Lessons of Experience

Markets, Capital Markets, and Globalization

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Manufacturers, gradually shift their places, leaving those countries and provinces which they have already enriched, and flying to others, whither they are allured by the cheapness of provisions and labour; till they have enriched these also, and are again banished by the same causes.

David Hume, On Trade, Essays, pages 283-84
INTRODUCTION

It is about exchange and markets, without which people cannot engage in task and knowledge specialization. It is this specialization that is the secret of all wealth creation. There is no other source of sustainable human betterment. We all function simultaneously in more than one world of exchange. Those worlds overlap, as we live first in a world of personal exchange—trading favors and friendship and of building reputations based on trust and trustworthiness in small groups and families; and second, in a world of impersonal exchange through markets—where communication and cooperation gradually emerged in trade with strangers.

I will discuss two kinds of markets—first, markets for commodities and services, which we have studied extensively in the laboratory. Then I will apply the learning from experiments to interpret the nature and function of such markets in the world. These markets are the foundation of wealth creation.

Secondly, I will talk about markets for capital, or stock markets. Capital and stock markets are far more volatile and unpredictable than are existing commodity and service markets, but this is to be expected, as their function is to anticipate the commodities and services of the future.

I also want to discuss globalization—the worldwide extension of such markets—which is really nothing more than a new word for an ancient process of migration and human betterment seeking that began a long time ago when our common ancestors first walked out of Africa.
My message today is an optimistic one about the future.

I. PERSONAL EXCHANGE, RECIPROCITY AND EARLY PEOPLES

There are good reasons to support the belief that exchange has its origin in reciprocity and sharing norms in the family, the extended family and tribes. This personal exchange allowed task specialization between hunting, gathering and tool making that laid the basis for enhanced productivity and welfare, which in turn enabled early peoples to migrate all over the world. Thus, specialization supported by personal exchange allowed globalization to begin early, long before the emergence of markets.

Since the pioneering work of Boas over a century ago, the study of extant hunter-gather tribal societies makes plain the antiquity, sophistication and diversity of property rights in the human career. Of the hundreds of examples that could be cited, I want to quote one of my favorites, from Peter Freuchen’s *Book of the Eskimos*, 1960, pp 53-54 on the “first harpoon” principle as it applied to polar bear hunting teams.

“… According to custom, all the hunters present are to get parts in the quarry, in this case both of the meat and skin. There are three pairs of trousers in a bearskin. If there are more than three hunters present, the ones who threw their spears last will usually be generous enough to leave their parts of the skin to the others. The hunter who fixed his spear first in the bear gets the upper part. That is the finest part, for it includes the forelegs with the long mane hairs that are so much desired to border women's kamiks (boots) with.

Note that the Inuit “first harpoon” norm is an incentive rule that rewards with a greater value, the greater risk and cost of being the first to harpoon this incredibly dangerous prey. It is an equal opportunity rule, not an equal outcome rule that evolved from ancient prehistory. Any member of the hunting team is free to go first, pay the risk cost, and collect the higher revenue. All others, however, whose contributions cannot be differentiated, share equally or more flexibly in the remaining revenue.
A. EVIDENCE OF THIS IN THE LABORATORY

These deep ethical principles surface in laboratory experiments showing that when there is no way to differentiate individual contributions, then people support the equal outcome rule. When contributions can be differentiated, then people tend to prefer a rule that rewards in proportion to individual contributions—more to those who sacrifice more for the group.

I and my coauthors have studied this ancient norm of reciprocity and trading favors as it emerges in two person games between anonymously matched subjects, many of whom use trust and trustworthiness to achieve gains from the exchange—cooperative outcomes that maximize joint benefits. Many voluntarily avoid choosing outcomes that take for themselves without giving something in return to their matched counterpart.

