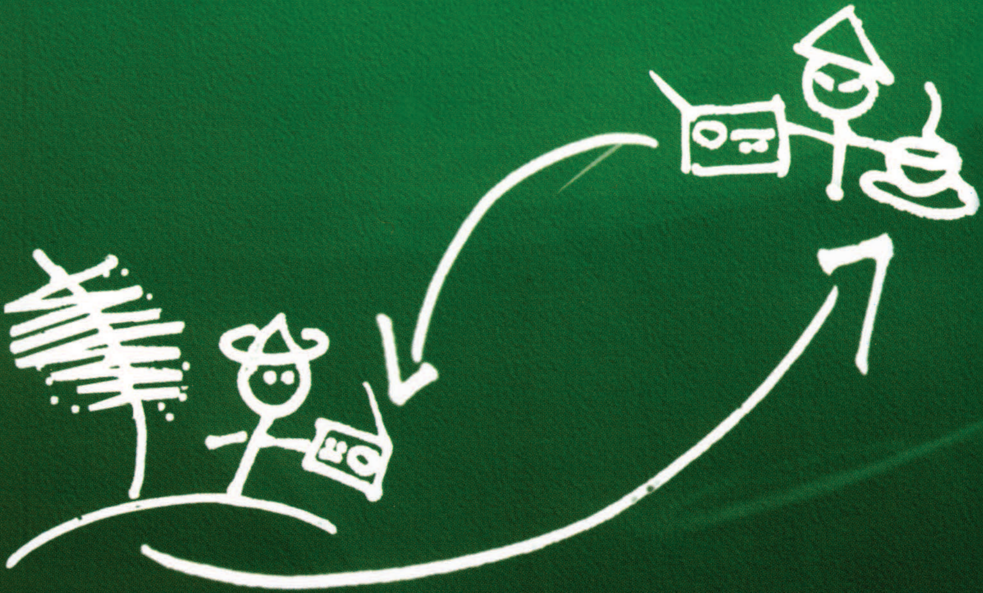
Not a Zero-Sum GAME

THE PARADOX OF EXCHANGE

Manuel F. Ayau



Forewords by
Donald J. Boudreaux
Roger LeRoy Miller

"Truly a jewel."
Roger LeRoy Miller
best-selling author on economics and law

I had no idea that the Law of Exchange had so many surprising and counterintuitive implications.

That is why I wrote this book.

Not a Zero-Sum Game

The Paradox of Exchange

MANUEL F. AYAU

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Dedicated to

All the people in the world who—unknowingly and totally
disinterested in my welfare—contribute through the
division of labor, in infinite ways, to my and
my family's well-being.

Acknowledgments

Many thanks for the help I received in the preparation of this essay to my wife, Olga, and to my friends and associates Elizabeth Hanckel, Giancarlo Ibárgüen S., Marialys Lowenthal de Monterroso, and Andrea Tunarosa.

Nobel Laureate (1969) Paul Samuelson was once challenged by the mathematician Stanislaw Ulam to "name me one proposition in all of the social sciences which is both true and non-trivial."

It was several years later that he thought of the correct response: **comparative advantage**. "That it 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."[1]

[1] P. A. Samuelson, "The Way of an Economist," in *International Economic Relations: Proceedings of the Third Congress of the International Economic Association*, (London: Macmillan, 1969), pp. 1–11.

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Foreword
by Donald Boudreaux

During a lunchtime conversation among economics graduate students at New York University in the early 1980s, a top PhD student wondered, "what's the big deal about comparative advantage? It's just arithmetic."

I was in that lunch group and recall my jaw figuratively falling to the floor when I heard this remark. "What's the big deal?!" I thought to myself. "How can he make such an uninformed comment?"

I'd studied economics long enough to know that comparative advantage is fundamental to any human economy—not just to market economies or only to international trade, but to human society itself. And yet, being just a first-year graduate student I was then unable to articulate clearly an explanation of comparative advantage. Although I tried to mount a case for the centrality of comparative advantage, I failed.

How I wish that I had then at my fingertips the brilliant monograph that you now hold in your hands. I would have given it to my fellow graduate students and asked each one to read it, confident that each would come away with a deeper understanding and appreciation of comparative advantage. (By the way, I would have given this monograph also to several of my economics professors at NYU. Many of them, too, would have learned much from it.)

Manuel Ayau has long emphasized the centrality of comparative advantage, rightly counseling scholars that society cannot be understood without first grasping the logic of comparative advantage.

Having spent much of his astonishingly productive and rich life reflecting on comparative advantage and explaining it again and again and again—with the patience of Job—to all who would listen, he offers here his crystalline thoughts on this foundational principle of human society.

I know of no explication of comparative advantage that equals this one in clarity and concision. Even if you think that you already know all you can possibly know about this matter—even if you are confident that you understand comparative advantage completely—read this work and enjoy the thrill that comes from the awareness of having your understanding sharpened and deepened.

Whatever his other talents (and they are many), Mr. Ayau enjoys a comparative advantage at explaining comparative advantage!

Donald J. Boudreaux, chair
Department of Economics
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Foreword
by Roger Miller

While I have much to say about this monograph, which is truly a jewel, I would like to mention my first experiences with its author, Manuel Ayau. When he was president of Universidad Francisco Marroquín, he invited me to teach monetary theory. During one of my first trips to Guatemala, I discovered an environment at that time that was not quite what I had been used to in the United States. One particular outspoken religious leader had called for capitalists to be hung from every lamppost. On another occasion, two experts from the U.S. Agency for International Development (USAID) came to visit the campus. In a small room, Muso (as his friends call him) began a logical and persistent grilling of what USAID was doing in Latin America. Within a relatively short period, he literally obliterated the specious interventionist arguments that these USAID PhDs were spewing (and using our taxpayer dollars to do so!). Muso's ability to present logical ideas in straightforward terminology has only gotten better since then, as this monograph proves.

As I read the following pages, I was struck by how Ayau is able to make what is so obvious to economists even more obvious. Actually, just a few months before reading this, a Swiss friend was essentially telling me how the rich could only get richer at the expense of the nonrich. When I tried to explain to him that voluntary exchange is **not a zero-sum game**, his eyes went blank. He could not grasp that obvious concept because he had never figured out how trade leads to economic growth, so that there is more for everyone. Manuel Ayau, in contrast, explains this concept so clearly here that even the economically "unwashed" can be convinced.

Consider just a few gems that I found in this monograph:

> **Understanding that in a market economy a person can only get rich by enriching others torpedoes claims to the moral high ground of those who propose that government redistribution of wealth is a means to alleviate poverty.**

Throughout Europe and increasingly in the United States, if more people understood the first part of the above sentence, perhaps we would not have to read so much negative class-based commentary on the rich. The general concept can be applied to nations, too. Try as I may, I am hard pressed to convince most Americans that as Americans we will also be better off if China becomes two, three, or even ten times richer than the U.S.

> **[In a market economy], one cannot "make a fortune" at the expense of others, but only by offering others a better deal and, thereby, making them richer.**

This is such a simple concept, yet how many laypersons and politicians (and some economists, too) do not believe it? They are convinced that if you are rich and getting richer, you are clearly only benefiting yourself. When I was at the Center for

Law and Economics at the University of Miami School of Law, for a short period a foreign exchange student helped take care of my children. I heard from her friends when she returned home that she said I had gotten rich "on the backs of others." For her, it was inconceivable that I could be earning so much without making others suffer. Manuel Ayau successfully dispels such misconceptions in his monograph.

In a very real sense, we all compete to enrich others.

If the world at large understood this last sentence, today the peoples of the world would be much richer than they are.

One thing is certain: Manuel Ayau will have enriched the understanding of free markets and voluntary exchange for all of those who read this monograph.

Roger LeRoy Miller, author
Economics Today

Preface

This book deals with the economic law known as the *Law of Comparative Costs*. It is a "law" that concerns many social issues that have far reaching implications. As will be evident, it would be more appropriately named the *General Theory of Exchange* (as it is called by Professor Pascal Salin),[2] or the *Law of Association* (Ludwig von Mises).[3]

Most textbooks on economics leave the explanation of the *Theory of Exchange* almost exclusively to those chapters that deal with international trade. Apparently, they mistakenly take for granted that people already understand the basic principle of exchange and its relation to the exercise of property rights, its implications regarding the distribution of wealth and distributive justice, its relevance to the allocation of human and material resources, taxation, and other important issues of modern and primitive societies.[4]

In Part I, *Exchange*, I focus on several of these "taken for granted" aspects of the phenomenon of exchange. I point out that division of labor and exchange result in two distinct and separate effects: one is the generally recognized gain from increased individual skills (**productivity**) that results from

[2] Paper presented at the meeting of the Mont Pèlerin Society, Salt Lake City, Utah, August 2004.

[3] Ludwig von Mises, *Human Action* (Indianapolis: Liberty Fund, Inc., 2007).

[4] Interestingly though, both Adam Smith and Ludwig von Mises begin their discussions of economics proper with the division of labor. Mises subtitled "The division of labor," in Part II of *Human Action*, "Action within the Framework of Society." It begins with the phrase: "The fundamental social phenomenon is the division of labor and its counterpart human cooperation." His treatise does not include a specific chapter on international trade.

specialization. The other is more subtle. Even when there is no increase in **individual** productivity, **group** productivity increases when tasks are allocated according to the least costly combination for dividing up the work. The prospect of mutual gain through subsequent trading emerges and therefore one can anticipate it. It is the prospect of saving one's resources, labor, and time that drives the exchange which results in mutual gain.

