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Chapter 8 Free Trade and National Security

We briefly discussed the role of free trade when discussing policy 6 in the ten-point model for NCC (New Competition-based Capitalism) proposed in chapter 3. We will not repeat here the elements raised there.

The globalization of markets and the internationalization of cultures are often held responsible for destroying jobs in developed countries due to outsourcing, offshoring, and imports; for encouraging the exploitation of workers in developing countries by unscrupulous entrepreneurs for the benefit of businesses, investors, and consumers in developed countries; and, finally, for undermining food security with food imports, environmental security through transportation-related GHG (Greenhouse Gas) emissions, and, more generally, national security by the forging of global, and therefore multilateral, supply chains.

All of these claims are fundamentally misguided, founded as they are on ignorance and misunderstanding of three of the most important elements of modern economic history: the trustworthiness of competitive prices and their coordinating and incentivizing nature, opportunity costs, and comparative advantage.

Beneath these criticisms is the confusion between the impacts of free trade policies and those of other, variously flawed economic policies whose impacts are too often incorrectly attributed to the expansion of free trade. Similarly, the impacts of phenomena not explicitly accounted for, such as technological change and evolving competitive pressures, are too quickly laid at the feet of free trade. In other words, it is easy to blame free trade for “negative” outcomes

that are due not to trade policy but to other policies or phenomena, the unfavourable effects of which parallel and often predate it. These parallel effects reverse the changes brought about by free trade. Sometimes, the pre-existing harms to the economy can be exacerbated by free trade. The counterfactual – What would have happened in the absence of changes to the conditions of free trade? – is often poorly modelled, setting the stage for free trade to be the scapegoat for damages that are actually attributable to ill-advised crony capitalism.

While empirical studies are currently all the rage in economics, we must never forget that an empirical study is only as good as its theoretical underpinnings. The theoretical model must be rigorous and appropriate – including a transparent counterfactual model in which causality is explicitly defined.¹ We might even coin the term “empiriness” to mirror the “mathiness” described and denounced by Paul Romer: “Mathiness [or empiriness, in our usage] lets academic politics masquerade as science. Like mathematical theory, mathiness uses a mixture of words and symbols, but instead of making tight links, it leaves ample room for slippage between statements in the languages of words as opposed to symbols, and between statements with theoretical as opposed to empirical content. Because it is difficult to distinguish mathiness from mathematical theory, the market for lemons tells us that the market for mathematical theory might collapse, leaving only mathiness as entertainment that is worth little but cheap to produce.”²

Confounding the impacts of various phenomena and policies is a common error, frequently agenda driven and intentional. This is a sophisticated variant on the *post hoc, ergo propter hoc* error, a sophism or cognitive bias that consists of treating as a cause of a given phenomenon that which merely precedes it. We encounter this error under various

guises in a number of academic contributions, in which a change in the conditions of free trade – typically a new agreement or a significant shift in international trade with a strong emphasis on imports – is identified as the cause of various changes in the economy (transitions in employment and wages, factory closures, changes in some tax revenues, societal transformations, child labour, and other calamities, etc.).

Popular misconceptions commonly arise from this error. A cause-and-effect relationship is inferred without due consideration of the potential impact of other aspects of economic policy, which may be poorly designed with the socio-economic challenges that existed prior to the “opening to free trade” event, or even concurrent with it.

Associating these undesirable, even disastrous, effects with trade policy is clearly indicative of a flawed representation (theoretical model) of reality. Too often, alleged measures of the impact of free trade in fact reflect the combined effects of correlated causal factors with insufficient attention being paid to the appropriateness of the underlying theory. This yields empirical results that, while “statistically significant,” are specious, misleading, and fundamentally of little value.

