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EnronOnline and the Not-so-New Economy

By Andrew Pollack¹

When the story of Enron's bankruptcy broke I expected a vibrant debate in the media – although one certain to be skewed by its corporate priorities -- about the future of deregulation. After all, Enron pushed hard for and profited mightily from deregulation of energy markets; it was a leading player in the blackouts and price hikes facing Californians last summer, and played a similar role in other markets here and abroad.² The cascade of revelations about Enron's lies and corruption now seem to be sidetracking any such debate.

Ironically, when I thought the focus of reporting would be on the implications for deregulation, I was worried that this much-needed debate would nonetheless fail to address the far broader implications of Enron's strategy. For Enron is far more than an energy company. By building online trading markets for thousands of goods and services it hoped to achieve the status prematurely announced on the banner in front of its headquarters: "The world's leading company."

This gap between aim and achievement is characteristic of Enron's strategy and in fact explains its propensity for accounting lies and financial swindles. Its crimes flowed not primarily from a desire to cover losses in its energy trading business, but rather from a desire to become as rapidly as possible the dominant middleman in virtually every market for commodities, both real and financial.

The problem is that Enron CEOs Kenneth Lay and Jeff Skilling can't compare to John D. Rockefeller or J.P. Morgan when it comes to empire building skills. Their aims were every bit as grandiose, and certainly the latter pair was every bit as ruthless and dishonest as the former. But the period in which Rockefeller and Morgan operated was one made for a robber baron to build and maintain an empire, and that is not – at least not yet – the kind of period in which the capitalist system is functioning today.

If anything Lay and Skilling mirror more the creators of the Credit Mobilier scam, i.e. the worst of the speculating financiers who dominated early railroad construction, building competing parallel lines financed by government taxbreaks and land grants (legal and otherwise)

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² Corporate Watch for instance reported on March 15, 2001: "During the crisis global investment firm Credit Suisse First Boston sent a memo to its clients saying the California's rolling blackouts were not caused by shortage, but by the utilities themselves. According to the document, the blackouts were 'intended to soften up the legislature and the voters to the need for rate increases.' Shortly after the memo was leaked to the press, Morgan Stanley Dean Witter urged investors to buy the utilities' stock." Yet "California's energy debacle has not thwarted the world wide rush towards privatization prescribed by international lending agencies. The World Bank and the International Monetary Fund typically force countries receiving their loans to privatize their state owned power companies as a conditions of continued financial aid. And that's not likely to change any time soon. In a white paper released earlier this month the Director of the World Bank's energy and water program worried that 'California's power crisis is giving deregulation a bad name both inside the U.S. and in developing countries that are reforming their power sectors.'"

and by stock swindles. It was left to Morgan and other mainstream bankers to reorganize and consolidate the industry.

But of course once put on a solid footing the railroads were a necessary component in a qualitatively different reorganization of the broader economy, and of the corporate structures dominating it. The question posed by Enron's efforts is whether a similar, more stable, second chapter will be written in the Internet sector – and if so, by whom and in whose interests.

Origins

Enron started as a small Texas gas pipeline outfit, grew to become a leading energy wholesaler, and then seized on the opportunities of deregulation – opportunities it pushed with the help of its friends in both political parties – to fashion a huge online energy trading exchange. But very quickly it set its sights on, in its own words, “the commoditisation of everything”. Previous corporate titans sought to extend their reach by monopolizing production in their own industry, or extending their empires vertically into related industries, or more recently to become multi-industry conglomerates in unrelated but profitable fields. Lay and Skilling pursued none of these goals. Instead they aimed to ride the Internet wave to become the premier middleman for any and all industries, setting up business-to-business (B2B) electronic exchanges for virtually every major sector of the economy.

And they did so at the height of the dot.com hype, and thus found a credulous audience among investors. Adam Lashinsky told in the New York Times how “analysts were particularly receptive when Jeffrey Skilling, then Enron's president, suggested that the company's money-losing broadband network business alone was worth \$29 billion, or an extra \$37 a share. Unsurprisingly, Enron's shares skyrocketed by more than 50 percent in the first half of that year. Enron, it seems, had become an Internet company, and decidedly old-economy energy-industry analysts were loath to be left behind. Many openly acknowledged their lack of understanding of Enron's new lines of business — but hey, the company told such a good story. Why quibble over a few murky details?” (“Bankrupt Analysis,” New York Times, November 30, 2001)

Lashinsky blames “the Enron debacle” on the conniving and/or naivete of investors. Wall Street's “loss of objectivity” has meant that “Investment banks make far more money from underwriting or merger deals than they do from broker fees. Analysts at these firms often face conflicting loyalties. They can be put in the position of having to worry as much about whether a chief executive might find a report offensive as whether an investor might find it helpful.” But this begs the question of what is it about our economy today that breeds such dishonesty. And the reforms being promoted in response to the role of Arthur Andersen in facilitating Enron's lies will likely result in some very modest changes in accounting standards which won't begin to get at the fundamental sources of the problem. But we can be sure – even if the only product of capital's soul-searching is a body like the one proposed by SEC chair Harvey Pitt (himself a deregulation proponent with Enron links) for a body in which the foxes watch the chicken coop – that, as after Watergate, we will be assured once again that “the system worked.”

The broadband example cited by Lashinsky is a good example of the technological opportunity Enron astutely sniffed out as well as the barriers in its way to consolidating that opportunity. It wanted to become the dominant trader of broadband capacity (i.e. cable, DSL and other faster-than-modem Internet connections). Again, it didn't seek to be a player in the laying of broadband wires or even in charging for their use, but rather wanted to be the middleman in trading access to such wires, as well as in marketing derivatives betting on the availability of such capacity over various time-frames.