II. FROM PERSONAL TO IMPERSONAL EXCHANGE AND MARKETS

When the same subjects who consciously cooperate for betterment in elementary two person interactions come to the laboratory to trade in impersonal experimental markets what do they do? They strive to maximize their own gain, and in this process maximize the joint benefits of the group without intending to. However, these markets are supported by externally enforced property right rules that prevent taking without giving in return.

A. THE EXTENDED, OR TRANSIENT, ORDER OF MARKETS: ACHIEVING ENDS NOT PART OF ANYONE’S INTENTIONS

In established commodity and service markets producers incur recurrent, relatively predictable costs, and consumers experience corresponding recurrent flows of value from consumption. But costs and values are inherently private and all such information is dispersed. Command and control economies have failed because such information cannot be given to any one mind. But how do we know that the price discovery process in
commodity markets yields efficient surplus-maximizing outcomes? We have discovered in controlled laboratory experiments that these recurrent flow markets are incredibly efficient, and these findings have been replicated many hundreds of times. Moreover, the subjects in these experiments are not aware of the group welfare maximizing ends that they produce. Each, in pursuing his personal gain, achieves group maximizing benefits that are not part of his intention.

In debriefings at the end of a market experiment:

1. people deny that any kind of model could predict their final trading prices and exchange volume, yet these outcomes correspond to the demand and supply schedules of values and costs that are dispersed privately among all the participants; market efficiency does not require large numbers, complete information, economic understanding or sophistication, a fact that should not be too surprising since people were trading in markets long before there were economists.

2. people in these market experiments also believe that it ought to have been possible for them to have earned more profit for themselves, yet in fact they were in equilibrium, each doing as well as was possible given the behavior of all the others.

B. GOING FROM THE LABORATORY TO THE ECONOMY: THE FUNCTION OF MARKETS AND THE POWER OF DIVERSITY.

What have we learned about markets? What is the unseen function that they serve?

1. Commodity and service markets are the foundation of existing wealth creation. Each of us earns our income from no more than one or two sources. Yet think of all the hundreds of items that we use or consume throughout the day that are produced by others whom we do not know, and will never know.
2. The hallmark of commodity and service markets is diversity: diversity of tastes, human skill and knowledge, natural resources, soil and climate. These in turn are what account for the differences in the values and costs that we use to define and motivate gains from exchange in the laboratory; that is, we create a controlled economy that exhibits this diversity.

3. The power of diversity to be extended and to serve human betterment depends vitally on exchange, both personal exchange, in our intimate groupings, and impersonal exchange through markets.

C. THE ORIGINS AND CHARACTERISTICS OF DIVERSITY

Initially, diversity was possible and encouraged through sharing and reciprocity norms in the family, the extended family and tribes. Thus, in stateless hunter/gather societies, the women and children gathered fruits, nuts, tubers, and grains; men hunted; and old men advised in the hunt, fashioned tools, weapons, and helped in gathering.

At many times and many places in prehistory, exchange was extended to strangers through barter, and ultimately the use of commodity money.

Indeed early humans set the stage for a vast expansion of wealth and well-being whenever a tribe discovered that it was better to trade with their neighboring tribes than to kill them. If you kill them, they can’t produce something and trade it with you tomorrow, nor can you benefit from their unique skills, learning, art, culture and experience. Similarly if you let them live but steal from them, they are much less willing to produce more for you tomorrow, than if you trade with them today.

Diversity requires freedom, because it is freedom that allows each to be as different as he or she is able and desires to become. Markets in turn support tolerance of freedom. Chile had little political freedom, but opened the economy to freer choice, and this spread to political choice and brought democracy.
Similarly, the Chinese government has moved to liberalize the economy over the last several years. Moreover, early in 2004 the constitution was modified to permit individuals to own private property, although the provision added the catch-22 that the property “be legally acquired.” Although this provision disappointed those pushing for liberalization, the move did recognized the operating norm in which people in fact have private property that is exchanged. The legal modification was motivated by the need to prevent corruption—payments to government officials in return for permitting these trades to occur.

