Speculative Capital

By Jim Davis
Presented at the
Globalization and Social Justice Conference
Chicago, May 9-11, 2002

In a strip mall five blocks from my house in Chicago, there's an office for "Chicago Entertainment Tours". Chicago Entertainment Tours has one destination: The Horseshoe Casino in Hammond, Indiana, just across the Chicago city limits. Every two hours, from 8:30 in the morning until 6:30 in the evening, a bus leaves from this corner of Chicago, taking a busload of gamblers to the closest of the 11 casino boats within an hour or so of downtown Chicago.

Travel five miles east from the Horseshoe, along the south shore of Lake Michigan, past the refineries and tank farms where the air is sweet with petroleum smells. Across the railroad tracks, in "Buffington Harbor", Gary, Indiana, a Trump boat shares a dock with the Majestic Star. On the top deck the Trump boat, to the port you can see the tiny glittering Harrah's boat a mile to the west, in turn overshadowed by the steel mill behind it. Off the starboard side you see a mammoth cement works.

Each boat is a little replica of a Las Vegas casino, from the flashing lights, to the jangle of the slot machines, to the cocktail waitresses. The various table games are organized around "pits", and occupy the center of most of the decks. The table games are surrounded, and vastly outnumbered, by slots and video poker machines. In 2000, some 9 million people passed through the turnstiles of the four boats, leaving behind almost $720 million. (Indiana Gaming Commission 2000 Report to the Governor, 2001).

Not 20 minutes drive from the Horseshoe in Hammond, the Chicago Mercantile Exchange operates the largest futures trading market in the world. Visitors can take an elevator to the fourth floor, and look out over the trading floor. The floor is segmented into pits according to the type of contract being traded. There are the hard commodities like pork bellies, cattle, butter and lumber that belie the exchange's agricultural roots. And then there are the more exotic stock index contracts — Standard and Poor 500, Nasdaq and Nikkei index futures. Started in 1896 as the Chicago Butter and Egg Board, in 2001 the Merc traded 411.7 million contracts with an underlying value of $294 trillion.

A few blocks away, the older Chicago Board of Trade trades over one million contracts a day on soybeans and oats, as well as treasury bonds and stock index futures and options. A few blocks away, the Chicago Board Options Exchange provides a market in stock option trading. Most of the financial contracts traded at these exchanges — in currencies, treasury bonds, and stock indexes, did not exist before 1972 (the CBOE was only founded in 1973).

The gambling that takes place in northwest Indiana in the heart of the Calumet Corridor, once the greatest concentration of industrial production in America; and the trading, speculating and hedging in Chicago's Loop are two sides of capitalism in the 21st century. Speculation, hedging, risk-taking, gambling, volatility are keywords for the millennium-straddling economy. Both gambling and speculation are intimately tied to the big, broad phenomenon loosely called "globalization." It is impossible to understand globalization, or society today, without understanding the dynamics of speculation.

###

There has been a lively debate around the idea of globalization — does it exist? is it significant? what is it? what does it mean? For the sake of this discussion, I will use a deceptively simple definition — globalization is capitalism in the age of electronics (Davis, 1998). As such, globalization describes a stage of capitalism that arises on a particular technical foundation. Electronics (and here, this should be taken to embrace the host of new technologies that have flowed from the breakthroughs in electronics: computers, digital communication, rocketry, lasers, smart materials, biotechnology, etc.) when deployed in the economy creates pressures for capital, and also suggests opportunities.

On the one hand, electronics, as a labor-replacing technology, puts pressure on the production of surplus value. Electronics disrupts industry as labor-intensive processes are replaced by electronic equivalents. Increased output means that more goods must be sold. Improved transportation and communication pressure political boundaries between markets. Digitalization pressures the physical boundaries between markets. As markets converge and merge, competition increases. The shift to greater dependence on techniques and science, and the rapid spread of ideas, also pressures whatever competitive advantage one firm might have over another. Electronics also puts powerful tools of resistance in the hands of workers.

On the other hand, electronics opens up opportunities. New production techniques provide dramatic savings to the innovator; new markets can be reached; the circuit of capital can be cut short; more credit can be deployed and absorbed. Electronics puts powerful new technologies of surveillance and control in the hands of the owning class. Marketing can be sharpened, and workers bound more tightly to work and to their debt.[1]

The features that people have come to associate with globalization — the perfection of the world market, the integration of global production, the rapidly gelling world culture, "Empire" — these simply would not be possible without electronics.

Technology defines the boundaries of the possible. And capitalists seize upon whatever tools are at-hand. So capitalism in the age of electronics takes on certain peculiar and unique features.

###

Risk is unavoidable with economic activity that spans time. Between the planting and the harvest, or the order and the delivery, any number of disasters can happen. Throughout the course of capitalism, various mechanisms have developed to handle risk. Risk management is, in general, a stabilizing activity. Insurance, hedging and speculation are examples of trading in risk.

Insurance, at least in most of the capitalist world, is ubiquitous. For a consideration (the premium), the insurer buys the risk that a house will burn down, a car will crash, a person will die prematurely. By socializing the risk amongst thousands or millions of people, and counting on the law of large numbers, sorted out and organized into actuarial tables, the insurer can profit.

Hedging is another a way of transferring risk. Hedging is a way of locking in the price of a commodity that may change before it is bought or sold. One example of hedging is "forward contracts" or "futures". A farmer might agree to sell his or her wheat, even before it is planted, for an agreed upon price, at harvest. The farmer knows the price of the crop in advance, and is

[1]The concept of new technologies and "laborless production" is not without its critics. The two main challenges raise the productivity paradox (if electronics is qualitatively new, why isn't productivity growth faster?) and the fact that employment is not dropping (laborless production could be simplistically interpreted as the end of work.) The complex relationship between new technologies and value production, including a response to these challenges, is covered elsewhere (Davis, 2000).

protected from the price of wheat rising or falling. The farmer has transferred the risk of price changes in wheat to another party. At the same time, a firm that on the other side of the production process that uses wheat as raw material (e.g, say a bakery) has an interest in locking in, in advance, the price of wheat (for as low a price as possible).

Hedging may also involve buying another item that will fall in price as the commodity in question rises. At the end of the day, the rise in the price of one commodity is offset by the fall in price of the other commodity. For example, a U.S. company that does business in Germany will be adversely affected if the dollar falls in relation to the deutschemark. So the company may buy a contract to exchange dollars for deutschemarks at the current exchange rate at some date in the future. If the dollar does fall (and the deutschemark rises), the company is protected.

Speculators buy the risk that hedgers try to sell (or, hedgers buy the stability that speculators sell). Speculators do not create risk, rather, their (unconscious) role is to absorb risk in the course of making money, from price changes. By creating a market for risk, they help to stabilize dynamic markets. Speculators situate themselves between buyers and sellers — the wheat farmer and the bakery in the above example. From their vantage point in the middle of the market (between the farmer and the bakery), speculators also help in "price discovery", smoothing the process of determining a price for commodities.

This description of speculation as a stabilizer of a mature economy intentionally dismisses the notion of speculation as reckless or irresponsible behavior. A simple but functional definition of speculation is the act of trading financial instruments with the goal of making money.

Hedging and speculating are very different acts, as different as buying is from selling. Hedging is an attempt to protect the equity of a firm by maintaining the balance between assets and liabilities. It is, like insurance, the defensive act of preservation. The goal of speculation, on the other hand, is to make money. It is an offensive act.

However, since hedging and speculation both involve "trading financial instruments with the goal of making money", we can and should consider both of these activities, different as they are, as part of speculation in the general sense, and the capital they deploy as part of speculative capital. Both actors enter into the financial markets, and carry out similar activities ("indistinguishable on paper"), albeit with different motives (although both are trying, in one way or another, to secure profit). (Saber, 1999) Hedging provides the market material for speculation, what speculators trade in. Speculators provide a market for the hedges (e.g., of matching positions of one hedger to another.) The two groups grow together.

The notion of making money from money — that is, not from labor, not from trade, but simply by the loaning of money for a consideration, or of taking money on the off-chance that an unforeseeable calamity might happen, was, in the early days of capitalism, a sin. Usury was proscribed. The taking of insurance was seen in the same light. (Brenner and Brenner, 1990)[2] Nevertheless, the expansion of world trade and capitalism demanded the extension of credit, and the distribution of risk. Various forms of credit emerged early on, through the *lettres de faire* and bills of exchange. A formal insurance industry did not really achieve legitimacy until the 18th century, when the new science of probability and statistics enabled the generation of actuarial tables that took the mystery out of insurance, and put it on a firm material footing. Speculation was the last of the financial activities to achieve legitimacy, and that not until the end of the

[2]Even today, some insurance still has a stench about it. For example, see "Companies profit from workers' death through 'dead peasants' insurance", *Wall Street Journal*, Apr 19, 2002. Companies routinely take life insurance out on employees, and collect the benefit from the employees death, a kind of employee death speculation.

nineteenth century (although even today the activity is often viewed with some skepticism).[3]

###

As the degree of uncertainty rises in the world economy, the element of risk grows, and so the need for mechanisms to manage this risk also grows. It is with this basic requirement in mind that we can look at the expansion of speculation as a factor in the world economy of globalization today.

The system of globalization grew out of World War II. That war was really the conclusion of the conflict begun in 1914. The general crisis of capital could be resolved only through either socialism, or through a radical restructuring of the world capitalist system. The dismantling of the old colonial system, the opening of world markets, the Bretton Woods system of fixed exchange rates linked to the dollar, the construction of institutions like the World Bank, the International Monetary Fund, the General Agreement on Trade and Tariffs (which eventually became the World Trade Organization), the United Nations — all of these emerged out of World War II to reorganize capitalism. The Bretton Woods system provided stability to world trade by effectively fixing currency exchange rates at US$35 for an ounce of gold.

Also during the war, governments pumped massive amounts of resources into research, resulting in breakthroughs in electronics (radar, computing machinery, numerical control machinery), medicine and pharmacology, physics and mechanics (jet engines, nuclear power, rockets), and new materials.

There are many reasons for the eventual collapse of the Bretton Woods system. Increased productivity, increased competition from the rebuilt economies of Europe and Japan, the expense of the Cold War, efforts to contain insurgent new social forces, and various policy decisions at the government level all contributed to the unsustainability of the fixed rate system. (See, e.g., Strange, 1986). The Nixon administration set about dismantling the Bretton Woods system in the early 1970s; by 1973, the system had been abandoned. Currency exchange rates now bobbed up and down in relation to each other.