After a decade in which billions were spent in laying the physical connections for broadband, this sector is suffering from a glut of capacity and a shortage of both consumers willing to pay the high price for such service and, despite the flourishing of Internet-ready music and video, of available content.

The technical capacity is certainly not lacking, either in the varied (and of course incompatible) standards, or in the PC and TV software needed to use content (as the Napster episode shows). But the crisis of the broadband sector is symptomatic of the barriers in the way of a qualitative reorganization of even one industry, much less the economy as a whole, using new technologies.

In the latter half of January of this year all the major players in the broadband sector descended on Washington to lobby for their various solutions to the ills of that industry. Local and national phone companies are bickering with each other and with cable companies about who should provide access to whose wires at what price (the overlapping ownership of the above of course complicates matters further). And no-one can agree on who should pay for the "last mile," i.e. the connection between the cable and the home. Some companies and politicians urge government subsidies and/or tax breaks, drawing parallels with the role played during railroad days. Others claim not to want government help but are lobbying instead for legislation saying that their companies have rights to carry and/or charge for the services to the exclusion of others.

Thus Enron's move into broadband not surprisingly fell flat on its face. The Wall Street Journal on January 17th dissected its efforts to link with Blockbuster Inc. to provide videos at home over such high-speed connections -- certainly a guaranteed money-maker in the content-provision field if ever there was one. But the timing was way off because of the obstacles cited above. So Enron resorted to making "false claims to investors about how far along the business was," and even set up, on behalf of the venture, one of its many shady financing subsidiaries without telling Blockbuster.

To justify such moves, Enron CFO and later head of all Enron's bogus subsidiaries, Andrew Fastow, described the need for a "private equity strategy" in order to be able to fund "significant capital investments by the company, some of which would not generate cash flow or earnings for a number of years." His description of the need for such a strategy specifically mentioned plans to expand the trading of broadband access.

When the strategy didn't pay off as quickly as expected, Enron's solution was just to lie about how far along its ventures were. It claimed a \$53 million profit two weeks into the pilot program while it wasn't yet generating any profit! A former employee told the Journal: "How can they monetize the asset when we're still putting it together? It didn't make any sense to me... I was just floored. I mean, I couldn't believe it."

Roots of the EnronOnline Strategy

Broadband of course was just one of many, many sectors Enron sought to master. On December 6th The Economist analyzed the evolution of what it called "the amazing disintegrating firm," noting that it had only been a year since "Enron unveiled its master plan for domination of the universe. Not content with changing from an obscure gas-pipeline concern into the world's biggest energy trader, Enron's bosses set their sights higher. Jeffrey Skilling, then president, vowed to skyrocket past ExxonMobil to become the world's leading energy firm—quite an ambition, given that Exxon had just posted a quarterly profit of over \$4 billion. But even that was not enough for Mr Skilling. He had a business insight so powerful that it would

transform Enron into the world's leading company, period: the 'disintegration' of the traditional corporation."

"Mr. Skilling believed that deregulation and market forces would force traditional, asset-heavy companies to break up into thousands of niche players. Rather than being vertically integrated, companies would be "virtually integrated"—by enterprises such as Enron that would "wire those thousands of firms back together cheaply and temporarily."

This strategy was announced during the height of predictions that B2B would remake the economy. And at the time, Enron was touted – by the Economist itself, as well as by business strategy gurus such as Donald Tapscott – as being a case study in just how technology should be used in such a transformation.

Said the Economist: "'There is a very reasonable chance that we will become the biggest corporation in the world,' Mr. Lay's handpicked successor as Enron's chief executive, Jeffrey K. Skilling, told the authors of a book, just published, about business on the Internet. Even the book's title, 'Radical E: From GE to Enron — Lessons on How to Rule the Web', showed the cachet the company had attained. Enron, the authors wrote, was 'creating a culture in which radical and creative thinking is encouraged and rewarded.'"

But the dream never materialized. In its December 6th article, while noting the damage from "a \$1.2 billion reduction in equity capital, stemming from a hedging deal with a related private-equity fund" (i.e. the first of many revelations of hidden cash in bogus subsidiaries), it also noted "third-quarter results in mid-October that showed a \$1 billion write-off on broadband, water and other bad investments." Note that the big losses by this point weren't from its original base in energy trading. This fits with my main contention: that the company's accounting tricks were designed to finance, and later to hide its difficulties in, expansion into any and all markets. And the fact that UBS is now poised to take over Enron's online energy trading apparatus shows the problems weren't rooted primarily in that base.

Some of its problems did flow from bad investments in actual physical plant. Business Week for instance described losses from bad investments in England's water sector, power distribution and generation in India and Brazil, etc. But Skilling pointed out that when Enron bought physical assets it was mostly to get a foothold in trading in that sector -- and after that foothold was secured, the assets themselves could and should be dumped. Unfortunately for Enron (and of course even more so for its employees), it was saddled with these assets before its broader strategy could bear fruit. What's more, to the extent that there were problems in its energy trading base, these too reflect the current social and economic barriers to the broader Enron strategy.

In fact The Economist traces Enron's desire to expand beyond the energy sector to inadequate profits in that sector. Enron had difficulties with its earnings per share (EPS) figures: "It now seems clear that growth in EPS became ever harder for Enron to deliver. So its laser focus switched to looking for accounting fiddles that would make it look as if EPS was going up, and also hive debt off its books. To that end, several off-balance-sheet entities were set up. These were not wholly independent of Enron, but were judged sufficiently separate that their profit or loss did not have to be consolidated into the company's results. Assets, or portfolios of assets, were then 'sold' to these entities."

Then the author raises the crucial issue: "The thorniest question of all is why Enron ever had to resort to these financial shenanigans. Perhaps evidence of simple, criminal activity will be found. Yet greed was surely not the only factor."

