvious good. The toil of production, by contrast, is only a necessary means to that end—if one manages to consume more while producing less, all the better. In The Vanishing American Adult, Senator Ben Sasse writes, “There is almost nothing more important we can do for our young than convince them that production is more satisfying than consumption.” In her review, The Atlantic’s Emma Green characterizes this as “stoicism” and “self-denial.”

The mindset in which the consumption tail wags the production dog has perverted our understanding of prosperity. Only through production does the ability to consume exist. Production without consumption creates options; consumption without production, dependence and debt. Further, most of the activities and achievements that give life purpose and meaning are—whether in the economic sphere or not—fundamentally acts of production. While the material living standards achieved through consumption represent one component of prosperity, both lived experience and social science point to other dimensions that are far more important to life satisfaction.

Lists vary, but they generally include accomplishments like strong personal relationships, success at one’s work (whether paid or not), raising a self-sufficient family that passes opportunity to its children, and fulfillment of traditional obligations. What these things have in common is their productive nature, not in the sense of boosting GDP but rather as ways that people invest effort to improve the lives of others. Popular culture notwithstanding, ingrained social norms still recognize such efforts—the productive virtues—as the ones that allow society
to function and people to prosper, and the culture thus awards respect, dignity, and gratitude to those who perform them.

Empirical support for the preeminence of productivity comes from “happiness” studies. For instance, Harvard professor Ed Glaeser, citing economists Andrew Clark and Andrew Oswald, notes “the huge drop in happiness associated with unemployment—about ten times larger than that associated with a reduction in earnings from the $50,000–$75,000 range to the $35,000–$50,000 bracket.” The job, not the consumption enabled by the job, appears to be what matters most. Clark and other colleagues likewise found that while people return to their previously self-reported level of “subjective well-being” several years after marrying, divorcing, becoming widowed, or welcoming a first child into the world, they never get used to joblessness.

Such studies of life satisfaction typically focus on paid employment, but in Coming Apart, Charles Murray offers a clever look at whether paid work or a productive vocation is the true source. The U.S. General Social Survey (GSS), he notes, asks the question “On the whole, how satisfied are you with the work you do?” of all respondents, not just employed workers. It is homemakers, not wage earners, for whom high job satisfaction translates most directly into a high level of happiness.

The productive virtues, properly and broadly defined, can seem intangible and unquantifiable. Two things must be said about this: First, it is not true. Measurement would be challenging, yes, but not any more challenging than estimating every American’s employment status every month through surveys of more than 60,000 people. Not more challenging than calculating the total economic output of the nation each quarter with a precision that allows detection of fractional-point increases, or estimating the economic value of reducing by one
percent the risk of asthma attacks from air pollution. The measures would not be perfect, but neither is counting an increase in prison construction as GDP growth.

Second, choosing where to focus policy based on ease of measurement is absurd. In 1975, Friedrich Hayek lamented, “To an economist today, however, only that is true which can be proved statistically, and everything that cannot be demonstrated by statistics can be neglected.” GDP might appear a more straightforward and objective measure, but it is every bit as incomplete and reliant on value judgments; it merely assigns 100 percent of its value to economic transactions and 0 percent to everything else. Attachment to the quantifiable provides a wonderful illustration of the distinction between precision and accuracy: a dart-thrower who hits the exact same spot three times is precise, but if that spot happens to be halfway across the room from the bulls-eye then he is also inaccurate. Economic measures may be precise, but we should care more that our policy choices fly at least in the general direction of the dartboard. As Stiglitz observed in Davos, “What we measure informs what we do. And if we’re measuring the wrong thing, we’re going to do the wrong thing.”

A helpful feature of defining prosperity more broadly is the reminder it provides that no two people want the same thing. Measures like GDP create the convenient illusion of a homogenous population benefiting or suffering in lockstep. Real life is not so simple. People have different priorities, excel in different ways, and find meaning in different places. Declaring prosperity available to everyone so long as they become welders in Houston is not sufficient. Prosperity also requires pluralism.

A prosperity that extends across society will offer numerous paths to its achievement. Prosperity should be accessible in any part of the country to people from diverse backgrounds
choosing from a wide array of vocations. Cities may be more economically productive, but not everyone wants to live in a city. A traditional college degree may correlate with higher earnings, but most people will not attain one. Having two parents work while the children attend daycare may be more efficient, but a community consisting entirely of such households is one that many families would rather avoid.

This should not be confused with “having it all.” Everyone will always face tradeoffs, whether between location and profession, or lifestyle and income, or family and career. The promise of pluralism lies in maximizing the sets of choices that lead toward the productive virtues, so that they are accessible to as many people as possible. A math whiz may not earn in his hometown what he could in Silicon Valley, but he should be able to find vocational success, raise a self-sufficient family, and so forth. Likewise, someone whose academic talents will not take him beyond high school should be able to make it in New York City if he so chooses, though he will have to find new community affiliations in the process. Pluralism may not maximize short-term GDP as well as an approach that channels everyone to wherever their economic output is greatest, but it will improve prosperity if the permutations it leaves available more closely match people’s abilities and the range of life choices they wish to make.