Often, any difficulties or negative effects associated with free trade in a given country can be attributed to some relatively anomalous and unexplained situation in that country. Therefore, these analyses should not be used to detract from free trade, but rather to learn about and identify economic policy recommendations to reform the existing policies responsible for the undesirable situation. To summarize, in order to produce all potential benefits, a free trade policy may often require changes to some current economic policies that are impeding a given country’s ability to profit from it. Not realizing this is a symptom of popular misconception.³

The Goal of Food Security or Sovereignty

In developed countries particularly, the goal of food security or sovereignty translates into various supply management programs and/or generous farm subsidies to the detriment of consumers and taxpayers. To bolster their arguments, proponents of food sovereignty argue that it kills two birds with one stone by also reducing GHG emissions.

Boyer and Charlebois estimated that, in 2007, supply management cost Quebec families some \$575 million per year, or \$300 per family of four.⁴ The argument for food sovereignty has a certain appeal, but it is nonetheless fallacious and dangerous.

The desire to purchase local goods is a matter of taste and a choice any consumer has the right to make. Similarly, there is nothing wrong with producers, whether collectively or individually, promoting their products by playing up their homegrown character. It's a matter of marketing and competition. Issues arise, however, when "buying local" becomes economic policy. This is especially true in that the reactions of trading partners could be very negative.

Proponents of buying local trumpet their desire to support the local economy and claim they are willing to pay more for some locally produced goods, even if similar products are available for less. Would it not make more sense for them to choose the cheaper alternatives and allocate their savings to purchasing other local goods, such as cultural products, for example, or even supporting local charities? These unrealized expenditures represent the opportunity costs of buying local at a higher price than necessary.

Every economic production activity or consumption decision carries an opportunity cost that must be properly evaluated: the opportunity cost of buying local

must always be compared with the value of an alternative purchase, including the social and economic value of the alternative and the potential savings.

The Goal of Environmental Security

This type of fallacy also besets the pursuit of environmental security. We have known the solution to environmental destruction for a long time: define and impose an appropriate competitive price on pollution and eliminate pet projects as well as regulations and other micro-policies or control measures that pop up left and right and are systematically designed to impose the bulk of their cost on others.⁵

We often hear that our lifestyle depends on perpetual growth, while the planet's resources are limited. This is false. This belief has risen repeatedly throughout history, only to be repudiated each time. In 1865, William Stanley Jevons, one of the best economists of his time, expressed concern about the disappearance of forests – and later, about the depletion of England's coal reserves.⁶ This was also the discredited position taken by the Club of Rome during the 1970s.⁷ Innovation, markets, and competitive prices have successfully dealt with all the threats of natural resource depletion confronting humanity in the past. Growth is driven by humanity's capacity for invention and innovation, scientific and technological progress, and improvements to old and new products and services – our scope for action is immense and continues to expand.

We saw above how free trade and climate change policies can be not only compatible, but mutually reinforcing. There is still a need for rigorous analyses to identify barriers erected by cronyism and vested private and public interests, so we can deliver sound policies at a cost that is not inflated by “pet projects.”

The Dynamics of Free Trade: Comparative Advantage and (Nash) Choice Equilibrium

In every defence of a specific industry, whether well-intentioned or not, we always find a fundamental imbalance between the clearly identified and narrowly targeted interests of some, who are able to hire lobbyists to fight for their cases, and a greater but more diffuse interest spread across the entire economy and population. Ultimately, we observe the victory of populism over competence.

A serious effort must be made to consolidate domestic markets – as they are often splintered by intra-national barriers to the mobility of goods, services, and labour – and to open up as much as possible to the vast international market so that we can profit from opportunities created by free trade agreements. To do this, it needs to be said that international trade at competitive prices, just like intra-national inter-regional trade, can and must be expanded for the good of all. At the same time, it is necessary to promote intra- and international trade that is more secure against unilateral protectionist actions by governments.

It is not the interests of firms and workers in specific industries that are to be defended, but rather the principles and mechanisms of healthy competition that must underlie international trade – again, just as in the case of intra-national and inter-regional trade. Targeted and protectionist defences of the interests of businesses and workers in a particular industry are always detrimental to companies and workers in other industries. Similarly, subsidies to some industries or firms are taxes on other industries and firms.