A rival in the energy field is quoted as conceding that "Enron had the biggest and strongest energy-trading business in North America," and an economist is reported as saying "the internal risk management of the trading business was basically sound."

"But did high volumes really add up to big profits? At first, yes. However, partly as a result of Enron's success in expanding competitive markets, dozens of rivals flocked into trading. There proved to be few barriers to entry in energy trading; and Enron's skilled employees were snapped up in droves by rivals." For instance six of the largest U.S. electricity providers -- American Electric Power, Aquila Energy, Duke Energy, El Paso Energy, Reliant Energy and Southern Company Energy Marketing -- formed an Internet trading consortium, which would also trade natural gas liquids, crude oil petrochemicals and telecommunications services.

As a result, "although revenues mushroomed -- growing by \$10 billion from 1998 to 1999, and then by another \$60 billion to \$100 billion in 2000 -- profits before tax rose by only \$1 billion in 1998, and by less than \$500 million in both 1999 and 2000. Enron's return on capital was only 6.6% in 2000, less than rivals such as Williams and Dynegy."

What's worse, "the firm's trading margins collapsed, from 5.3% in early 1998 to less than 1.7% in the third quarter of this year [2001]." And even these margins were suspected of being artificially "pumped up."

This is a not surprising experience for a pioneer in a new field -- as was certainly the case earlier with rail, auto and other industries. But rather than focus on consolidating its early lead in energy trading and/or pushing aside its challengers, Enron chose to build on its online trading experience by expanding it to other industries and thus seeking ever-new sources of revenue outside energy.

The declining revenues, continues the Economist, "encouraged [Skilling] to bet the company on his radical, risky view that Enron could create markets in just about anything. With margins shrinking, Mr. Skilling tried to stretch the brand into new areas. Enron grew to have contracts with some 8,000 counterparties, in hundreds of business lines ranging from credit insurance to metals trading. In practice, this meant taking ever bigger bets, such as trading telecoms' bandwidth."

"As these bets started to go horribly wrong all at once, Enron may have felt compelled to pump up its revenues and profits using ever more ingenious tactics. Dynegy's Mr Watson puts it this way: 'Enron tried to be a worldwide commodities broker and market maker to the world, open 24 hours a day, with just a BBB rating, unlike banks, which have a much stronger balance sheet—and the market fell for it.'"³

Of course Enron wasn't a bank. But the ease of setting up online markets made it think it could perform many of the functions of a bank. And in this they were only taking the next logical step in a period when banking functions have been assumed by companies from a wide

³ Aside from the business press, the daily papers have generally ignored Enron's non-energy trading business or minimized its significance. An exception is Bill Keller's "Enron for Dummies," an op-ed in the Times on January 26th:

"So where did Enron go wrong? As often happens with buccaneering entrepreneurs, it got a case of hubris. It figured if it could trade energy, it could trade anything, anywhere, in the new virtual marketplace. Newsprint. Television advertising time. Insurance risk. High-speed data transmission. All of these were converted into contracts -- called derivatives -- that were sold to investors. Enron poured billions into these trading ventures, and some failed. It turned out Enron was good at inventing businesses, but terrible at the tedious work of running them, judging by some appalling internal management audits discovered by The Times's Kurt Eichenwald. For a time, Enron swept its failures into creative hiding places, but ultimately the truth came out, confidence in the company collapsed and you now have a feeding frenzy."

variety of economic sectors (see for instance Jeff Madrick's analysis in the current New York Review of Books, in his review of Jack Welch's autobiography, of the contribution of GE's capital arm to its success). Enron's unique contribution was to be the first to try it almost entirely online. The fact that they didn't succeed doesn't mean, however, that it can't or won't be done.

What exactly was it trading?

Even in its glory days as the dominant energy trader, Enron was not "just" trading energy. Rather, it helped develop what business journalists call the "spot-and-derivatives markets" in that sector. In this it followed the lead of pioneers in the financial sector who saw how new information technology made more practical and profitable the expansion of old, or creation of new, financial derivatives. And as in the financial world, these derivatives are usually several steps removed from any physical commodity and its price; they are often ways of betting on those prices or even betting on how a bet will turn out.

Thus for instance Enron would sell what was in essence "weather insurance" whereby a customer could place a bet on how thunderstorms would impact the need for and thus the price of energy. And as in any gambling, of course, the house always wins no matter how the bet goes down. (Again, Enron's problem was that new online casinos kept opening up.)

Enron took the lead in providing online trading of derivatives in many markets because it had earlier mastered that art in energy. In that sector energy users, such as utilities and industrial power users, have a real need to protect themselves against fluctuations in power prices. Similarly the earliest derivatives – for instance, futures contracts on agricultural commodities – played, in part, a similarly concrete economic function in moderating price fluctuations arising from lag times between production, delivery and payment for grain and similar products.

But as Doug Henwood shows in Wall Street most trading in derivatives has much less to do with evening out the uncertainties and volatilities of commodity prices and much more to do with financial speculation. And of course those fickle prices are in any case themselves largely a product of the normal functioning of a capitalist economy and have little relationship to the physical requirements posed by use of any given commodity. But online trading exacerbates the tendency always inherent in capital to produce more and more abstract manifestations of itself in the search for new forms of profit as old ones stagnate.

In "Market That Deals in Risks Faces a Novel One" (New York Times, November 29, 2001), Diana Henriques describes how such markets work: "Enron had helped create the global market for energy-based derivatives — customized risk-swapping contracts that enable companies to hedge their exposure to changing energy prices and supply fluctuations. In a typical energy swap, a company will enter into a contract to lock in a fixed price of a certain commodity, like natural gas or electricity. The other company, the counterparty, in the deal assumes the risk of future price changes and quotes a fixed price that includes its own profit."