In Part II, *Comments on Trade between "Countries,"* I remark on common fallacies regarding international trade, perhaps well understood by economists, but not so well understood by people in business and politicians (who both frequently think they do). For those inclined to numbers, I use tables to illustrate the examples.

As appendices, I include two articles I think would be of interest to those who reach the end of the monograph. These articles are reprinted here with permission from the Foundation for Economic Education.

Part I

Exchange

1

Exchange as an Exercise of Property Rights

Some who consider themselves champions of the right to private property would be surprised to learn that when they oppose free exchange and "globalization," or support economic trade restrictions, they are in effect denying people their right to property.

A person can exercise property rights in one of two ways: through personal use, the enjoyment or consumption of what he owns; or by trading it for something else, either directly through barter or indirectly through the use of money and the intermediation of third parties. Thus, **trade is a fundamental manifestation of your property rights**.

If you are unable to peacefully trade the rights you hold to possessions that you acquired legitimately, you are no longer the owner of your property. A government established for the protection of basic individual rights may legitimately restrict the use of your property only to protect the equal rights of others, but not to serve the private interests of another industry or person.

Property is generally defined as the right to possess, enjoy, and dispose of something tangible or intangible.

Sir William Blackstone (1723–1780) defined property as "that despotic dominion that one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe."[5]

Obviously, Sir William did not intend his dictum to mean that the lawful owner of something might dispose of it in any manner and with no limit. For without limits, someone else, in the use of his property rights, could damage yours. In such a scenario, no one would be assured the enjoyment of his rights.

> **Tom Bethell, *The Noblest Triumph***
> Property is the most peaceable of institutions. In a society of private property, goods must be either voluntarily exchanged or laboriously created.

The generally accepted limit to property rights is that **as long as** you respect other people's equal and generally recognized rights, no one has any say in how you enjoy or dispose of your rights. In other words, as long as you observe the **reciprocally** accepted rules of good conduct that make society viable, you have sole discretion as to the disposal of what is yours. Indeed, rules of good conduct—such as the Ten Commandments—establish limits on what you are allowed to do, in order to protect other people's equal and reciprocal rights.

When such norms prevail, people have no choice but to enjoy or dispose of their property in a peaceful manner. These generally accepted limitations to the exercise of property rights—admittedly with grey areas—constitute and define the basic rules of the market economy: respect for life, for property, and for contracts.

[5] Quoted in: Tom Bethell, *The Noblest Triumph: Property and Prosperity through the Ages* (New York: St. Martin's Press, 1998), p. 19.

Any tax is a confiscation of property rights. Nonetheless, arguably, a general nondiscriminatory tax to finance collective affairs (for example, the police department) is generally tolerated, along with the partial loss of one's freedom, as part of the cost of living in society, as long as the tax is the same for everyone. However, too often people agree with their government's imposition of discriminatory taxes to restrict the freedom of trade of third parties and support such taxes not for the revenue they may generate for the government, but rather for economic (not fiscal) and even moral reasons. For example, governments use taxes to restrict liquor consumption for moral reasons or to protect certain domestic producers from foreign competitors for economic reasons, justifying the violation of property rights with the incidental fact that the persons doing the trading happen to live in different countries.

Discussions of international trade seem to forget that, ultimately, those who engage in exchange are not nations, but individual persons acting either directly or indirectly through commercial agents.

For example, before the breakup of Czechoslovakia in 1993, Václav, a resident of Prague, exchanged his wares with Vladimir, who lived in Bratislava. Their government, committed to protecting their property rights, did not interfere in their exchanges except to guarantee their contracts, which are part of their rights. When Czechoslovakia split in two, their exchanges became "international commerce," subject to government regulations and duties.

Lex Mercatoria / Law Merchant

For exchange to reach far away places, it is necessary to adopt and observe norms of conduct that bring about mutual trust and respect for private property, including contractual obligations. To this end, private traders in the 12th century developed ***Lex Mercatoria***, the precursor of modern commercial codes.

It is not clear why, at the moment of the split, Václav and Vladimir lost their property rights. Indeed, I am not aware of any book, treatise, or author that attempts to justify the violation of property rights based on the political jurisdiction of residence of the property owners.

The view that it is countries that trade and not people is so widespread because, I suspect, it is not perceived as something that involves property rights. As a result, most governments feel free to use their coercive powers to deny or otherwise interfere with free trade when the parties involved in the exchange live in different countries.

Some defend government interference arguing that a person does not have an **exclusive** right to property because nobody produces anything in isolation, without the collaboration of others, including governments. But the process of social cooperation in the production of goods and services is a series of contractual exchanges of property rights, which are duly and mutually remunerated by voluntary agreement between the parties involved. The process is a continuum of settled accounts.

Whatever I produce—a bushel of coffee, a transistor radio, or a crystal bowl—I do so by coordinating, directing, and disposing of many human and material resources. Some are mine, others I obtained through contractual agreements with their owners.

I compensated the land owner with a freely agreed upon price; I gave the worker his best offer (if he had had a better one, I would not have obtained his services); I paid the power and telephone companies, and the providers of fertilizer, insecticides, and various raw materials. Finally, I paid for government services through my taxes.

All these contributions to the production process are settled accounts, and the final bushel of coffee, crystal bowl, or transistor radio is mine alone to peacefully dispose of as I wish. My remuneration is residual, not contractual; it is speculative, for production always takes place with the expectation that the process will not fail, that the product will satisfy consumers and that its price will be greater than the sum of expenses; but it could turn out that it does not cover expenses, in which case, the difference is my loss.

Reciprocally accepted norms of conduct establish the rules for the legitimate acquisition of property rights. The very acts of production and contractual exchange determine the pattern of ownership that will result; that is, how the wealth produced will be distributed.

We must remember that production and distribution are one and the same act, just as a purchase and a sale are different sides of the same coin. The observance of the rules is precisely what determines the legitimacy of the rights acquired. *Ex-post* **r**edistribution of wealth is tantamount to changing the rules of the game after the game is over. Thus, it necessarily implies a coercive breach of the general rules on which people planned and carried out their exchanges.

Another frequent criticism is that the acquisition of the goods was not equitable or just, even if it was legitimate. But, as we will learn below from the example of the **Law of Exchange**, we have no objective measure to determine what constitutes "equitable gain" because we cannot know the opportunity costs of those who participate in an exchange.[6] Nor do we have a definition of justice other than that which gives to each his due as a result of legitimate and voluntary contracts of exchange.

Critics often argue that people with fewer opportunities are forced, by circumstances, to accept unjust conditions. But surely those conditions cannot be imputed to those who are offering them their best opportunity. On the contrary, when someone accepts an offer to trade, he is signaling that this represents an improvement over other opportunities he has, not to mention the opportunities that the critics fail to provide.

The mutual gain that results from voluntary exchange is not merely a subjective appreciation based on a reshuffling of existing goods. For a given expenditure of resources it produces a material increase in real goods that both parties subjectively desire. This was the outstanding discovery and contribution of David Ricardo.[7] I trust what follows will make it clear.

[6] **Opportunity cost** is the forgone next best opportunity or satisfaction. Since the pertinent opportunity cost is, of course, at the margin, it cannot be ascertained by anyone other than the actor himself.

[7] David Ricardo, *On the Principles of Political Economy and Taxation* (Indianapolis: Liberty Fund, Inc., 2004), pp. 128–149.

2
The Division of Labor

Most explanations dealing with the division of labor are limited to how it leads to specialization and a subsequent increase in individual productivity. The most often cited example is Adam Smith's pin factory. Smith compares the meagerness of production before division of labor with the much enhanced production that comes with the specialized division of tasks.[8] However, this is only part of the story.

Neglected in most traditional explanations is how wealth increases when tasks are divided up according to comparative advantage, even without any improvement in individual skills or the introduction of new methods or technology. Furthermore, the fact that this increase in group productivity occurs in all societies, from hunter-gatherer to advanced, is also neglected.

In his book, *Human Action*, Ludwig von Mises states that "in a hypothetical world in which the division of labor would not

[8] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Indianapolis: Liberty Fund, Inc., 1981), pp. 13–24.

increase productivity, there would not be any society."[9] With these words, in effect, Mises attributes the existence and the evolution of society itself to this phenomenon. Obviously, if people never anticipated being better off by cooperating, no society would have ever evolved.

> **Ludwig von Mises, *Human Action***
>
> The theory of comparative costs is in no way connected with the value theory of classical economics. It does not deal with value or with prices, it is an analytical judgment . . . The theorem can disregard problems of valuation . . . The law of comparative costs is as independent of classical theory of value as is the law of returns. In both cases, we can content ourselves with comparing only physical input with physical output.

A frequently cited partial explanation of trade and the division of labor is Adam Smith's observation that people have a "natural propensity to truck, barter, and exchange one thing for another."[10] Arguably, the propensity of humans is just the opposite: people would rather be independent and self-sufficient. They trade only because they perceive they will be better off, because they value what they receive more than what they give up in exchange. Therefore, they are willing to accept the disadvantage of being more dependent on others, and to sacrifice some of their freedom, as a trade off for being better off.

Adam Smith illustrates in several parts of his book that it is self-interest (which properly understood is not selfishness) that drives exchange, for if people thought they would be worse off by "trucking, bartering, and exchanging," they simply wouldn't do it.