Diversity without the freedom to exchange implies poverty: no human, however abundantly endowed with a single skill or a single resource, can prosper without trade. Robinson Crusoe owned an Island, but he was poor.

We have need of others, and the diversity they bring to the table, if we are to rise above bare subsistence. Through markets we depend on others, whom we do not know, or recognize or understand. We know not how and in what ways others contribute to our welfare, and we contribute to theirs. Such are the long subtle, largely invisible chains of interdependence through markets connected by prices. The welfare of each of us depends vitally upon the knowledge and skills of others with whom we trade through markets.

Without markets we would indeed be poor, miserable, brutish and ignorant; if some were less poor, it would be because of conquest, theft, taking without giving in return, which can be sustained only for as long as there are others to conquer.

D. MARKETS AND PROPERTY RIGHT INSTITUTIONS

Diversity is made possible, productive and permissive of wealth creation, through market institutions.

Markets require consensual enforcement of the rules of social and economic exchange. No one has said it better than David Hume over 250 years ago, when he said that there are just three laws of human nature:
1) the right of possession,

2) its transference by consent, and

3) the performance of promises.

These are the ultimate foundations of order, with or without formal law, that make possible markets and prosperity.

Hume is talking about discovered or emergent law, not made or legislated law. The early ‘law-givers’ did not make the law they presumed to ‘give’; they studied social traditions, norms and informal rules and gave voice to them, as God’s, or natural, law.

Hume’s Laws of nature are derived from the ancient Judeo commandments: Thou shalt not steal; thou shalt not covet thy neighbors’ possessions; thou shalt not bear false witness. But these same commandments emerged in other religions the world over.

- The game of ‘steal’ consumes wealth without encouraging its reproduction, while the game of ‘trade’ sustains and grows abundance.
- Coveting the possessions of others invites an involuntary state enforced redistribution of the gains from specialization and trade, endangering incentives to produce tomorrow’s harvest perhaps as surely as its theft.
- To bear false witness is to undermine community, management credibility, investor trust and confidence, long-term profitability and the personal social exchanges that are most humanizing. Corporate management bears false witness at its peril. Once management loses credibility with shareholders the stock market is unforgiving, as evidenced with Enron, whose stock plummeted when management self dealing became known.
II. CAPITAL MARKETS

This brings me to the topic of stock markets, which are inherently far more uncertain than markets for commodities and services because stock markets must anticipate innovations—the new commodities and services of the future. At the time of new innovations the extent of their subsequent economic success is inherently unpredictable.

A. INNOVATIONS IN HISTORY, AND STOCK MARKETS

If changing knowledge and technologies are to yield new commodities and services, they require capital. Capital markets allow the users and suppliers of capital to be distinct and more specialized; the savers do not also have to be the entrepreneurs that can grow new wealth from capital investment, and both can gain by exchanging investment for a share of the return, each also bearing the risk of loss.

Stock market bubbles and crashes are not new. Why?

1. Great stock market booms are fueled by new technologies.
2. For example, in the 19th century the steam engine allowed the steam ship to replace the square-rigger, the railroad to replace the mule team and the stagecoach. Railroad expansion in 19th century America outran the shipping needs of inter-regional trade.
3. Profitability turned to losses, bankruptcies and consolidations. But out of this 19th century expansion, long-term value was created and retained for the entire economy.
4. At the turn of the 20th century many new technologies emerged. Telephone, electricity, petroleum and automobiles sustained a wave of investment and development. There was over-expansion in response to high profitability followed by declining margins, losses, bankruptcy, consolidation, but long run value was created and not lost to the economy. Bankruptcy allows the assets of failed managers—human and physical—to be reallocated to managers who launch a new attempt at making the business a success.
5. My hometown of Wichita had 15 airplane manufacturers in 1929: Travel Air, Stearman, Cessna, United, Laird, Swift, Lark, Knoll, Bradley, Yunkers, Wichita, Watkins, Mooney, Sullivan and Buckley. Two of them were new company names in 1927: Cessna and Stearman. A decade later Stearman’s successful operation had been bought by Boeing, and the general aviation survivors were Cessna and Beech who made Wichita the national center of this new industry. Being start-up companies just two years before the great crash had not prevented success for Cessna and Beech, but the others all failed and there salvageable assets reallocated.