Online trading of such derivatives guaranteed a new speed and volume to such swaps. Said Internet Week (May 11, 2000): "If there is ever a place where Internet trading makes a lot of sense, it's with energy commodities... because electronic trading can match the speed with which commodity pricing changes. On the telephone, a buyer previously would call to ask about gas prices for each of the next six months, but by the time the trader finished reciting the prices, some prices could have changed. The Internet system allows everyone to see all the prices all the time and make more careful decisions. "Everyone can clearly see the bid and offer prices on the screen for 800 products."

In Skilling's own words, Enron profited because "the prices of electricity and gas vary wildly by geographical market and can fluctuate every few seconds. Online trading has helped to reduce the time between the placement of an order and its execution (from as much as two hours before the online operation's launch to a split-second today); this greatly reduces the exposure of the firm to price fluctuations that might occur 'twixt the ordered cup and the transacted lip."

Obviously the need for energy fluctuates tremendously based on changes in weather, time of day, construction (or destruction) of homes and institutions using energy, etc., etc. And certainly the computers running local or regional (or even international) electrical and other power grids have to be able to make split-second adjustments in energy flows. This is several steps removed, however, from Enron's ability to profit from split-second placement of trades on derivatives based on energy prices. And such distance from physical reality is even more glaring in the case of derivatives based on such commodities as steel, one of the many sectors Enron moved into next.

Here's the description on EnronOnline's website of how its computers could benefit investors in that arena:

"Volatile pricing for steel products and raw materials is creating challenges for companies that produce, process, distribute and consume steel products. Companies can mitigate their exposure to fluctuating prices by using risk management products recently introduced to this market. Enron offers financial swap contracts to help companies mitigate price risks without altering their physical operations.⁴ In addition, Enron is developing a transparent spot market and a liquid forward market for base, commodity grades of steel."

Note that this new market for steel derivatives comes at a time when the production of steel worldwide is supposedly suffering from overcapacity. Yet even in the most developed countries more steel is needed to build new houses, schools, hospitals, etc. The need for steel in underdeveloped countries is obviously far, far greater.⁵ Nonetheless the leaders of the major steel producing countries recently met in Europe to argue over which of them should cut production the most and to threaten each other with import barriers. And of course the discussion there was not over split-second or even daily changes in steel production by individual firms, but over annual targets for entire countries.

But Enron's online steel trading has another face even further removed from the physical reality of production (and of course even further removed from any conceivable standard of morality). Again, from its website:

"The emission allowances market was created following the Clean Air Act of 1990, which set limits on emissions of SO₂ and NO_x in the United States. The government allocated transferable rights to emit predetermined levels of emissions. This program created the foundation for the development of a commodity market in emission allowances." Investors were thus encouraged to use EnronOnline to profit from that market.

Other markets listed on the website include: natural gas, power, emission allowances, bandwidth, weather derivatives, natural gas, petrochemicals and plastics, coals, crude oil, pulp

⁴ This is a good proof of Henwood's point that derivatives can actually make a market *less* stable—Enron is arguing here that rather than expand or contract physical plant to meet changing demand, investors should simply hedge away risk from such disturbing market uncertainty.

⁵ For instance, the construction of new, safer housing to replace the shacks which get swept away in floods, hurricanes and earthquakes around the globe would save thousands of lives every year and provide more jobs in an expanded steel industry – including new jobs to build plants which would produce far less pollution.

and paper, credit derivatives, shipping, and metals. Through EnronOnline, Enron was thus no longer just an energy trader, but in fact a conglomerate of business-to-business exchanges (B2Bs). Internet Week (May 11, 2000) reported that Enron had "executed a staggering \$35 billion worth of transactions on the Web since launching a site six months ago. And momentum is building rapidly. Company executives project more than \$60 billion in transactions this year. Enron's transaction numbers rank it among the world's elite group of top e-commerce sites. 'It's certainly bigger than any one company's online marketplace. It's huge,' said Gartner Group analyst Emily Andren."

Whereas since the 1960's companies have often diversified by becoming conglomerates that manufacture products in multiple industries, and more recently by combining manufacturing, services and retailing, Enron's "asset-light" strategy had as its goal transforming the company into the electronic intermediary between firms anywhere in the economy.

Online trading meant the public exposure of what had been business secrets. "There are also intangible costs, though, such as the impact on corporate culture and the upheaval in the firm's business model. After all, since the days of the spice trade, information about prices and spreads has always been jealously guarded, as a potential competitive advantage, by any commodity trader. Now, thanks to EnronOnline, Enron is posting that information on the web for all and sundry to see. That must come at a price."

The price of course was not just the discomfort of old fogies, but the right of Enron right to profit by virtue of being the provider of that information:

"The EnronOnline model that Ms Kitchen and her colleagues came up with was not based on an open platform, however. Rather, it is what is called a "principal-intermediated" model in which Enron acts as the principal. In other words, rather than striking deals among themselves willy-nilly through an Enron website, every buyer and seller participating in EnronOnline has to accept Enron as its direct counterparty—i.e., as the seller or the buyer." In this respect there are some interesting parallels with the role played by J.P. Morgan as an intermediary between transportation and manufacturing firms at a time when capital markets were just developing and information about companies closely guarded. (See Ron Chernow's The Death of the Banker.)

The problem for Enron was that the economy as currently structured is not ready for such a global intermediary, and thus Enron's deals, rather than consolidating and stabilizing industries, as did Morgan, had more of the ephemeral, speculative character of those engineered by railroad speculators. But as with rail this doesn't mean that online trading won't find its Morgan – or, one would hope, a more progressive equivalent in the form of unions and other progressive organizations who take over for their own uses the B2B exchanges.