[9] Ludwig von Mises, *Human Action* (Indianapolis: Liberty Fund, Inc., 2007), p. 143.

[10] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Indianapolis: Liberty Fund, Inc., 1981), p. 25.

Because some implications are so important, and sometimes neglected, the principle of the division of labor deserves a more detailed explanation at the beginning of economic textbooks. Indeed, every other issue in economic texts is, in essence, an elaboration of how the division of labor and trade are spontaneously coordinated in the market through the mechanisms of the price system and the use of money. Notwithstanding complicated and sophisticated monetary systems, the only function of money is, ultimately, to facilitate the division of labor.

Explanations of exchange predominately rely on the fact that people differ in their subjective valuations; that when they trade, they give up something they subjectively value less than what they receive. True enough. However, in this case, the aggregate total material wealth of participants in the exchange has not increased; it has merely changed hands.

The subjective valuation explanation fails to address how it is that division of labor, in and of itself, increases the tangible output—material wealth—of the participants, even when individual productivity remains constant. The answer, unfortunately, is not obvious: **In their quest for satisfaction, people base their decisions on the comparison of alternative opportunity costs at the margin. And naturally, they choose the least costly option.**

To illustrate, consider a simple arithmetic example of exchange between two persons, in a worst case scenario. One participant, InferJoe, is less productive than the other, SuperJack, **in everything**. In all cases, InferJoe uses more time than SuperJack to produce the same thing. This assumption will help to demonstrate why it behooves even the most productive to cooperate with the least productive—how even the most skilled will gain by cooperating with the least skilled. (The sole exception would be the hypothetical, and improbable, case in which one person has an **equal** advantage over the other person in each and every task.)

Although the **General Theory of Exchange** usually refers to how different types of tasks and professional activities are allocated, it also applies to how the market always tends to allocate resources—including land, however slowly—toward a socially optimum pattern. It shows how voluntary exchange is **not a zero-sum game**. Just the opposite: it is a positive sum game, where one person's gain is another's gain as well. Consequently, it has important implications regarding the wealth differences that so worry many people, institutions, and governments, especially international organizations like the United Nations and the World Bank.

Understanding that in a market economy a person can only get rich by enriching others torpedoes claims to the moral high ground of those who propose that government redistribution of wealth is a means to alleviate poverty. Clearly, these insights have important implications for tax, economic, and social policies.

3
SuperJack and InferJoe: A Numerical Illustration

- Imagine a world with two people: SuperJack and InferJoe.
- Let's assume that SuperJack and InferJoe consume only two products: BREAD **(B)** and GARMENTS **(G)**.
- SuperJack is better than InferJoe at producing **everything**—both **B** and **G—but not equally better**.
- SuperJack makes BREAD **twice as fast** as InferJoe and he makes GARMENTS **three times as fast**.
- We use time (hours of labor) like any other resource subject to being saved, and not as a measure of value.

Note the emphasis on the fact that SuperJack is **not equally better** than InferJoe in producing both BREAD and GARMENTS. SuperJack is even better than InferJoe at producing GARMENTS than at producing BREAD. Thus, in any trade, **they will have different opportunity costs**, which is the key to understanding the phenomenon.

In order to isolate the effect of the division of labor itself, we assume that the abilities (productivity) of InferJoe and SuperJack remain constant and do not improve with specialization.

We will measure SuperJack and InferJoe's productivity by how much BREAD and GARMENTS each produces in a 12-hour shift. The total time worked by each will remain constant throughout.

PRODUCTION *WITHOUT* DIVISION OF LABOR

	SuperJack		**InferJoe**	
Hours	12	12	12	12
Output	12 breads	6 garments	6 breads	2 garments
Total Production	**18 BREADS + 8 GARMENTS**			

Note that the opportunity cost of having one thing instead of the other is different for SuperJack and InferJoe, because their respective productivities are different:

for SuperJack	1 **G** = 2 **B** or 1 **B** = 1/2 **G**
for InferJoe	1 **G** = 3 **B** or 1 **B** = 1/3 **G**

For SuperJack, an even exchange is 1 **G** for 2 **B**.
For InferJoe, it is 1 **G** for 3 **B**.
It is precisely this difference that will induce them to trade and allow **both** to gain.

Assume that SuperJack subjectively desires to have more BREAD than GARMENTS. Since he is better at producing both goods, the intuitive solution would be that he just goes ahead and makes more BREAD. However, he is able to anticipate that by trading with InferJoe he can end up with **more of the things he wants** with **the same expenditure of time**.

PRODUCTION *WITH* DIVISION OF LABOR

	SuperJack		**InferJoe**	
Hours	8	16	24	0
Output	8 breads	8 garments	12 breads	0 garments
Total Production	**20 BREADS + 8 GARMENTS**			

Total production WITHOUT division of labor	**18 B + 8 G**
Total production WITH division of labor	**20 B + 8 G**
INCREASE in total production	**2 BREADS**
Change in individual productivity	**none**
Increase in total time worked	**none**

The **only** thing that changed was that SuperJack and InferJoe allocated their time according to comparative advantage.

How the increased production will be shared will depend on each one's negotiating ability.

Following the division of labor, a possible exchange might be that SuperJack gives 2 GARMENTS to InferJoe, in exchange for 5 BREADS. The result would be as follows:

AFTER THE DIVISION OF LABOR

	SuperJack		**InferJoe**	
Outcome	13 breads	6 garments	7 breads	2 garments

Each benefits from the exchange because his substitution ratio (or comparative cost) between BREAD and GARMENTS is different from the other's.

Who gained the most?

- If we measure the gain in terms of BREAD, both end up with 1 more BREAD . . .
    - ° SuperJack gains 1 **B** by giving the equivalent of 4 **B** (2 **G**) in exchange for 5 **B**.
    - ° InferJoe gains 1 **B** by giving 5 **B** and receiving 2 **G**, the equivalent of 6 **B**.
- Since they both gain 1 BREAD, we can measure the benefit in terms of time . . .
    - ° SuperJack has gained one hour and InferJoe two hours.
- And if we measure the gain in terms of GARMENTS . . .
    - ° SuperJack has gained 1/2 **G** and InferJoe 1/3 **G**.

Is there such a thing as a "fair" way to measure gain?

Note that SuperJack and InferJoe's respective gains change according to how we measure them . . .

- In BREAD: they gained equally.
- In time saved: InferJoe gained more.
- In GARMENTS: SuperJack gained more.

Obviously, when trading, people don't go through the mental exercise as we just did. But they instinctively perform what economists call cost-benefit analysis, because they are always conscious of what they must forgo—their opportunity costs—in order to acquire what they need or desire. The nature of the process is one of trial and error because the information is imperfect and subject to change over time.

In our example, the premise is that both individual productivity and time invested remain constant throughout the example. Therefore, it must be the combined effort that increased the wealth of the group (productivity).

In a nutshell: division of labor, in and of itself, increases the productivity of the group by reducing everyone's opportunity cost in objective, real terms. This explains why SuperJack can end up with more BREAD by spending his available time and other resources producing GARMENTS rather than producing BREAD.

4

A Few Examples of Comparative Costs at Work

Price relationships, among other functions, communicate to us the relative scarcity of things. Hence, they serve to allocate our human and material resources to their most valuable use via the market bidding process. Although we choose our ends subjectively, we compare our means (costs) objectively. Comparing prices allows us to choose the most economical combinations—among literally infinite alternatives—to secure the things that best satisfy our needs.

This **Law of Comparative Costs** is always influencing our decisions in the allocation of every task and resource—including talent, land, and time—in a world with abundant natural and man-made constraints and imperfections.

Example 1: Me

While I have been a relatively successful businessman, I have friends who could manage my businesses better than I. Why don't they displace me in the marketplace with their superior managerial skills? Because the advantage they have in the business they are managing is greater than the advantage they have in managing mine.

Likewise, I am aware that I could manage the businesses of some of my customers better than they do. But since my advantage is greater in the business I manage than in theirs, I mind my own. By inducing this division of managerial abilities according to **comparative costs**, the market is always moving toward the optimization of social output. Everyone in the community benefits—not just my friends and customers—from the enhanced social productivity brought about by the efficient allocation of managerial talent and our subsequent trading of the products of our efforts, our initiatives, and our ingenuity.

Example 2: Farmer Jones

Farmer Jones was resting in his hammock when a visitor approached and offered him $100,000 for his farm. Farmer Jones had to think about it, so he asked the visitor to come back the next day. That evening, Jones considered the deal: He could buy the piece of land he had his eye on, which was bigger, further from town, and slightly more productive than his own farm. However, it had no house. He could rent something nearby but this would eat up the added income. Besides, his ancestors were buried here. He declined the offer, whereupon the visitor raised his offer to $150,000. Again, Farmer Jones needed time to think and asked him to come back the next day.

That night Jones figured that with the additional fifty thousand he could buy the other land, build a house on it, and still have money left over. Then he remembered his ancestors. He finally convinced himself that they would consider him a blockhead if he didn't sell.

Who came out ahead? Farmer Jones is better off with a new house and extra income, albeit further away. The visitor is better off, too; otherwise, he would have done something else with his money. Society is better off because the new owner has a comparative advantage over Jones in the use of Jones' farm. His $150,000 will create more value for the community than what farmer Jones was creating. Even the ancestors would be pleased they didn't sire a blockhead. Everybody benefits, although in a different way and in different amounts.