Stand on a street corner and ask a hundred passers-by to explain the difference between nuclear fusion and nuclear fission; you'll be lucky if two understand the question. You might be right to conclude that 98 per cent know nothing about nuclear energy. The case of international trade is similar. Ask a hundred passers-by to explain the

link between trade deficit, foreign investment, and the exchange rate; if even one can, it would be your lucky day. Economics may at times be as complex as nuclear physics.

To understand the link, you must first understand comparative (or relative) advantage, the role of the exchange rate, the concepts of trade deficit or surplus, and foreign (or cross-border) investment deficit or surplus.

Comparative Advantage

It is too often forgotten that international trade is simply a logical extension of inter-regional trade and interpersonal exchanges. The same arguments underly their positive effects on the development and enhancement of social wealth and well-being. We all have an interest in specializing in the production of goods in which we have a comparative advantage and trading with others for the rest.

For two centuries, the understanding of comparative advantage, as formulated by the English economist David Ricardo in 1817,⁸ has been at the heart of trade liberalization, phenomenal wealth creation, exceptional and inclusive economic and social growth, striking improvements in human welfare, and sweeping poverty eradication. This is the most compelling and powerful argument against the private interests of anti-trade groups at the regional, inter-regional, and international levels, no matter how eloquent their arguments.

By reallocating production, the well-being of both countries involved in a trade can be increased when it is done by way of an exchange occurring at competitive prices. This argument, which is a fundamental result of modern economic analysis, is valid at all levels of competitiveness (or absolute advantage) in both countries. Even if one country were more efficient than the other in producing both goods, both countries would benefit from opening their domestic markets to international trade and allowing their respective economies to adjust to

international prices. The implications of this theory are immediate, but relatively counterintuitive. It is not the absolute advantages of a country that matter, but rather its comparative (or relative) advantages. It is important to emphasize that all countries benefit from this trade, regardless of their absolute levels of competitiveness. These same countries will also benefit from opening their domestic markets to trade and allowing their respective economies to adjust to internationally competitive prices.

The argument that a trade deficit in one product or basket of products will generate net payments that leave the country to primarily benefit foreigners reflects a serious misunderstanding of how international trade works. Some people generally fear the application of competitive processes to the production and distribution of public and social, as well as private, goods and services, not only at the domestic but also at the international level.

However, the significant growth in international trade in recent decades has been a major contributor to improvements in collective economic well-being and to cultural and social development. Recall Amartya Sen's characterization of *social inclusion* in chapter 2 as a shared social experience, an active participation, an equality of opportunities, and a basic level of well-being for all citizens. The same reasoning applies to intra-national trade between regions.

In response to the mathematician Stanislaw Ulam, who challenged him to "name a proposition, from the social sciences, that would be both true and non-trivial," Paul A. Samuelson, the 1970 Nobel laureate in economics, countered by invoking the notion of comparative advantage: "That [comparative advantage] is logically true need not be argued before a mathematician; that it is not trivial is attested by the thousands of

important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them.”⁹

(Nash) Choice Equilibrium

It is not easy to identify the comparative advantages of countries, regions, or individuals a priori. Furthermore, these advantages may change over time as countries and regions develop and individuals acquire new skills. In more technical terms, comparative advantages are expressed using national or regional production potential for reallocating resources between the production of different products and services and reflecting on the characteristics of a country's available natural, institutional, and human resources at a given point in time. Obviously, these resources evolve: human resources can migrate from one region to another, institutional resources can be imitated, and endowments in natural resources can change as a function of past and present prospecting efforts.

All things considered, comparative advantages depend on dynamic and adaptive prospecting efforts (investment), institutional developments (rule of law, property rights, contract law, human rights, social and physical infrastructure), and the acquisition and transferability of skills (education). Determining who (country, region, individual) decides to do what, given what others (countries, regions, individuals) are doing, is a complex process. We can well imagine that these decisions could yield a Nash equilibrium in which each country, region, or individual optimizes its development, given its perception of its partners' and competitors' development and of the resources available to it.