Before the Fall

Enron's move into multi-industry online trading came as the dot.com hype was cresting. So not surprisingly the media – including the normally more sober Economist – was full of praise for Enron's new strategy. In a special report on "e-strategy" profiling companies from seven different industries which were leading the way in remaking their markets with new technology, the magazine analyzed Enron's "spectacularly successful Internet effort," and claimed that "Enron has created what may be the most successful Internet venture of any company in any industry anywhere." (Although, given its generally more level-headed reporting, the Economist characteristically added a crucial caveat: "EnronOnline is one of the

Internet's few success stories, assuming its huge trading volumes do indeed generate big profits, as the firm claims." "A matter of principals," June 30, 2001.)

EnronOnline was said to represent a new business model for the company: "With each new trade, it has less and less to do with energy, and more and more to do with making markets. One manager says that the firm's goal is "the commoditisation of everything".

According to the magazine EnronOnline offers over 1,500 different products, and "Online trades now make up nearly two-thirds of the company's trading business... Management consultants and Internet gurus cannot stop singing its praises: Harvard Business School has already put together a glowing case study." And of course New Economy gurus such as Donald Tapscott et al. in their Digital Capital cited Enron as a model to follow.

Was Enron's online trading model really that new? Listen to Skilling: "We were doing business-to-business trading long before there was such a thing as B2B, only we were using telephones." His interviewer concluded "EnronOnline, its 'killer app', is really just a better telephone."

It would be more accurate historically to say that such B2B exchanges, and business Internet use in general, are, as currently used, just better telegraphs. As several authors have pointed out, the telegraph qualitatively changed the extent and speed of interfirm and interindustry communication (and the simultaneous development of rail enabled an equivalently dramatic increase in the speed of shipment of goods which were the topic of that communication).⁶ The changes wrought by the Internet to such communication has, to this point, been a matter of degrees rather than of qualitative type. Despite all the claims for the impact of lower transaction costs on firm functioning and relationship, the basic structures and functions of corporations have not been substantively altered by the Internet, in the way that the telegraph and rail did in the 19th Century.

Enron, the banks, and the broader economy

Enron's online trading did, however, expand far and fast enough to wreak havoc in other industries and potentially the economy as a whole. In this it again threatens to reproduce earlier developments in rail, specifically the way speculation in that field helped spark the Panic of 1893.

Enron's fall is expected to impact other utilities trading energy, as well as the commodity and derivative operations of large commercial and investment banks. Floyd Norris noted in the Times ("A Big Fall Evoking Nasty Old Memories of a Run on a Bank", November 29, 2001) that J.P. Morgan is on the hook not only for credit provided to Enron, but also "also has the largest derivative operation of any bank, as well as a large business trading commodities." Big declines in the fourth-quarter 2001 results for Morgan and Citibank already indicate trouble brewing.

Were Enron to fail, analysts quoted by Norris think "it has the potential to cause a major financial crisis", worse, in some ways, than what occurred after the fall of Long-Term Capital Management. "That merely froze the debt markets temporarily, whereas Enron deals in the building-blocks of the American economy. Imagine gridlock in the markets for gas, timber, coal, metals, fertiliser, bandwidth or indeed any of the products Enron deals in."

Despite the emphasis I've laid on Enron's extra-energy operations, I'm not sure their weight in those sectors was yet great enough to negatively impact all those markets. The point though is that they tried to expand to a point where such dangers would have been a reality.

⁶ See Alfred Chandler, The Visible Hand; James Beniger, The Control Revolution; Tom Standage, The Victorian Internet.

Norris also draws an interesting parallel between Enron's operations and the normal role played by banks: "The final collapse of Enron amounted to something that few living Americans have ever seen: a bank run like those in the days before deposit insurance."

"Enron," said Norris, "became something like a bank, which takes depositors' money and promises to pay it back later. But unlike banks in the current era, this institution had no federal deposit insurance to reassure customers when rumors began to spread that it was in trouble. That proved to be its Achilles' heel. Enron's collapse is a reminder for big players in unregulated markets that their financial health must be beyond doubt."

But Norris' analysis, like most mainstream commentary on Enron, begs the larger question: what is it about the evolution of our economy that has encouraged nonfinancial firms to enter the financial sector (and vice versa)? Why have manufacturing and extracting (i.e. energy) firms entered the world of finance rather than expanding in their original bases? Why have financial firms created more and more abstract investment tools and devised ways of trading them faster and in higher volumes? The answer of course, which mainstream analysts shy away from, is the difficulty in finding outlets for productive investment because of the global crisis of accumulation and overproduction. Thus, for instance, one of the few mentions in the daily papers of Enron's non-energy online trading ties it completely to speculative mania in the financial sphere and ignores economic developments encouraging this mania (Edward Chancellor, "The Trouble With Bubbles," New York Times, January 27, 2002).

These commentators, even if not understanding the underlying roots, are keen enough to see the warning signs of trouble ahead, as the speculative and cross-industry strategies of firms like Enron threaten to have tremendous ripple effects when they fail. To cite just one example of fallout that's already occurred: Kmart's demise was hastened by its difficulties in getting surety bonds from insurance companies recently shaken by Enron's fall.

Listen to Norris' policy recommendation:

"The markets Enron helped to create will endure, but probably without Enron. It will be interesting to see whether participants in them continue to resist regulation as much as they have in the past. Unregulated markets, especially when they are relatively new, can be very profitable for those with superior market knowledge, as Enron seemed to have. But when prices are visible to all, the value of that knowledge plummets. Regulation could bring more openness, but it could also bring structures, like clearing systems, that reassure traders they need not worry about the credit of those with whom they trade. If the markets continue to be unregulated, Enron's collapse makes it more likely that the big players in those markets will be companies that are already regulated enough to assure customers that they are secure — companies like major banks and brokerage houses."