Pluralism also should not be confused with unconditional wish fulfillment. Part-Time Astronaut cannot be dreamed into viability. But society should recognize the value in preserving combinations of life choices that have proved themselves compatible with the productive virtues and we should expect that people pursuing happiness under conditions of rising prosperity will open new paths over time. Conversely, we should be skeptical of efforts to socially engineer new choices with no historical precedent. Single parenthood, to choose an obvious example, generally
imposes tight constraints around other choices—one may need to live close to a supportive extended family, possess the skills to find work that is both highly compensated and flexible, etc. Cultural and legislative efforts have failed to invent new ways for a single adult to build a healthy and self-sufficient family.

Free-market economic theory celebrates the triumph of new and more efficient economic configurations over the traditional or obsolete. So it naturally chafes at the idea that preserving or creating choices should be an object of public policy. The answer to this must be yes, but. Yes, those dynamics drive GDP higher, reward innovators, and improve material living standards over time. But we must acknowledge the costs to genuine prosperity as well. And we should not expect the benefits to always be larger.

In other contexts, we have no trouble acknowledging just that. The premise of environmental regulation, for instance, is that pollution’s intangible costs to public health sometimes exceed the value of economic activity. A more direct analogy is zoning: even the most valid and widely supported zoning provisions are efforts to preempt forms of economic development that would interfere with people’s enjoyment of their communities. Many wealthy towns, filled with high-income capitalists, still do everything in their power to stop big-box retailers from moving in. If market interventions to preserve those values at the expense of GDP can be prosperity-enhancing, why not ones that keep struggling communities alive or career paths open?

* * *

Objections to “globalization” tend in practice to be quite narrow. Few people, for instance, take umbrage at globalization’s original conception: McDonald’s and Coca-Cola selling their products worldwide or, for that matter, Pret a Manger opening on every other street corner in
New York City. Nor do they mind global entertainment culture’s homogenization or the cross-pollination of tastes in food and fashion. They aren’t sick of the human tourists, feeling overrun by invasive species, or fearful of some exotic pathogen triggering a pandemic. Even trade, broadly speaking, is not the issue. Exports are fine, superlative even. So are imports of novel goods and services unavailable in the domestic market.

Rather, by “globalization” the pundits, the politicians, and the pissed-off populous mean two very specific things: immigrant workers and imported substitutes, especially when produced by American firms that have moved operations overseas. In other words, they are upset about the warping of the labor market.

The connection between immigration and the labor market is straightforward. People who move to the United States obviously join its labor market, increasing the supply of whatever labor they can perform. But goods and services entering the United States have a similar effect, allowing work that otherwise must be done by someone inside the United States to instead be performed by anyone in the world. When the set of cars available to Americans goes from those made domestically to those made anywhere, the supply of labor available to meet U.S. car demand goes from prospective autoworkers living within the nation’s borders to all prospective autoworkers worldwide.

Conversely, both immigration and trade have the potential to boost demand for work. Immigrants are consumers as well as workers. The same trade agreements that allow foreign workers to produce for the domestic market allow (at least in theory) domestic workers to produce for foreign markets. Trade and immigration can also promote economic dynamism and innovation through greater competition and more business creation. Immigration affects the
communities into which immigrations move, tax collection and welfare spending, and long-term demographic trends. Trade delivers lower prices to consumers as well as a crucial geopolitical dimension. And lest anyone forget, millions of foreigners’ economic prospects hang in the balance.

Thus, people’s views about trade and immigration policy depend upon the outcomes they emphasize, the interests they prioritize, the timeframes they consider, and the tradeoffs they accept. This complexity strains the standard political coalitions. Republicans have traditionally been more supportive of open trade while Democrats have emphasized open immigration, but sharp splits have emerged within both parties on both questions. Some adopt absolutist positions to elide the complexity. They claim that unconditional free trade always benefits Americans regardless of whether other nations reciprocate, or insist on “open borders” that welcome an unlimited number of immigrants. But this cannot be true.

* * *

Trade delivers its benefits in several ways. The standard mechanism, taught in Economics 101, is specialization. Where two parties have capabilities that make them better at different types of production, they can both be more productive (and create more output for consumption) if they specialize where they are relatively better equipped. This is true of next-door neighbors where the accountant does both households’ taxes and the carpenter does both households’ repairs, and it is true of the United States and Mexico where one’s climate is ideal for growing wheat, the other’s for avocados.