The early 1970s, in retrospect, can be seen as a significant marker in the history of globalization. Where the beginnings of globalization start in 1945, the early 1970s mark its emergence as a definite stage. The defeat of the U.S. in Vietnam, the introduction of the first commercial microchip, the end of Bretton Woods in their very different ways described different facets of the new stage.

The financial crisis that erupted in the early 1970s provided opportunities to put into place economic policy changes to bring the economy into line with the new conditions. Between December 1972 and September 1974, the Standard and Poor 500 stock index fell 43 percent. After inflation, the loss in equity values was the worst performance in history since 1929-31. Bondholders in the 1930s had made money; in the early 1970s long-term treasury bonds fell 28% as inflation hit 11%. The dollar's foreign exchange value fell 50%. (Bernstein, 1996) The price of

[3]Speculation has certainly been abused, including attempts by speculators to "corner" the market in commodities (historically in agricultural goods, but more recently by the Hunt brothers in the 1980s in the silver market), usually to the detriment of the producer. As finance capital matured in the United States in the late 19th century, and speculation as market-making becomes more widespread, hard-pressed small farmers frequently pushed, through the populist platform, for an end to speculation. As with all capitalist activity, the reality of speculation is that it has frequently been accompanied by crime, graft, lying, cheating, etc. Witness the revelation that Enron, as an energy trader, manipulated the California energy market to increase profits during the state's 2000-01 power crisis. (E.g., "Enron Rigged Power Market in California, Documents Say", *Wall Street Journal*, May 7, 2002.)

oil, denominated in dollars, soared. The breakup of fixed exchange rates and the oil price shocks that resulted introduced new uncertainties and risks into the world economy. The neoliberal onslaught began, injecting new uncertainties and risk into daily life.

###

Pity the poor corporate treasurer. For multinational corporations — by the early 1970s dominant players on the economic field — the constantly changing exchange rates in the post-Bretton Woods world played havoc with planning and pricing across national borders. Corporate treasurers were compelled to start hedging in currencies to lock in known exchange rates in advance — conceptually no different than the farmer and his wheat.

In 1972, in the midst of the breakup of the Bretton Woods agreement, the Chicago Mercantile Exchange introduced trading on futures on seven foreign currencies. This was the birth of the modern money markets, and marks the emergence of modern speculation. The multinational banks that serviced the multinational corporations were in a position to see, and to profit from rate differences. (Saber, 1999)

As early as 1976, the foreign exchange markets were dominated by speculation. Charles Coombs, who oversaw U.S. Treasury and Federal Reserve Operations from 1961 to 1975, observed that "of the tens of billions of dollars in daily transactions cleared through the market only a fraction is derived from such fundamental factors as foreign trade and long-term investment. On a day-to-day basis the market is instead dominated by short-term capital movements in search of quick profits or a hedge against exchange rate risks." (in Strange, 1986, p 39).[4]

As communication technology improved and prices dropped, and with profits being squeezed, corporate treasuries had both the opportunity, and the motive, to make the subtle shift from defensive hedging to offensive speculation. Speculation (including hedging) becomes an important and necessary part of any "responsible" corporate financial strategy. Treasury departments of corporations are compelled in various ways to *manage* money. As each department of the firm is expected to contribute to the overall bottom line, the management of money through offensive speculation, becomes a profit center for the firm. A 1993 study showed that 85.2% of Fortune 500 companies used derivative securities, and 87.7% speculated at least some of the time. Their goal is "to control their financial environment". At one point, 15% of Intel's bottom line came from speculation in interest rate and currency instruments. (Millman, 1995)

###

Speculation can be seen as a subset of finance in general; and speculative capital — the capital bound up in speculation — as a portion of finance capital in general. Speculation grows out of finance. However speculation differs from classic finance capital as the merger of bank capital and industrial capital under the control of the banks. Classic finance capital is capital destined to go into production, for investment in infrastructure or raw materials or production or trade. Speculative capital has no such pretense, it is solely involved in the trading of financial contracts. The special role that it plays in the financial arena distinguishes it from more mundane finance capital. The growth of its importance from bit player to main actor suggests we should examine its special features and the special role that it plays.

[4]Today, over $1 trillion passes the clearinghouse each day, of which only a few percent relates to trade in goods. (Henwood, 1997).

Speculation has peculiar features which give a particular cast to the economy. The key features of speculation are:

(1) the constant shrinkage of price spreads (the difference between what something can be bought and sold for), speculation's source of profits
(2) as a result, the need for more money to be thrown into speculation to accommodate the shrinking spreads
(3) the increase in "leverage", or the use of credit as the source of money used in speculation
(4) the jump from markets in single commodities to all commodities, and from one country to all countries, tying them all together
(5) the magnification of volatility
(6) an objective compulsion to participate in speculation
(7) the growth of "systemic risk" in the financial system.

Nasser Saber's book, *Speculative Capital* provides a fascinating overview of the dynamics of speculative capital. Markets are imperfect machines. Within the market, there are discrepancies between prices for identical goods. One function of speculation is to exploit those differences, by buying at the low price, and turning around and selling to someone else, unaware of the cheaper source of the item, at the higher price. For example, say a share of Company A's stock costs $20 on the New York Stock Exchange, and $20.25 on the Pacific Stock Exchange. By simultaneously buying the stock in New York (low) and selling it in San Francisco (high), the trader has made 25 cents. After multiplying that price discrepancy by hundreds of thousands or millions of shares, that quarter can represent a big chunk of money. The exploitation of price differences in the market with an eye to what he calls "simultaneous 'buy-low, sell-high'" is called "arbitrage." Saber describes this as "risk-free profit" because buyer and seller and prices are known in advance. Saber considers arbitrage as the most complete, sophisticated form of speculation, "the Holy Grail of finance: making money, without risking money." (Saber, 1999)[5]

The price spread is a temporary and fleeting thing. As information about the price discrepancies becomes widely known, the spread disappears. That is, as technology is dispersed and becomes common (which allows the discovery of the anomalies, and then the rapid distribution of that information until it becomes ubiquitous) the spread shrinks or disappears. So the 25 cent discrepancy may shrink to a one cent discrepancy. In order to maintain the same level of gain, speculative capital needs to throw more money into arbitrage — in the above case, 25 times the amount of money — to realize the same amount of profit.[6]

One important way that additional money can be deployed is through the increase in "leverage".

[5]In practice, the price differences in arbitrage are often quite smaller.

Saber considers buying low in one market at selling high in another a merchant activity. He considers buying low at one time, and selling high at a later time as a "wholesaling" or "retailing" activity. He considers neither one to be "speculation", and criticizes Samuelson and Nordhaus, the authors of one of the most popular economics texts for including these activities as a form of speculation. Arbitrage — for Saber the distilled essence of speculation — means buying low and selling high *at the same time in the same place.* All of these activities (buying low, selling high across space, over time, and at the same time/place) play a similar function of absorbing risk. Speculation involves trading financial contracts (which could include a contract to deliver goods) for gain, and so I don't think the line is so hard and fast.

[6]Speculation perfects the market by exposing and exploiting, and thereby destroying price discrepancies. The rise of a subclass of thrift shop / rummage / jumble sale prowlers who harvest troll dolls, World War II memorabilia and the like for sale on the Internet-enabled global market (e.g. EBay) is an interesting market perfection phenomenon — taking advantage of information discrepancy between the thrift shop / garage sale and the global second-hand market. EBay becomes a useful tool for price discovery. This isn't speculation as we are talking about it, because it doesn't involve financial contracts, but it does provide an example of a similar process that takes place in speculative capital.

In finance, leverage refers to the use of credit capital — borrowed money — to expand activity. Credit allows the expansion of production and of capital, but it is not necessarily *required* of the factory owner (although today, such a capitalist would be on the sidelines of the economy). Saber argues, however, in speculation that "no manager of speculative capital can avoid leverage. With regard to speculative capital, credit capital is more than a booster of returns. It is a vital component of support, an engine of sorts, without which speculative capital cannot operate." (p 195).

Since arbitrage spreads are well below the rate of profit, the only way to achieve a normal return is either by increasing the velocity of trades, or borrowing money to grow the amount being arbitraged — by throwing credit capital into the mix. When the hedge fund Long Term Capital Management's troubles became public in 1998, its leverage ratio (that is, the amount of the capital it was investing compared to its own capital) was 50. "To a bank loan officer, who lends on traditional criteria, that leverage is incomprehensible, almost madness. No business could generate sufficient profits to service debt 50 times the owners equity."[7] Saber argues that this isn't necessarily madness though, because in theory, in arbitrage, the profits are supposed to be "riskless", because every purchase is a simultaneous sale. "It is a refined version of banks' own practice of borrowing low and lending high, so the banks readily recognize it." (p 197)

As a result, speculative capital depends on credit capital, and even demands the expansion of credit capital for its own expansion. Through margin loans, junk bonds, U.S. Treasury bonds (as in the Reagan credit expansion / deficit spending of the 1980s), even consumer debt.[8] Because the Federal Reserve opens and closes the credit tap by adjusting key interest rates, its actions have a big impact on speculative capital.

Arbitrage emerges out of the classic speculation described above, but wasn't possible until the twin acts — of buying and then selling — could be squeezed in time to something close to the same moment and same place (i.e., "cyberspace"). "While the urge to earn riskless profit always lived in the bosom of finance capital, in the primitive markets of the eighteenth and nineteenth centuries the practice could not take place. The rise of speculative capital had to wait for historically ripe conditions." (p 103)

A few caveats must be noted here: first, "simultaneous" is a physical impossibility, even if the difference is just a few nano-seconds, but it does highlight the importance of the speed of transactions, and the advantages provided by fast processors and fast networks should be appreciated here. Second, as Saber clarifies, such a lucrative market implies a "legion of utterly ignorant and foolish players in the market who would be handing over their money to the speculators." But "ignorance" is just a factor of access to information. As communication networks improve, in theory the arbitrage opportunities start to thin out, as "ignorance" decreases. Again, speed in the flow and processing of information — of price discrepancy discovery — becomes critical.

These two problems are addressed first, by faster and better technology, and second, by the construction of artificial simultaneous transactions. The arbitrager matches two things that are different, but equivalent; hoping that one goes up in price, and that the other goes down. At a later date then, the arbitrager hopes to "unwind" the positions, by selling the two positions. "The heart of his game plan is ... to arbitrage the deviation of qualitative differences of equivalent positions so as to profit when the difference is returned to normal... By establishing the initial

[7]These figures are from Saber. The GAO report on the LTCM collapse reported that LTCM had a 28-1 leverage ratio, lower than Goldman Sachs' ratio. The difference between Goldman Sachs and LTCM was that LTCM had invested in a much riskier type of derivative. The difference in the reported LTCM leverage ratio does not affect Saber's argument.