Example 3: The secretary

The secretary of a copy machine manufacturer intercepts the technical manager on his way to the copy machine and suggests that she should make the copies. When he informs her that he knows how to make copies better than she does, she replies, "Yes, but you earn more than I, so the opportunity cost is higher." It is like the doctor who lets the nurse prep the patient because, while he is a superior "prepper," he has a greater advantage in diagnosing and doing surgery.

Because imperfections in the world impose limitations on knowledge, the allocation of tasks can never be perfect. One frequently overlooked impediment to the quest for perfection is the cost of acquiring information, which F. A. Hayek pointed out. This is due to the fact that usable knowledge is dispersed in time and circumstance, and both time and circumstances are changing continually and unpredictably. Only those in the right place at the right time can make the most of it.[11]

Admittedly, no one can possibly be aware of every existing opportunity to which every person might apply his talent and effort at any given moment. But as we gain more knowledge we continually endeavor to seek and adapt to more profitable opportunities to divide labor over time. The ever present incentives of higher rewards tend to steer the community toward maximizing each person's particular knowledge, experience, and ability to manage and economize. This continuous process of reallocation is coordinated by the principle of **comparative costs.**

As specialization increases, the **individual** productivity of each participant in his own field in turn increases the differences in abilities, lowering the opportunity costs for each. As opportunity costs decrease, everyone can offer more in exchange, increasing the benefits and wealth for all. When InferJoe increases his own productivity by specializing in BREAD, the BREAD he uses as payment costs him less. With this savings, he can pay SuperJack more BREAD for the GARMENTS, or he can increase his bid in the market for other things. Everybody shares the gains of everyone else's increased productivity.

[11] Friedrich von Hayek, "The Use of Knowledge in Society," *American Economic Review* 35, no. 4 (September 1945): pp. 519–530. Also available online at http://www.econlib.org/library/Essays/hykKnw1.html (accessed October 2, 2007).

It is true that some people in labor-intensive occupations (such as barbers) will not significantly increase their own productivity through specialization over time, because they cannot mechanize or otherwise automate their work. Even so, a barber in Chicago gets paid more than one in Costa Rica because the people he trades with are more productive and wealthier than the customers of the barber in Costa Rica. The worker in Chicago can pay his barber more, precisely because his opportunity cost would be quite high if he were to cut his own hair. Besides, if Chicagoans want the barber to stay in the neighborhood and continue to serve them, they have to keep him in the chips.

Division of labor also allows persons, groups, and nations to specialize and, by doing so, to increase their own productivity considerably. This happens not by design but by a spontaneous process ordered according to the law of exchange. Geographical areas undergo specialization and eventually become agricultural, commercial, or industrial centers. Special activities will cluster, like textile manufacturing in the Carolinas, insurance companies in Connecticut, ceramic flooring in Italy, electronics in Silicon Valley, and so on.

A specialized community fosters a culture more propitious for advanced innovation. Members of the community find their specialization more highly rewarded because of the increased opportunities to use their skills and more frequent personal exchange of ideas close to home.

In myriad ways, specialization fosters continuous innovation in time-saving methods and better utilization of resources. This frees time and resources, making it possible to increase the quantity and—very importantly—the quality of disposable goods and services.

When we look around closely, we see the fundamental principle of comparative costs at work everywhere.

5
Trade as a Distributor of Wealth

A **market economy** is the exercise of people's freedom to exchange. In such an economy, one cannot "make a fortune" at the expense of others, but only by offering others a better deal and, thereby, making them richer. Thus, it is **not a zero-sum game**.

Since we have no objective way to measure who gains the most in a trade, it is fruitless to talk about an equitable or fair exchange, in the sense that both parties should gain approximately the same. Equitable is not the same as fair or just.

As economists well know, benefits are measured subjectively **at the margin**. Each subsequent trade—even of exactly the same thing—will produce different gains for the participants and so will, thus, always create unequal benefits. When I make a deal with Bill Gates (every time I buy one of his computer programs!), surely I gain more than he does because the program is worth much more to me than the price I pay for it. Fortunately, I only have to pay what the marginal buyer is willing to pay; since I am not the marginal buyer, I would be ready to pay more. The reason Gates's fortune is much bigger than mine is because he makes more deals than I do. My ancestors would think me a blockhead if I bought my programs from suppliers who enriched me less than Bill Gates.

David Hume, *An Enquiry Concerning the Principles of Morals*

Few enjoyments are given us from the open and liberal hand of nature; but by art, labor and industry we can extract them in great abundance. Hence the ideas of property become necessary in all civil society.

To increase one's fortune, a person has but two choices. He can offer goods and services to other members of society through voluntary exchange, or he can resort to coercion, fraud, or a government-granted privilege. One such privilege would be tariff protection from foreign competitors to prevent consumers from purchasing imported goods at a lower price.[12] Since tariffs distort comparative costs, the resulting misallocation of resources will be suboptimal and produce a net loss to society.

When exchange is **voluntary**, people must compete with others to make the consumer "richer" **in each and every** transaction by giving him greater satisfaction. Whoever succeeds the most in enriching others makes the greatest fortune. Is there a better way to induce all people—the good and the not-so-good—to work to make everyone else better off: to make them richer . . . or less poor?

Incredibly, progressive taxation in effect is designed to take a bigger bite from the income of those who succeed best at enriching other members of society. Besides creating perverse incentives, this distorting interference with free exchanges invariably brings into play the law of unintended consequences by creating unexpected losers. When progressively higher taxes discourage those who are more productive—who can offer the best deals—those who would have benefited by trading with them end

[12] Import tariffs established to protect someone's interests, in effect, destroy another's property right to dispose (trade) freely with someone else, simply because the parties live in different political jurisdictions.

up getting stuck with their second-best option, with the difference becoming their loss. The actual loss to society is larger because the tax reduces the size of the pie.[13]

In a free society, by definition, one cannot make a fortune by imposing one's own will or preferences on others. In fact, when we compete to make others less poor—wealthier—it is **their priorities** we must successfully anticipate, not our own.

If we want to make money, we might have to make garments we wouldn't wear or produce food we wouldn't eat. And we have to tailor quality to other people's budget, not our own.

In this very real sense, we all compete to enrich others. This requires ceaseless effort, initiative, and inventiveness. We must anticipate other people's needs, individual tastes, and purchasing power, as well as consider the other options they might have access to, all of which are in a constant state of flux. Who makes a fortune and who does not is determined by what Ludwig von Mises called the "daily plebiscite of the market." People vote with money, with the dollars (or yen or euros) that they have purchased with their efforts. When we act as consumers, we vote for those who enrich us most and, in turn, we make them wealthier. Should the government veto our votes? Can a more democratic system exist?

In a free society a person's fortune is precarious. Just as he cannot take it with him when he dies, he can never take it for granted while he lives. He cannot be sure of holding on to it. He must win it over and over every day, by enriching others through exchanges.

[13] The discriminatory nature of progressive taxation has other impoverishing and unintended effects, unrelated to comparative advantage. It taxes incomes at a progressively higher rate, not in proportion to the consumption of the rich, but in proportion to the likelihood of that income becoming productive capital, increasing productivity and, therefore, bidding up nominal and real wages.

Adam Smith, *The Wealth of Nations*

It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self love, and never talk to them of our own necessities but of their advantages.

Consumers are merciless. When they shop, they don't consider the personal or family needs of the seller: they do their charity elsewhere.

Those who fail to satisfy society's needs go broke. Going broke means that the property title to their productive assets is transferred to someone else who believes he can serve consumers better. If the new owner succeeds in serving them better, he keeps the fortune. If not, it moves on once again. It is a system that depends not on the goodness but on the self-interest of all participants in order to generate win-win relationships—even when intentions are less than virtuous. It is society-at-large, not the government, that determines the distribution of wealth.

Production and distribution are one and the same act.[14] As wealth comes into being, its ownership is legitimately determined by the process of acquisition. This is because people consume their own time, their own effort, and their privately-owned resources to produce the things that wealth consists of; and they assume the inevitable risks inherent in this always uncertain process of trial and error. No one else can have a legitimate claim on it, for as pointed out above, it has not been made at anyone's expense, because all who collaborated were contractually remunerated.

[14] "... in the market economy this alleged dualism of two independent processes, that of production and that of distribution, does not exist. There is only one process going on. Goods are not first produced and then distributed. There is no such thing as an appropriation of portions of ownerless goods. The products come into existence as somebody's property. If one wants do distribute them, one must first confiscate them." Ludwig von Mises, *Human Action* (Indianapolis: Liberty Fund, Inc., 2007), p. 804.

Only competitors can claim to be temporarily harmed by the process, just as barge owners were harmed by bridge builders. Even the workers, who admittedly are harmed temporarily because they lose their jobs due to competition, most probably will be better employed in the long run, as society as a whole becomes richer.

When a person increases output, normally it is not for his own use because the quantity will easily exceed his need or desire. An increase in output is not "excess production" in any meaningful sense. He who forgoes making his own garments, shoes, and furniture to specialize in growing corn does not do so because he consumes large quantities of corn. It is deliberately produced to be traded for the more liquid asset of money.

And logically, he is not going to sacrifice his self-sufficiency if he is not going to end up with more and better garments, shoes, and furniture than he could have made directly with the resources and time that he spent growing and trading the corn.