A second benefit, which many economists now believe is more important in the international context, is scale. Think of the carpenter, who must buy a full set of tools just to maintain his own
house but would much prefer, via trade, to deploy his talents and equipment throughout the neighborhood. Likewise, Microsoft can expect far greater revenue and invest more in product development if its software will be bought not just in the United States but around the world.

The third oft-cited benefit is technological diffusion. When producers come in contact, they can learn from each other and competition can force both to become more effective. If the carpenter can work all around town instead of just in his neighborhood, he will discover techniques used by his peers and seek to improve his time-per-job to match what they offer, especially if they will be doing business in his neighborhood as well. While the stiff competition from international automakers dealt harsh blows to Detroit, it introduced products and processes that led to better domestic cars too.

Through all these channels, workers can become more productive while consumers can benefit from greater choice, lower prices, and more rapid innovation. Thanks to these effects, the elimination of trade barriers and increase in international trade in the second half of the 20th century produced gains throughout the world and especially in certain developing countries. In the 1960s, less than one-quarter of global economic output traveled across international borders. By 2003 that share had reached half, as of 2015 it stood at nearly 60 percent.\textsuperscript{15}

Trade is not without drawbacks. The parties trading almost certainly gain—it is, after all, their choice to make an exchange. If one measured prosperity in terms of consumption, this might be the end of the story. People and firms who once could only buy things on the domestic market now can buy from the international market as well. What’s not to love? But as Irving Kristol responded when Irwin Stelzer told him that protectionism is bad because it may benefit
producers but harms consumers, “where is it written that the welfare of consumers takes
precedence over that of producers?”

If the goal is productive pluralism and the focus is labor-market outcomes, the calculus
changes. In isolation, opening the U.S. market to a global supply of labor could be cause for
serious concern. Trade needs to be balanced for the net effect to be positive, with the world
buying as much from the United States as we buy from the world so that workers face not only
greater competition but also greater opportunity.

That outcome is by no means guaranteed. If trillions of dollars of foreign goods are flowing
into the United States then Americans must send back something in return. But other countries
might impose obstacles to American producers selling in their markets and instead acquire
American assets like stocks, bonds, and real estate. For instance, what if China sends $50 billion
worth of electronics to the United States and we send $50 billion worth of U.S. treasury bonds
back to China? In colloquial terms China has sent the goods on credit. U.S. production is lower
and U.S. government debt is higher. Such an imbalanced exchange is far from the model of
prosperity-enhancing “free trade” taught in economics classes. It can reduce opportunities for
workers, lower the trajectory of their productivity, and weaken the nation’s prosperity.

Just such an imbalance has emerged in recent decades. For instance, in 2016 the
United States traded $3.6 trillion in goods: $1.45 trillion of exports and $2.25 trillion of imports,
which resulted in an $800 billion deficit offset only in part by a $250 billion surplus on $1.25
trillion of services trade. Of that $3.6 trillion in goods, about 20 percent was in agriculture or
natural resources where differing national endowments would make one country or another an
obvious importer or exporter. The largest single product in that category was crude oil, which
accounted for $108 billion of U.S. imports against only $9 billion of exports. But otherwise, trade of this type was balanced: $308 billion of imports against $324 billion of exports; 55 product categories with net imports and 43 with net exports.

By contrast, for the 80 percent of trade in manufactured products, Americans bought nearly two dollars of imports for every one dollar of exports sold overseas—$1.75 trillion in imports against $1.08 trillion in exports overall; 113 product categories with net imports and 46 with net exports. Of the 23 product categories with a surplus or deficit of at least $10 billion, 22 ran deficits. The only manufactured product of which the United States exports significantly more than it imports is airplanes.

The U.S. trade deficit in advanced technology is particularly stunning. Balanced trade might include a large deficit in unsophisticated manufacturing that relies heavily on low-cost, unskilled labor, offset at least in part by U.S. exports of more sophisticated products. Yet the U.S. is a net importer even of what the U.S. government designates as “advanced technology products,” importing $429 billion against $346 billion of exports in 2016. In addition to airplanes, U.S. exports do exceed imports in weapons and in flexible manufacturing tools. But the nation is a net importer of biotechnology, life sciences, computers and electronics, advanced materials (including semiconductors), and even nuclear technology.

This has not happened by accident. Countries like South Korea, Taiwan, and Japan achieved rapid growth in part through mercantilist policies that aggressively subsidized and promoted their strategically important industries on the global stage while preventing foreign (e.g., American) producers from selling in their markets. Today, China is the primary practitioner of this mercantilism and its gargantuan scale is producing unprecedented distortions. Its approach to the
international economy differs in both degree and kind from its predecessors and incorporates brazen practices like widespread intellectual property (IP) theft. With its “mercantilist campaign to dominate advanced industries by flouting the rules of the international trading system,” explained Rob Atkinson, president of the Information Technology and Innovation Foundation, “China has been kidney-punching its competitors.”