One thing is certain: rationality in a country's decision making requires a comparative evaluation of how to allocate scarce resources to the many potential consumption, training, and investment options available to it on the basis of its actual and potential comparative advantage.

These actual and potential comparative advantages ultimately determine the comparative advantages of tomorrow. China's comparative advantages today are not the same as they were in 1950 (under Mao Zedong) or 1980 (Deng Xiaoping). This is true for all regions.

Analysis of these partly exogenous and partly endogenous shifts in economic plates can and must also account for concerted policy interventions from governments at the group level (countries and regions). However, international free trade is consistently a positive element of this analysis. We would not want to be obligated to cut ties with others in order to acquire one or several specific skills given the constraints we are under. Quite the opposite: this kind of isolation would simply impose more constraints. By the same token, we would not want to have to cut ourselves off regionally or nationally in order to develop our comparative advantage given the constraints we are under. Again, quite the opposite is true.

As is the case for individuals, the dynamic development of a region's comparative advantage can and should be grounded in an explicit and unreserved participation in the world of free trade. Ultimately, this type of development, which is simultaneously modern and ambitious, is attainable at any level (national, regional, individual, and transnationally). But to benefit from it, we need intelligence and courage. Intelligence in choosing programs, policies, modalities, and mechanisms – that is, the means that favour the achievement of our ambitions – and the courage to pursue these means.

Trade Deficit, Foreign Investment, and the Exchange Rate

Examining any country's international trade data always reveals some sectors or goods and services with a negative trade balance and others with a positive balance. No country has a positive trade balance for all goods and services, and no country should strive for that.

Furthermore, the sectoral goods and services trade balance (positive or negative) must be

considered jointly with the overall trade balance. This includes the balance of financial transactions (loans) and foreign direct investment, meaning both the balance of direct investment abroad (by nationals) and direct investment at home (by foreigners). Their sum constitutes the balance of payments, for which “equilibrium pressures” both determine and are determined by the exchange rate. In other words, the trade balance for a product or basket of products cannot be considered in isolation. As mentioned above, the argument that a trade deficit in one product or basket of products will generate net payments that leave the country to primarily benefit foreigners reflects a serious misunderstanding of how international trade works. Here is why.

Consider a trade deficit (imports higher than exports of goods and services, including tourism), on the one hand, and a foreign investment surplus (total inbound investment from abroad higher than total outbound investment), on the other. These two, taken together, form the head and tail of a coin. They are glued together with a special adhesive: the exchange rate. The exchange rate is the amount of, say, US dollars that you can buy with one Canadian dollar; it is also expressed as the amount of Canadian dollars that an American can buy with one US dollar. Obviously, each rate is the reciprocal of the other.

The trade balance, the foreign investment balance, and the exchange rate are intimately connected and cannot be analyzed independently. In other words, any one of them cannot be explained in isolation without reference to the other two. They are always systematically in equilibrium and their respective values are determined jointly. Here is how.

Let us assume for simplicity that there are only two countries, the United States and Canada. When Canadians visit the United States, they must “buy” US dollars and “sell” Canadian dollars. Similarly, the Canadian importer of US goods and services (exported from the United States) must buy US dollars by selling Canadian dollars. When Canadians invest in the United States (buying a condo, a factory, treasury bills, or stocks), they must buy US dollars by selling

Canadian dollars. If we were to reverse these three examples, the same would be true of American visitors, importers, and investors.

Thus, there is a supply and demand for Canadian and US dollars that determines the equilibrium exchange rate, which is nothing more than the equilibrium relative price of the currencies: if the supply of US dollars increases (Americans want to sell more of their dollars to buy Canadian ones), there is downward pressure on the price of the US dollar and the amount of US dollars you can buy with one Canadian dollar increases, while the amount of Canadian dollars you can buy with one US dollar decreases.