[8]Debt can also be packaged and securitized, providing additional speculative opportunities.

position, the arbitrager in fact sets a trap in the hope of catching the anomalies." The irony, as Saber points out, is that the arbitrager now finds him or herself out of the frying pan, and into the fire — by eliminating the risk through the elimination of the time and space between purchase and sale, the arbitrager now holds *two* positions and facing a time of uncertain duration.

"Modern day" derivatives are the instruments by which this practice can be executed. A *Financial Times* primer on risk management defines derivatives as "any financial contract whose value is derived from the value of another 'underlying' asset." "Derivatives" in this sense are the meat and potatoes of speculation, and have been around for a long time. "Before the 1970s almost all commodity derivatives were agricultural." "Modern day" derivatives are distinguished by their complexity: "It is not uncommon to see derivatives based on multiple assets from different markets." (Brown, 2000) This matching of multiple assets from multiple markets is how the arbitrager solves the "simultaneous position" problem.

The problem of "different but equivalent" echoes Marx's puzzle about how two qualitatively different commodities — e.g., corn and iron — can be exchanged for each other on the market. His solution was that they shared something in common — they both they were products of human labor. For Saber, the equivalence of the two matched positions in the derivative is human labor abstracted two or three times — "equivalence means the *equality of certain aspects of two qualitatively different* things. The thing that is equal is the cash flow of the positions. Cash flow is the focus and subject of arbitrage." (p 211, emphasis in original) Cash flow is the stream of surplus value sucked up from global production, the basis of Marx's fictitious capital, the "future revenue stream" capitalized and sold.[9]

Derivatives involve establishing correlations between independent things, and determining anomalies in the correlations. If "statistically" the correlation is valid, then "in the long run", the anomalies will right themselves, normalcy will return. The contradiction between the short term, random fluctuations — variance — and the long term of standard deviation and the law of large numbers (where Keynes reminds us, we are all dead) — is a perilous dilemma that any gambler will recognize. "The danger facing the arbitrager is now clear: while waiting for normalcy, the spread might move against him and wipe out his equity... Even if the spreads returned to normal, it would be too late for him." (Saber, 215) Among these "martyrs of finance," we can count Orange County, California — less than a year after its bankruptcy due to unexpected changes in interest rates that destroyed the value of its derivative investments, its portfolio was sold for a "hefty profit." (Saber, 215)

The marriage of positions in "equivalent" but "different" positions effectively starts to connect different markets together at a more abstract level, at the level of their cash flows. This can happen between two different commodities, or between commodities in two different national markets. A simultaneous position in the Japanese yen and the U.S. dollar effectively links the two currencies. Bond (debt) trading and stock (equity) trading begin to merge as identical activity. The process of modern speculation — of identifying correlations in the world economy with the aid of computer technology, and then pairing them through the use of multi-asset derivatives, becomes the mechanism to superglue the world financial system, and through it the global economy.

###

In *Speculative Capital*, Nasser Saber quotes from a 1910 text that describes the skills required of a successful speculator: "thorough knowledge of all usage, and quickness of figures in order to work out rapidly the difference in the prices are therefore essential qualifications for a capable

[9] The quality of cash flow is measured by rating agencies, like Standard and Poor or Moody's, using an inexact measure of letters (AAA, AA, A, etc.)

Arbitrageur." (Saber, p 103).

In a May, 2000 technology profile of Goldman Sachs, Forbes reported that the financial services firm has developed built an automated pricing system that can develop and offer bond prices in 300 milliseconds. "Secret algorithms guide 20,000 trades a day in the volatile equity derivatives market. A new Web bond trading service now handles 70% of Goldman's Treasury trades, updating prices 200 times per second and executing $100 million deals without a lick of human intervention." (Weinberg, 2000)

As Doug Henwood wrote in *Wall Street,* referring to the various hedging tools like options, swaps and futures, "it's hard to imagine a deep market in such alchemy in a computerless age." Modern day speculation could not exist without computers, could not have grown to command the huge amounts of money that it does. The volume of transactions handled by the markets, e.g., could not be processed without computers.[10] And the nature of the business is such that as more technology is thrown into the battle, still more will need to be deployed. It's never enough.

Goldman Sachs' technology story is impressive. The $5 billion cited above in Forbes has bought over 20,000 PCs and workstations, 80,000 gigabytes of storage, 18,000 miles of network cable and 30,000 phone lines. The company has been making a big move into electronics-only trading by investing in some two-dozen ventures. Goldman Sachs is not the only ones doing this — most markets and exchanges are in the process of, or have developed, and electronic counterpart to their labor-intensive floor trading operations.

###

One of the notable features in financial markets today is the degree of volatility — the dramatic swings in prices. A Wall Street Journal article [Nasdaq Stocks' Swings Are Unprecedented — But Taken In Stride" *Wall Street Journal*, 4/19/00] published in the midst of the dot.com crash two years ago, warned that "without question, the volatility in stock prices is unprecedented. Last year, the Nasdaq Composite Index moved 2% or more on a quarter of the trading days. That was the most in the Nasdaq Stock Market's 29-year history." It concluded, "Investors had better get used to it."

Contributing to the volatility, according to the article, are a number of factors, all related to the peculiar features of digital capitalism. One was the trading of stocks in "winner-take-all" markets. This is directly related to the establishment of monopolies, or effective monopolies through legal mechanisms like copyright and patents, or brand identity, or standards adoption. Another factor is the speed with which price drops can happen — this is magnified by the speed with which transactions can take place, through the use of computer-mediated trading. Internet-based trading, including day-trading, opened the market to more individual investors, and investors trading more often. "At the end of December, RD Waterhouse Inc, a major discount broker, had 2.4 million account holders, who were doing 151,000 trades a day, about two-thirds of them online. But one broker that caters to day traders, Tradescape.com Inc. in New York, was executing the same number of trades with just 1,500 account holders." One day trader — "cut his average time holding a position to about 25 minutes from about two hours."

"Price momentum" trading has grown in popularity. "Price momentum trading" ignores stock fundamentals, like how much a company earned, or whether it has good products, or is in a growing market. Instead, price momentum bases trading on which way the price is moving, and

[10] "As stock markets around the world went on a roller-coaster ride of buying and selling Tuesday, legions of bulky black computers at the New York Stock Exchange handled 1.2 billion shares — 76% more that ever before — without missing a beat." For reference, the busiest quarter ever, 4th quarter 2000, the average was over 1.0 billion a day; on 4/19/2002, was just shy of 1.2 billion shares. ("How computers calmly handled stock frenzy" (WSJ 10-30-97)

how fast.[11] "Many money managers who once liked to pick stocks based on traditional measures of valuation found they were falling too far behind those who followed momentum, and decided to fallow suit." W. Brian Arthur at the Santa Fe Institute[12] observed that "when investors frequently assessed their success, the rules started to work, they were increasingly adopted by other investors — and stock prices were prone to bubbles and crashes. 'Technical trading strategies became self-validating,' says Prof. Arthur. 'Ripples of change in expectations avalanche their way through the market in a domino effect.' He believes something like that has happened in the market in the past year, fueled by the inherent volatility of technology stocks and the entry of many short-term traders." That is, increased information and speed of trading (computers again) resulted in increased volatility. "Across all markets there are signs investors are increasingly using the same trading styles, producing buying and selling *en masse* at particular junctures."

One additional reason noted in the article is another function of the electronics revolution — the growing reliance on immediate information from effectively single sources. "Retail trades" (as opposed to "institutional" trades), enabled by PCs and the Internet, account for two-thirds of the NASDAQ volume. These additional "players" because of the general homogenization of economic news, and in particular, the concentration of ownership in the media, are fed the same ideas. Instead of a "rational market" based on the wealth of available information, there are in fact relatively few sources of information for most people, generating a "momentum" effect. Everyone hears the same news, so tends to move in the same direction.

Laura D'Andrea Tyson, Clinton's former chief economic advisor, noted that "under normal circumstances" (to which one must ask, what is normal about today?), "financial markets, like other markets, are self-stabilizing." And again, in theory, "by expanding the knowledge available to market participants and reducing the cost of market transactions, new information technologies have further enhanced the efficiency and stability of financial markets under normal conditions". These new technologies have "enabled the development of sophisticated new instruments to unbundle risks and allocate them to market players who are most willing and able to bear them" [i.e., speculators, arbitragers, hedgers - jd]. "But" she complains,

> the new technologies have not reduced the volatility of financial markets. Indeed, the opposite appears to be the case.... Better access to knowledge about these fundamentals through round-the-clock, round-the-world information sources has only intensified these fluctuations. Nor have better access to market information and sophisticated risk-management tools eliminated sharp, unpredictable reversals in confidence and destabilizing market behavior. (D'Andrea Tyson, 2000)

The sameness of information from what Business Week described as the "Wall Street Hype Machine"[13], coupled with basic rules of operation, leads to self-organizing behavior, resulting in consistent shifts — rather than a white noise of trading activity, the activity starts to take on a pattern of organized behavior, consistent with a complex dynamic system.

One might question whether small individual traders affect the markets to such an extent, but the same behavior is repeated for the managers of large pools of capital. "The rush of fund managers

[11]This practice is reminiscent of "bucket shops" in the 19th century which flourished on Wall Street and LaSalle Street, near the stock and commodity exchanges. Patrons could bet on which way stock or commodity or stock might move. (Brenner, 1990)

[12]The Santa Fe Institute is one of the main research centers in complexity theory, or "chaos theory". Arthur is a coeditor of *The Economy as an Evolving Complex System II*, Addison Wesley, 1997.

[13]In an April 3, 2000 cover story, *Business Week* reported that Wall Street advertising "zoomed 95% last year [1999] to $1.2 billion — 3 times what it was 5 years ago."

to position themselves in a profitable arbitrage situation overshadows the mathematical exactness of the arbitrage, with the result that the target is overshot; the undervalued currency becomes relatively overvalued. So the process is repeated in reverse. As a result, we have the constant ebbs and lows of money directed from one market to another that seek to arbitrage the spreads and, in doing so restore "equilibrium" to the markets." *Volatility is the result of the attempts of speculative capital to restore equilibrium to markets.* (Saber, p. 120 emphasis in original)

An analysis of the Asian currency crisis in the *New York Times*, described this process in action and showed the extent of speculation in the economy — far beyond the initially-identified culprits of "speculators and the hedge funds they manage."