I'll leave aside for now the fact that banks such as Citibank and J.P. Morgan actively abetted Enron's criminal behavior (Morgan actually initiated a scheme whereby Enron set up a fraudulent trading subsidiary on the Isle of Jersey; see the Wall Street Journal, 1/24/02).

Norris is on to something, though: banks — and more generally firms whose operations can impact the economy as a whole -- are regulated because in periods of crisis capital develops just enough self-awareness to realize that it needs a greater degree of order and discipline for its own survival. But such self-awareness fades rapidly when the system goes through a period such as the one we've been in for the last few decades — a period encouraging deregulation and other mechanisms to try to reinvigorate falling profit levels. The history of capitalism shows a correlation between the degree and type of regulation, and the system's expansions and contractions. So any re-regulation sparked by Enron's fall is likely to be timid, given the period

we're in; and even if, after the onset of a depression in the coming years, more dramatic re-regulation occurs, that too will be swept away if the system pulls itself out of that depression.

The irony is that the multi-industry online trading pioneered by Enron (and attempted on single-industry bases by auto and other manufacturers) provides the objective possibility for the socialization not just of production but of its distribution and circulation functions. That is, a socialized conglomerate of B2B exchanges could do away with these cycles, both of speculation and of inability to rationally organize production. That assumes, of course, that such a conglomerate were run by the workers of the industries whose data flowed into the exchanges as part of a general reorganization of society – in other words, socialism.

How New is the New Economy?

The mainstream debate on the impact of information technology (i.e., computers and communications) on the economy tends to revolve around two issues: first, its impact on productivity, and second, how decreases in transaction costs (i.e. the price of doing business with other firms) impact the size and character of corporations.

Not long before the scandal broke, Enron was used as a positive example in an article focussed directly on this debate.

In the August 2001 Business 2.0, Jerry Useem described a debate at that year's World Economic Forum in Davos between Michael Porter of the Harvard Business School and Donald Tapscott ("And Then, Just When You Thought the 'New Economy' Was Dead ..."). The former, described as the "godfather of business strategy" advised, as he has for decades, says Useem, "a return to fundamentals." The latter, co-author of *Digital Capital*, is one of the most shameless promoters of claims for the qualitatively new nature of the New Economy.

In a follow-up article on the debate "Porter published a 12,000-word treatise in Harvard Business Review called 'Strategy and the Internet,' in which he... argued that the Internet 'does not require a radically new approach to business.'" Tapscott's reply claimed that the Internet "is becoming a ubiquitous medium of human communications that will be at the foundation of all economic activity and will change every institution in this society."

Useem then quotes some other prominent critics of New Economy theories who analyze away the reputed productivity gains (including Robert Solow's famous quip, "You can see the computer age everywhere but in the productivity statistics"), and who attribute the inflated stock valuations to a decade-long "speculative bubble."

But Useem then goes on to cite those who argue that the greatest leaps in productivity tend to come decades after the introduction of a new technology – and that before this happens speculation is the norm: "Speculative bubbles, it's worth remembering, have accompanied everything truly 'new' in U.S. economic history, from canal mania in the 1830s to the radio craze of the 1920s. Investors invariably got burned for letting their exuberance get ahead of reality (who knew that 500 automobile startups would be too many?). But when the smoke cleared, the basis of a new economy was left standing: railroad tracks that would help create a national mass market; telegraph lines that would facilitate the rise of modern big business; electricity grids that would revolutionize manufacturing and extend the working day. In other words, the Internet is like these Victorian technologies: a general-purpose infrastructure that can make *all* economic activities more efficient, as well as wholly new ones possible."

Then Useem raises an issue which gets to the heart of why the Internet has not yet qualitatively transformed the economy or even, in general, individual firms:

"Under this broader definition of 'new economy,' the usual question -- Will anyone ever make any money on the Internet? -- misses the point. Few companies managed to make money *on* the railroad; many early operators went bankrupt in the panics of 1857 and 1893. Yet by slashing transportation costs, railroads had what economists call 'spillover effects' on the economy at large. A young John D. Rockefeller would have seen no point in consolidating Ohio's small oil refineries, for example, had the Great Atlantic & Western Railroad not recently linked Cleveland to the vast consumer demand of the East Coast."

And as Alfred Chandler pointed out, once Rockefeller decided to do so he needed a new organizational form for his corporation adapted to meet the larger "scale and scope" of his business (the latter phrase being the title of another Chandler work documenting this phenomenon). He borrowed this organizational form, the multi-division, manager-run corporation, from the railroads themselves.

To the extent that the Internet serves as yet another communication device, a la the telegraph, facilitating business interaction, it will have similar spillover effects. But as mentioned above these will only be marginal improvements. The real question is whether it will also call forth qualitatively different organizational forms of its own. I would argue that it won't do so on the level of the individual firm. I would further argue that the Internet provides the objective possibility for new cross-firm and cross-industry organizational forms on a scale eclipsing even the multi-division corporation. The barriers, of course, to this happening under capitalism are obvious, and the failure of EnronOnline -- which was a twisted, embryonic version of such a potential form -- are due to those barriers.

"The real question, then," continues Useem, "is whether information technology is creating similar spillovers." In line with what I've just argued I would answer this by saying that this will happen only to the extent that the "transaction costs" saved by using the Net lead to expanding firm boundaries -- and, further, that this is only likely to happen should they be socialized.

Useem notes that "research by Paul David, an economic historian at Oxford, shows there was a 40-year lag between the introduction of electric power in the 1880s and its effect on productivity. It wasn't until they began to redesign the tasks themselves -- spreading small electric motors throughout the factory floor, for instance, instead of using a centralized belt-drive system -- that serious efficiency gains kicked in. And here's the kicker: These changes began in earnest when electricity reached a 50 percent penetration rate, slightly less than the portion of Americans now connected to the Internet."