It's very similar to the tomato market: too many tomatoes supplied for sale relative to demand drives the price of tomatoes down; too few tomatoes supplied for sale relative to demand drives the price up.

One simply has to remember that the supply of US dollars (and therefore the demand for Canadian dollars) comes from Americans who want to buy Canadian goods and services (including tourism) or invest in Canada, while the demand for US dollars (and therefore the supply of Canadian dollars) comes from Canadians who want to buy American goods and services or invest in the United States.

The observed exchange rate is the result of demand and supply pressures in the currency market. Total demand for US dollars consists of the expenditures incurred in US dollars by Canadians for buying US goods and services ($G\&S_{CA}$) and investing (INV_{CA}) in the United States. The supply of US dollars is composed of the expenditures incurred in US dollars by Americans for their purchases of Canadian goods and services ($G\&S_{US}$) and their investments in Canada (INV_{US}), and similarly for the demand and supply of Canadian dollars.

At the observed, and thus equilibrium, exchange rate (supply = demand), the total quantity demanded in US dollars by Canadians ($G\&S_{CA} + INV_{CA}$) is necessarily equal to the total quantity of US dollars supplied by Americans ($G\&S_{US} + INV_{US}$). Therefore, $G\&S_{CA} + INV_{CA} = G\&S_{US} + INV_{US}$, which can be rewritten as follows: $G\&S_{US} - G\&S_{CA} = INV_{CA} - INV_{US}$, where all values are expressed in US dollars. The left-hand-side term in the last equation is the trade deficit/surplus, and the right-hand-side term is the investment surplus/deficit. At the observed exchange rate, the above equalities necessarily hold true.

The above equations do not require that $G\&S_{CA} = G\&S_{US}$ (trade equilibrium), or that $INV_{CA} = INV_{US}$ (foreign investment equilibrium). If the United States has a trade deficit with Canada (so $G\&S_{US} < G\&S_{CA}$), it necessarily follows that it has a foreign investment surplus of the same magnitude (so $INV_{CA} > INV_{US}$).

Thus, the exchange rate, the trade deficit, and the foreign investment surplus are all determined simultaneously: at the observed exchange rate, the trade deficit (surplus) is necessarily associated with a foreign investment surplus (deficit) of the same magnitude. If $G\&S_{CA} + INV_{CA} \neq G\&S_{US} + INV_{US}$, there is an imbalance, and the exchange rate will adjust to re-establish equality between the supply of, and demand for, Canadian and US dollars.

A foreign investment surplus in the United States (meaning that Canada is investing more in the United States than Americans are investing in Canada) contributes to the growth of the US economy. This foreign investment surplus, which offsets the trade deficit, creates jobs in the United States, increases the productivity of the US economy, and contributes to US economic growth. Similarly, a trade surplus offsets a foreign investment deficit.

Any attempt by the United States to reduce its trade deficit (through the imposition of tariffs, for example) can only have some combination of the following potential impacts: a shift in the trade deficit from industries that are protected by the tariffs to unprotected industries with

no significant reduction in the total trade deficit, a reduction in its foreign investment surplus, or an appreciation of the exchange rate between US and Canadian dollars.

On 20 July 2018, the *New York Times* reported the following (reminder: Larry Kudlow was President Donald J. Trump’s chief economic adviser): “Larry Kudlow, the chairman of the White House’s National Economic Council, said in an interview that the president strongly believed that his policies would increase investment and draw workers into the labor force. “The United States is the hottest economy and investment destination in the world right now,” thanks largely to Mr Trump’s policies, Mr. Kudlow said. “Money is flowing in from everywhere and that’s terrific.”¹⁰