> In early May, Japanese officials, concerned about the decline of the yen, hinted that they might raise interest rates. The threat never materialized. But it proved to be the first sign of an Asian flu that six months later is still spreading and has already prompted around $100 billion in international pledges for a cure.
>
> Speculators — and the hedge funds they manage — have been singled out by Asian politicians and others as the proximate cause of the turmoil, which spread to South Korea and continues to rattle Japan.
>
> But the real story is much more complex, filled with bankers, corporate treasurers and mutual fund managers from the region and around the world who, unlike speculators, were not trying to profit from the fall of the currencies but still contributed significantly to their declines. Joined by many local companies, these agents actually had very strong vested interests in keeping the currencies stable.
>
> First, the talk of a Japanese interest rate increase raised fears among commercial bankers, investment bankers and others about the safety of big investment positions that were predicated on currency stability.
>
> As these investors scurried to liquidate holdings in local currencies, the anxiety spread. Big foreign companies operating in the region became frightened, too, and scrambled to convert local revenues into dollars. And finally, local companies rushed to get yen and dollars. With everyone running for the exits, the Thai baht, the Indonesian rupiah and other regional currencies were trampled.
>
> "Big movements in asset markets don't tend to happen unless all the actors move from one side of the ship to the other," said Peter Fisher, head of market intervention at the Federal Reserve Bank of New York.
>
> Among the first to take the stage in the summertime drama were the bankers and treasurers, and a financial technique of theirs known by some as the carry trade.
>
> For years, because of rock-bottom interest rates in Japan and low rates in the United States, banks, investment houses and insurers had borrowed in yen and dollars and put the proceeds into short-term notes in Southeast Asia that were paying far higher rates. These are the carry trades.
>
> The trades attracted so many investors because the Southeast Asian currencies had been stable for years. Still, the trades did not come without risks. Should foreign interest rates rise, or the currencies start to lose value, the profits would diminish — or might turn into losses.
>
> Indeed, just the threat of a Japanese rate rise was enough to cause some investors to unwind their positions. That meant they sold their Asian notes and, in the process, the local currencies.
>
> "If you had 50 banks doing it, that could create some pressure," conceded David Puth, head of foreign exchange in New York for Chase Manhattan, which had been involved in carry trades. "There are big forces in the market that are totally separate from speculators making a bet."

> American companies that do big business in Asia, like the Dell Computer Corporation, added to the pressure as they rushed to protect themselves against further declines in the value of the local currencies in which they were paid. They did this by hedging, which allows an investor to lock in an exchange rate.
>
> Mutual funds, like the T. Rowe Price New Asia Fund, moved, too, selling Asian securities and converting the proceeds back into dollars, further driving down the value of Asian currencies.
>
> But chief among the participants were the many local companies and banks in Thailand, Singapore, Malaysia, Indonesia and South Korea that had borrowed billions of dollars at low rates abroad. Some used that money to expand; many banks used it for lending in overheated real estate markets. As their currencies fell in value, the amount the companies and banks owed in dollars and yen skyrocketed. To make their payments, these players also scrambled to get into dollars or yen.
>
> But, said Jeffrey Lim, director of structured products at the American Express Bank in Singapore, "The speculators would never have been as successful as they have been unless everyone jumped on the bandwagon."
>
> That view — of the speculator as just one of the players on the field — was echoed by Mr. Camdessus in his Dec. 2 speech in Malaysia.
>
> "It is becoming increasingly difficult," he said, "to distinguish between the activities of hedge funds and other institutional investors."
>
> The I.M.F. report on the European currency crisis of the early 1990's summed up that situation in a strikingly similar way.
>
> "The difference between hedging and speculation becomes blurred when most market participants become convinced — rightly or wrongly — that a nontrivial change in exchange rates is coming, and that the change is likely to be in one direction," it said. "In that circumstance, everyone gets into the act." (Fuerbringer, 1997)

The article brings to light the similar role of different actors, with different interests: the corporate hedgers, the classic speculators, the trading desks of banks, etc., all participating in the same general speculative process.

Volatility moves into other markets, besides the financial markets — e.g., price of oil and electricity. Labor markets also start to experience volatility as they are "deregulated" (in the sense that the contemporary workplace has been de-unionized, and requires no social contract):

> "U.S. business activity is shaped by two new powerful trends: the push to boost productivity and a greater use of temporary workers to adjust to savings in demand. The combination means that as demand growth fluctuates, *payrolls will experience wider swings that in the past* [emphasis added - jd]... Ben S. Bernanke of Princeton University agrees that if productivity is strong, output could rise even while employment falls...
>
> Labor's new flexibility has caused a disconnect between job growth and consumer demand. Companies can quickly lay off temps when demand slows. But these same businesses can give real raises to their remaining workers commensurate with faster productivity. The divergence was evident in 2001. Unemployment has risen by about two percentage points in the past year, but real wages are growing at the fastest pace since the 1960s." ["What Recession?", Business Week 2/11/02]

To the degree that any friction in the market — for example regulations or long-term

commitments can be eliminated ("flexibility"; the neoliberal agenda) the markets become open to complex dynamic behaviors, and to an increase in volatility. While computers don't *create* volatility, they do accelerate and exaggerate processes to the point where certain properties in the process can emerge. One report of experiments at IBM in the use of "smart agents" in the factory, where software programs ("agents") were used to automatically make routine decisions like selling goods, noted that when the agents competed, "they created a never-ending cycle of widely fluctuating prices." ("Agents of Change on the Factory Floor", Business Week, Aug 7, 2000)

So at the same time the contingent labor market contributes to a new kind of volatility in peoples' lives, it also contributes to polarization within the working class.

Finally, it should be noted that volatility, as a phenomenon, has its champions. "Goldman Sachs will by year's end have spent $5 billion in five years on all this technology, building an arsenal aimed at making money whichever direction the market goes. So long as it goes somewhere. 'Volatility is our friend,' Hank Paulson says serenely. 'If it wasn't for volatility, why would you need Goldman Sachs? Why would you need to take positions or risk?" (Weinberg, 2000)

###

The growth of speculation becomes a powerful attractor for financiers. As noted above, corporate treasurers adopted various hedging and speculative strategies primarily as a risk management tool, in response to a dramatically changing economic environment. In stock market trading, also noted above, managers are expected to deliver results, in particular, above-average gains in the market. As such they are compelled to look for the "pockets of value" (i.e., price discrepancies). "Forecasting," or analysis, is abandoned in favor of anomalies and hedging. "Such is the impact of speculative capital on financial markets: fund managers reluctantly joining a trend which they abhor and whose dynamics they do not understand." (Saber p. 221)

As speculative capital pushes along the completion and perfection of the world market, it at the same time elevates the possibility, or even likelihood, of "systemic risk". Saber defines systemic risk as "the risk of a chain reaction of bankruptcies which then disrupt the process of the circulation of capital." In 1987, "systemic risk" was seen as a relatively containable problem of gridlock at the Clearing House Interbank Payment System (CHIPS). The CHIPS is where banks settle there accounts at the end of the day. If a large bank for whatever reason was unable to meet its obligations, it could precipitate a chain reaction of failures. By 1998, "systemic risk" was being described by Alan Greenspan as "the risk of the collapse of financial systems." A U.S. General Accounting Office report on the Long-Term Capital Management crisis, released in October, 1999, defined "systemic risk" as "the risk that a disruption (at a firm, in a market segment, to a settlement system, etc.) could cause widespread difficulties at other firms, in other market segments, or in the financial system as a whole." ["Long-Term Capital Management: Regulators Need to Focus Greater Attention on Systemic Risk", GAO, October, 1999, GAO/GGD-00-3]

Under "normal" circumstances, the unification of the world market helps to socialize all risk in the economy. This enables the global economy *globally* to sustain shocks and disruptions. Recent events — the Mexican peso collapse in 1995, the Asian currency crisis in 1997, the Russian default in 1998 which triggered the Long-Term Capital Management collapse and bailout, the dot.com crash in 2000, the Argentine collapse of 2002, to name just a few — were (are) sharp and painful locally, but globally could be sustained. As a global system, capitalism is able and willing to sacrifice the local for the global. For example, wheat is easy to grow in lots of places. As trade barriers fall, growing wheat in the relatively cold climate of North Dakota puts farmers there at a distinct disadvantage to farmers in warmer Argentina or Australia. Capitalism

is more than willing to creatively destroy the farming communities of North Dakota; the wheat market thrives.

Systemic risk emerges as all of the various threads of the global economy are tied together via speculative capital, inflated by leverage, and operating in something close to tandem. The system becomes vulnerable due to the unexpected, in particular, political swells that prompt unexpected actions — currency devaluation, debt default, 9/11. The tight binding together allows what Saber calls a "financial resonance" to form, with potentially disruptive effects. This resonance must be sufficient to overwhelm the noise in the market that normally would help to diffuse or spread the risk. "As long as the loss occurs in the course of miscellaneous strategies [e.g., the Barings trading scandal] the risk remains confined to immediate parties involved." But, "sometimes strategies coincide. Speculative capital is directed from all sides to a few markets. As a result, a financial resonance is created which has the potential to disrupt the system." "Systemic risk begins to take shape when the mass of speculative capital is locked in a particular arbitrage position — say, between Treasuries and junk bonds. ... But because of the social nature of finance, they remain highly vulnerable to political and social events. And frequently, the "trigger" events are social and political." The problem occurs when all of the similar positions are liquidated together, and "the pool of speculative capital *as a whole* incurs loss." (p 224, emphasis in original)

The volatility brought on by speculation, and the degree of leverage contribute to the degree of systemic risk. The higher the leverage, the lower the tolerance to market swings. Systemic risk does not arise out of the failure of one or two firms, but out of the "common strategy." The problem is compounded as firms attempt to "unwind", or sell their positions at the same time — the very act of selling puts further pressure on not just one firm's situation, but that of all firms.

This describes the rush to the exits in the Asian currency collapse, and the ultimately unrealized danger of the 1998 Long-Term Capital failure, when "[m]arkets around the globe plunged and the financial system itself seemed in peril." ["How LTCM Came to the Edge of the Abyss", *Wall Street Journal*, Sept 11, 2000.] Following the Russian default in August, 1998, LTCM was "immobilized by its sheer size." With holdings of $1.4 trillion in notional value, a large part of it in relatively risky over-the-counter derivatives. "The smaller fish around it were liquidating every bond in sight, but Long-Term was helpless, a bloated whale surrounded by deadly piranha. The frightful size of its positions put the partners in a terrible bind. If they sold even a tiny fraction of a big position ... it would send the price plummeting and reduce the value of all the rest."[14] (Lowenstein, 2000)

Systemic risk is a result of the development of speculative capital, and systemic risk first hits financial institutions. As equity is wiped out (or distributed to other players), it can bankrupt governments, destroy corporations, and force countries to devalue currencies, with all of the attendant damage that goes along with that.