While China’s commitments through the World Trade Organization limit the official tariffs it can impose on imports, they do not prevent it from placing importers at other insurmountable disadvantages when attempting to sell into the Chinese market. China designs regulations and establishes technical standards that its domestic producers can more easily meet, provides direct subsidies to give those producers a financial advantage, and slows the approval of foreign products. It establishes “local content” requirements that force foreign firms to set up shop within the country and enter into joint ventures with local companies, rather than manufacturing at home and exporting the finished goods to China. And it ensures that government procurement gives preferential treatment to local firms—no small matter in a state-run economy where the government is often the primary consumer.

Even when American companies do have the opportunity to enter the Chinese market, they are rightly reluctant to do so for fear of falling victim to the pervasive intellectual-property theft that the Chinese government permits and in many cases facilitates. It is official Chinese policy to promote “indigenous innovation” by forcing foreign firms to transfer their technology and trade secrets to local Chinese companies as a condition of doing business in the country. The U.S. Chamber of Commerce called the policy “a blueprint for technology theft on a scale the world has never seen before.” Meanwhile, the government provides little to no enforcement of
protection for foreign firms that find their patents and trademarks ignored by their Chinese counterparts.

Nor does staying away from China provide a respite; China’s market distortions and intellectual-property abuses come home to roost in the U.S. market as well. A subsidy that advantages Chinese firms in China gives a similar advantage to those firms when they export across the Pacific. And China is actively pursuing an unprecedented global campaign of industrial cyber-espionage, targeting thousands of U.S. companies as diverse as Google, Coca-Cola, and the New York Times. The issue has risen to the top of the U.S.–China economic dialogue as centrally coordinated Chinese cyber-attacks have seized hundreds of billions of dollars’ worth of intellectual property while giving Chinese firms access to their competitors’ strategies. In testimony before Congress in 2015, General Keith Alexander, former head of the National Security Agency and the U.S. Cyber Command, called the theft “the greatest transfer of wealth in history.”

As Reuters reported early in 2017, the nation’s “Made in China 2025” plan “aims to dramatically increase domestically made products in 10 sectors, from robotics to biopharmaceuticals” through “subsidies, standards, financial policy and government-backed investment funds.” Now, according to Quartz, “Startups and foreign manufacturers are embracing a new reality—someone in China is going to make a knockoff of your unique invention, almost immediately.” And rolling off the assembly line by year’s end: China’s first attempt to compete with Boeing, built conveniently through “at least 16 joint ventures for avionics, flight control, power, fuel and landing gear.”
In June, Tesla announced it would build its second electric-vehicle plant in Shanghai, not the United States, supported by a 50% investment from the Chinese government that would include free land. A research-and-development center and a second “gigafactory” for batteries may follow. Tesla believes China could become its biggest market; but apparently, a market for U.S. exports it will not be.

* * *

Why has the United States tolerated this state of affairs? To the untrained observer, it might seem self-evidently harmful to both send away the labor-intensive industrial employers that sustain communities and forfeit leadership in the industries that might play such a role in the future, especially if the result is to become somehow more indebted in the process. Certainly, that is what the Working Hypothesis would suggest.

Unfortunately, the standard position on trade, held by many economists and adopted by market-oriented policymakers, is that trade is always good and more is always better. This conclusion stems from the error of evaluating trade by its effects on immediate consumption. In the short-run, a consumer would obviously prefer having the opportunity to purchase something from abroad over not having that opportunity. A trade deficit created by the United States importing more from other countries than it exports would be unimportant or even beneficial.

“The idea with international trade is to import the largest volume of goods and services for any level of exports,” writes Simon Constable, a columnist for the Wall Street Journal and fellow at the Johns Hopkins Institute for Applied Economics. “The more goodies you get rather than give, the better off you are.” In this thinking, if other countries are willing to send us more than they demand we send in return, it is they who are the patsies. If rather than purchase American-
made goods, other countries choose to purchase American treasury bonds or companies or houses, that is the free market at work—a demonstration of confidence in the American economy and the desire of foreign investors to invest here.

Concern for the long-term likewise falls by the wayside, assuming away differences between industries in employment profiles, growth trajectories, opportunities for productivity improvement, and spillovers to broader research ecosystems and supply chains. Michael Boskin, chairman of George H. W. Bush’s Council of Economic Advisors, is reported to have once said, “computer chips, potato chips, what’s the difference?” Writing in the New York Times, Obama CEA chair Christina Romer observed, “American consumers value health care and haircuts as much as washing machines and hair dryers.”