6. The ball point pen is today an almost invisible but classic example of innovation and change: this mid-century invention sold initially for $10; it was a very profitable new product, attracting a rush of entry, falling prices, losses, consolidations, but the pen stays—yielding continuing long term value of which we are not aware, except that we are all a little richer as a result. When today we buy a 60 cent BIC pen we are unaware that they are far superior to those $10 upstarts over a half century ago.

B. THE 1990’S BUBBLE CRASH: HISTORY REPEATS

1. Picking winners and identifying losers in advance is inherently risky if impossible except by chance. More than 60% of manufacturing firms have left the industry in their first 5 years; 80% in their first 10 years. (These data are from the years, 1967-1982). The 1990s brought an unprecedented volume of IPOs. I am sure that the history of that decade will record an unprecedented failure rate, but also, and much less visible, an unprecedented increase in long-term economic value for the economy. The current bubble and crash is fueled by new electronic, communication, computer, biological and pharmacological technologies. The residual long tern value is suggested by the post crash national income data: output has increased with little increase in employment. We are getting more for less as manufacturing rapidly goes the way of agriculture.
2. Diesel truck engines are an example of long-term value in the old economy created by companies that become severely stressed if not bankrupt. Each cylinder is computer controlled for minimizing fuel consumption and meeting tough new emissions standards under all operating conditions. Small electronic companies like Apex Microtech with 50 employees developed and sold the power-op amplifiers used by Navistar to create the new engine.

3. It is painful for those who risk investment in new technologies and lose, but the benefits captured by other industries, and by the learning and consolidations that leave value for the few winners, are retained as new wealth for the economy. This is the substance of growth, betterment and the ultimate reduction of poverty. This is why almost everybody is wealthier than were their parents and grandparents.

4. How can the individual pain be eliminated, and the long-term value achieved, with a policy fix that avoids the risk of doing more harm than good? We don’t know. On this as on many matters there are just two classes of people: those who know they do not know and those that don’t. If someone tells you they can identify new company stock market winners and losers, keep your hands in your pockets.

5. Here is the problem: If you limit people’s decisions to make risky investments in an attempt to keep them from harming themselves, how much will that reduce our capacity to achieve major technological advancements? The hope of great gain by individuals fuels thousands of experiments in an environment of great uncertainty as to which experiments, which combinations of management and technology will be successful. The failure of many may be a crucial part of the cost of sorting out the few that will succeed. After a wave of innovation, and a bubble bursts managers know a lot about what did not work, and a little about what did work.
III. GLOBALIZATION: A NEW WORD FOR THE AGE-OLD PROCESS OF MIGRATION AND MARKET EXPANSION.

Globalization for us all began when our common Cro-Magnon ancestors walked out of Africa about 50,000 years ago, settling Asia and Australia, 50-40,000 years ago, Europe by 40,000 years ago, Siberia and the Arctic, 35-20,000 years ago, the Bering gateway to North America, 14-13,000 years ago, the Americas 12-11,000 years ago, and NZ and Madagascar only 1,000 years ago. Long before the square rigger sailing ship, our ancestors had settled every continent except Antarctica, and all the major islands.

Archeology and ethnographic studies suggest that early peoples, long before nation states, traded tools, weapons, and public goods like symbols, customs, crests, and un molested rights of access to trade routes and hunting grounds.

A. EXPANSION

The first long distance trade between Europe and the Near East allowed us to escape the static dead-end and poverty-ridden Middle Ages. This led to new explorations by stock companies and nation states.