Each instance of a systemic crisis can set the stage for bigger ones. In Marxist terms:

> "The ebb and flow of fictitious values affect the overall economic structure in other important ways. Just as access to credit facilitated centralization of capital during the upswing, Marx observed that the resulting depreciation of paper capital 'in times of crisis serves as a potent means of centralising fortunes' (Marx 1967). Thus, it will contribute to the further growth of those businesses that are most integrated

[14]One must appreciate the irony of Myron Scholes's and Robert Merton's involvement with LTCM. Scholes and Merton (with Fischer Black who died in 1997) developed a ground-breaking theory of how to price derivatives, for which they received the Nobel Prize in economics in 1997. Scholes and Merton were the "academic superstars" of LTCM.

with the credit system, adding to the instability of the economy. In the process, the more that instability is introduced into the economy, the more firms find themselves dependent on financial institutions (see Marx 1967; 2, p. 107). These same financial institutions serve to reflate the fictitious values, thereby fueling renewed optimism. Thus, the crisis serves to reinforce the very processes that set the crisis off in the first place. " (Perelman, 1990)[15]

###

Speculation is a specialized wing of finance. As noted above, some of the actors in this wing include the treasurers and traders of multinational manufacturing companies. Sections of the banks also are part of this wing. A specialized form in speculative capital is the "hedge fund", and the managers of these funds are perhaps the most identifiable individuals of speculative capital — people like George Soros.

The minimum investment to participate in hedge funds typically is at least seven figures. The partnerships are kept small enough to avoid SEC registration requirements. The lack of regulation of these funds gives them a tremendous amount of freedom in the financial universe. Because the funds are essentially unregulated, the exact number and size of assets is not really known. In 2001, *Business Week* estimated that there were 4000 funds with $400 billion in assets..

These funds are not without substantial risks. In 2000 two important funds, Tiger Funds and George Soros' Quantum Funds both disappeared. A March 28, 2002 Reuters report noted that "after months of dismal returns, hedge funds... are finding it harder to raise money and make money." In part to raise additional capital, and in part to grab additional fees, funds are starting to allow "smaller" investors in, with 'as little as $100,000." (Business Week, 2/26/01)

Large as these hedge funds are, "the trading of the hedge funds is overshadowed by the trading of banks and brokerages, many of which also take leveraged bets in the market... The only genuine difference between hedge funds and the proprietary trading operations of the big institutions is that hedge funds are much smaller." (*Business Week,* 4/25/94, cited in Saber)

###

---

[15]"Fictitious capital" is a term that Marx used in Volume III of Capital to describe titles of ownership to future revenue streams, or claims to future surplus value (e.g., bonds) and also to shares of joint-stock companies. Because the basis of the securities is not-yet-existent (future) value, Marx termed this capital "fictitious." "The market value of these securities [shares] is partly speculative, since it is determined not just by the actual revenue but rather by the anticipated revenue as reckoned in advance." [p 598, Penguin]

"Their depreciation in a crisis is a powerful means of centralizing money wealth. ... In so far as the rise or fall in value of these securities is independent of the movement in the value of the real capital that they represent, the wealth of a nation is just as great afterwards as before." [p 599]

"All these securities actually represent nothing but accumulated claims, legal titles, to future production. Their money or capital value does not represent capital at all, as in the case of national debts, or is determined independently of the real capital value they represent." [p 599]

Gain and loss through fluctuations in the price of these titles of ownership, and their centralisation in the hands of railway kings, etc., become, by their very nature, more and more a matter of gamble, which appears to take the place of labour as the original method of acquiring wealth and also replaces naked force. This type of imaginary money wealth not only constitutes a very considerable part of the money wealth of private people, but also of banker's capital as we have already indicated. [Marx, Capital Volume III, Collected Works, Vol 37, p 477]

Speculative capital is an engine for the redistribution of surplus value. Although speculative capital is not directly involved in the production of surplus value, surplus value ultimately provides the substance of its activity. As with any sector of the class, the speculative wing strives to seize as much as possible of the surplus value pie. This inter-class struggle over profits is the basis for conflict within capitalist class.

Certainly some of the political, or class, interests of the speculation wing are shared with all capitalists, e.g., the defense of capitalism and the system of private property, and the continued flow of future income streams, i.e.. surplus value, and hence the maximization of profit. But the character and modus operandi of speculative capital places its agenda at odds with other sectors.

Speculative capital tends to connect and universalize the world financial markets. It deals with the economy in an abstract way, not just through the abstraction of "fictitious capital", but also the abstraction of digital money mediated through computer screens. As such, it has a stake in the overall maintenance of the world economy, but not in any particularity.

Speculative capital requires the free and easy flow of money, across borders and markets to function most effectively. Therefore, the deregulation of financial markets in particular, and all markets in general (so as to create new arbitrage opportunities) is an important goal. The effective repeal of the Depression-era Glass-Steagall Act in late 1999 removed an important barrier to systemic risk. Repeal of the act, which prevented banks from acting as stock brokers, and placed other restrictions on bank activities, allows trouble in one sector of finance to ricochet to all sectors.

Alan Greenspan, who, in his role as the chair of the U.S. Federal Reserve Bank, plays an important role in controlling the spigot of credit, even in the post-LTCM, post-dot.com, post-Enron world, has not seen a need to increase regulation. Speaking in April, 2002 to international financiers, he effectively said that the financial system is too big to be regulated; the private players must themselves provide the due diligence and oversight:

> [C]oncerns over potential systemic problems resulting from the vast expansion of derivatives have reemerged with the difficulties of Enron. To be sure, firms like Enron, and Long-Term Capital Management before it, were major players in the derivatives markets. But their problems were readily traceable to an old-fashioned excess of debt, however acquired, as well as to opaque accounting of that leverage and lax counterparty scrutiny. Swaps and other derivatives have been remarkably free of default throughout their short history, including over the past eighteen months.
>
> Our international banking and financial system is regulated primarily by counterparties whose due diligence is fundamental to the containment of risk, including systemic risk. Government regulators can exercise only broad oversight. We at the Federal Reserve, for example, can never bring to bear the detailed market and counterparty surveillance that private-sector players exercise. We rely on you to be, in effect, the front-line regulators. [Prepared remarks by U.S. Federal Reserve Chairman Alan Greenspan: At the Institute of International Finance, New York, New York (via videoconference) April 22, 2002 http://www.federalreserve.gov/boarddocs/speeches/2002/20020422/default.htm]

The mobility of capital, sometimes referred to as "hot money", has locally destabilizing effects, while globally it may serve to stabilize capitalism. The mobility of this "stateless money", as former Citicorp chairman Walter Wriston described it, allows for the "instant plebiscite" by speculative capital on domestic policies. (Bass, 1996) The increased mobility of capital also speeds the formation of the general rate of profit, speeding the transfer of surplus value from the backward and labor intensive corners of the economy to the high tech center.

Free and easy flow requires harmonization of economies, from "intellectual property" rules to accounting standards, to computer network protocols. It favors the "American system" — stock market-centered, bottom-line focused, accountability, and transparency. Inflation is particularly destructive to finance, so controlling inflation is a key agenda item.

The Southeast Asian currency crisis that began in mid-1997 provided a glimpse into the political operation of speculative capital. Using the IMF as a battering ram, and to give the initiative a global face, the U.S. negotiators, led by then secretary of the Treasury Robert Rubin (and the former head of Goldman Sachs), pushed through rules to open up the economy of South Korea and other countries.

In short, the political agenda of speculative capital is very much expressed in neoliberalism. However, within the sphere of speculative capital, different players have fundamentally different motives. One section enters into speculation to minimize risk and bring stability to operations. A Goldman-Sachs, e.g.., where "volatility is out friend", has different preferences. It might be possible, based on these different interests, to map out sections of speculative capital per the categories that Harris and Robinson (2000) identified: "structuralists", "free traders", "regulationists," whose main differences are what kind of governance, if any to exert over speculative capital.

###

The fall of Enron presents speculative capital with a particularly vexing crisis. The history of Enron reflects in many ways the role and workings of speculative capital.

Kenneth Lay was the Undersecretary of the Interior in the Nixon Administration in the early 1970s, where he promoted the deregulation of natural gas markets. In 1986, Lay took over Enron, the product of the merger of two gas pipeline companies. After the gas markets were deregulated, Lay pushed for electricity markets to be opened, Lay hired Jeffrey Skilling away from the consulting firm McKinsey & Co., where Skilling had worked in the energy marketing field. At Enron, Skilling developed the first "forward contracts" in the gas business. Forward contracts are a type of hedging tool that have been common in agriculture for decades; they are also used in currency markets after Bretton Woods.

Skilling's success in the speculative side of Enron propelled him past the assets development group, which focused on old-school projects like building power plants. In 1997, Skilling became the president and COO of Enron. In February, 2001, Skilling was made CEO of Enron, and Lay backed out of day-to-day operations.

Although the process was never completed, Skilling pushed to shed Enron of its "hard assets" in power plants and pipelines. Enron built a sophisticated speculation operation, EnronOnline, and then began branching out past energy trading, introducing trading in weather futures.[16] Enron dabbled with moving into water trading through its Azurix spinoff. It invested some $1.2 billion in building a fiber-optic network with the intention of creating a market in data network capacity

[16]Here's *Business Week*'s explanation of how weather futures work: "1. A small clothing manufacturer asks Enron to create a derivative to protect against hot weather that might hurt sales of winter clothes. 2. For every degree above normal over some period, Enron must pay the retailer a certain amount; for every degree below, the retailer pays Enron. 3. Enron lays off its risk through a deal with a soft drink maker who benefits from hot weather." So if the weather is warmer than usual, the coat maker sells fewer coats, but is protected, because Enron pays them for the "degrees above normal". Meanwhile, Enron collects money from the soft-drink manufacturer who presumably is selling more soft drinks because of the warmer weather. Also, presumably, both the coat maker and the soft drink maker are paying a premium for the hedging protection that they receiv(ed) from Enron. ["The Enron Way", *Business Week*, 2/12/01]

(at the same time a dozen or more other companies were also rapidly laying new cable). In July, 2000 it launched an online metals speculation operation; two months later it started an online speculation operation in wood products.