This is myopic, as a production lens makes clear. In aggregate at the national level, imbalanced trade is placing the economy on a lower trajectory. In the short-run, it reduces productive capacity. It also allocates both human and physical capital away from industries that hold most potential for the future. And it builds industrial ecosystems and supply chains outside the United States that will make future efforts to regain a competitive foothold more difficult. “The products a country makes today,” explains The Economist, describing work done by Harvard professor Ricardo Hausmann and MIT professor César Hidalgo, “determines which products they will be able and likely to make tomorrow, through the evolution of their capabilities.” What begins as distortion becomes genuine advantage as supply chains and know-how embed in the countries that have seized them. The United States, meanwhile, has become a prominent exporter of garbage (not bad pop music, actual garbage).
Individuals and their communities feel the labor-market effects directly. Harvard economist Greg Mankiw assured his *New York Times* readers that, “full employment is possible with any pattern of trade. The main issue is not the number of jobs, but which jobs. Americans should work in those industries in which we have an advantage compared with other nations, and we should import from abroad those goods that can be produced more cheaply there.” But which jobs do Americans lose and which do they gain if trade is imbalanced and other nations are dominating the most promising industries? Presumably, other jobs have not been available to them all along in which they could have been working more productively. Nor, if trade is imbalanced, are new opportunities opening in proportion to the ones that are lost. Instead, new jobs are ones in which workers likely are far less productive and which likely provide less opportunity for productivity growth over time.

Further, where unbalanced trade reduces the American economy’s output of the “tradeable” goods and services that can be produced in one place and sold to another, the suggestion that workers shift into the services economy is especially unhelpful. Notwithstanding the sneers from economists who regard attachment to manufacturing as nostalgic pabulum, a very good reason exists for the average citizen to place special value on such activity. Every community, defined by its local labor market, must produce a sufficient quantity of tradeables to exchange for what it needs from the outside world. Yet that tradeable sector is by definition the one exposed to withering competition.

Economists are gradually acknowledging that trade is not always an unmitigated good. An influential 2016 paper by MIT professor David Autor and colleagues found that the economic shock of China’s entry into the global trading system caused the net loss of more than two
million American jobs between 1999 and 2011, roughly half in manufacturing and half in other industries:

Employment has certainly fallen in US industries more exposed to import competition; however, overall employment in the local labor markets in which these industries were concentrated has as well. Offsetting regional employment gains either in export-oriented tradables or in nontradables has been difficult to detect in the data.

Affected low-wage workers saw the largest proportional declines in earnings and were most likely to exit the labor force entirely.\textsuperscript{21}

Another 2016 paper, by former Harvard University president and Treasury Secretary Larry Summers and colleagues observed that under conditions of “secular stagnation,” characterized by low interest rates, slow growth, sub-target inflation, and excessive unemployment:

- neo-mercantilist policies—policies that attempt to improve one country’s net foreign asset position relative to another or run persistent current account surpluses—are beggar-thy-neighbor.
- Neo-mercantilist policies alleviate the secular stagnation of the country pursuing them by exporting savings, but at the expense of the trading partner.

They conclude, “economists and policymakers need to give substantial weight to the possibility that secular stagnation [and thus the effects of neo-mercantilism] will be the defining economic challenge for macroeconomic policy over the next decade.”
Yet when confronted with this problem, rather than either defend or rethink their policies, many free-traders shrug and say nothing can be done. This resignation comes in three forms: First, that even if past policies were misguided the die has been cast, “the jobs aren’t coming back,” and the unique “China shock” will never repeat. (This argument is particularly befuddling because the same consumer-focused analysts who dismissed the strategic value of retaining industrial strength now also dismiss the possibility of restoring industrial strength, on the ground that it is too firmly embedded elsewhere.) Second, that trade imbalances are merely a symptom of underlying savings imbalances and trade policy is powerless to intervene. Third, that any disruption of the status quo or confrontation with countries whose policies hurt Americans risks a “trade war,” which would cause an even worse situation. None of these makes sense.

Better policy can still have an enormous impact. Technological advances will transform ever more goods and, especially, services into tradeables. Behind the one billion Chinese, another [TK four] billion citizens of the world are eager to produce their way out of poverty and would happily follow a path steamrolled with impunity by China. Effective policy would also go beyond the prevention of future harm and help to reverse recent losses. The garment factories of early-20th-century New England will not roar back to life. But more of the products still designed in the United States and produced by U.S.-based firms—from aerospace components to pharmaceuticals and medical devices to, yes, iPhones—could be made here as well. As described by Vivek Wadhwa, distinguished fellow at Carnegie Mellon University’s College of Engineering and Director of Research at Duke University’s Pratt School of Engineering:

Foreign companies do not trust China and nearly all of the intellectual property in Apple’s products originates from outside it.
This means that the value chains could be shifted over time. This begs the question: what it would cost to move manufacturing to the United States? … India [where Foxconn plans to build a $10 billion iPhone manufacturing facility] does have a labor cost advantage over the U.S. but robots could eliminate this. Similar manufacturing facilities could be set up in the United States, product by product. Of course, this will not be easy and there are many risks. But it certainly is possible for Apple to bring manufacturing back to the United States. If Apple can do this, so can most other companies; their value chains are a lot less complex than Apple’s.