So-called "excess" production is, in essence, purchasing power that after it is turned into money will serve to procure what the producer ultimately wants. He wants to trade his property right to the corn for the property right others have to things he needs or wants.[15] In this sense, trade is triangular for you don't need to buy goods or services only from those who buy from you. This is why the extended use of money has multiplied trading opportunities.

In everyone's effort to outbid other buyers in their quest for goods, all end up sharing their own increased productivity—that is, their cost savings—with others.

[15] This production for trade is the essence of what economists refer to as **Say's Law**.

Jean-Baptiste Say, *A Treatise on Political Economy*

Money performs but a momentary function in this double exchange; and when the transaction is finally closed, it will always be found that one kind of commodity has been exchanged for another.

Those who are more successful in contributing to the well-being of the rest, by means of competitive-free trade, will attract more customers and consequently acquire more wealth, than those who contribute less.

The competition to satisfy other people's needs and desires will cause adjustments and changes in the way people do and make things. When everyone enjoys the same right to compete, we have to adapt and change in order to survive. This forces us to be innovative and inventive. Assets, both tangible (machinery) and intangible (knowledge) that were once highly prized become obsolete. This process is what Joseph Schumpeter called "creative destruction."[16]

Obviously, adaptation will take place only when it produces a benefit to society. Unfortunately, change also has costs, including insecurity of investments and of jobs. Car makers killed the buggy whip trade; the plastic industry reduced some natural yarns to a boutique item; foreign outsourcing temporarily displaces domestic workers, etc. Therefore, we should not be surprised that domestic producers will lobby their government to establish import duties to keep out competition.

To the degree that they succeed they will retard progress. Had we achieved job security in the Stone Age, we would still live in caves.

[16] Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Row, 1950).

Epilogue

Property Rights Matter

In the modern world, it is hardly controversial that the only economic organization of society that is efficient—and, therefore, capable of producing prosperity—is the free market economy. As Adam Ferguson pointed out,[17] this order is the product of human action, but not of human design. Indeed, Carl Menger raised the question: "How can it be that institutions that serve the common welfare and are extremely significant for its development come into being without a common will directed toward establishing them?"[18] The answer, which Menger undoubtedly knew, is the spontaneous result of the exercise of property rights: also known as the market.

Economic theory explains how the price structure that results from the exchange of property rights allows for the efficient allocation of resources to satisfy social priorities. In the absence of real prices, economic calculation for their allocation is

[17] "We have hitherto observed mankind, either united together on terms of equality, or disposed to admit of a subordination founded merely on the voluntary respect and attachment which they paid to their leaders; but, in both cases, without any concerted plan of government, or system of laws . . . Every step and every movement of the multitude, even in what are termed enlightened ages, are made with equal blindness to the future; and nations stumble upon establishments, which are indeed the result of human action, but not the execution of any human design." Adam Ferguson, *An Essay on the History of Civil Society*, 5th ed. (London: T. Cadell, 1782). Also available online at http://oll.libertyfund.org/title/1428/19736/1566165 (accessed October 2, 2007).

[18] Carl Menger, quoted in Friedrich von Hayek, *The Fatal Conceit* (Chicago: University of Chicago Press, 1988), p. 1.

impossible.[19] Consequently, property rights are a necessary condition for prosperity and for the reduction of poverty.

On the other hand, laws and regulations that distort the price structure misrepresent facts and hide opportunity costs. The result is that people end up making erratic decisions that misallocate resources and bring about an unintended net social loss.

> **Montesquieu, *The Spirit of the Laws***
>
> The spirit of commerce brings with it the spirit of frugality, of economy, of moderation, of work, of wisdom, of tranquility, of order, of regularity.

From the discussions in this monograph we can appreciate how the enforcement of property rights brings about cost saving exchanges, increases social economic efficiency, and reduces poverty. In addition, respect for property rights has collateral benefits: it contributes to avoid pollution (damage to someone else's property rights), it reduces corruption (stealing someone else's property), and it restricts bribery (when people act by right and not by permission, bureaucrats have fewer opportunities to exact bribes). The certainty that derives from the rights to property encourages people to prudently plan and economize, because economic losses come out of their own pockets. Both opportunity costs and the possibility of losses are important and mutually reinforcing incentives to save resources. When losses occur, they are limited to the resources that their owners put at risk.

Most importantly, the enforcement of property rights fosters a voluntary, responsible, and peaceful society, based primarily on free exchange.

[19] Ludwig von Mises, *Human Action* (Indianapolis: Liberty Fund, Inc., 2007), pp. 206–211.

Part II

Comments on Trade between "Countries"

Foreign Exchange

Countries cannot trade. Only people can exchange their property rights. Even when many participants are involved in a market where many products are traded, each successive trade is between **a seller** and **a buyer** no matter how many middlemen are involved along the way. Intermediation by agents (middlemen) only comes about when it facilitates trade and thus saves money to the participants.

Usually countries have their own currency. Hence, in order to buy goods and services from a foreign country, a person must first purchase its domestic currency. Likewise, if one sells in a foreign country payment will be in their local currency. Therefore, a market for the currencies (the foreign exchange market) will emerge.

The supply and the demand of currencies will determine their price in terms of each other; that is, the "rate of exchange"—just like when we purchase four five-dollar bills with a twenty dollar bill. When we exchange one dollar bill for one hundred and twenty yen, the exchange rate will be one to one hundred and twenty.

The exchange rate (the parity) will reflect the approximate purchasing power of each currency in terms of the other, in the same way that the four five-dollar bills purchase the same as the one twenty-dollar bill. This equivalent purchasing power is called the purchasing power parity (**PPP**). It would be the only determinant of exchange rates if other factors did not affect the supply and demand of foreign currencies; because, after all, it is supply and demand that determines the price of things. Other factors that influence demand and supply of foreign currencies are capital flows from cross-country investments, international credit transactions, family remittances, foreign aid and capital flight.

The political place of residence of the provider of the goods being traded is irrelevant because a foreign supplier simply will not ship the goods if the domestic importer does not have the wherewithal to pay; that is, if he has not bought the required foreign currency from the domestic country's exporters. When the demand for foreign currency increases (or decreases), its price will just go up (or down) like any other good.

Whether trade is domestic or international, it allows everyone to share the savings brought on by increases in the productivity of others. This sharing occurs because, as people reduce their own costs through trade, their enhanced purchasing power allows them to buy other things, at home or abroad, or to pay more to others for what they want. When we purchase, we are in effect outbidding other buyers. The more we save, the higher we can bid.

How Foreign Exchange Rates (Parity) Work

For trade to occur between people in different countries (or different areas of the same country), the relative prices must be different in each place. Although this is a necessary condition, it is not sufficient because the price difference must be large enough to compensate for transportation and other transaction costs.

It is price relationships that reveal to us opportunity costs. When we say price relationships are different, what we are in effect saying is that the opportunity costs of the parties involved are different. The following example shows how different relative price structures create profitable opportunities for trade. As will be seen below, intermediation (arbitrage between currencies) tends to reduce the discrepancies between exchange rates. This should not surprise us because relative prices allow us to compare the opportunity cost of having one thing instead of another.

TABLE I Prices without trade

country A uses currency **$** **country B** uses currency **¥**

exchange rates are expressed as purchasing power parity (PPP)

	COUNTRY A ($)		**COUNTRY B (¥)**			
	Local	*Imported*	*Local*	*Imported*	*Exchange rate*	*Average exchange rate*
TVs	$30	------	¥1,200	------	$1 : ¥40	$1 : ¥45
RADIOS	$20	------	¥1,000	------	$1 : ¥50	
	Price relationship between a **TV** and a **radio** in each country					
	1.5 : 1		**1.2 : 1**			

As we can see, the prices have a different relationship in country A and in country B:

	relative prices
country A	1.5 : 1
country B	1.2 : 1

How Foreign Exchange Rates (Parity) Work

Figure 1: How different price relationships create profitable opportunities

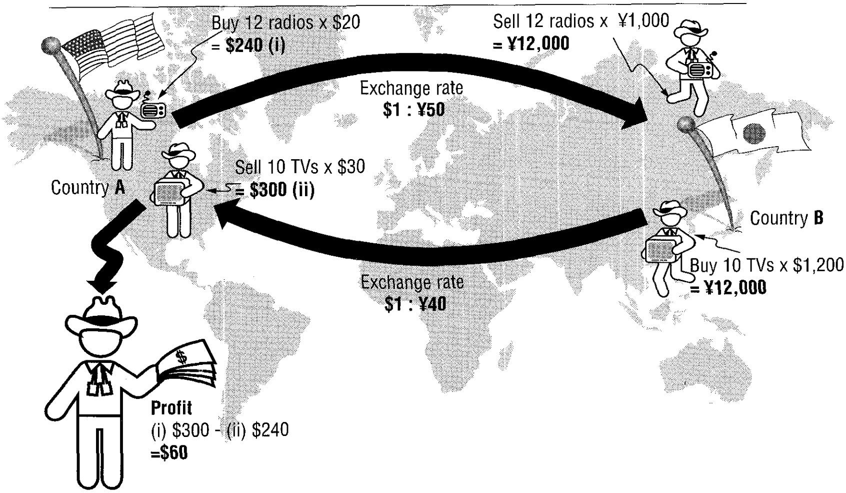
Buy 12 radios x $20
= **$240 (i)**
Sell 12 radios x ¥1,000
= **¥12,000**
Exchange rate
$1 : ¥50
Sell 10 TVs x $30
= **$300 (ii)**
Country **A**
Country **B**
Buy 10 TVs x $1,200
= **¥12,000**
Exchange rate
$1 : ¥40
Profit
(i) $300 - (ii) $240
=**$60**