It now turns out that Enron also ran a successful hedge fund, ECT Investments. According to the *Wall Street Journal*, the hedge group was trading about $145 million of Enron's money before the company filed for bankruptcy protection. The fund evidently did quite well, contributing as much as 8 percent of the company's profits. ("Enron Quietly Ran a Risky Hedge Fund That Did Well" *Wall Street Journal*, 4/11/02). Enron's active use of derivatives eventually made it the fifth largest commodity derivatives dealer in the U.S., according to one market research firm. "[A]t its heart, [Enron] had become a massive trading operation in derivatives." (Michael Hiltzik, "The Fall of Enron", *Los Angeles Times*, Jan 31, 2002)

A pre-bankruptcy *Business Week* article described the new Enron: "Though often grouped with utilities, Enron produces little power itself and owns relatively little in the way of hard assets. Instead it has pioneered the financialization of energy, making the company more akin to Goldman Sachs than Consolidated Edison. Its impressive profits stream is squeezed out of a torrent of often low-margin trades, in which it buys and sells a dazzling variety of contracts. The more buyers and sellers, the better for Enron, which is now twice the size of its nearest competitor." ("Enron's Power Play", Business Week. Feb 12, 2001)

Enron's tight connection with the Bush regime provides insight into the political operation of speculative capital. Ken Lay was an important backer of George Bush, Sr. He hired Bush, Sr.'s former secretary of state, James Baker, and Commerce Secretary Robert Mosbacher as consultants after Bush's defeat in 1992. Enron donated more than $550,000 to George Bush, Jr. while he was Texas governor; Lay chaired Gov. George Bush's Governor's Business Council. Lay was one of George Bush's "pioneer" donors who raised more than $100,000, and Enron was the top supplier of corporate jets to the Bush campaign. Enron donated $250,000 for the Republican National Convention. Lay sent the maximum allowable $5000 to the Florida "recount" legal fund; and $100,000 to the Bush inaugural committee. Beyond the tight ties to the White House, Enron has been generous with Congress as well. The company and its top executives directed over $1 million in soft money to the Republican Party, and over $500,000 to the Democrats.

What does that kind of money buy in Austin and Washington? In Austin, "Lay pushed for, and won, education reforms, litigation curbs and tax cuts. In Washington, Lay's army of lobbyists sought everything from electricity deregulation to tax breaks." ("Enron's Big Wheel Has a Heavy Tread." Business Week. Feb 12, 2001)

The whole thing rapidly came unraveled in 2001. As is well known, the company aggressively borrowed money through various questionable off-book partnerships. Although the company survived the 2000 dot.com crash (it's stock rose 87% in 2000), the heavy debt backed by company stock left the company vulnerable when the general slowdown hit the economy, many questionable investments failed to pay off, and the California energy crisis cast a long shadow on Enron. The company stock, which had reached $89 in the fall of 2000 had fallen to a 52-week low in March of 2001 (in the midst of the California crisis).

As the stock started to slide, Enron executives began to unload stock, Skilling's personal take was $17.5 million. One lawsuit suggests that Enron executives made $1 billion off stock sales before the company collapsed. On August 14, Jeffrey Skilling unexpectedly resigned; and the next day Sherron Watkins sent her memo to Kenneth Lay: "I am incredibly nervous that we will implode in a wave of accounting scandals."

After Skilling's departure, the stock continued to fall, down to half of its value a year earlier,

destroying the collateral Enron had used in its partnerships. In October, the company started laying off people, and announced a quarterly loss after taking over $1 billion in "charges." By November, the company's debt had been downgraded to junk status and stockholder lawsuits had begun. In December, following the collapse of merger talks with competitor Dynegy (after Enron revealed that it had additional, previously undisclosed debt), the company filed for bankruptcy, the largest ever in U.S. history, It later came out that Enron paid over $55 million in bonuses to 500 employees days before filing for bankruptcy. 4000 employees lost their jobs and their retirement money that was tied up in Enron stock. State pension and endowment funds in 21 states that owned Enron stock lost a total of $1.5 billion. The collapse touched even more people through the hundreds of mutual funds that held Enron stock. ("Enron Exposed!" American Media Specials. Boca Raton, Florida. 2002)

What is one to make of Enron? While the company had a base in production, Skilling was trying to take the company in a purely speculative direction. Is Enron simply a case of capitalism run amok? Enron obviously was not alone in its accounting practices, and it puts to shame the U.S. insistence on transparency and accounting standards, openness, and an end to "crony capitalism." Business Week recently featured one cover story on "Accounting in Crisis" (1/28/02), and more recently, "Wall St.: How Corrupt Is It?" (5/13/02). From accounting, to brokerage firms, the business press, the banks, most of the telecommunications sector, and important companies in the high tech sector — the collapse of Enron was the brightest explosion in a general crisis in the "American system." That is, until the telecommunications giant Worldcom, declared an even larger bankruptcy in July, 2002. It had "misclassified" nearly $4 billion in expenses.

The challenge facing speculative capital is salvaging what it can from this wreckage. It's agenda of deregulation may suffer setbacks in the post-Enron climate. The losses will be taken out of workers through wage cuts, speed-ups and layoffs. Some house-cleaning may take place. But capitalism cannot turn away from speculation.

###

One of the weaknesses that the Enron scandal has exposed is that companies are increasingly basing their worth on intangible assets — such soft accounting items like "good will" and "intellectual property."

> Federal Reserve Chairman Alan Greenspan noted recently that "a firm is inherently fragile if its value-added emanates more from conceptual as distinct from physical assets." An office building or auto factory can keep producing even if their management is discredited, whereas Enron Corp.'s collapse shows the vulnerability of a company whose value is based on its reputation, he said. "Trust and reputation can vanish overnight. A factory cannot."
>
> Fifty years ago, tangible assets such as real estate, equipment and inventories represented 78% of the assets of U.S. non-financial corporations. Today, the proportion is 53%, according to Federal Reserve data. Much of the shift is due to growth in intangible assets such as patents, copyrights and goodwill — the difference between what a company pays to acquire another and the net worth of the acquisition as reported on its balance sheet. Leonard Nakamura, a researcher at the Federal Reserve Bank of Philadelphia, estimates that annual investment in intangible assets, which he classifies as research and development, software purchases and advertising, rose from 4% of gross domestic product in 1978 to almost 10% in 2000.
>
> ("The Rise and Fall of Intangible Assets Leads to Shorter Company Life Spans: Why High-Fliers Like Telecom Winstar, Built on Big Ideas, Tumble So Quickly", Greg Ip. Wall Street Journal 4/4/02)

This growing reliance on "intangibles" can be traced back to the electronics revolution. The special advantage that knowledge (technique, skills, etc.) gives a firm disappears as knowledge

gets loose, becomes the new social average. (Davis and Stack, 1993). The reliance on "intellectual capital" ("Jeff's theory was assets were bad, intellectual capital was good," a former Enron senior executive quoted in Business Week, Dec 17. 2001) points to an inherent fragility in digital system.

> "People like assets, they can go in the field and kick them," Enron's then-president Jeffrey Skilling said in an interview in 2000. "It gives people a certain warm feeling. What's becoming clear is that there's nothing magic about hard assets. They don't generate cash. What does is a better solution for your customer. And increasingly that's intellectual, not physical assets, driven.
>
> "The market is sending us a very clear signal," Mr. Skilling went on. "We are in a new economy, and the market is willing to pay for market position, not necessarily assets." (ibid)

From Skilling's statements one can see the general weakness in new economy talk. It's not that what they are saying is necessarily untrue, or that profitability is not possible[17], but that the business model is inherently shaky. Intangible assets can rapidly depreciate, or cease to be assets, because they become obsolete, due to pace of development. Patents may expire, or knockoffs may be manufactured by countries that refuse to acknowledge absurd or destructive laws. "Intellectual property" is the Achilles heel of the capitalism in the age of electronics.

The reliance on "intellectual property" especially feeds into the system of speculative capital. The only way that a company can make money off of intellectual property is to control access to it. The system of patents, copyright and trademarks provides a legal monopoly to technical and scientific developments. The extent to which these developments can be controlled give the property holder an advantage — the winner take all phenomenon noted above.

###

While the impact of globalization has been discussed in many places in detail, it is still worth noting the distinctive trail that speculative capital leaves across society. The most profound expression of capitalism in the age of electronics — capitalism under the rule of speculative capital — is the polarization of wealth and poverty.

This polarization takes place not just between center and periphery, or "north" and "south", but also within each country. Polarization results from many forces. Production organized around electronics ends up with the bifurcation of the work force into skilled and unskilled; permanent and temp. High tech production in one sphere is matched by low-tech production in another. The deregulated electronic markets unleash the full force of the conscious-less law of supply and demand. New monopolies appear, free of any regulatory scheme (in electricity, software, heating fuel and gasoline, milk), spiking prices and draining the resources of exposed consumers.

The neoliberal agenda pushes privatization — expanding the sphere of value production as labor-replacing technologies undermine the traditional value-producing sites. As wages are driven down, more members of the household are driven into the workforce to maintain household income. Various spheres of the reproduction of labor previously beyond the reach of capital — food preparation, laundry, childcare, recreation, etc. — are also privatized and franchised, beginning the process of sucking more surplus value into the upper reaches of the economy.

Here's another view of the networked economy:

---

[17]Enron's trading model itself was not necessarily flawed — EnronOnline, the online trading operation of Enron was taken over by UBS Warburg; the new trading operation has a AA+ rating (of course, if ratings mean anything any more.)

> The networked economy is the great speed up, intensifying the pace of work, while extending the working day to that of the 7x24 robot. It both enables and requires the circulation of capital at faster speeds, so it turns over faster (to maximize profit); it demands that human beings keep up with the packets of digitized commodities zipping at the speed of light through fiber optic cables. The family is required to work more hours, in competition with the robot, trying to hold on to a slipping standard of living, and, stripped of any social safety net, fending for themselves in the contingent economy. How else is a family to survive under electronic capitalism, except by working harder, faster, longer? (LRNA, 2001).

The maximization of profit demands the maximization of consumption, so that every moment is bound to the commodity relationship. Debt becomes the deadweight on the American family, the shock collar to keep the American worker in line.

The neoliberal regime erases the social safety net — to shave government expenses in an era of tax-cutting; to further the general program of privatization; or to push retirees or welfare recipients into the bottom of the labor market.

The destruction of the long-term job has meant the individualization of pensions — each worker for him or herself, armed with a 401(k). A regular stream of scare stories cast doubt about the future of Social Security, while promoting the privatization of one of the last vestiges of social insurance in the U.S.