The *Harvard Business Review* recently highlighted one firm’s decision to make stainless-steel trash cans in the U.S. instead of Asia, with a more automated production line that employs seven to ten workers versus the equivalent eighty overseas. The seven to ten new workers don’t care that somewhere else the total might have been eighty; nor do the other employees working to support the domestic plant, nor their families, nor their communities. “Its medium-term goal — if its first U.S. facility is successful,” reports the *Review*, “is to add as many as three more U.S. manufacturing sites. In the longer term, the company might supply global demand from the United States.”

None of those things will happen overnight. The massive advantages of entrenched supply chains and built expertise, which policymakers foolishly ignored and allowed the United States to give away, now stand as obstacles to U.S. growth. But the same forces that warped global
supply chains away from the U.S. worker can straighten them again at a similar pace. In many cases, the choice to move production overseas is a narrow one and relatively small policy changes can have large effects in terms of preventing further departures and encouraging returns. If trade were operating as its proponents promise, the United States should even be a place to which other countries offshore their own production in some instances. The domestic petrochemical industry has experienced just that as falling natural-gas prices began to shift businesses cases: in Iowa, an Egyptian fertilizer plant; in Tennessee, a German polysilicon plant; in Texas, a Taiwanese ethylene plant and an Austrian steel plant that would send half its output back to Austria.22

Americans should likewise be unsatisfied by claims that the trade deficit is an inevitable side effect of the nation’s low savings rate. Yes, a country consuming more than it produces will by definition run a trade deficit. But that merely begs the question: why is it doing this? The dynamic is not exogenous to the international economic system; something is influencing those saving and investment decisions. Unless one prefers a blatantly racist analysis that “those spendthrift Asians will always be savers, while those cowboy Americans will never be able to hold on to a dollar,” policy choices must surely be playing a role, and could surely play a different one.

The issue is confused, once again, by the obsession with the American consumer, which leads to descriptions of the trade deficit as excess American consumption. But view it instead as a problem of insufficient production: why isn’t the American economy producing more? In exchange for the goods that foreigners send to the United States, why are they taking back American assets—stocks, bonds, and real estate—instead of American goods? The American
consumer is only one variable in this equation. The policies of U.S. and foreign governments that discourage foreigners from buying American products are responsible too, and those policies can be changed.

Are such fights worth picking? Even after conceding that trade is harming American workers, that jobs could come back, and that trade policy matters, skepticism remains that any policy changes that might strengthen the American position. Such assertiveness, the thinking goes, would spark a “trade war” in which other countries respond with further protection for their own producers, matters escalate, and the international trading system ceases to function.

But that trading system is not self-enforcing. It is a reciprocal construct in which only the prospect of benefits denied compels each nation to operate within the rules in a manner that can make all nations better off. If large economies so fear the possibility of a trade war that they would rather surrender preemptively—tolerating the abuses of others and forgoing opportunities to advance their own interests—then more and more countries will flout the rules more and more aggressively, imbalances will persist, and domestic frustration will grow. Appeasement is not sustainable.

The alternative is for the United States, in partnership with other developed nations facing similar challenges, to make clear that it will no longer tolerate the status quo. China today, and other nations plotting their own strategies, will then need to decide whether to settle on a peaceful equilibrium in which all sides play by the rules or to continue down a path that undermines an international economic system that could benefit everyone. Given only those two options, following the rules would seem the obviously more attractive one for all involved. That is the hope and the goal—not actually to retaliate but rather to create conditions in which abuses
are no longer contemplated. But the crucial point is that if some nations in fact prefer an open trade war to genuine free trade, then the collapse of economic relationships is inevitable.

Accusing those who would defend American economic interests of “starting a trade war” represents a nonsensical form of economic pacifism. The trade war has already started, but only one side is fighting. The question for the United States is whether to respond or surrender, bearing in mind that a response has a good chance of defusing the conflict, whereas a surrender will only embolden nations with no commitment to free markets, undermine the health of the trading system as a whole, and leave the committed free-traders to fight on far less favorable ground at some point in the future.

* * *

None of which is to advocate protectionism or to suggest that anyone voicing skepticism about current conditions must be on the right track. For instance, President Donald Trump made opposition to free trade a centerpiece of his campaign. His policy prescriptions, to the extent they exist, emphasized the renegotiation of trade deals and imposition of indiscriminate tariffs aimed at bilateral trade deficits. But like a doctor who misdiagnosis an illness, his explanation of the problem was incorrect and his remedies ill-suited to their task.