B. TECHNOLOGY DRIVEN CHANGE

1. Exploration was driven by a new technology; the great square-rigger sailing ships.

2. As commerce spanned the old and new worlds, there was a worldwide exchange of plant and fruit products. The Italian gourmet had not a single tomato until the plant was imported from the new world; nor did the Irish have the potato until one of the thousands of varieties was imported from South America. The diversity of nature was the basis of specialization and much wealth creation through exchange. Instead of cutting edge research and development we had exploration, transportation and transplantation.

3. In the 19th century the seas were spanned by steamships; the Continents by the steam locomotive railroads.
4. Whole regions now began to specialize in different industrial and agricultural products depending on their natural comparative advantages. The diversified subsistence farm reformed into the cattle ranch, the wheat, barley, corn and rice farms, the milk farm and the chicken farm.

5. The recent global Green Revolution stemmed from the new seed varieties developed by Norman Borlaug, who won the Nobel Peace prize in 1970. His work doubled and tripled the yields of wheat, maize, rice and other crops enabling Mexico, India, Pakistan and China to feed their greatly increased populations with only a 1% increase in world land cultivation.

6. The latest great thrust in globalization is driven by innovations in computing power, communications, and transportation logistics. All three serve Internet exchange.

7. The retail store was once the place where buyers met producers through the intermediary of the merchant who risked the purchase of inventories of what he hoped people would want to buy, and the buyer risked the quality of the goods produced.

8. This very high cost way of matching consumers with producers has been challenged by the internet, where buyers and sellers are matched at near zero cost, and new institutions are being created for direct shipment, and for quality assurance through competition in reputation formation, warranties, and liberal return policies. This new dream world of potential profit led to over-expansion as investors threw investment funds at all the retail dotcoms just as their ancestors a century earlier had thrown money at the railroads.

C. NEW WORLD OF COMPETITION IN NATIONAL POLICIES

1. But current globalization is bringing a new discipline to national governments. Budget and monetary excesses by national governments discourage foreign investment, while encouraging domestic nationals to seek foreign, more stable, investment opportunities.
2. South American countries can better serve their people by asking how they can learn from Chile to bite the bullet, stabilize currencies, control government spending, privatize government owned industries, and reduce barriers to free trade.

3. In particular there is the need emphasized by Hernando de Soto for institutional change enabling the owners of real estate and other assets to hold clear fungible titles. In this way the use value of existing assets in poor countries can be reflected in exchange value allowing entrepreneurial access to capital markets to facilitate internal development.

4. Not only capital but also people move to where there is opportunity, and this is an essential part of creating new wealth and prosperity. This was dramatically illustrated for me in 1978 in a taxicab trip from the Wellington NZ airport to my hotel. The driver was friendly, and I asked him, “Tell me about your country.” He replied, “It’s really wonderful. I don’t like paying half my small income in taxes, but we receive so much that is free: health benefits, prescriptions, free education through college and advanced graduate study. I am just a cab driver, but my son is going to be a medical doctor. He has finished his medical degree, and internship, and will begin practicing next year.” In recognition of his obvious pride, I said, “How wonderful. You have every right to be proud. Is he going to practice in Wellington?” He replied, “Oh no, he’s going to Australia. You can’t make any money here.” The New Zealand economic crisis hit about two years later. NZ could not compete in world markets, and could no longer afford socialism.
CONCLUSION:

Commodity and service markets are the foundation of wealth creation. The fact that stock markets serve by supplying capital for new consumer products explains why they are inherently uncertain, unpredictable, volatile, and, given investor behavior, why they tend to bubble and crash. Stock markets are far more uncertain than markets for commodities and services because stock markets must anticipate innovations—the new commodities and services of the future. Globalization is not new. It is a modern word describing an ancient human movement—a word for humankind’s search for betterment, and the worldwide expansion of resource specialization, which is determined by the extent of market development.

I think globalization is a good word—a peaceful word. In the wise pronouncement of the great French Economist, Bastiat,

If goods don’t cross borders, soldiers will.