> "Throughout the 1990s ... one of the main underlying features of the U.S. economy has been the devolution of risk onto the backs of individuals. Just as corporations have been forced to survive in a more Darwinian environment of global competition and deregulation, employers have become far less paternalistic. Where they once offered an implicit promise of employment for good service, even the best companies promise only 'employability', meaning we'll train you to survive on your own. And on a parallel track, employers, including the U.S. government, put the burdens and risks of retirement planning squarely on the shoulders of individuals — by replacing traditional defined pension benefits with 'defined contribution' plans that are portable from job to job.
>
> These risks have been thrust on people in the U.S. to a much greater degree than in most other developed countries. Every citizen is his or her own portfolio manager, however clueless about financial-market volatility. And every citizen is in charge of his or her own career.
>
> It is only one big step from that idea to the emergence of a culture of risk taking, not just in Silicon Valley, but way beyond." ["High Rollers: How Life on the Edge Became Mainstream in Today's America" *Wall Street Journal*, 8/3/99]

The dramatic swings in the stock market, the general volatility of life, the tenuousness of employment, of social life lead to a general anxiety about the future, about social security, about pensions, about health care, about education.

###

Susan Strange opens up her insightful 1986 analysis of the roots of globalization and the world of finance with this description:

> The Western financial system is rapidly coming to resemble nothing as much as a vast casino. Every day games are played in this casino that involve sums of money so large that they cannot be imagined. ....
>
> [T]he croupiers in this global financial casino are the big bankers and brokers... These bankers and dealers seem to be a very different kind of men working in a very different kind of world from the world

> of finance and the typical bankers that older people remember... Something rather radical and serious has happened to the international financial system to make it so much like a gambling hall....
>
> What is certain is that it has affected everyone. For the great difference between an ordinary casino which you can go into or stay away from, and the global casino of high finance, is that in the latter all of us are involuntarily engaged in the day's play. A currency change can halve the value of a farmer's crop before he harvests it, or drive an exporter out of business. A rise in interest rates can fatally inflate the cost of holding stocks for the shop-keeper. A takeover dictate by financial considerations can rob the factory worker of his job. From school-leavers to pensioners, what goes on in the casino in office blocks of the big financial centres is apt to have sudden, unpredictable and unavoidable consequences for individual lives.
>
> This cannot help but have grave consequences. For when sheer luck begins to take over and to determine more and more of what happens to people, and skill, effort, initiative, determination and hard work count for less and less, then inevitably faith and confidence in the social and political system quickly fades. ... There seems less and less point in trying to make the right decision, when it is so difficult to know how the wheel of chance will turn and where it will come to rest. ... That is why I think the increase in uncertainty has made inveterate, and largely involuntary, gamblers of us all." (Strange, 1986)

It is in the context of general social turbulence brought on by the onslaught of globalization, the destruction of social stability — of society; the rise of risk and risk-taking in general, of speculative capital, that the dramatic rise in gambling over the last 25 years takes on special meaning. Gambling is the poor man or woman's speculation.

That being said, it should also be noted that although the gambling and speculation are related on the surface — they both involve risk and chance, their histories are intertwined, they share a common rhetoric — they are, fundamentally, qualitatively different activities. Speculation involves capital, where capital is the expression of a social relation of wealth deployed to make more wealth through the exploitation of labor. Speculation is a particular act in the self-expansion of capital. Gambling, on the other hand, is an act of entertainment consumption. While it is true that the social consequences of gambling (versus speculation) extend beyond the casino — to the shareholders of the casino corporation and to the family and community of the losers and winners — the money being gambled is not capital per se, any more than a worker's wage used to buy groceries or rent is "capital."

Still, despite the qualitative differences of the two activities, the recent resurgence of gambling does mirror the rise of speculative capital. Some form of legal gambling is available in every state in the U.S. except Hawaii and Utah. Gambling is the largest entertainment industry, pulling in over $50 billion a year, more than movies, baseball and Disneyland combined. (O'Brien, 1998). Other gambling-like activities, like game shows with large, life-changing prizes, marketing sweepstakes, even baseball cards where one or two prized cards are in short supply, are also recognizable in today's cultural landscape.

Virtually every culture gambles, and has so for a very long time. In the capitalist era there have been big swings in its popularity. But this most recent rise is the confluence of several factors related to globalization.

On the "pull" side, many states and cities have been faced with shrinking revenue from neoliberal tax cuts, corporate tax breaks and fading industrial-era manufacturing (related to electronic-based and globally deployed production). As a result, states began to turn to lotteries in the 1960s to help with funding.[18] New Jersey's lottery proved successful when it featured

[18]Lotteries have a rich history in the U.S. Up until the 1830s, lotteries were a popular tool for raising money for public works, schools (including Harvard, Yale, and Princeton), churches, and other expensive projects. Brenner and Brenner show that,

cheap anonymous tickets and used new electronic technology to computer-track sales. In 1975, New Jersey started using an online computer system to run a numbers game to compete with illegal games. In the late 1970s, statewide computer-based terminals were used to offer lotto games. Although lottery proceeds contribute less than 3 percent to jurisdictions, it still is a critical revenue source; about one-third of gambling revenues come from the lotteries. (Thompson, 2001). As an active promoter of lotteries, the states play a critical role (re)selling the public on gambling. "Somebody's gotta lotto — it might as well be you."

As in Atlantic City, Tunica, Mississippi, and northwest Indiana, the legalization of casino gambling has been sold as an economic development engine. While this argument is highly suspect (since gambling cannibalizes existing entertainment venues, and then sends the profits to out-of-state corporations), it does provide important revenue for the hosting city and provides some jobs.[19] Electronic-powered de-industrialization and other effects of globalization forces the need to seek out such new industries.

Gambling spreads. When gambling is legalized in one state, it starts to draw revenues from neighboring states. The neighboring state is then pressured to follow suit, to hold on to the gambling dollars and tax revenue. Iowa legalized gambling in 1989, Illinois responded in early 1990 by legalizing casino gambling there. Missouri voted to legalize casino gambling in 1992. In 1993 Indiana legalized gambling. Michigan legalized casinos in 1996, in part to stop the flood of dollars flowing from Detroit across the river to Windsor, Ontario. Similar arguments have been used to promote Native American casinos.[20]

On the push side, gambling as an industry had, since the 1960s, been effectively taken over by Wall Street corporations that had an interest and pressure in "growing" the market. The companies that manufactured slot machines and lottery terminals, and managed lottery operations and casinos, promoted these new industries to willing governments.

New technologies also lowered the transaction cost of gambling such that it was an easier industry to package and deploy, with greater margins, amenable to corporate management. A casino is an entertainment factory (Mike Davis described the MGM Grand in Las Vegas, with its 5,000-plus rooms and 10,000 workers, as the River Rouge plant of the post-industrial era). Gambling is a value-producing activity, just as making movies or playing professional baseball. As such, it is subject to the same law of value as any other industry, and faces the same problems

in the absence of a developed banking system, governments, unable to borrow money, used lotteries instead to raise money. In other cases, lotteries were used to sell property. Chase National Bank and the First National Bank of New York City (the distant ancestor of Citibank) were both started by lottery operators. (Brenner and Brenner, 1990).

[19]One study by Prof. William Thompson of UNLV suggested that in Illinois, casino gambling has a negative economic impact. Destination locations like Las Vegas are the exception. (Thompson, 2001. p 103) The five gambling boats in northwest Indiana, which includes a boat in Michigan City, employs more people than the U.S. Steel's flagship steel production facility, the Gary works.

[20]"In 1860, Monaco was a principality in great financial troubles when a man named François Blanc proposed to open casino to bail it out. Three years later, the "Société des Bains de Mer" was born with the opening of the casino in what was to become the most famous and glamorous gambling place on earth, Monte-Carlo." ["History of gambling" http://www.bgchips.com/s200.html]

"Could Blackpool be the new Las Vegas? You bet — Britain goes for the jackpot: Gambling reform represents the chance to revitalise a town which once attracted 17 million visitors a year. That figure is down to 10 million, and people are staying for shorter periods. " [Guardian Unlimited - http://www.guardian.co.uk/Archive/Article/0,4273,4381270,00.html]

European casinos are typically owned by the government, which imposes a number of restrictions to curb gambling excesses, the casinos are intended mostly to stimulate tourism and help with revenues. (Thompson, 2001)

of how to maximize profit.

Electronics enabled computer-based slot machines and video poker. These machines, the automatons of gambling, are highly profitable — a machine costing $4,000 might pull in $200,000 a year (Thompson, 2001). In the 1960s, perhaps 15 percent of a casino's revenue came from slots; today, in some casinos, slots may account for over 80 percent. While table games like craps and blackjack are labor intensive, slot machines are basically gambling robots. Because the machines require minimal human oversight, they can be deployed not just in casinos, but in convenience stores and supermarkets. Since the machines are essentially computers, they also function as data collection devices. Through "slot clubs", gamblers' activity can be recorded and tracked to better manage incentive programs. Harrah's has been especially effective in applying mathematical models to adjust incentive programs to maximize the revenues it can collect from its clientele. The Internet represents the ultimate gambling venue in the sense that it can provide a totally automated gambling operation.

The providers of the gambling opportunity would have floundered without willing consumers. The Brenners, in *Gambling and Speculation* (1990) separate gambling into two types — gambling with the possibility of winning a large prize — e.g., the lottery, versus activities like most casino table games where limited sums are wagered and won as a pastime or form of entertainment.[21] They cite numerous studies that indicate that the former has its strongest appeal to "the poor, the frustrated, and those falling or fearing to fall behind." Gambling has had big upswings in times of social upheaval — those periods where the gap between rich and poor is most visible; when stable society has come unstuck, or when the fear of falling or failing is strongest. Gambling in England rose dramatically in the 17th century, in a period of upheaval and civil war (the theories of probability and statistics grew out of gambling in this period.) Gambling has been seen as a way out of poverty — a way of breaking out of the gravity belt of capitalism, of becoming a person of independent means.