No particular bilateral deficit is necessarily problematic—in a well-functioning system of global trade, countries might run deficits with some partners and surpluses with others. Further, within the undifferentiated aggregate of exports and imports, some elements of trade may be constructive while others are destructive. And further still, free-trade agreements (FTAs) reached by the United States with other countries have tended to improve its terms of trade—since 2001, for instance the Congressional Research Service reports that the U.S. trade deficit in goods has
fallen by a third with its FTA partners while more than doubling with other countries. The Trans-Pacific Partnership (TPP), now shattered, aimed squarely at promoting a more idealized model of trade while assembling a coalition of free-market economies to combat the unfair trade practices of nations like China.

A middle ground exists between the refusal to countenance affirmative trade policy and the desire to throw weight around indiscriminately. For instance, the Wall Street Journal, known for its aggressive opposition to protectionism and fear of trade war, editorialized in 2017 that:

Mr. Trump brandished big sticks in the campaign by promising to declare China a currency manipulator and impose punitive tariffs. But this would hurt the U.S. as much as China. U.S. officials now concede that a better approach is to target areas where China fails to grant Americans the market access that Chinese enjoy in the U.S.

So if China declares internet industries off-limits to foreign investors, Chinese companies will be blocked from buying similar American firms. If Tesla is hit with high tariffs on its U.S.-made cars, then Chinese cars will face higher duties in the U.S. Exports from firms that receive state assistance under the “Made in China 2025” industrial-policy plan could be blocked or subject to countervailing duties. 23
“Such a policy,” they concluded, “would address the reality that after benefitting from access to Western markets, China in the past decade began to harass or close its door to foreign companies.”

A policy that fully occupies this middle ground would focus on four objectives: first, building strong U.S. advantages in the tradeable sector; second, deterring unfair foreign practices that undermine free markets; third, addressing financial imbalances that contribute to trade imbalances; and fourth, supporting the less-skilled U.S. workers who disproportionately bear trade’s costs.

Building U.S. Advantages

The idea of government offering advantages to segments of the private sector offends many free-market policymakers. It appears an invitation for government to “pick winners and losers.” But that construct is not quite right where international competition is concerned, because it envisions policies that intervene on behalf of some firms or industries to the detriment of others. Improving U.S. competitiveness does not do that. It elevates the nation’s own firms and industries at the expense of competitors overseas.

The condemnation of government intervention also presumes a marketplace that would be free but-for a proposed policy, but the United States doesn’t decide whether the international marketplace will be “free” or “distorted”; other nations have their own say, and they have stated loudly their preference for the latter. One can be a free-trade absolutist or a free-market
absolutist, but not both. The choice for U.S. policymakers is whether to push American
producers onto an equal footing or leave them to flounder.

As Rob Atkinson and Stephen Ezell detail in *Innovation Economics: The Race for Global
Advantage*, efforts at boosting the competitiveness of American producers (and making the
United States an attractive place for foreign firms to locate production) need not mimic the
government-led mercantilism on display elsewhere. The United States can leverage its own
strengths by focusing government support on innovation, infrastructure, and education. If
policymakers acknowledged the enormous social value of domestic production, they would
direct resources accordingly. As one concrete example, public funding for research in
manufacturing—advanced materials, robotics, logistics, etc.—should be on par with that given to
the National Institutes of Health.\(^\text{24}\)

Many other policy areas acquire greater urgency and new priorities in this context. Reforms
to organized labor and vocational training, discussed earlier, would make critical contributions.
The same goes for regulatory reform, which should be expedited especially for infrastructure
investments like pipeline construction and port upgrades that might have the greatest global
effect. The American advantage in cheap and abundant energy that has developed over the past
decade, thanks in particular to new oil and gas supplies unlocked by hydraulic fracturing, must
be embraced and extended.

**Deterring Unfair Practices**

The logic of international trade, built on reciprocity, leads toward tit-for-tat retaliation as a
means of conflict resolution. But that is rarely constructive, and can leave a country taking action
hurting itself as much as its target. To deter unfair practices that contribute to unbalanced trade, the United States should develop asymmetric tools that hurt trading partners without hurting itself and can therefore be credibly threatened.

Where other nations deny American producers access to their markets with non-tariff barriers like discriminatory regulations and local content requirements, the U.S. should respond in areas where its own advantages give it the greatest leverage—for instance, by limiting access to American student visas, advanced medical technologies, and capital markets. Denying any of these to a foreign country would hit its own ruling classes hardest while doing little damage to its lower-income population or to American households.

The goal in developing such tools is not to use any of them. The United States should not want to exclude foreigners from its schools, deprive them of lifesaving drugs, or quarantine them from American investors. But developing these tools is every bit as important as developing the next generation of military technologies, and being prepared to use them is every bit as important to keeping the economic peace.