Figure 1 depicts an entrepreneurial opportunity:

- In **country A**, a person may buy 12 radios at a cost of $240.
  (12 radios x $20 = $240)
- He sells them in **country B** at ¥1,000 each, for a total of ¥12,000.
  (12 radios x ¥1,000 = ¥12,000)
- With the ¥12,000, he buys 10 TVs in **country B.**
  (¥12,000 / ¥1,200 = 10 TVs)
- He sells them in **country A** for $30 each, for a total of $300.
  (10 TVs x $30 = $300)
- He makes a profit of $60, minus transaction costs.
  ($300 - $240 = $60)

Naturally, such a highly profitable activity won't last long

TABLE II Prices with free trade

	COUNTRY A ($)		COUNTRY B (¥)			
	Local	*Imported*	*Local*	*Imported*	*Exchange rate*	*Average exchange rate*
TVs	$30	**$26.67***	**¥1,200**	¥1,350	$1 : ¥45	$1 : ¥45
RADIOS	**$20**	$22.22	¥1,000	**¥900***	$1 : ¥45	
	Price relationship between a **TV** and a **radio** in each country					
	1.33 : 1		**1.33 : 1**			

Sequence of events:

- Competition emerges, tending to drive prices toward the elimination of the discrepancy in price relationships, as shown in Table I.
- As competitors begin to purchase radios and sell TVs, the spread narrows and the purchasing power parity tends to settle near **$1 : ¥45**.
- The prices that would tend to prevail in each country are shown in bold in the shaded boxes of Table II.
  *1,200 / 45 = $26.67
  *20 x 45 = ¥900
- Thus price relationships become the same in each country: **1.33 : 1**, as shown in Table II.
  $26.67 / $20 = 1.33
  ¥1,200 / ¥900 = 1.33
- People would purchase the items where the **price is lower**, as shown in shaded areas, regardless of origin.

The Politicization of Trade

Balancing Accounts or Balancing Trade

Fluctuations in trade (balance of trade) are always offset by fluctuations in, for instance, capital flows, because the total account of the exchanges has to balance (balance of payments). The two most important factors that increase or decrease the supply and demand of foreign currencies (foreign exchange) are imports/exports and international capital flows (investments or credits).

Proceeds from the total inflow and outflow of transactions (trade plus capital) necessarily tend to balance between the two parties, whether what is being exchanged are tangibles (e.g., merchandise) or intangibles (e.g., government bonds). An imbalance would mean that one of the parties is getting something for nothing.

Fluctuations in the rate of exchange serve to balance the income from exports and capital inflows, with the expenses from imports and capital outflows . . .

- When demand for imports increases, causing a negative balance of trade, the price of foreign currencies goes up, which then reduces imports.
- Exports are now more profitable because exporters can sell their foreign currency at a higher price in local currency.
- As exporting becomes more profitable, people redirect their resources from production for the domestic market to production for the export market.
- This will increase the supply of foreign currency, tending to lower its price, thus increasing imports.
- An inflow of capital will also lower the price of foreign currency, which will increase imports.
- Fluctuations in the rate of exchange bring about a continuous tendency to balance payments.

Frequently people are alarmed when the balance of trade is negative and celebrate when it is positive. But an inflow of capital, with its accompanying negative trade balance, is a sign that the country's prosperity is attracting capital. Thus, hair-pulling over a negative balance of trade is senseless.

Unsuspected losses for exporters. Somewhere we seem to have lost sight of the fact that the sole purpose of exporting is to be able to import, just like we sell our labor or goods in order to have the wherewithal to purchase other goods or services. In both cases, we sell in order to buy.

No matter what he produces, every exporter ends up with foreign currency as his final product . . .

- However, to cover his local production costs, he will need local currency.
- So he sells his foreign currency in the exchange market to local importers.
- In this very real sense, all exporters' markets are domestic, because they all sell their final product (foreign currency) in the local market.
- Thus, the higher the price of foreign currency, the greater the exporter's income.

Why is it we never see exporters lobbying to lower import tariffs? I suspect this is because they are not aware that the abolition of import tariffs would increase their income. Consider the extreme cases: if all import restrictions and tariffs were removed, the increase in demand for consequently cheaper imported goods would raise the price of the foreign currency they receive for their exports. On the contrary, if tariffs were raised enough to prevent **all** imports, exporters would go broke because the market for foreign currency would dry up.

Government manipulation of the rate of exchange has the same effect as a tax on imports or a subsidy to exports. Imagine that all of the foreign currency used to pay for imports is taxed at 10 percent when it is purchased. Whether it is a 10 percent duty collected at the custom house or a 10 percent tax collected at the bank on foreign currency used to pay for imports, the effect on the cost of imports and on government revenue is exactly the same. Since free market exchange always tends to balance the flows, when a government intervenes in the foreign currency market, it can only cause imbalance: an accumulation of reserves or an accumulation of foreign debt.

Now suppose that the government of COUNTRY A imposes a 10 percent import tariff on TVs

Table III The effect assuming no intermediation

	COUNTRY A ($)		COUNTRY B (¥)			
	Local	*Imported*	*Local*	*Imported*	*Exchange rate*	*Average exchange rate*
TVs	$30	**$29.33**	**¥1,200**	¥1,350	$1 : ¥41	$1 : ¥43
RADIOS	**$20**	$22.22	¥1,000	**¥900**	$1 : ¥45	
	Price relationship between a **TV** and a **radio** in each country					
	1.47 : 1		**1.33 : 1**			

Country A

- The price of imported TVs goes up from **$26.67** to **$29.33** each.
  ($26.67 + 10% = $29.33)
- The purchasing power parity tends to settle at **$1 : ¥41**.
- The price relationship between a TV and a radio changes to **1.47 : 1**.

The cost of a basket of 10 radios and 10 TVs would initially rise:

from under free trade

10 radios	x $26.67	=	$266.70
10 TVs	x $20.00	=	$200.00
TOTAL			**$466.70**

to include the 10 percent tariff

10 radios	x $29.33	=	$293.30
10 TVs	x $20.00	=	$200.00
TOTAL			**$493.30**

Table IV The effect with intermediation

	COUNTRY A ($)		COUNTRY B (¥)			
	Local	*Imported*	*Local*	*Imported*	*Exchange rate*	*Average exchange rate*
TVs	$30	**$27.91**	**¥1,200**	¥1,290	$1 : ¥43	$1 : ¥43
RADIOS	**$20**	$23.26	¥1,000	**¥860**	$1 : ¥43	
	Price relationship between a **TV** and a **radio** in each country					
	1.4 : 1		**1.4 : 1**			

As always, intermediation will bring about a change in prices and, thus, in the exchange rates. At $1 : ¥43, the tendency will be to eliminate differences in price relationships between TVs and radios approximating 1.4 : 1

Country A

- The price of imported TVs in country A goes down from **$29.33** to **$27.91** each.
- Intermediation brings the price of the basket of 10 radios and 10 TVs down from **$493.30** to **$479.10** (still higher than $466.70 under free trade).

10 radios	x	$27.91	=	$279.10
10 TVs	x	$20.00	=	$200.00
TOTAL				**$479.10**

Country B

- Surprisingly, the cost of the same basket in country B goes **down** from **¥21,000** to **¥20,600**.

10 radios	x	¥1,200	=	¥12,000
10 TVs	x	¥860	=	¥8,600
TOTAL				**¥20,600**

- Country B benefits because of the tax in country A, while country A harms its own exporters (and consumers) because of the effect on the exchange rate.
- The price of a radio in country B went down from ¥900 to ¥860 due to the effect of the change in the exchange rate.

No one in his right mind will spend his own resources manufacturing items that he can purchase for a lower expenditure of resources. When well-intentioned people impose economic tariffs, quotas, and other non-tariff restrictions to divert industry and commerce (not solely to raise revenue), they do so partly because they view trade as a zero-sum game between nations and not between Václav and Vladimir. They are seldom aware of the self-imposed dead weight costs to their consumers.

Effects of "economic" tariffs

Tariffs established to raise revenue are very different from "economic" tariffs established to restrict foreign competition. The goal of economic tariffs is to raise the domestic price of a good above the world price so domestic producers can charge more and reap additional, noncompetitive, unearned income.

This is only possible politically because the benefits are large and concentrated among a few domestic producers who can afford to lobby for the tariffs, while the added costs go unnoticed because they are diluted among many consumers.

As mentioned above, the consumer bears a dead weight loss. This loss does not show up as income to anyone. It is an unrecoverable loss to the community. Even if the government returned both the extra revenue it received thanks to the tariff plus the extra unearned income that the favored producers pocketed, consumers would still be worse off. They could never recover the costs incurred by the misallocation of resources that resulted from the arbitrary distortion of relative market prices.

WHO PAYS THE IMPORT TAXES?

All taxes are paid by people; "things" cannot pay. Thus, when a government puts a tariff on a Chinese good, it is really taxing its own citizens. They now have to spend more money to get the good from China or buy the next best product from some other supplier, domestic or foreign. Ultimately, it is the individual purchasers of an imported good who pay the tax in the form of a loss in their purchasing power. This loss of purchasing power prevents them from buying other goods and services that would have required additional labor to produce. Thus, a tariff on imports also has a negative effect on domestic employment.