Historically, the laws prohibiting gambling have had a distinct class bias — to prevent the poor from gambling. These morality laws were part of a general structure to bind workers to the factory. The Protestant work ethic condemned the "reallocation of property by chance", advancement and improvement came from labor, not by chance; idleness was condemned. Poverty was an incentive to work. Gambling, like alcohol, were believed to sap the strength, initiative, and willingness to work. These sentiments are echoed today. James Dobson, head of the right-wing Focus on the Family, and a member of the bi-partisan federal National Gambling Impact Study Commission that examined gambling in the U.S. a few years ago, wrote in the commission's final report:

> [G]ambling is a destroyer that ruins lives and wrecks families.
>
> One of the most scandalous features of the gambling industry, engaged in by many of our state governments, is the vigorous promotion of gambling among the poor, less-educated and senior populations. Gambling is touted as the "ticket out of poverty," offering a last chance to riches. As such, it overtly preys on the desperation of the poor by peddling false hope.
>
> [T]he illusion of pain-free riches promoted by the gambling industry has been exposed. The very appeal

[21]The dividing line between these two types of gambling does not neatly separate casino gambling from non-casino gambling. We should count in the "big win" category the staple of modern casinos, the slot machines and video poker machines, which promise potentially large jackpots. Nevada does not have a state lottery, instead it has "Megabucks", a statewide network of slot machines tied in to the same progressive jackpot. Even some table games straddle the line. "Let It Ride" and "Caribbean Stud Poker", two poker variations, feature large jackpots.

> of gambling belies the claims of the gambling industry, which is sown in greed and the exploitation of human weakness. It robs from the poor and exploits the most vulnerable. It undermines the ethic of work, sacrifice and personal responsibility that exemplify the best qualities of American society.

Dobson assumes that the "ethic of work, sacrifice and personal responsibility" will actually lift the worker out of poverty. Yet very little in contemporary society suggests that that is the case. The poor *are* getting poorer, the rich *are* getting richer, and generally *not* from the ethic of either "work", "sacrifice" or "personal responsibility."

At the same time, the extension of electronic production — production by robot and bioengineered cell — suggests a disconnect between effort and result. The robot produces goods, virtually in the absence of workers, a primitive version of Star Trek's replicator. At the same time, incredible fortunes are made completely out of scale to effort. How could one person ever be worth $32 billion, as Bill Gates was on May 7, 2002?[22]

Small wonder then that there is truth behind a 1999 Chicago Tribune headline: "Lottery, not saving, seen as the ticket to wealth" (10/29/99): "Most low to middle income Americans believe they have a better chance of accumulating $500,000 by winning a lottery or sweepstakes than from savings and investing, according to a national poll released Thursday." This perception was blamed on "financial ignorance and excessive consumer debt."

In the context of globalization, gambling can be seen as an expression of worker rejection of capitalism, of worker autonomy. While the Left may consider this misguided — isn't the hope of the worker through the overthrow of capitalism, and wouldn't workers be better off struggling towards that end? — the impulse still is one of survival, in defiance of the ideology of wage enslavement, an impulse towards freedom.

This is not to dismiss the serious problem of compulsive gambling. Both conservative and liberal critics of gambling focus in on this aspect of gambling. One recent study suggests that about 1.6 percent of Americans are diagnosable problem gamblers at some point in their lives, and 3.85 percent have "sub-clinical gambling disorders" at some point. Another survey, conducted as part of the NGISC study said 1.5 percent were "problem gamblers" at some point in their lives; 1.2 percent were pathological gamblers at some point. The numbers were higher within 50 miles of a casino. Some critics suggest that the casino industry preys on compulsive gamblers.[23] (O'Brien, 1998)

---

[22]See e.g. the "Bill Gates Net Worth Page", http://www.quuxuum.org/~evan/bgnw.html. Because much of his wealth is based on Microsoft's stock price, now relatively low, Gates wealth at one point exceeded $100 billion. According to Forbes, he has been the world's wealthiest person seven years in a row.

[23]Recent research indicates that some people have a genetic physiological abnormality in the dopamine receptors in the brain that causes them to react differently from most people to the gambling experience. See e.g. "Dead Broke: Theories emerge on why it’s so hard to stop", Minneapolis-St Paul Star-Tribune, 1996.
http://www.startribune.com/stonline/html/special/gamble/gamb4b.htm

The Motor City casino Detroit at one point ran billboards that read "Adrenaline rush" (photo in Thompson, 2001). Whether it is adrenaline or dopamine or some other chemical, this is one element of the use value of gambling, the triggering of the change in the body's use of these chemicals. The price of the chemical rush varies according to the table minimum or machine setting. The use value for some players of a $3 blackjack bet (the price of the event) is sufficient to keep them playing; for others, the price may be $25, $100, or more for an equivalent chemical nudge. One of the accepted indicators of compulsive gambling is the need to bet more in order to receive the same satisfaction from gambling.

While not to minimize the impact of compulsive gamblers on themselves, their families, co-workers, friends and communities, the Brenners argue that the percentage of compulsive gamblers is so low that the illness aspect of gambling, as serious as it is, should not overwhelm the discussion of the role that gambling plays in the lives of most gamblers. For the "multitude", gambling is an expression of rebellion, escape, independence.

One might add that capitalism *does* drive people crazy. To the extent that it is a problem, problem gambling isn't just an individual problem, but a social problem that cannot be looked at outside of the context of capitalism, and especially capitalism in a period of deep upheaval, transition and instability. One of the indicators of potential problem gambling is using gambling as an "escape." While escape may not be the most productive way of dealing with capitalism, it certainly is an understandable, even rational response.

###

Gambling brings us back to where we started. Gambling reflects the disconnect between effort and result that electronics has presented us with. Gambling reflects speculation and speculative capital. The disconnect is expressed in speculative capital on the one hand; and on the other, in the rise of all of the schemes to get by or get free outside of the pale of work or "the job." In the swirlings of capitalism, this disconnect manifests itself in globalization; under capitalism it shows as the destruction of society.

All of the talk about globalization has been criticized as a yoke on the shoulders of the propertyless. Globalization's (i.e., capitalism's) relentless force, the totality of its power, its universal presence — how can it be confronted? While that kind of talk is certainly dangerous, and "escape" rather than confrontation an always present temptation, globalization is neither total, or invincible.

First, as the economy moves out onto the thin ice of "asset light" operations, the only thing that props it up is the force of ideas. Certainly the capitalist propaganda machine is powerful, but not all-powerful.

Second, the reality of life under speculative capital repeatedly points out the lie of capitalist propaganda. The field is ripe for powerful and coordinated counter-thrusts of truth.

Third, we are entering the moment when the reward from the effort of every generation that has preceded us is ready to be collected. New technologies give us new tools for action and independence; they also provide a foundation for a new society. What will it look like? How will it work? We will figure that out.

We will figure that out because, finally, within the process of capitalist destruction, the initiative of workers, post-workers, never-workers — the multitude — shines through. New social formations, new classes are starting to take shape, to coalesce around the new opportunities that the bequest of our forebears is presenting us. There are the violent and visible reactions and initiatives. There are also the millions of daily acts of passive and active resistance to the work regime — the hours on the clock idled by web surfing or email, the stolen photocopies, the extended lunch hour, job-hopping, the "I prefer not to"s. And there are the acts of creation, always insurgent — the net-based open-source projects; the explosion of music, art, writing.

In the microprocessor we have a cheap, light, efficient, easily deployed device to take on the control of production. It in turn makes many other things possible, not the least of which is laborless production and certainly freedom from drudge work. We are putting into place the technological foundation of a world free of the risk (and the reality) of hunger, disease, illiteracy,

homelessness and the general terror of being abandoned by a brutal system. Those are the risks that globalization has in some cases re-opened; in others, intensified. Those are unnecessary and absurd risks today. In the global casino, we have a world to win.

Jim Davis
jdav2002@gearthlink.net
Presented at the Globalization and Social Justice Conference, Chicago, May 10-12, 2002
5/11/02

References

Bass, Thomas A.. 1996. "The Future of Money". *Wired* 4.10 October 1996.

Bernstein, Peter L. 1998. *Against the Gods: The Remarkable Story of Risk*. John Wiley & Sons. New York.

Brenner, Reuven with Brenner, Gabrielle A. 1990. *Gambling and Speculation: A Theory, a History, and a Future of Some Human Dimensions*. Cambridge University Press. Cambridge.

Brown, Gregory W. 2000. "Seeking Security in a Volatile World". *Financial Times* "Mastering Risk" Series. May 16. 2000.

D'Andrea Tyson, Laura. 2000. "Viewpoint: Global Markets: More Info May Only Feed the Herd Instinct", *Business Week*, April 3, 2000.

Davis, Jim. 1998. "Rethinking globalization." *Race & Class*. Volume 40 No. 2/3. London. Institute of Race Relations.

Davis, Jim. 2000. "The End of Value". Presented at The Marxism 2000 Conference. http://www.scienceofsociety.org/texts/end.of.value.htm

Davis, Jim and Michael Stack. 1993. "Knowledge in production." *Race & Class* 34 (3): 1 - 14

Fuerbringer, Jonathan. 1997. "How Asian Currencies Tumbled So Quickly." *New York Times.* Dec 10, 1997.

Harris, Jerry and Robinson, William. 2000. "Towards a global ruling class?" Globalization and the transnational capitalist class." *Science and Society*. 64:1. Spring, 2000.

Hardt, Michael and Negri, Antonio. 2000. *Empire*. Harvard University Press. Cambridge, MA.

Henwood, Doug. 1997. *Wall Street.* Verso. London.

League of Revolutionaries for a New America (LRNA). 2001. "Economic Background Report". http://www.lrna.org/doc.4/econ.html.

Lowenstein, Roger. 2000. *When Genius Failed: The Rise an Fall of Long-Term Capital Management.* Excerpted in the *Wall Street Journal*. Sept 11, 2000.

Marx, Karl. 1981. *Capital*. Vol III. Penguin Books.

Millman, Gregory. 1995. *The Vandal's Crown: How Rebel Currency Traders Overthrew the*

World's Central Banks. Free Press.

O'Brien, Timothy L. 1998. *Bad Bet: The Inside Story of the Glamour, Glitz, and Danger of America's Gambling Industry.* Random House.

Perelman, Michael. 1990. "The Phenomenology of Constant Capital and Fictitious Capital." *Review of Radical Political Economy*. 22:2-3 (Summer and Fall) (66-91).

Saber, Nasser. 1999. *Speculative Capital*. Volume I. Pearson Education Limited. Harlow.

Strange, Susan. 1986. *Casino Capitalism.* Basil Blackwell. Oxford.

Thompson, William N. 2001. *Gambling in America*. ABC-CLIO, Inc. Santa Barbara, CA.

Weinberg, N. 2000. "Fear, Greed and Technology". *Forbes*. May 15, 2000.

Thanks to Howard Schwartz of the Gambler's Bookshop, Las Vegas, Nevada (`http://www.gamblersbook.com/`*) for excellent book suggestions.*

Change History:

5/10/02: Original version
9/11/02: Factual corrections and other clarifications.
1/28/03: Minor typo corrections
5/10/03: More typo-type corrections
9/30/04: Updated email address

http://www.gocatgo.com/jdav.html