Theft of intellectual property (IP) poses a particular threat to the United States because so much of its potential advantage in the international market derives from its superiority in IP development. The United States should designate foreign industries that use stolen IP as persona non grata and prohibit importation of their products. Further, it should attempt to build a coalition of developed economies that together prohibits their firms from transferring sensitive IP to any country with a track record of IP theft or forced IP transfers—essentially “IP Sanctions”—just as they do with sensitive military technology. One way to prevent China from inducing Tesla to set up shop in Shanghai is to flatly prohibit the move; if Elon Musk would prefer to
proceed as a Chinese firm part-owned by the Communist party without access to the U.S. market or investment, he is welcome to make that bet.

Short of banning IP transfers, and perhaps more effective in the absence of international cooperation, the United States could bar the import from China of products that contain IP in its first five years of protection under a U.S. patent. The IP could only have gotten into the product if an American firm transferred it or a Chinese firm stole it. If neither action is in the American interest, then neither is the subsequent import. This approach would be less draconian than IP Sanctions because American firms could still enter the Chinese market and do business there; but it would still insulate the American market from reverberations back across the Pacific. This parallels the U.S. policy of banning drug reimportation from Canada. American firms can develop drugs here and then sell them in Canada, where that nation’s government aggressively distorts drug prices. But once the drug passes through that distortion and gets sold at a below-market price, it cannot be brought back into the U.S. because doing so would bring the Canadian policy back with it.

**Addressing Financial Imbalances**

The truism that a trade deficit reflects a lack of national savings—that is, national consumption in excess of production—says nothing about causality and does not justify a claim that the former is merely a byproduct of the latter. The policies described above, by increasing the relative attractiveness of consuming-by-importing-from-the-U.S. as compared to saving-by-acquiring-U.S.-assets can be described as likely to reduce both trade and savings imbalances. However, the truism is helpful in highlighting another lever for addressing undesirable
imbalances in the international economy: not only trade policy, but also financial policy, can influence the trade balance. If the purchase of American assets becomes less attractive to foreigners holding U.S. dollars, the purchase of U.S.-produced goods and services will become relatively more attractive. Any number of policy tools could discourage foreign acquisition of assets, but the most straightforward would be simply to block it. As with technology transfers, the United States already blocks various corporate acquisitions deemed not in the national interest. A foreign government boosting its own economy’s production at the expense of America’s by sending goods on credit should qualify.

In this the United States would find an enthusiastic partner in Germany, who saw the value of Chinese acquisitions increase more than eight-fold last year. “It’s not on that Germany sacrifices its companies on the altar of free markets, while at the same time our own companies have huge problems investing in China,” complained Vice Chancellor Sigmar Gabriel. According to Politico Europe, “trade experts warn that a recent spending spree by Chinese companies—many of them supported by the Chinese government—will harm the competitiveness of European business in the long-term,” but “China has a major advantage: It has a plan. Germany doesn’t. Neither does the European Union.”

Beyond scrutinizing specific high-profile transactions, the United States could more broadly reduce the attractiveness of assets to foreigners by taxing acquisition of them. Many nations [insert list TK] assess such taxes, which both raise revenue and have the effect of making their produced goods relatively more attractive. Whether such a tax would also impose economic drag depends on whether one believes the free flow of capital adds significant value to begin with. As Jagdish Bhagwati observed in “The Capital Myth,” a seminal 1998 essay in Foreign Affairs.
“even a cursory glance at history suggests that these gains [from free capital mobility] may be negligible. … It is time to shift the burden of proof from those who oppose to those who favor liberated capital.” The Economist agreed.

Supporting U.S. Workers

The wage subsidy described in Chapter 4 is particularly potent as a remedy for the challenges presented by trade. First, the wage subsidy is the appropriate mechanism for redistributing the gains of trade from its “winners” to its “losers.” It comes closest to doing this directly, by taking tax revenue drawn from higher earners and inserting it directly into the paychecks of lower earners. As a result, it demands the least of government and introduces the fewest opportunities for inefficiency and distortion. Perhaps most importantly, it ties the redistribution to productive employment rather than its absence.

Second, the wage subsidy offsets subsidies given to foreign producers and moves the wage demanded by domestic workers closer to parity with that demanded by foreign workers living in a sharply different social and economic context. The benefit is largest for industries whose work is most labor intensive and relies on the lowest-cost labor, in other words the industries under greatest pressure and in need of greatest support.

Third, the wage subsidy helps to sustain communities that lose their tradeable sector. A community lacking the ability to export (even to the rest of the nation) must rely on government transfer payments to fund the resources it requires from the outside world—the community is literally exporting need. The existing American safety net conditions those transfers on very low incomes—often no work at all—and channels them toward consumption of health care services.
With a wage subsidy, work becomes a better method than unemployment for attracting government support and that support flows to a broad range of productive activities. In this model, a services economy can even thrive disconnected from a tradeable sector—not an ideal arrangement, but one far better than today’s.