Larry Kudlow (and his president) should understand that the foreign investment surplus necessarily corresponds to the trade deficit, which it directly mirrors. Kudlow seemed to ignore this fact. What’s more, the second part of his assertion is completely synonymous with the following statement: “*The United States is the hottest economy and export destination in the world right now, thanks largely to Mr Trump’s policies. We incur a large trade deficit with everyone and that’s terrific.*”

Anne O. Krueger demonstrates how the ill-informed drive to cut the trade deficit that pursued after the election of Donald Trump has hurt the US economy. She states that international trade increased from approximately 20 per cent of global output in the immediate postwar period to 39 per cent in 1990, and then to 58 per cent in 2018. American consumers now pay more for many products from China. Also, the United States had to pay out some \$28 billion in compensation to US farmers.¹¹

She adds that many US companies have had to pay more for their inputs, and have consequently lost market share to foreign competitors who benefited from a cost

advantage. By pulling the United States out of the Trans-Pacific Partnership (TPP) the president succeeded in raising tariffs on US exports almost everywhere. Under the TPP, US wheat producers would have been spared the 38 per cent tariff that Japan imposes on all wheat imports. Now that the TPP has been replaced by the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a free trade agreement between eleven countries – Canada, Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam – Canadians and Australians exporting wheat to Japan are subject to lower tariffs than their US counterparts.

According to Krueger, high customs duties on US imports of steel and aluminum (that initially included those of its trading partners in the United States–Mexico–Canada Agreement) have only hurt American industries that use aluminum and steel, and employment in those industries has indeed declined in the past two years.¹²

The Win-Win Solution of Free Trade

But why and how do countries benefit from international trade? It is for the same reason that regions benefit from inter-regional trade (Quebec-Ontario, Pennsylvania-Ohio, Finistère-Gironde, etc.) and individuals benefit from exchanges among themselves. The answer lies in the specialization of labour and production that trade allows – a key contributor to productivity. This specialization reflects the comparative (or relative) advantages of each and increases the well-being of all, regardless of their absolute advantages or disadvantages.

Dynamic or inter-temporal analysis applied to a multilateral world (with each country having its own monetary policy) certainly renders the analysis more complex, but the basic principles are the same. Three complementary factors have allowed international trade to expand to the benefit of all: a decline in transportation and travel costs, greater efficiency of financial

markets, and the development of the important social capital of trust between trading partners through open and transparent treaties and the rule of law. These three factors work together to reduce transaction costs for the good of all.

It should be re-emphasized, however, that a more efficient economy will be able to export and import more, invest more abroad, and receive more foreign direct investment, irrespective of the trade and foreign investment deficit or surplus and exchange rate fluctuations, and thus benefit from a higher welfare level.

Rising productivity owing to a workforce that is better trained and highly motivated; public and private technological investments that have undergone more rigorous scrutiny, selection, and implementation processes; and institutions that are more efficient, are all important contributors to a country's or region's welfare gains, especially against the backdrop of an economy that is more open to international trade.

The current international challenges require a more informed, stronger, and resilient spirit of international co-operation able to stand up to anti-globalization trends. Focusing on local or domestic food and health-care clusters, for example, would negatively impact developing countries, among others, and thus increase the risk of pandemics in developed countries. More than ever, we humans are all in the same boat – but it's such a big boat that some seem unable to recognize it as such.

Let us hope that the march toward more co-operation, more globalization, more international treaties, and more competition – in other words, the march toward a more integrated, inclusive, and civilized world – will survive the current challenges and the protectionist policies of some governments.

Endnotes

¹ Sound modelling of causality in a situation with correlations and confounding factors is complicated in any area of science. In *The Book of Why: The New Science of Cause and Effect* (New York: Basic Books, 2018), Judea Pearl and Dana Mackenzie claim that causal analysis, in particular the new revolution in causality studies, makes it possible to go from correlation to causality, thus ending a century of confusion and placing the study of cause and effect on solid scientific footing. But even today, many statistical studies, artificial intelligence studies, and econometric studies do not go past measuring correlations and lack any credible statements about causality, whatever the claims of their authors.