The result of course was such developments as Ford's assembly line. The question is whether the Internet can lead to the equivalent of cross-firm or cross-industry assembly lines. That in essence is what a B2B, and even more so a cross-industry B2B, could be. And that is what Enron tried, and failed, to build.

In an economy where there's "too much" steel capacity, where there's "too much" auto production (witness recent layoffs at Ford), within-firm impact of savings from using the Internet will be mostly wasted. What good is it to save on time and cost in moving goods around on the shop floor, or even from suppliers or to customers, when the market won't support the production and sale of more goods?

Let's look at the case Useem cites to prove the significance of the within-firm impact of IT. Guess who he cites as an exemplar of such a new organization? That's right, Enron.

Says Useem: "Approaching that question [of what a new organization would look like] requires diving beneath the surface of aggregate statistics and into firms themselves -- in this case, the Houston headquarters of Enron, where glimmers of a possible future are emerging.

"It's no secret that Enron has found the Internet a friendly place; the company's online markets for trading electricity, natural gas, telecommunications bandwidth, and other commodities now generate 60 percent of the company's revenue. What's truly striking, however, is the extent to which the company has rearranged itself to take advantage of falling information costs."

"Jeff Skilling, Enron's CEO, points specifically to what he calls 'interaction costs,' [what the academics call transactions costs] or the expense of finding, contracting with, and communicating with outside suppliers and partners. Ten years ago, he says, those costs were high enough that it made sense to do most activities under one corporate roof. Gas was drilled by an Enron exploration team, flowed from an Enron wellhead, traveled through an Enron pipeline, was cleaned in an Enron processing plant, and so forth. No longer. 'There's only been a couple of times in history when those costs of interaction have radically changed,' Skilling says. 'One was the railroads, and then the telephone and the telegraph. And I think we're going through another one right now. The costs of interaction are collapsing because of the Internet.'"

Then Skilling gets to the heart of the matter. In contrast to those Internet gurus who babble about the coming triumph of smaller, more flexible firms, he emphasizes that "the goal isn't to shrink. 'Someone like Enron, we are going to be gigantic,' Skilling says. 'What you'll find instead is that companies will take some horizontal sliver of the business process' -- in Enron's case, making markets -- and become outstanding at it and do that across many industries. Rather than a world of smaller companies, I think we'll see a world of a lot more specialized companies.'"

But it's precisely because the Internet allows firms to "make markets," i.e. to internalize functions that were previously handled as exchanges across firms, that this potential can't be realized in a market economy.

Instead, as we saw with Enron's energy trading operations, advantages accruing initially to firms creating B2B exchanges encourage entry into the field by competitors, soon leading to lower profits for all. Says Useem: "Indeed, many companies will be forced to spend heavily on infotech just to maintain their position vis-a-vis competitors -- the corporate equivalent of 'keeping up with the Joneses.'" Useem then quotes Porter on this trend: "Consider, for instance, the twin beliefs that the Internet will increase corporate profits and, at the same time, increase competition by lowering barriers to entry. What Porter notes is that the two claims, by definition, cancel each other. Greater competition has to squeeze profits, suggesting that the Internet's biggest beneficiary won't be firms at all. (Even Enron made a relatively meager \$400 million profit on its \$50 billion in second-quarter revenue.) Rather, it will be consumers who continue to reap a windfall."

Echoing this claim that consumers will reap this windfall is Robert Reich, who says that declining profits from faster, high-tech exchanges "doesn't mean the new economy doesn't exist. In fact, it's proof that the new economy *does* exist."

But in our system, corporations certainly aren't going to continue to build B2B exchanges if the only one profiting is the consumer!

Firm size and transaction costs

Useem notes that "In his study of industrial capitalism from 1880 to 1920, business historian Alfred Chandler estimated that organizational, not technological, innovations accounted for half of economic growth during the period." And in the same vein: "Thus, theorizes MIT professor Tom Malone, 'the golden age of organizational experimentation has just begun.' I've already discussed the type of organizational innovation which the Internet makes possible. Let's look in a little more detail at the question of firm structure to see why capital has trouble utilizing this innovation.

As the Enron scandal deepened, Hal Varian of the Berkeley Business School published an article in the Times drawing on economic theories of the firm to explain why the Internet could have an impact directly contrary to that predicted by its boosters (the latter predicting smaller, more flexible firms). ("A New Economy With No New Economics," January 17, 2002.) He notes that no new economic theory has been devised to explain or predict the Internet's potential, and instead refers us back to the classic 1937 paper, "The Nature of the Firm," by Nobel laureate Ronald Coase.

Let me add some background. Coase, who went from being a socialist to an advocate of the free market at the notorious University of Chicago economics department, was inspired by his early beliefs to ask how and why firms decide in a capitalist economy to draw their boundaries. Why isn't the economy, he asked, "one big firm" (a phrase borrowed from Lenin by which the latter described a socialist economy).

As Varian explains, "The Coase paper asked a deceptively simple question: If the market is such a great tool for allocating resources, why isn't it used inside the firm or company? Why doesn't one worker on the assembly line negotiate with the worker next to him about the price at which he will supply the partly assembled product?"

"That sort of negotiation rarely happens. Instead of using markets, companies tend to be organized as hierarchies, using a chain of command and control rather than negotiation, markets and explicit contracts. Paradoxically, the primary unit of capitalism, on close inspection, looks a lot like central planning."⁷

"Mr. Coase's answer: it all hinges on the costs of making transactions. What economists call firms, he said, are essentially groups of activities for which it is more effective and less costly to use command-and-control than markets to have things done."