"FREE TRADE" AGREEMENTS (FTA)

Free trade requires no treaties. All that is needed is to remove (unilaterally or multilaterally) artificial barriers to trade: England did this in the mid-nineteenth century, Hong Kong in the mid-twentieth century. In 1789, the Constitution of the United States needed just fifty-four words to establish free trade among the states.[20] NAFTA, the "free" trade agreement between Canada, Mexico, and the United States has two thousand pages, nine hundred of which are tariff rates.[21]

The sheer size of these trade agreements with their myriad stipulations and controls—such as rules of origin and the corresponding inspection, verification requirements, and interference in sovereign affairs such as labor laws—belie their name.

Trade agreements are filled with "exceptions." A favorite is protection from foreign competition for those who wield political influence through vested interests, typically the producers of essential items. Ironically, many government efforts allow producers of basic consumer items to charge high prices, redistributing income upwards: from the poorest members of society to the privileged few. Rather than free trade these agreements create a regime of managed trade and, not least, lots of expensive useless wealth-consuming jobs for bureaucrats.

To supervise and control trade between countries makes as much economic sense as supervising and controlling trade between the states or provinces of the same country. If free trade had not been stipulated in the U.S. Constitution, in all probability we would see custom houses at every road, railroad access, airport, and river and lake port in each state.[22] Plus, police to try to control contraband between states.

[20] See p. 71.
[21] See appendix 1, "Why Managed Trade is Not Free Trade."
[22] See appendix 2, "Underdeveloping Indiana."

Uneconomic diversion of trade. Trade agreements have other detrimental implications. They discriminate against lower-cost imports coming from countries that are not part of the treaty. Trade is diverted away from them to more expensive tax-exempt suppliers, in countries that signed the FTA. Now, the importers of these higher-cost goods need more foreign currency to pay for them. And as a bonus, part of the tax revenue the government gave up with the tariff exemption winds up as income in the pocket of the favored supplier.

The best option. For a country looking to prosper, the best option is to open trade unilaterally; to remove an economic weight from the back of its own people.

Meanwhile, as a second-best option, politicians should pitch free trade agreements as more than just a way to open export markets for domestic producers, which indeed they do. They should also showcase them as a way to lower the costs of goods and services to consumers, and as a means to increase the competition to local producers. This is especially important in small economies, where foreign competition may be the only competition that will promote efficiency.

The future will tell whether "free trade" agreements are a step toward generalized free trade or not.

Appendix I

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Why Managed Trade is Not Free Trade
By Robert Batemarco

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The British historian Thomas Babington Macaulay observed that free trade, one of the greatest blessings which a government can bestow, is in almost every country unpopular.[1] Indeed, sound economics often makes for unsuccessful politics. That free trade is a great benefactor is one of the most convincingly established truths of economic science.[2] The economic case for free trade is essen-

[1] Cited by Lindley H. Clark, Jr., "The GATT Struggle Continues," *The Wall Street Journal*, March 16, 1993.

[2] A compendium of the successful refutations of economic theories which purported to find exceptions to the general benefits of a free trade regime can be found in Douglas Irwin, *Against the Tide* (Princeton, N.J.: Princeton University Press, 1996).

tially the case for voluntary exchange in general: no one freely enters into an exchange, whether as buyer or seller, unless he expects to emerge better off as a result of that exchange. Furthermore, the ability to exchange a single product one has produced for the many things one would like to consume makes possible the division of labor and the manifold expansion of production capacity that it permits. There is no economic reason why these gains do not apply equally to potential traders on different sides of national boundaries.

The political liabilities associated with free trade stem from the vigorous competition it promotes. Competitors who do not provide the best deal for consumers fail. Far from sugarcoating this unwelcome fact, free trade demonstrates it in no uncertain terms. Rather than looking to improve their own shortcomings, many of the losers in the competitive process seek to derail the process. They seek to ensure that they provide customers the best deal *not* by improving the package they provide, but by getting the government to hamper the ability of their competitors to provide a better deal. Foreign competitors make an especially easy target for such government restrictions.

Thus, government restrictions on international trade are of a piece with domestic restrictions on competition. They share the same goal: to redistribute income from the many to government's chosen few and to substitute its own preferred allocation of resources for that of the market. Indeed, by restricting trade with foreigners, governments close off an important means of mitigating the impact of their domestic restrictions. This is what John T. Flynn had in mind when he said, "The first condition of a planned economy is that it be a closed economy."[3]

FREE TRADE: THE REAL THING

In establishing a free economic system for the United States, the Framers mandated free trade among all the states in the union. They spelled this out in Article I, Section 9, of the Constitution:

> No tax or duty shall be laid on articles exported from any state. No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another: nor shall vessels bound to, or from, one State, be obliged to enter, clear, or pay duties in another.

At 54 words, this was the original North American Free Trade Agreement. As we shall see, the 1994 agreement that goes by that name makes a travesty of free trade.

The damage done by restrictions on international trade became clear to most people during the debacle of the 1930s. Once World War II had ended, the popularity of free trade surpassed Macaulay's fondest hopes. Yet in many ways truly free trade was not in keeping with the tenor of the postwar times. Free trade requires neither complex laws nor ponderous bureaucracies. With the establishment of the United Nations, the World Bank, and the International Monetary Fund, the world was moving in the opposite direction. So postwar governments sought managed trade rather than free trade. While the establishment of the proposed International Trade Organization was avoided, free trade was not restored.

[3] Cited by Llewellyn H. Rockwell, Jr. in "Who Killed Free Trade?" *The Free Market* 14, (April 1996): p. 2.

While far from the ideal, the managed-trade regime that followed World War II was a measurable improvement over the beggar-thy-neighbor protectionism which preceded that conflict. For a while even, the international bureaucracies that managed trade seemed to move the world in the right direction, generally lowering tariff rates. Managed traders seemed to resemble free traders. However, as memories of the folly of Smoot-Hawley[4] faded, politically well-connected firms sought shelter from the cold winds of international competition. As bureaucrats reverted to empire-building form, managed trade became a fig leaf for protectionism. A rundown of the major vehicles of managed trade illustrates this.

MECHANISMS OF MANAGED TRADE GATT

The General Agreement on Trade and Tariffs (GATT) came about largely by default. Established on an interim basis, to be superseded by the International Trade Organization, it ended up lasting four decades when the proposed ITO failed to muster the votes to be passed by Congress. GATT basically provided for tariff reduction based on multilateralism. While it did achieve a number of piecemeal steps in the direction of freer trade, its weak link was that it played into the popular notion that unilateral relinquishing of trade barriers was at best a mixed blessing. The idea that a country should not give up its trade barriers shifted the focus to striking a deal and away from the merits of free trade itself.

NAFTA

The North American Free Trade Agreement (NAFTA) is the quintessential managed-trade vehicle sold under the rubric of free trade. The first tip-off should be its size. While we earlier saw how 54

[4] The Smoot-Hawley Tariff was passed in 1930 supposedly to prevent the loss of American jobs to foreigners. It raised tariff rates to unprecedented levels and ended up crippling world trade and contributing to the severity of the Great Depression.

words in the U.S. Constitution established free trade among the states of the Union, NAFTA weighs in at over 2,000 *pages*, 900 of which are tariff rates. (Under true free trade, there is *one* tariff rate—0 percent.) The agreement does have trade-liberalizing features, to be sure. Consisting of a 10 percent reduction in tariffs to be phased in over 15 years, however, they are all but buried under the profusion of controls NAFTA also establishes.

In the first place, the benefits from those tariff reductions are jeopardized by the agreement's snap-back provisions. Those permit pre-NAFTA tariff levels to be restored against imported items which cause or threaten serious injury to domestic industry.[5] In other words, NAFTA supports free trade as long as it does not promote international competition which is too hot for favored domestic firms to handle. In addition, NAFTA's rules of origin are designed to divert trade from the *world's* most efficient suppliers to *North America's* most efficient suppliers. This hobbles the international division of labor instead of expanding it, as true free trade does.

The importance of NAFTA clauses that keep *out* foreign goods came to light as U.S. clothing manufacturers railed against the import of wool suits from our NAFTA partner Canada. The suits in question were made from third-country wool *not* covered by NAFTA rules of origin. Since Canadian tariffs on foreign wool were lower than U.S. tariffs (10 percent vs. 34 percent),[6] Canadian suits sold for less and soon claimed a large share of the U.S. market. The fact that the entire discussion of this issue centered on closing this loophole in NAFTA rather than on lowering the

[5] James M. Sheehan, "NAFTA—Free Trade in Name Only," *The Wall Street Journal*, September 9, 1993.

[6] Christopher J. Chippelo, "Fight Looms over Canada's Suit Exports," *The Wall Street Journal*, August 7, 1996, p. A2.

injurious U.S. tariff on wool should prove how devoted NAFTA's supporters are to free trade.

Free trade does not depend on international bureaucracies, yet NAFTA creates several of them. Its Commission for Environmental Cooperation was set up to enforce the environmental aim of sustainable growth. One tactic it uses is to prevent countries from trying to create a friendlier environment for investors by relaxing any extant environmental regulations.[7] Such rules are to be enforced by trade sanctions and fines, with the latter to go into a slush fund for environmental law enforcement.[8] NAFTA also created a Labor Commission, whose purpose is to level the playing field between trading partners with regard to labor costs. To repeat, free trade this is not.