² Paul M. Romer, “Mathiness in the Theory of Economic Growth,” *American Economic Review* 105, no. 5 (2015): 89–93.

³ The following list of academic papers, impressive but by no means exhaustive, all suffer to varying degrees of seriousness from this error: Ricardo Hausmann, Jason Hwang, and Dani Rodrik, “What You Export Matters,” *Journal of Economic Growth* 12, no. 1 (2007): 1–25; Svetlana Demidova, “Productivity Improvements and Falling Trade Costs: Boon or Bane?,” *International Economic Review* 49, no. 4 (2008): 1437–62; Erhan Artuç, Shubham Chaudhuri, and John McLaren, “Trade Shocks and Labor Adjustment: A Structural Empirical Approach,” *American Economic Review* 100, no. 3 (2010): 1008–45; David H. Autor, David Dorn, and Gordon H. Hanson, “The China Syndrome: Local Labor Market Effects of Import Competition in the United States,” *American Economic Review* 103, no. 6 (2013): 2121–68; Avraham Ebenstein, Ann Harrison, Margaret McMillan, and Shannon Phillips, “Estimating the Impact of Trade and Offshoring on American Workers Using the Current Population Surveys,” *Review of Economics and Statistics* 96, no. 4 (2014): 581–95; Rafael Dix-Carneiro, “Trade Liberalization and Labor Market Dynamics,” *Econometrica* 82, no. 3 (2014): 825–85.

⁴ Marcel Boyer and Sylvain Charlebois, “La Gestion de L’offre des Produits Agricoles: Un Système Coûteux Pour les Consommateurs,” *Les Notes économiques*, Institut économique de Montréal (August 2007), https://www.iedm.org/sites/default/files/pub_files/agri0807_fr.pdf.

⁵ See the interesting interview with Christian Gollier, of the Toulouse School of Economics, on the television program *Rendez-vous des entrepreneurs français* in 2019: “La REF 2019 – Christian Gollier sur ‘Le capitalisme à l’épreuve du réchauffement climatique,’” available at https://www.youtube.com/watch?v=ZS9Xx7hhw3c&ab_channel=Widoobiz.

⁶ William Stanley Jevons, *The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal Mines* (London: Macmillan, 1865).

⁷ Donella Meadows, Dennis Meadows, Jørgen Randers, William W. Behrens, *The Limits to Growth*, report of the Club of Rome (Washington, DC: Potomac Associates, 1972).

⁸ David Ricardo, *On the Principles of Political Economy and Taxation* (London, 1817).

⁹ *Understanding the WTO* (Geneva: World Trade Organization, 2007), 16, https://www.wto.org/english/thewto_e/whatis_e/tif_e/utw_chap1_e.pdf.

¹⁰ Ana Swanson, Jim Tankersley, and Alan Rappeport, “Trump Blasts Fed, China and Europe for Putting U.S. Economy at a Disadvantage,” *New York Times*, 20 July 2018, <https://www.nytimes.com/2018/07/20/business/trump-fed-china-economy.html?searchResultPosition=1>.

¹¹ Anne O. Krueger, “Trump’s Spectacular Trade Failure,” *Project Syndicate*, 22 September 2020, <https://www.project-syndicate.org/commentary/trump-trade-policy-is-a-failure-by-anne-krueger-2020-09>.

¹² The same is true for farming, which will end up (as is usually the case for all industries and all countries) suffering from the trade war being waged by the US administration despite temporarily benefiting from compensation paid out by that same administration, generating a massive risk of “moral hazard” and, over time, a serious loss of competitiveness. See Dan Charles, “Farmers Got Billions from Taxpayers in 2019, and Hardly Anyone Objected,” *The Salt* (blog), NPR, 13 December 2019, <https://www.npr.org/sections/thesalt/2019/12/31/790261705/farmers-got-billions-from-taxpayers-in-2019-and-hardly-anyone-objected>.