The flip side of this is that firms draw their boundaries at the point where command-and-control ceases to be effective, where the cost of internalizing decisions begins to exceed the cost of letting markets make that decision.

"New-economy advocates found this a compelling idea. One consequence of the Internet has surely been to make it cheaper to communicate. This should, in turn, lower transaction costs and change company boundaries. Their conclusion was that companies would inevitably downsize and outsource, spin off unnecessary functions, and carry out more and more transactions using the Internet instead of internal memos."

But, continues Varian: "Not so fast. The Internet lowers communication costs, that's for sure. But that means it lowers transaction costs within organizations as well as across organizations. The internal memo might disappear, but only because it is replaced by the internal e-mail message. It just doesn't follow that lower communication costs lead to smaller companies. In fact, Mr. Coase himself said that 'changes like the telephone and telegraphy, which tend to reduce the cost of organizing spatially, will tend to increase the size of the firm.'"

⁷ Mandel uses the same analogy in an article explaining the logic of socialist planning. New Left Review, 1992.

Backing up Coase, says Varian, is Alfred Chandler, who documented how the deployment of the telegraph and railroad led to the creation of the giant corporation." If Chandler was right, says Varian, "*Maybe the Internet's role is to provide the inexpensive communications that can support megacorporations. This thought is enough to make a new-economy guru shudder.*" (emphasis added)

That of course was exactly the outcome desired by Skilling and his co-conspirators.

"Later on in his article, Mr. Coase acknowledges that inventions like the telephone might reduce a company's size, if they reduce the costs of using markets by more than they reduce internal communication cost. In other words, it could go either way. We need a deeper understanding of transaction costs to resolve the issue."

Varian then discusses firms' fears of "opportunistic behavior" – that is, the desire of a competitor to get a better price from you or even to cheat – as incentive to expand firms' boundaries. "The real issue confronting a company trying to decide if some unit will be inside or spun off is what incentives the spinoff will have. If you spin off something critical to your business, you leave yourself open to extortion down the road. An internal monopoly supplier may be sluggish and inefficient, but its incentives are at least partly aligned with the rest of the organization. An external monopoly can be much worse."

So firms have an incentive to minimize transaction costs, i.e. to spin off units if one can do deals with them as external partners rather than as internal divisions. But they have an even stronger incentive to try to dominate or monopolize their own industry, and to vertically integrate backwards and forwards, to overcome competition from outsiders, no matter how cheaply one can transact business with them.

Again it's important to look at the evolution of the system as the tendencies toward and away from concentration and centralization of capital have in turn prevailed. Thus, on the one hand, periods of industrial consolidation – such as the one in which Morgan and other banks reorganized rail, steel and other industries. Thus also, on the other hand, periods in which new opportunities shatter old monopolies (through both market competition and government policy), encourages start-ups – and then after time leads to a new phase of stable reorganization.

And running through both periods are the inherent limits, in a capitalist economy, to concentration and centralization, manifested, among other ways, in the limits to the fullest use of technological and organizational innovations. Thus Ernest Mandel, in discussing barriers to a new technological revolution on the scale of the three experienced in the life of the capitalist system so far, describes how in the second half of the 20th Century "... further increases in the velocity of turnover of capital became more difficult. The revolution in telecommunications permitted the transfer of huge sums of money in only a few seconds from New York to Tokyo or from London to Johannesburg (which is still happening every day, all the cant about barbarous apartheid notwithstanding). But further progress in such areas as transportation, sales of goods, and turnover of liquid holdings has become increasingly scarce for more than a decade, partly for technical reasons but especially for socioeconomic reasons, because they run contrary to institutional social barriers linked to the very nature of capitalism: private property, bourgeois (i.e., highly unequal and class-biased) norms of distribution, and the survival of the nation-state." (Long Waves of Capitalist Development, p. 69.)

Thus, as shown above, the difficulties faced by an innovation on the scale of EnronOnline.

There certainly are firms that have used the Internet to dramatically cut costs and expand firm size – and have even done so relatively honestly. Wal-Mart is perhaps the best example,

using the Internet to speed stock replenishment and turnover, to minimize warehousing requirements, etc. – and thus enabling it to drive out thousands of competing firms. But at the end of the day the Wal-Mart model represents nothing fundamentally different from equally ambitious reorganizations undertaken by monopolists at the end of the 19th and beginning of the 20th centuries.

It's not inconceivable that the Internet will find its Morgan – that is, someone who can push aside the speculators, reorganize and consolidate B2B exchanges and help them realize their full potential. This depends in part on the arrival of a new long wave upturn. But it's more likely, because of the barriers inherent in capitalism discussed above, that the Internet's full potential won't be realized until the birth of a new social system, of socialism.

The response of the rail unions, at least for a brief moment, to Morgan's version of industry reorganization was to put forward their own plan – the "Plumb Plan" – for socialization of the rails. The question is whether unions and allied organizations will come up with a similar plan for the Internet.⁸ And given what I've said above about the cross-firm and industry potential of the Net, because of its importance to the spheres of circulation and distribution, that means developing a plan not just for one company or sector, but for the entire economy – that is, for socialism.

In such a society the advantages of flexibility and smallness boasted about by Internet gurus could be used not for profit, but to rationally combine centralized and decentralized decision-making, to decide what combination of each is most efficient, so that society can both make decisions at the lowest level possible, while spreading costs and opportunities as broadly as possible across a global economy.

This would mean, to correct Skilling's slogan both ethically and grammatically, the decommodification of everything.

⁸ In today's political climate this may sound beyond the pale even for most of the left. But it's worth remembering that during the California energy crisis last summer ballot initiatives for municipal ownership and community control were raised and widely supported. And recent strikes in Nigeria against price hikes following deregulation and privatization of energy there are just the latest example of recent worker mobilization around these issues abroad.