WTO

The crowning jewel of managed trade is the World Trade Organization. Instituted to replace GATT, its 29,000-page treaty is a bureaucrat's dream come true. Its driving force comes from those who see government's job as civilizing the market (which they believe would otherwise operate as the law of the jungle). While those 29,000 pages say little about deregulating trade, they say a great deal about regulating everything else. Whereas GATT had been a voluntary forum for nations seeking mutual agreements to lower tariffs, the WTO has enforcement powers, with trade sanctions chief among them.

[7] For example, article 1114 forbids relaxing environmental regulations as an encouragement for establishment, acquisition, expansion or retention in its territory of an investment or investor. Sheehan, ibid.

[8] Matthew C. Hoffman and James M. Sheehan, *The Free Trade Case against NAFTA* (Washington, D.C.: Competitive Enterprise Institute, 1993), p. 3.

The treaty and other enabling legislation creating WTO overflows with such Orwellian verbiage as systematic denial of worker rights in order to gain a competitive advantage is an unjustifiable trade barrier.[9] In other words, people in poor countries are allowed to participate in international trade as long as they don't offer to sell goods cheaply enough that anyone would desire to purchase them. Indeed, many within the WTO bureaucracy support extending minimum-wage protection to poor nations in which they would wreak even more havoc than they do in the advanced nations where they are already in force.

The WTO agreement also expands the reach of anti-dumping laws, another favorite tool of entrenched multinational corporations to shield themselves from the competition of Third World upstarts. Technically defined as exporting goods below costs, the very concept of dumping is problematic, given costs' subjective nature. Any determination of a firm's costs by one not involved in the decision-making process must by definition be arbitrary.

The concept of harmonization is another buzzword beloved by the managed trade mavens of the WTO. The idea here is to achieve uniformity of labor laws, environmental and health regulations, and a host of other such restrictions on enterprise. And surprise, surprise—achievement of this uniformity is to come by countries with the least restrictive measures ratcheting them up to the level of the most restrictive (known as upward harmonization). Clearly, the goal is not worldwide free trade based on the division of labor, but rather of a worldwide welfare state based on the faith that bureaucrats know best how to run businesses in which they themselves have no stake.

[9] William H. Lash III, "Labor Rights and Trade Policy," *The Journal of Commerce and Commercial*, May 17, 1994.

Conclusion

Free trade means the ability of producers to exchange their wares with anyone on the globe for other goods without some government standing in the way of some of those exchanges due to the country of origin of the goods involved. It requires no more laws or institutions than are necessary to provide standard protection of the property rights of all involved in the exchange. It is the application of laissez faire across international borders: nothing more, nothing less.

Multivolume documents paying lip service to free trade but forbidding transactions by parties whose competitive advantages are considered by some to be unfair are the antithesis of free trade no matter how many times the words free trade appear in their pages. That managed trade proponents hide the nature of their policy preferences under the cloak of free trade reveals their utter shamelessness. It also suggests that the free trade side is winning the battle of ideas.

Appendix II

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Underdeveloping Indiana
By Manuel F. Ayau Cordón

The people of the 50 states of the United States (5 percent of the world's population) produce 23.3 percent of the world's gross product of goods and services. Think of the United States as a world in itself, composed of 50 countries with open borders and no restrictions on trade between them. In this world, no limits exist on immigration, enabling people to vote with their feet. There is also considerable diversity in the laws among the states because most legislation is not "harmonized."

Now let us imagine what it would mean to Indiana if it adopted the trade policies common to most underdeveloped countries.

Imagine that Indiana established tariffs and other trade restrictions to provide a new source of revenue, protect local industry (principally steel and autos)—as well as its agriculture—from competition by other states, attract more industries to create jobs, and make sure that Indiana does not have a negative balance of trade.

The first step would be for the government to purchase the required real estate on its periphery to build customhouses where all highways and rail lines enter Indiana from Michigan, Ohio, Kentucky, and Illinois, as well as at ports on Lake Michigan. And don't forget the airports where flights from other states come in.

Look at a map in order to appreciate the extent of the task. Indiana would have to build warehouses at train sidings, roads, airports, and ports to unload, inspect, and reload imported goods from the other states. Then it would have to staff these facilities with customs inspectors to apply the proper tariffs established in its newly created Customs Code. A Bureau of Customs would have to be staffed with personnel adequately trained and prepared for the required tasks; they would have to be specially screened and supervised to avoid bribery and smuggling from other states. The new bureaucrats would naturally have to come from previously productive occupations—and their products be forgone.

Given the present demand for goods, the new additional handling and production costs could not simply be passed on to the consumer, so marginal production would be abandoned. Thus, thanks to the diminished supply of goods and the diminished competition from out of state in the market for raw materials and industrial supplies, prices would rise. Real wages would thus be correspondingly lowered.

New investment opportunities would immediately arise to exploit the competitive advantage of local production over imported goods subject to duties and extra expenses. The duties would be set high enough so that protected firms could attract workers from their current occupations. The old activities would have to be abandoned because they couldn't compete for workers and capital with the more profitable protected industries.

An Intra-American Free Trade Area (IAFTA) would seem to be in order, with the corresponding Protocol with the List of Exceptions to let some things in duty free, provided that they didn't compete with local manufacturers. Goods manufactured in the free-trade area with imported materials and components would get credit for the duties paid on the foreign component. In other words, duties would be assessed according to rules of origin and only on the internal value added. Imports to Indiana made with components or raw materials originating in Indiana would be taxed only on the value added by the other states. Once the initial learning period ended, the war on the newly created crime of smuggling would be undertaken with full vigor and nationalistic zeal. Fines and punishments would be applied with force to violators by the newly established, all-powerful Anti-Smuggling Task Force.

RESTRICTION ON EXPLOITATION

Special restrictions such as punitive duties could be adopted for humanitarian and economic reasons to punish other states that exploited their workers by paying less than Indiana's union wages, that did not have adequate environmental laws, or that had right-to-work laws. In addition, since those practices constitute unfair competition, appropriate reprisals would be applied to dumping.

As the delinquent states raised their wages to adequate levels, treaties would permit the gradual reduction of the duties, provided those states reciprocated.

To prevent the collapse of businesses threatened with imports from states that tax their citizens in order to subsidize their exports, Indiana would establish new taxes to aid such threatened enterprises and thus neutralize the aggressor's artificial competitive advantage. Alternately, were that considered politically inconvenient, the state could raise duties further to prevent the cheaper goods from coming into Indiana and thus allow threatened industries to sell at higher prices than the subsidized cheaper goods from foreign states. The price increment would in effect constitute a subsidy directly paid to the threatened industries without the government acting as middleman.

A new State of Indiana Department of Commerce, under a State Secretary of Commerce, would be entrusted with keeping accurate statistics of imports and exports in order to allow the government to take timely measures when trade imbalances threatened its economy, and to negotiate fast-track trade agreements with other states. If things didn't go well and the situation became critical, Indiana could appeal to the Federal Reserve Bank for a contingency loan and, if refused, could try the IMF or the World Bank, with the advantage that these would also provide advice on how to correct the situation, as long as Indiana raised taxes and adopted the reform plan they suggested. Better still, in a pinch it could apply for one of those nonreimbursable loans, or have the citizens of other states establish a program of foreign aid to help Indiana; and if all else failed, it could devaluate the Indiana Buck.

Other states could either keep their borders open to Indiana or retaliate and likewise establish customhouses where things coming from Indiana would be searched, inspected, and taxed, while those coming from other states would be allowed to pass free, as if there were a free-trade treaty among the other 49 states.

One day a citizen might complain that his property rights were violated because, before the establishment of the new policies, the government of Indiana had not questioned his right to peacefully dispose of his legitimately acquired possessions by exchanging them for the property of other persons living in the other states. Now, suddenly each of his trades had become the concern of the government because it was no longer considered a private transaction between two people, but a trade between Indiana and some other state. This person might start a movement to recover his property rights, but by that time the many pressure groups and the anti-globalization forces—including workers and owners in the protected industries that had prospered as a result of the new policies—would become politically strong and successfully lobby to prevent free trade and the globalization of Indiana.

Sounds crazy? Well, it is. The question then is: Why give foreign aid to bail out countries that persist in doing such dumb things as raising tariffs to protect their businessmen from foreign competition, imposing unnecessary costs on their citizens, forcing their own poor to subsidize inefficient producers, and financing the dead weight of the uneconomic diversion of workers, capital, and other resources from activities that don't need protection—who then go out begging for help?

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I know of no explication of comparative advantage that equals this one in clarity and concision. Even if you think that you already know all you can possibly know about this matter—even if you are confident that you understand comparative advantage completely—read this work and enjoy the thrill that comes from the awareness of having your understanding sharpened and deepened.

Donald J. Boudreaux, chair, Department of Economics, George Mason University

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Leonard P. Liggio, vice president, Atlas Economic Research Foundation

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An engineer and businessman, Mr. Ayau managed and founded several industrial enterprises. His interest in the causes of the underdevelopment of nations led him to study economics and law. In 1957, he created the Center for Economic and Social Studies (CEES) and was founding president of the Universidad Francisco Marroquín in Guatemala City from 1972 to 1988. He has played a leading role in international academia, as member of the Mont Pèlerin Society—which he presided from 1978 to 1980—trustee of the Foundation for Economic Education, and director of the Liberty Fund since 1987. He has published a weekly newspaper column for several decades and written four books and many articles published in international newspapers and magazines.

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